



## **ABB i-bus<sup>®</sup> EIB Shutter Actuators**



# Product Range Overview I



- Shutter Actuator, 2fold, 230 V AC (4 modules)



- Shutter Actuator, 4fold, 230 V AC (4 modules)



# Product Range Overview II



- Shutter Actuator, 8fold, 230 V AC (8 modules)

# Product Range Overview III



- Shutter Actuator with Manual Switches, 4fold, 230 V AC (4 modules)



- Shutter Actuator with Manual Switches, 8fold, 230 V AC (8 modules)

# Product Range Overview IV



- Shutter Actuator, 4fold, 24 V DC (4 modules)



- Shutter Actuator Standard, 4fold, 230 V AC (4 modules)



# Shutter Actuator with Manual Switches



- 2 push buttons per output (long: up/down – short: stop/step)
- 2 LEDs per output (display of actual position)
- Push button and LED for changing between EIB and manual operation
- Manual Operation:
  - with EIB, no 230 V AC supply voltage,
  - no EIB, with 230 V AC supply voltage,
  - with EIB and 230 V AC supply voltage



# Application Program

- All application programs are identical (exeption: RA/S 4.230.1)
- Functions:
  - Move to position
  - Call scene and set scene
  - Safety and Security functions
  - Sun protection automatic control
  - Heating/Cooling automatic control
  - Status feedback
- Additional functions for Shutter Actuators with Manual Switches



# Application Program

## Move to Position

- Choice between direct and indirect positioning
- 2 objects „Move to position 0...255“:
  - 1 Byte for height of shutter/sunblind
  - 1 Byte for blind angle
- 2 objects „Move to preset position“:
  - 1 Bit for Move to position 1 („0“) and position 2 („1“)
  - 1 Bit for Move to position 3 („0“) and position 4 („1“)
- 2 objects „Set preset position“:
  - 1 Bit for setting preset 1 („0“) and setting preset 2 („1“)
  - 1 Bit for setting preset 3 („0“) and setting preset 4 („1“)



# Application Program

## Call scene and set scene

- 8 Bit scenes:
  - only 1 group address for up to 64 scenes
  - all EIB participants are connected to this group address
  - all scene positions are set within the actuators
  - all scene positions can be changed via EIB
- Content of the 8 Bit telegram:
  - No. of the scene (6 Bit)
  - the information „Recall scene“ or „Set scene“ (1 Bit)
  - 1 Bit not used
- Shutter Actuators:
  - Each output can be integrated in up to 10 scenes



# Application Program

## Safety and Security Functions

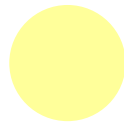
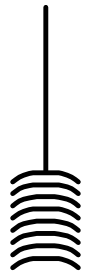
- 3 objects „Wind alarm“ (1 Bit):
  - Up to 3 wind alarm objects can be activated
  - Cyclical control of wind sensor(s)
  - Reaction on wind alarm individual for each output
- 2 objects „Rain alarm“ and „Frost alarm“ (1 Bit):
  - Cyclical control of sensors
  - Reaction on rain/frost alarm individual for each output
- 1 object „Block operation“ (1 Bit) for each output
- 1 object „Forced control“ (2 Bit) for each output
- Priority of safety and security functions parameterable



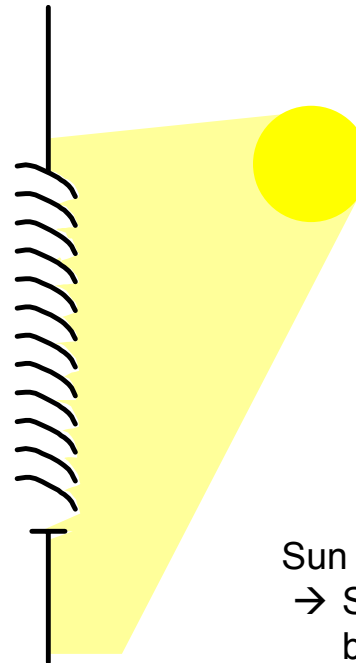
# Application Program

## Sun Protection Automatic Control I

- Example „Simple sun protection automatic control“:



No sun  
→ Sunblind up

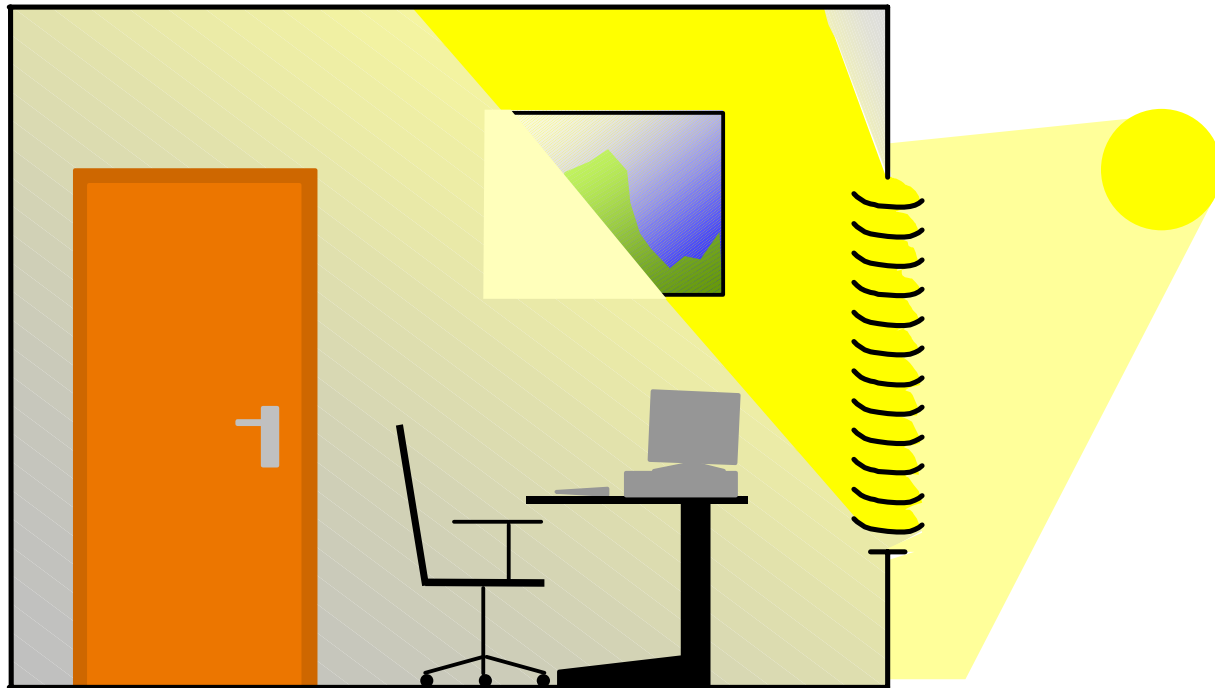


Sun  
→ Sunblind down and  
blinds closed

# Application Program

## Sun Protection Automatic Control II

- Example „Day light control“:



# Application Program

## Sun Protection Automatic Control III

- Automatic Control can be activated individually for each output
- Position when the sun is shining:
  - according parameterized preset value or
  - according 1 Byte position telegram 0...255



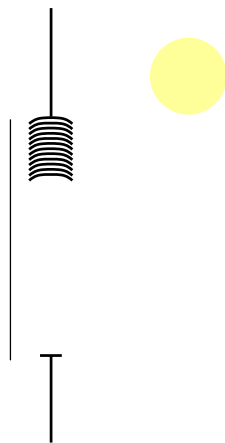
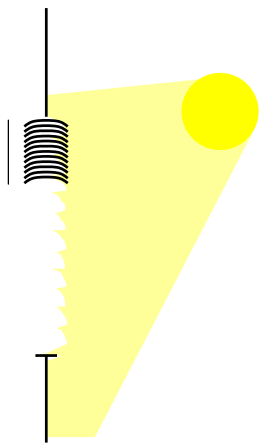
# Application Program

## Heating/Cooling Automatic Control I

### ■ Example:

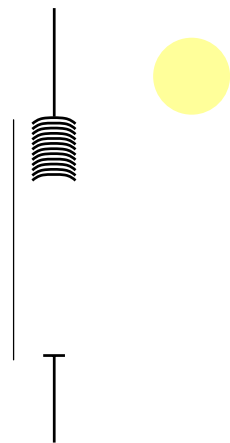
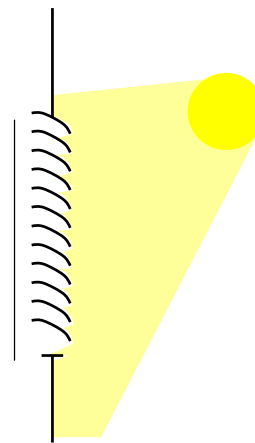
Heating periode

Cooling period



Sun:  
→ inside up  
outside up

No sun:  
→ inside down  
outside up



Sun:  
→ inside down  
outside down

No sun:  
→ inside down  
outside up

# Application Program

## Heating/Cooling Automatic Control II

- Automatic Control can be activated individually for each output
- Change between Sun protection and Heating/Cooling automatic control via EIB
- Position when the sun is shining / not shining:
  - According parameterized preset value



# Application Program

## Status Feedback

- 4 objects „Status position“:
  - 2 x 1 Byte: Height of shutter/sunblind and blind angle 0...255
  - 2 x 1 Bit: upper / downer final position reached
- 1 object „Status operation“ (1 Bit):
  - „0“: operation blocked (e.g. because of wind alarm)
  - „1“: operation allowed
- 1 object „Statusbyte“ (1 Byte):
  - Actual status of shutter actuator
- 1 object „Status automatic control“ (1 Bit):
  - „0“: Automatic control deactivated
  - „1“: Automatic control activated



# Application Program

## Additional Functions for Shutter Actuators with Manual Switches

- 1 object „Block/allow manual operation“ (1 Bit):
  - „0“: Operation blocked
  - „1“: Operation allowed
- 1 object „Status manual operation“ (1 Bit):
  - „0“: EIB operation
  - „1“: Manual operation
- 1 Object „Status supply voltage“ (1 Bit):
  - „0“: Supply voltage not OK
  - „1“: Supply voltage OK



# Application Program

## Functions of the Application Program for the Shutter Actuator Standard, 4fold, 230 V AC

- Move Up/Down
- Stop/Step
- Wind alarm



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