SIEMENS

N 141/14, N 141/32

KNX/DALI Gateway/Twin

Application program description

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Smart Infrastructure

Contents

Supplementary information

Purpose of the application program description

The application program description contains detailed information on the parameters and communication objects of the ETS application program as well as a description of the functions that can be set via the different parameters.

Target audience of the application program description

The application program description is intended for people who have attended an ETS course and want to commission or reconfigure the KNX/DALI gateway/twin.

Product documentation and support

Product documentation

Documents related the product, such as operating and installation instructions, application program description, product database, additional software and CE declarations can be downloaded from the following website:

http://www.siemens.com/gamma-td

Frequently asked questions

For frequently asked questions about the product and their solutions, see:

https://support.industry.siemens.com/cs/products?dtp=Faq&mfn=ps&lc=en-WW

Support

Contact details for additional questions relating to the product:

Tel.: +49 89 9221-8000

http://www.siemens.com/supportrequest

1 Information about the KNX/DALI Gateway and the application program

Product family: Lighting
Product type: Gateways
Manufacturer: Siemens

Type	Order number	Application program
KNX/DALI Gateway N 141/14	5WG1141-1AB14	9A1B01
KNX/DALI Gateway Twin N 141/32	5WG1141-1AB32	9A1C01

See also

Device Configuration App (DCA) [→ 256]

2 Functional description

2.1 Functions of the KNX/DALI Gateway

What is DALI?

DALI (Digital Addressable Lighting Interface) is a bi-directional communication interface as per IEC 62386, the specification of which was defined by manufacturers for electronic control gear (ECG). It enables reception of e.g. switching and dimming commands as well as transmission of status information, such as the failure of a lamp or reporting an error in the ECG.
A DALI bus line can be used to connect up to 64 DALI actuators as well as 8 brightness and 8 presence sensors or multisensors, each of which can be assigned an individual participant address. This makes it possible to control each device individually, and status and error messages can be assigned to a specific electronic control device and therefore to a specific lamp. The KNX/DALI Gateway N 141/14 or N 141/32, for example, can be used for the individual control of DALI devices.
For more information on DALI, visit: http://www.dali-alliance.org. The DALI dimming curve has been adapted to the sensitivity of the human eye. This results in a logarithmic characteristic curve for the luminous flux. However, humans perceive this logarithmic characteristic curve as a linear brightness curve. IEC 62386-102 describes the DALI values as "ARC Power across the light source," with an almost linear correlation to the luminous flux in most cases. The luminous flux describes the entire power emitted by a light source in all directions. The unit is lumen (lm).

Basic information about the KNX/DALI gateway N141/14 or N 141/32

The device is used to control DALI electronic control gear (ECG) via commands. Depending on the selected operating mode, in addition to the communication objects for the functions switching, dimming brighter/darker, dimming value, color temperature and status requests, there is a series of additional functions available for each output, line or channel. As an alternative to the switching input, a control value input with configurable threshold value for switching on and off can be selected. In direct operation, a line can be operated via the corresponding push-buttons on the user interface. The device display shows the error codes of the DALI channel error messages. A corresponding communication object is created for each error message.

These KNX/DALI Gateways are KNX devices with one or two independent DALI interface(s), to which up to 64 DALI ECGs and an additional 8 DALI brightness and 8 DALI motion sensors are connected per line (8 combined brightness and motion sensors per DALI line are also possible). These can be controlled individually or in groups using the device. In addition, the device can detect and transmit status and error messages from DALI devices. To ensure efficient and fast commissioning, the device offers its own IP interface. The device can control both the brightness of the lights and also the color temperature ("Tunable White") and light color ("RGB(W)"). The device can therefore be used in human-centric lighting applications.

Individual names, parameters and scenes are assigned to the individual ECGs by means of ETS (Engineering Tool Software). The DALI sensors and their functionality are also assigned in the ETS. All DALI participants and functions are independent and can be linked via group addresses. The device is designed to act as the only multi-master application controller in a DALI segment. Other application controllers are switched off during configuration. The KNX/DALI Gateway is a rail-mounted device for installation in distributions. For DALI, the electronics of the DALI devices are fed via the DALI bus line. Hence, the device has an integrated power supply for AC 230 V for supplying the device electronics and generating the DALI bus voltage for each line.

All functions of the KNX/DALI Gateway are briefly described below.

Line operating modes

Each output (line) of the KNX/DALI Gateway can be set to one of the following operating modes:

- Normal mode (bus)
- Broadcast
- Deactivated

Normal mode

In normal mode, ECGs in channels can be switched and dimmed individually without restriction. Control is carried out for each channel by three communication objects (switching, dimming, value setting). A channel assignment of an ECG can only be made to a maximum of one DALI channel. Multi-channel assignments are not directly supported. If necessary, the assignments must be implemented via the KNX communication objects or via ECG control. Separate status objects inform about the switching and value status of the channel.

Broadcast

The "Broadcast" DALI line operating mode allows the simultaneous control of all connected ECGs in the channels via the broadcast commands provided by DALI. Sensors are not taken into account. Commissioning is significantly reduced because neither the search nor the individual assignment is necessary. Thus, all settings for ECG, channels and sensors, the commissioning and test functionality for this line are omitted. For configuration, the parameters are available as in a group (ignition time 0.7s).

Deactivated

If a DALI line is deactivated, no channels attached to it and no assigned ECGs can be addressed.

Channel operating modes

Each channel of the KNX/DALI Gateway can be set to one of the following operating modes:

- Normal mode
- Timer mode
- Timer mode 2-fold
- Flashing
- Deactivated

Normal mode

In normal mode, ECGs in channels can be switched and dimmed individually without restriction. Control is carried out for each channel by three communication objects (switching, dimming, value setting). A channel assignment of an ECG can only be made to a maximum of one DALI channel. Multi-channel assignments are not directly supported. If necessary, the assignments must be implemented via the KNX communication objects or via ECG control. Separate status objects inform about the switching and value status of the channel.

Timer mode

In the "normal mode” operating mode, the timer modes for "delayed switching on and off” and "timer night mode” are available. For night mode, an additional warning can be set before switching off. In the "timer mode” operating mode, the functions "ON time 1 in day mode” and "ON time in night mode” are available. Moreover, a warning before switching off can be set separately for both functions. In the "timer mode 2-fold” operating mode, the functions "ON time 1 in day mode” and "ON time 2 in day mode” and "ON time in night mode” are available.

Flashing

In the "Flashing” operating mode, the channel is switched on and off cyclically with an adjustable on and off duration. It also possible to set up delayed switching on and off.

Deactivated

If a channel is deactivated, no assigned ECGs can be addressed.

Overrides:

Up to seven different override function blocks can be activated to override the automation functions. For each override function block, one of the following functions can be selected:

- Manual override (ON)
- Permanent OFF
- Lock
- Central Override
- User-defined override function
- Forced Control

This enables flexible configuration of a separate priority-specific override for each channel. For the override functions a control value input can be selected instead of a switching input.

Counting of switching cycles and operating hours:

The application program features optional counting of switching cycles and counting of operating hours without threshold monitoring for each channel.

Scenes

The application program makes it possible to parameterize up to 16 scenes per DALI line. Up to 64 channels can be added to each scene. The dimming and color temperature values for the scene can be specified for each channel. As an alternative to the color temperature values, color values can be specified. The scenes are stored and retrieved via an 8-bit communication object. When new scene values are saved, the value of the channels is not queried via DALI; instead the internally calculated value is used. This value is then written to the channels and the associated ECG.

Logic operations

The KNX/DALI Gateway has 2 independent logic blocks per channel with which different mathematical operations are possible: AND, OR, XOR, FILTER, TRIGGER. The switching information for the second input of logic operation 1 or 2 is received at the output via a corresponding communication object. The logic result is sent via a KNX communication object.

Color temperature control

The color temperature control is defined in standard DALI IEC 62386, in chapter 209 "Color Control.” The ECG is defined as device type 8. Device type 8 refers to color controllable lights. The unit for color temperature is Kelvin (K). The KNX/DALI gateways N 141/14 and N 141/32 can control the color temperature and brightness of type 8 ECG devices. The devices can be used in human-centric lighting applications, as it can control the color temperature of a DALI LED from warm white to cold white ("Tunable White"). Human-centric lighting (HCL) expands the concept of biologically effective lighting with holistic planning and covers the visual, emotional and biological effects of light. HCL supports human health, well-being and performance in the long-term.

Color control

In the KNX/DALI Gateway, DALI control devices of the type "DT8 - Colour Control" can be used to control the light color. An RGB(W) color control allows precise control of LED lights that combine red, green, blue and white (RGBW). This control offers a wide range of color options and makes it possible to generate both colored light and pure white light. The HSV color control describes colors in a cylindrical color model and offers an intuitive way of color control.

Ethernet

The KNX/DALI Gateways have an RJ45 socket via which the device can be connected to Ethernet. This significantly shortens the download times of the firmware and configuration.

2-point brightness controller

Up to 16 independent switching brightness controllers (2-point-lighting controls) are provided. These are independent of all other functions and can be used via objects.

2-point control is the most basic form of lighting control. If the brightness controller is activated (automatic operation), the lighting is switched on as soon as the brightness falls below the configured lower brightness limit. The lighting is switched off once the configured upper brightness limit is exceeded. The brightness limits can be set using parameters or communication objects.

Constant lighting control

Up to 16 independent steadily regulating constant light controllers are provided. These are independent of all other functions and can be connected and used via objects both internally and externally.

Constant lighting control is an advanced form of lighting control. The control uses natural light to balance out the artificial light that is necessary to light the room adequately, which reduces power consumption and therefore costs. The illuminance of natural light entering a room through the window decreases the deeper it enters into the room. The controller is able to control one main lamp group and up to four subsidiary lamp groups. This is especially suitable for application in rooms in which the daylight entering through the window decreases further into the room.

2.2 Smart channels - new channel concept

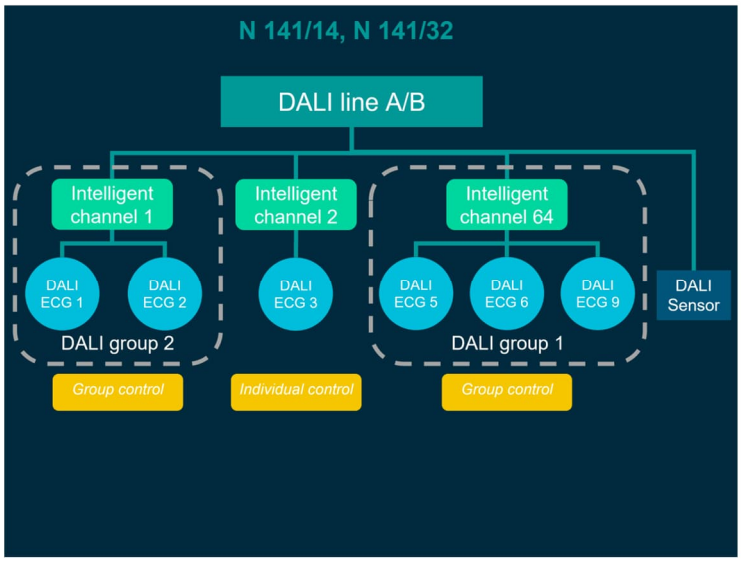

Fig. 1: new channel concept

The new generation of DALI-2 certified KNX/DALI Gateways N 141/14 and N 141/32 is equipped with up to two separate DALI outputs (A and B), depending on the version. The line (A or B) forms the top-level DALI instance, which can be connected to up to 64 ECGs and additional sensors. Within the DALI line, up to 64 ECGs are assigned to the respective provided smart channels, of which there are also up to 64. Among other things, the intelligence of the channels ensures that, if more than one ECG is assigned per channel, a DALI group is automatically

created from the ECGs assigned to the channel. In addition, the channels containing the most ECGs are given preference when groups are created (i.e. group 1 = channel xy with the highest number of ECGs, group 2 = channel yx with the second-highest number of ECGs). The advantage of this functionality especially comes into effect if there are more than 16 channels with more than one ECG and there is thus the need for more than the 16 groups provided by DALI. From group 17 onwards, the ECGs are actuated in the KNX/DALI gateway directly via the channels as if they were a group, even though sequential control runs in the background. Controlling an individual ECG is still easily possible in the new KNX/DALI Gateways if only one ECG is assigned to a channel. DALI-2 sensors are incorporated at the line level.

2.3 Security

KNX Secure Ready

The KNX/DALI Gateways N 141/14 and N 141/32 are currently KNX Secure ready. This means that the devices already meet all the conditions on the hardware side to be considered KNX Secure. Thus, in the future, they can be equipped with a KNX IP Secure Stack by means of a firmware update in order to be fully KNX Data Secure.

Before a device can be used "securely", the ETS project must be protected with a password.

NOTICE	
!	Special conditions must be observed when using secure devices in the ETS. Find out more on the corresponding websites of the KNX website http://www.knx.org.

KNX Data Secure

The KNX standard has been extended to include KNX Data Secure. As a result, communication in the KNX network is signed and encrypted to ensure secure data transmission of telegrams. This allows both the ETS download and communication via communication objects to be securely encrypted. KNX Data Secure thus ensures that all or only selected KNX telegrams are authenticated and encrypted regardless of the medium. Communications between the sender and the receiver can therefore neither be interpreted nor manipulated. As a result, KNX Data Secure effectively protects user data against unauthorized access and manipulation.

KNX IP Secure

Regardless of the medium, KNX IP Secure encrypts and authenticates all telegrams and data at the network level. This ensures that the information transmitted is completely secure. In this way, the communication between sensor and actuator in the IP network can neither be interpreted nor manipulated. KNX IP Secure is the first vendor-independent security solution that is recognized as an international security standard according to EN ISO 22510.

Instructions for the secure operation of KNX/DALI Gateways

- Do not use the device to control safety-related applications (e.g. emergency lighting).
- Install the device in a protected area (enclosed control cabinet).

- Only operate the device in a protected network environment and do not allow direct access from the Internet.
- Set up a separate IP network with its own hardware for KNX communication.
- Protect the device by assigning a BCU key in the ETS.
- Secure remote access to the device via an additional VPN connection. A virtual private network (VPN) establishes an encrypted and authorized connection (VPN tunnel) from a remote connection to a network via the internet. This VPN connection enables secure communication protected from eavesdropping between a remote device and the KNX installation.
- If Wi-Fi is used, change the preset SSID of the wireless access point. Encrypt the Wi-Fi using a secure procedure (such as WPA2 at present).
- Document network settings and give them to the building owner/operator or LAN administrator.
- Coordinate the administration of access rights to this KNXnet/IP device in an IP network with the respective IP network administrator.

NOTICE	
!	**Measures after replacing a device in the KNX/IP network.** When a KNX device is stolen from a network or replaced due to a defect, the BCU key must be reassigned (changed) for all other devices in the network. This change is necessary because it cannot be ruled out that the BCU key, which is located in a protected area, can be read

For more information on KNX security, including, for example, a security check, refer to the "KNX Secure" section on the KNX website (http://www.knx.org).

Notes on the FDSK sticker

- Remove the device from the sealed packaging, scan the FDSK and store.
- Remove all FDSK stickers from the device and then install the device.

This procedure ensures that the FDSK cannot be read from mounted devices.

NOTICE	
!	If the scanned FDSK is lost, the device can no longer be used (in secure mode) after a master reset. For devices with secure by default and a lost FDSK, the device can no longer be used after a master reset.

2.4 Operating and display elements and connections

2.4.1 Position and function of the operating and display elements

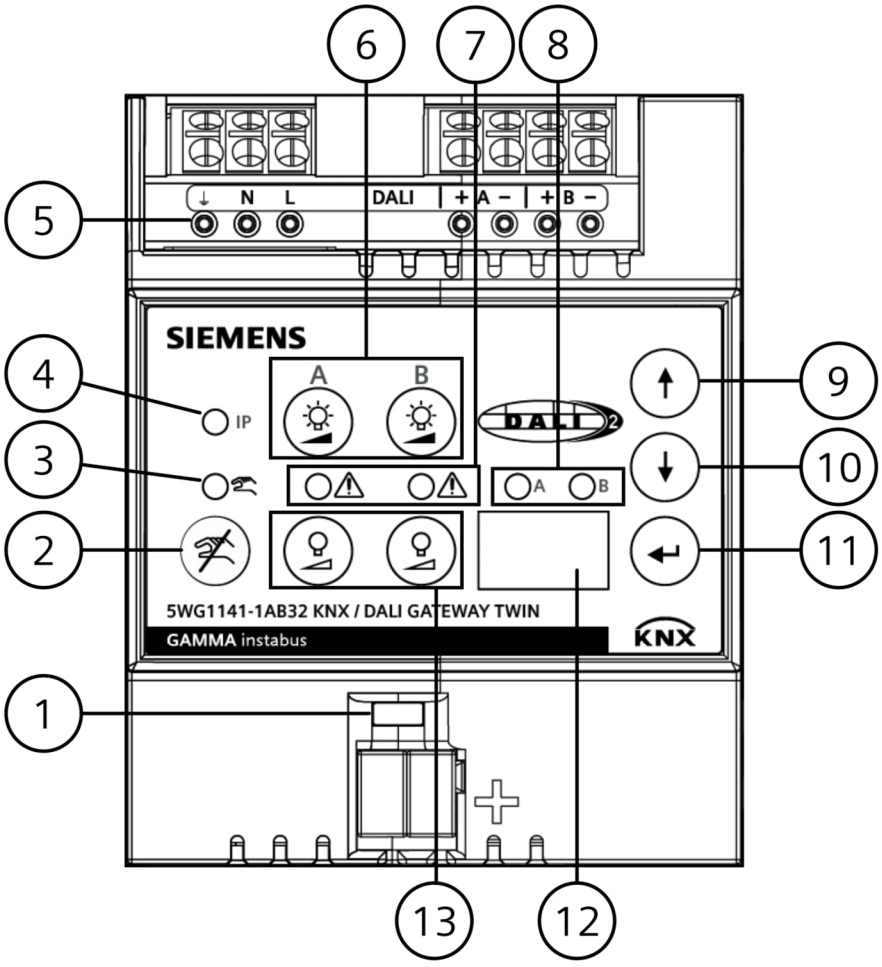

Fig. 2: Operating and display elements

Item	Operating or display element	Function
1	Programming LED (red), Programming button	Short push of button (< 2 s): ● Activate programming mode, display status (LED on = active). Very long push of button (> 20 s): ● Reset to factory settings (after 20 s, the LED starts flashing for about 8 s). Hint: ● A longer push of button (>2 s to 20 s) does not perform any function. ● The device can be locked for programming mode for approx. 10 s. This is indicated by the flashing of the programming LED.

Item	Operating or display element	Function
2	Button: Deactivate direct operation	Short press of button (< 1 s): ● Deactivate/exit direct operation.
3	Status LED of direct operation	The LED shows whether direct operation is activated. The LED flashes regularly if direct operation is active for at least one channel.
4	Status LED of the IP connection	The LED shows if there is a link in the IP connection. The LED lights up when an Ethernet cable is connected and if communication is performed via IP.
5	Test contacts	Metering point for voltage testing
6	Buttons: Switching on line A or line B	Short press of button (< 1 s): ● ECGs on line A/B are switched on (broadcast) Long press of button (> 1 s): ● ECGs on line A/B are dimmed brighter (broadcast).
7	Error LEDs	The LEDs indicate whether there is an error on the respective line A or line B.
8	LEDs of the error display	The LEDs indicate the current line when the error display is operated with the buttons.
9	Button: Top	Menu control up in the display Hint: ● If the button is not pressed for more than 5 seconds, the standard display returns automatically.
10	Button: Bottom	Menu control down in the display Hint: ● If the button is not pressed for more than 5 seconds, the standard display returns automatically.
11	Button: Enter	Confirmation of the error Hint: ● If the button is not pressed for more than 5 seconds, the standard display returns automatically.
12	Display	The display is used to display the device information (status, error codes and currently loaded firmware version): Hint: The following device information can only be displayed if the "Information on device display" parameter is enabled. Status display: ● d: Direct operation (manual operation) ● b: Normal mode (bus) ● ...: Short address of the affected ECG Error display: ● F0: Lamp defective ● F1: ECG defective ● F3: External voltage on DALI line ● F5: DALI short circuit / overload ● F6: No ECG found ● F7: Application controller switched off Display of the loaded firmware version

Item	Operating or display element	Function
13	Buttons: Switching off line A or line B	Short press of button (< 1 s): ● ECGs on line A/B are switched off (broadcast) Long press of button (> 1 s): ● ECGs on line A/B are dimmed darker (broadcast)

NOTICE	
	More information on the menu navigation and operation of the display is explained in more detail in the technical product information (TPI) of the KNX/DALI Gateway.

2.4.2 Position and function of the connections and labeling

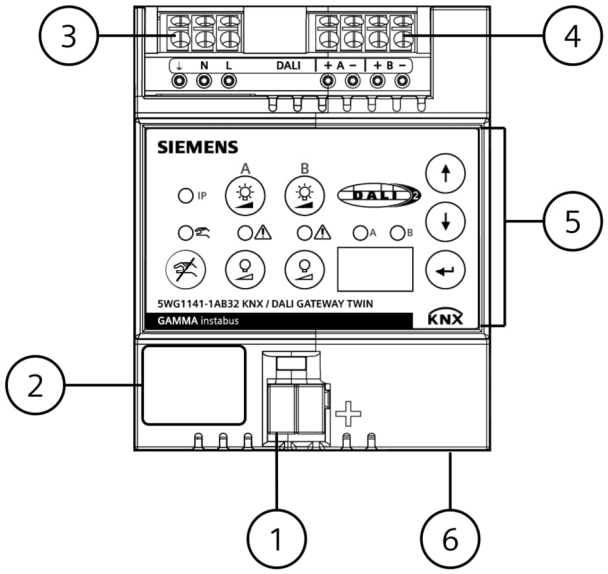

Fig. 3: Connections

Item	Element	Function
1	Connection pins for KNX bus terminal block, screwless	Connect KNX bus
2	Label field	Enter physical address
3	Connection terminals	Connect input and loads
4	Connection terminals for DALI lines	Connecting DALI lines
5	Membrane keypad with LEDs	Execute direct operation Switching and dimming lights Displaying status and error messages
6	RJ45 connector socket	Connecting IP communication

2.5 Programming mode

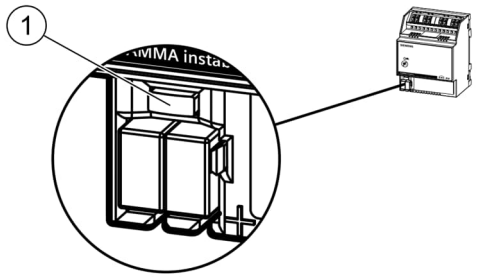

Fig. 4: Programming button and programming LED (exemplary illustration)

After supply voltage recovery, wait several seconds (after booting is complete) before pushing the programming button (1).

Activating programming mode

◈ Briefly press the programming button (1) (< 2 seconds).

⇨ Programming mode is activated.

⇨ The programming LED (1) illuminates continuously.

Deactivating programming mode

▷ Programming mode is activated. The programming LED (1) lights up continuously.

◈ Briefly press the programming button (1) (< 2 seconds).

⇨ Programming mode is deactivated.

⇨ The programming LED (1) is not illuminated.

2.6 Behavior on unloading the application program

After unloading the application program with the ETS, the unloaded device has no functions.

2.7 Behavior on voltage failure/recovery

The electronics of the device are powered by mains power. A supply voltage failure leads to a functional failure of the KNX/DALI gateway.

In case of supply voltage failure, the current status and other values for each output are permanently saved so that they can be restored if applicable when the supply voltage is recovered.

On supply voltage recovery, the configured actions are executed and, if applicable, new status values are reported.

2.8 DALI device types

The device type of the ECG can be displayed in the DCA under the selected "Type" column.

DALI device type	Function
DT0 (control gear for fluorescent lamps)	Controlling the brightness
DT1 (standalone emergency operating device)	Controlling the brightness
DT2 (discharge lamps HLD)	Controlling the brightness
DT3 (low-voltage halogen lamps)	Controlling the brightness
DT4 (dimmer for incandescent lamps)	Controlling the brightness
DT6 (LED)	Controlling the brightness
DT7 (switching)	Switching relays
DT8 (color temperature)	Controlling brightness and color temperature
DT8 (RGB)	Controlling the brightness and the color in the RGB color space
DT8 (RGBW)	Controlling the brightness and the color in the RGBW color space

Table 1: DALI device types

3 Overview of the ETS user interface

Fig. 5: ETS user interface

1 Tree view of devices and channels

2 Listing of parameter cards. Depending on which parameters have been enabled or configured in the parameter area (3), additional parameter cards are displayed here.

3 Parameter area. In this area, parameters are set, enabled or disabled. With some parameters, after enable additional rows or additional parameter cards are displayed.

4 Properties area. This area displays the properties of the device.

You can use the ‘Highlight changes’ button in the ETS to highlight in yellow any parameters that do not have the default settings.

4 Resetting the device to factory settings

NOTICE	
!	**Loss of data due to resetting device!** When you reset the device, all parameters and settings entered are deleted. ● Ensure that the device is really supposed to be reset.

Resetting the device to factory settings

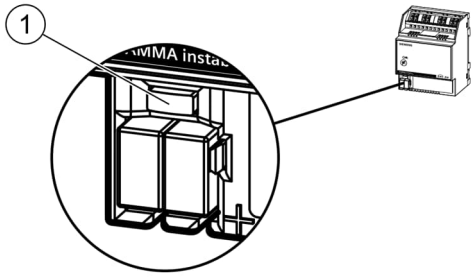

Fig. 6: Programming button and programming LED (exemplary illustration)

◈ Press the programming button (1) (at least 20 seconds) until the programming LED (1) starts flashing quickly.

⇨ The programming (1) LED flashes for 8 seconds.

⇨ The device has been reset to factory settings. All parameter settings have been deleted.

⇨ The building site function is active again.

5 Device settings

5.1 Parameters on the "Device settings" parameter card

Cyclical transmission of device function (0 = in operation)

Parameter	Settings
Cyclical transmission of device function (0 = in operation)	disable enable

Function:

This parameter is used to disable or enable the cyclic sending of the device function.
If the device is functioning properly, the value "0" is transmitted cyclically.
If the device no longer transmits cyclically, this indicates a device failure. A higher-level system can monitor the cyclic sending and trigger a warning or alarm message if the status message is not transmitted, for example.

Communication object:

If the parameter is set to "enable," the following communication object is displayed:

- "Status device function"

Note:

Sending first takes place after the time set in the "Cyclical transmission period" parameter.

Send status of device function inverted (1 = in operation)

Parameter	Settings
Send status of device function inverted (1 = in operation)	No Yes

Function:

This parameter can be used to transmit the status of the device function in inverted form. When inverted transmission is active, the value "1" is transmitted cyclically when the device is functioning properly.

If the device is functioning properly, the value "1" is transmitted in inverted form.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Cyclical transmission of device function (0 = in operation)"
  - Setting: "enable"

Cyclical transmission period

Parameter	Settings
Cyclical transmission period (hh:mm:ss.f)	00:00:01... **00:02:00** ... 18:12:15

Function:

This parameter is used to set the time interval for cyclical transmission.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Cyclical transmission of device function(0 = in operation)"
  - Setting: "enable"

Note:

The device status is also sent for the first time after bus voltage failure and bus voltage recovery after the time set here.

Specific transmission time for status objects after bus/mains voltage recovery

Parameter	Settings
Specific transmission time for status objects after bus/mains voltage recovery (hh:mm:ss)	00:00:00 ... **00:00:15** ... 18:12:15

Function:

This parameter is used to ensure that no unnecessary bus load is generated by status telegrams immediately after bus voltage recovery and after a re-start of the device. The time of sending after bus voltage recovery must be set high enough that other KNX devices that have to receive and process the status have also already completed their initialization. The time of sending applies to the stored status values after bus voltage recovery. If the state changes during bus voltage failure or after bus voltage recovery (e.g. due to switching), the respective status is transmitted immediately and once again after the elapse of the time set here.

Note:

The sending time does not apply if a status request of all status objects is initiated via the "Send status values” communication object. If a status request is initiated directly after bus voltage recovery and before this sending time (e.g. via the "Send status values” communication object), then this request is discarded. Separate sending of the status objects is possible only after the regular transmission of the status.

Transmission delay between status objects

Parameter	Settings
Transmission delay between status objects (hh:mm:ss.f)	**00:00:00.1** ... 00:01:00.0

Function:

This parameter is used to set the minimum waiting time between two consecutive status telegrams. This setting prevents an excessive bus load.

Note:

This parameter applies to the communication object "Send status values” and only after bus voltage recovery.

Behavior after download

Parameter	Settings
Behavior after download	Use device parameter Use ETS parameter

Function:

This parameter is used to set which parameters are used after ETS data are downloaded.

The following settings are possible:

- Use device parameter:
  If data were received from other sources, they will not be overwritten by the parameters of the ETS.

  The settings of the channels are not re-initialized and the current status is retained.
- Use ETS parameter:
  If data were received from other sources, they will be overwritten by the parameters of the ETS. If configurations have been made in the ETS, they are executed on the device.

Note:

If the device does not behave as expected, it is recommended to use the setting "Use ETS parameter".

Information on device display

Parameter	Settings
Information on device display	Deactivated Operation Operating mode Firmware version

Function:

This parameter is used to set which information is displayed on the display.

The following settings are possible:

- Deactivated:
  The display is switched off.
- Operation:
  When the device is in operation, "--" is displayed on the display.
- Operating mode:
  The display shows whether the device is in bus or direct operation. When the device is configured, this is also shown on the display.
- Firmware version:
  The current firmware is shown on the display.

5.2 "Device settings" communication objects

Status device function

Object name	Function	Datapoint type	Flags
Status device function	Ok/Defect	1.005 alarm	CRT

Function:

This communication object is used to regularly transmit the value "0" when the device is operating. If the device no longer transmits cyclically, this indicates a device failure.
A higher-level system can monitor the cyclical transmission and trigger a warning or alarm message if the status message is not transmitted. The "Send status of device function inverted" parameter can be used to set that this value is transmitted in inverted form. In this case, the value "1" is transmitted cyclically when the device is functioning properly.

If the device is working properly, the value is sent using the settings ("0" cyclical or "1" inverted). If no value is sent, a device failure is displayed.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter "Cyclical transmission of device function(0 = in operation)"
  - Setting: "enable"

Note:

Transmission first takes place after the time configured in the "cyclical transmission period" parameter.

6 Setting functions

6.1 DALI line A/B

6.1.1 Setting the DALI line

6.1.1.1 Parameters on the "DALI line A and B" parameter card

If a number is entered for each of the following parameters, a parameter card is activated. Detailed settings are set on the parameter card. In this application description, the additional parameter cards are described in their own chapters.

DALI lilne operating mode

Parameter	Settings
DALI lilne operating mode (keine Einheit)	Deactivated Normal operation (bus) Broadcast

Function:

This parameter is used to set the operating mode of the DALI line.

The following settings are possible:

- Deactivated:
  All DALI channels are deactivated.
- Normal operation (bus):
  A configured number of DALI channels are activated
- Broadcast:
  One DALI channel is activated.

Number of channels (0 = disabled)

Parameter	Settings
Number of channels (0 = disabled) (keine Einheit)	0 ... **8** ... 64

Function:

This parameter is used to set whether dimming channels are activated, and if so, how many. If a number is entered, the same number of dimming channels (with associated parameter cards and communication objects) is displayed in the ETS.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “DALI lilne operating mode”
  - Setting: "Normal operation (bus)”

Note:

The value "**8**" is stored as the default parameter. The maximum number is "64".

Number of scenes (0 = disabled)

Parameter	Settings
Number of scenes (0 = disabled) (no unit)	**0** ... 16

Function:

This parameter is used to set whether any scenes are activated, and if so, how many. If "0" is entered, all associated parameters in the ETS are deactivated. If a number is entered, the same number of parameter cards is displayed in the ETS.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of channels (0 = disabled)“
  - Setting: “1 ... 16“

Communication object:

If the parameter is set to "enable,” the following communication object is displayed:

- "A 8-bit scene"

Number of standby areas (0 = disabled)

Parameter	Settings
Number of standby areas (0 = disabled) (no unit)	**0** ... 16

Function:

This parameter is used to set whether any standby areas are activated, and if so, how many.
If "0" is entered, all associated parameters in the ETS are deactivated. If a number is entered, the same number of parameter cards is displayed in the ETS.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of channels (0 = disabled)“
  - Setting: “1 ... 16“

Communication object:

If a number is set, the following communication objects are displayed:

- "A Standby 1 <Name>"
- "A Standby 1 <Name> lock"

Number of brightness sensors (0 = disabled)

Parameter	Settings
Number of brightness sensors (0 = disabled) (no unit)	**0** ... 8

Function:

This parameter is used to set whether any brightness sensors are activated, and if so, how many.
If "0" is entered, all associated parameters in the ETS are deactivated. If a number is entered, the same number of parameter cards is displayed in the ETS.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “DALI lilne operating mode”
  - Setting: "Normal operation (bus)”
  - Setting: "Broadcast”

Number of presence detectors (0 = disabled)

Parameter	Settings
Number of presence detectors (0 = disabled) (no unit)	**0** ... 8

Function:

This parameter is used to set whether any presence detectors are activated, and if so, how many.
If "0" is entered, all associated parameters in the ETS are deactivated. If a number is entered, the same number of parameter cards is displayed in the ETS.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “DALI lilne operating mode”
  - Setting: "Normal operation (bus)”
  - Setting: "Broadcast”

6.1.1.2 Communication objects "DALI line A and B"

A 8-bit scene

Object name	Function	Datapoint type	Flags
A 8-bit scene	recall/store	18.001 scene control	CW

Function:

This communication object is used to retrieve, restore or save the 8-bit scene with the number 1 ... 64.

Bits 0 ... 5 contain (binary coded) the number of the desired scene as a decimal number in the range 1 to 64 (where the decimal number 1 corresponds to the binary number 0, decimal number 2 corresponds to binary number 1, etc.). If bit 7 = log. 1, the scene is saved, if bit 7 = log. is 0, it is retrieved. Bit 6 currently has no meaning and must be set to log. 0.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Number of scenes (0 = disabled)”
  - Setting: “1 ... 16“

A Standby 1 <Name>

Object name	Function	Datapoint type	Flags
A Standby 1 <Name>	On/Off	1.001 switch	CRT

Function:

This communication object is used to control a relay of a load switch. The relay switches off the mains voltage supply of the ECGs of a defined switch-off range as soon as the last channel of the switch-off range has been switched off via DALI (dimming value = 0). When a channel returns to "ON,” the power supply of the channel switches to "ON.”

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Number of standby areas (0 = disabled)”

– Setting: “1 ... 16“

A Standby 1 <Name> lock

Object name	Function	Datapoint type	Flags
A Standby 1 <Name> lock	On/Off	1.001 switch	CRW

Function:

This communication object is used to temporarily disable standby for the associated area. This communication object is forcibly switched to "ON", irrespective of whether ECGs in the switch-off area are on or off.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Number of standby areas (0 = disabled)”
  - Setting: “1 ... 16“

6.1.2 Direct operation

6.1.2.1 Parameters on the "Direct operation” parameter card

Direct operation

Parameter	Settings
Direct operation	disable enable

Function:

This parameter is used to disable or enable the operation of the DALI gateway directly on the device.

Direct operation auto reset (0 = do not reset)

Parameter	Settings
Direct operation auto reset (0 = do not reset) (hh:mm:ss)	00:00:00 ... **00:15:00** ...18:12:15

Function:

This parameter is used to set the time after which direct operation is automatically deactivated. If "0" is entered, direct operation is not deactivated. If a number is entered, direct operation is deactivated after the set period of time.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Direct operation”
  - Setting: "enable”

Note:

If direct operation has been switched on, the DALI gateway cannot be controlled remotely. This parameter can be used to prevent direct operation from being unintentionally left switched on.

Direct operation lockable

Parameter	Settings
Direct operation lockable	disable enable

Function:

This parameter is used to lock or unlock the associated communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Direct operation”
  - Setting: "enable”

Communication object:

If the parameter is set to "enable,” the following communication object is displayed:

- "A Direct operation lock"

Status direct operation

Parameter	Settings
Status direct operation	disable enable

Function:

This parameter is used to lock or unlock the associated communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Direct operation”
  - Setting: "enable”

Communication object:

If the parameter is set to "enable,” the following communication object is displayed:

- "A Status direct operation"

Send status on change of status

Parameter	Settings
Send status on change of status	disable enable

Function:

This parameter is used to set whether the value of the associated communication object is automatically sent after each status change.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status direct operation”
  - Setting: "enable”

Send status on request

Parameter	Settings
Send status on request	disable enable

Function:

This parameter is used to set whether the status of the associated communication object is sent on request or whether requests for the status value are rejected.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status direct operation”
  - Setting: "enable”

Send status cyclically (00:00:00 = no sending)

Parameter	Settings
Send status cyclically (00:00:00 = no sending) (hh:mm:ss)	**00:00:00** ... 18:12:15

Function:

This parameter is used to set the time interval at which the value of the associated communication object is sent cyclically. If "00:00:00” is entered, cyclic sending is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status direct operation”
  - Setting: "enable”

6.1.2.2 "Direct operation” communication objects

A Direct operation lock

Object name	Function	Datapoint type	Flags
A Direct operation lock	On/Off	1.003 enable	CW

Function:

This communication object is used to block or release operation at the DALI gateway.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter "Direct operation lockable”
  - Setting: "enable”

A Status direct operation

Object name	Function	Datapoint type	Flags
A Status direct operation	On/Off	1.002 boolean	CRT

Function:

This communication object is used to report whether direct operation is active.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter "Status direct operation”
  - Setting: "enable”

6.1.3 Status messages

6.1.3.1 Parameters on the status messages parameter card

Status failure short circuit DALI line

Parameter	Settings
Status failure short circuit DALI line	disable enable

Function:

This parameter is used to lock or unlock the associated communication object.

Communication object:

If the parameter is set to "enable," the following communication object is displayed:

- "Status failure short circuit DALI line"

Send status on change of status

Parameter	Settings
Send status on change of status	disable enable

Function:

This parameter is used to set whether the value of the associated communication object is automatically sent after each status change.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status failure short circuit DALI line”
  - Setting: "enable”

Send status on request

Parameter	Settings
Send status on request	disable enable

Function:

This parameter is used to set whether the status of the associated communication object is sent on request or whether requests for the status value are rejected.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status failure short circuit DALI line”
  - Setting: "enable”

Send status cyclically (00:00:00 = no sending)

Parameter	Settings
Send status cyclically (00:00:00 = no sending) (hh:mm:ss)	**00:00:00** ... 18:12:15

Function:

This parameter is used to set the time interval at which the value of the associated communication object is sent cyclically. If "00:00:00” is entered, cyclic sending is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status failure short circuit DALI line”
  - Setting: "enable”

Status failure no ECG found

Parameter	Settings
Status failure no ECG found	disable enable

Function:

This parameter is used to disable or enable the associated communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “DALI lilne operating mode“
  - Setting: "Broadcast”

Communication object:

If the parameter is set to "enable,” the following communication object is displayed:

- "Status failure no ECG found"

Send status on change of status

Parameter	Settings
Send status on change of status	disable enable

Function:

This parameter is used to set whether the value of the associated communication object is automatically sent after each status change.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status failure no ECG found”
  - Setting: "enable”

Send status on request

Parameter	Settings
Send status on request	disable enable

Function:

This parameter is used to set whether the status of the associated communication object is sent on request or whether requests for the status value are rejected.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status failure no ECG found”
  - Setting: "enable”

Send status cyclically (00:00:00 = no sending)

Parameter	Settings
Send status cyclically (00:00:00 = no sending) (hh:mm:ss)	**00:00:00** ... 18:12:15

Function:

This parameter is used to set the time interval at which the value of the associated communication object is sent cyclically. If "00:00:00" is entered, cyclic sending is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status failure no ECG found”
  - Setting: "enable”

Status failure incorrect voltage on DALI line

Parameter	Settings
Status failure incorrect voltage on DALI line	disable enable

Function:

This parameter is used to lock or unlock the associated communication object.

Communication object:

If the parameter is set to "enable," the following communication object is displayed:

- "A Status failure incorrect voltage on DALI line"

Send status on change of status

Parameter	Settings
Send status on change of status	disable enable

Function:

This parameter is used to set whether the value of the associated communication object is automatically sent after each status change.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status failure incorrect voltage on DALI line”
  - Setting: "enable”

Send status on request

Parameter	Settings
Send status on request	disable enable

Function:

This parameter is used to set whether the status of the associated communication object is sent on request or whether requests for the status value are rejected.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status failure incorrect voltage on DALI line”
  - Setting: "enable”

Send status cyclically (00:00:00 = no sending)

Parameter	Settings
Send status cyclically (00:00:00 = no sending) (hh:mm:ss)	**00:00:00** ... 18:12:15

Function:

This parameter is used to set the time interval at which the value of the associated communication object is sent cyclically. If "00:00:00" is entered, cyclic sending is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status failure incorrect voltage on DALI line”
  - Setting: "enable”

Status failure

Parameter	Settings
Status failure	disable enable

Function:

This parameter is used to lock or unlock the associated communication object.

Communication object:

If the parameter is set to "enable," the following communication object is displayed:

- "A Status failure"

Send status on change of status

Parameter	Settings
Send status on change of status	disable enable

Function:

This parameter is used to set whether the value of the associated communication object is automatically sent after each status change.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status failure”
  - Setting: "enable”

Send status on request

Parameter	Settings
Send status on request	disable enable

Function:

This parameter is used to set whether the status of the associated communication object is sent on request or whether requests for the status value are rejected.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status failure”

– Setting: "enable”

Status failure, ECG no. xy

Parameter	Settings
Status failure, ECG no. xy	disable enable

Function:

This parameter is used to lock or unlock the associated communication object.

Communication object:

If the parameter is set to "enable,” the following communication object is displayed:

- "A Status failure, ECG no. xy"

Send status on change of status

Parameter	Settings
Send status on change of status	disable enable

Function:

This parameter is used to set whether the value of the associated communication object is automatically sent after each status change.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status failure, ECG no. xy”
  – Setting: "enable”

Send status on request

Parameter	Settings
Send status on request	disable enable

Function:

This parameter is used to set whether the status of the associated communication object is sent on request or whether requests for the status value are rejected.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status failure, ECG no. xy”
  – Setting: "enable”

6.1.3.2 Communication objects "Status messages”

Status failure incorrect voltage on DALI line

Object name	Function	Datapoint type	Flags
Status failure incorrect voltage on DALI line	1 = Failure	1.005 alarm	CRT

Function:

An error is reported via this communication object if an external voltage is detected during initialization due to incorrectly connected lines on the DALI line A or B.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter "Status failure incorrect voltage on DALI line”
  - Setting: "enable”

Status failure short circuit DALI line

Object name	Function	Datapoint type	Flags
Status failure short circuit DALI line	1 = Failure	1.005 alarm	CRT

Function:

This communication object is used to report an error if the DALI line is short-circuited. If the DALI line is short-circuited, the DALI devices can no longer be controlled.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter "Status failure short circuit DALI line”
  - Setting: "enable”

Status failure no ECG found

Object name	Function	Datapoint type	Flags
Status failure no ECG found	1 = Failure	1.002 boolean	CRT

Function:

This communication object is used to report an error if no connected ECG is found.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter "Status failure no ECG found”
  - Setting: "enable”

A Status failure

Object name	Function	Datapoint type	Flags
A Status failure	send/request	237,600 diagnostic value	CRWT

Function:

This 2-byte communication object is used to query the error status of an ECG or a group. Depending on the setting, the error messages are sent automatically or after a query has been made.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Status failure”
  - Setting: "enable”

A Status failure, ECG no. xy

Object name	Function	Datapoint type	Flags
A Status failure, ECG no. xy	send/request	238.600 diagnostic value	CRWT

Function:

This 8-bit communication object is used to report and query the error status of an ECG. The designation "xy" stands for the short address of the ECG. Bit 0 to bit 5 contain the number of the ECG. A lamp error is reported via bit 6 = 1 and an ECG error via bit 7 = 1.
If a send request has been sent to this communication object, the send request in bit 0 to bit 5 must contain the number of the ECG and bits 6 and 7 must be set to "1." In response to a transmission request, the dimming state is always transmitted, regardless of how it came about.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Status failure, ECG no. xy”
  - Setting: "enable”

6.1.4 Scene assignments

6.1.4.1 Parameters on the "Scene assignment” parameter card

Link with KNX scene [0…64] (0 = disabled)

Parameter	Settings
Link with KNX scene [0…64] (0 = disabled) (no unit)	**0** ... 64

Function:

This parameter is used to assign one of 64 possible KNX scenes to the associated DALI scene.
If "0” is selected, no assignment is made and all parameter cards in the ETS are hidden. When a number is selected, up to 16 DALI scenes of a DALI line can be configured. Up to 64 channels can be added to each DALI scene. If a channel has been added, the desired dimming and/or color temperature values are set in the associated parameter cards.
The scenes are stored and retrieved via the associated communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Link with KNX scene [0…64] (0 = disabled)”
  - Setting: “1 ... 64“

Communication object:

If a number is set, the following communication object is displayed:

- Communication object “A 8-bit scene [recall/store]“

Dimming time

Parameter	Settings
Dimming time (hh:mm:ss.f)	**00:00:00.0** ... 01:49:13.5

Function:

This parameter is used to set the time in which the dimming process is completed for all lights together. This fade time also applies to the dimming of the color temperature. The fade time of the scene is independent of the fade times set for the channels.

Example: The lights on line A are dimmed from 50% to 90% The lights on line B are dimmed from 100% to 20%. Since both lines are dimmed to the respectively set value in the same time, the dimming curve for line A is flatter than for line B.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Link with KNX scene [0…64] (0 = disabled)”
  - Setting: “1 ... 64“

Note:

Different fade times lead to reprogramming of the internal fade time of the affected ECGs when the scene is called up or when the dimming or color temperature value is sent. This may cause delays in the scene call. The reprogramming applies both when dimming a new value and when dimming new values together in scenes.
If dimming times are changed by scene calls at very short intervals, this can lead to damage to some manufacturers’ ECGs in the long term. This problem can occur, for example, in the case of color light control via rapidly changing scenes. If the same fade times are used for all scene calls, this problem does not occur. It is recommended to use the default fade time of 0.7 seconds.

For DALI scenes, only the fade times can be processed as follows:

0 s (= start)	2.0 s	8.0 s	32.0 s
0.7 s	2.8 s	11.3 s	45.3 s
1.0 s	4.0 s	16.0 s	64.0 s
1.4 s	5.7 s	22.6 s	90.5 s

8-bit scenes configurable by user

Parameter	Settings
8-bit scenes configurable by user	disable enable

Function:

This parameter is used to set whether the scenes are programmable via a scene telegram. If "disable” is set, the dimming value set in the "Predefined dimming value for scene (%)” parameter cannot be changed during operation.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Link with KNX scene [0…64] (0 = disabled)”
  - Setting: “1 ... 64“

Delete learned scene

Parameter	Settings
Delete learned scene	disable enable

Function:

This parameter is used to set what happens to the learned scene values when the configuration of the ETS is downloaded.

The following settings are possible:

- "disable":
  The learned scene values are not deleted from the device.
- "enable":
  Scene values already learned are deleted from the device and overwritten by the configuration of the ETS.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "8-bit scenes configurable by user”
  – Setting: "enable”

Predefine scene

Parameter	Settings
Predefine scene	disable enable

Function:

This parameter is used to set whether a predefined dimming value is used for the scene.

The following settings are possible:

- "disable":
  Already learned values are deleted from the device during the download of the configuration of the ETS. A scene must be programmed by the user. If nothing is learned, the scene is not activated.
- "enable":
  The dimming value set in the "Predefined dimming value for scene (%)” parameter is stored in the ETS as a scene value.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Delete learned scene”
  – Setting: "enable”

Recall/store dimming value

Parameter	Settings
Recall/store dimming value	disable enable

Function:

This parameter is used to set whether the dimming value of the associated channel is part of the scene.

The following settings are possible:

- "disable":
  The dimming value does not change when the scene is called up.
- "enable":
  The dimming value is approached when the scene is called.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Link with KNX scene [0…64] (0 = disabled)”
  – Setting: “1 ... 64“

Predefined dimming value for scene (%)

Parameter	Settings
Predefined dimming value for scene (%)	0 ... **100**

Function:

This parameter is used to predefine the dimming value for the selected scene number during the configuration and to load it into the device with the ETS.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Recall/store dimming value"
  and
- Parameter "Predefine scene"
  – Setting: "enable"

Recall/store color temperature value

Parameter	Settings
Recall/store color temperature value	disable enable

Function:

This parameter is used to set whether the color temperature value of the associated channel is part of the scene.

The following settings are possible:

- "disable":
  The color temperature value does not change when the scene is called up.
- "enable":
  The color temperature value is approached when the scene is called up.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Link with KNX scene [0…64] (0 = disabled)”
  – Setting: “1 ... 64“

Predefined color temperature for scene (K)

Parameter	Settings
Predefined color temperature for scene (K)	0 ... **4000** ... 65535

Function:

This parameter is used to predefine the color temperature for the selected scene number during the configuration and is loaded into the device with the ETS.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Recall/store color temperature value”
  – Setting: "enable”

Recall/store color value (RGB)

Parameter	Settings
Recall/store color value (RGB) (no unit)	disable enable

Function:

This parameter is used to set whether the color value “red, green, blue” of the associated channel is part of the scene.

The following settings are possible:

- "disable":
  The color value does not change when the scene is called up.
- "enable":
  The color value is approached when the scene is called.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Link with KNX scene [0…64] (0 = disabled)”
  – Setting: “1 ... 64“

Recall/store color value (W)

Parameter	Settings
Recall/store color value (W) (no unit)	disable enable

Function:

This parameter is used to set whether the color value "white” of the associated channel is part of the scene.

The following settings are possible:

- "disable":
  The color value does not change when the scene is called up.
- "enable":
  The color value is approached when the scene is called.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Link with KNX scene [0…64] (0 = disabled)”
  – Setting: “1 ... 64“

Predefined color value for scene (RGB)

Parameter	Settings
Predefined color value for scene (RGB) (no unit)	#000000 ... **#000FA0** ... #FFFFFF

Function:

This parameter is used to predefine the color value “red, green, blue" for the selected scene number during the configuration and is loaded into the device with the ETS.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Recall/store color value (RGB)”
  – Setting: "enable”

Predefined color value for scene (W)

Parameter	Settings
Predefined color value for scene (W) (no unit)	**0** ... 255

Function:

This parameter is used to predefine the "white" color value for the selected scene number during the configuration and to load it into the device with the ETS.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Recall/store color value (W)”
  - Setting: "enable”

6.1.5 Standby

This function makes it possible to switch off the power supply of an ECG when the ECG is switched off (brightness value 0). The switch-off command is suitable for disconnecting the power supply of the corresponding ECG via a load switch and switching off the existing quiescent current of the ECG.
Channels or ECGs can be assigned to one of 16 areas per DALI line. If all assigned groups and ECGs are switched off, "0" (Off) is sent via the corresponding communication object. The switch-off command can be delayed with the parameter “Off after".

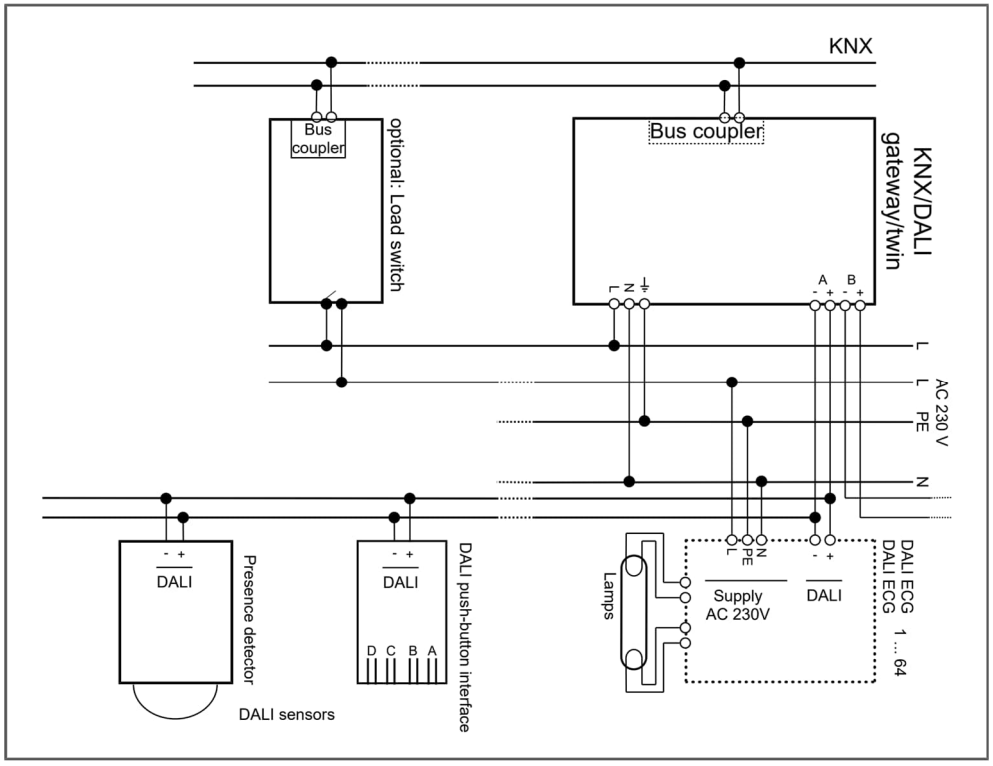

Fig. 7: Standby connection example

6.1.5.1 Parameters of the "Standby” parameter card

A1

Parameter	Settings
A1 (no unit)	**0** ... 16

Function:

This parameter is used to assign the standby areas to the DALI dimming channels.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of standby areas (0 = disabled)”
  - Setting: “1 ... 16“

6.1.5.2 Parameters of the parameter card "Area 1 … 16“

Name

Parameter	Settings
Name	... (free text box for max. 45 characters)

Function:

These parameters are used to specify the name of the associated parameter card.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of standby areas (0 = disabled)”
  - Setting: “1 ... 16“

Off after

Parameter	Settings
Off after (hh:mm:ss)	00:00:05 ... **00:01:00** ...18:12:15

Function:

This parameter is used to set the time after which the standby is activated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of standby areas (0 = disabled)”
  - Setting: “1 ... 16“

Delay on (DALI)

Parameter	Settings
Delay on (DALI) (hh:mm:ss.f)	00:00:00.0 ... **00:00:00.7** ... 01:49:13.5

Function:

This parameter is used to set the time between "ECG on" (brightness 1 ... 100) and the switch-on command. The set delay must not be less than the start time (run-up time) of the ECG. If a delay is set, the time is not taken into account for dimming ramps or time functions.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of standby areas (0 = disabled)”
  - Setting: “1 ... 16“

6.1.6 Channels A1 ... 64

variable number of associated parameter cards

If individual parameters are set to “enable“, additional parameter cards are displayed. The additional parameter cards are used to individualize the parameters and are described in this application program description in a subchapter.

6.1.6.1 Parameters of the parameter card "A1 ... 64“

Name

Parameter	Settings
Name	... (free text box for max. 45 characters)

Function:

These parameters are used to specify the name of the associated parameter card.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “DALI lilne operating mode”
  - Setting: "Normal operation (bus)”
  - Setting: "Broadcast”

Operation Mode

Parameter	Settings
Operation Mode	Normal mode Timer mode Timer mode 2 Flashing Deactivated

Function:

This parameter is used to set the desired operating mode.

The following settings are possible:

- Normal mode:
  All ECG channels can be switched and dimmed without restriction.
- Timer mode:
  All ECG channels can be switched on and off with a delay. For this purpose, the functions “ON time 1 during day mode” and "ON time during night mode” are available. In addition, it is possible to set a warning before switching off.
- Timer mode 2:
  All functions of the timer mode are active. In addition, the function "ON time 2 in day mode" is available.
- Flashing:
  The switching output is switched on and off cyclically. The switch-on and switch-off time can be set.
- Deactivated:
  No operating mode is active on the device.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “DALI lilne operating mode”
  - Setting: "Normal operation (bus)”
  - Setting: "Broadcast”

Communication object:

If the following parameters are selected, the following communication objects are displayed:

- Parameter “Normal operation (bus)”
  - Communication object “A1 <Name> Switching”
  - Communication object “A1 <Name> Dimming”
  - Communication object “A1 <Name> Dimming value 1”
- Parameter “Timer mode“ or “Timer mode 2“
  - Communication object “A1 <Name> Switching”
  - Communication object “A1 <Name> Dimming”
  - Communication object “A1 <Name> Dimming value 1”
  - Communication object “A1 <Name> Lock Timer”
- Parameter “Flashing”
  - Communication object “A1 <Name> Switching”

Control Value Input

Parameter	Settings
Control Value Input	disable enable

Function:

This parameter is used to disable or enable the control value input. The control value input is an alternative to the switching input and can be set for each channel. If the control value input is released, the switching input is automatically deactivated or overwritten. A threshold value can also be set.

Availability:

This parameter is displayed if the following configuration was made:

- Parameter “Operation Mode”
  - Setting: "Normal operation (bus)”
  - Setting: "Timer mode”
  - Setting: "Timer mode 2”
  - Setting: "Flashing”

If the parameter is set to "enable,” the following communication object is displayed:

- Communication object “A1 <Name> Control Value”

Central Switching

Parameter	Settings
Central Switching	disable enable

Function:

This parameter is used to lock or unlock the associated communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Operation Mode”
  - Setting: "Normal operation (bus)”
  - Setting: "Timer mode”
  - Setting: "Timer mode 2”
  - Setting: "Flashing”

Communication object:

If the parameter is set to "enable,” the following communication object is displayed:

- "A1 <Name> Central Switching"

Color Control

Parameter	Settings
Color Control	disable Color temperature RGB RGBW

Function:

This parameter is used to set whether or how the colors of the connected lights are controlled automatically. If a color control type is selected, an additional parameter card is activated, in which detailed settings are possible.

The following settings are possible:

- disable:
  The colors of the lights are not controlled automatically.
- Color temperature:
  The color temperature of the lights is controlled.
- RGB:
  The color of the lights is controlled with adjustable RGB values.
- RGBW:
  The color of the lights is controlled with adjustable RGBW values.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Operation Mode”
  - Setting: "Normal operation (bus)”
  - Setting: "Timer mode”
  - Setting: "Timer mode 2”

Communication object:

If the following parameters are selected, the following communication objects are displayed:

- Parameter “Color temperature”
  - Communication object “A1 <Name> Dim color temperature”
  - Communication object “A1 <Name> Color temperature value”
  - Communication object “A1 <Name> Dim brightness and color temperature”
  - Communication object “A1 <Name> Dimming value 1/color temperature value/dimming time”
- Parameter “RGB”
  - Communication object “A1 <Name> Dim color”
  - Communication object “A1 <Name> Color value”
  - Communication object “A1 <Name> Dimming value 1/color value/dimming time”
- Parameter “RGBW”
  - Communication object “A1 <Name> Dim color”
  - Communication object “A1 <Name> Color value”
  - Communication object “A1 <Name> Dimming value 1/color value/dimming time”

Additional control with single objects

Parameter	Settings
Additional control with single objects	disable enable

Function:

This parameter is used to disable or enable the associated communication objects. When the communication objects are enabled, each color is controlled individually with 3 communication objects.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Color Control“
  - Setting: "RGB”
  - Setting: "RGBW”

Communication object:

If the parameter is set to “enable,” the following communication objects are displayed:

- Communication object “A1 <Name> RGB(W) - R [On/Off]“
- Communication object “A1 <Name> RGB(W) - R [Dimming]“
- Communication object “A1 <Name> RGB(W) - R [8-bit value]“
- Communication object “A1 <Name> RGB(W) - G [On/Off]“
- Communication object “A1 <Name> RGB(W) - G [Dimming]“
- Communication object “A1 <Name> RGB(W) - G [8-bit value]“
- Communication object “A1 <Name> RGB(W) - B [On/Off]“
- Communication object “A1 <Name> RGB(W) - B [Dimming]“
- Communication object “A1 <Name> RGB(W) - B [8-bit value]“

*If the setting: "RGBW" was activated, the following additional communication objects are displayed:

- Communication object “A1 <Name> RGB(W) - W [On/Off]“
- Communication object “A1 <Name> RGB(W) - W [Dimming]“
- Communication object “A1 <Name> RGB(W) - W [8-bit value]“

Additional control with HSV(W)

Parameter	Settings
Additional control with HSV(W)	disable enable

Function:

This parameter is used to disable or enable the associated communication objects. When the communication objects are enabled, each color is controlled individually with 2 communication objects.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Color Control“
  - Setting: "RGB”
  - Setting: "RGBW”

Communication object:

If the parameter is set to “enable,” the following communication objects are displayed:

- Communication object “A1 <Name> HSV(W) - H [Dimming]“
- Communication object “A1 <Name> HSV(W) - H [8-bit value]“
- Communication object “A1 <Name> HSV(W) - S [Dimming]“
- Communication object “A1 <Name> HSV(W) - S [8-bit value]“
- Communication object “A1 <Name> HSV(W) - V [Dimming]“
- Communication object “A1 <Name> HSV(W) - V [8-bit value]“
- Communication object “A1 <Name> HSV(W) - W [Dimming]“
- Communication object “A1 <Name> HSV(W) - W [8-bit value]“

Override 1 ... 7

Parameter	Settings
Override 1 ... 7	Deactivated Manual override (ON) Permanent OFF Lock Central override User defined Forced Control

Function:

These parameters are used to set the override of the selected override block. 7 override blocks are available. The priority of the override function blocks is determined by the position in the processing chain. Override block 7 has the highest priority, override block 1 the lowest priority.

The following settings are possible:

- Deactivated:
  The override block is deactivated.
- Manual override (ON):
  The output is switched on independently of upstream sub-functions. If the output was switched off before activation of the override block, it is switched on when deactivated. If the output was on before the override block was activated, it will remain on when deactivated.
- Permanent OFF:
  The output is switched off independently of upstream sub-functions. If the output was off before activation of the override block, it remains off when deactivated. If the output was switched on before activation of the override block, it is switched off when deactivated.
- Lock:
  The output is locked irrespective of upstream sub-functions as long as this setting is active. If this setting is active, all upstream sub-functions are saved internally but not evaluated or sent. If the lock is deactivated, the last value obtained is processed and the value of the input is forwarded to the output.
- Central override:
  The output is switched on or off independently of upstream sub-functions. If this setting is active, all upstream sub-functions are saved internally but not evaluated or sent. If the central override is deactivated, the last value obtained is processed and the value of the input is forwarded to the output.
- User defined:
  The output is switched on or off or set to the current value irrespective of upstream sub-functions. If this setting is active, all upstream sub-functions are saved internally but not evaluated or sent. The behavior upon deactivation or activation of this function block can be set.
- Forced Control:
  The output is automatically switched on and off to a set value regardless of upstream sub-functions.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Operation Mode”
  - Setting: "Normal operation (bus)”
  - Setting: "Timer mode”
  - Setting: "Timer mode 2”
  - Setting: "Flashing”

Communication object:

If the following parameters are selected, the following communication objects are displayed:

- Parameter: “Manual override (ON)”
  - Communication object: “A1 <Name> Override 1, Manual ON”
- Parameter: “Permanent OFF”
  - Communication object: “A1 <Name> Override 1, Permanent OFF”
- Parameter: “Lock”
  - Communication object: “A1 <Name> Override 1, Lock”
- Parameter: “Central override”
  - Communication object: “A1 <Name> Override 1, Central Control”
- Parameter: “User defined”
  - Communication object: “A1 <Name> Override 1, User-defined Control”
- Parameter: “Forced Control”
  - Communication object: “A1 <Name> Override 1, Forced Control”

Note:

When the mains voltage returns, the override functions "A1 <Name> Override 1, Manual ON” and "Central override” are deactivated.

Overrides status

Parameter	Settings
Overrides status	disable enable

Function:

This parameter is used to lock or unlock the associated communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”

Communication object:

If the parameter is set to “enable,” the following communication object is displayed:

- "A1 <Name> Overrides status"

Send status on request

Parameter	Settings
Send status on request	disable enable

Function:

This parameter is used to set whether the status of the associated communication object is sent on request or whether requests for the status value are rejected.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Overrides status”
  - Setting: "enable”

Send status on change of status

Parameter	Settings
Send status on change of status	disable enable

Function:

This parameter is used to set whether the value of the associated communication object is automatically sent after each status change.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Overrides status”
  - Setting: "enable”

Send status cyclically (00:00:00 = no sending)

Parameter	Settings
Send status cyclically (00:00:00 = no sending) (hh:mm:ss)	**00:00:00** ... 18:12:15

Function:

This parameter is used to set the time interval at which the value of the associated communication object is sent cyclically. If "00:00:00” is entered, cyclic sending is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Overrides status”
  - Setting: "enable”

Status switching

Parameter	Settings
Status switching	disable enable

Function:

This parameter is used to lock or unlock the associated communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Operation Mode”
  - Setting: "Normal operation (bus)”
  - Setting: "Timer mode”
  - Setting: "Timer mode 2”
  - Setting: "Flashing”

Communication object:

If the parameter is set to "enable,” the following communication object is displayed:

- Communication object “A1 <Name> Status switching”

Send status on request

Parameter	Settings
Send status on request	disable enable

Function:

This parameter is used to set whether the status of the associated communication object is sent on request or whether requests for the status value are rejected.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status switching”
  - Setting: "enable”

Send status on change of status

Parameter	Settings
Send status on change of status	disable enable

Function:

This parameter is used to set whether the value of the associated communication object is automatically sent after each status change.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status switching”
  - Setting: "enable”

Send status cyclically (00:00:00 = no sending)

Parameter	Settings
Send status cyclically (00:00:00 = no sending) (hh:mm:ss)	**00:00:00** ... 18:12:15

Function:

This parameter is used to set the time interval at which the value of the associated communication object is sent cyclically. If "00:00:00” is entered, cyclic sending is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status switching”
  - Setting: "enable”

Status dimming value

Parameter	Settings
Status dimming value	disable enable

Function:

This parameter is used to lock or unlock the associated communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Operation Mode”

- Setting: "Normal operation (bus)”
- Setting: "Timer mode”
- Setting: "Timer mode 2”
- Setting: "Flashing”

Communication object:

If the parameter is set to "enable," the following communication object is displayed:

- Communication object “A1 <Name> Status dimming value”

Send status on request

Parameter	Settings
Send status on request	disable enable

Function:

This parameter is used to set whether the status of the associated communication object is sent on request or whether requests for the status value are rejected.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status dimming value”
  - Setting: "enable”

Send status on change of status

Parameter	Settings
Send status on change of status	disable enable

Function:

This parameter is used to set whether the value of the associated communication object is automatically sent after each status change.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status dimming value”
  - Setting: "enable”

Value change since last sent (%)

Parameter	Settings
Value change since last sent (%)	0 ... **5** ... 100

Function:

This parameter is used to set from which value difference to the last transmission the associated communication object is sent again.
If the blocking time has expired, the status is sent.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Send status on change of status”
  - Setting: "enable”

Block time for sending of status

Parameter	Settings
Block time for sending of status (hh:mm:ss)	00:00:00 ... **00:00:10** ... 18:12:15

Function:

This parameter is used to set how much time since the last transmission of the status has to have passed in order for it to be sent again. Hence, no additional bus load is generated by status telegrams generated in quick succession during bus mode.

Availability:

- Parameter “Send status on change of status”
  - Setting: "enable”

Note:

The block time does not apply to cyclic sending. If the block time is greater than the cycle time, the value is nonetheless sent at the end of the cycle time.

Send status cyclically (00:00:00 = no sending)

Parameter	Settings
Send status cyclically (00:00:00 = no sending) (hh:mm:ss)	**00:00:00** ... 18:12:15

Function:

This parameter is used to set the time interval at which the value of the associated communication object is sent cyclically. If "00:00:00” is entered, cyclic sending is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status dimming value”
  - Setting: "enable”

A1 <Name> Status color temperature value

Parameter	Settings
A1 <Name> Status color temperature value	disable enable

Function:

This parameter is used to lock or unlock the associated communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Color Control”
  - Setting: "enable”

Communication object:

If the parameter is set to "enable,” the following communication object is displayed:

- Communication object “A1 <Name> Status color temperature value”

Send status on request

Parameter	Settings
Send status on request	disable enable

Function:

This parameter is used to set whether the status of the associated communication object is sent on request or whether requests for the status value are rejected.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “A1 <Name> Status color temperature value”
  - Setting: "enable”

Send status on change of status

Parameter	Settings
Send status on change of status	disable enable

Function:

This parameter is used to set whether the value of the associated communication object is automatically sent after each status change.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “A1 <Name> Status color temperature value”
  - Setting: "enable”

Value change since last sent (K)

Parameter	Settings
Value change since last sent (K)	0 ... **100** 65535

Function:

This parameter is used to set from which value difference to the last transmission the associated communication object is sent again.
If the blocking time has expired, the status is sent.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Send status on change of status”
  - Setting: "enable”

Block time for sending of status

Parameter	Settings
Block time for sending of status (hh:mm:ss)	00:00:00 ... **00:00:10** ... 18:12:15

Function:

This parameter is used to set how much time since the last transmission of the status has to have passed in order for it to be sent again. Hence, no additional bus load is generated by status telegrams generated in quick succession during bus mode.

Availability:

- Parameter “Send status on change of status”

– Setting: "enable”

Note:

The block time does not apply to cyclic sending. If the block time is greater than the cycle time, the value is nonetheless sent at the end of the cycle time.

Send status cyclically (00:00:00 = no sending)

Parameter	Settings
Send status cyclically (00:00:00 = no sending) (hh:mm:ss)	**00:00:00** ... 18:12:15

Function:

This parameter is used to set the time interval at which the value of the associated communication object is sent cyclically. If "00:00:00” is entered, cyclic sending is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “A1 <Name> Status color temperature value”
  – Setting: "enable”

Status color value

Parameter	Settings
Status color value	disable enable

Function:

This parameter is used to lock or unlock the associated communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Color Control”
  – Setting: "enable”

Communication object:

If the parameter is set to "enable,” the following communication object is displayed:

- Communication object “A1 <Name> Status color value”

Send status on request

Parameter	Settings
Send status on request	disable enable

Function:

This parameter is used to set whether the status of the associated communication object is sent on request or whether requests for the status value are rejected.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status color value”
  – Setting: "enable”

Send status on change of status

Parameter	Settings
Send status on change of status	disable enable

Function:

This parameter is used to set whether the value of the associated communication object is automatically sent after each status change.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status color value”
  - Setting: "enable”

Block time for sending of status

Parameter	Settings
Block time for sending of status (hh:mm:ss)	00:00:00 ... **00:00:10** ... 18:12:15

Function:

This parameter is used to set how much time since the last transmission of the status has to have passed in order for it to be sent again. Hence, no additional bus load is generated by status telegrams generated in quick succession during bus mode.

Availability:

- Parameter “Send status on change of status”
  - Setting: "enable”

Note:

The block time does not apply to cyclic sending. If the block time is greater than the cycle time, the value is nonetheless sent at the end of the cycle time.

Send status cyclically (00:00:00 = no sending)

Parameter	Settings
Send status cyclically (00:00:00 = no sending) (hh:mm:ss)	**00:00:00** ... 18:12:15

Function:

This parameter is used to set the time interval at which the value of the associated communication object is sent cyclically. If "00:00:00” is entered, cyclic sending is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status color value”
  - Setting: "enable”

Switching state on mains voltage failure

Parameter	Settings
Switching state on mains voltage failure	Off On No change Switch on to: Dimming value on mains voltage failure

Function:

This parameter is used to set the desired switching state, which is activated in the event of a mains voltage failure.

The following settings are possible:

- Off:
  In case of a mains voltage failure, the channel is deactivated.
- On:
  In the event of a mains voltage failure, the channel with the maximum dimming value is switched on.
- No change:
  In case of a mains voltage failure, the switching status does not change. The status "Off" is retained. If the status is "On", the current dimming value is retained.
- Switch on to: Dimming value on mains voltage failure:
  In the event of a mains voltage failure, the channel is switched on with a set dimming value.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Operation Mode”
  - Setting: "Normal operation (bus)”
  - Setting: "Timer mode”
  - Setting: "Timer mode 2”
  - Setting: "Flashing”

Dimming value on mains voltage failure (%)

Parameter	Settings
Dimming value on mains voltage failure (%)	**0** ... 100

Function:

This parameter is used to select the desired dimming value, which is activated in the event of a mains power failure.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Switching state on mains voltage failure”
  - Setting: "Switch on to: Dimming value on mains voltage failure”

Color temperature on mains voltage failure

Parameter	Settings
Color temperature on mains voltage failure	No change According to parameter: Color temperature value on mains voltage failure

Function:

This parameter is used to set whether a defined color temperature value is activated in the event of mains power failure.

The following settings are possible:

- No change:
  No new color temperature value is activated in the event of a mains voltage incident.
- According to parameter: Color temperature value on mains voltage failure:
  The color temperature value is set with the parameter”Color temperature value on mains voltage failure (K)”.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Color Control“
  - Setting: "Color temperature”

Color temperature value on mains voltage failure (K)

Parameter	Settings
Color temperature value on mains voltage failure (K)	1000 ... **2700** ... 20000

Function:

This parameter is used to set the color temperature value that is activated in the event of a mains voltage failure.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Color temperature on mains voltage failure”
  - Setting: "According to parameter: Color temperature value on mains voltage failure”

Color on mains voltage failure

Parameter	Settings
Color on mains voltage failure	No change According to parameter: color value on mains voltage failure

Function:

This parameter is used to set whether a defined color value is activated in the event of a mains power failure.

The following settings are possible:

- No change:
  No new color value is activated in the event of a mains voltage incident.
- According to parameter: color value on mains voltage failure:
  The color value is set with the parameter “Color value on mains voltage failure (W)”.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Color Control“
  - Setting: "RGB”
  - Setting: "RGBW”

Color value on mains voltage failure (RGB)

Parameter	Settings
Color value on mains voltage failure (RGB)	#000000 ... **#FFFFFF**

Function:

This parameter is used to set the color value that is activated in the event of a mains power failure.

Availability:

The parameter is displayed if the following configuration has been made:

Parameter “Color Control”

- Setting: "RGB”
- Parameter “Color on mains voltage failure”
  - Setting: "According to parameter: color value on mains voltage failure”

Color value on mains voltage failure (W)

Parameter	Settings
Color value on mains voltage failure (W)	0 ... **255**

Function:

This parameter is used to set the color value that is activated in the event of a mains power failure.

Availability:

The parameter is displayed if the following configuration has been made:

Parameter “Color Control”

- Setting: "RGBW”
- Parameter “Color on mains voltage failure”
  - Setting: "According to parameter: color value on mains voltage failure”

Starting value of switching object/dimming value on mains voltage recovery

Parameter	Settings
Starting value of switching object/dimming value on mains voltage recovery	Off On Starting value according to parameter: Dimming value on mains voltage recovery Last status of the switching value Last received dimming value 1 Last status of the dimming value

Function:

This parameter is used to set the starting value of the communication object "A1 <Name> Switching” and/or "A1 <Name> Dimming value 1”

The following settings are possible:

- Off:
  The starting value of the "A1 <Name> Switching” communication object is in the "Off” state after mains voltage is recovered.
- On:
  The starting value of the "A1 <Name> Switching” communication object is in the "On” state after mains voltage is recovered.
- Starting value according to parameter: Dimming value on mains voltage recovery:

The starting value of the "A1 <Name> Dimming value 1" communication object is set with the "Starting value according to parameter: Dimming value on mains voltage recovery" parameter.

- Last status of the switching value:
  The starting value of the "A1 <Name> Switching" communication object is set with the "Switching state on mains voltage failure" parameter.
- Last received dimming value 1:
  The starting value of the "A1 <Name> Dimming value 1" communication object corresponds to the last received value before mains voltage failure.
- Last status of the dimming value:
  The starting value of the "A1 <Name> Dimming value 1" communication object corresponds to the "A1 <Name> Status dimming value" communication object before mains voltage failure.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter "Operation Mode"
  - Setting: "Normal operation (bus)"
  - Setting: "Timer mode"
  - Setting: "Timer mode 2"
  - Setting: "Flashing"

Dimming value on mains voltage recovery (%)

Parameter	Settings
Dimming value on mains voltage recovery (%)	**0** ... 100

Function:

This parameter is used to select the desired dimming value, with which the channel is switched on when the mains voltage returns.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Switching state on mains voltage failure"
  - Setting: "Switch on to: Dimming value on mains voltage failure"

Starting value color temperature after mains voltage recovery

Parameter	Settings
Starting value color temperature after mains voltage recovery	Starting value according to parameter: Color temperature value on mains voltage recovery Last color temperature value received Last color temperature value status

Function:

This parameter is used to set the color temperature value with which the associated switching input activates when the mains voltage returns.

The following settings are possible:

- Starting value according to parameter: Color temperature value on mains voltage recovery:
  When the mains voltage returns, the switching input starts with the value set in parameter "Color temperature value on mains voltage failure (K)".
- Last color temperature value received:
  When the mains voltage returns, the switching input starts with the last received color temperature value.
- Last color temperature value status:
  When the mains voltage returns, the switching input starts with the last active status color temperature value.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Color Control”
  – Setting: "Color temperature”

Color temperature value on mains voltage failure (K)

Parameter	Settings
Color temperature value on mains voltage failure (K)	1000 ... **2700** ... 20000

Function:

This parameter is used to set the color temperature value that is activated in the event of a mains voltage failure.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Color temperature on mains voltage failure”
  – Setting: "According to parameter: Color temperature value on mains voltage failure”

Starting value color after mains voltage recovery

Parameter	Settings
Starting value color after mains voltage recovery	Starting value according to parameter: color value on mains voltage recovery Last color value received Last status color value

Function:

This parameter is used to set the color temperature value with which the associated switching input activates when the mains voltage returns.

The following settings are possible:

- Starting value according to parameter: color value on mains voltage recovery:
  When the mains voltage returns, the switching input starts with the value set in parameter "Color value on mains voltage recovery (RGB)”.
- Last color value received:
  When the mains voltage returns, the switching input starts with the last received color temperature value.
- Last status color value:
  When the mains voltage returns, the switching input starts with the last active status color temperature value.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Color Control”
  – Setting: "RGB”

– Setting: "RGBW”

Color value on mains voltage recovery (RGB)

Parameter	Settings
Color value on mains voltage recovery (RGB)	#000000 ... **#FFFFFF**

Function:

This parameter is used to set the color value with which the switching input starts when the mains voltage returns.

Availability:

The parameter is displayed if the following configuration has been made:

Parameter “Color Control”

- Setting: "RGB”
- Parameter “Starting value color after mains voltage recovery”
  - Setting: "Starting value according to parameter: color value on mains voltage recovery”

Color value on mains voltage recovery (W)

Parameter	Settings
Color value on mains voltage recovery (W)	0 ... **255**

Function:

This parameter is used to set the color value with which the switching input starts when the mains voltage returns.

Availability:

The parameter is displayed if the following configuration has been made:

Parameter “Color Control”

- Setting: "RGBW”
- Parameter “Starting value color after mains voltage recovery”
  - Setting: "Starting value according to parameter: color value on mains voltage recovery”

Counting of switching cycles

Parameter	Settings
Counting of switching cycles	disable enable

Function:

This parameter is used to disable or enable the counting of the switching cycles. If this parameter is enabled, it is counted how often the associated discrete output is switched on or off. The counting of the switching cycles is used to monitor the connected load.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Operation Mode”
  - Setting: "Normal operation (bus)”
  - Setting: "Timer mode”
  - Setting: "Timer mode 2”
  - Setting: "Flashing”

Communication object:

If the parameter is set to “enable,” the following communication objects are displayed:

- "A1 <Name> Number of switching cycles [Value (in cycles)]”
- "A1 <Name> Number of switching cycles[Set value (in cycles)]”

Counting of operating hours

Parameter	Settings
Counting of operating hours	disable enable

Function:

These parameters are used to disable or enable the counting of operating hours. If this parameter is enabled, it is counted how long the associated switching output has been switched on so far.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Operation Mode”
  - Setting: "Normal operation (bus)”
  - Setting: "Timer mode”
  - Setting: "Timer mode 2”
  - Setting: "Flashing”

Communication object:

If the parameter is set to “enable,” the following communication objects are displayed:

- "A1 <Name> Operating hours [Value (in hours)]”
- "A1 <Name> Operating hours [Set value (in hours)]”

6.1.6.2 Communication objects "A1 ... 64“

A1 <Name> Switching

Object name	Function	Datapoint type	Flags
A1 <Name> Switching	On/Off	1.001 switch	CW

Function:

This communication object is used to receive switching telegrams, which may be forwarded to the associated switching output via the time function. If a logic operation is set, the result of the time function forms the first value of the operation for the associated switching output.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Operation Mode”
  - Setting: "Normal operation (bus)”
  - Setting: "Timer mode”
  - Setting: "Timer mode 2”
  - Setting: "Flashing”

A1 <Name> Control Value

Object name	Function	Datapoint type*	Flags
A1 <Name> Control Value	Value	5.001 percentage (0..100%) 5.010 counter pulses (0..255) 9.001 temperature (°C) 9.004 lux (Lux) 9.021 current (mA) 9.024 power (kW) 14.056 power (W)	CW

*The datapoint type is set with the parameter “Data type".

Function:

This communication object is used to receive control value telegrams for the channel. A received control value is converted into a switching signal via a threshold evaluation.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Control Value Input”
  - Setting: "enable”

A1 <Name> Dimming

Object name	Function	Datapoint type	Flags
A1 <Name> Dimming	brighter/darker	3.007 dimming control	CW

Function:

This communication object is used to receive the telegrams for dimming the associated channel.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Operation Mode”
  - Setting: "Normal operation (bus)”
  - Setting: "Timer mode”
  - Setting: "Timer mode 2”

A1 <Name> Dimming value 1

Object name	Function	Datapoint type	Flags
A1 <Name> Dimming value 1	8-bit value	5.001 percentage (0..100%)	CW

Function:

This communication object is used to receive the telegrams with dimming values for the respective channel.
If the received dimming value is below the minimum dimming value, the behavior of the channel is determined by setting the parameter "Switching via dimming value 1”. The dimming value is dimmed in the time that has been set with the parameter “Switching via dimming value 1“.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Operation Mode”
  - Setting: "Normal operation (bus)”
  - Setting: "Timer mode”
  - Setting: "Timer mode 2”

Dimming value 2

Object name	Function	Datapoint type	Flags
Dimming value 2	8-bit value	5.001 percentage (0..100%)	CW

Function:

This communication object is used to receive the telegrams with dimming values for the respective channel.
If the received dimming value is below the minimum dimming value, the behavior of the channel is determined by the setting for the parameter “switching via dimming value 2.” The dimming value is dimmed in the time that has been set with the parameter “switching via dimming value 2".

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Operation Mode”
  - Setting: "Normal operation (bus)”
  - Setting: "Timer mode”
  - Setting: "Timer mode 2”
- Parameter “Two dimming values”
  - Setting: "enable”

A1 <Name> Status switching

Object name	Function	Datapoint type	Flags
A1 <Name> Status switching	On/Off	1.001 switch	CRT

Function:

This communication object is used to store the current switching state of the associated switching output and to query it by means of a read request. The switching state is automatically sent after each value change of the communication object with appropriate configuration.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Status switching”
  - Setting: "enable”

A1 <Name> Status dimming value

Object name	Function	Datapoint type	Flags
A1 <Name> Status dimming value	8-bit value	5.001 percentage (0..100%)	CRT

Function:

This communication object is used to query the current dimming value of the channel. If the associated parameter has been set accordingly, the dimming value is automatically sent when a change is made.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Status dimming value”
  - Setting: "enable”

A1 <Name> Central Switching

Object name	Function	Datapoint type	Flags
A1 <Name> Central Switching	On/Off	1.001 switch	CW

Function:

This communication object is used to receive switching telegrams, which may be forwarded to the associated output via a different time function than for the communication object “A1 <Name> Switching".

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Central Switching”
  - Setting: "enable”

A1 <Name> Override 1, Manual ON

Object name	Function	Datapoint type	Flags
A1 <Name> Override 1, Manual ON	On/Off	1.003 enable	CW

Function:

This communication object is used to permanently or temporarily switch on a switching output that is switched off via its "normal" switching input.

If the value of the communication object is "On”, "Manual override (ON)” is active. If an inversion is configured, "Manual override (ON)” is when the value of the communication object is "Off”.
If the switching output has not been switched off via its "normal" switching input (possibly with a logic link), the switching output remains switched on.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”

A1 <Name> Override 1, Permanent OFF

Object name	Function	Datapoint type	Flags
A1 <Name> Override 1, Permanent OFF	On/Off	1.003 enable	CW

Function:

This communication object is used to permanently switch on a switching output irrespective of the upstream sub-functions.

If the value of the communication object is "On", "A1 <Name> Override 1, Permanent OFF" is active. If an inversion is configured, "A1 <Name> Override 1, Permanent OFF" is active when the value of the communication object is "Off". The switching output is only switched on if the switching output has also been switched on via its "normal" switching input (if necessary with a logic link). Otherwise the output remains switched off.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter "Override 1 ... 7"
  - Setting: "A1 <Name> Override 1, Permanent OFF"

A1 <Name> Override 1, Lock

Object name	Function	Datapoint type	Flags
A1 <Name> Override 1, Lock	On/Off	1.003 enable	CW

Function:

This communication object is used to lock the switching output against changes for as long as the lock is active irrespective of the upstream sub-functions. All upstream function blocks are internally saved, but not evaluated and sent.
If the lock is deactivated, the current value of the processing chain at the switching input of the function block is passed on to the switching input of the function block.
If the communication object is released, the last received value is processed.

If the value of the communication object is "On", the lock is active. If an inversion is configured, the lock is active when the value of the communication object is "Off". This communication object is only switched on if the switching output has also been switched on via its "normal" switching input (if necessary with a logical link). Otherwise the output remains switched off.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter "Override 1 ... 7"
  - Setting: "Lock"

A1 <Name> Override 1, Central Control

Object name	Function	Datapoint type	Flags
A1 <Name> Override 1, Central Control	On/Off	1.003 enable	CW

Function:

This communication object is used to set, switch on or switch off a switching output at the current value irrespective of the upstream sub-functions. All upstream function blocks are internally saved, but not evaluated and sent. The state can be retained permanently or for a limited time.

If the central control is deactivated, the current value of the processing chain at the switching input of the function block is passed on to the switching input of the function block.
If the central override is released, the last received value is processed.

If the value of the communication object is "On", the timing control is active. If an inversion is configured, the central control is active when the value of the communication object is "Off".
This communication object is only switched on if the switching output has also been switched on via its "normal" switching input (if necessary with a logical link). Otherwise, the switching output remains deactivated.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Central override”

A1 <Name> Override 1, User-defined Control

Object name	Function	Datapoint type	Flags
A1 <Name> Override 1, User-defined Control	On/Off	1.003 enable	CW

Function:

This communication object is used to set, switch on or switch off a switching output at the current value irrespective of the upstream sub-functions. All upstream function blocks are internally saved, but not evaluated or sent. The state can be retained permanently or for a limited time.
The behavior of the communication object is set using the parameters of the "A1 <Name> Override 1, User-defined Control” parameter card.

If the value of the communication object is “On“, user-defined control is active. If an inversion is configured, user-defined control is active when the value of the communication object is "Off”.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "User defined”

A1 <Name> Override 1, Forced Control

Object name	Function	Datapoint type	Flags
A1 <Name> Override 1, Forced Control	On/Off	2.001 switch control	CW

Function:

This 2-bit communication object is used to forcibly switch a switching output on or off irrespective of the upstream sub-functions.

The following settings are possible:

Bit 1	Bit 0	Function
0	0	Forced control disabled
0	1	Forced control disabled
1	0	Forced control switched off
1	1	Forced control switched on

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Forced Control”

A1 <Name> Overrides status

Object name	Function	Datapoint type	Flags
A1 <Name> Overrides status	1 = Active	1.002 boolean	CRT

Function:

This communication object is used to report when an override is active.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Overrides status”
  - Setting: "enable”

A1 <Name> Dim color temperature

Object name	Function	Datapoint type	Flags
A1 <Name> Dim color temperature	warmer/colder	3.007 dimming control	CW

Function:

This communication object is used to dim the colour temperature.

Availability:

This communication object is displayed if the following configuration was made:

- Parameter “Color Control”
  - Setting: "Color temperature”

A1 <Name> Dim color

Object name	Function	Datapoint type	Flags
A1 <Name> Dim color	Color change	254,600 RGB relative control 252,600 RGBW relative control	CW

Function:

This communication object is used to dim the color.

Availability:

This communication object is displayed if the following configuration was made:

- Parameter “Color Control”
  - Setting: "RGB”
  - Setting: "RGBW”

A1 <Name> Color temperature value

Object name	Function	Datapoint type	Flags
A1 <Name> Color temperature value	16-bit value	7.600 absolute colour temperature (K)	CW

Function:

This communication object is used to receive the color temperature value.

Availability:

This communication object is displayed if the following configuration was made:

- Parameter “Color Control”

– Setting: "Color temperature”

A1 <Name> Color value

Object name	Function	Datapoint type	Flags
A1 <Name> Color value	Color value	232.600 RGB value 3x(0..255) 251.600 RGBW value 4x(0..100%)*	CW

Function:

This communication object is used to receive the color value.

Availability:

This communication object is displayed if the following configuration was made:

- Parameter “Color Control”
  - Setting: "RGB”
  - Setting: "RGBW”

A1 <Name> Dim brightness and color temperature

Object name	Function	Datapoint type	Flags
A1 <Name> Dim brightness and color temperature	brighter/darker, warmer/colder	250.600 brightness colour temperature control	CW

Function:

The telegrams for dimming the brightness and colour temperature of the channel are received via this communication object (length: 3 bytes).

Bit	23	22	21	20	19	18	17	16
Meaning	Dimming color temperature (datapoint type: 3.007 dimmer step)							
Bit	15	14	13	20	19	18	17	16
Meaning	Dimming brightness (datapoint type: 3.007 dimmer step)							
Bit	7	6	5	4	3	2	1	0
Meaning	–	–	–	–	–	–	Color temperature “0” = invalid “1” = valid	Brightness “0” = invalid “1” = valid

Availability:

This communication object is displayed if the following configuration was made:

- Parameter “Color Control”
  - Setting: "Color temperature”

A1 <Name> Dimming value 1/color temperature value/dimming time

Object name	Function	Datapoint type	Flags
A1 <Name> Dimming value 1/color temperature value/dimming time	Dimming value + color temperature value + dimming time	249.600 brightness colour temperature transition	CW

Function:

This communication object is used to receive a dimming value and a color temperature value with dimming time for the output (length: 6 bytes).

Bit	47	46	45	44	43	42	41	40
Meaning	Dimming time (datapoint type: TimePeriod100MSec, high byte)							
Bit	39	38	37	36	35	34	33	32
Meaning	Dimming time (datapoint type: TimePeriod100MSec, low byte)							
Bit	31	30	29	28	27	26	25	24
Meaning	Color temperature value (datapoint type: 7,600 absolute color temperature (K), high byte)							
Bit	23	22	21	20	19	18	17	16
Meaning	Color temperature value (datapoint type: 7,600 absolute color temperature (K), low byte)							
Bit	15	14	13	12	11	10	9	8
Meaning	Dimming value (datapoint type: 5,001 percent (0… 100), low byte)							
Bit	7	6	5	4	3	2	1	0
Meaning	–	–	–	–	–	Dimming time “0” = invalid “1” = valid	Color temperature “0” = invalid “1” = valid	Brightness “0” = invalid “1” = valid

Availability:

This communication object is displayed if the following configuration was made:

- Parameter “Color Control”
  - Setting: "Color temperature”

A1 <Name> Dimming value 1/color value/dimming time

Object name	Function	Datapoint type	Flags
A1 <Name> Dimming value 1/color value/dimming time	Dimming value + color value + dimming time	must be set	CW

Function:

This communication object is used to receive a dimming value and a color value with dimming time for the output (length: 6 bytes).

Bit	63	62	61	60	59	58	57	56
Meaning	Dimming time (datapoint type: TimePeriod100MSec, high byte)							
Bit	55	54	53	52	51	50	49	48
Meaning	Dimming time (datapoint type: TimePeriod100MSec, low byte)							
Bit	47	46	45	44	43	42	41	40
Meaning	Red value (datapoint type: 5,001 percent (0… 100%))							
Bit	39	38	37	36	35	34	33	32
Meaning	Green value (datapoint type: 5,001 percent (0… 100%))							
Bit	31	30	29	28	27	26	25	24
Meaning	Blue value (datapoint type: 5,001 percent (0… 100%))							
Bit	23	22	21	20	19	18	17	16
Meaning	White value (datapoint type: 5,001 percent (0… 100%))							
Bit	15	14	13	12	11	10	9	8
Meaning	Dimming value (datapoint type: 5,001 percent (0… 100%))							
Bit	7	6	5	4	3	2	1	0
Meaning	–	–	Dimming time “0” = invalid “1” = valid	Red “0” = invalid “1” = valid	Green “0” = invalid “1” = valid	Blue “0” = invalid “1” = valid	White “0” = invalid “1” = valid	Brightness “0” = invalid “1” = valid

Availability:

This communication object is displayed if the following configuration was made:

- Parameter “Color Control”
  - Setting: "RGB”
  - Setting: "RGBW”

A1 <Name> Status color temperature value

Object name	Function	Datapoint type	Flags
A1 <Name> Status color temperature value	16-bit value	7.600 absolute colour temperature (K)	CRT

Function:

This communication object is used to query the current color temperature value of the channel and to send a change in the color temperature.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “A1 <Name> Status color temperature value”
  - Setting: "enable”

A1 <Name> Status color value

Object name	Function	Datapoint type	Flags
A1 <Name> Status color value	Color value	232.600 RGB value 3x(0..255) 251.600 RGBW value 4x(0..100%)*	CRT

Function:

This communication object is used to query the current color value of the channel and to send a change in the color value.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Status color value”
  - Setting: "enable”

A1 <Name> RGB(W) - R

Object name	Function	Datapoint type	Flags
A1 <Name> RGB(W) - R	On/Off	1.001 switch	CW

Function:

This communication object is used to receive the telegrams for switching the color value "Red" of the channel.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Additional control with single objects”
  - Setting: "enable”

A1 <Name> RGB(W) - R

Object name	Function	Datapoint type	Flags
A1 <Name> RGB(W) - R	Dimming	3.007 dimming control	CW

Function:

This communication object is used to receive the telegrams for dimming the "Red" color value of the channel.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Additional control with single objects”
  - Setting: "enable”

A1 <Name> RGB(W) - R

Object name	Function	Datapoint type	Flags
A1 <Name> RGB(W) - R	8-bit value	5.001 percentage (0..100%)	CW

Function:

This communication object is used to receive the telegrams for setting the color value "Red" of the channel.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Additional control with single objects”
  - Setting: "enable”

A1 <Name> Status RGB(W) - R

Object name	Function	Datapoint type	Flags
A1 <Name> Status RGB(W) - R	8-bit value	5.001 percentage (0..100%)	CRT

Function:

This communication object is used to query the current status of the channel. If the associated parameter has been set accordingly, the status value is automatically sent when a change is made.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Status color value”
- Parameter “Additional control with single objects”
  - Setting: "enable”

A1 <Name> RGB(W) - G

Object name	Function	Datapoint type	Flags
A1 <Name> RGB(W) - G	On/Off	1.001 switch	CW

Function:

This communication object is used to receive the telegrams for switching the color value "green" of the channel.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Additional control with single objects”
  - Setting: "enable”

A1 <Name> RGB(W) - G

Object name	Function	Datapoint type	Flags
A1 <Name> RGB(W) - G	Dimming	3.007 dimming control	CW

Function:

This communication object is used to receive the telegrams for dimming the "green" color value of the channel.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Additional control with single objects”
  - Setting: "enable”

A1 <Name> RGB(W) - G

Object name	Function	Datapoint type	Flags
A1 <Name> RGB(W) - G	8-bit value	5.001 percentage (0..100%)	CW

Function:

This communication object is used to receive the telegrams for setting the color value "green" of the channel.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Additional control with single objects”
  - Setting: "enable”

A1 <Name> Status RGB(W) - G

Object name	Function	Datapoint type	Flags
A1 <Name> Status RGB(W) - G	8-bit value	5.001 percentage (0..100%)	CRT

Function:

This communication object is used to query the current status of the channel. If the associated parameter has been set accordingly, the status value is automatically sent when a change is made.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Status color value”
- Parameter “Additional control with single objects”
  - Setting: "enable”

A1 <Name> RGB(W) - B

Object name	Function	Datapoint type	Flags
A1 <Name> RGB(W) - B	On/Off	1.001 switch	CW

Function:

This communication object is used to receive the telegrams for switching the color value "blue" of the channel.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Additional control with single objects”
  - Setting: "enable”

A1 <Name> RGB(W) - B

Object name	Function	Datapoint type	Flags
A1 <Name> RGB(W) - B	Dimming	3.007 dimming control	CW

Function:

This communication object is used to receive the telegrams for dimming the "blue" color value of the channel.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Additional control with single objects”
  - Setting: "enable”

A1 <Name> RGB(W) - B

Object name	Function	Datapoint type	Flags
A1 <Name> RGB(W) - B	8-bit value	5.001 percentage (0..100%)	CW

Function:

This communication object is used to receive the telegrams for setting the color value "blue" of the channel.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Additional control with single objects”
  - Setting: "enable”

A1 <Name> Status RGB(W) - B

Object name	Function	Datapoint type	Flags
A1 <Name> Status RGB(W) - B	8-bit value	5.001 percentage (0..100%)	CRT

Function:

This communication object is used to query the current status of the channel. If the associated parameter has been set accordingly, the status value is automatically sent when a change is made.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Status color value”
- Parameter “Additional control with single objects”
  - Setting: "enable”

A1 <Name> RGB(W) - W

Object name	Function	Datapoint type	Flags
A1 <Name> RGB(W) - W	On/Off	1.001 switch	CW

Function:

This communication object is used to receive the telegrams for switching the color value "white" of the channel.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Additional control with single objects”
  - Setting: "enable”

A1 <Name> RGB(W) - W

Object name	Function	Datapoint type	Flags
A1 <Name> RGB(W) - W	Dimming	3.007 dimming control	CW

Function:

This communication object is used to receive the telegrams for dimming the "white" color value of the channel.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Additional control with single objects”
  - Setting: "enable”

A1 <Name> RGB(W) - W

Object name	Function	Datapoint type	Flags
A1 <Name> RGB(W) - W	8-bit value	5.001 percentage (0..100%)	CW

Function:

This communication object is used to receive the telegrams for setting the color value “white" of the channel.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Additional control with single objects”
  - Setting: "enable”

A1 <Name> Status RGB(W) - W

Object name	Function	Datapoint type	Flags
A1 <Name> Status RGB(W) - W	8-bit value	5.001 percentage (0..100%)	CRT

Function:

This communication object is used to query the current status of the channel. If the associated parameter has been set accordingly, the status value is automatically sent when a change is made.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Status color value”
- Parameter “Additional control with single objects”
  - Setting: "enable”

A1 <Name> HSV(W) - H

Object name	Function	Datapoint type	Flags
A1 <Name> HSV(W) - H	Dimming	3.007 dimming control	CW

Function:

This communication object is used to receive the telegrams for dimming the color value "H" of the channel.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Additional control with HSV(W)”
  - Setting: "enable”

A1 <Name> HSV(W) - H

Object name	Function	Datapoint type	Flags
A1 <Name> HSV(W) - H	8-bit value	5.001 percentage (0..100%)	CW

Function:

This communication object is used to receive the telegrams for setting the color value "H" of the channel.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Additional control with HSV(W)”
  - Setting: "enable”

A1 <Name> Status HSV(W) - H

Object name	Function	Datapoint type	Flags
A1 <Name> Status HSV(W) - H	8-bit value	5.001 percentage (0..100%)	CRT

Function:

This communication object is used to query the current status of the channel. If the associated parameter has been set accordingly, the status value is automatically sent when a change is made.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Status color value”
- Parameter “Additional control with HSV(W)”
  - Setting: "enable”

A1 <Name> HSV(W) - S

Object name	Function	Datapoint type	Flags
A1 <Name> HSV(W) - S	Dimming	3.007 dimming control	CW

Function:

This communication object is used to receive the telegrams for dimming the color saturation "S" of the channel.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Additional control with HSV(W)”
  - Setting: "enable”

A1 <Name> HSV(W) - S

Object name	Function	Datapoint type	Flags
A1 <Name> HSV(W) - S	8-bit value	5.001 percentage (0..100%)	CW

Function:

This communication object is used to receive the telegrams for setting the color saturation "S" of the channel.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Additional control with HSV(W)”
  - Setting: "enable”

A1 <Name> Status HSV(W) - H

Object name	Function	Datapoint type	Flags
A1 <Name> Status HSV(W) - H	8-bit value	5.001 percentage (0..100%)	CRT

Function:

This communication object is used to query the current status of the channel. If the associated parameter has been set accordingly, the status value is automatically sent when a change is made.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Status color value”
- Parameter “Additional control with HSV(W)”
  - Setting: "enable”

A1 <Name> HSV(W) - V

Object name	Function	Datapoint type	Flags
A1 <Name> HSV(W) - V	Dimming	3.007 dimming control	CW

Function:

This communication object is used to receive the telegrams for dimming the brightness value "V" of the channel.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Additional control with HSV(W)”
  - Setting: "enable”

A1 <Name> HSV(W) - V

Object name	Function	Datapoint type	Flags
A1 <Name> HSV(W) - V	8-bit value	5.001 percentage (0..100%)	CW

Function:

This communication object is used to receive the telegrams for setting the brightness value "V" of the channel.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Additional control with HSV(W)”
  - Setting: "enable”

A1 <Name> Status HSV(W) - V

Object name	Function	Datapoint type	Flags
A1 <Name> Status HSV(W) - V	8-bit value	5.001 percentage (0..100%)	CRT

Function:

This communication object is used to query the current status of the channel. If the associated parameter has been set accordingly, the status value is automatically sent when a change is made.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Status color value”
- Parameter “Additional control with HSV(W)”
  - Setting: "enable”

A1 <Name> HSV(W) - W

Object name	Function	Datapoint type	Flags
A1 <Name> HSV(W) - W	Dimming	3.007 dimming control	CW

Function:

This communication object is used to receive the telegrams for dimming the "white" color value of the channel.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Additional control with HSV(W)”
  - Setting: "enable”

A1 <Name> HSV(W) - W

Object name	Function	Datapoint type	Flags
A1 <Name> HSV(W) - W	8-bit value	5.001 percentage (0..100%)	CW

Function:

This communication object is used to receive the telegrams for setting the color value “white" of the channel.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Additional control with HSV(W)”
  - Setting: "enable”

Object name	Function	Datapoint type	Flags
A1 <Name> Status HSV(W) - W	8-bit value	5.001 percentage (0..100%)	CRT

Function:

This communication object is used to query the current status of the channel. If the associated parameter has been set accordingly, the status value is automatically sent when a change is made.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Status color value”
- Parameter “Additional control with HSV(W)”
  - Setting: "enable”

A1 <Name> Number of switching cycles[Value (in cycles)]

Object name	Function	Datapoint type	Flags
A1 <Name> Number of switching cycles	Value (in cycles)	12.001 counter pulses (unsigned)	CRT

Function:

This communication object is used to query the number of switching cycles via bus. If the switching channel has been switched on and off once, the value is increased by 1.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Counting of switching cycles”
  - Setting: "enable”

A1 <Name> Number of switching cycles [Set value (in cycles)]

Object name	Function	Datapoint type	Flags
A1 <Name> Number of switching cycles	Set value (in cycles)	12.001 counter pulses (unsigned)	CW

Function:

This communication object is used to set the number of switching cycles of the switching output via bus. The number of switching cycles is calculated as an integer value in the range of 0 ... 4 294 967 295.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Counting of switching cycles”
  - Setting: "enable”

A1 <Name> Operating hours [Value (in hours)]A1 <Name> Operating hours [Value (in seconds)]

Object name	Function	Datapoint type	Flags
A1 <Name> Operating hours	Value (in hours) Value (in seconds)	12.001 counter pulses (unsigned)	CRT

Function:

This communication object is used to query the number of operating hours via bus. The unit is set with the parameter “Counting of operating hours”.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Counting of operating hours”
  - Setting: "enable”

A1 <Name> Operating hours [Set value (in hours)] A1 <Name> Operating hours [Set value (in hours)]

Object name	Function	Datapoint type	Flags
A1 <Name> Operating hours	Set value (in hours) Value (in seconds)	12.001 counter pulses (unsigned)	CW

Function:

This communication object is used to set the number of operating hours of the switching output via bus. The unit is set with the parameter “Counting of operating hours”.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Counting of operating hours”
  - Setting: "enable”

6.1.6.3 Operation

Parameters of the "Operation” parameter card

Minimum dimming value (%)

Parameter	Settings
Minimum dimming value (%)	0 ... **1,2**... 100

Function:

This parameter is used to select the dimming value that cannot be undershot during dimming.
Especially with LED (light-emitting diode) and ESL (energy-saving), this parameter can be used to optimize the dimming behavior in the lower dimming range.
If the minimum dimming value is greater than the maximum dimming value, the two values are switched automatically.

If the following additional configurations have been made, the dimming channel is switched off when dimming below the minimum dimming value:

- Parameter “Off via dimming”
  - Setting: "enable”
- Parameter "Switching via dimming value 1" or *
  - Setting: "Off, if dimming value < min. dimming value”
  - Setting: "On and Off possible”

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Operation Mode”
  - Setting: "Normal operation (bus)”
  - Setting: "Timer mode”

– Setting: "Timer mode 2”
– Setting: "Flashing”

Maximum dimming value (%)

Parameter	Settings
Maximum dimming value (%)	0 ... **100**

Function:

This parameter is used to set the dimming value that cannot be exceeded during dimming. If a dimming value is received during operation that is above the maximum dimming value, dimming is only carried out up to the set value. Especially with LED (light-emitting diode) and ESL (energy-saving), this parameter can be used to optimize the dimming behavior in the upper dimming range. Some LEDs can only be dimmed if the maximum dimming value is below 100%.

If the maximum dimming value is smaller than the minimum dimming value, the two values are switched automatically.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Operation Mode”
  – Setting: "Normal operation (bus)”
  – Setting: "Timer mode”
  – Setting: "Timer mode 2”
  – Setting: "Flashing”

Min/max limitation objects

Parameter	Settings
Min/max limitation objects	disable enable

Function:

This parameter is used to display the associated communication objects.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Operation Mode”
  – Setting: "Normal operation (bus)”
  – Setting: "Timer mode”
  – Setting: "Timer mode 2”
  – Setting: "Flashing”

Communication object:

If the parameter is set to “enable,” the following communication objects are displayed:

- Communication object “A1 <Name> Minimum dimming value”
- Communication object “A1 <Name> Maximum dimming value”

Global dimming max. limit

Parameter	Settings
Global dimming max. limit	disable enable

Function:

This parameter is used to disable or enable the associated communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Operation Mode”
  - Setting: "Normal operation (bus)”
  - Setting: "Timer mode”
  - Setting: "Timer mode 2”
  - Setting: "Flashing”

Communication object:

If the parameter is set to "enable,” the following communication object is displayed:

- "A1 <Name> Global dimming max. limit"

Note:

This parameter helps to save energy if, for example, a maximum of 90% instead of 100% can be dimmed globally.

Dimming time for switching

Parameter	Settings
Dimming time for switching (hh:mm:ss.f)	**00:00:00:0** ... 01:49:13:5

Function:

This parameter is used to set whether the set switch-off value "0%" or the switch-on value should be activated (fade time = 0 s) or in which time it should be activated.
If the switch-off is not from 100% to 0% or the switch-on from 0% to 100%, the fade time is calculated proportionally based on the difference between the old and new values. This results in different times in which the setpoint is reached depending on the size of the value difference.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Operation Mode”
  - Setting: "Normal operation (bus)”
  - Setting: "Timer mode”
  - Setting: "Timer mode 2”
  - Setting: "Flashing”

Dimming time for dimming

Parameter	Settings
Dimming time for dimming (hh:mm:ss.f)	00:00:00:0 ... **00:00:05:0**... 01:49:13:5

Function:

This parameter is used to set the time in which dimming is to take place in the case of manual dimming from 0% to 100% (or from 100% to 0%).
This time is calculated proportionally based on the selected dimming step (value difference between the old and new values). This results in different times in which the target value is reached depending on the size of the dimming step.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Operation Mode”
  - Setting: "Normal operation (bus)”
  - Setting: "Timer mode”
  - Setting: "Timer mode 2”

– Setting: "Flashing”

Dimming time for dimming value 1

Parameter	Settings
Dimming time for dimming value 1 (hh:mm:ss.f)	00:00:00:0 ... **00:00:05:0**... 01:49:13:5

Function:

This parameter is used to set whether dimming value 1 is started (fade time = 0 s) or in which time dimming to dimming value 1 should take place.
This time is calculated proportionally based on the selected dimming step (value difference between the old and new values). This results in different times in which the target value is reached depending on the size of the dimming step.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Operation Mode”
  – Setting: "Normal operation (bus)”
  – Setting: "Timer mode”
  – Setting: "Timer mode 2”
  – Setting: "Flashing”

Two dimming values

Parameter	Settings
Two dimming values	disable enable

Function:

This parameter is used to disable or enable the associated communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Operation Mode”
  – Setting: "Normal operation (bus)”
  – Setting: "Timer mode”
  – Setting: "Timer mode 2”
  – Setting: "Flashing”

Communication object:

If the parameter is set to "enable,” the following communication object is displayed:

- “Dimming value 2”

Dimming time for dimming value 2

Parameter	Settings
Dimming time for dimming value 2 (hh:mm:ss.f)	00:00:00:0 ... **00:00:05:0**... 01:49:13:5

Function:

This parameter is used to set whether dimming value 2 is started (fade time = 0 s) or in which time dimming to dimming value 2 should take place.
This time is calculated proportionally based on the selected dimming step (value difference between the old and new values). This results in different times in which the target value is reached depending on the size of the dimming step.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Two dimming values”
  - Setting: "enable”

Dimming fade time objects

Parameter	Settings
Dimming fade time objects	disable enable

Function:

This parameter is used to disable or enable the associated communication objects.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Operation Mode”
  - Setting: "Normal operation (bus)”
  - Setting: "Timer mode”
  - Setting: "Timer mode 2”
  - Setting: "Flashing”

Communication object:

If the parameter is set to “enable,” the following communication objects are displayed:

- Communication object: “A1 <Name> Dimming time for switching”
- Communication object: “A1 <Name> Dimming time for dimming”
- Communication object: “A1 <Name> Dimming time for dimming value 1”

If the "Two dimming values” parameter is also set to “enable", the following communication object is displayed:

- Communication object “A1 <Name> Dimming time for dimming value 2”

Dimming value/time object

Parameter	Settings
Dimming value/time object	disable enable

Function:

This parameter is used to disable or enable the associated communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Operation Mode”
  - Setting: "Normal operation (bus)”
  - Setting: "Timer mode”
  - Setting: "Timer mode 2”
  - Setting: "Flashing”

Communication object:

If the parameter is set to "enable,” the following communication object is displayed:

- "A1 <Name> Dimming value 1/time"

Switch on at value

Parameter	Settings
Switch on at value	Dimming value at switch off Start value according to parameter Last received dimming value 1

Function:

This parameter is used to select the dimming state which is triggered or activated during manual switching on.

The following settings are possible:

- Dimming value at switch off:
  The dimming value at switch on corresponds to the dimming value at switch off
- Start value according to parameter:
  The dimming value at switch on is set with parameter “Switch on value (%)".
- Last received dimming value 1:
  The dimming value at switch on corresponds to “dimming value 1”.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Operation Mode”
  - Setting: "Normal operation (bus)”
  - Setting: "Timer mode”
  - Setting: "Timer mode 2”
  - Setting: "Flashing”

Switch on value (%)

Parameter	Settings
Switch on value (%)	0 ... **100**

Function:

This parameter is used to select the dimming value that is active during switch on.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Switch on at value”
  - Setting: "Start value according to parameter”

ON delay

Parameter	Settings
ON delay (hh:mm:ss)	**00:00:00** ... 23:59:59

Function:

This parameter is used to set the time that passes between the manual command and the actual switch-on. If the default value 00:00:00 is active, the switch-on command is executed immediately.
The ON delay only affects the communication object "A1 <Name> Switching” and a communication object assigned to the switching output.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Operation Mode”
  - Setting: "Normal operation (bus)”
  - Setting: "Timer mode”

– Setting: "Timer mode 2”
– Setting: "Flashing”

OFF delay

Parameter	Settings
OFF delay (hh:mm:ss)	**00:00:00** ... 23:59:59

Function:

This parameter is used to set the time that passes between the manual command and the actual switching off. If the default value 00:00:00 is active, the switch-off command is executed immediately.
The switch-off delay only affects the communication object "A1 <Name> Switching” and a communication object assigned to the switching output.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Operation Mode”
  – Setting: "Normal operation (bus)”
  – Setting: "Timer mode”
  – Setting: "Timer mode 2”
  – Setting: "Flashing”

ON delay (central switching)

Parameter	Settings
ON delay (central switching) (hh:mm:ss)	**00:00:00** ... 23:59:59

Function:

This parameter is used to set the desired ON delay for central switching. If the default value 00:00:00 is active, the switch-on command is executed immediately. The ON delay only affects the communication object "A1 <Name> Central Switching”.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Central Switching”
- Parameter “Operation Mode”
  – Setting: "Normal operation (bus)”
  – Setting: "Timer mode”
  – Setting: "Timer mode 2”
  – Setting: "Flashing”

OFF delay (central switching)

Parameter	Settings
OFF delay (central switching) (hh:mm:ss)	**00:00:00** ... 23:59:59

Function:

This parameter is used to set the desired OFF delay for central switching. If the default value 00:00:00 is active, the switch-off command is executed immediately. The OFF delay only affects the communication object "A1 <Name> Central Switching”.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Central Switching”
- Parameter “Operation Mode”
  - Setting: "Normal operation (bus)”
  - Setting: "Timer mode”
  - Setting: "Timer mode 2”
  - Setting: "Flashing”

Off via dimming

Parameter	Settings
Off via dimming	disable enable

Function:

This parameter is used to set whether the dimming channel is switched off if the brightness is dimmed manually below the minimum dimming value.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Operation Mode”
  - Setting: "Normal operation (bus)”
  - Setting: "Timer mode”
  - Setting: "Timer mode 2”
  - Setting: "Flashing”

On via dimming

Parameter	Settings
On via dimming	disable enable

Function:

This parameter is used to set whether the dimming channel is switched on when the brightness is manually dimmed "brighter".
If a switched-off switching channel is dimmed up manually, the channel is first switched on with the smallest dimming value. The smallest dimming value is dimmed brighter with the configured fade time.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Operation Mode”
  - Setting: "Normal operation (bus)”
  - Setting: "Timer mode”
  - Setting: "Timer mode 2”
  - Setting: "Flashing”

Switching via dimming value 1
Switching via dimming value 2

Parameter	Settings
Switching via dimming value 1 Switching via dimming value 2*	Not possible On, if dimming value >= min. dimming value Off, if dimming value < min. dimming value On and Off possible On, if dimming value > 0 %/Off, if dimming value = 0 %

Function:

This parameter is used to set whether and how the switching channel can be switched on and off by manual dimming.

The following settings are possible:

- Not possible:
  Switching on or off when a set dimming value is reached is not possible.
- On, if dimming value >= min. dimming value:
  If the received dimming value is equal to or greater than the minimum dimming value, the switching channel is switched on and dimmed depending on the configured fade time 1 or fade time 2. If the received dimming value is below the minimum dimming value, the channel remains switched off.
- Off, if dimming value < min. dimming value:
  If the received dimming value is smaller than the minimum dimming value, the switching channel is dimmed down depending on the configured fade time 1 or 2. When the minimum dimming value is reached, the switching channel is switched off. Switching on via dimming value 1 or dimming value 2 is not possible with this setting.
- On and Off possible:
  If the received dimming value is equal to or greater than the minimum dimming value, the switching channel is switched on. If the received dimming value is below the minimum dimming value, the switching channel is switched off.
- On, if dimming value > 0 %/Off, if dimming value = 0 %:
  If a dimming value (of any size) is received, the switching channel is switched on. If the received dimming value falls below the minimum dimming value, the switching channel is set to the minimum dimming value. If the received dimming value is 0%, the switching channel is switched off.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Operation Mode”
  - Setting: "Normal operation (bus)”
  - Setting: "Timer mode”
  - Setting: "Timer mode 2”
  - Setting: "Flashing”

*Is additionally available if the following configuration was performed at the same time as the initial configuration:

- Parameter “Two dimming values”
  - Setting: "enable”

ON time 1 during day mode

Parameter	Settings
ON time 1 during day mode (hh:mm:ss)	00:00:00 ... **00:15:00** ... 23:59:59

Function:

This parameter is used to set the ON time in timer mode or the ON time 1 in 2-stage timer mode.
If during an ongoing ON time, a renewed switch, dim, dimming value or scene recall command is received, the command is executed, the timer is reset and the ON time starts again.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Operation Mode”
  - Setting: "Timer mode”
  - Setting: "Timer mode 2”

Retriggering possible

Parameter	Settings
Retriggering possible (no unit)	0 ... **1** ... 5

Function:

This parameter is used to set whether, if a further switch-on telegram is received during an ongoing ON time, the ON time can be re-started and thus extended.

The following settings are possible:

- “0”:
  The ON time cannot be extended.
- “1“:
  The ON time can be extended for max. 1 timer period.
- “2“:
  The ON time can be extended for max. 2 timer periods.
- “3“:
  The ON time can be extended for max. 3 timer periods.
- “4“:
  The ON time can be extended for max. 4 timer periods.
- “5“:
  The ON time can be extended for max. 5 timer periods.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Operation Mode”
  - Setting: "Timer mode”
  - Setting: "Timer mode 2”

Warning before switching Off

Parameter	Settings
Warning before switching Off	No Via briefly switching on - off Via communication object Via briefly switching on - off and via communication object Dim to half dimming value Dim to half dimming value and via communication object

Function:

This parameter is used to set whether the switch-on time is to be permanently switched off immediately after expiry of the switch-on time or whether a warning is to be given before switching off the output.

The following settings are possible:

- No :
  The switching output is deactivated without warning.
- Via briefly switching on - off:
  The switching output is switched off for the configurable warning signal period (default: 2 s) and then switched on again for a configurable period (difference: parameter “warning period” – parameter “warning signal period”). If, within the warning period, the switching output is switched on again, e.g. via the object “switching,” the timer begins again. If no further signal is received, the output is switched off.
- Via communication object:
  A warning is displayed via the communication object "A1 <Name> Pre-warning expiration of timer period”
  .
  At the same time a warning period begins whose duration is defined by the parameter "warning period.” The value of the communication object is "1” for the warning period. If, within the warning period, the output is switched back on e.g. via the communication object “switching,” the timer begins again. Otherwise the output is switched off.
  The expiry of the switch-on time is signaled via the same communication object.
- Via briefly switching on - off and via communication object:
  This option combines the options "Via briefly switching on - off” and "Via communication object”.
- Dim to half dimming value:
  The switching output is regulated down to half the dimming value at the end of the switch-on time. If the switching output is switched on again within the warning period (e.g. via the "switching” communication object), the timer starts again. Otherwise the output is switched off.
- Dim to half dimming value and via communication object:
  This option combines the options "Dim to half dimming value” and "Via communication object”.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Night mode”
  – Setting: "enable”

Communication object:

If the following parameters are set, the communication object "A1 <Name> Pre-warning expiration of timer period” is displayed:

- Setting “Via communication object”
- Setting “Via briefly switching on - off and via communication object”
- Setting “Dim to half dimming value and via communication object”

Warning period

Parameter	Settings
Warning period (hh:mm:ss)	00:00:00 ... **00:00:30** ... 23:59:59

Function:

This parameter is used to set how long the output remains switched on after the timer has expired.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Warning before switching Off”
  - Setting: "Via briefly switching on - off”
  - Setting: “Via communication object“
  - Setting: "Via briefly switching on - off and via communication object”
  - Setting: "Dim to half dimming value”
  - Setting: "Dim to half dimming value and via communication object”

Note:

If the warning period is shorter than the warning signal period, there is no warning.

Warning signal period

Parameter	Settings
Warning signal period (hh:mm:ss)	00:00:00 ... **00:02:00** ... 23:59:59

Function:

This parameter is used to set how long to warn before switching off and how long to react. After expiry of the warning signal period, the output is switched off.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Warning before switching Off”
  - Setting: "Via briefly switching on - off”
  - Setting: "Via briefly switching on - off and via communication object”

Note:

The default parameter for the warning signal period is 2 seconds. If the warning signal period is longer than the warning period, there is no warning.

Change ON 1 time during day mode via object

Parameter	Settings
Change ON 1 time during day mode via object	disable enable

Function:

This parameter is used to lock or unlock the associated communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Operation Mode”
  - Setting: "Timer mode”
  - Setting: "Timer mode 2”

Communication object:

If the parameter is set to "enable,” the following communication object is displayed:

- "A1 <Name> Day mode timer"

Blocking characteristics for timer mode

Parameter	Settings
Blocking characteristics for timer mode	Deactivate timer Reset timer Pause timer no blocking

Function:

This parameter is used to set the lock behavior that is activated in timer mode.

The following settings are possible:

- Deactivate timer:
  Triggered time functions are halted. After the communication object "lock timer" is enabled, the time function is neither resumed nor re-started.
- Reset timer:
  Triggered time functions are halted. Upon enabling of the communication object "lock timer" the timer is reset and re-started.
- Pause timer:
  Triggered time functions are halted. After the communication object "lock timer" is enabled, the time function is neither resumed nor re-started.
- no blocking:
  The timer operation cannot be locked.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Operation Mode"
  - Setting: "Timer mode"
  - Setting: "Timer mode 2"

Night mode

Parameter	Settings
Night mode	disable enable

Function:

This parameter is used to disable or enable night mode with associated communication objects.
When night mode is active, the switching output can no longer be switched on permanently, but only for a limited time (cleaning lighting for e.g. 30 minutes).

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Operation Mode"
  - Setting: "Normal operation (bus)"
  - Setting: "Timer mode"
  - Setting: "Timer mode 2"
  - Setting: "Flashing"

Communication object:

If the parameter is set to "enable," the following communication objects are displayed:

- "A1 <Name> Night mode"
- "A1 <Name> Lock Timer"

Limit ON time when switching to night mode while lights are on

Parameter	Settings
Limit ON time when switching to night mode while lights are on	disable enable

Function:

This parameter is used to set the behavior for lights that are already switched on when night mode is activated.

The following settings are possible:

- disable:
  If the lights are switched on when night mode is activated, they remain switched on after the ON time (night mode) has ended.
- enable:
  If the lights are switched on when night mode is activated, the lights are switched off at the end of the ON time (night mode).

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Night mode”
  – Setting: "enable”

Cancel ON time when ending night mode while lights are on

Parameter	Settings
Cancel ON time when ending night mode while lights are on	disable enable

Function:

This parameter is used to set how lights that are already switched on behave when the switch is made from night mode to timer mode.

The following settings are possible:

- disable:
  If the lights are already switched on when night mode is deactivated, they switch off at the end of the ON time (night mode).
- enable:
  If the lights are switched on when night mode is deactivated, they remain switched on when the switch is made to timer mode.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Night mode”
  – Setting: "enable”

ON time during night mode

Parameter	Settings
ON time during night mode (hh:mm:ss)	00:00:00 ... **00:30:00** ... 23:59:59

Function:

This parameter is used to set how long the lights remain switched on in night mode.
If during an ongoing ON time, a renewed switch, dim, dimming value or scene recall command is received, the command is executed, the timer is reset and the ON time starts again.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Night mode”
  – Setting: "enable”

Retriggering possible

Parameter	Settings
Retriggering possible (no unit)	0 ... **1** ... 5

Function:

This parameter is used to set whether, if a further switch-on telegram is received during an ongoing ON time, the ON time can be re-started and thus extended.

The following settings are possible:

- “0”:
  The ON time cannot be extended.
- “1“:
  The ON time can be extended for max. 1 timer period.
- “2“:
  The ON time can be extended for max. 2 timer periods.
- “3“:
  The ON time can be extended for max. 3 timer periods.
- “4“:
  The ON time can be extended for max. 4 timer periods.
- “5“:
  The ON time can be extended for max. 5 timer periods.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Night mode”
  – Setting: "enable”

Warning before switching Off

Parameter	Settings
Warning before switching Off	No Via briefly switching on - off Via communication object Via briefly switching on - off and via communication object Dim to half dimming value Dim to half dimming value and via communication object

Function:

This parameter is used to set whether the switch-on time is to be permanently switched off immediately after expiry of the switch-on time or whether a warning is to be given before switching off the output.

The following settings are possible:

- No :
  The switching output is deactivated without warning.
- Via briefly switching on - off:
  The switching output is switched off for the configurable warning signal period (default: 2 s) and then switched on again for a configurable period (difference: parameter “warning period” – parameter “warning signal period”). If, within the warning period, the switching output is switched on again, e.g. via the object “switching,” the timer begins again. If no further signal is received, the output is switched off.
- Via communication object:
  A warning is displayed via the communication object "A1 <Name> Pre-warning expiration of timer period”

  .

  At the same time a warning period begins whose duration is defined by the parameter "warning period.” The value of the communication object is "1” for the warning period. If, within the warning period, the output is switched back on e.g. via the communication object “switching,” the timer begins again. Otherwise the output is switched off.

The expiry of the switch-on time is signaled via the same communication object.

- Via briefly switching on - off and via communication object:
  This option combines the options "Via briefly switching on - off" and "Via communication object".
- Dim to half dimming value:
  The switching output is regulated down to half the dimming value at the end of the switch-on time. If the switching output is switched on again within the warning period (e.g. via the "switching" communication object), the timer starts again. Otherwise the output is switched off.
- Dim to half dimming value and via communication object:
  This option combines the options "Dim to half dimming value" and "Via communication object".

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Night mode"
  - Setting: "enable"

Communication object:

If the following parameters are set, the communication object "A1 <Name> Pre-warning expiration of timer period" is displayed:

- Setting "Via communication object"
- Setting "Via briefly switching on - off and via communication object"
- Setting "Dim to half dimming value and via communication object"

Warning period

Parameter	Settings
Warning period (hh:mm:ss)	00:00:00 ... **00:00:30** ... 23:59:59

Function:

This parameter is used to set how long the output remains switched on after the timer has expired.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Warning before switching Off"
  - Setting: "Via briefly switching on - off"
  - Setting: "Via communication object"
  - Setting: "Via briefly switching on - off and via communication object"
  - Setting: "Dim to half dimming value"
  - Setting: "Dim to half dimming value and via communication object"

Note:

If the warning period is shorter than the warning signal period, there is no warning.

Warning signal period

Parameter	Settings
Warning signal period (hh:mm:ss)	00:00:00 ... **00:02:00** ... 23:59:59

Function:

This parameter is used to set how long to warn before switching off and how long to react. After expiry of the warning signal period, the output is switched off.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Warning before switching Off”
  - Setting: "Via briefly switching on - off”
  - Setting: "Via briefly switching on - off and via communication object”

Note:

The default parameter for the warning signal period is 2 seconds. If the warning signal period is longer than the warning period, there is no warning.

Change ON time in night mode via object

Parameter	Settings
Change ON time in night mode via object	disable enable

Function:

This parameter is used to disable or enable the associated communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Night mode”
  - Setting: "enable”

Communication object:

If the parameter is set to "enable,” the following communication object is displayed:

- "A1 <Name> Night mode timer"

Blocking characteristics for timer mode

Parameter	Settings
Blocking characteristics for timer mode	Deactivate timer Reset timer Pause timer no blocking

Function:

This parameter is used to set the blocking behavior that is activated in the timer mode of night mode.

The following settings are possible:

- Deactivate timer:
  Triggered time functions are halted. After the communication object "lock timer” is enabled, the time function is neither resumed nor re-started.
- Reset timer:
  Triggered time functions are halted. Upon enabling of the communication object "lock timer” the timer is reset and re-started.
- Pause timer:
  Triggered time functions are halted. After the communication object "lock timer” is enabled, the time function is neither resumed nor re-started.
- no blocking:
  The timer operation cannot be locked.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Night mode”
  - Setting: "enable”

Communication object:

If the following parameters are set, the communication object "A1 <Name> Lock Timer” is displayed:

- "Deactivate timer"
- "Reset timer"
- "Pause timer"

“Operation” communication objects

A1 <Name> Dimming value 1/time

Object name	Function	Datapoint type	Flags
A1 <Name> Dimming value 1/time	Dimming value + time	225.001 scaling speed	CW

Function:

This communication object is used to receive dimming value 1 with dimming time for the output (length: 3 bytes).

Bit	23	22	21	20	19	18	17	16
Meaning	Dimming time (datapoint type: Time Period100MSec, high byte)							
Bit	15	14	13	20	19	18	17	16
Meaning	Dimming time (datapoint type: Time Period100MSec, low byte)							
Bit	7	6	5	4	3	2	1	0
Meaning	Dimming value (datapoint type: scaling)							

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Dimming value/time object”
  - Setting: "enable”

A1 <Name> Minimum dimming value

Object name	Function	Datapoint type	Flags
A1 <Name> Minimum dimming value	Set/Request value	5.001 percentage (0..100%)	CRW

Function:

This communication object is used to define the minimum dimming value that cannot be undershot for "dark dimming" (i.e. it can only be dimmed to the minimum dimming value).
In particular with LED and ESL, this parameter can be used to optimize dimming behavior in the lower dimming range.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Min/max limitation objects”
  - Setting: "enable”

A1 <Name> Maximum dimming value

Object name	Function	Datapoint type	Flags
A1 <Name> Maximum dimming value	Set/Request value	5.001 percentage (0..100%)	CRW

Function:

This communication object is used to specify the maximum dimming value that cannot be exceeded during "bright dimming" (i.e. it can only be dimmed up to the maximum dimming value). If a dimming value above the maximum dimming value is received, dimming only goes up to the max. dimming value.
In particular with LED and ESL, this parameter can be used to optimize dimming behavior in the upper dimming range. Some LEDs can only be dimmed if the maximum dimming value is set to < 100 %.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Min/max limitation objects”
  - Setting: "enable”

A1 <Name> Dimming time for switching

Object name	Function	Datapoint type	Flags
A1 <Name> Dimming time for switching	Set/Request dimming time	7.004 time (100 ms)	CRW

Function:

This communication object is used to jump to or dim to the switch-on value set in the “Dimming time for switching" parameter or the switch-off value 0% (fade time = 0 s). If the switch-off is not from 100% to 0% or the switch-on from 0% to 100%, the fade time is calculated proportionally based on the difference between the old and new values. This results in different times in which the setpoint is reached depending on the size of the value difference.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Dimming fade time objects”
  - Setting: "enable”

A1 <Name> Dimming time for dimming

Object name	Function	Datapoint type	Flags
A1 <Name> Dimming time for dimming	Set/Request dimming time	7.004 time (100 ms)	CRW

Function:

This communication object is used to dim the time set in the parameter “Dimming time for dimming“ from 0% to 100% (or from 100% to 0%) during manual dimming. This time is calculated proportionally based on the selected dimming step (value difference between the old and new values). This results in different times in which the target value is reached depending on the size of the dimming step.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Dimming fade time objects”

– Setting: "enable”

A1 <Name> Dimming time for dimming value 1

Object name	Function	Datapoint type	Flags
A1 <Name> Dimming time for dimming value 1	Set/Request dimming time	7.004 time (100 ms)	CRW

Function:

This communication object is used to set whether dimming value 1 is activated (fade time = 0 s) or in which time the set dimming value is dimmed. This time is calculated proportionally based on the selected dimming step (value difference between the old and new values). This results in different times in which the target value is reached depending on the size of the dimming step.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Dimming fade time objects”
  – Setting: "enable”

A1 <Name> Dimming time for dimming value 2

Object name	Function	Datapoint type	Flags
A1 <Name> Dimming time for dimming value 2	Set/Request dimming time	7.004 time (100 ms)	CRW

Function:

This communication object is used to set whether dimming value 2 is activated (fade time = 0 s) or in which time the set dimming value is dimmed. This time is calculated proportionally based on the selected dimming step (value difference between the old and new values). This results in different times in which the target value is reached depending on the size of the dimming step.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Dimming fade time objects”
  – Setting: "enable”

- Parameter "Two dimming values”
  – Setting: "enable”

A1 <Name> Night mode

Object name	Function	Datapoint type	Flags
A1 <Name> Night mode	On/Off	1.003 enable	CW

Function:

This communication object is used to deactivate or activate "night mode" via bus for the associated switching output. If a logical 1 is received, the associated switching output is switched to night mode.
In night mode, the switching output can no longer be switched on permanently, but only for a limited time (e.g. cleaning lighting for 30 minutes).

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter "Night mode”
  - Setting: "enable”

A1 <Name> Night mode timer

Object name	Function	Datapoint type	Flags
A1 <Name> Night mode timer	ON time (seconds)	7.005 time (s)	CRW

Function:

This communication object is used to change the ON time in night mode via bus for the associated switching output.
In contrast to the ETS parameter, due to the DPT it is not possible to specify a delay time of 23:59:59 here.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter "Change ON time in night mode via object ”
  - Setting: "enable”

A1 <Name> Day mode timer

Object name	Function	Datapoint type	Flags
A1 <Name> Day mode timer	ON time (seconds)	7.005 time (s)	CRW

Function:

This communication object is used to change the ON time in day mode via bus for the associated switching output.
This makes it possible to change the timer period during operation.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Change ON 1 time during day mode via object ”
  - Setting: "enable”

A1 <Name> Pre-warning expiration of timer period

Object name	Function	Datapoint type	Flags
A1 <Name> Pre-warning expiration of timer period	On/Off	1.001 switch	CRT

Function:

This communication object is used to signal the elapse of the timer period in timer mode or night mode. This can switch on a warning lamp, for example.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Warning before switching Off”
  - Setting “Via communication object”
  - Setting “Via briefly switching on - off and via communication object”
  - Setting “Dim to half dimming value and via communication object”

A1 <Name> Lock Timer

Object name	Function	Datapoint type	Flags
A1 <Name> Lock Timer	On/Off	1.003 enable	CW

Function:

This communication object is used to switch off timer mode for the associated switching output if necessary. When night mode is active, the switching output can be stopped, restarted, blocked or released again via the communication object.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Blocking characteristics for timer mode”
  - "Deactivate timer"
  - "Reset timer"
  - "Pause timer"

A1 <Name> Global dimming max. limit

Object name	Function	Datapoint type	Flags
A1 <Name> Global dimming max. limit	8-bit value	5.001 percentage (0..100%)	CW

Function:

This communication object is used to set the dimming value globally for all settings to the set maximum limit.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter "Global dimming max. limit”
  - Setting: "enable”

6.1.6.4 Color control

The gateway allows DALI operating devices of the type "DT8 - Colour Control" to be used to control the light colur. It allows flexible color control in the color spaces "RGB", "RGBW", "HSV". In the RGB color space, the colors "Red", "Green", "Blue" and optionally "White" can be directly controlled according to KNX specification by combined or separate communication objects.

In the ETS, the colors can be set using a color selection:

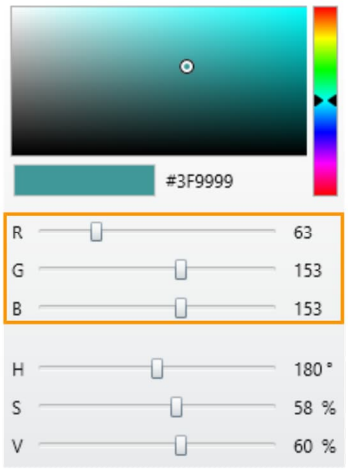

Fig. 8: Color selection in the ETS

The RGBW color model is an extension of the traditional RGB color model that uses red, green, and blue. In the RGBW model, white (W) is added to increase brightness and improve color rendering. 255 gradations are possible for the color value W.

Advantages of the RGBW color model

The RGBW color model offers several advantages over the traditional RGB color model:

1. Higher brightness: The additional white LED can be used to achieve a higher brightness without affecting the color saturation.
2. Energy efficiency: Using a white LED is more energy efficient as it consumes less power than combining red, green and blue LEDs to produce white.
3. Better color rendering: Adding white improves color rendering and allows for a more precise representation of colors, especially for pastel shades and light colors.
4. Flexibility: RGBW LEDs offer more flexibility in the design of lighting solutions as they can produce both colored light and pure white light.

HSV color cone

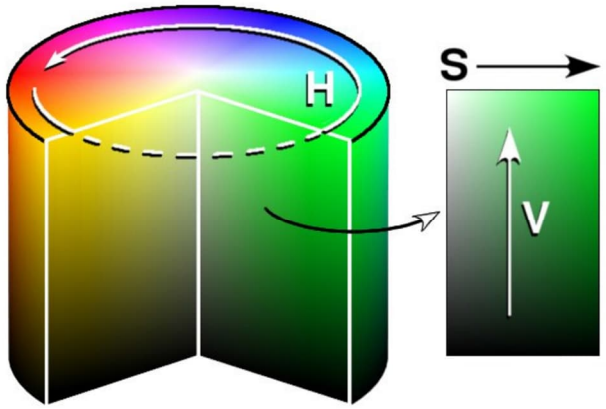

Fig. 9: HSV color cylinder

HSV color space

HSV stands for hue, saturation, value. It is a color model used to describe colors in a way that is more intuitive to humans than the RGB model.
The HSV coordinates can be converted into LAB coordinates without losses.

Coordinates
Color angle "H (Hue)"

Color angle "H (Hue)": The color value is used to set the wavelength of the color between 0° and 360° degrees. In the ETS software, the color angle is set via the color scale.

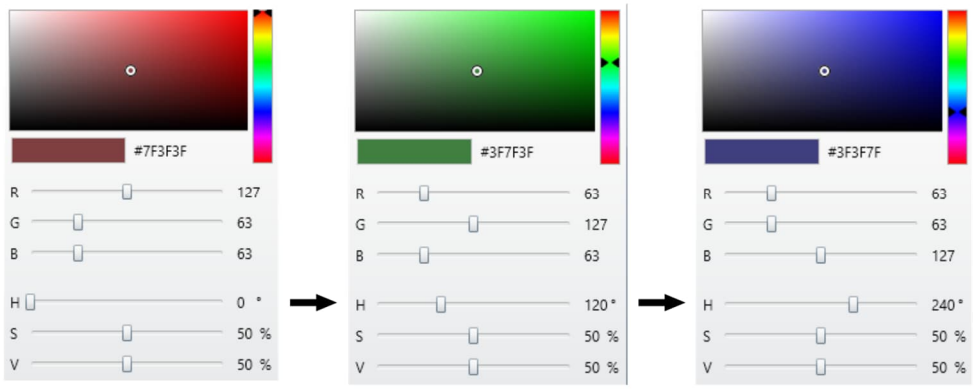

Fig. 10: Color angle H 0- 240°

Color saturation "S (Saturation)"

The color saturation is used to set the level of “purity” at which the selected color value is displayed. In the ETS software, the color saturation is set via the x axis of the color field (x/x).
There are the following guideline values:

Color saturation (in %)	Designation
0	Neutral gray
50	Low saturation
100	Saturated, pure color

Brightness value "V (Value)"

The brightness value (also dark level) is used to set how dark the selected color value is displayed. In the ETS software, the brightness value is set via the y axis of the color field (x/x).

Advantages over the RGB color model

The HSV color model offers some advantages over the RGB color model, especially in image processing and computer vision:

1. Intuitive color display: HSV is more oriented towards human color perception. The hue corresponds to what we see as color, the saturation describes the intensity of the color, and the value indicates the brightness. This makes it easier to manipulate and understand colors.

2. Independence from brightness: In many applications, the brightness of a color is less important than the hue itself. The HSV model separates the brightness from the color information, which makes it possible to perform color operations without affecting the brightness.

3. Robustness against lighting changes: Because the HSV model represents hue regardless of brightness, it is less susceptible to changes in lighting. This is particularly useful in image processing, where lighting variations can be considered noise.

4. Easier color corrections: Color corrections and the compilation of color palettes are often more intuitive and easier to carry out in the HSV model than in the RGB model.

Comparison HSV>RGB

HSV values (°,%,%)	RGB values (no unit)	Color
0,100,100	255,0,0	Red
120,100,100	0,255,0	Green
240,100,100	0,0,255	Blue
360,0,100	255,255,255	White
360,0,0	0,0,0	Black

Table 2: Examples of typical color (values)

Parameters of the "Color control" parameter card

Minimum color value (RGB)

Parameter	Settings
Minimum color value (RGB) (no unit)	**#000000** ... #FFFFFF

Function:

This parameter is used to set the value that cannot be undershot when dimming three color channels "Red, Green, Blue".

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Color Control”
  - Setting: "RGB”
  - Setting: "RGBW”

Minimum color value (W)

Parameter	Settings
Minimum color value (W) (no unit)	**0** ... 255

Function:

This parameter is used to set the value that cannot be undershot when dimming the "White" color channel.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Color Control”
  - Setting: "RGBW”

Maximum color value (RGB)

Parameter	Settings
Maximum color value (RGB) (no unit)	#000000 ... **#FFFFFF**

Function:

This parameter is used to set the value that cannot be exceeded when dimming the three color channels "Red, Green, Blue".

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Color Control”
  - Setting: "RGB”
  - Setting: "RGBW”

Maximum color value (W)

Parameter	Settings
Maximum color value (W) (no unit)	0 ... **255**

Function:

This parameter is used to set the value that cannot be exceeded when the "White" color channel is dimmed.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Color Control”
  - Setting: "RGBW”

Min/max limitation objects

Parameter	Settings
Min/max limitation objects	disable enable

Function:

This parameter is used to disable or enable the described communication objects.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Color Control”
  - Setting: "RGB”
  - Setting: "RGBW”

Communication object:

If the parameter is set to “enable,” the following communication objects are displayed:

- "A1 <Name> Minimum color value"
- "A1 <Name> Maximum color value"

Global color max. limit

Parameter	Settings
Global color max. limit	disable enable

Function:

This parameter is used to disable or enable a global setting of the colors to a maximum limit.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Color Control”
  - Setting: "RGB”
  - Setting: "RGBW”

Communication object:

If the parameter is set to "enable,” the following communication object is displayed:

- "A1 <Name> Global color max. limit"

Dimming time for dimming the color

Parameter	Settings
Dimming time for dimming the color (hh:mm:ss.f)	00:00:00:0 ... **00:00:05:0**... 01:49:13.5

Function:

This parameter is used to set the time in which dimming is carried out from the minimum to the maximum color value during manual dimming. This time is calculated proportionally based on the selected dimming step (value difference between the old and new values). This results in different times in which the target value is reached depending on the size of the dimming step.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Color Control”
  - Setting: "RGB”
  - Setting: "RGBW”

Dimming time for color value

Parameter	Settings
Dimming time for color value (hh:mm:ss.f)	00:00:00:0 ... **00:00:05:0**... 01:49:13.5

Function:

This parameter is used to set in which time the color value is to be reached through dimming.
This time is calculated proportionally based on the selected dimming step (value difference between the old and new values). This results in different times in which the target value is reached depending on the size of the dimming step.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Color Control”
  - Setting: "RGB”
  - Setting: "RGBW”

Dimming fade time objects

Parameter	Settings
Dimming fade time objects	disable enable

Function:

This parameter is used to disable or enable the described communication objects.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Color Control”
  - Setting: "RGB”
  - Setting: "RGBW”

Communication object:

If the parameters are set to “enable,” the following communication objects are displayed:

- "A1 <Name> Dimming time for dimming the color temperature"
- "A1 <Name> Dimming time for color value"

Switch on at value

Parameter	Settings
Switch on at value	Color value at switch off Color value according to parameter Last received color value

Function:

This parameter is used to set the color value that is jumped to or dimmed to upon switching on.

The following settings are possible:

- Color value at switch off:
  The last active color value before switching off is switched on.
- Color value according to parameter:
  When this parameter is activated, an additional parameter appears in which the desired color value can be set.
- Last received color value:
  The last received color value is switched on.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Color Control”
  - Setting: "RGB”
  - Setting: "RGBW”

Switch on value (RGB)

Parameter	Settings
Switch on value (RGB) (no unit)	#000000 ... **#FFFFFF**

Function:

This parameter is used to set the color value "Red, Green, Blue", which is jumped to upon switching on.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Color Control”
  - Setting: "RGBW”

Switch on value (W)

Parameter	Settings
Switch on value (W) (no unit)	0 ... **255**

Function:

This parameter is used to set the color value “White", which is jumped to upon switching on.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Color Control”
  - Setting: "RGB”

Communication objects "Color control”

Dimming time for dimming the color

Object name	Function	Datapoint type	Flags
Dimming time for dimming the color	Set/Request dimming time	7.004 time (100 ms)	CRW

Function:

This communication object is used to set the time in which dimming is to be completed from the minimum to the maximum color value during manual dimming.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Dimming fade time objects”
  - Setting: "enable”

A1 <Name> Dimming time for color value

Object name	Function	Datapoint type	Flags
A1 <Name> Dimming time for color value	Set/Request dimming time	7.004 time (100 ms)	CRW

Function:

This communication object is used to set whether the color value is to be jumped to.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Dimming fade time objects”
  - Setting: "enable”

A1 <Name> Global color max. limit

Object name	Function	Datapoint type	Flags
A1 <Name> Global color max. limit	Color value	232.600 RGB value 3x(0..255) 251.600 RGBW value 4x(0..100%)*	CW

Function:

This communication object is used to set the color value globally to a certain maximum limit.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Global color max. limit”
  - Setting: "enable”

A1 <Name> Minimum color value

Object name	Function	Datapoint type	Flags
A1 <Name> Minimum color value	Set/Request value	232.600 RGB value 3x(0..255) 251.600 RGBW value 4x(0..100%)*	CRW

Function:

This communication object is used to send and receive the minimum color value.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Min/max limitation objects”
  - Setting: "enable”

A1 <Name> Maximum color value

Object name	Function	Datapoint type	Flags
A1 <Name> Maximum color value	Set/Request value	232.600 RGB value 3x(0..255) 251.600 RGBW value 4x(0..100%)*	CRW

Function:

This communication object is used to send and receive the maximum color value.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Min/max limitation objects”
  - Setting: "enable”

6.1.6.5 Color temperature control

The KNX/DALI gateway can be used to adjust the color temperature of the connected lamps from warm white to cold white in order to adapt the lighting to different needs and moods.

Parameters of the “color temperature control” parameter card

Minimum color temperature value (K)

Parameter	Settings
Minimum color temperature value (K)	1000 ... **2700** ... 20000

Function:

This parameter is used to set the value that cannot be undershot when the color temperature is dimmed.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Color Control”
  - Setting: "Color temperature”

Maximum color temperature value (K)

Parameter	Settings
Maximum color temperature value (K)	1000... **6000** ... 20000

Function:

This parameter is used to set the value that cannot be exceeded when the color temperature is dimmed.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Color Control”
  - Setting: "Color temperature”

Min/max limitation objects

Parameter	Settings
Min/max limitation objects	disable enable

Function:

This parameter is used to disable or enable the described communication objects.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Color Control”
  - Setting: "Color temperature”

Communication object:

If the parameter is set to “enable,” the following communication objects are displayed:

- "A1 <Name> Minimum color temperature value"
- "A1 <Name> Maximum color temperature value"

Global color temperature max. limit

Parameter	Settings
Global color temperature max. limit	disable enable

Function:

This parameter is used to disable or enable a global setting of the color temperature to a maximum limit.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Color Control”
  - Setting: "Color temperature”

Communication object:

If the parameter is set to "enable,” the following communication object is displayed:

- "A1 <Name> Global color temperature max. limit"

Dimming time for dimming the color temperature

Parameter	Settings
Dimming time for dimming the color temperature (hh:mm:ss.f)	00:00:00:0 ... **00:00:05:0**... 01:49:13.5

Function:

This parameter is used to set the time in which dimming is carried out from the minimum to the maximum color temperature value during manual dimming. This time is calculated proportionally based on the selected dimming step (value difference between the old and new values). This results in different times in which the target value is reached depending on the size of the dimming step.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Color Control”
  - Setting: "Color temperature”

Dimming time for color temperature value

Parameter	Settings
Dimming time for color temperature value (hh:mm:ss.f)	00:00:00:0 ... **00:00:05:0**... 01:49:13.5

Function:

This parameter is used to set whether the color temperature value is to be jumped to.
If the color temperature value is to be jumped to, the time in which dimming to this color temperature value should be complete is set. The set time is calculated proportionally based on the selected dimming step (difference between the old and new values). Based on the size of the dimming step, there are different times in which the target value is reached.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Color Control”
  - Setting: "Color temperature”

Dimming fade time objects

Parameter	Settings
Dimming fade time objects	disable enable

Function:

This parameter is used to disable or enable the described communication objects.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Color Control”
  - Setting: "Color temperature”

Communication object:

If the parameter is set to “enable,” the following communication objects are displayed:

- "A1 <Name> Dimming time for dimming the color temperature"
- "A1 <Name> Dimming time for color temperature value"

Switch on at value

Parameter	Settings
Switch on at value	Color temperature value at switch off Color temperature value according to parameter Last received color temperature value

Function:

This parameter is used to set the color temperature value, which is jumped to or dimmed to upon switching on.

The following settings are possible:

- Color temperature value at switch off:
  The last active color temperature value before switching off is switched on.
- Color temperature value according to parameter:
  When this parameter is activated, an additional parameter appears in which the desired color temperature value can be entered in Kelvin.
- Last received color temperature value:
  The last color temperature value received is switched on.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Color Control”
  - Setting: "Color temperature”

Switch on value (K)

Parameter	Settings
Switch on value (K)	1000 ... **2700** ...20000

Function:

This parameter is used to set the color temperature value in Kelvin, which is jumped to upon switching on.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Switch on at value”
  - Setting: "Color temperature value according to parameter”

Communication objects “Color temperature control”

A1 <Name> Dimming time for dimming the color temperature

Object name	Function	Datapoint type	Flags
A1 <Name> Dimming time for dimming the color temperature	Set/Request dimming time	7.004 time (100 ms)	CRW

Function:

This communication object is used to set the time for dimming from the minimum to the maximum color temperature value in case of manual dimming.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Dimming fade time objects”
  - Setting: "enable”

A1 <Name> Dimming time for color temperature value

Object name	Function	Datapoint type	Flags
A1 <Name> Dimming time for color temperature value	Set/Request dimming time	7.004 time (100 ms)	CRW

Function:

This communication object is used to set whether the color temperature value is to jumped to.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Dimming fade time objects”
  - Setting: "enable”

A1 <Name> Maximum color temperature value

Object name	Function	Datapoint type	Flags
A1 <Name> Maximum color temperature value	Set/Request value	7.600 absolute colour temperature (K)	CRW

Function:

This communication object is used to set the maximum value when "dimming the color temperature".

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Min/max limitation objects”
  - Setting: "enable”

A1 <Name> Minimum color temperature value

Object name	Function	Datapoint type	Flags
A1 <Name> Minimum color temperature value	Set/Request value	7.600 absolute colour temperature (K)	CRW

Function:

This communication object is used to set the minimum value when "dimming the color temperature".

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Min/max limitation objects”
  - Setting: "enable”

A1 <Name> Global color temperature max. limit

Object name	Function	Datapoint type	Flags
A1 <Name> Global color temperature max. limit	16-bit value	7.600 absolute colour temperature (K)	CW

Function:

This communication object is used to set the color temperature globally to a certain maximum limit.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Global color temperature max. limit”
  - Setting: "enable”

6.1.6.6 Control value input

Parameters of the “Control value input” parameter card

Data type

Parameter	Settings
Data type	Percentage (%) DPT 5.001 Value (8-bit) DPT 5.010 Temperature (°C) DPT 9.001 Current (mA) DPT 9.021 Illuminance (lx) DPT 9.004 Power (kW) DPT 9.024 Power (W) DPT 14.056

Function:

These parameters are used to select and set the datapoint type of the "Control value” communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Control Value Input”
  - Setting: "enable”

Threshold for Off (<=)

Parameter	Settings
Threshold for Off (<=)* (no unit)	**0** ... 100 *

Function:

This parameter is used to set the threshold for "Off".
If the value of this communication object is equal to or smaller than the configured threshold for OFF, then the determined switching value is equal to "OFF” (0). The permitted values for the threshold value depend on the selected data type.

* The settings of the “Data type“ parameter change the settings and unit of this parameter.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Control Value Input”
  - Setting: "enable”

Threshold for On (>=)

Parameter	Settings
Threshold for On (>=)* (no unit)	0 ... **1,2** ... 100*

Function:

This parameter is used to set the threshold for “On".
If the value of this communication object is equal to or greater than the configured threshold for ON, then the determined switching value is equal to “Off” (1). The permitted values for the threshold value depend on the selected data type.

* The settings of the “Data type“ parameter change the settings and unit of this parameter.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Control Value Input”
  - Setting: "enable”

6.1.6.7 Logic operations

Parameters of the “Logic operation” parameter card

Logic operation 1 Logic operation 2

Parameter	Settings
Logic operation 1 Logic operation 2	No logic operation AND OR XOR FILTER TRIGGER

Function:

If required, this parameter is used to supplement the switching output via a logic operation of the switching object with an additionally inserted communication object "link 1" or "link 2". The link object is not subject to a time delay, i.e. the link always takes effect immediately.

The following settings are possible:

- No logic operation:
  The communication object is not enabled.
- AND:
  If the value of the logical input and the other switching input is simultaneously "1”, then the result of the logical operation is "1”. If the value of the logical input and the other switching input is "0" at the same time, then the result of the logical link is "0".
- OR:
  If a value of the logical input or the other switching input is equal to "1”, then the result of the logical operation is "1”. If no value of the logical input or of the other switching input is equal to "0”, then the result of the logical operation is "0”.
- XOR:
  If the value of the logical input is equal to the value of the other switching input, then the result of the logical operation is "0”. If the value of the logical input is

not equal to the value of the other switching input, then the result of the logical operation is "1".

- FILTER:
  If the value of the logical input is "1", the value of the other switching input is passed on to the switching output. If the logical input is "0", the value of the other switching input is filtered and not passed on.
  If the output is to be inverted and the logical input is "1", the inverted value of the other switching input is passed on to the switching output. If the logical input is "0", the value of the other switching input is not passed on, i.e., is filtered. For regular normal mode of the channel without an effective filter, this input must be set to "1" after mains voltage recovery.

Input value	Value operation	Output
x	0	–
0	1	0
1	1	1

– No output of the output value
x any value

- TRIGGER :
  If there is no logical input, "1" is passed to the switching output with each incoming value from the other switching input.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Operation Mode"
  - Setting: "Normal operation (bus)"
  - Setting: "Timer mode"
  - Setting: "Timer mode 2"
  - Setting: "Flashing"

Communication object:

If the following parameters are selected, the communication object "A1 <Name> Logic operation 1" and/or "" is displayed:

- AND
- OR
- XOR
- FILTER

Invert logical input

Parameter	Settings
Invert logical input	No Yes

Function:

This parameter is used to set whether the logical input value is inverted.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Logic operation 1" and/or "logic operation 2"
  - Setting: "AND"
  - Setting: "OR"
  - Setting: "XOR"
  - Setting: "FILTER"

Invert logical output

Parameter	Settings
Invert logical output	No Yes

Function:

This parameter is used to set whether the logical output value is inverted.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Logic operation 1" and/or "logic operation 2"
  - Setting: "AND"
  - Setting: "OR"
  - Setting: "XOR"
  - Setting: "FILTER"

Initial value of logic operation after mains voltage recovery

Parameter	Settings
Initial value of logic operation after mains voltage recovery	Off On As before mains voltage failure

Function:

This parameter is used to set the starting value of the logic input when mains voltage is recovered.

The following settings are possible:

- Off:
  The logic input is set to the value "Off".
- On:
  The logic input is set to the value "On".
- As before mains voltage failure:
  The logic input is set to the value that was active when the mains voltage failure occurred.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Logic operation 1" or "logic operation 2"
  - Setting: "AND"
  - Setting: "OR"
  - Setting: "XOR"
  - Setting: "FILTER"

Communication objects "logic operation"

A1 <Name> Logic operation 1 A1 <Name> logic operation 2

Object name	Function	Datapoint type	Flags
A1 <Name> Logic operation 1 A1 <Name> logic operation 2	On/Off	1.001 switch	CW

Function:

This communication object is used to receive the switching information for the second input of the logic operation 1 or 2 for the respective output.

Availability:

Communication object:

This communication object is displayed if the following configuration has been made:

- Parameter "Logic operation 1” and/or
  Parameter “logic operation 2”
  - Setting: "AND”
  - Setting: "OR”
  - Setting: "XOR”
  - Setting: "FILTER”

Note:

After the values are downloaded from the software of the switching/dimming actuator, the logical input has the value that was in the input before the download. After reset and start-up, the logical input has the configured value or the value "0”.

6.1.6.8 Overrides

Parameters of the "Override, manual ON” parameter card

Control Value Input

Parameter	Settings
Control Value Input	disable enable

Function:

This parameter card is used to disable or enable the implementation of the analogue switch-on and switch-off commands. If the control value input is released, the switching input is automatically deactivated or overwritten.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”

Note:

The control value input is an alternative to the switching input that is available for every channel.

Control Value Input Data Type

Parameter	Settings
Control Value Input Data Type	Percentage (%) DPT 5.001 Value (8-bit) DPT 5.010 Temperature (°C) DPT 9.001 Illuminance (lx) DPT 9.004 Current (mA) DPT 9.021 Power (kW) DPT 9.024 Power (W) DPT 14.056

Function:

This parameter is used to select and set the datapoint type of the "Control value" communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Control Value Input”
  - Setting: "enable”

Threshold for Off (<=)

Parameter	Settings
Threshold for Off (<=)* (no unit)	**0** ... 100 *

Function:

This parameter is used to set the threshold for "Off".
If the value of this communication object is equal to or smaller than the configured threshold for OFF, then the determined switching value is equal to "OFF” (0). The permitted values for the threshold value depend on the selected data type.

* The settings of the “Data type“ parameter change the settings and unit of this parameter.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Control Value Input”
  - Setting: "enable”

Threshold for On (>=)

Parameter	Settings
Threshold for On (>=)* (no unit)	0 ... **1,2** ... 100*

Function:

This parameter is used to set the threshold for “On".
If the value of this communication object is equal to or greater than the configured threshold for ON, then the determined switching value is equal to “Off” (1). The permitted values for the threshold value depend on the selected data type.

* The settings of the “Data type“ parameter change the settings and unit of this parameter.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Control Value Input”
  - Setting: "enable”

Invert Override Control

Parameter	Settings
Invert Override Control	No Yes

Function:

This parameter card can be used to invert the override input.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”

Override Duration

Parameter	Settings
Override Duration (hh:mm:ss)	**00:00:00** ... 18:12:15

Function:

This parameter is used to set the ON time for manual override. If "00:00:00" is set, the override duration is unlimited. The override duration is then re-started with each incoming activation telegram.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Forced Control”

Behavior color temperature value on override activation

Parameter	Settings
Behavior color temperature value on override activation	No change Color temperature value according to parameter

Function:

This parameter is used to set which color temperature value is passed to the output of the function block when the override is activated.

The following settings are possible:

- No change:
  The color temperature value at the output is retained until a new value arrives at the input.
- Color temperature value according to parameter:
  The configuration of "Color temperature value on activation (K)" is adopted.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”

  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”
- Parameter “Color Control“
  - Setting: "Color temperature”

Behavior color value on override activation

Parameter	Settings
Behavior color value on override activation	No change Color value according to parameter

Function:

This parameter is used to set which color value is passed to the output of the function block when the override is activated.

The following settings are possible:

- No change:
  The color value at the output is retained until a new value arrives at the input.
- Color value according to parameter:
  The configuration of "Color value according to parameter" is adopted.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”
- Parameter “Color Control“
  - Setting: "RGB”
  - Setting: "RGBW”

Color temperature value on activation (K)

Parameter	Settings
Color temperature value on activation (K)	1000 ... **6000** ... 20000

Function:

This parameter is used to set the color temperature value that is set and stored when the associated switching output is activated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Behavior color temperature value on override activation”
  - Setting: "Color temperature value according to parameter”

Color value on activation (RGB)

Parameter	Settings
Color value on activation (RGB) (no unit)	#000000 ... **#FFFFFF**

Function:

This parameter is used to set the color value "Red, Green, Blue", which is jumped to when the override is activated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Behavior color value on override activation”
  - Setting: "Color value according to parameter”

Color value on activation (W)

Parameter	Settings
Color value on activation (W) (no unit)	0 ... **255**

Function:

This parameter is used to set the color value "White", which is jumped to when the override is activated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Color Control”
  - Setting: "RGBW”
- Parameter “Behavior color value on override activation”
  - Setting: "Color value according to parameter”

Behavior switching/dimming value on override deactivation

Parameter	Settings
Behavior switching/dimming value on override deactivation	No change Dimming value according to parameter Updated value

Function:

This parameter is used to set which switching and dimming value is forwarded to the output of the function block when the override is deactivated.

The following settings are possible:

- No change:
  The switching value at the output is retained until a new value arrives at the input.
- Dimming value according to parameter:
  The configuration of "Value at activation (%)" is adopted.
- Updated value:
  The switching and dimming value is passed on from the input directly to the output.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”

- Setting: "Central override”
- Setting: "User defined”
- Setting: "Forced Control”

Value at deactivation (%)

Parameter	Settings
Value at deactivation (%)	**0** ... 100

Function:

This parameter is used to set which value is passed on from the switching input to the switching output of a function block when the override is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Behavior switching/dimming value on override deactivation”
  - Setting: "Dimming value according to parameter”

Behavior color temperature value on override deactivation

Parameter	Settings
Behavior color temperature value on override deactivation	No change Color temperature value according to parameter Updated value

Function:

This parameter is used to set which color temperature value is passed to the output of the function block when the override is deactivated.

The following settings are possible:

- No change:
  The color temperature value at the output is retained until a new value arrives at the input.
- Color temperature value according to parameter:
  The configuration of "Color temperature value on deactivation (K)" is adopted.
- Updated value:
  The color temperature value is passed on from the input directly to the output.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”
- Parameter “Color Control”
  - Setting: "Color temperature”

Behavior color value on override deactivation

Parameter	Settings
Behavior color value on override deactivation	No change Color value according to parameter Updated value

Function:

This parameter is used to set which color value is passed to the output of the function block when the override is deactivated.

The following settings are possible:

- No change:
  The switching value at the output is retained until a new value arrives at the input.
- Color value according to parameter:
  The configuration of "Color value on deactivation (RGB)" is adopted. If RGBW has been activated, the configuration of "Color value on deactivation (W)" is also adopted.
- Updated value:
  The switching and dimming value is passed on from the input directly to the output.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”
- Parameter “Color Control”
  - Setting: "RGB”
  - Setting: "RGBW”

Color temperature value on deactivation (K)

Parameter	Settings
Color temperature value on deactivation (K)	1000 ... **2700** ... 20000

Function:

This parameter is used to set which color temperature value is passed on from the switching input to the switching output of a function block when the override is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Behavior color temperature value on override deactivation”
  - Setting: "Color temperature value according to parameter”

Color value on deactivation (RGB)

Parameter	Settings
Color value on deactivation (RGB) (no unit)	#000000 ... **#FFFFFF**

Function:

This parameter is used to set the color value "Red, Green, Blue" that is jumped to when the override is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Behavior color value on override activation"
  - Setting: "Color value according to parameter"

Color value on deactivation (W)

Parameter	Settings
Color value on deactivation (W) (no unit)	0 ... **255**

Function:

This parameter is used to set the "White" color value that is jumped to when the override is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Color Control"
  - Setting: "RGBW"
- Parameter "Behavior color value on override activation"
  - Setting: "Color value according to parameter"

Status Override

Parameter	Settings
Status Override	disable enable

Function:

This parameter is used to display the associated communication objects.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Override 1 ... 7"
  - Setting: "Manual override (ON)"
  - Setting: "Permanent OFF"
  - Setting: "Lock"
  - Setting: "Central override"
  - Setting: "User defined"
  - Setting: "Forced Control"

Communication object:

If the parameter is set to "enable," the following communication objects are displayed:

- "A1 <Name> Override 1, Manual ON, Status"
- "A1 <Name> Override 1, Permanent-OFF, Status"
- "A1 <Name> Override 1, Lock, Status"
- "A1 <Name> Override 1, Central Control, Status"
- "A1 <Name> Override 1, User-defined Control, Status"
- "A1 <Name> Override 1, Forced Control, Status"

Send status on request

Parameter	Settings
Send status on request	disable enable

Function:

This parameter is used to set whether the status of the associated communication object is sent on request or whether requests for the status value are rejected.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status Override”
  - Setting: "enable”

Send status on change of status

Parameter	Settings
Send status on change of status	disable enable

Function:

This parameter is used to set whether the value of the associated communication object is automatically sent after each status change.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status Override”
  - Setting: "enable”

Send status cyclically (00:00:00 = no sending)

Parameter	Settings
Send status cyclically (00:00:00 = no sending) (hh:mm:ss)	**00:00:00** ... 18:12:15

Function:

This parameter is used to set the time interval at which the value of the associated communication object is sent cyclically. If "00:00:00” is entered, cyclic sending is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status Override”
  - Setting: "enable”

Parameters of the "Override, Permanent OFF” parameter card

Control Value Input

Parameter	Settings
Control Value Input	disable enable

Function:

This parameter card is used to disable or enable the implementation of the analogue switch-on and switch-off commands. If the control value input is released, the switching input is automatically deactivated or overwritten.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”

Note:

The control value input is an alternative to the switching input that is available for every channel.

Control Value Input Data Type

Parameter	Settings
Control Value Input Data Type	Percentage (%) DPT 5.001 Value (8-bit) DPT 5.010 Temperature (°C) DPT 9.001 Illuminance (lx) DPT 9.004 Current (mA) DPT 9.021 Power (kW) DPT 9.024 Power (W) DPT 14.056

Function:

This parameter is used to select and set the datapoint type of the "Control value” communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Control Value Input”
  - Setting: "enable”

Threshold for Off (<=)

Parameter	Settings
Threshold for Off (<=)* (no unit)	**0** ... 100 *

Function:

This parameter is used to set the threshold for "Off".
If the value of this communication object is equal to or smaller than the configured threshold for OFF, then the determined switching value is equal to "OFF” (0). The permitted values for the threshold value depend on the selected data type.

* The settings of the “Data type“ parameter change the settings and unit of this parameter.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Control Value Input”
  - Setting: "enable”

Threshold for On (>=)

Parameter	Settings
Threshold for On (>=)* (no unit)	0 ... **1,2** ... 100*

Function:

This parameter is used to set the threshold for “On".
If the value of this communication object is equal to or greater than the configured threshold for ON, then the determined switching value is equal to “Off” (1). The permitted values for the threshold value depend on the selected data type.

* The settings of the “Data type“ parameter change the settings and unit of this parameter.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Control Value Input”
  - Setting: "enable”

Invert Override Control

Parameter	Settings
Invert Override Control	No Yes

Function:

This parameter card can be used to invert the override input.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”

Behavior color temperature value on override activation

Parameter	Settings
Behavior color temperature value on override activation	No change Color temperature value according to parameter

Function:

This parameter is used to set which color temperature value is passed to the output of the function block when the override is activated.

The following settings are possible:

- No change:
  The color temperature value at the output is retained until a new value arrives at the input.
- Color temperature value according to parameter:
  The configuration of "Color temperature value on activation (K)" is adopted.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”
- Parameter “Color Control“
  - Setting: "Color temperature”

Behavior color value on override activation

Parameter	Settings
Behavior color value on override activation	No change Color value according to parameter

Function:

This parameter is used to set which color value is passed to the output of the function block when the override is activated.

The following settings are possible:

- No change:
  The color value at the output is retained until a new value arrives at the input.
- Color value according to parameter:
  The configuration of "Color value according to parameter" is adopted.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”
- Parameter “Color Control“
  - Setting: "RGB”
  - Setting: "RGBW”

Color temperature value on activation (K)

Parameter	Settings
Color temperature value on activation (K)	1000 ... **6000** ... 20000

Function:

This parameter is used to set the color temperature value that is set and stored when the associated switching output is activated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Behavior color temperature value on override activation”
  - Setting: "Color temperature value according to parameter”

Color value on activation (RGB)

Parameter	Settings
Color value on activation (RGB) (no unit)	#000000 ... **#FFFFFF**

Function:

This parameter is used to set the color value "Red, Green, Blue", which is jumped to when the override is activated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Behavior color value on override activation”
  - Setting: "Color value according to parameter”

Color value on activation (W)

Parameter	Settings
Color value on activation (W) (no unit)	0 ... **255**

Function:

This parameter is used to set the color value "White", which is jumped to when the override is activated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Color Control”
  - Setting: "RGBW”
- Parameter “Behavior color value on override activation”
  - Setting: "Color value according to parameter”

Behavior switching/dimming value on override deactivation

Parameter	Settings
Behavior switching/dimming value on override deactivation	No change Dimming value according to parameter Updated value

Function:

This parameter is used to set which switching and dimming value is forwarded to the output of the function block when the override is deactivated.

The following settings are possible:

- No change:
  The switching value at the output is retained until a new value arrives at the input.
- Dimming value according to parameter:
  The configuration of "Value at activation (%)" is adopted.
- Updated value:
  The switching and dimming value is passed on from the input directly to the output.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”

– Setting: "Central override”
– Setting: "User defined”
– Setting: "Forced Control”

Value at deactivation (%)

Parameter	Settings
Value at deactivation (%)	**0** ... 100

Function:

This parameter is used to set which value is passed on from the switching input to the switching output of a function block when the override is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Behavior switching/dimming value on override deactivation”
  – Setting: "Dimming value according to parameter”

Behavior color temperature value on override deactivation

Parameter	Settings
Behavior color temperature value on override deactivation	No change Color temperature value according to parameter Updated value

Function:

This parameter is used to set which color temperature value is passed to the output of the function block when the override is deactivated.

The following settings are possible:

- No change:
  The color temperature value at the output is retained until a new value arrives at the input.
- Color temperature value according to parameter:
  The configuration of "Color temperature value on deactivation (K)" is adopted.
- Updated value:
  The color temperature value is passed on from the input directly to the output.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  – Setting: "Manual override (ON)”
  – Setting: "Permanent OFF”
  – Setting: "Lock”
  – Setting: "Central override”
  – Setting: "User defined”
  – Setting: "Forced Control”
- Parameter “Color Control”
  – Setting: "Color temperature”

Behavior color value on override deactivation

Parameter	Settings
Behavior color value on override deactivation	No change Color value according to parameter Updated value

Function:

This parameter is used to set which color value is passed to the output of the function block when the override is deactivated.

The following settings are possible:

- No change:
  The switching value at the output is retained until a new value arrives at the input.
- Color value according to parameter:
  The configuration of "Color value on deactivation (RGB)" is adopted. If RGBW has been activated, the configuration of "Color value on deactivation (W)" is also adopted.
- Updated value:
  The switching and dimming value is passed on from the input directly to the output.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”
- Parameter “Color Control”
  - Setting: "RGB”
  - Setting: "RGBW”

Color temperature value on deactivation (K)

Parameter	Settings
Color temperature value on deactivation (K)	1000 ... **2700** ... 20000

Function:

This parameter is used to set which color temperature value is passed on from the switching input to the switching output of a function block when the override is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Behavior color temperature value on override deactivation”
  - Setting: "Color temperature value according to parameter”

Color value on deactivation (RGB)

Parameter	Settings
Color value on deactivation (RGB) (no unit)	#000000 ... **#FFFFFF**

Function:

This parameter is used to set the color value "Red, Green, Blue" that is jumped to when the override is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Behavior color value on override activation"
  - Setting: "Color value according to parameter"

Color value on deactivation (W)

Parameter	Settings
Color value on deactivation (W) (no unit)	0 ... **255**

Function:

This parameter is used to set the "White" color value that is jumped to when the override is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Color Control"
  - Setting: "RGBW"
- Parameter "Behavior color value on override activation"
  - Setting: "Color value according to parameter"

Status Override

Parameter	Settings
Status Override	disable enable

Function:

This parameter is used to display the associated communication objects.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Override 1 ... 7"
  - Setting: "Manual override (ON)"
  - Setting: "Permanent OFF"
  - Setting: "Lock"
  - Setting: "Central override"
  - Setting: "User defined"
  - Setting: "Forced Control"

Communication object:

If the parameter is set to "enable," the following communication objects are displayed:

- "A1 <Name> Override 1, Manual ON, Status"
- "A1 <Name> Override 1, Permanent-OFF, Status"
- "A1 <Name> Override 1, Lock, Status"
- "A1 <Name> Override 1, Central Control, Status"
- "A1 <Name> Override 1, User-defined Control, Status"
- "A1 <Name> Override 1, Forced Control, Status"

Send status on request

Parameter	Settings
Send status on request	disable enable

Function:

This parameter is used to set whether the status of the associated communication object is sent on request or whether requests for the status value are rejected.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status Override”
  - Setting: "enable”

Send status on change of status

Parameter	Settings
Send status on change of status	disable enable

Function:

This parameter is used to set whether the value of the associated communication object is automatically sent after each status change.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status Override”
  - Setting: "enable”

Send status cyclically (00:00:00 = no sending)

Parameter	Settings
Send status cyclically (00:00:00 = no sending) (hh:mm:ss)	**00:00:00** ... 18:12:15

Function:

This parameter is used to set the time interval at which the value of the associated communication object is sent cyclically. If "00:00:00” is entered, cyclic sending is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status Override”
  - Setting: "enable”

Start value/behavior of override input on voltage recovery

Parameter	Settings
Start value/behavior of override input on voltage recovery	Activated - Switched Off Activated - Switched On Deactivated Last value

Function:

These parameters are used to set the desired switching state, which is activated when the mains voltage returns.

The following settings are possible:

- Activated - Switched Off:
  When mains voltage returns, the switching channel is deactivated.
- Activated - Switched On:
  When mains voltage returns, the switching channel with the maximum dimming value is switched on.
- Deactivated:
  When mains voltage returns, the switching channel is switched on with the same value as before mains voltage failure.
- Last value:
  When mains voltage returns, the switching channel with the last received value is switched on.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Control Value Input”
  – Setting: "enable”

Parameters of the "Override, lock” parameter card

Control Value Input

Parameter	Settings
Control Value Input	disable enable

Function:

This parameter card is used to disable or enable the implementation of the analogue switch-on and switch-off commands. If the control value input is released, the switching input is automatically deactivated or overwritten.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  – Setting: "Manual override (ON)”
  – Setting: "Permanent OFF”
  – Setting: "Lock”
  – Setting: "Central override”
  – Setting: "User defined”
  – Setting: "Forced Control”

Note:

The control value input is an alternative to the switching input that is available for every channel.

Control Value Input Data Type

Parameter	Settings
Control Value Input Data Type	Percentage (%) DPT 5.001 Value (8-bit) DPT 5.010 Temperature (°C) DPT 9.001 Illuminance (lx) DPT 9.004 Current (mA) DPT 9.021 Power (kW) DPT 9.024 Power (W) DPT 14.056

Function:

This parameter is used to select and set the datapoint type of the "Control value" communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Control Value Input”
  - Setting: "enable”

Threshold for Off (<=)

Parameter	Settings
Threshold for Off (<=)* (no unit)	**0** ... 100 *

Function:

This parameter is used to set the threshold for "Off".
If the value of this communication object is equal to or smaller than the configured threshold for OFF, then the determined switching value is equal to "OFF” (0). The permitted values for the threshold value depend on the selected data type.

* The settings of the “Data type“ parameter change the settings and unit of this parameter.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Control Value Input”
  - Setting: "enable”

Threshold for On (>=)

Parameter	Settings
Threshold for On (>=)* (no unit)	0 ... **1,2** ... 100*

Function:

This parameter is used to set the threshold for “On".
If the value of this communication object is equal to or greater than the configured threshold for ON, then the determined switching value is equal to “Off” (1). The permitted values for the threshold value depend on the selected data type.

* The settings of the “Data type“ parameter change the settings and unit of this parameter.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Control Value Input”
  - Setting: "enable”

Invert Override Control

Parameter	Settings
Invert Override Control	No Yes

Function:

This parameter card can be used to invert the override input.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”

- Setting: "Permanent OFF”
- Setting: "Lock”
- Setting: "Central override”
- Setting: "User defined”
- Setting: "Forced Control”

Behavior color temperature value on override activation

Parameter	Settings
Behavior color temperature value on override activation	No change Color temperature value according to parameter

Function:

This parameter is used to set which color temperature value is passed to the output of the function block when the override is activated.

The following settings are possible:

- No change:
  The color temperature value at the output is retained until a new value arrives at the input.
- Color temperature value according to parameter:
  The configuration of "Color temperature value on activation (K)" is adopted.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”
- Parameter “Color Control“
  - Setting: "Color temperature”

Behavior color value on override activation

Parameter	Settings
Behavior color value on override activation	No change Color value according to parameter

Function:

This parameter is used to set which color value is passed to the output of the function block when the override is activated.

The following settings are possible:

- No change:
  The color value at the output is retained until a new value arrives at the input.
- Color value according to parameter:
  The configuration of "Color value according to parameter" is adopted.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”

  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”
- Parameter “Color Control“
  - Setting: "RGB”
  - Setting: "RGBW”

Color temperature value on activation (K)

Parameter	Settings
Color temperature value on activation (K)	1000 ... **6000** ... 20000

Function:

This parameter is used to set the color temperature value that is set and stored when the associated switching output is activated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Behavior color temperature value on override activation”
  - Setting: "Color temperature value according to parameter”

Color value on activation (RGB)

Parameter	Settings
Color value on activation (RGB) (no unit)	#000000 ... **#FFFFFF**

Function:

This parameter is used to set the color value "Red, Green, Blue", which is jumped to when the override is activated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Behavior color value on override activation”
  - Setting: "Color value according to parameter”

Color value on activation (W)

Parameter	Settings
Color value on activation (W) (no unit)	0 ... **255**

Function:

This parameter is used to set the color value "White", which is jumped to when the override is activated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Color Control”
  - Setting: "RGBW”
- Parameter “Behavior color value on override activation”
  - Setting: "Color value according to parameter”

Behavior switching/dimming value on override deactivation

Parameter	Settings
Behavior switching/dimming value on override deactivation	No change Dimming value according to parameter Updated value

Function:

This parameter is used to set which switching and dimming value is forwarded to the output of the function block when the override is deactivated.

The following settings are possible:

- No change:
  The switching value at the output is retained until a new value arrives at the input.
- Dimming value according to parameter:
  The configuration of "Value at activation (%)" is adopted.
- Updated value:
  The switching and dimming value is passed on from the input directly to the output.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”

Value at deactivation (%)

Parameter	Settings
Value at deactivation (%)	**0** ... 100

Function:

This parameter is used to set which value is passed on from the switching input to the switching output of a function block when the override is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Behavior switching/dimming value on override deactivation”
  - Setting: "Dimming value according to parameter”

Behavior color temperature value on override deactivation

Parameter	Settings
Behavior color temperature value on override deactivation	No change Color temperature value according to parameter Updated value

Function:

This parameter is used to set which color temperature value is passed to the output of the function block when the override is deactivated.

The following settings are possible:

- No change:
  The color temperature value at the output is retained until a new value arrives at the input.
- Color temperature value according to parameter:
  The configuration of "Color temperature value on deactivation (K)" is adopted.
- Updated value:
  The color temperature value is passed on from the input directly to the output.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”
- Parameter “Color Control”
  - Setting: "Color temperature”

Behavior color value on override deactivation

Parameter	Settings
Behavior color value on override deactivation	No change Color value according to parameter Updated value

Function:

This parameter is used to set which color value is passed to the output of the function block when the override is deactivated.

The following settings are possible:

- No change:
  The switching value at the output is retained until a new value arrives at the input.
- Color value according to parameter:
  The configuration of "Color value on deactivation (RGB)" is adopted. If RGBW has been activated, the configuration of "Color value on deactivation (W)" is also adopted.
- Updated value:
  The switching and dimming value is passed on from the input directly to the output.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”
- Parameter “Color Control”
  - Setting: "RGB”
  - Setting: "RGBW”

Color temperature value on deactivation (K)

Parameter	Settings
Color temperature value on deactivation (K)	1000 ... **2700** ... 20000

Function:

This parameter is used to set which color temperature value is passed on from the switching input to the switching output of a function block when the override is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Behavior color temperature value on override deactivation”
  - Setting: "Color temperature value according to parameter”

Color value on deactivation (RGB)

Parameter	Settings
Color value on deactivation (RGB) (no unit)	#000000 ... **#FFFFFF**

Function:

This parameter is used to set the color value "Red, Green, Blue” that is jumped to when the override is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Behavior color value on override activation”
  - Setting: "Color value according to parameter”

Color value on deactivation (W)

Parameter	Settings
Color value on deactivation (W) (no unit)	0 ... **255**

Function:

This parameter is used to set the "White" color value that is jumped to when the override is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Color Control”
  - Setting: "RGBW”
- Parameter “Behavior color value on override activation”
  - Setting: "Color value according to parameter”

Status Override

Parameter	Settings
Status Override	disable enable

Function:

This parameter is used to display the associated communication objects.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”

Communication object:

If the parameter is set to “enable,” the following communication objects are displayed:

- "A1 <Name> Override 1, Manual ON, Status"
- "A1 <Name> Override 1, Permanent-OFF, Status"
- "A1 <Name> Override 1, Lock, Status"
- "A1 <Name> Override 1, Central Control, Status"
- "A1 <Name> Override 1, User-defined Control, Status"
- "A1 <Name> Override 1, Forced Control, Status"

Send status on request

Parameter	Settings
Send status on request	disable enable

Function:

This parameter is used to set whether the status of the associated communication object is sent on request or whether requests for the status value are rejected.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status Override”
  - Setting: "enable”

Send status on change of status

Parameter	Settings
Send status on change of status	disable enable

Function:

This parameter is used to set whether the value of the associated communication object is automatically sent after each status change.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status Override”
  - Setting: "enable”

Send status cyclically (00:00:00 = no sending)

Parameter	Settings
Send status cyclically (00:00:00 = no sending) (hh:mm:ss)	**00:00:00** ... 18:12:15

Function:

This parameter is used to set the time interval at which the value of the associated communication object is sent cyclically. If "00:00:00" is entered, cyclic sending is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status Override”
  - Setting: "enable”

Parameters of the "Override, central control” parameter card

Control Value Input

Parameter	Settings
Control Value Input	disable enable

Function:

This parameter card is used to disable or enable the implementation of the analogue switch-on and switch-off commands. If the control value input is released, the switching input is automatically deactivated or overwritten.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”

Note:

The control value input is an alternative to the switching input that is available for every channel.

Control Value Input Data Type

Parameter	Settings
Control Value Input Data Type	Percentage (%) DPT 5.001 Value (8-bit) DPT 5.010 Temperature (°C) DPT 9.001 Illuminance (lx) DPT 9.004 Current (mA) DPT 9.021 Power (kW) DPT 9.024 Power (W) DPT 14.056

Function:

This parameter is used to select and set the datapoint type of the "Control value” communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Control Value Input”
  - Setting: "enable”

Threshold for Off (<=)

Parameter	Settings
Threshold for Off (<=)* (no unit)	**0** ... 100 *

Function:

This parameter is used to set the threshold for "Off".
If the value of this communication object is equal to or smaller than the configured threshold for OFF, then the determined switching value is equal to "OFF" (0). The permitted values for the threshold value depend on the selected data type.

* The settings of the “Data type“ parameter change the settings and unit of this parameter.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Control Value Input”
  - Setting: "enable”

Threshold for On (>=)

Parameter	Settings
Threshold for On (>=)* (no unit)	0 ... **1,2** ... 100*

Function:

This parameter is used to set the threshold for “On".
If the value of this communication object is equal to or greater than the configured threshold for ON, then the determined switching value is equal to “Off” (1). The permitted values for the threshold value depend on the selected data type.

* The settings of the “Data type“ parameter change the settings and unit of this parameter.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Control Value Input”
  - Setting: "enable”

Invert Override Control

Parameter	Settings
Invert Override Control	No Yes

Function:

This parameter card can be used to invert the override input.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”

Monitoring time

Parameter	Settings
Monitoring time (hh:mm:ss)	**00:00:00** ... 18:12:15

Function:

This parameter is used to set the time during which the cyclic input of telegrams for the associated communication object is monitored.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Central override”
  - Setting: "User defined”

Behavior color temperature value on override activation

Parameter	Settings
Behavior color temperature value on override activation	No change Color temperature value according to parameter

Function:

This parameter is used to set which color temperature value is passed to the output of the function block when the override is activated.

The following settings are possible:

- No change:
  The color temperature value at the output is retained until a new value arrives at the input.
- Color temperature value according to parameter:
  The configuration of "Color temperature value on activation (K)" is adopted.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”
- Parameter “Color Control“
  - Setting: "Color temperature”

Behavior color value on override activation

Parameter	Settings
Behavior color value on override activation	No change Color value according to parameter

Function:

This parameter is used to set which color value is passed to the output of the function block when the override is activated.

The following settings are possible:

- No change:
  The color value at the output is retained until a new value arrives at the input.
- Color value according to parameter:
  The configuration of "Color value according to parameter" is adopted.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”
- Parameter “Color Control“
  - Setting: "RGB”
  - Setting: "RGBW”

Color temperature value on activation (K)

Parameter	Settings
Color temperature value on activation (K)	1000 ... **6000** ... 20000

Function:

This parameter is used to set the color temperature value that is set and stored when the associated switching output is activated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Behavior color temperature value on override activation”
  - Setting: "Color temperature value according to parameter”

Color value on activation (RGB)

Parameter	Settings
Color value on activation (RGB) (no unit)	#000000 ... **#FFFFFF**

Function:

This parameter is used to set the color value "Red, Green, Blue", which is jumped to when the override is activated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Behavior color value on override activation”
  - Setting: "Color value according to parameter”

Color value on activation (W)

Parameter	Settings
Color value on activation (W) (no unit)	0 ... **255**

Function:

This parameter is used to set the color value "White", which is jumped to when the override is activated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Color Control”
  - Setting: "RGBW”
- Parameter “Behavior color value on override activation”
  - Setting: "Color value according to parameter”

Behavior switching/dimming value on override deactivation

Parameter	Settings
Behavior switching/dimming value on override deactivation	No change Dimming value according to parameter Updated value

Function:

This parameter is used to set which switching and dimming value is forwarded to the output of the function block when the override is deactivated.

The following settings are possible:

- No change:
  The switching value at the output is retained until a new value arrives at the input.
- Dimming value according to parameter:
  The configuration of "Value at activation (%)" is adopted.
- Updated value:
  The switching and dimming value is passed on from the input directly to the output.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”

Value at deactivation (%)

Parameter	Settings
Value at deactivation (%)	**0** ... 100

Function:

This parameter is used to set which value is passed on from the switching input to the switching output of a function block when the override is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Behavior switching/dimming value on override deactivation”
  - Setting: "Dimming value according to parameter”

Behavior color temperature value on override deactivation

Parameter	Settings
Behavior color temperature value on override deactivation	No change Color temperature value according to parameter Updated value

Function:

This parameter is used to set which color temperature value is passed to the output of the function block when the override is deactivated.

The following settings are possible:

- No change:
  The color temperature value at the output is retained until a new value arrives at the input.
- Color temperature value according to parameter:
  The configuration of "Color temperature value on deactivation (K)" is adopted.
- Updated value:
  The color temperature value is passed on from the input directly to the output.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”
- Parameter “Color Control”
  - Setting: "Color temperature”

Behavior color value on override deactivation

Parameter	Settings
Behavior color value on override deactivation	No change Color value according to parameter Updated value

Function:

This parameter is used to set which color value is passed to the output of the function block when the override is deactivated.

The following settings are possible:

- No change:
  The switching value at the output is retained until a new value arrives at the input.
- Color value according to parameter:
  The configuration of "Color value on deactivation (RGB)" is adopted. If RGBW has been activated, the configuration of "Color value on deactivation (W)" is also adopted.
- Updated value:
  The switching and dimming value is passed on from the input directly to the output.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”
- Parameter “Color Control”
  - Setting: "RGB”
  - Setting: "RGBW”

Color temperature value on deactivation (K)

Parameter	Settings
Color temperature value on deactivation (K)	1000 ... **2700** ... 20000

Function:

This parameter is used to set which color temperature value is passed on from the switching input to the switching output of a function block when the override is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Behavior color temperature value on override deactivation”
  - Setting: "Color temperature value according to parameter”

Color value on deactivation (RGB)

Parameter	Settings
Color value on deactivation (RGB) (no unit)	#000000 ... **#FFFFFF**

Function:

This parameter is used to set the color value "Red, Green, Blue” that is jumped to when the override is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Behavior color value on override activation”
  - Setting: "Color value according to parameter”

Color value on deactivation (W)

Parameter	Settings
Color value on deactivation (W) (no unit)	0 ... **255**

Function:

This parameter is used to set the "White" color value that is jumped to when the override is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Color Control”
  - Setting: "RGBW”
- Parameter “Behavior color value on override activation”

– Setting: "Color value according to parameter”

Status Override

Parameter	Settings
Status Override	disable enable

Function:

This parameter is used to display the associated communication objects.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”

Communication object:

If the parameter is set to “enable,” the following communication objects are displayed:

- "A1 <Name> Override 1, Manual ON, Status"
- "A1 <Name> Override 1, Permanent-OFF, Status"
- "A1 <Name> Override 1, Lock, Status"
- "A1 <Name> Override 1, Central Control, Status"
- "A1 <Name> Override 1, User-defined Control, Status"
- "A1 <Name> Override 1, Forced Control, Status"

Send status on request

Parameter	Settings
Send status on request	disable enable

Function:

This parameter is used to set whether the status of the associated communication object is sent on request or whether requests for the status value are rejected.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status Override”
  - Setting: "enable”

Send status on change of status

Parameter	Settings
Send status on change of status	disable enable

Function:

This parameter is used to set whether the value of the associated communication object is automatically sent after each status change.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status Override”
  - Setting: "enable”

Send status cyclically (00:00:00 = no sending)

Parameter	Settings
Send status cyclically (00:00:00 = no sending) (hh:mm:ss)	**00:00:00** ... 18:12:15

Function:

This parameter is used to set the time interval at which the value of the associated communication object is sent cyclically. If "00:00:00” is entered, cyclic sending is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status Override”
  - Setting: "enable”

Parameters of the "Override, user-defined control” parameter card

Control Value Input

Parameter	Settings
Control Value Input	disable enable

Function:

This parameter card is used to disable or enable the implementation of the analogue switch-on and switch-off commands. If the control value input is released, the switching input is automatically deactivated or overwritten.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”

Note:

The control value input is an alternative to the switching input that is available for every channel.

Control Value Input Data Type

Parameter	Settings
Control Value Input Data Type	Percentage (%) DPT 5.001 Value (8-bit) DPT 5.010 Temperature (°C) DPT 9.001 Illuminance (lx) DPT 9.004 Current (mA) DPT 9.021 Power (kW) DPT 9.024 Power (W) DPT 14.056

Function:

This parameter is used to select and set the datapoint type of the "Control value" communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Control Value Input”
  - Setting: "enable”

Threshold for Off (<=)

Parameter	Settings
Threshold for Off (<=)* (no unit)	**0** ... 100 *

Function:

This parameter is used to set the threshold for "Off".
If the value of this communication object is equal to or smaller than the configured threshold for OFF, then the determined switching value is equal to "OFF” (0). The permitted values for the threshold value depend on the selected data type.

* The settings of the “Data type“ parameter change the settings and unit of this parameter.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Control Value Input”
  - Setting: "enable”

Threshold for On (>=)

Parameter	Settings
Threshold for On (>=)* (no unit)	0 ... **1,2** ... 100*

Function:

This parameter is used to set the threshold for “On".
If the value of this communication object is equal to or greater than the configured threshold for ON, then the determined switching value is equal to “Off” (1). The permitted values for the threshold value depend on the selected data type.

* The settings of the “Data type“ parameter change the settings and unit of this parameter.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Control Value Input”
  - Setting: "enable”

Invert Override Control

Parameter	Settings
Invert Override Control	No Yes

Function:

This parameter card can be used to invert the override input.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”

Monitoring time

Parameter	Settings
Monitoring time (hh:mm:ss)	**00:00:00** ... 18:12:15

Function:

This parameter is used to set the time during which the cyclic input of telegrams for the associated communication object is monitored.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Central override”
  - Setting: "User defined”

Override Duration

Parameter	Settings
Override Duration (hh:mm:ss)	**00:00:00** ... 18:12:15

Function:

This parameter is used to set the ON time for manual override. If "00:00:00" is set, the override duration is unlimited. The override duration is then re-started with each incoming activation telegram.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Forced Control”

Behavior color temperature value on override activation

Parameter	Settings
Behavior color temperature value on override activation	No change Color temperature value according to parameter

Function:

This parameter is used to set which color temperature value is passed to the output of the function block when the override is activated.

The following settings are possible:

- No change:
  The color temperature value at the output is retained until a new value arrives at the input.
- Color temperature value according to parameter:
  The configuration of "Color temperature value on activation (K)" is adopted.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”
- Parameter “Color Control“
  - Setting: "Color temperature”

Behavior color value on override activation

Parameter	Settings
Behavior color value on override activation	No change Color value according to parameter

Function:

This parameter is used to set which color value is passed to the output of the function block when the override is activated.

The following settings are possible:

- No change:
  The color value at the output is retained until a new value arrives at the input.
- Color value according to parameter:
  The configuration of "Color value according to parameter" is adopted.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”
- Parameter “Color Control“
  - Setting: "RGB”

– Setting: "RGBW”

Color temperature value on activation (K)

Parameter	Settings
Color temperature value on activation (K)	1000 ... **6000** ... 20000

Function:

This parameter is used to set the color temperature value that is set and stored when the associated switching output is activated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Behavior color temperature value on override activation”
  – Setting: "Color temperature value according to parameter”

Color value on activation (RGB)

Parameter	Settings
Color value on activation (RGB) (no unit)	#000000 ... **#FFFFFF**

Function:

This parameter is used to set the color value "Red, Green, Blue", which is jumped to when the override is activated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Behavior color value on override activation”
  – Setting: "Color value according to parameter”

Color value on activation (W)

Parameter	Settings
Color value on activation (W) (no unit)	0 ... **255**

Function:

This parameter is used to set the color value "White", which is jumped to when the override is activated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Color Control”
  – Setting: "RGBW”
- Parameter “Behavior color value on override activation”
  – Setting: "Color value according to parameter”

Behavior switching/dimming value on override deactivation

Parameter	Settings
Behavior switching/dimming value on override deactivation	No change Dimming value according to parameter Updated value

Function:

This parameter is used to set which switching and dimming value is forwarded to the output of the function block when the override is deactivated.

The following settings are possible:

- No change:
  The switching value at the output is retained until a new value arrives at the input.
- Dimming value according to parameter:
  The configuration of "Value at activation (%)" is adopted.
- Updated value:
  The switching and dimming value is passed on from the input directly to the output.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”

Value at deactivation (%)

Parameter	Settings
Value at deactivation (%)	**0** ... 100

Function:

This parameter is used to set which value is passed on from the switching input to the switching output of a function block when the override is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Behavior switching/dimming value on override deactivation”
  - Setting: "Dimming value according to parameter”

Behavior color temperature value on override deactivation

Parameter	Settings
Behavior color temperature value on override deactivation	No change Color temperature value according to parameter Updated value

Function:

This parameter is used to set which color temperature value is passed to the output of the function block when the override is deactivated.

The following settings are possible:

- No change:
  The color temperature value at the output is retained until a new value arrives at the input.
- Color temperature value according to parameter:
  The configuration of "Color temperature value on deactivation (K)" is adopted.
- Updated value:
  The color temperature value is passed on from the input directly to the output.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”
- Parameter “Color Control”
  - Setting: "Color temperature”

Behavior color value on override deactivation

Parameter	Settings
Behavior color value on override deactivation	No change Color value according to parameter Updated value

Function:

This parameter is used to set which color value is passed to the output of the function block when the override is deactivated.

The following settings are possible:

- No change:
  The switching value at the output is retained until a new value arrives at the input.
- Color value according to parameter:
  The configuration of "Color value on deactivation (RGB)" is adopted. If RGBW has been activated, the configuration of "Color value on deactivation (W)" is also adopted.
- Updated value:
  The switching and dimming value is passed on from the input directly to the output.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”
- Parameter “Color Control”
  - Setting: "RGB”
  - Setting: "RGBW”

Color temperature value on deactivation (K)

Parameter	Settings
Color temperature value on deactivation (K)	1000 ... **2700** ... 20000

Function:

This parameter is used to set which color temperature value is passed on from the switching input to the switching output of a function block when the override is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Behavior color temperature value on override deactivation”
  - Setting: "Color temperature value according to parameter”

Color value on deactivation (RGB)

Parameter	Settings
Color value on deactivation (RGB) (no unit)	#000000 ... **#FFFFFF**

Function:

This parameter is used to set the color value "Red, Green, Blue” that is jumped to when the override is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Behavior color value on override activation”
  - Setting: "Color value according to parameter”

Color value on deactivation (W)

Parameter	Settings
Color value on deactivation (W) (no unit)	0 ... **255**

Function:

This parameter is used to set the "White" color value that is jumped to when the override is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Color Control”
  - Setting: "RGBW”
- Parameter “Behavior color value on override activation”
  - Setting: "Color value according to parameter”

Status Override

Parameter	Settings
Status Override	disable enable

Function:

This parameter is used to display the associated communication objects.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”

– Setting: "Forced Control”

Communication object:

If the parameter is set to “enable,” the following communication objects are displayed:

- "A1 <Name> Override 1, Manual ON, Status"
- "A1 <Name> Override 1, Permanent-OFF, Status"
- "A1 <Name> Override 1, Lock, Status"
- "A1 <Name> Override 1, Central Control, Status"
- "A1 <Name> Override 1, User-defined Control, Status"
- "A1 <Name> Override 1, Forced Control, Status"

Send status on request

Parameter	Settings
Send status on request	disable enable

Function:

This parameter is used to set whether the status of the associated communication object is sent on request or whether requests for the status value are rejected.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status Override”
  – Setting: "enable”

Send status on change of status

Parameter	Settings
Send status on change of status	disable enable

Function:

This parameter is used to set whether the value of the associated communication object is automatically sent after each status change.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status Override”
  – Setting: "enable”

Send status cyclically (00:00:00 = no sending)

Parameter	Settings
Send status cyclically (00:00:00 = no sending) (hh:mm:ss)	**00:00:00** ... 18:12:15

Function:

This parameter is used to set the time interval at which the value of the associated communication object is sent cyclically. If "00:00:00” is entered, cyclic sending is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status Override”
  – Setting: "enable”

Start value/behavior of override input on voltage recovery

Parameter	Settings
Start value/behavior of override input on voltage recovery	Activated - Switched Off Activated - Switched On Deactivated Last value

Function:

These parameters are used to set the desired switching state, which is activated when the mains voltage returns.

The following settings are possible:

- Activated - Switched Off:
  When mains voltage returns, the switching channel is deactivated.
- Activated - Switched On:
  When mains voltage returns, the switching channel with the maximum dimming value is switched on.
- Deactivated:
  When mains voltage returns, the switching channel is switched on with the same value as before mains voltage failure.
- Last value:
  When mains voltage returns, the switching channel with the last received value is switched on.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Control Value Input”
  – Setting: "enable”

Parameters of the "Override, forced control” parameter card

Value at activation (%)

Parameter	Settings
Value at activation (%)	0 ... **100**

Function:

This parameter is used to set which value is passed on from the switching input to the switching output of a function block when the override is activated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  – Setting: "Forced Control”

Behavior color temperature value on override activation

Parameter	Settings
Behavior color temperature value on override activation	No change Color temperature value according to parameter

Function:

This parameter is used to set which color temperature value is passed to the output of the function block when the override is activated.

The following settings are possible:

- No change:
  The color temperature value at the output is retained until a new value arrives at the input.
- Color temperature value according to parameter:
  The configuration of "Color temperature value on activation (K)" is adopted.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”
- Parameter “Color Control“
  - Setting: "Color temperature”

Behavior color value on override activation

Parameter	Settings
Behavior color value on override activation	No change Color value according to parameter

Function:

This parameter is used to set which color value is passed to the output of the function block when the override is activated.

The following settings are possible:

- No change:
  The color value at the output is retained until a new value arrives at the input.
- Color value according to parameter:
  The configuration of "Color value according to parameter" is adopted.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”
- Parameter “Color Control“
  - Setting: "RGB”
  - Setting: "RGBW”

Color temperature value on activation (K)

Parameter	Settings
Color temperature value on activation (K)	1000 ... **6000** ... 20000

Function:

This parameter is used to set the color temperature value that is set and stored when the associated switching output is activated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Behavior color temperature value on override activation”
  - Setting: "Color temperature value according to parameter”

Color value on activation (RGB)

Parameter	Settings
Color value on activation (RGB) (no unit)	#000000 ... **#FFFFFF**

Function:

This parameter is used to set the color value "Red, Green, Blue", which is jumped to when the override is activated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Behavior color value on override activation”
  - Setting: "Color value according to parameter”

Color value on activation (W)

Parameter	Settings
Color value on activation (W) (no unit)	0 ... **255**

Function:

This parameter is used to set the color value "White", which is jumped to when the override is activated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Color Control”
  - Setting: "RGBW”
- Parameter “Behavior color value on override activation”
  - Setting: "Color value according to parameter”

Behavior switching/dimming value on override deactivation

Parameter	Settings
Behavior switching/dimming value on override deactivation	No change Dimming value according to parameter Updated value

Function:

This parameter is used to set which switching and dimming value is forwarded to the output of the function block when the override is deactivated.

The following settings are possible:

- No change:
  The switching value at the output is retained until a new value arrives at the input.
- Dimming value according to parameter:
  The configuration of "Value at activation (%)" is adopted.
- Updated value:
  The switching and dimming value is passed on from the input directly to the output.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”

Restart timer on deactivation of override

Parameter	Settings
Restart timer on deactivation of override	disable enable

Function:

This parameter is used to set whether an already expired timer is restarted when the override is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Forced Control”

Value at deactivation (%)

Parameter	Settings
Value at deactivation (%)	**0** ... 100

Function:

This parameter is used to set which value is passed on from the switching input to the switching output of a function block when the override is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Behavior switching/dimming value on override deactivation”
  - Setting: "Dimming value according to parameter”

Behavior color temperature value on override deactivation

Parameter	Settings
Behavior color temperature value on override deactivation	No change Color temperature value according to parameter Updated value

Function:

This parameter is used to set which color temperature value is passed to the output of the function block when the override is deactivated.

The following settings are possible:

- No change:
  The color temperature value at the output is retained until a new value arrives at the input.
- Color temperature value according to parameter:
  The configuration of "Color temperature value on deactivation (K)" is adopted.
- Updated value:
  The color temperature value is passed on from the input directly to the output.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”
- Parameter “Color Control”
  - Setting: "Color temperature”

Behavior color value on override deactivation

Parameter	Settings
Behavior color value on override deactivation	No change Color value according to parameter Updated value

Function:

This parameter is used to set which color value is passed to the output of the function block when the override is deactivated.

The following settings are possible:

- No change:
  The switching value at the output is retained until a new value arrives at the input.
- Color value according to parameter:
  The configuration of "Color value on deactivation (RGB)" is adopted. If RGBW has been activated, the configuration of "Color value on deactivation (W)" is also adopted.
- Updated value:
  The switching and dimming value is passed on from the input directly to the output.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”
- Parameter “Color Control”

– Setting: "RGB”
– Setting: "RGBW”

Color temperature value on deactivation (K)

Parameter	Settings
Color temperature value on deactivation (K)	1000 ... **2700** ... 20000

Function:

This parameter is used to set which color temperature value is passed on from the switching input to the switching output of a function block when the override is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Behavior color temperature value on override deactivation”
  – Setting: "Color temperature value according to parameter”

Color value on deactivation (RGB)

Parameter	Settings
Color value on deactivation (RGB) (no unit)	#000000 ... **#FFFFFF**

Function:

This parameter is used to set the color value "Red, Green, Blue” that is jumped to when the override is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Behavior color value on override activation”
  – Setting: "Color value according to parameter”

Color value on deactivation (W)

Parameter	Settings
Color value on deactivation (W) (no unit)	0 ... **255**

Function:

This parameter is used to set the "White" color value that is jumped to when the override is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Color Control”
  – Setting: "RGBW”
- Parameter “Behavior color value on override activation”
  – Setting: "Color value according to parameter”

Status Override

Parameter	Settings
Status Override	disable enable

Function:

This parameter is used to display the associated communication objects.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Override 1 ... 7”
  - Setting: "Manual override (ON)”
  - Setting: "Permanent OFF”
  - Setting: "Lock”
  - Setting: "Central override”
  - Setting: "User defined”
  - Setting: "Forced Control”

Communication object:

If the parameter is set to “enable,” the following communication objects are displayed:

- "A1 <Name> Override 1, Manual ON, Status"
- "A1 <Name> Override 1, Permanent-OFF, Status"
- "A1 <Name> Override 1, Lock, Status"
- "A1 <Name> Override 1, Central Control, Status"
- "A1 <Name> Override 1, User-defined Control, Status"
- "A1 <Name> Override 1, Forced Control, Status"

Send status on request

Parameter	Settings
Send status on request	disable enable

Function:

This parameter is used to set whether the status of the associated communication object is sent on request or whether requests for the status value are rejected.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status Override”
  - Setting: "enable”

Send status on change of status

Parameter	Settings
Send status on change of status	disable enable

Function:

This parameter is used to set whether the value of the associated communication object is automatically sent after each status change.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status Override”
  - Setting: "enable”

Send status cyclically (00:00:00 = no sending)

Parameter	Settings
Send status cyclically (00:00:00 = no sending) (hh:mm:ss)	**00:00:00** ... 18:12:15

Function:

This parameter is used to set the time interval at which the value of the associated communication object is sent cyclically. If "00:00:00" is entered, cyclic sending is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status Override”
  - Setting: "enable”

Start value/behavior of override input on voltage recovery

Parameter	Settings
Start value/behavior of override input on voltage recovery	Activated - Switched Off Activated - Switched On Deactivated Last value

Function:

These parameters are used to set the desired switching state, which is activated when the mains voltage returns.

The following settings are possible:

- Activated - Switched Off:
  When mains voltage returns, the switching channel is deactivated.
- Activated - Switched On:
  When mains voltage returns, the switching channel with the maximum dimming value is switched on.
- Deactivated:
  When mains voltage returns, the switching channel is switched on with the same value as before mains voltage failure.
- Last value:
  When mains voltage returns, the switching channel with the last received value is switched on.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Control Value Input”
  - Setting: "enable”

Communication objects "Overrides”

A1 <Name> Override 1, Manual ON, Status

Object name	Function	Datapoint type	Flags
A1 <Name> Override 1, Manual ON, Status	On/Off	1.002 boolean	CRT

Function:

This communication object is used to report that override 1, manual ON is active.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Status Override“
  - Setting: "enable”

A1 <Name> Override 1, Permanent-OFF, Status

Object name	Function	Datapoint type	Flags
A1 <Name> Override 1, Permanent-OFF, Status	On/Off	1.002 boolean	CRT

Function:

This communication object is used to report whether override 1, Permanent OFF is active.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Status Override”
  - Setting: "enable”

A1 <Name> Override 1, Lock, Status

Object name	Function	Datapoint type	Flags
A1 <Name> Override 1, Lock, Status	On/Off	1.002 boolean	CRT

Function:

This communication object is used to report whether override 1, lock is active.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Status Override”
  - Setting: "enable”

A1 <Name> Override 1, Central Control, Status

Object name	Function	Datapoint type	Flags
A1 <Name> Override 1, Central Control, Status	On/Off	1.002 boolean	CRT

Function:

This communication object is used to report whether override 1, lock is active.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Status Override”
  - Setting: "enable”

A1 <Name> Override 1, User-defined Control, Status

Object name	Function	Datapoint type	Flags
A1 <Name> Override 1, User-defined Control, Status	On/Off	1.002 boolean	CRT

Function:

This communication object is used to report whether "Override 1, User-defined control" is active.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter "Status Override"
  - Setting: "enable"

A1 <Name> Override 1, Forced Control, Status

Object name	Function	Datapoint type	Flags
A1 <Name> Override 1, Forced Control, Status	On/Off	1.002 boolean	CRT

Function:

This communication object is used to report whether "Override 1, forced control" is active.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter "Status Override"
  - Setting: "enable"

6.1.6.9 Counting of switching cycles

Parameters of the "Counting of switching cycles" parameter card

Send status on request

Parameter	Settings
Send status on request	disable enable

Function:

This parameter is used to set whether the status of the associated communication object is sent on request or whether requests for the status value are rejected.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Counting of switching cycles"
  - Setting: "enable"

Send status on change of status

Parameter	Settings
Send status on change of status	disable enable

Function:

This parameter is used to set whether the value of the associated communication object is automatically sent after each status change.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Counting of switching cycles”
  - Setting: "enable”

Value change since last sent (cycles)

Parameter	Settings
Value change since last sent (cycles) (no unit)	0 ... **1** ... 4294967295

Function:

This parameter is used to set from which value difference to the last transmission the associated communication object is sent again.
If the blocking time has expired, the status is sent.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Send status on change of status”
  - Setting: "enable”

Send status cyclically (00:00:00 = no sending)

Parameter	Settings
Send status cyclically (00:00:00 = no sending) (hh:mm:ss)	**00:00:00** ... 18:12:15

Function:

This parameter is used to set the time interval at which the value of the associated communication object is sent cyclically. If "00:00:00” is entered, cyclic sending is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Counting of switching cycles”
  - Setting: "enable”

Threshold monitoring

Parameter	Settings
Threshold monitoring	disable enable

Function:

These parameters are used to disable or enable the associated communication objects.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Counting of switching cycles”
  - Setting: "enable”

Communication object:

If the parameter is set to “enable,” the following communication objects are displayed:

- "A1 <Name> Threshold for switching cycles"
- "A1 <Name> Exceedance of threshold for switching cycles"

Threshold for switching cycles

Parameter	Settings
Threshold for switching cycles	0 ... **1000** ... 4294967592

Function:

This parameter is used to set the limit value from which a limit value exceedance is reported via bus.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Threshold monitoring”
  - Setting: "enable”

Send status on request

Parameter	Settings
Send status on request	disable enable

Function:

This parameter is used to set whether the status of the associated communication object is sent on request or whether requests for the status value are rejected.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Threshold monitoring”
  - Setting: "enable”

Send status on change of status

Parameter	Settings
Send status on change of status	disable enable

Function:

This parameter is used to set whether the value of the associated communication object is automatically sent after each status change.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Threshold monitoring”
  - Setting: "enable”

Send status cyclically (00:00:00 = no sending)

Parameter	Settings
Send status cyclically (00:00:00 = no sending) (hh:mm:ss)	**00:00:00** ... 18:12:15

Function:

This parameter is used to set the time interval at which the value of the associated communication object is sent cyclically. If "00:00:00" is entered, cyclic sending is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Threshold monitoring”
  - Setting: "enable”

Communication objects "Counting of switching cycles”

A1 <Name> Threshold for switching cycles

Object name	Function	Datapoint type	Flags
A1 <Name> Threshold for switching cycles	Set/Request value (in cycles)	12.001 counter pulses (unsigned)	CRW

Function:

This communication object is used to send and receive the configured limit value for switching cycle counting to the DALI gateway.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Threshold monitoring”
  - Setting: "enable”

A1 <Name> Exceedance of threshold for switching cycles

Object name	Function	Datapoint type	Flags
A1 <Name> Exceedance of threshold for switching cycles	On/Off	1.002 boolean	CRT

Function:

This communication object is used to report via bus if the configured threshold is exceeded.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Threshold monitoring”
  - Setting: "enable”

6.1.6.10 Operating hours

Parameters of the "Operating hours" parameter card

Counting of operating hours in

Parameter	Settings
Counting of operating hours in	Hours Seconds

Function:

This parameter is used to set the unit in which the operating hours are counted.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Counting of operating hours”
  - Setting: "enable”

Send status on request

Parameter	Settings
Send status on request	disable enable

Function:

This parameter is used to set whether the status of the associated communication object is sent on request or whether requests for the status value are rejected.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Counting of operating hours”
  - Setting: "enable”

Send status on change of status

Parameter	Settings
Send status on change of status	disable enable

Function:

This parameter is used to set whether the value of the associated communication object is automatically sent after each status change.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Counting of operating hours”
  - Setting: "enable”

Value change since last sent (hours) Value change since last sent (seconds)

Parameter	Settings
Value change since last sent (hours) Value change since last sent (seconds)	0 ... **1** ... 4294967295

Function:

This parameter is used to set from which value difference to the last transmission the associated communication object is sent again.

If the blocking time has expired, the status is sent.
The unit is set with the parameter “Counting of operating hours in”.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Send status on change of status”
  - Setting: "enable”

Send status cyclically (00:00:00 = no sending)

Parameter	Settings
Send status cyclically (00:00:00 = no sending) (hh:mm:ss)	**00:00:00** ... 18:12:15

Function:

This parameter is used to set the time interval at which the value of the associated communication object is sent cyclically. If "00:00:00” is entered, cyclic sending is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Counting of operating hours”
  - Setting: "enable”

Threshold monitoring

Parameter	Settings
Threshold monitoring	disable enable

Function:

These parameters are used to disable or enable the associated communication objects.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Counting of operating hours”
  - Setting: "enable”

Communication object:

If the parameter is set to “enable,” the following communication objects are displayed:

- "A1 <Name> Threshold for operating hours"
- "Variable missing”

Threshold for operating hours (in hours)

Parameter	Settings
Threshold for operating hours (in hours) (hh:mm:ss)	0 ... **1000** ... 4294967592

Function:

This parameter is used to set the limit value from which a limit value exceedance is reported via bus.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Threshold monitoring”

– Setting: "enable”

Send status on request

Parameter	Settings
Send status on request	disable enable

Function:

This parameter is used to set whether the status of the associated communication object is sent on request or whether requests for the status value are rejected.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Threshold monitoring”
  – Setting: "enable”

Send status on change of status

Parameter	Settings
Send status on change of status	disable enable

Function:

This parameter is used to set whether the value of the associated communication object is automatically sent after each status change.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Threshold monitoring”
  – Setting: "enable”

Send status cyclically (00:00:00 = no sending)

Parameter	Settings
Send status cyclically (00:00:00 = no sending) (hh:mm:ss)	**00:00:00** ... 18:12:15

Function:

This parameter is used to set the time interval at which the value of the associated communication object is sent cyclically. If "00:00:00” is entered, cyclic sending is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Threshold monitoring”
  – Setting: "enable”

Communication objects “Operating hours”

A1 <Name> Threshold for operating hours

Object name	Function	Datapoint type	Flags
A1 <Name> Threshold for operating hours	Set/Request value (in hours)	12.001 counter pulses (unsigned)	CRW

Function:

This communication object is used to send and receive the configured limit value for the operating hours to the DALI gateway.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Counting of operating hours”
  - Setting: "enable”

Exceedance of threshold for operating hours

Object name	Function	Datapoint type	Flags
Exceedance of threshold for operating hours	On/Off	1.002 boolean	CRT

Function:

This communication object is used to report via bus if the configured threshold is exceeded.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Threshold monitoring”
  - Setting: "enable”

6.1.7 Brightness sensors

6.1.7.1 Parameters of the "Brightness sensors (BS)” parameter card

Name

Parameter	Settings
Name	... (free text box for max. 45 characters)

Function:

These parameters are used to specify the name of the associated parameter card.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of brightness sensors (0 = disabled)”
  - Setting: “1... 8”

Calibration

Parameter	Settings
Calibration	With adjustment factor With adjustment factor and offset Via object (mixed light, artificial light) Via two objects (artificial light and daylight)

Function:

This parameter is used to set the type of calibration or correction of the light sensor.

For calibration "Via two objects (artificial light and daylight)", constant lighting control must be calibrated and activated. Calibration must be performed even if only brightness measurement without constant lighting control is used.

The following settings are possible:

- With adjustment factor:
  Calibration is performed with the adjustment factor set.
- "With adjustment factor and offset":
  The calibration is calculated with an adjustment factor and an offset.
- "Via object (mixed light, artificial light)":
  The calibration is carried out with a calculated adjustment factor.
  If this setting is selected, a brightness value is provided via the associated communication object with which an adjustment factor is calculated. If no brightness value is provided via the associated communication object, the initial adjustment factor is used for the calibration.
- "Via two objects (artificial light and daylight)":
  The adjustment is calculated by two calibrations. If this setting is selected, the constant light level control must be calibrated and carried out, even if not all functions are used.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of brightness sensors (0 = disabled)”
  - Setting: “1 ... 8”

Communication object:

If the following configuration is set, the following communication objects are displayed:

- Parameter “Via object (mixed light, artificial light)”
  - Communication object “A BS 1 <Name> Brightness value (calibration)”
- Parameter “Via two objects (artificial light and daylight)“
  - Communication object “Brightness value daylight (calibration)”
  - Communication object “Brightness value artificial light (calibration)”

Adjustment factor (x 0.01)

Parameter	Settings
Adjustment factor (x 0.01) (no unit)	1 ... **100** 2000

Function:

This parameter is used to set the adjustment factor. The value measured by the light sensor is permanently multiplied by 0.01 times the configured adjustment factor.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Calibration”
  - Setting: "With adjustment factor”
  - Setting: "With adjustment factor and offset”

Offset (lx)

Parameter	Settings
Offset (lx)	-671088.60 ... **0** ... 670760.90

Function:

This parameter is used to correct the deviation of the light sensor due to environmental influences.
The correction is made according to the following formula:
Adjusted brightness value = (measured brightness value + offset) * (adjustment factor * 0.01)

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Calibration”
  - Setting: "With adjustment factor and offset”

Initial adjustment factor (x 0.01)

Parameter	Settings
Initial adjustment factor (x 0.01) (no unit)	1 ... **100** 2000

Function:

This parameter is used to set the initial adjustment factor. The value measured by the light sensor is multiplied by 0.01 times the configured adjustment factor until a value is received via the “Brightness value (calibration)" communication object, with which a new adjustment factor is calculated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Calibration”
  - Setting: "Via object (mixed light, artificial light)”

Adjustment factor daylight (x 0.01)

Parameter	Settings
Adjustment factor daylight (x 0.01) (no unit)	1 ... **100** 2000

Function:

This parameter is used to set the adjustment factor. The value measured by the light sensor is multiplied by 0.01 times the configured adjustment factor until a value is received via the “Brightness value daylight (calibration)" communication object, with which the adjustment factor is calculated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Calibration”
  - Setting: "Via two objects (artificial light and daylight)”

Adjustment factor artificial light (x 0.01)

Parameter	Settings
Adjustment factor artificial light (x 0.01) (no unit)	1 ... **100** 2000

Function:

This parameter is used to set the adjustment factor. The value measured by the light sensor is multiplied by 0.01 times the configured adjustment factor until a value is received via the “Brightness value artificial light (calibration)" communication object, with which the adjustment factor is calculated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Calibration”
  - Setting: "Via two objects (artificial light and daylight)”

Number of values for calculation of average

Parameter	Settings
Number of values for calculation of average (no unit)	1 ... **2** ... 8

Function:

This parameter is used to set the number of values measured by the light sensor that are used for averaging. The light sensor measures and sends a value every 20 milliseconds.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of brightness sensors (0 = disabled)”
  - Setting: “1 ... 8”

Object "Brightness value (sensor)"

Parameter	Settings
Object "Brightness value (sensor)"	disable enable

Function:

This parameter is used to lock or unlock the associated communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of brightness sensors (0 = disabled)”
  - Setting: “1 ... 8”

Communication object:

If the parameter is set to "enable,” the following communication object is displayed:

- "A BS 1 <Name> Brightness value (sensor)"

Send brightness value on request

Parameter	Settings
Send brightness value on request	disable enable

Function:

This parameter is used to set whether the brightness value is sent on request or whether requests for the brightness value will be rejected.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Object "Brightness value (sensor)""
  - Setting: "enable”

Send brightness value on change of value

Parameter	Settings
Send brightness value on change of value	disable enable

Function:

This parameter is used to set whether the brightness value is automatically sent after each value change.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Object "Brightness value (sensor)""
  - Setting: "enable"

Value change since last sent (lx)

Parameter	Settings
Value change since last sent (lx)	0.00 ... **10** ... 670760.00

Function:

This parameter is used to set from which value difference to the last transmission the associated communication object is sent again.
If the blocking time has expired, the status is sent.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Send brightness value on change of value"
  - Setting: "enable"

Note:

Transmission takes place if the minimum block time for transmission of the brightness value has been exceeded.

Value change since last sent (%)

Parameter	Settings
Value change since last sent (%)	0 ... **5** ... 100

Function:

This parameter is used to set from which value difference to the last transmission the associated communication object is sent again.
If the blocking time has expired, the status is sent.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Send brightness value on change of value”
  - Setting: "enable"

Note:

Transmission takes place if the minimum block time for transmission of the brightness value has been exceeded.

Block time for sending the brightness value

Parameter	Settings
Block time for sending the brightness value (hh:mm:ss)	00:00:00 ... **00:00:10** ... 18:12:15

Function:

This parameter is used to set how much time since the last transmission of the brightness value has to have passed in order for it to be sent again.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Send brightness value on change of value""
  - Setting: "enable”

Note:

The block time does not apply to cyclic sending. If the block time is greater than the cycle time, the value is nonetheless sent at the end of the cycle time.

Send brightness value cyclically

Parameter	Settings
Send brightness value cyclically (hh:mm:ss)	00:00:00 ... **00:15:00** ... 18:12:15

Function:

This parameter is used to set in which time interval the brightness value is sent. If "00:00:00” is entered, cyclic sending is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Object "Brightness value (sensor)""
  - Setting: "enable”

6.1.7.2 Communication objects "Brightness sensors (BS)"

Brightness value (sensor)

Object name	Function	Datapoint type	Flags
Brightness value (sensor)	Value in LUX	9.004 lux (Lux)	CRT

Function:

This object is used to send the brightness value and to query it via bus. The measured range of the internal light sensor is 1000 lux max. If the value is to be changed, it must be calibrated.

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Number of brightness sensors (0 = disabled)”
  - Setting: “1 ... 8”

Brightness value (calibration)

Object name	Function	Datapoint type	Flags
Brightness value (calibration)	value in LUX	9.004 lux (Lux)	CW

Function:

This communication object is used to calibrate the light sensor.
Since the light sensor only measures the indirect light reflected from the desk, this must be calibrated in accordance with the environment and position. During calibration, the room in which the device has been installed should have about the same brightness value as the setpoint that is to be used for constant lighting control later on.
ETS can be used to send the value in lux measured on the desk surface by an

external lux meter to the device via the object above. The measured value is entered into the ETS input field as a decimal number. ETS encodes this value and sends it to the device. As soon as the value has been received, it is used to calculate the adjustment factor (brightness value = adjustment factor * measured value).

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Calibration”
  - Setting: "Via object (mixed light, artificial light)”

Note:

If the value 0 lx is received via the object, the adjustment factor is set to the value of the parameter "Initial adjustment factor (x 0.01).”

If the value received via the object exceeds the value measured by the internal light sensor by more than a factor of 20, the adjustment factor is set to the value of the parameter "Initial adjustment factor (x 0.01).”

Brightness value daylight (calibration)

Object name	Function	Datapoint type	Flags
Brightness value daylight (calibration)	value in LUX	9.004 lux (Lux)	CW

Function:

This communication object is used to calibrate the light sensor for natural light.

If the light sensor is calibrated, ensure that there is sufficient natural light (>1/2 * setpoint) in the area of the light sensor and switch off the artificial light. ETS can be used to send the value in lux measured on the desk surface by an external lux meter to the device via the object above. The measured value is entered into the ETS input field as a decimal number. ETS encodes this value and sends it to the device. As soon as the value has been received, it is used to calculate the adjustment factor (brightness value = adjustment factor * measured value).

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Calibration”
  - Setting: "Via two objects (artificial light and daylight)”

Note:

If the value 0 lx is received via the object, the adjustment factor is set to the value of the parameter "Adjustment factor daylight (x 0.01).”

If the value received via the object exceeds the value measured by the internal light sensor by more than a factor of 20, the adjustment factor is set to the value of the parameter "Adjustment factor daylight (x 0.01).”

Brightness value artificial light (calibration)

Object name	Function	Datapoint type	Flags
Brightness value artificial light (calibration)	Value in LUX	9.004 lux (Lux)	CW

Function:

This communication object is used to calibrate the light sensor for artificial light.

When the sound sensor is calibrated, the environment of the light sensor must be darkened and all lights switched on (max. brightness without sunlight). ETS can be

used to send the value in lux measured on the desk surface by an external lux meter to the device via the object above. The measured value is entered into the ETS input field as a decimal number. ETS encodes this value and sends it to the device. As soon as the value has been received, it is used to calculate the adjustment factor (brightness value = adjustment factor * measured value).

Availability:

This communication object is displayed if the following configuration has been made:

- Parameter “Calibration”
  - Setting: "Via two objects (artificial light and daylight)”

Note:

If the value 0 lx is received via the object, the adjustment factor is set to the value of the parameter "Adjustment factor artificial light (x 0.01)”.

If the value received via the object exceeds the value measured by the internal light sensor by more than a factor of 20, the adjustment factor is set to the value of the parameter "Adjustment factor artificial light (x 0.01)”.

6.1.8 Presence detector

6.1.8.1 Parameters of the "A/B PD <name>” parameter cards

Name

Parameter	Settings
Name	... (free text box for max. 45 characters)

Function:

These parameters are used to specify the name of the associated parameter card.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of presence detectors (0 = disabled)”
  - Setting: “1 ... 8”

Instance A PD 1-1 <Name> , operating mode

Parameter	Settings
Instance A PD 1-1 <Name> , operating mode	Inactive Presence detector Presence detector (HVAC) Subordinate

Function:

This parameter is used to set which sensor/ operating mode of the presence detector is used.

The following settings are possible:

- Inactive:
  The instance is not used.
- Presence detector:
  If the presence detector detects a motion, "telegram A" is sent. If it has been set that “telegram B" should also be sent, “telegram B" is sent after the configured delay time. "Telegram B" can also be sent cyclically.
  If no movements are detected, “telegram C” is sent at the end of the overrun time. If it has been set that “telegram D" should be sent in addition, “telegram D" is sent. "Telegram D" can also be sent cyclically.

If additional motions are detected during the override time, the override time is restarted.

- Presence detector (HVAC):
  The presence detector has an additional control output with a monitoring timeframe for HVAC applications. This operating mode requires a longer detection time for switching on. The channel is triggered when at least one motion is detected in the observation window.
- Subordinate :
  The presence detector is used as a "subordinate.” To cover larger areas, the detection area can be extended with additional presence detectors. For this purpose, "subordinates" are connected to "main detectors" via KNX.
  “Subordinates” only supply motion information to the main detector.
  When telegrams are received via "subordinates", they can always be treated as presence regardless of the measured brightness.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of presence detectors (0 = disabled)”
  - Setting: “1 ... 8”

Communication object:

With the following configuration, the following communication objects are displayed:

- Setting “Presence detector”
  - Communication object “A PD 1-1 <Name> , Presence detector, status object of actuator”

  Setting “Presence detector (HVAC)”
  - Communication object “A PD 1-1 <Name> , Presence detector (HVAC), status object of actuator”
- Setting “Subordinate ”
  - Communication object “A PD 1-1 <Name> , Presence detector, status object of actuator”
  - Communication object “A PD 1-1 <Name> , Presence detector, start, (A), switching value”

6.1.8.2 Parameters of the parameter cards "Presence detector (PM)"

Brightness-dependent presence detection

Parameter	Settings
Brightness-dependent presence detection	disable enable

Function:

This parameter is used to enable or disable the motion message depending on the ambient brightness. If a movement has already been detected (follow-up time is running), no evaluation of the ambient brightness takes place. That is, if additional motions occur while the overrun time is still running, the overrun time is re-started.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Subordinate ”
  - Setting: "Presence detector (HVAC)”

Brightness limit (lx)

Parameter	Settings
Brightness limit (lx)	0.00 ... **50** ... 670760.90

Function:

This parameter is used to set the brightness limit up to which a movement is evaluated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Brightness-dependent presence detection”
  - Setting: "enable”

Source for brightness value

Parameter	Settings
Source for brightness value	Calculated value Line A Line B

Function:

This parameter is used to select the source for the brightness value.

The following settings are possible:

- "Calculated value":
  The source is configured with the associated parameter “Index of calculator“.
- "Line A":
  The source is set with the associated parameter “Index of DALI brightness sensor A BS “.
- "Line B":
  The source is set with the associated parameter “Index of DALI brightness sensor B BS “.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Brightness-dependent presence detection”
  - Setting: "enable”

Index of calculator

Parameter	Settings
Index of calculator	**1** ... 16

Function:

This parameter is used to set the source for the calculated value.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Source for brightness value”
  - Setting: "Calculated value”

Note:

The calculator used must be configured with the correct data type.

Index of DALI brightness sensor A BS Index of DALI brightness sensor B BS

Parameter	Settings
Index of DALI brightness sensor A BS Index of DALI brightness sensor B BS (no unit)	**1** ... 8

Function:

This parameter is used to set the index of the brightness sensor within line A or B, from which the brightness value is used.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Source for brightness value”
  - Setting “Line A”
  - Setting “Line B”

Note:

The calculator used must be configured with the correct data type.

Start behavior after bus voltage recovery

Parameter	Settings
Start behavior after bus voltage recovery	Switch off, send (C) [and D] Switch on, send (A) [and B] No change As before bus voltage failure

Function:

This parameter is used to set the behavior of the presence detector when bus voltage is recovered.

The following settings are possible:

- "Switch off, send (C) [and D]":
  After bus voltage recovery, a switch-off command is sent with “telegram C". If configured, the switch-off command is additionally sent with “telegram D”.
- "Switch on, send (A) [and B]":
  After bus voltage recovery, a switch-on command is sent with “telegram A". If configured, the switch-on command is additionally sent with “telegram B”.
- "No change":
  After bus voltage recovery, the behavior of the presence detector is not changed.
- "As before bus voltage failure":
  After bus voltage recovery, the presence detector adpüts the same behavior as before bus voltage failure.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”

Start-up delay

Parameter	Settings
Start-up delay (hh:mm:ss)	00:00:00 ... **00:00:40** ... 18:12:15

Function:

This parameter is used to set the time during which the presence detector neither responds nor sends telegrams.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”
  - Setting: "Subordinate ”

Note:

This parameter can be used to ensure that all KNX devices are fully initiated after bus voltage recovery before they are controlled by the presence detector. The time should not be configured to less than 40 seconds.

Movement (external)

Parameter	Settings
Movement (external)	disable enable

Function:

This parameter is used to set whether movements are detected by external sensors.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”

Communication object:

If the parameter is set to "enable,” the following communication object is displayed:

- "A PD 1-1 <Name> , Presence detector, movement (external)"
- "A PD 1-1 <Name> , Presence detector (HVAC), movement (external)"

Extension input On

Parameter	Settings
Extension input On	disable enable

Function:

This parameter is used to lock or unlock the associated communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”

Communication object:

If the parameter is set to “enable,” the following communication objects are displayed:

- "A, Presence detector, extension [On]”
- "A, Presence detector (HVAC), extension [On]”

Dead time also impacts extension

Parameter	Settings
Dead time also impacts extension	disable enable

Function:

This parameter is used to set whether the configured dead time also acts on the extensions. If the dead time also affects the extension, a trigger is “buffered" by the extension in the detector and the corresponding telegrams A to D are sent after the dead time has elapsed.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Extension input On”
  - Setting: "enable”

Extension input Off

Parameter	Settings
Extension input Off	disable enable

Function:

This parameter is used to lock or unlock the associated communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”

Communication object:

If the parameter is set to “enable,” the following communication objects are displayed:

- "A, Presence detector, extension [Off]”
- "A, Presence detector (HVAC), extension [Off]”

Evaluate status object [s]

Parameter	Settings
Evaluate status object [s] (00:00:00.0 = no evaluation) (hh:mm:ss.f)	00:00:00.0 ... **00:00:04.0** ...01:49:13.5

Function:

This parameter is used to set the duration during which the associated sensor is switched inactive. If the sensor is inactive, faulty motion signals can be bypassed.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”
  - Setting: "Subordinate ”

Note:

If a lamp in the detection range of a detector changes temperature, an incorrect movement message can be prevented by the configured time.

Dead time after end of detection

Parameter	Settings
Dead time after end of detection (hh:mm:ss.f)	00:00:00.0 ... **00:00:01.0** ... 01:49:13.5

Function:

This parameter is used to set how long the presence detector does not switch on despite movement. The dead time is used to protect the actuator that is connected to the presence detector.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”

Note:

The dead time must be longer than the delay time between expiry of the overrun time and telegram C or D, otherwise telegram C or D may fail.

Since the sensor is internally "active" for approx. 3 seconds after detecting a movement, a movement that might be detected during the dead time may also trigger a telegram. To ensure that the dead time actually works you should set as large a number as possible.

Kind of overshoot time

Parameter	Settings
Kind of overshoot time	Fixed value Selectable value Variable value

Function:

This parameter is used to set how the overrun time is entered. The overrun time is the time after the last movement that the presence detector waits until it reports that there is no more movement.

The following settings are possible:

- Fixed value:
  The overrun time is entered manually.
- Selectable value:
  Two overrun times are entered manually, which can be toggled via a 1-bit object.
- Variable value:
  The starting overrun time is set. This subsequent overrun time can then be changed via the associated communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”

Communication object:

With the following configuration, the following communication objects are displayed:

- Setting “Selectable value”
  - Communication object “A, Presence detector, overshoot time [time 1 = 0/time 2 = 1]“

  - Communication object “A, Presence detector (HVAC), overshoot time [time 1 = 0/time 2 = 1]“
- Setting “Variable value”
  - Communication object “A, Presence detector, overshoot time [Value]“
  - Communication object “A, Presence detector (HVAC), overshoot time [Value]“

Overshoot time 1

Parameter	Settings
Overshoot time 1 (hh:mm:ss)	00:00:00 ... **00:00:10** ... 18:12:15

Function:

This parameter is used to set the duration of the first overrun time. Depending on the configuration, the first overrun time is a starting or continuous overrun time.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”

Overshoot time 2

Parameter	Settings
Overshoot time 2 (hh:mm:ss)	00:00:00 ... **00:00:10** ... 18:12:15

Function:

This parameter is used to set the duration of the overrun time to which the start overrun time can be switched.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”

Object "Status overshoot time"

Parameter	Settings
Object "Status overshoot time"	disable enable

Function:

This parameter is used to disable or enable the communication object via which the presence detector communicates its current follow-up time.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”

Communication object:

If the parameter is set to "enable,” the following communication object is displayed:

- "A, Presence detector, status overshoot time"
- "A, Presence detector (HVAC), status overshoot time"

Send status on request

Parameter	Settings
Send status on request	disable enable

Function:

This parameter is used to set whether the status of the associated communication object is sent on request or whether requests for the status value are rejected.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Object "Status overshoot time"”
  - Setting: "enable”

Send status on change of status

Parameter	Settings
Send status on change of status	disable enable

Function:

This parameter is used to set whether the value of the associated communication object is automatically sent after each status change.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Object "Status overshoot time"”
  - Setting: "enable”

Send status cyclically (00:00:00 = no sending)

Parameter	Settings
Send status cyclically (00:00:00 = no sending) (hh:mm:ss)	**00:00:00** ... 18:12:15

Function:

This parameter is used to set the time interval at which the value of the associated communication object is sent cyclically. If "00:00:00” is entered, cyclic sending is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Object "Status overshoot time"”
  - Setting: "enable”

Function A

Parameter	Settings
Function A	disable enable

Function:

This parameter is used to activate the "Start, (A)" parameter card and the associated communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”

Communication object:

If the parameter is set to "enable”, the following communication object is displayed:

- "A, Presence detector, start, (A), switching"
- "A, Presence detector (HVAC), start, (A), switching"

Function B

Parameter	Settings
Function B	disable enable

Function:

This parameter is used to unlock the parameter card "Start, 2 telegram (B)” and the associated communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”

Communication object:

If the parameter is set to "enable”, the following communication object is displayed:

- "A, Presence detector, start, 2nd telegram (B), switching"
- "A, Presence detector (HVAC), start, 2nd Telegram (B), switching"

Function C

Parameter	Settings
Function C	disable enable

Function:

This parameter is used to activate the parameter card "End, (C)” and the associated communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”

Communication object:

If the parameter is set to "enable”, the following communication object is displayed:

- "A, Presence detector, end, (C), switching"
- "A, Presence detector (HVAC), end, (C), switching"

Function D

Parameter	Settings
Function D	disable enable

Function:

This parameter is used to activate the parameter card "End, telegram (D)" and the associated communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”

Communication object:

If the parameter is set to "enable,” the following communication object is displayed:

- "A, Presence detector, end, 2nd telegram (D), switching"
- "A, Presence detector (HVAC), end, 2nd telegram (D), switching"

Lock sensor

Parameter	Settings
Lock sensor	disable enable

Function:

This parameter is used to specify whether the presence sensor can be locked or not. If locked, the presence sensor is deactivated. If the overrun time is already active (detector has switched on), the remaining overrun time expires. Switching on again via the presence sensor is not possible as long as the lock is active.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”
  - Setting: "Subordinate ”

Communication object:

With the following configuration, the following communication objects are displayed:

- "A, Presence detector, lock sensor"
- "A, Presence detector (HVAC), lock sensor"
- "A, Slave, lock sensor"
- "A, Presence detector, lock sensor active"
- "A, Presence detector (HVAC), lock sensor active"
- "A, Slave, lock sensor active"

Lock output

Parameter	Settings
Lock output	disable enable

Function:

This parameter is used to set whether or not the transmission of telegrams A – D can be blocked.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”

Communication object:

If the parameter is set to "enable,” the following communication object is displayed:

- "A PD 1-1 <Name> , Presence detector, lock output"
- "A PD 1-1 <Name> , Presence detector (HVAC), lock output"
- "A PD 1-1 <Name> , Presence detector, stop switching"
- "A PD 1-1 <Name> , Presence detector (HVAC), stop switching"
- "A PD 1-1 <Name> , Presence detector, stop dimming"
- "A PD 1-1 <Name> , Presence detector (HVAC), stop dimming"
- "A PD 1-1 <Name> , Presence detector, stop dimming value"
- "A PD 1-1 <Name> , Presence detector (HVAC), dimming value"

6.1.8.3 Parameters of the “Presence detector for HVAC" parameter cards

Interval time for HVAC-Presence detection (minutes)

Parameter	Settings
Interval time for HVAC-Presence detection (minutes)	1 ... **5** ... 15

Function:

This parameter is used to set the time interval in which the movements are counted.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector (HVAC)”

Minimum number of detected motions during interval time

Parameter	Settings
Minimum number of detected motions during interval time	1 ... **3** ... 255

Function:

This parameter is used to set how many movements must be detected in the configured interval time in order to start the HVAC presence. This setting ensures that an HVAC presence only starts if people are within the capture area of the detector for an extended period of time.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector (HVAC)”

Start behavior after bus voltage recovery

Parameter	Settings
Start behavior after bus voltage recovery	Switch off, send (C) [and D] Switch on, send (A) [and B] No change As before bus voltage failure

Function:

This parameter is used to set the behavior of the presence detector when bus voltage is recovered.

The following settings are possible:

- "Switch off, send (C) [and D]":
  After bus voltage recovery, a switch-off command is sent with “telegram C". If configured, the switch-off command is additionally sent with “telegram D”.
- "Switch on, send (A) [and B]":
  After bus voltage recovery, a switch-on command is sent with “telegram A". If configured, the switch-on command is additionally sent with “telegram B”.
- "No change":
  After bus voltage recovery, the behavior of the presence detector is not changed.
- "As before bus voltage failure":
  After bus voltage recovery, the presence detector adpüts the same behavior as before bus voltage failure.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”

Start-up delay

Parameter	Settings
Start-up delay (hh:mm:ss)	00:00:00 ... **00:00:40** ... 18:12:15

Function:

This parameter is used to set the time during which the presence detector neither responds nor sends telegrams.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”
  - Setting: "Subordinate ”

Note:

This parameter can be used to ensure that all KNX devices are fully initiated after bus voltage recovery before they are controlled by the presence detector. The time should not be configured to less than 40 seconds.

Movement (external)

Parameter	Settings
Movement (external)	disable enable

Function:

This parameter is used to set whether movements are detected by external sensors.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”

Communication object:

If the parameter is set to "enable,” the following communication object is displayed:

- "A PD 1-1 <Name> , Presence detector, movement (external)"
- "A PD 1-1 <Name> , Presence detector (HVAC), movement (external)"

Extension input On

Parameter	Settings
Extension input On	disable enable

Function:

This parameter is used to lock or unlock the associated communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”

Communication object:

If the parameter is set to “enable,” the following communication objects are displayed:

- "A, Presence detector, extension [On]”
- "A, Presence detector (HVAC), extension [On]”

Dead time also impacts extension

Parameter	Settings
Dead time also impacts extension	disable enable

Function:

This parameter is used to set whether the configured dead time also acts on the extensions. If the dead time also affects the extension, a trigger is “buffered" by the extension in the detector and the corresponding telegrams A to D are sent after the dead time has elapsed.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Extension input On”
  - Setting: "enable”

Extension input Off

Parameter	Settings
Extension input Off	disable enable

Function:

This parameter is used to lock or unlock the associated communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”

Communication object:

If the parameter is set to “enable,” the following communication objects are displayed:

- "A, Presence detector, extension [Off]”
- "A, Presence detector (HVAC), extension [Off]”

Evaluate status object [s]

Parameter	Settings
Evaluate status object [s] (00:00:00.0 = no evaluation) (hh:mm:ss.f)	00:00:00.0 ... **00:00:04.0** ...01:49:13.5

Function:

This parameter is used to set the duration during which the associated sensor is switched inactive. If the sensor is inactive, faulty motion signals can be bypassed.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”
  - Setting: "Subordinate ”

Note:

If a lamp in the detection range of a detector changes temperature, an incorrect movement message can be prevented by the configured time.

Dead time after end of detection

Parameter	Settings
Dead time after end of detection (hh:mm:ss.f)	00:00:00.0 ... **00:00:01.0** ... 01:49:13.5

Function:

This parameter is used to set how long the presence detector does not switch on despite movement. The dead time is used to protect the actuator that is connected to the presence detector.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”

Note:

The dead time must be longer than the delay time between expiry of the overrun time and telegram C or D, otherwise telegram C or D may fail.

Since the sensor is internally "active" for approx. 3 seconds after detecting a movement, a movement that might be detected during the dead time may also trigger a telegram. To ensure that the dead time actually works you should set as large a number as possible.

Kind of overshoot time

Parameter	Settings
Kind of overshoot time	Fixed value Selectable value Variable value

Function:

This parameter is used to set how the overrun time is entered. The overrun time is the time after the last movement that the presence detector waits until it reports that there is no more movement.

The following settings are possible:

- Fixed value:
  The overrun time is entered manually.
- Selectable value:
  Two overrun times are entered manually, which can be toggled via a 1-bit object.
- Variable value:
  The starting overrun time is set. This subsequent overrun time can then be changed via the associated communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”

Communication object:

With the following configuration, the following communication objects are displayed:

- Setting “Selectable value”
  - Communication object “A, Presence detector, overshoot time [time 1 = 0/time 2 = 1]“
  - Communication object “A, Presence detector (HVAC), overshoot time [time 1 = 0/time 2 = 1]“
- Setting “Variable value”
  - Communication object “A, Presence detector, overshoot time [Value]“
  - Communication object “A, Presence detector (HVAC), overshoot time [Value]“

Overshoot time 1

Parameter	Settings
Overshoot time 1 (hh:mm:ss)	00:00:00 ... **00:00:10** ... 18:12:15

Function:

This parameter is used to set the duration of the first overrun time. Depending on the configuration, the first overrun time is a starting or continuous overrun time.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”

Overshoot time 2

Parameter	Settings
Overshoot time 2 (hh:mm:ss)	00:00:00 ... **00:00:10** ... 18:12:15

Function:

This parameter is used to set the duration of the overrun time to which the start overrun time can be switched.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”

Object "Status overshoot time"

Parameter	Settings
Object "Status overshoot time"	disable enable

Function:

This parameter is used to disable or enable the communication object via which the presence detector communicates its current follow-up time.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”

Communication object:

If the parameter is set to "enable,” the following communication object is displayed:

- "A, Presence detector, status overshoot time"
- "A, Presence detector (HVAC), status overshoot time"

Send status on request

Parameter	Settings
Send status on request	disable enable

Function:

This parameter is used to set whether the status of the associated communication object is sent on request or whether requests for the status value are rejected.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Object "Status overshoot time"”
  - Setting: "enable”

Send status on change of status

Parameter	Settings
Send status on change of status	disable enable

Function:

This parameter is used to set whether the value of the associated communication object is automatically sent after each status change.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Object "Status overshoot time"”
  - Setting: "enable”

Send status cyclically (00:00:00 = no sending)

Parameter	Settings
Send status cyclically (00:00:00 = no sending) (hh:mm:ss)	**00:00:00** ... 18:12:15

Function:

This parameter is used to set the time interval at which the value of the associated communication object is sent cyclically. If "00:00:00” is entered, cyclic sending is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Object "Status overshoot time"”
  - Setting: "enable”

Function A

Parameter	Settings
Function A	disable enable

Function:

This parameter is used to activate the "Start, (A)" parameter card and the associated communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”

Communication object:

If the parameter is set to "enable”, the following communication object is displayed:

- "A, Presence detector, start, (A), switching"
- "A, Presence detector (HVAC), start, (A), switching"

Function B

Parameter	Settings
Function B	disable enable

Function:

This parameter is used to unlock the parameter card "Start, 2 telegram (B)" and the associated communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”

Communication object:

If the parameter is set to "enable”, the following communication object is displayed:

- "A, Presence detector, start, 2nd telegram (B), switching"
- "A, Presence detector (HVAC), start, 2nd Telegram (B), switching"

Function C

Parameter	Settings
Function C	disable enable

Function:

This parameter is used to activate the parameter card "End, (C)” and the associated communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”

Communication object:

If the parameter is set to "enable”, the following communication object is displayed:

- "A, Presence detector, end, (C), switching"
- "A, Presence detector (HVAC), end, (C), switching"

Function D

Parameter	Settings
Function D	disable enable

Function:

This parameter is used to activate the parameter card "End, telegram (D)" and the associated communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”

Communication object:

If the parameter is set to "enable," the following communication object is displayed:

- "A, Presence detector, end, 2nd telegram (D), switching"
- "A, Presence detector (HVAC), end, 2nd telegram (D), switching"

Lock sensor

Parameter	Settings
Lock sensor	disable enable

Function:

This parameter is used to specify whether the presence sensor can be locked or not. If locked, the presence sensor is deactivated. If the overrun time is already active (detector has switched on), the remaining overrun time expires. Switching on again via the presence sensor is not possible as long as the lock is active.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”
  - Setting: "Subordinate ”

Communication object:

With the following configuration, the following communication objects are displayed:

- "A, Presence detector, lock sensor"
- "A, Presence detector (HVAC), lock sensor"
- "A, Slave, lock sensor"
- "A, Presence detector, lock sensor active"
- "A, Presence detector (HVAC), lock sensor active"
- "A, Slave, lock sensor active"

Lock output

Parameter	Settings
Lock output	disable enable

Function:

This parameter is used to set whether or not the transmission of telegrams A – D can be blocked.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”

Communication object:

If the parameter is set to "enable," the following communication object is displayed:

- "A PD 1-1 <Name> , Presence detector, lock output"
- "A PD 1-1 <Name> , Presence detector (HVAC), lock output"
- "A PD 1-1 <Name> , Presence detector, stop switching"
- "A PD 1-1 <Name> , Presence detector (HVAC), stop switching"
- "A PD 1-1 <Name> , Presence detector, stop dimming"
- "A PD 1-1 <Name> , Presence detector (HVAC), stop dimming"

- "A PD 1-1 <Name> , Presence detector, stop dimming value"
- "A PD 1-1 <Name> , Presence detector (HVAC), dimming value"

6.1.8.4 Parameters of the “Subordinate/extension” parameter cards

Brightness-dependent presence detection

Parameter	Settings
Brightness-dependent presence detection	disable enable

Function:

This parameter is used to enable or disable the motion message depending on the ambient brightness. If a movement has already been detected (follow-up time is running), no evaluation of the ambient brightness takes place. That is, if additional motions occur while the overrun time is still running, the overrun time is re-started.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Subordinate ”
  - Setting: "Presence detector (HVAC)”

Brightness limit (lx)

Parameter	Settings
Brightness limit (lx)	0.00 ... **50** ... 670760.90

Function:

This parameter is used to set the brightness limit up to which a movement is evaluated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Brightness-dependent presence detection”
  - Setting: "enable”

Source for brightness value

Parameter	Settings
Source for brightness value	Calculated value Line A Line B

Function:

This parameter is used to select the source for the brightness value.

The following settings are possible:

- "Calculated value":
  The source is configured with the associated parameter “Index of calculator“.
- "Line A":
  The source is set with the associated parameter “Index of DALI brightness sensor A BS “.
- "Line B":
  The source is set with the associated parameter “Index of DALI brightness sensor B BS “.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Brightness-dependent presence detection”
  - Setting: "enable”

Index of calculator

Parameter	Settings
Index of calculator	**1** ... 16

Function:

This parameter is used to set the source for the calculated value.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Source for brightness value”
  - Setting: "Calculated value”

Note:

The calculator used must be configured with the correct data type.

Index of DALI brightness sensor A BS Index of DALI brightness sensor B BS

Parameter	Settings
Index of DALI brightness sensor A BS Index of DALI brightness sensor B BS (no unit)	**1** ... 8

Function:

This parameter is used to set the index of the brightness sensor within line A or B, from which the brightness value is used.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Source for brightness value”
  - Setting “Line A”
  - Setting “Line B”

Note:

The calculator used must be configured with the correct data type.

Start-up delay

Parameter	Settings
Start-up delay (hh:mm:ss)	00:00:00 ... **00:00:40** ... 18:12:15

Function:

This parameter is used to set the time during which the presence detector neither responds nor sends telegrams.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”
  - Setting: "Subordinate ”

Note:

This parameter can be used to ensure that all KNX devices are fully initiated after bus voltage recovery before they are controlled by the presence detector. The time should not be configured to less than 40 seconds.

Evaluate status object [s]

Parameter	Settings
Evaluate status object [s] (00:00:00.0 = no evaluation) (hh:mm:ss.f)	00:00:00.0 ... **00:00:04.0** ...01:49:13.5

Function:

This parameter is used to set the duration during which the associated sensor is switched inactive. If the sensor is inactive, faulty motion signals can be bypassed.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”
  - Setting: "Subordinate ”

Note:

If a lamp in the detection range of a detector changes temperature, an incorrect movement message can be prevented by the configured time.

Cyclic sending

Parameter	Settings
Cyclic sending (hh:mm:ss)	00:00:00 ... 18:12:15

Function:

This parameter is used to set the duration during which the value of the associated communication object (objects A to D) is sent cyclically.
If this is set to "00:00:00,” cyclic sending is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Subordinate ”

Lock sensor

Parameter	Settings
Lock sensor	disable enable

Function:

This parameter is used to specify whether the presence sensor can be locked or not. If locked, the presence sensor is deactivated. If the overrun time is already active (detector has switched on), the remaining overrun time expires. Switching on again via the presence sensor is not possible as long as the lock is active.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”

– Setting: "Subordinate ”

Communication object:

With the following configuration, the following communication objects are displayed:

- "A, Presence detector, lock sensor"
- "A, Presence detector (HVAC), lock sensor"
- "A, Slave, lock sensor"
- "A, Presence detector, lock sensor active"
- "A, Presence detector (HVAC), lock sensor active"
- "A, Slave, lock sensor active"

6.1.8.5 3rd level recurring parameter cards

The parameters of the parameter cards "presence detector” and "presence detector for HVAC” described below activate recurring parameter cards at the 3rd level. These parameter cards individualize the operating mode of the presence message and repeat depending on the settings. Therefore, they are only described once in this chapter.

Parameter	Parameter card
Function A	Start, (A)
Function B	Start, 2nd telegram (B)
Function C	End, (C)
Function D	End, 2nd telegram (D)
Lock sensor	Lock presence detector
Lock output	Lock output

Delay time

Parameter	Settings
Delay time (hh:mm:ss.f)	**00:00:00.0** ... 01:49:13.5

Function:

This parameter is used to set the time for which the start of the presence detection is delayed.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Function A”
  – Setting: "enable”

Communication object:

If the parameter is set to "enable”, the following communication object is displayed:

- "A, Presence detector, start, (A), switching"
- "A, Presence detector (HVAC), start, (A), switching"

Cyclic sending

Parameter	Settings
Cyclic sending (hh:mm:ss.f)	**00:00:00.0** ... 01:49:13.5

Function:

This parameter is used to set the time interval in which the value of the associated communication object is sent cyclically.
If this is set to "00:00:00," cyclic sending is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Function B"
  - Setting: "enable"

Communication object:

If the parameter is set to "enable", the following communication object is displayed:

- "A, Presence detector, start, (A), switching"
- "A, Presence detector (HVAC), start, (A), switching"

Data type

Parameter	Settings
Data type	Switching DPT 1.001 Percentage (%) DPT 5.001 Value (8-bit) DPT 5.010 Value (16-bit) DPT 7.001 Temperature (°C) DPT 9.001 Illuminance (lx) DPT 9.004 Humidity (% r.H.) DPT 9.007 CO2 concentration (ppm) DPT 9.008 Scene DPT 17.001

Function:

This parameter is used to determine the datapoint types of the associated communication object.

The following settings are possible:

- Switching DPT 1.001:
  Corresponds to the datapoint type "1.001 switching"
- Percentage (%) DPT 5.001:
  Corresponds to the datapoint type "5.001 percent (0…100 %)"
- Value (8-bit) DPT 5.010:
  Corresponds to the datapoint type "5.010 counting impulses (0 … 255)"
- Value (16-bit) DPT 7.001:
  Corresponds to the datapoint type "7.001 pulses"
- Temperature (°C) DPT 9.001:
  Corresponds to the datapoint type "9.001 temperature °C"
- Illuminance (lx) DPT 9.004:
  Corresponds to the datapoint type "9.004 lux (Lux)"
- Humidity (% r.H.) DPT 9.007:
  Corresponds to the datapoint type "9.007 humidity (%)"
- CO2 concentration (ppm) DPT 9.008:
  Corresponds to the datapoint type "9.008 parts/million (ppm)"
- Scene DPT 17.001:
  Corresponds to the datapoint type "17.001 scenes number"

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Function A”
  - Setting: "enable"

Value

Parameter	Settings
Value	Off On

Function:

This parameter is used to set the value of the data type specified previously.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Function A”
  - Setting: "enable”

Selectable value

Parameter	Settings
Selectable value	disable enable

Function:

This parameter is used to set whether or not the value to be sent at the start or the end of a movement is switchable via a communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Function A”
  - Setting: "enable”

Communication object:

If the parameter is set to "enable,” the following communication object is displayed:

- "A PD 1-1 <Name> , Presence detector, start, (A), switching value"
- "A PD 1-1 <Name> , Presence detector (HVAC), start, (A), switching value"

Value 2

Parameter	Settings
Value 2	Off On

Function:

This parameter is used to set the second value of the data type specified above, which can be switched to.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Selectable value”
  - Setting: "enable”

6.1.8.6 Communication objects "Presence detector (PD)"

A PD 1-1 <name> presence detector, start, (A), switching
A PD 1-1 <name> presence detector for HVAC, start, (A), switching

Object name	Function	Datapoint type	Flags
A PD 1-1 <name> presence detector, start, (A), switching A PD 1-1 <name> presence detector for HVAC, start, (A), switching	On/Off	1.001 switch	CRT

Function:

This communication object is used to report a detected movement or external trigger via bus.

Availability:

This communication object is displayed if the following configuration was made:

- Parameter "Function A”
  - Setting “enable”

A PD 1-1 <Name> , Presence detector, status object of actuator
A PD 1-1 <Name> , Presence detector (HVAC), status object of actuator
A PD 1-1 <Name> , Slave, Status object of actuator

Object name	Function	Datapoint type	Flags
A PD 1-1 <Name> , Presence detector, status object of actuator A PD 1-1 <Name> , Presence detector (HVAC), status object of actuator A PD 1-1 <Name> , Slave, Status object of actuator	On/Off	1.001 switch	CW

Function:

This communication object is used to report whether the actuator controlled by the detector has switched.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”
  - Setting: "Subordinate ”

Note:

If a change of state (1 to 0 or 0 to 1) has occurred, the passive infrared sensor is not evaluated for a configurable time. This prevents the detector from detecting the temperature drop at a light bulb that has just been switched off as movement.

A PD 1-1 <name>, presence detector, end, (C), switching
A PD 1-1 <name>, presence detector for HVAC, end, (C), switching

Object name	Function	Datapoint type	Flags
A PD 1-1 <name>, presence detector, end, (C), switching A PD 1-1 <name>, presence detector for HVAC, end, (C), switching	On/Off	1.001 switch	CRT

Function:

This communication object is used to report the end of a movement or external trigger via bus.

Availability:

This communication object is displayed if the following configuration was made:

- Parameter "Function C"
  - Setting “enable”

A PD 1-1 <Name> , Presence detector, overshoot time[Value]
A PD 1-1 <Name> , Presence detector (HVAC), overshoot time[Value]

Object name	Function	Datapoint type	Flags
A PD 1-1 <Name> , Presence detector, overshoot time A PD 1-1 <Name> , Presence detector (HVAC), overshoot time	Value	7.005 time (s)	CW

Function:

This communication object is used to change the overrun time of the detector via the bus. This time is set in seconds. This communication object is saved in case of a bus voltage failure and restored on bus voltage recovery.

Availability:

This communication object is displayed if the following configuration was made:

- Parameter “Kind of overshoot time”
  - Setting “Variable value”

A PD 1-1 <Name> , Presence detector, overshoot time[time 1 = 0/time 2 = 1]
A PD 1-1 <Name> , Presence detector (HVAC), overshoot time[time 1 = 0/time 2 = 1]

Object name	Function	Datapoint type	Flags
A PD 1-1 <Name> , Presence detector, overshoot time A PD 1-1 <Name> , Presence detector (HVAC), overshoot time	time 1 = 0/time 2 = 1	1.002 boolean	CW

Function:

This communication object is used to switch the overrun time of the detector to one of the two previously configured overrun times. This communication object is saved in case of a bus voltage failure and restored on bus voltage recovery.

Availability:

This communication object is displayed if the following configuration was made:

- Parameter “Kind of overshoot time”
  - Setting “Selectable value”

A PD 1-1 <Name> , Presence detector, extension[Off]
A PD 1-1 <Name> , Presence detector (HVAC), extension[Off]

Object name	Function	Datapoint type	Flags
A PD 1-1 <Name> , Presence detector, extension A PD 1-1 <Name> , Presence detector (HVAC), extension	Off	1.001 switch	CW

Function:

This communication object is used to switch off the sensor in a defined manner. That is, as soon as the sensor receives the value "0” via this communication object, the overrun time ends and telegrams C and D are sent in accordance with the configuration.
This communication object is evaluated during the lock phase (lock sensor).

Availability:

This communication object is displayed if the following configuration was made:

- Parameter “Extension input Off”
  - Setting: "enable”

A PD 1-1 <Name> , Presence detector, extension[On]
A PD 1-1 <Name> , Presence detector, extension[On]

Object name	Function	Datapoint type	Flags
A PD 1-1 <Name> , Presence detector, extension A PD 1-1 <Name> , Presence detector, extension	On	1.001 switch	CW

Function:

This communication object is used to trigger the sensor externally. That is, as soon as the sensor receives the value "1” via this communication object, telegrams A and B are sent in accordance with the configuration.
This communication object is evaluated during the lock phase (lock sensor).

Availability:

This communication object is displayed if the following configuration was made:

- Parameter “Extension input On”
  - Setting: "enable”

A PD 1-1 <Name> , Presence detector, status overshoot time
A PD 1-1 <Name> , Presence detector (HVAC), status overshoot time

Object name	Function	Datapoint type	Flags
A PD 1-1 <Name> , Presence detector, status overshoot time A PD 1-1 <Name> , Presence detector (HVAC), status overshoot time	Value	7.005 time (s)	CRT

Function:

This communication object is used to report the current overrun time of the detector and can be queried via the bus at any time.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Presence detector”
  - Setting: "Presence detector (HVAC)”

A PD 1-1 <name>, presence detector HVAC, end, 2nd telegram (D), switching
A PD 1-1 <name>, presence detector for HVAC, end, 2nd telegram (D), switching

Object name	Function	Datapoint type	Flags
A PD 1-1 <name>, presence detector HVAC, end, 2nd telegram (D), switching A PD 1-1 <name>, presence detector for HVAC, end, 2nd telegram (D), switching	On/Off	1.001 switch	CRT

Function:

This communication object is used to report the end of a movement or external trigger via bus.

Availability:

This communication object is displayed if the following configuration was made:

- Parameter "Function D”
  - Setting “enable”

A PD 1-1 <Name>, presence detector, start, 2nd telegram (B), switching
A PD 1-1 <Name>, presence detector for HVAC, start, 2nd telegram (B), switching

Object name	Function	Datapoint type	Flags
A PD 1-1 <name>, presence detector, start, 2nd telegram (B), switching A PD 1-1 <name>, presence detector for HVAC, start, 2nd Telegram (B), switching	On/Off	1.001 switch	CRT

Function:

This object is used to report a detected movement or external trigger via bus.

Availability:

This communication object is displayed if the following configuration was made:

- Parameter "Function B”
  - Setting “enable”

A PD 1-1 <Name> , Presence detector, movement (external)
A PD 1-1 <Name> , Presence detector (HVAC), movement (external)

Object name	Function	Datapoint type	Flags
A PD 1-1 <Name> , Presence detector, movement (external) A PD 1-1 <Name> , Presence detector (HVAC), movement (external)	On	1.010 start/stop	CW

Function:

This communication object is triggered via an external presence detector. When the value "1” is received via this object, a movement is interpreted. This corresponds to the signal as if a movement had been detected via the internal presence sensor. The communication object is evaluated during the lock phase ("lock sensor”).

Availability:

This communication object is displayed if the following configuration was made:

- Parameter “Movement (external)”
  - Setting: "enable”

A PD 1-1 <Name> , Presence detector, lock output
A PD 1-1 <Name> , Presence detector (HVAC), lock output

Object name	Function	Datapoint type	Flags
A PD 1-1 <Name> , Presence detector, lock output A PD 1-1 <Name> , Presence detector (HVAC), lock output	On/Off	1.003 enable	CW

Function:

This communication object is used to disable the sending of telegrams A to D by the detector and enable them again.
The parameter "invert lock input” can be used to set whether the output is disabled when a "0” or a "1” is received.

Availability:

This communication object is displayed if the following configuration was made:

- Parameter “Lock output”
  - Setting: "enable”

A PD 1-1 <Name> , Presence detector, stop dimming
A PD 1-1 <Name> , Presence detector (HVAC), stop dimming

Object name	Function	Datapoint type	Flags
A PD 1-1 <Name> , Presence detector, stop dimming A PD 1-1 <Name> , Presence detector (HVAC), stop dimming	brighter/darker	3.007 dimming control	CW

Function:

This communication object is used to block the transmission of telegrams A to D by the detector when a dimming command is received. This allows users to directly control the actuator and at the same time disable the detector.
The lock is released via the communication object “A, Presence detector (HVAC), lock output“ or”A, Presence detector, lock output".

A PD 1-1 <Name> , Presence detector, stop switching
A PD 1-1 <Name> , Presence detector (HVAC), stop switching

Object name	Function	Datapoint type	Flags
A PD 1-1 <Name> , Presence detector, stop switching A PD 1-1 <Name> , Presence detector (HVAC), stop switching	On/Off	1.001 switch	CW

Function:

This object can be used to lock the output (transmission of telegrams A to D) of the detector when a switch command is received. This allows users to directly control the actuator and at the same time disable the detector.

The lock is released via the object "A, Presence detector (HVAC), lock output" or "A, Presence detector, lock output.”

Availability:

This communication object is displayed if the following configuration was made:

- Parameter “Lock output”
  - Setting: "enable”

A PM 1-1 <name>,presence detector, subordinate, start, (A)

Object name	Function	Datapoint type	Flags
A PM 1-1 <name>,presence detector, subordinate, start, (A)	On/Off	1.001 switch	CRT

Function:

This communication object is used to send the corresponding value to the bus at the start of a detected movement or in case of external triggering, depending on the configuration.
The value depends on the operating mode of the channel of the selected data type (parameter card "Start, (A)”).

Availability:

This communication object is displayed if the following configuration was made:

- Parameter “Instance A PD 1-1 <Name> , operating mode”
  - Setting: "Subordinate ”

A PD 1-1 <Name> , Presence detector, lock sensor
A PD 1-1 <Name> , Presence detector (HVAC), lock sensor
A PD 1-1 <Name> , Slave, lock sensor

Object name	Function	Datapoint type	Flags
A PD 1-1 <Name> , Presence detector, lock sensor A PD 1-1 <Name> , Presence detector (HVAC), lock sensor A PD 1-1 <Name> , Slave, lock sensor	On/Off	1.003 enable	CW

Function:

This communication object is used to lock and enable the presence sensor. The parameter "invert lock input” can be used to set whether the sensor is disabled when a "0” or a "1” is received.

Availability:

This communication object is displayed if the following configuration was made:

- Parameter “Lock sensor”
  - Setting: "enable”

Note:

Movement notifications are evaluated via the communication objects "(movement (external) and extension" even if the presence sensor is locked.

A PD 1-1 <Name> , Presence detector, lock sensor active
A PD 1-1 <Name> , Presence detector (HVAC), lock sensor active
A PD 1-1 <Name> , Slave, lock sensor active

Object name	Function	Datapoint type	Flags
A PD 1-1 <Name> , Presence detector, lock sensor active A PD 1-1 <Name> , Presence detector (HVAC), lock sensor active A PD 1-1 <Name> , Slave, lock sensor active	On/Off	1.002 boolean	CRT

Function:

This communication object is used to report whether the lock of the presence sensor is active or not. This can be queried via the bus at any time.

Availability:

This communication object is displayed if the following configuration was made:

- Parameter “Status lock”
  - Setting: "enable”

A PD 1-1 <Name> , Presence detector, lock output active
A PD 1-1 <Name> , Presence detector (HVAC), lock output active

Object name	Function	Datapoint type	Flags
A PD 1-1 <Name> , Presence detector, lock output active A PD 1-1 <Name> , Presence detector (HVAC), lock output active	On/Off	1.002 boolean	CRT

Function:

This communication object is used to report whether the transmission of telegrams A to D from the sensor is active or not. This status can be queried via the bus at any time.

Availability:

This communication object is displayed if the following configuration was made:

- Parameter “Status lock”
  - Setting: "enable”

A PD 1-1 <Name> , Presence detector, start, (A), switching value
A PD 1-1 <Name> , Presence detector (HVAC), start, (A), switching value

Object name	Function	Datapoint type	Flags
A PD 1-1 <Name> , Presence detector, start, (A), switching value A PD 1-1 <Name> , Presence detector (HVAC), start, (A), switching value	Value 1/Value 2	1.002 boolean	CW

Function:

This communication object can be used to switch the value of the communication object (start A) to one of the previously configured values. The detector sends the value 1 when it receives a "0” and the value 2 when it receives a "1”. This communication object is saved in case of a bus voltage failure and restored on bus voltage recovery.

Availability:

This communication object is displayed if the following configuration was made:

- Parameter “Selectable value”
  - Setting: "enable”

6.2 Controller

2-point brightness controller (switching)

2-point control is the most basic form of lighting control. If the brightness controller is activated (automatic operation), the lighting is switched on as soon as the brightness falls below the configured lower brightness limit. The lighting is switched off once the configured upper brightness limit is exceeded. The brightness limits can be set using parameters or communication objects.

Due to the split into two individual switching objects when the limit is exceeded or not reached, the controller can also be operated semi-automatically. This means that "On only" or "Off only" can be switched.

If the controller receives a switching or dimming command via one of the corresponding communication objects via DALI or KNX, then this is evaluated as an external override and the controller switches off automatic operation. At the same time, this change of state is sent to the bus via the "controller status" object, whereby the current status of the lighting is retained.

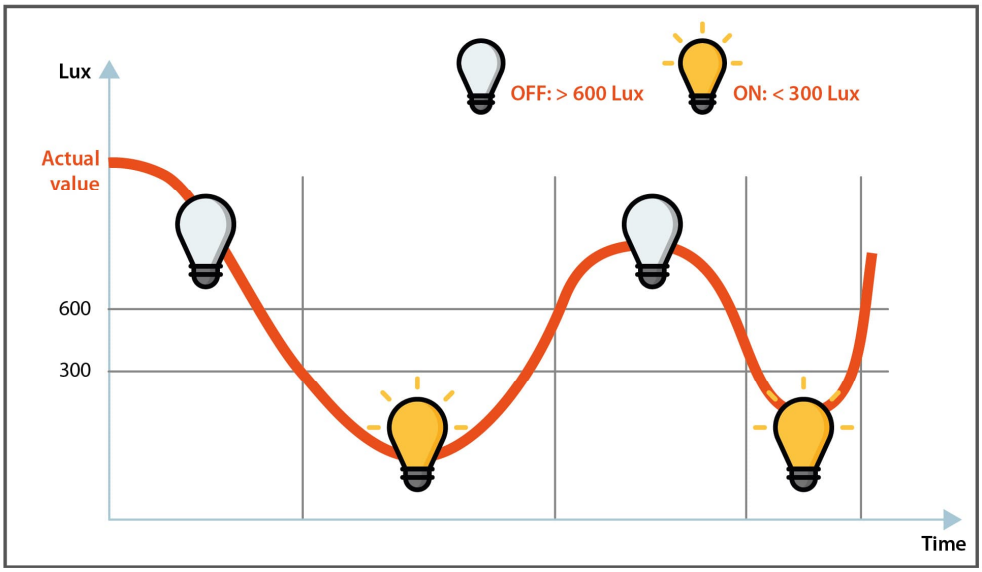

Fig. 11: 2-point control in automatic operation

If you want to give the controller a value in the format of an external brightness sensor, you must use the calculation function.

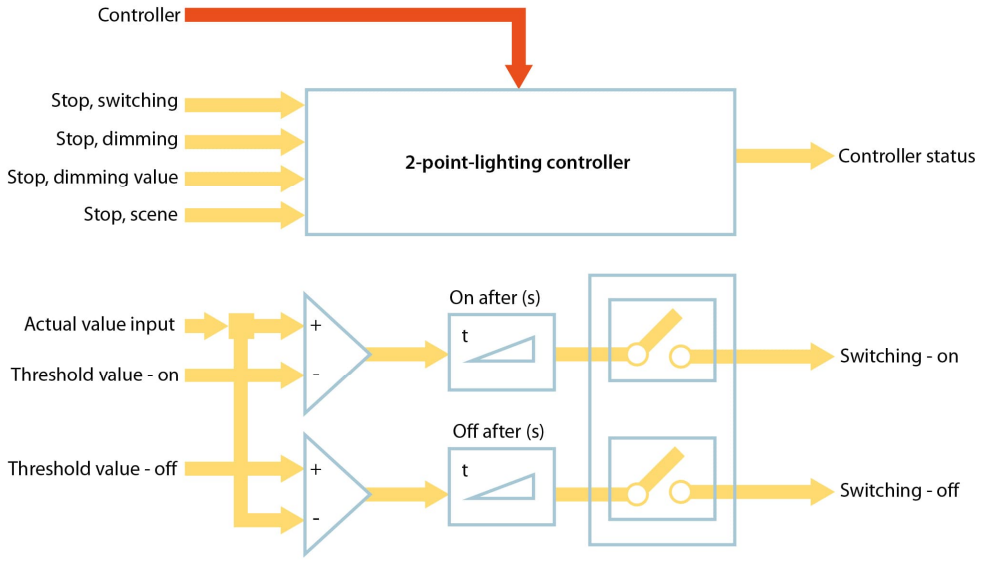

Fig. 12: 2-point control

Constant light level controller

Constant lighting control is an advanced form of lighting control. The control uses natural light to balance out the artificial light that is necessary to light the room adequately, which reduces power consumption and therefore costs.

The illuminance of natural light entering a room through the window decreases the deeper it enters into the room.

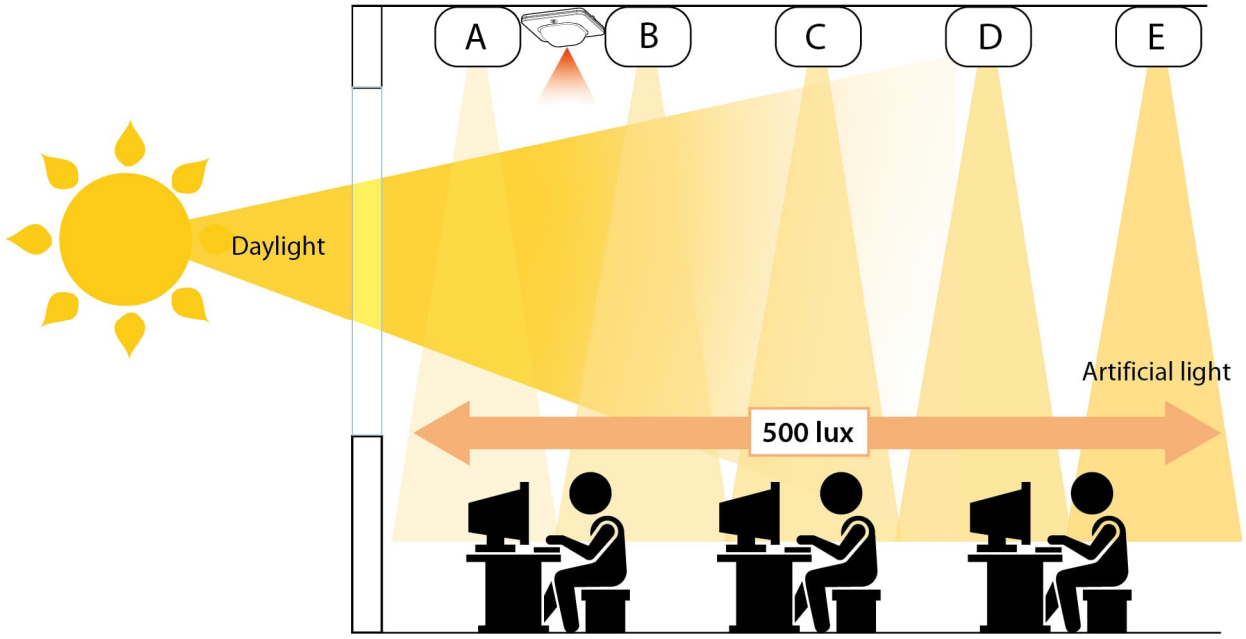

Fig. 13: Principle of constant lighting control for five groups of lights

Depending on the lamps, lighting is regulated using dimming actuators or switching/dimming actuators to the specified target brightness value, whereby the setpoint can be selected as a parameter or as a communication object.

In order to use the entering natural light in the best possible way with constant lighting control, the KNX/DALI gateway offers the option to use a brightness sensor to control a main lighting group directly and up to four additional sub-lighting groups, each via a separate characteristic curve and a separate controller (manager/subordinate mode). All lighting groups are supposed to be dimmed to the same setpoint (e.g. 500 lux). This allows the brightness in a room to be regulated with a single brightness sensor. Depending on whether the secondary lighting groups are closer to the window or further away from the window than the main lighting group ("manager"), the respective lighting group must be dimmed up or down accordingly.

To do so, you first need to determine where in the room the brightness sensor is installed. The brightness sensor can be installed on the ceiling at positions A – E. The position of the brightness sensor, which determines the main lighting group, is basically freely selectable. However, this position should be as close as possible to the window to best capture the natural light.

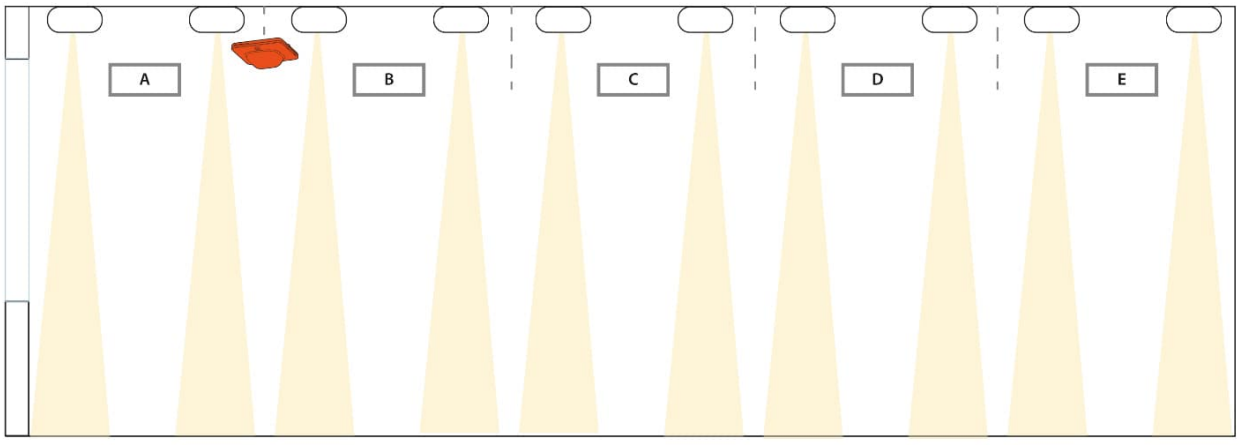

Fig. 14: Position of lighting group A-E

For manager/subordinate operation, the course of the natural light must be recorded under lighting groups A–E. To do this, the lighting in the room must be

switched off completely so that the room is illuminated only by natural light. Ideally, the natural light is even (no shadows), bright and diffuse, e.g. on a bright day with a cloudy sky around midday. Under each of the lighting groups, the illuminance (lux) must then be measured manually and the values entered into the ETS.

In this case, sub group 1 corresponds to lighting group B, sub group 2 to lighting group C and so on. Lighting group A is the main group as it is the closest to the window.

The control characteristic cover for the sub lighting groups must be determined without natural light. To do this, the room must be darkened completely or the characteristic curve must be recorded at night. When a start signal is sent to object 17704, the recording of the characteristic curve starts. The KNX/DALI gateway independently creates 15 discrete control values in the range of 0% to 100% for the main lighting group and the sub lighting groups. The brightness sensor records the resulting illuminance. The interval between measurements can be selected between 10 and 60 seconds in order to optimally preheat the luminaires at each individual control value.

After successful completion or cancellation of the calibration, the controller is in the "inactive" state. If the process is completed successfully, the light groups all light up with 50% control value; if the process is completed incorrectly, they light up with 6% control value.

When in operation, constant lighting control can assume four internal states:

- **Active:** Actual controlling takes place in this state. This means that a comparison between the setpoint and actual value is carried out at certain intervals (configurable) and a control value is output depending on the deviation.
- **Inactive:** In this state, the controller is passive. That is, it is switched off and no longer performs any controlling activities.
- **Standby:** The controller is also passive in this state. Unlike in "inactive" state, the actual value is still compared to the target value here. If there is a certain difference between the setpoint and the actual value, the controller switches itself to active.
- **Off:** The control is stopped and the actuators (manager & subordinate) are switched off.

6.2.1 Parameters on the "Controller" parameter card

Number of 2-point lighting controller (0 = disabled)

Parameter	Settings
Number of 2-point lighting controller (0 = disabled) (no unit)	**0** ... 16

Function:

This parameter is used to set whether and how many parameter cards "2PLR" are activated. If "0" is entered, all associated parameters in the ETS software are deactivated. If a number is entered, the same number of parameter cards is displayed in the ETS software.

Communication object:

If a number is set, the following communication objects are displayed:

- "2PLC 1 <Name> controller"
- "2PLC 1 <Name> stop when switching"
- "2PLC 1 <Name> stop when dimming"
- "2PLC 1 <Name> stop at dimming value"
- "2PLC 1 <Name> switching [On]"
- "2PLC 1 <Name> switching[Off]"

Number of constant lighting controllers (0= disabled)

Parameter	Settings
Number of constant lighting controllers (0= disabled) (no unit)	**0** ... 16

Function:

This parameter is used to set whether and how many "KLR" parameter cards are activated. If "0" is entered, all associated parameters in the ETS software are deactivated. If a number is entered, the same number of parameter cards is displayed in the ETS software.

Communication object:

If a number is set, the following communication objects are displayed:

- "CLC 1 <Name> controller"
- "CLC 1 <Name> stop when switching"
- "CLC 1 <Name> stop when dimming"
- "CLC 1 <Name> stop at dimming value"
- "CLC 1 <Name> Main group switching"
- "CLC 1 <Name> Main group dimming value"
- "CLC 1 <Name> Main group dimming value status"
- "CLC 1 <Name> Calibration"
- "Constant lighting control, Diagnostic values"

6.2.2 Parameters on the “2-point-light controller (2PLC)” parameter card

Name

Parameter	Settings
Name	... (free text box for max. 45 characters)

Function:

These parameters are used to specify the name of the associated parameter card.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of 2-point lighting controller (0 = disabled)”
  - Setting: “1 ... 16“

Source for brightness value (actual value)

Parameter	Settings
Source for brightness value (actual value)	Calculated value Line A Line B

Function:

This parameter is used to select the source for the brightness value.

The following settings are possible:

- Calculated value:
  The source is configured with the associated parameter “Index of calculator“.
- Line A:
  The source is configured with the associated parameter “Index of DALI brightness sensor A BS “.
- Line B:
  The source is configured with the associated parameter “Index of DALI brightness sensor B BS “.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of 2-point lighting controller (0 = disabled)“
  – Setting: “1 ... 16“

Index of calculator

Parameter	Settings
Index of calculator (no unit)	**1** ... 16

Function:

This parameter is used to set the source for the calculated value.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Source for brightness value (actual value)”
  – Setting: "Calculated value”

Note:

The calculator used must be configured with the correct data type.

Index of DALI brightness sensor A BS Index of DALI brightness sensor B BS

Parameter	Settings
Index of DALI brightness sensor A BS Index of DALI brightness sensor B BS (no unit)	**1** ... 8

Function:

This parameter is used to set the index of the DALI brightness sensor that is used as a source for the brightness value.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Source for brightness value (actual value)”
  – Setting: "Line A”
  – Setting: "Line B”

Behavior controller at bus voltage recovery

Parameter	Settings
Behavior controller at bus voltage recovery	Off On As before bus voltage failure

Function:

This parameter is used to set how the controller behaves after bus voltage recovery.

The following settings are possible:

- Off:
  After bus voltage recovery, the controller is switched off.
- On:
  After bus voltage recovery, the controller is switched on and controlling is active.
- As before bus voltage failure:
  The controller remains in the same status as before the bus voltage failure.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of 2-point lighting controller (0 = disabled)”
  – Setting: “1 ... 16“

Behavior at controller off

Parameter	Settings
Behavior at controller off	Off No change

Function:

This parameter is used to set whether the switching telegram "Off” is sent when the controller is switched off (setting: "Off”) or not (setting: "No change”).

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of 2-point lighting controller (0 = disabled)”
  – Setting: “1 ... 16“

Setpoint changeable via object

Parameter	Settings
Setpoint changeable via object	disable enable

Function:

This parameter is used to specify whether the setpoints are set as parameters to a fixed value during control, each of which can only be changed with the ETS, or whether the corresponding factory-set parameter values can be changed at any time via the bus using communication objects.
The values received via the communication objects immediately overwrite the factory-set parameter value and are stored permanently.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of 2-point lighting controller (0 = disabled)”
  – Setting: “1 ... 16“

Communication object:

If the parameter is set to “enable,” the following communication objects are displayed:

- "2PLC 1 <Name> threshold - on"
- "2PLC 1 <Name> threshold - off"

Control stop for scenes

Parameter	Settings
Control stop for scenes	disable enable

Function:

This parameter is used to lock or unlock the associated communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of 2-point lighting controller (0 = disabled)”
  - Setting: “1 ... 16“

Communication object:

If the parameter is set to "enable,” the following communication object is displayed:

- "2PLC 1 <Name> stop for scenes"

Switch on, if brightness value <= xx LUX

Parameter	Settings
if brightness value <= xx LUX (lx)	20.00 ... **500** ... 670760.00

Function:

This parameter is used to specify from which brightness value onwards the "switch on” telegram is sent.
If the set brightness threshold value for switching on is higher than the brightness threshold value for switching off, the controller sets the value for switching on to the value for switching off. That is, the two values are the same. Consequently, the controller only sends a telegram for switching on. In this case, manual switching off is required.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of 2-point lighting controller (0 = disabled)”
  - Setting: “1 ... 16“

not before

Parameter	Settings
not before (hh:mm:ss.f)	00:00:00 ... **00:10:00**... 01:49:13:5

Function:

This parameter is used to set whether and with which delay the “switching on” telegram is sent after the configured brightness value has been reached.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of 2-point lighting controller (0 = disabled)”
  - Setting: “1 ... 16“

Switching off, if brightness value >= xx LUX

Parameter	Settings
if brightness value >= xx LUX (lx)	20.00 ... **900** ... 670760.00

Function:

This parameter is used to set the brightness value above which the “Switching Off” telegram is sent.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of 2-point lighting controller (0 = disabled)”
  - Setting: “1 ... 16“

not before

Parameter	Settings
not before (hh:mm:ss.f)	00:00:00 ... **00:20:00** ... 01:49:13:5

Function:

This parameter is used to set whether and with which delay the “switching off” telegram is sent after the configured brightness value has been reached.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of 2-point lighting controller (0 = disabled)”
  - Setting: “1 ... 16“

Controller status

Parameter	Settings
Controller status	disable enable

Function:

This parameter is used to lock or unlock the associated communication object. The controller uses this status object to communicate its status. If the status has the value "On”, the controller is operating in automatic operation.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of 2-point lighting controller (0 = disabled)”
  - Setting: “1 ... 16“

Communication object:

If the parameter is set to "enable,” the following communication object is displayed:

- "2PLC 1 <Name> status controller"

Send status on request

Parameter	Settings
Send status on request	disable enable

Function:

This parameter is used to set whether the status of the communication object is sent upon request or the requests are rejected.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Controller status”
  - Setting: "enable”

Send status on change of status

Parameter	Settings
Send status on change of status	disable enable

Function:

This parameter is used to set whether the value of the status object is automatically sent after each status change.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Controller status”
  - Setting: "enable”

Send status cyclically (00:00:00 = no sending)

Parameter	Settings
Send status cyclically (00:00:00 = no sending) (hh:mm:ss)	**00:00:00** ... 18:12:15

Function:

This parameter is used to set the time interval at which the value of the status object is sent cyclically. If the setting is "00:00:00,” cyclic sending is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Controller status”
  - Setting: "enable”

6.2.3 Communication objects “2-point-light control (2PLC)"

2-p. lighting control, controller

Object name	Function	Datapoint type	Flags
2-p. lighting control, controller	On/Off	1.001 switch	CW

Function:

This communication object is used to switch the controller on or off. The information for switching on or off can come from a bus push button or from the output object of a presence detector.

Availability:

This communication object is displayed if the following configuration was made:

- Parameter “Number of 2-point lighting controller (0 = disabled)”
  - Setting: “1 ... 16“

2-p. lighting control, status controller

Object name	Function	Datapoint type	Flags
2-p. lighting control, status controller	On/Off	1.002 boolean	CRT

Function:

The internal controller uses this communication object to share its internal status externally. The status can either have the value "On,” i.e. the controller is operating in automatic mode, or the value "Off.” No distinction is made whether the controller was switched off manually or by override ("Stop" objects)

Availability:

This communication object is displayed if the following configuration was made:

- Parameter “Number of 2-point lighting controller (0 = disabled)”
  - Setting: “1 ... 16“

2PLC 1 <Name> stop when switching

Object name	Function	Datapoint type	Flags
2PLC 1 <Name> stop when switching	On/Off	1.002 boolean	CRT

Function:

This communication object is used to switch off the controller. If a value is received (4-bit dimming command), the controller switches off because it has been overwritten externally. The controller can only be switched on again by receiving "logical 1" on the communication object “2-p. lighting control, controller".

Availability:

This communication object is displayed if the following configuration was made:

- Parameter “Number of 2-point lighting controller (0 = disabled)”
  - Setting: “1 ... 16“

2-p. lighting control, stop when dimming

Object name	Function	Datapoint type	Flags
2-p. lighting control, stop when dimming	Dimming	3.007 dimming control	CW

Function:

This communication object is used to switch off the controller. If a value is received (4-bit dimming command), the controller switches off because it has been overwritten externally. The controller can only be switched on again by receiving "logical 1" on the communication object “2-p. lighting control, controller".

Availability:

This communication object is displayed if the following configuration was made:

- Parameter “Number of 2-point lighting controller (0 = disabled)”
  - Setting: “1 ... 16“

2-p. lighting control, stop at dimming value

Object name	Function	Datapoint type	Flags
2-p. lighting control, stop at dimming value	Dimming value	5.001 percentage (0..100%)	CW

Function:

This communication object is used to switch off the controller. If a value is received (8-bit dimming value), the controller switches off because it has been overwritten externally. The controller can only be switched on again by receiving "logical 1" on the communication object “2-p. lighting control, controller".

Availability:

This communication object is displayed if the following configuration was made:

- Parameter "Number of 2-point lighting controller (0 = disabled)”
  - Setting: “1 ... 16“

2-p. lighting control, stop for scenes

Object name	Function	Datapoint type	Flags
2-p. lighting control, stop for scenes	Scene	18.001 scene control	CW

Function:

This communication object is used to switch off the controller when a scene value (1 – 64) is received. The controller can only be switched on again by receiving "logical 1" on the communication object “2-p. lighting control, controller".

Availability:

The communication object is displayed if the following configuration was made:

- Parameter "Control stop for scenes”
  - Setting: "enable”

Note:

The scene value can only be sent if the scene has been enabled in the "Link with KNX scene [0…64] (0 = disabled)" parameter.

2-p. lighting control, threshold - on

Object name	Function	Datapoint type	Flags
2-p. lighting control, threshold - on	9.004 lux (Lux)	9.004 lux (Lux)	CRW

Function:

This communication object is used to externally set the threshold value for switching on the 2-point control. Until the first value is received, the value from the "if brightness value <= xx LUX" parameter is used as the default value.

This communication object is saved in case of a bus voltage failure and restored on bus voltage recovery.

Availability:

The communication object is displayed if the following configuration was made:

- Parameter "Setpoint changeable via object”
  - Setting: "enable”

2-p. lighting control, threshold - off

Object name	Function	Datapoint type	Flags
2-p. lighting control, threshold - off	Value in LUX	9.004 lux (Lux)	CRW

Function:

This communication object is used to externally set the threshold value for switching off the 2-point control. Until the first value is received, the value from the "if brightness value >= xx LUX" parameter is used as the default value.

This communication object is saved in case of a bus voltage failure and restored on bus voltage recovery.

Availability:

The communication object is displayed if the following configuration was made:

- Parameter "Setpoint changeable via object”
  - Setting: "enable”

2-p. lighting control, switching (On)

Object name	Function	Datapoint type	Flags
2-p. lighting control, switching	On	1.001 switch	CRT

Function:

This communication object is used to send the value "On" if the brightness is below the configured brightness value in a certain period. This communication object is one of the two outputs of the 2-point controller.

Availability:

This communication object is displayed if the following configuration was made:

- Parameter “Number of 2-point lighting controller (0 = disabled)”
  - Setting: “1 ... 16“

2-p. lighting control, switching (Off)

Object name	Function	Datapoint type	Flags
2-p. lighting control, switching	Off	1.001 switch	CRT

Function:

This communication object is used to send the value "Off" if the brightness is below the configured brightness value in a certain period. This communication object is one of the two outputs of the 2-point controller.

Availability:

This communication object is displayed if the following configuration was made:

- Parameter "Number of 2-point lighting controller (0 = disabled)"
  - Setting: “1 ... 16“

6.2.4 Parameters on the "Scenes for controller stop” parameter card

This parameter card can be activated for all controllers.
Within this parameter card, the individual parameters have the same function. Therefore a parameter is described by way of example.

Scene 1 ... 64

Parameter	Settings
Scene 1 ... 64	disable enable

Function:

This parameter is used to disable or enable the scene number that turns off the controller when it is received via the communication object “2-p. lighting control, stop for scenes“.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Control stop for scenes”
  - Setting: "enable”

6.2.5 Parameters on the "Constant lighting controller (CLC)” parameter card

Name

Parameter	Settings
Name	... (free text box for max. 45 characters)

Function:

These parameters are used to specify the name of the associated parameter card.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Number of constant lighting controllers (0= disabled)”
  - Setting: “1 ... 16“

Source for brightness value (actual value)

Parameter	Settings
Source for brightness value (actual value)	Calculated value Line A Line B

Function:

This parameter is used to select the source for the brightness value.

The following settings are possible:

- Calculated value:
  The source is configured with the associated parameter “Index of calculator“.
- Line A:
  The source is configured with the associated parameter “Index of DALI brightness sensor A BS “.
- Line B:
  The source is configured with the associated parameter “Index of DALI brightness sensor B BS “.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of constant lighting controllers (0= disabled)”
  - Setting: “1 ... 16“

Index of calculator

Parameter	Settings
Index of calculator (no unit)	**1** ... 16

Function:

This parameter is used to set the source for the calculated value.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Source for brightness value”
  - Setting: "Calculated value”

Note:

The calculator used must be configured with the correct data type.

Index of DALI brightness sensor A BS Index of DALI brightness sensor B BS

Parameter	Settings
Index of DALI brightness sensor A BS Index of DALI brightness sensor B BS (no unit)	**1** ... 8

Function:

This parameter is used to set the index of the DALI brightness sensor that is used as a source for the brightness value.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Source for brightness value (actual value)”
  - Setting: "Sensor line A”
  - Setting: "Sensor line B”

Setpoint

Setpoint (lx)

Parameter	Settings
Setpoint (lx)	20.00 ... **600** ... 670760.00

Function:

This parameter is used to set the brightness setpoint for constant lighting control. If the "Change setpoint via object" parameter is set to "enable", this parameter specifies the starting value if no valid value has yet been received via the communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of constant lighting controllers (0= disabled)”
  - Setting: “1 ... 16“

Setpoint changeable over object

Parameter	Settings
Setpoint changeable over object	disable enable

Function:

This parameter is used to specify whether the setpoint is set as a parameter to a fixed value during control, which can only be changed with the ETS software, or whether the corresponding factory-set parameter value can be changed at any time via the bus using communication objects.
The value received via the communication object immediately overwrites the factory-set parameter value and is stored permanently.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of constant lighting controllers (0= disabled)”
  - Setting: “1 ... 16“

Communication object:

If the parameter is set to “enable,” the following communication objects are displayed:

- "CLC 1 <Name> setpoint - absolute"
- "CLC 1 <Name> setpoint - relative"

Minimum setpoint (lx)

Parameter	Settings
Minimum setpoint (lx)	20.00 ... **400** ... 670760.00

Function:

This parameter is used to set the lower limit that applies to the parameter “Setpoint changeable over object“.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Setpoint changeable over object”
  - Setting: "enable”

Maximal setpoint (lx)

Parameter	Settings
Maximal setpoint (lx)	20.00 ... **1000** ... 670760.00

Function:

This parameter is used to set the upper limit that applies to the parameter “Setpoint changeable over object“.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Setpoint changeable over object”
  - Setting: "enable”

Reset setpoint at controller OFF

Parameter	Settings
Reset setpoint at controller OFF	disable enable

Function:

This parameter is used to set whether or not the setpoint set via the communication object is to be reset when the controller is switched off. If the parameter is set to "enable", the setpoint is reset to the setpoint last received via the communication object "CLC 1 <Name> setpoint - absolute" when the controller is switched off.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Setpoint changeable over object"
  - Setting: "enable"

Note:

If no absolute setpoint has yet been received via the associated communication object, the setpoint is reset to the setpoint configured via ETS software when the controller is switched off.

Store current brightness value as setpoint via object

Parameter	Settings
Store current brightness value as setpoint via object	disable enable

Function:

This parameter can be used to set whether the current brightness value is to be stored as the new setpoint via the 1-bit object "Constant lighting control, store setpoint."

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Setpoint changeable over object"
  - Setting: "enable"

Communication object:

If the parameter is set to "enable," the following communication object is displayed:

- "CLC 1 <Name> store setpoint"

Setpoint changes per dimming step by (%)

Parameter	Settings
Setpoint changes per dimming step by (%)	1 ... **10** ... 50

Function:

This parameter is used to set the value by which the brightness setpoint for continuous constant lighting control is to change per dimming step if the communication object "CLC 1 <Name> setpoint - relative" is used.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Setpoint changeable over object"
  - Setting: "enable"

Status of setpoint

Parameter	Settings
Status of setpoint	disable enable

Function:

This parameter is used to lock or enable the associated communication object “Constant lighting control, setpoint status“.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Setpoint changeable over object”
  - Setting: "enable”

Communication object:

If the parameter is set to "enable,” the following communication object is displayed:

- "Constant lighting control, setpoint status"

Send setpoint on request

Parameter	Settings
Send setpoint on request	disable enable

Function:

This parameter is used to set whether the status of the communication object is sent upon request or the requests are rejected.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status of setpoint”
  - Setting: "enable”

Send setpoint on change of value

Parameter	Settings
Send setpoint on change of value	disable enable

Function:

This parameter is used to set whether the value of the status object is automatically sent after each value change.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status of setpoint”
  - Setting: "enable”

Send setpoint cyclically

Parameter	Settings
Send setpoint cyclically (hh:mm:ss)	00:00:00 ... **00:15:00** ... 18:12:15

Function:

This parameter is used to set the time interval at which the value of the status object is sent cyclically.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Status of setpoint”
  - Setting: "enable”

Control On/Off

Behavior controller at bus voltage recovery

Parameter	Settings
Behavior controller at bus voltage recovery	Off On As before bus voltage failure

Function:

This parameter is used to set how the controller behaves after bus voltage recovery.

The following settings are possible:

- Off:
  After bus voltage recovery, the controller is switched off.
- On:
  After bus voltage recovery, the controller is switched on and controlling is active.
- As before bus voltage failure:
  The controller remains in the same status as before the bus voltage failure.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of constant lighting controllers (0= disabled)”
  - Setting: “1 ... 16“

Only switch on light at start of control when necessary

Parameter	Settings
Only switch on light at start of control when necessary	disable enable

Function:

This parameter is used to set that when the control is started with sufficient brightness, the light is switched on only when required. When the parameter is set to “enable", the controller switches to the "standby" state and does not send any control values when the brightness is greater than the setpoint range and the last status dimming value received from the actuator was 0%. If there is a certain difference between the setpoint and the actual value, the controller then switches itself to active.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of constant lighting controllers (0= disabled)”
  - Setting: “1 ... 16“

Behavior of light at controller off

Parameter	Settings
Behavior of light at controller off	Off No change

Function:

This parameter is used to set whether the control value 0% or the switching telegram "Off" is sent when the controller is switched off (setting: "Off") or not (setting: "No change").

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Number of constant lighting controllers (0= disabled)"
  - Setting: "1 ... 16"

Control stop for scenes

Parameter	Settings
Control stop for scenes	disable enable

Function:

This parameter is used to lock or unlock the associated communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Number of constant lighting controllers (0= disabled)"
  - Setting: "1 ... 16"

Communication object:

If the parameter is set to "enable," the following communication object is displayed:

- "CLC 1 <Name> stop for scenes"

Start controller with setpoint greater than 0

Parameter	Settings
Start controller with setpoint greater than 0	disable enable

Function:

This parameter is used to set whether the controller switches to the "active" state when a setpoint greater than "0" is received via the communication object "CLC 1 <Name> setpoint - absolute". The specified value is also the new setpoint.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Number of constant lighting controllers (0= disabled)"
  - Setting: "1 ... 16"

Switch off at setpoint = 0

Parameter	Settings
Switch off at setpoint = 0	disable enable

Function:

This parameter is used to set whether the controller switches to the "off" state when a setpoint of "0" is received via the communication object "CLC 1 <Name> setpoint - absolute". When the controller switches to the "Off" state, the controller ends its function and the associated actuators are switched off with dimming value "0".

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Number of constant lighting controllers (0= disabled)"

– Setting: “1 ... 16“

Controller status

Parameter	Settings
Controller status	disable enable

Function:

These parameters are used to disable or enable the associated communication object. The controller uses this status object to communicate its status. If the status has the value "On”, the controller is operating in automatic operation.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of constant lighting controllers (0= disabled)”
  – Setting: “1 ... 16“

Communication object:

If the parameter is set to "enable,” the following communication object is displayed:

- "CLC 1 <Name> controller status"

Regulation

Max. deviation from setpoint (hysteresis) (+/- %)

Parameter	Settings
Max. deviation from setpoint ((hysteresis) (+/- %)) (no unit)	5 ... **10** ...20

Function:

This parameter is used to set the difference between the actual value and the setpoint at which the controller starts to control.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of constant lighting controllers (0= disabled)”
  – Setting: “1 ... 16“

Send dimming value after (control speed)

Parameter	Settings
Send dimming value after (control speed) (hh:mm:ss.f)	00:00:00.1 ... **00:00:01.0** ... 00:00:20.0

Function:

This parameter is used to set at which time intervals the controller outputs the calculated setpoints.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of constant lighting controllers (0= disabled)”
  – Setting: “1 ... 16“

Time until the controller automatically shuts off (0 = never)

Parameter	Settings
Time until the controller automatically shuts off (0 = never) (hh:mm:ss)	00:00:00 ... **00:03:00** ... 18:12:15

Function:

This parameter is used to set the controller to the "Standby" state if the control value of the controller in the active state has reached the minimum dimming value and at the same time the actual brightness value is greater than the brightness setpoint. If configured, the switching telegram is sent with the value "Off".

The time from reaching the above described conditions until changing to the "Standby" state is set by the above parameter. If the parameter is set to "0", the controller remains in the "Active" state with its minimum control values.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of constant lighting controllers (0= disabled)”
  - Setting: “1 ... 16“

Automatic reactivation of controller

Parameter	Settings
Automatic reactivation of controller	disable enable

Function:

This parameter is used to set whether automatic restarting of the controller from the "Standby” state is prevented or not.

The following settings are possible:

- disable:
  When the "standby" state is reached, the controller is switched off and can only be switched on again by receiving "logical 1" on object “Constant lighting control, controller".
- enable:
  When the configured difference between the setpoint and the actual value is reached, the controller switches itself to active.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of constant lighting controllers (0= disabled)”
  - Setting: “1 ... 16“

Additional hysteresis for automatic reactivation of the controller (%)

Parameter	Settings
Additional hysteresis for automatic reactivation of the controller (%)	5 ... **20** ... 70

Function:

This parameter is used to set that the controller automatically switches from "standby" to "active" when the actual value falls below the value of setpoint minus hysteresis minus additional hysteresis.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Automatic reactivation of controller”
  - Setting: "enable”

Control output

First dimming value, when the controller starts

Parameter	Settings
First dimming value, when the controller starts	Adopt from parameter Query from dimming actuator's status Calculate start value Use last received value Calculate starting value considering last received value

Function:

This parameter is used to set how the first dimming value of the control (starting value) is determined.

The following settings are possible:

- Adopt from parameter:
  With this setting, the controller starts with a fixed, configured dimming value. This setting makes sense when the other options are not viable.
- Query from dimming actuator's status:
  A status query is used to query the current control value from the dimming actuator, which is then used to start controlling. This is necessary because there is a chance that the settings of the dimming actuator were changed manually before starting the controller.
- Calculate start value:
  In doing so, the current actual value is measured before the control operation is started. The value represents mixed light (artificial light from the lamp + natural light from outside). The measured room brightness value is then converted into a control value by using the characteristic curve and used as the starting value for controlling.
- Use last received value:
  This setting uses the last dimming value received via the object "Constant lighting control, Main group dimming value status" as the starting value when controlling starts. If no value is available, the value of the "First dimming value (%)" parameter is used.
- Calculate starting value considering last received value:
  In doing so, the current actual value is measured before the control operation is started. The value represents mixed light (artificial light from the lamp + natural light from outside). The last dimming value received via the object "Constant lighting control, Main group dimming value status" is used to calculate the external light portion. This is then converted into a control value by using the characteristic curve and used as the starting value for controlling.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Number of constant lighting controllers (0= disabled)"
  - Setting: "1 ... 16"

if obj. did not return a value

Parameter	Settings
if obj. did not return a value	1 ... **50** ... 100

Function:

This parameter is used to set the starting value of the controller control values if no value can be taken from the "Constant lighting control, Main group dimming value" communication object.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "First dimming value, when the controller starts"
  - Setting: "Query from dimming actuator's status"
  - Setting: "Use last received value"

Minimum dimming value (%)

Parameter	Settings
Minimum dimming value (%)	**1** ... 100

Function:

This parameter is used to set the minimum dimming value of the main group.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Number of constant lighting controllers (0= disabled)"
  - Setting: "1 ... 16"

Maximum dimming value (%)

Parameter	Settings
Maximum dimming value (%)	1 ... **100**

Function:

This parameter is used to set the maximum dimming value of the main group.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Number of constant lighting controllers (0= disabled)"
  - Setting: "1 ... 16"

Note:

If the maximum dimming value was configured smaller than the minimum dimming value, the two values are switched automatically.

Max. increment when dimming (%)

Parameter	Settings
Max. increment when dimming (%)	1... **5** ...10

Function:

This parameter is used to set the maximum increment when outputting the control values.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Number of constant lighting controllers (0= disabled)"
  - Setting: "1 ... 16"

Note:

The increment should be selected so that a change of dimming value does not change the illuminance by more than the hysteresis set for the setpoint.

Send additional switching telegram at start

Parameter	Settings
Send additional switching telegram at start	disable enable

Function:

This parameter is used to set whether or not an additional switch on telegram is to be sent at the start of controlling (switch to the "active" state).

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Number of constant lighting controllers (0= disabled)"
  - Setting: "1 ... 16"

Send additional switching telegram at stop

Parameter	Settings
Send additional switching telegram at stop	disable enable

Function:

This parameter is used to set whether or not an additional switch off telegram is sent at the end of controlling (leaving the "active" state).

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Number of constant lighting controllers (0= disabled)"
  - Setting: "1 ... 16"

Calibration

Time until the next calibration value

Parameter	Settings
Time until the next calibration value (hh:mm:ss.f)	00:00:10.0 ... **00:00:12.0** ... 00:01:00.0

Function:

This parameter Is used to set the time between the individual brightness measurements of the controller during automatic calibration.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Number of constant lighting controllers (0= disabled)"
  - Setting: "1 ... 16"

Note:

A high value should be selected for lamps that require a longer start-up time to reach full brightness.

6.2.6 Parameters on the "Sub groups" parameter card

Number of sub groups

Parameter	Settings
Number of sub groups (no unit)	**0** ... 4

Function:

This parameter is used to set the number of subordinate groups.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Number of constant lighting controllers (0= disabled)"
  - Setting: "1 ... 16"

Communication object:

If a number is set, the following communication objects are displayed with consecutive numbering:

- "CLC 1 <Name> subgroup 1 switching"
- "CLC 1 <Name> subgroup 1 dimming value"

Calculation type

Parameter	Settings
Calculation type	Calculate with characteristic curve Calculate with offset

Function:

This parameter is used to set which type of calculation is used for the dimming control values of the subordinate groups.

The following settings are possible:

- Calculate with characteristic curve:
  The dimming control values are derived from the dimming control value of the main lighting group via calibration curves that convert the measured (main) illuminance into a calculated illuminance on the position of each subordinate lighting group.
- Calculate with offset:
  The dimming control values are derived from the dimming control value of the main lighting group via an offset that is entered for each lighting sub group.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Number of sub groups”
  – Setting: “1 ... 4“

Individually switch main/sub groups

Parameter	Settings
Individually switch main/sub groups	disable enable

Function:

This parameter is used to set whether or not the sub groups are switched separately from the main group for the calculation type "Calculate with characteristic curve”: That is, if this is set to "enable,” a target value/setpoint comparison is performed for each sub group so that the lighting sub groups are switched on and off individually.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Calculation type”
  – Setting: "Calculate with characteristic curve”

Sub group 1, minimum dimming value (%)

Parameter	Settings
Sub group 1, minimum dimming value (%)	**1** ... 100

Function:

This parameter is used to set the minimum dimming value of the associated subgroup (1 ... 4).

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of sub groups”
  - Setting: “1 ... 4“

Sub group 1, maximum dimming value (%)

Parameter	Settings
Sub group 1, maximum dimming value (%)	1 ... **100**

Function:

This parameter is used to set the maximum dimming value of the associated subgroup (1... 4).

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of sub groups”
  - Setting: “1 ... 4“

Note:

If the maximum dimming value is configured smaller than the minimum dimming value, the two values are switched automatically.

Main group, measured brightness value (lx)

Parameter	Settings
Main group, measured brightness value (lx)	**0.00** ... 670760.00

Function:

This parameter is used to set at which position the main and subordinate lighting groups are located. The brightness value measured with a lux meter at the main group lights is entered here.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Calculation type”
  - Setting: "Calculate with characteristic curve”

Sub group 1, Measured brightness value (lx)

Parameter	Settings
Sub group 1, Measured brightness value (lx)	**0.00** ... 670760.00

Function:

This parameter is used to set at which position the main and subordinate lighting groups are located. The brightness value measured with a lux meter at the main group lights is entered here.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Calculation type”
  - Setting: "Calculate with characteristic curve”

Sub group 1, Offset for the dimming value of the main group (%)

Parameter	Settings
Sub group 1, Offset for the dimming value of the main group (%)	-100... **0** ...100

Function:

This parameter is used to set the offset dimming value of the subordinate group (1 ... 4) to the main group.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of sub groups”
  - Setting: “1 ... 4“

6.2.7 Communication objects "Constant lighting controller (CLC)"

Constant lighting control, controller

Object name	Function	Datapoint type	Flags
Constant lighting control, controller	On/Off	1.001 switch	CW

Function:

This communication object can be used to switch the controller on or off. This information can come, for example, from a bus push button or from the output object of a presence detector.

Availability:

This communication object is displayed if the following configuration was made:

- Parameter "Number of constant lighting controllers (0= disabled)”
  - Setting: “1 ... 16“

Constant lighting control, controller status

Object name	Function	Datapoint type	Flags
Constant lighting control, controller status	On/Off	1.002 boolean	CRT

Function:

The internal controller uses this communication object to share its internal status externally. The internal status can either have the value "On,” i.e. the controller is operating in automatic mode, or the value "Off.”
No distinction is made whether the controller was switched off manually or by override ("Stop" objects)

Availability:

This communication object is displayed if the following configuration was made:

- Parameter "Controller status”
  - Setting: "enable”

Constant lighting control, stop when switching

Object name	Function	Datapoint type	Flags
Constant lighting control, stop when switching	Switching	1.001 switch	CW

Function:

The controller is switched off via this communication object when a value is received (logical 0 or 1) because it has been overwritten externally. The controller can only be switched on again by receiving "logical 1" at the "Constant lighting control, controller" object.

Availability:

This communication object is displayed if the following configuration was made:

- Parameter "Number of constant lighting controllers (0= disabled)"
  - Setting: “1 ... 16“

CLC 1 <Name> stop when dimming

Object name	Function	Datapoint type	Flags
CLC 1 <Name> stop when dimming	Dimming	3.007 dimming control	CW

Function:

The controller is switched off via this communication object when a value is received (8-bit dimming value) because it has been overwritten externally. The controller can only be switched on again by receiving "logical 1" at the "Constant lighting control, controller" object.

Availability:

This communication object is displayed if the following configuration was made:

- Parameter "Number of constant lighting controllers (0= disabled)"
  - Setting: “1 ... 16“

Constant lighting control, stop at dimming value

Object name	Function	Datapoint type	Flags
Constant lighting control, stop at dimming value	Dimming value	5.001 percentage (0..100%)	CW

Function:

The controller is switched off via this communication object when a value is received (8-bit dimming value) because it has been overwritten externally. The controller can only be switched on again by receiving "logical 1" at the "Constant lighting control, controller" object.

Availability:

This communication object is displayed if the following configuration was made:

- Parameter "Number of constant lighting controllers (0= disabled)"
  - Setting: “1 ... 16“

Constant lighting control, stop for scenes

Object name	Function	Datapoint type	Flags
Constant lighting control, stop for scenes	Scene	18.001 scene control	CW

Function:

A scene value (0 – 63) is received via this communication object and the controller is switched off if the corresponding scene number is enabled on the parameter card "controller stop for scenes.” The controller can only be switched on again by receiving "logical 1" at the "Constant lighting control, controller" communication object.

Availability:

The communication object is displayed if the following configuration was made:

- Parameter "Control stop for scenes" ("Constant lighting control” parameter card)
  - Setting: "enable”

Constant lighting control, setpoint - absolute

Object name	Function	Datapoint type	Flags
Constant lighting control, setpoint - absolute	Value in LUX	9.004 lux (Lux)	CW

Function:

This communication object is used to set the setpoint for constant lighting control. Until the first value is received, the value from the "Setpoint (lx)" parameter is used as the default value.

Availability:

The communication object is displayed if the following configuration was made:

- Parameter “Change setpoint via object”
  - Setting: "enable”

Note:

- When the setpoint is changed, depending on the calibration characteristic determined, a control process can take place even if the actual value is already within the range of the hysteresis around the new setpoint.
- The setpoint is limited by the parameters "Minimum setpoint (lx)" and "Maximal setpoint (lx).”
- When a 0 is received, the setpoint is not changed.

Constant lighting control, setpoint - relative

Object name	Function	Datapoint type	Flags
Constant lighting control, setpoint - relative	brighter/darker	3.007 dimming control	CW

Function:

This communication object is used to change the setpoint. The controller increments or decrements the internal setpoint at the interval of the controller speed by a dimming step set via a parameter if dimming with stop telegram is used.

Availability:

The communication object is displayed if the following configuration was made:

- Parameter “Change setpoint via object”
  - Setting: "enable”

Note:

The setpoint is limited by the parameters "Minimum setpoint (lx)" and "Maximal setpoint (lx).”

Constant lighting control, store setpoint

Object name	Function	Datapoint type	Flags
Constant lighting control, store setpoint	1 = save	1.001 switch	CW

Function:

The current brightness value is used as the new setpoint via this communication object if a "logical 1” is received via this communication object.

Availability:

The communication object is displayed if the following configuration was made:

- Parameter "Change setpoint via object" ("Constant lighting control” parameter card)
  - Setting: "enable”

Note:

The setpoint is limited by the parameters "Minimum setpoint (lx)" and "Maximal setpoint (lx)."

Constant lighting control, setpoint status

Object name	Function	Datapoint type	Flags
Constant lighting control, setpoint status	Value in LUX	9.004 lux (Lux)	CRT

Function:

The controller uses this communication object to share the current setpoint externally. The setpoint value is sent to the bus via this communication object when it is changed or can be queried at any time.

Availability:

The communication object is displayed if the following configuration was made:

- Parameter “Change setpoint via object”
  - Setting: "enable”
- Parameter “Status of setpoint”
  - Setting: "enable”

Constant lighting control, Main group switching

Object name	Function	Datapoint type	Flags
Constant lighting control, Main group switching	On/Off	1.001 switch	CRT

Function:

The controller uses this communication object to send switch-on and switch-off commands for the main lighting group. The controller sends the value "On” if the brightness is below the defined brightness value in a certain period. The controller sends the value "Off" when it has received a logical "0" via the communication object "Constant lighting control, controller” or when it changes from the "Active" state to the "Standby" state.

Availability:

This communication object is displayed if the following configuration was made:

- Parameter “Number of constant lighting controllers (0= disabled)”
  - Setting: “1 ... 16“

Constant lighting control, Main group dimming value

Object name	Function	Datapoint type	Flags
Constant lighting control, Main group dimming value	Dimming value	5.001 percentage (0..100%)	CRT

Function:

The controller uses this object to send the dimming values for the main lighting group.

Availability:

This communication object is displayed if the following configuration was made:

- Parameter “Number of constant lighting controllers (0= disabled)”
  - Setting: “1 ... 16“

Constant lighting control, Main group dimming value status

Object name	Function	Datapoint type	Flags
Constant lighting control, Main group dimming value status	Dimming value	5.001 percentage (0..100%)	CWTU

Function:

This communication object is used to query the current dimming value of the dimming actuator of the main lighting group. This communication object should be linked to the status object “Status dimming value of dimming actuator".

Availability:

This communication object is displayed if the following configuration was made:

- Parameter “Number of constant lighting controllers (0= disabled)”
  - Setting: “1 ... 16“

Constant lighting control, subgroup 1 switching

Object name	Function	Datapoint type	Flags
Constant lighting control, subgroup 1 switching	On/Off	1.001 switch	CRT

Function:

The controller uses this communication object to send switch-on and switch-off commands for the associated slave light group.

Availability:

The communication object is displayed if the following configuration was made:

- Parameter "Number of sub groups" ("Constant lighting control” parameter card)
  - Setting: “1 … 4”

Constant lighting control, subgroup 1 dimming value

Object name	Function	Datapoint type	Flags
Constant lighting control, subgroup 1 dimming value	Dimming value	5.001 percentage (0..100%)	CRT

Function:

The controller uses this communication object to send the dimming values for the associated subordinate lighting group.

Availability:

The communication object is displayed if the following configuration was made:

- Parameter "Number of sub groups" ("Constant lighting control” parameter card)
  - Setting: “1 ... 4“

Constant lighting control, Calibration

Object name	Function	Datapoint type	Flags
Constant lighting control, Calibration	1 = Start/0 = Stop	1.010 start/stop	CW

Function:

With a logical "1,” this communication object is used to start the calibration run of the controller. After the calibration has been completed, the controller is in the "Inactive" state. With a logical "0" via this communication object, the calibration run of the controller can be stopped.

Availability:

This communication object is displayed if the following configuration was made:

- Parameter “Number of constant lighting controllers (0= disabled)”
  - Setting: “1 ... 16“

Note:

If calibration is completed successfully, the actuators are dimmed to 50%. If calibration fails, the actuators are dimmed to 6%. The criterion for successful calibration is that the measured brightness value also increases with each increase in the dimming value.

Constant lighting control, Diagnostic values

Object name	Function	Datapoint type	Flags
Constant lighting control, Diagnostic values	Value in LUX	9.004 lux (Lux)	CRT

Function:

The brightness values transmitted in the calibration are sent via this communication object. The transmission takes place after completion of the calibration process started by the communication object “Constant lighting control, Calibration“.

Availability:

This communication object is displayed if the following configuration was made:

- Parameter “Number of constant lighting controllers (0= disabled)”
  - Setting: “1 ... 16“

6.3 Calculator

Up to 16 independent calculators are available, each with up to 12 inputs. The illuminance can be selected as the input. These values of the input can be evaluated in terms of maximum value, minimum value or weighted value.

The calculators can be integrated as follows:

- Each calculator can be used independently. The calculator is then supplied with input values via KNX communication objects and sends the result via a KNX communication object.

Using the calculator as a stand-alone unit

If the "Calculator" function module is used as a stand-alone unit, the input values can be linked to the KNX communication objects as required. For example, two input values of type illuminance can be used. The result of the calculation for the maximum, minimum or weighted value can then be sent to a receiver via a communication object.

The following figure illustrates this by way of example:

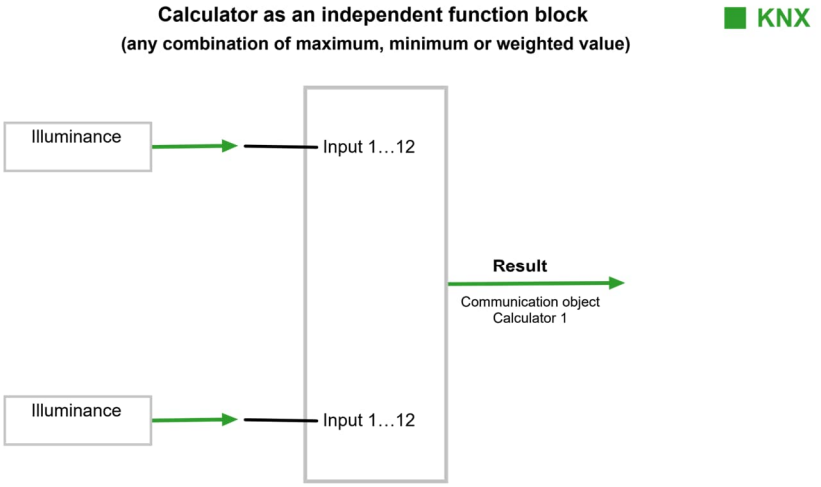

Fig. 15: Using the calculator as a stand-alone unit (example)

6.3.1 Parameters on the "Calculator" parameter card

Number of calculators brigthness

Parameter	Settings
Number of calculators brigthness (no unit)	**0** ... 16

Function:

This parameter is used to set how many calculator areas are activated in the ETS software. If "0" is entered, all associated parameters in the ETS software are deactivated. If a number is entered, the same number of parameter cards is displayed in the ETS software.

Communication object:

If a number greater than or equal to 2 is set, the following communication object is displayed with consecutive numbering:

- "Calculator 1 <Name> , brightness value 1"

6.3.2 Parameter in the parameter card "Calculator 1, brightness"

Name

Parameter	Settings
Name	... (free text box for max. 45 characters)

Function:

These parameters are used to specify the name of the associated parameter card.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Number of calculators brigthness"
  - Setting: "1 ... 16"

Calculation type

Parameter	Settings
Calculation type	Maximal value Minimal value Weighted value

Function:

This parameter is used to set the calculation method.

The following settings are possible:

- Maximal value:
  With this method, up to 12 percentage values are used to determine the maximum value. This setting is preconfigured and is required to determine the largest control value for a heating or cooling requirement in a primary system.
- Minimal value:
  With this method, up to 12 percentage values are used to determine the minimum value. This setting is preconfigured and is required to determine the smallest control value for a heating or cooling requirement in a primary system.
- Weighted value:
  With this method, up to 12 percentage values are used to determine the weighted value. The weighting is configured with parameter “Weight". This individually weighted control value is required for a heating or cooling demand request at a primary system. This allows, for example, less frequently used rooms to be weighted lower in the calculation of the total energy demand of the primary system.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of calculators brigthness”
  – Setting: “1 ... 16“

Inputs

Value count

Parameter	Settings
Value count (no unit)	1 ... **2** ... 12

Function:

This parameter is used to set the number of control value status values.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of calculators brigthness”
  – Setting: “1 – 16 “

Source for input value

Parameter	Settings
Source for input value	External object Sensor line A Sensor line B

Function:

This parameter is used to select the source for the input value.

The following settings are possible:

- External object:
  An external object (= communication object) is used as the source.
- Sensor line A:
  The internally available value of sensor line A is used as the source.
- Sensor line B:
  The internally available value of sensor line A is used as the source.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of calculators brigthness”
  - Setting: “1 ... 16“

Communication object:

If the parameter is set to "External object,” the following communication object is displayed:

- "Calculator 1 <Name> , brightness value 1"

Offset of external value 1 (lx)

Parameter	Settings
Offset of external value 1 (lx)	-671088.60 ... **0** ... 670760.90

Function:

This parameter is used to set the offset for the externally received brightness value. It adjusts for environmental factors.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Number of calculators brigthness”
  - Setting: “1 ... 16“

Index of DALI brightness sensor A BS Index of DALI brightness sensor B BS

Parameter	Settings
Index of DALI brightness sensor A BS Index of DALI brightness sensor B BS (no unit)	**1** ... 8

Function:

This parameter is used to set the index of the DALI brightness sensor that is used as a source for the brightness value.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Source for brightness value“
  - Setting: "Sensor line A”
  - Setting: "Sensor line B”

Weight

Parameter	Settings
Weight (no unit)	**1** ... 255

Function:

This parameter is used to weight different measured values with respect to their percentage influence.

Example for calculating the weighting:

- Temperature 1: Weighting = 4, temperature 2: Weighting = 2, temperature 3: Weighting = 4
- Total of weightings: 10
- Influence per temperature: own weighting factor divided by 10

For more information on the calculating scheme for weighting, see "Calculation scheme for specified weightings”

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Calculation type”
  - Setting: "Weighted value”

Object "Result"

Parameter	Settings
Object "Result"	disable enable

Function:

This parameter is used to lock or unlock the associated communication object.

Communication object:

If the parameter is set to "enable,” the following communication object is displayed:

- "Calculator 1 <Name> , brightness value 1"

Send value on request

Parameter	Settings
Send value on request	disable enable

Function:

This parameter is used to set whether the value of the associated communication object is sent on request or whether requests for the value are rejected.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Object "Result"“
  - Setting: "enable”

Send value on change of value

Parameter	Settings
Send value on change of value	disable enable

Function:

This parameter is used to set whether the value of the associated communication object is automatically sent after each value change.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Object "Result"“
  - Setting: "enable”

Value change since last sent (lx)

Parameter	Settings
Value change since last sent (lx)	0.00 ... **10** ... 670760.00

Function:

This parameter is used to set at which change of value since the last value transmission the value of the communication object "Object result" is sent again. Transmission takes place if the minimum block time for transmission of the brightness value has been exceeded.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Send value on change of value”
  - Setting: "enable”

Value change since last sent (%)

Parameter	Settings
Value change since last sent (%)	0 ... **1** ... 100

Function:

This parameter is used to set at which change of value since the last value transmission the value of the associated communication object is sent again. Transmission takes place if the minimum block time for transmission of the brightness value has been exceeded.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter "Send value on change of value”
  - Setting: "enable”

Block time for sending of value

Parameter	Settings
Block time for sending of value (hh:mm:ss)	**00:00:00** ... 18:12:15

Function:

This parameter is used to set when the next change of the value is sent at the earliest. If the value changes faster than transmission is possible, the current value at the time of transmission is sent.

This setting prevents the bus load from becoming too high because of frequent value changes (in seconds). If the bus load gets too high, telegrams might be lost.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Send value on change of value”
  - Setting: "enable”

Send value cyclically

Parameter	Settings
Send value cyclically (hh:mm:ss)	**00:00:00** ... 18:12:15

Function:

This parameter is used to set the time interval at which the value of the associated communication object is sent cyclically. If the setting is "00:00:00," cyclic sending is deactivated.

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Object result“
  - Setting: "enable”

6.3.3 "Calculator” communication objects

Calculator 1 <Name> , brightness value 1

Object name	Function	Datapoint type	Flags
Calculator 1 <Name> , brightness value 1	value in LUX	9.004 lux (Lux)	CW

Function:

This communication object is used to receive the external measured value 1 (brightness value), with which the calculation is carried out.

Availability:

This communication object is displayed if the following configuration was made:

- Parameter “Source for input value”
  - Setting: "External object”

Calculator 1 <Name> , brightness value 1

Object name	Function	Datapoint type	Flags
Calculator 1 <Name> , brightness value 1	value in LUX	9.004 lux (Lux)	CW

Function:

This communication object is used to send the result of the calculation. The current result of the calculation can be queried using a read request via the bus at any time.

Availability:

This communication object is displayed if the following configuration was made:

- Parameter “Source for input value”
  - Setting: "External object”

Availability:

The parameter is displayed if the following configuration has been made:

- Parameter “Object "Result"”
  - Setting: "enable”

7 Device Configuration App (DCA)

The DALI commissioning and the DALI test can be carried out using a Device Configuration App (DCA). The app is fully integrated into the ETS environment and facilitates the identification and mapping of DALI-ECGs and sensors. In addition, the status of a DALI line can be displayed and checked.

An ETS license is required for the installation of the DCA, but no additional software needs to be installed in addition to the ETS.

Installation

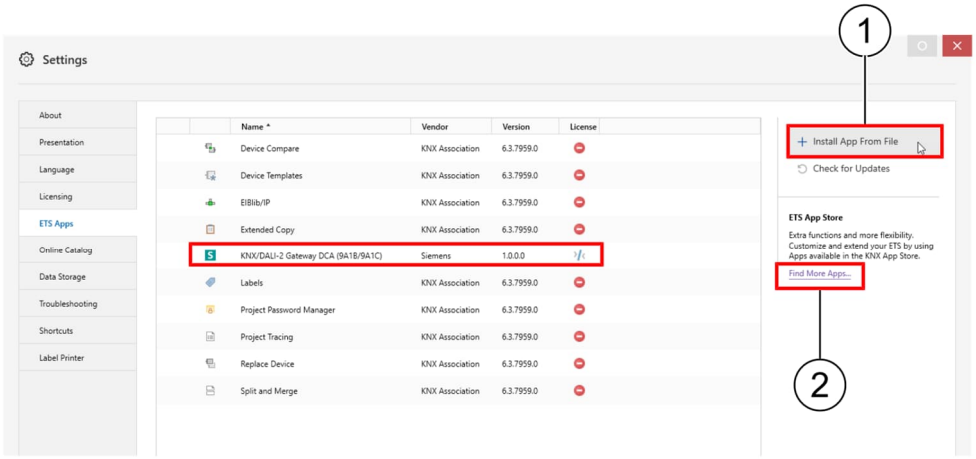

Fig. 16: ETS_settings_DCA_installation

In the settings of the ETS, the installation can be started under "ETS Apps" by pressing the "Install app from file" button [1]. The file required for this can be downloaded from the GAMMA-TD: KNX product database http://www.siemens.com/gamma-td .

Alternatively, the DCA can be loaded from the app shop of the KNX Association https://my.knx.org/en/shop/ets-apps [2].

After successful installation, the app is displayed in the list and appears in the ETS environment of the tab "DCA". When you click on the tab, the DCA window opens automatically.

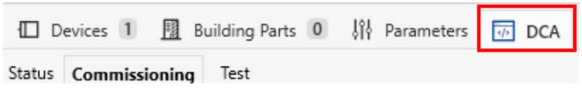

Fig. 17: DCA tab in the ETS

NOTICE	
!	In the ETS, several project windows can be opened at the same time. To avoid faults and errors during commissioning, the DCA functions should always be set in the same project window.

DCA functions:

Commissioning:

With this function, the installed ECGs and sensors can be assigned to the various configured channels and properly put into operation.

Status:

This function can be used to display and check the status of a DALI line.

Test:

This function can be used to test the commissioned DALI line. All found channels and associated ECGs can be controlled and the switching state can be checked. The displayed and the set dimming value can be tested as well as the color temperature.

NOTICE	
!	The DCA functions can only be executed if the ETS application program is programmed with the ETS. In addition, the ETS must have established a connection to the KNX project and the DALI line must be switched on and ready for operation.

7.1 Commissioning

Commissioning can only be started after configuration of the device has been completed. Consequently, all channels and ECGs, group addresses and scenes must be properly created and configured. Thanks to the intelligent channel concept, the creation and configuration of groups is not necessary. Furthermore, the device must already be connected to the ETS at least once prior to DALI commissioning so that the physical address and the application program are loaded.

The commissioning window can be opened in the DCA by clicking on the "Commissioning" tab.

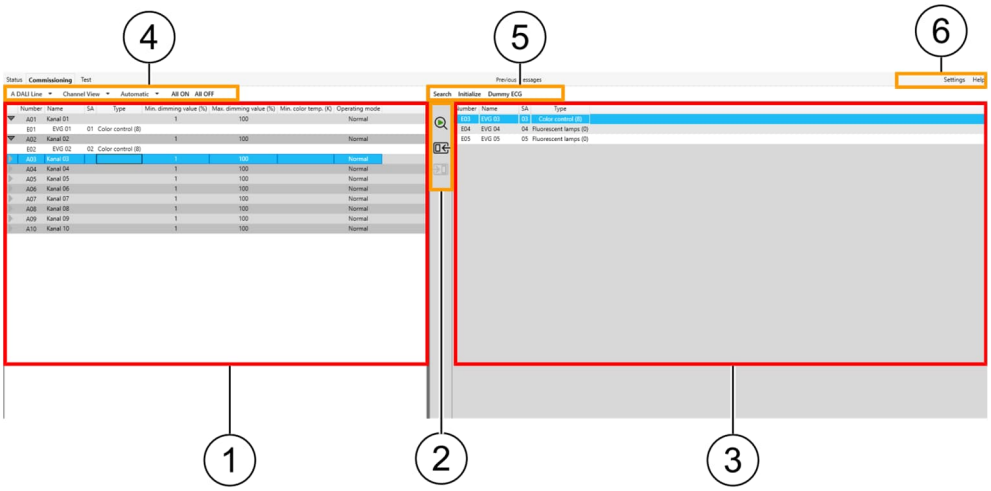

Fig. 18: Commissioning window in the ETS

Item	Function
1	Left display window with the channels and assigned ECGs
2	Button to start/stop the ECG search, move the selected ECGs into the selected channel or back to the detected ECGs
3	Right display window with the detected ECGs
4	Menu bar of the left display window: ● Switch DALI line ● Change view (channel/ECG/sensor) ● Type of identification of an ECG (automatic/flashing/switching on/switching off) ● Button for switching all ECGs on or off (All on/All OFF)
5	Menu bar of the right display window: ● Restart ECG search ● Button to initialize devices ● Dummy ECG
6	Help and settings window

In the left display window [1], all channels that have already been configured in the ETS are listed. The names of the channels can be adjusted and renamed as desired with a double click. A context menu can be opened by right-clicking in the display window:

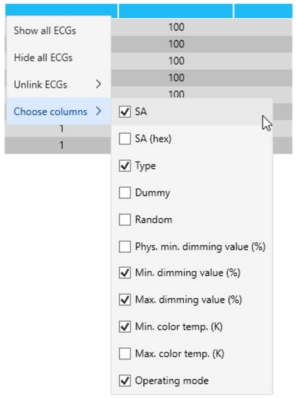

Fig. 19: Context menu in the left display window

This context menu can be used, among other things, to specifically adjust the display and removal of the assigned ECG. It is also possible to have additional columns with additional properties shown.

In the right display window [3], all ECGs found and not yet assigned are listed. A context menu can also be opened by right-clicking in the display window:

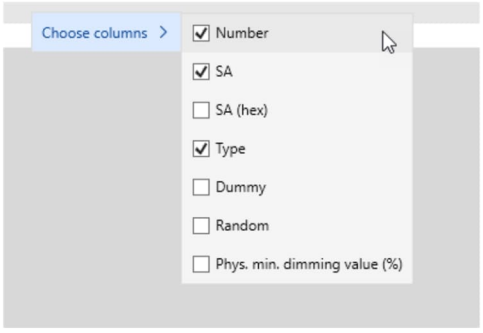

Fig. 20: Context menu in the right display window

In this context menu, additional columns with additional ECG properties can be added.

Commissioning procedure

Fig. 21: Commissioning procedure

In the first step of commissioning, all connected DALI-ECGs must be searched (no ECGs are listed in the right display window during initial commissioning). The search can be started by pressing the [1] button. The KNX/DALI gateway scans the active DALI line and identifies all connected ECGs. This process may take a few minutes.

After initial commissioning, the search is only required if new ECGs have been added or replaced.

After the search, the ECGs found in the right display window can be assigned to the channels in the left display window [1] using the button [2] or via "drag and drop".

The assignment can be removed using the [3] button or by dragging and dropping it back into the right display window.

In the left display window, the channels can also be selected and the respective ECG can be assigned by double-clicking. In addition, double-clicking on an ECG in the left channel list moves the respective ECG back to the right display window.

7.2 Test

In the DCA test environment, both the channels and the assigned ECGs of a DALI line can be tested. These can be controlled individually or together and the switching state can be checked. Furthermore, it is possible to check the displayed and set dimming value, as well as the color temperature values. The communication runs via gateway properties, whereby the ECG are addressed individually via the short address, a channel assignment does not have to be programmed into the gateway beforehand.

NOTICE	
!	The test can only be carried out after commissioning and a completed device and parameter configuration. Before a test, the KNX/DALI gateway must have been programmed in the ETS and a working connection must be established between the KNX/DALI gateway and the ETS.

NOTICE	
!	Before a test, it is strongly recommended to read all values via the button. Alternatively, the cyclic readout can be activated before the test. This function causes a high bus load.

The test environment can be opened by clicking on the "Test" tab:

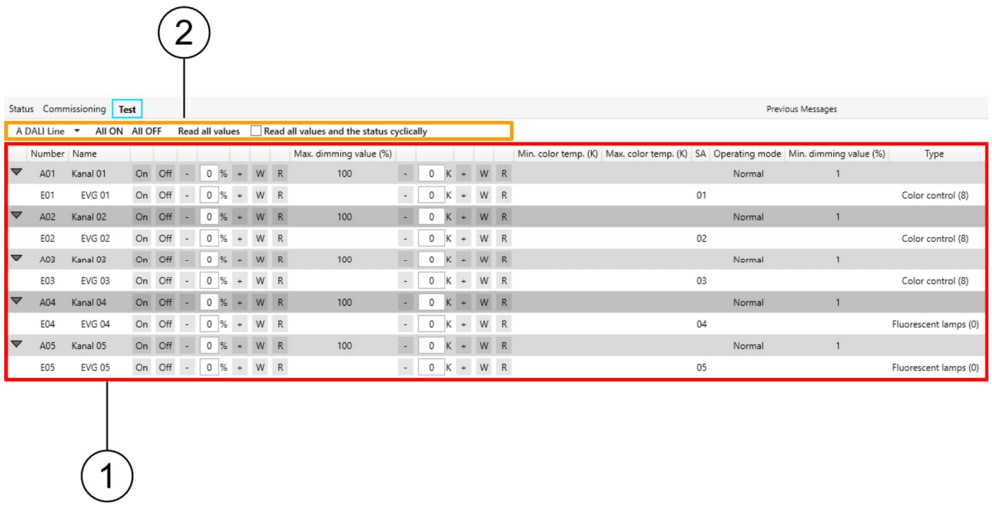

Fig. 22: Test environment in the ETS

Item	Function
1	Display window of the channels and assigned ECGs

Item	Function
2	Menu bar of the display window: ● Switch DALI line ● Button for switching all ECGs on or off (All on/All OFF) ● Button for reading all values ● Setting box for cyclical reading of all values and status

In the display window [1], all channels and the associated ECGs of the commissioned DALI line are listed. These can be selected and subsequently tested with regard to the desired functions or proper operation, provided that the ETS can communicate with the DALI gateway via the programming connection. The connection status is displayed in the center at the top in a small window.

A context menu can be opened by right-clicking in the display window:

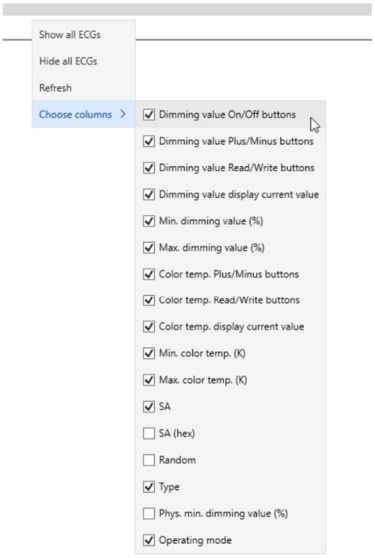

Fig. 23: Context menu in the display window of the test environment

This context menu can be used, among other things, to specifically adjust the display and removal of the assigned ECG. It is also possible to have additional columns with additional properties shown.

Test

Each channel and each assigned ECG can be tested individually. When the "On" and "Off" buttons are pressed, the ECGs of the selected channel or the individually selected ECG are switched. It is possible to set a dimming value in % and to transmit it with the button "W" to the assigned ECGs of the channel or to the individually selected ECG. In addition, the currently set dimming value can be read out by pressing the "R" button.

Even when testing the color temperature, a value can be set in K and transmitted with the button "W" to the assigned ECG of the channel or to the individually selected ECG. In addition, the currently set color temperature value can be read out by pressing the "R" button.

7.3 Status

In the DCA status environment, the status of the channels as well as the assigned ECGs of a DALI line can be visualized.

The status environment can be opened by clicking on the "Status" tab:

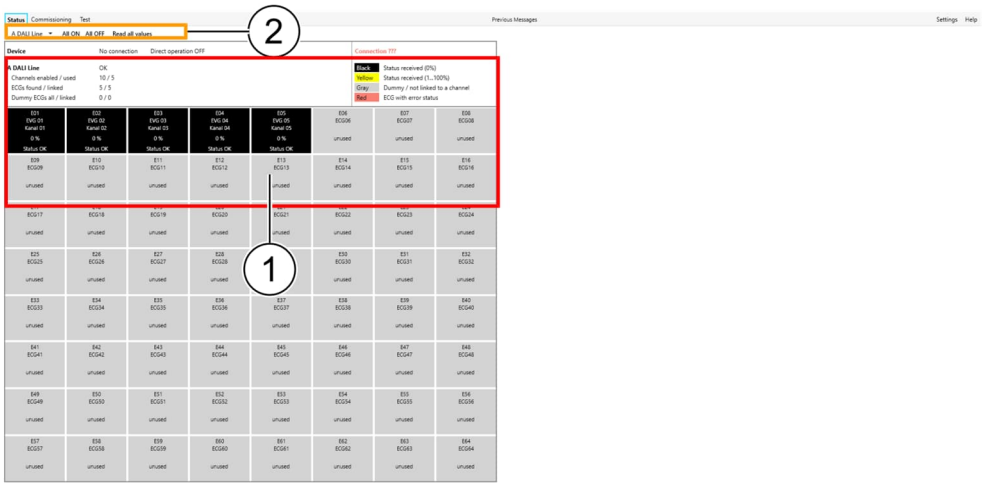

Fig. 24: Status environment in the ETS

Item	Function
1	Display window of the current status of the channels and assigned ECGs: ● Black: Status (dimming value) has not yet been received or "dimming value OFF" (dimming value = 0%) has been received. (0%) ● Yellow: Status (dimming value) has been received (1...100%) ● Gray: Dummy / ECG is not connected to the channel ● Red: ECG reports an error status
2	Menu bar of the display window: ● Switch DALI line ● Button for switching all ECGs on or off (All on/All OFF) ● Button for reading all values

8 Error messages during programming

If an error message is displayed, repeat the original process. If the error occurs again during reprogramming, the following descriptions will help to resolve it.

8.1 KNX DALI gateway

Error text:

Error when writing the data into the ECGs of DALI line A

Error when writing the data into the ECGs of DALI line B

The following causes and solutions are possible:

- No connection to the DALI line
  - Check the connection of the KNX/DALI gateway to the DALI line and establish if necessary.
- Programming faulty or aborted
  - Repeat the process.
- ECG defective
  - Replace defective ECG.
- Short circuit in DALI
  - Check the wiring and change if necessary.
  - Replace any defective cables.

Error text:

Error when writing the data into the sensors of DALI line A

Error when writing the data into the sensors of DALI line B

The following causes and solutions are possible:

- No connection to the DALI line
  - Check the connection of the KNX/DALI gateway to the DALI line and establish if necessary.
- Programming faulty or aborted
  - Repeat the process.
- Sensor defective
  - Replace defective sensor.
- Short circuit in DALI
  - Check the wiring and change if necessary.
  - Replace any defective cables.

Error text:

Timeout when writing the data into the ECGs of DALI line A

Timeout when writing the data into the ECGs of DALI line B

The following causes and solutions are possible:

- Data transfer faulty
  - Repeat the process.
  - Contact support.

Error text:

Timeout when writing the data into the Sensors of DALI line A

Timeout when writing the data into the sensors of DALI line B

The following causes and solutions are possible:

- Data transfer faulty

- Repeat the process.
- Contact support.

Error text:

Error during programming of the device: Application program is not compatible with the device

The following causes and solutions are possible:

- Incorrect database entry used for the device
  (e.g. database entry for N 141/14 in device N 141/32)
  - Check the device type and use the correct database entry

Error text:

Error when downloading the device: application program version is not compatible to firmware version of the device

The following causes and solutions are possible:

- Firmware outdated or incorrect version
  - Download* and install compatible or latest firmware for the application program.
- Application program outdated or wrong version
  - Download* and install the firmware-compatible or latest application program.

Note:

* For firmware, application program and further information, go to http://www.siemens.com/gamma-td or http://www.knx.org.

8.2 DCA

Error text:

The number(s) could not be changed!

The following causes and solutions are possible:

- Duplicate available
  - Find duplicate and adjust number

Error text:

A device long address was found several times!

The following causes and solutions are possible:

- Duplicate available
  - Re-initialize devices
  - Find duplicate and exchange device with double long address

Error text:

A device short address was found several times!

The following causes and solutions are possible:

- Duplicate available
  - Re-initialize ECGs
  - Find duplicate and adjust short address
  - Make sure that all devices already found are switched on during a new search.

Error text:

An ECG with the new number is already linked to a channel!
The following causes and solutions are possible:
- Duplicate available
  - Find duplicate and adjust the number of the ECG.

Error text:
The ECG search failed!
The following causes and solutions are possible:
- Connection to the DALI line interrupted
  - Restore the connection to the DALI line.

Error text:
No ECG found!
The following causes and solutions are possible:
- Connection to the DALI line interrupted
  - Restore the connection to the DALI line.
- ECG defective
  - Replace defective ECG.

Error text:
Too many ECGs in the line!
The following causes and solutions are possible:
- Maximum number (64) already reached within the line.
  - Activate additional line if necessary.
  - Assign further ECGs to another/additional line.

Error text:
ECG initialization failed!
The following causes and solutions are possible:
- Connection interrupted
  - Restore the connection.
- ECG defective
  - Replace defective ECG.

Error text:
Failed to initialize a sensor!
The following causes and solutions are possible:
- Connection interrupted
  - Restore the connection.
- Sensor defective
  - Replace defective sensor.

Error text:
Invalid color temperature value!
The following causes and solutions are possible:
- Entered color temperature value outside the permissible limits.
  - Adjust the color temperature value within the permissible limits.

Error text:
Invalid dimming value!

The following causes and solutions are possible:

- Dimming value entered outside the permissible limits.
  - Set the dimming value within the permissible limits.

Error text:

No connection to the device!

The following causes and solutions are possible:

- Connection interrupted
  - Restore the connection.
- Device defective
  - Replace the defective device.

Error text:

A sensor instance with the new number is already connected to a sensor!

The following causes and solutions are possible:

- Duplicate available
  - Find the duplicate and adjust the number of the sensor instance.

Error text:

The sensor is already connected!

The following causes and solutions are possible:

- Sensor already connected
  - Select another sensor.

Error text:

Sensor search failed!

The following causes and solutions are possible:

- Connection to the DALI line interrupted
  - Restore the connection.
- Sensor defective
  - Replace defective sensor.

Error text:

DALI timeout, sensor search failed!

The following causes are possible:

- Connection to DALI line interrupted
  - Check and restore connection to the DALI line

Error text:

No sensor found!

The following causes and solutions are possible:

- Connection to DALI line interrupted
  - Check connection to the DALI line and re-establish.
- Sensor defective
  - Replace defective sensor.

Error text:

Too many sensors in the line!

The following causes and solutions are possible:

- Maximum number (8 brightness and presence detectors) already reached within the line.
  - Activate additional line if necessary.
  - Assign further sensors to a different/additional line.

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