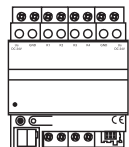


Analogue input REG-K 4-gang

Operating instructions



Art. no. MTN682191

Accessories

When the following measuring transducers are used, it is possible to access a pre-configuration in the software. If other sensors are used, the parameters to be configured must be determined beforehand.

- Brightness sensor (Art. no. MTN663593)
- Twilight sensor (Art. no. MTN663594)
- Rain sensor (Art. no. MTN663595)
- Temperature sensor (Art. no. MTN663596)
- Wind sensor with 0-10 V interface (Art. no. MTN663591)
- Wind sensor with 0-10 V interface and heating (Art. no. MTN663592)
- Analogue input module REG/4-gang (Art. no. MTN682192)
- Power supply REG, AC 24 V/1 A (Art. no. MTN663529)

For your safety



DANGER

Risk of fatal injury from electrical current.
The unit may only be installed and connected by skilled electricians. Observe the regulations valid in the country of use, as well as the valid KNX guidelines.



CAUTION

Risk of irreparable damage to the device!
Never connect the sensors at the inputs (K1...K4) of the weather station to the supply terminals U_S and GND of a connected analog input module. U_S and GND must not be interconnected with the corresponding terminals of another device.

Getting to know the analogue input

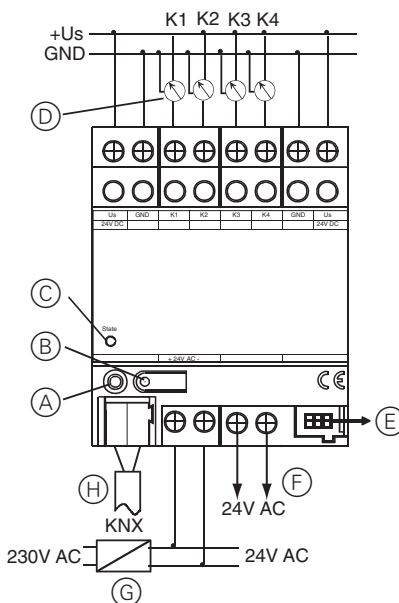
The analogue input processes measuring data from analog sensors. Up to four freely programmable analog transducers can be connected to the input.

The device can evaluate both voltage signals and current signals:

Current signals	0...20 mA DC
	4...20 mA DC
Voltage signals	0...1 V DC
	0..0.10 V DC

The current inputs can be monitored for wire breakage. A maximum of four additional analogue sensors can be connected and evaluated with the REG/4-gang analogue input module.

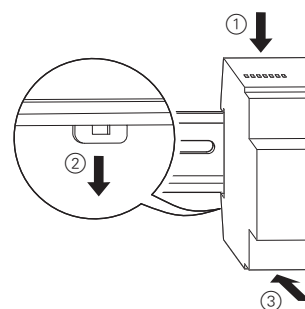
Operating and display elements



+Us	Power supply for external measuring transducer
GND	ref. potential for +Us and inputs K1...K4
(A)	Programming LED
(B)	Programming button
(C)	Status LED, three colours (red, orange, green)
(D)	Measured value inputs K1 ... K4
(E)	system connector, 6-pole, for module connection (system-Bus)
(F)	External power supply
(G)	External power supply
(H)	KNX-connecting terminal

Mounting the analogue input

Snap the device onto a 35 x 7.5 mm DIN profile rail which conforms to standard DIN EN 50022.



CAUTION

Risk of irreparable damage to the device!
Never connect the sensors at the inputs (K1...K4) of the weather station to the supply terminals U_S and GND of a connected analog input module. U_S and GND must not be interconnected with the corresponding terminals of another device.

To operate the device an external 24 V power supply is required.

This can also supply the connected sensors, heating for the sensors, or an analogue input module.

Power supply for connected sensors

- Connected sensors can be supplied using the +US and GND terminals.
- The current consumption of all sensors that are supplied via these terminals may not exceed 100 mA.
- Two of each kind of terminal (+US and GND) are supplied, and are interconnected in pairs.
- Voltage is disconnected if there is a short circuit between the +US and GND.
- Power for connected sensors can also be supplied via external sources (for instance when their current consumption exceeds 100 mA). Terminals K1...K4 and GND are then used to connect to the sensor inputs.

Installing extensions

The following basic rules should be observed when installing an extension module:

- One analogue input module can be connected.
- One extension module can be exchanged for another of the same type - e.g. if a module is faulty - during operation (disconnect module from voltage!). After a module has been replaced, the analogue input carries out a reset after approx. 25 seconds. This re-initialises all inputs and outputs on the analogue input and the connected modules and resets them to their original status.
- It is not permitted to add or remove modules without adapting the application and downloading it into the analogue input, as this may lead to system malfunctions.

Status LED

Off:	no power supply
Orange / on:	module scan by analogue input
Orange / flashing fast:	module scan REG extension module
Red / on:	error: no project in controller
Red / flashing slowly	error: undervoltage at module connection
Red / flashing fast:	error: parametrisation error
Green / flashing slowly:	address assignment, module scan completed, configuration OK
LED green/ flashing fast:	parameter download into the modules
LED green / on:	module scan completed, everything OK

Fashing slowly = 1/s

Fashing fast = 2/s

Technical data

Power supply

Supply voltage: 24 V AC $\pm 10\%$

Power consumption: Max. 250 mA

KNX

Voltage: 24 V DC (+6 V / -4 V)

Power consumption: typ. 150 mW

Ambient temperature: -5 °C bis +45 °C

Storage/transport temp.: -25 °C bis +70 °C

Humidity

Environment/storage/transport: max. 93%, no moisture condensation

Type of protection: IP 20 in accordance with EN 60529

Installation width: 4 depth units / 70 mm

Weight: approx. 150 g

Connections

Inputs, power supply: Screw terminals single-wire
0,5 mm² to 4 mm²
stranded wire (without ferrule)
0,34 mm² to 4 mm²
stranded wire (with ferrule) 0.14 mm² to 2.5 mm²

KNX: Connection and branch terminal

Analog input module: 6-pole system connector

Sensor inputs

Number: 4x analogue

Evaluable sensor signals (analog): 0...1 V DC, 0...10 V DC,
0...20 mA DC, 4...20 mA DC

Voltage measurement impedance: approx. 18 k Ω

Current measurement impedance: approx. 100 Ω

Supply for external sensors (+Us): 24 V DC. max.100 mA DC

Connection of extension modules: 24 V DC. max.80 mA DC

Subject to technical modifications.

Schneider Electric Industries SAS

If you have technical questions, please contact the Customer Care Center in your country.

www.schneider-electric.com

This product must be installed, connected and used in compliance with prevailing standards and/or installation regulations. As standards, specifications and designs develop from time to time, always ask for confirmation of the information given in this publication.