# **KNX Catalogue**

# Plan for intelligent Future Safety

**Building Control Systems** 





# KNX combines current requirements into one system

KNX is the intelligent building control system for all areas in which your customers live and work. From single-family houses to office complexes, the comprehensive portfolio of KNX solutions from Schneider Electric enables you to achieve flexible, energy-efficient, comfortable and safe solutions that are easy to plan, install and operate.



A KNX system grows with the customers' requirements

#### Comfort

Everyone nowadays expects more comfort and convenience in their domestic and working lives. What is called for are comfortable solutions that can be operated straightforwardly and without fuss, to make living and working easier.

#### Flexibility

In order to allow for flexible room usage over several decades, it is necessary for building functions to be adapted to the users' requirements easily in a cost-effective way – without the need for walls to be opened up and new cables to be laid.

#### **Cost efficiency**

Intelligent networking of all building systems can avoid unnecessary energy consumption and reduce operating costs on a sustained basis. The ability to expand modular KNX system technology ensures economical solutions that are guaranteed to remain tailor-made over the long haul.

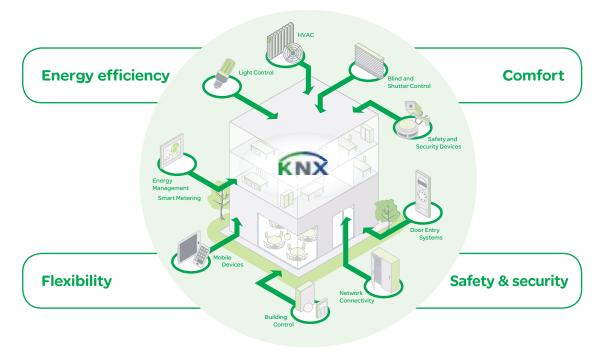
#### Safety and security

To let residents feel as safe as possible, building technology must be able to react in a fast and intelligent way in any situation and at any time. No matter whether the building is full of life or quiet.

# Combining building control with the technologies of the future



in one system





# The system components

All the devices for a KNX installation are connected together by a bus, thus allowing them to exchange data. The function of the individual bus devices is determined by their project planning, which can be changed and adapted at any time.



#### System devices and components

They are needed for the fundamental functioning of the system. They consist of power supply units for generating bus voltage, couplers for connecting bus segments and interfaces for connecting programming devices.

#### **Sensors**

These are the starting point for every action, because they gather information and send it on the bus as a data telegram. This can be information about room temperatures, movements, wind measurements or manually input instructions.

#### **Actuators**

They receive data which are then converted into actions. This can include controlling blinds, dimming lights or controlling heating and air conditioning systems.







### System devices (selection)



Power supply unit



KNX logic module



USB interface REG-K



Line coupler



IP Router



Wiser for KNX

#### Sensors (selection)



KNX push-button



Movement detector



Room temperature control unit



Binary input



Anemometer

### **Actuators (selection)**



Switch actuator



Dimming actuator



Heating actuator



Blind actuator



KNX DALI-Gateway

# Improvement starts with a decision about what to measure

The trump card of LifeSpace Management with U.motion is flexibility. For each requirement, Schneider Electric offers solutions for achieving individual energy efficiency concepts and energy

saving scenarios. The combination of switch actuators with current detection or KNX Energy Meter plus individually set switching times helps your customers to save energy.

#### Monitoring with high accuracy

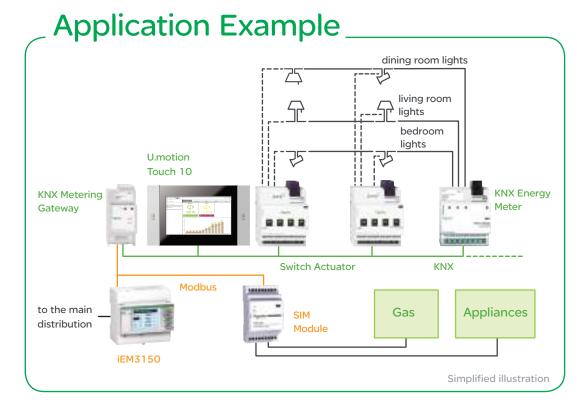
The KNX Energy Meter provides energy measuring with class 1 accuracy for single and groups of devices. It measures total and period energy as well as instant power and provides 8 different alarm thresholds. When consumption exceeds preset limit, commands for switching or dimming can be sent or KNX scenes can be activated. The commands can be provided with adjustable delays if needed. Alarms can be sent to U.motion as well in case of current power, e.g. if server cooling falls below preset limits.



#### KNX and Modbus: an intelligent combination

The KNX Metering Gateway combines the expertise of the Modbus open standard with KNX intelligent building control. Measured values of up to 10 meters with a Modbus interface and connected SIM modules for recording gas and water consumption via impulse can be integrated into the KNX Energy Management, thus enabling comprehensive analysis of consumption.





# **KNX Multitouch Pro**



The new KNX Multitouch Pro stands out thanks to its exceptional design. Its function control is similar to that of a smartphone or tablet. Swiping is used to achieve simple and intuitive switching between eight possible main functions. The unit offers a choice of two interface designs, vertical or rotary, which can also be

used in combination.

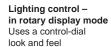
#### Special product features:

- · Proximity sensor: Display illumination is activated automatically upon approach
- Gesture function: controls one previously defined function using a particular gesture
- Customizable screen saver



Swipe to switch between main functions







Lighting control in vertical display Enables control of two functions per display

# **KNX Push-button Pro**



High-quality design and intuitive operability the new KNX Push-button Pro concentrates on what is essential.

The individual touch-sensitive zones of the sensor cover are shown using illuminated function icons that shine through the translucent surface and emphasize the high-quality look of the new push-button.

The sensor cover is available in in all the System Design colors.

Up to four light, shutter and scenario functions can be controlled using the KNX Push-button Pro. This means that, in combination with the KNX Multitouch Pro. it offers the perfect solution for intuitive and flexible room control at home or in commercial spaces.

#### Customizable

The foil set included with the KNX Push-button Pro interface allows you to clearly and professionally label basic functions. A blank carrier foil can also be used to add individual symbols as required.









Individual symbols for use with carrier foil

# Flexible in every detail

At Schneider Electric, comfort, safety, security and flexibility are combined with an extensive variety in design and function. Customers' wishes can be met easily, from the movement detector to the touch panel.

# Example: Merten System M



KNX push-buttons



KNX push-button 4-gang plus with room temperature control unit



KNX push-button 2-gang plus with room temperature control unit



KNX push-button 1-gang plus



KNX push-button 2-gang plus



KNX push-button 4-gang plus



KNX push-button 4-gang plus with IR receiver



Push-button modules



Push-button 1-gang



Push-button with 1/0 imprint 1-gang



Push-button 2-gang



Push-button with 1/0 imprint and up/down arrows 2-gang



KNX Movement and presence detectors



KNX ARGUS movement detector 180, flush-mounted



KNX ARGUS movement detector 180/2.20, flush-mounted



KNX ARGUS presence detector, flush-mounted

# **Innovations**

# **InSideControl**



Available on the common platforms

#### Upgrade KNX to the next comfort level

Whether in a private home or small office buildings, as part of a new installation or when retrofitting existing KNX installations: Schneider Electric InSideControl easily turns smartphones and tablets into remote controls for building functions. Controlling lights and temperature, calling up scenes or visualizing the energy consumption are just a few of the possibilities the app comes up with.



# **KNX Energy Meter**



Easy visualisation

#### High precision for low consumption

The KNX Energy Meter from Schneider Electric allows for measuring the energy consumption of individual devices or groups of devices. Individual energy-saving functions can be programmed, such as dimming, switching and retrieving scenes, as can alarms for specific threshold values. This actively helps to save energy.





Wiser for KNX and spaceLYnk are ready to communicate with several protocols

# Wiser for KNX | spaceLYnk

# KNX home automation Building automation

Schneider Electric offers two new logic controllers for home and building automation, connecting different standards and protocols to increase comfort and allow energy monitoring.

Each is optimised for a certain building type:

- Wiser for KNX for home automation
- spaceLYnk for building automation.



# Wiser for KNX

#### Wiser for KNX













Solutions are tested and validated according to Schneider Electric process

#### Wiser for KNX



Version

Art. no.

#### LSS100100

#### Logic Controller

Wiser for KNX is the easiest way to visualise and control a complete Home Automation Solution in a KNX and Modbus networks.

Wiser for KNX (formerly know as homeLYnk) can be used in several ways:

- As an user interface to display and control relevant informations on mobile devices
- As a gateway to translate and enable communication between different products
- As an aggregator to stock, analyze, and send the data (.csv file for example)
- As an event controler that sends email in case of issues

#### Applications:

- Logical functions
- WEB SCADA visualization for PC and touch-devices
- Cross-standard gateway between KNX and Modbus RTU/TCP BACnet Server (150 points)
- Integration with third party devices over RS-232 (IR, AV)
- Scheduling
- Camera streaming
- Data logger with trends
- Pre-made Modbus templates
- Easy bloc programming
- Up to 8 users with different login and password
- BACnet certified "BACnet Application Specific Controller (B-ASC)"
- New icons

Supply voltage: 24 V DC Power consumption: 2 W

LED indicator 1: Green LED (CPU load)

LED indicator 2: Green LED (Operation) or Red LED (Reset)

Interface: 1x KNX, 1x10BaseT/100BaseTX, 1x RS-485 (incl. Polarization resistors 47 kΩ, no

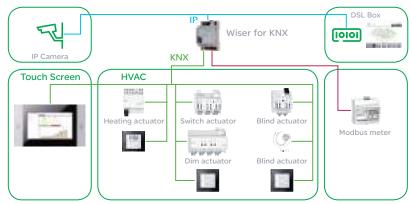
termination),1x RS-232, 1x USB2.0, 1x Reset push button

KNX bus: Bus connecting terminal 2 x 0.8 mm Power supply: Clamp, 0.5 mm<sup>2</sup>-1.5 mm<sup>2</sup> Serial: Clamp, 0.5 mm<sup>2</sup>-1.5 mm<sup>2</sup>

Operation: -5°C to +45°C

Environment: Can be used at elevations up to 2000 m above sea level (MSL)

Max. humidity: 93 %, no condensation Dimension: 90 x 52 x 58 mm (HxWxD) Device width: 3 modules = approx. 54 mm





# spaceLYnk

#### **spaceLYnk**













Solutions are tested and validated according to Schneider Electric process

#### spaceLYnk



Version

Art. no.

#### LSS100200

Logic Controller

spaceLYnk is the easiest way to build a complete Building Automation Solutions for commercial segments :

- Complete Building Automation solution for Small and Medium building with a complete architecture including Light and Room Control (KNX, DALI Control), Metering (Modbus offer, Smartlink RTU and IP), and boiler management (SSL)
- Complete Building Automation solution for Large Building with a complete architecture managed by SBO (BMS from Schneider Electric) and including Light and Room Control (KNX, DALI Control) and Metering (Modbus offer, Smartlink RTU and IP)

spaceLYnk can be used in several ways:

- As a gateway to translate and enable communication between different products
- As an aggregator to stock, analyze, and send the data (.csv file for example)
- As an user interface to display relevant informations on mobile devices
- As an event controler that sends email in case of issues

#### Applications:

- Logical functions
- WEB SCADA visualization for PC and touch-devices
- Cross-standard gateway between KNX and Modbus RTU/TCP
- BACnet Server (500 points)
- Integration with third party devices over RS-232 (IR, AV)
- Scheduling
- Camera streaming
- Data logger with trends
- Pre-made Modbus templates
- Easy bloc programming
- Up to 50 users with different login and password
- BACnet certified "BACnet Application Specific Controller (B-ASC)"
- New icons

Supply voltage: 24 V DC Power consumption: 2 W

LED indicator 1: Green LED (CPU load)

LED indicator 2: Green LED (Operation) or Red LED (Reset)

Interface: 1x KNX, 1x10BaseT/100BaseTX, 1x RS-485 (incl. Polarization resistors 47 k $\Omega$ , no

termination),1x RS-232, 1x USB2.0, 1x Reset push button

Terminal:

**KNX bus:** Bus connecting terminal 2 x 0.8 mm **Power supply:** Clamp, 0.5 mm<sup>2</sup>–1.5 mm<sup>2</sup>

**Serial:** Clamp, 0.5 mm<sup>2</sup>–1.5 mm<sup>2</sup> **Operation:** -5°C to +45°C

Environment: Can be used at elevations up to 2000 m above sea level (MSL)

Max. humidity: 93 %, no condensation Dimension: 90 x 52 x 58 mm (HxWxD) Device width: 3 modules = approx. 54 mm





## **U.motion**

#### **U.motion client**



#### U.motion Client Touch 7, Version 2





Version

Art. no.

Version 2

MTN6260-0307

Using the U.motion Client Touch, it is possible to visualise and control the functions transferred from a U.motion KNX server.

These functions include:

- Control of the lighting, blinds and room temperature control, scenarios
- Visualisation of the energy efficiency
   In conjunction with a KNX Server Plus, communication within a building is possible (intercom, communication with the door station)
- Building monitoring using IP cameras

Operation is interactive on the touch-sensitive TFT display.

The touch panel uses the Android operating system, which means the image is displayed on the device by an Android app. You can use the pre-installed U.motion Access app to configure the most frequently used apps on the front panel, e.g. the U.motion Control app (to control the KNX installation) and the U.motion Communication app (for the intercom system). Can be flush-mounted and installed in cavity walls.

For horizontal and vertical installation.

Nominal voltage: DC 12 - 32 V or alternatively via PoE (compatible with Cat5e/Cat6 UTP

cable, maximum length 100 m, IEEE standard 802.3at)

Energy consumption: max. 7 W Connections and interfaces:

1x LAN connection, Ethernet RJ45, 10/100 Mbit/s

2x USB 2.0

**Display size:** 17.78 cm (7")

Display type: TFT, capacitive touchscreen

Resolution: WSVGA (1024\*600) Light intensity: 500 cd/m<sup>2</sup> Contrast ratio: 400:1

Features: Loudspeaker, microphone IP protection rating: IP 20

Dimensions: 136x215x31 mm (LxHxW)

To be completed with: U.motion Touch 7 Mounting Set MTN6270-5001

U.motion KNX Server MTN6501-0001 U.motion KNX Server Plus MTN6501-0002

U.motion KNX Server Plus, Touch 10 MTN6260-0410 U.motion KNX Server Plus, Touch 15 MTN6260-0415

Inside Control, MTN6500-0113 Wiser for KNX, LSS100100 spaceLYnk, LSS100200

Contents: U.motion Touch 7 design elements. RJ45 connection adapter and Cat 6 patch cable 35 cm.

U.motion USB stick with additional software and documentation.

LSB02779 / 11.2018 48 schneider-electric.com



# Control and display devices

MTN6215-0310

### **Control and display devices**



#### **KNX Multitouch Pro**



Version Art. no.

Ne

New

#### For System M.

Comfortable room controller for controlling up to 32 room functions and the room temperature. All functions are displayed on a touch screen and are called up using simple finger movements. The user chooses from 3 interface designs that can be freely assigned to the room functions. The room temperature control can be shown in 2 different designs. With room temperature control unit, display and connection for the remote sensor.

The room temperature control unit can be used for heating and cooling with infinitely adjustable KNX valve drives or to trigger switch actuators and heating actuators.

#### ETS device functions:

- Switch-on behaviour of the user interface
- Proximity function: The display and the start screen only become visible when approached
- Gesture function: The device recognises a gesture (horizontal or vertical swipe movement) and triggers a function. In this way, the light can be switched on when you enter the room, for example.
- Cleaning mode: For a specific period of time, neither touches nor gestures are detected
- Adjusting the background lighting
- Setting the screen saver

With integrated bus coupler. The bus is connected using a bus connecting terminal.

#### KNX software functions:

#### Control unit/push-button:

Switching, toggling, dimming (single/dual-surface), blind (single/dual-surface), pulse edges trigger 1-, 2-, 4- or 8-bit telegrams, pulse edges with 2-byte telegrams, 8-bit linear regulator, scene retrieval, scene saving, signal function, fan control, operating modes, setpoint adjustment

#### Functions of the room temperature control unit:

Controller type: 2-step controller, continuous-action PI control, switching PI control (PWM) Output: continuous in the range 0 to 100% or switching ON/OFF

#### Controller mode:

- Heating with one controller output
- Cooling with one controller output
- Heating and cooling with separate controller outputs
- 2-step heating with 2 control outputs
- 2-step cooling with 2 control outputs
- 2-step heating and cooling with 4 control outputs

Operating modes: Comfort, comfort extension, standby (ECO), night reduction, frost/heat protection

Move all setpoints. Save all setpoint temperatures and operating modes when reset. External temperature monitoring. Additional output of the control value as 1 byte value on the PWM. Signal function for the actual temperature, valve protection function.

55

Scene function.
Operation: Touch display

Accessories: Dismantling protection MTN6270-0000 Remote sensor for universal room temperature control unit

with touch display MTN5775-0003

Note: Programmable with ETS4 and higher.

Contents: With bus connecting terminal and supporting plate.



# Control and display devices







Version Art. no.

MTN6215-5910

New

#### For System Design.

Comfortable room controller for controlling up to 32 room functions and the room temperature. All functions are displayed on a touch screen and are called up using simple finger movements. The user chooses from 3 interface designs that can be freely assigned to the room functions. The room temperature control can be shown in 2 different designs.

With room temperature control unit, display and connection for the remote sensor. The room temperature control unit can be used for heating and cooling with infinitely adjustable KNX valve drives or to trigger switch actuators and heating actuators.

#### ETS device functions:

- Switch-on behaviour of the user interface
- Proximity function: The display and the start screen only become visible when approached
- Gesture function: The device recognises a gesture (horizontal or vertical swipe movement) and triggers a function. In this way, the light can be switched on when you enter the room, for example.
- Cleaning mode: For a specific period of time, neither touches nor gestures are detected
- Adjusting the background lighting
- Setting the screen saver

With integrated bus coupler. The bus is connected using a bus connecting terminal.

#### KNX software functions:

#### Control unit/push-button:

Switching, toggling, dimming (single/dual-surface), blind (single/dual-surface), pulse edges trigger 1-, 2-, 4- or 8-bit telegrams, pulse edges with 2-byte telegrams, 8-bit linear regulator, scene retrieval, scene saving, signal function, fan control, operating modes, setpoint adjustment

#### Functions of the room temperature control unit:

Controller type: 2-step controller, continuous-action PI control, switching PI control (PWM) Output: continuous in the range 0 to 100% or switching ON/OFF

#### Controller mode:

- Heating with one controller output
- Cooling with one controller output
- Heating and cooling with separate controller outputs
- 2-step heating with 2 control outputs
- 2-step cooling with 2 control outputs
- 2-step heating and cooling with 4 control outputs

Operating modes: Comfort, comfort extension, standby (ECO), night reduction, frost/heat protection

Move all setpoints. Save all setpoint temperatures and operating modes when reset. External temperature monitoring. Additional output of the control value as 1 byte value on the PWM. Signal function for the actual temperature, valve protection function.

Scene function.

Operation: Touch display

Accessories: Dismantling protection MTN6270-0000

Remote sensor for universal room temperature control unit with touch display MTN5775-0003

Fixing frame for 3-module box MTN6270-0015

D-Life frame, 1-gang, for 3-module box MTN6010-65xx

Note: Programmable with ETS4 and higher.

Contents: With bus connecting terminal and supporting plate.

#### Dismantling protection



Version Art. no

MTN6270-0000

New

Prevents the KNX Push-button Pro and the KNX Multi-Touch Pro from being removed easily. In KNX, to be completed with: KNX Push-button Pro System M MTN6180-04..

System Design MTN6180-60...

System Design MTN6181-6035

KNX Multitouch Pro System M MTN6215-03...

System Design MTN6215-59.. System Design MTN6216-5910 **Contents:** 2 stainless steel hooks







## Push-button



#### **KNX Multitouch Pro**



Version Art. no.

MTN6215-0310

New

#### For System M.

Comfortable room controller for controlling up to 32 room functions and the room temperature. All functions are displayed on a touch screen and are called up using simple finger movements. The user chooses from 3 interface designs that can be freely assigned to the room functions. The room temperature control can be shown in 2 different designs.

With room temperature control unit, display and connection for the remote sensor. The room temperature control unit can be used for heating and cooling with infinitely adjustable KNX valve drives or to trigger switch actuators and heating actuators.

#### ETS device functions:

- Switch-on behaviour of the user interface
- Proximity function: The display and the start screen only become visible when approached
- Gesture function: The device recognises a gesture (horizontal or vertical swipe movement) and triggers a function. In this way, the light can be switched on when you enter the room, for example.
- Cleaning mode: For a specific period of time, neither touches nor gestures are detected
- Adjusting the background lighting
- Setting the screen saver

With integrated bus coupler. The bus is connected using a bus connecting terminal.

#### KNX software functions:

#### Control unit/push-button:

Switching, toggling, dimming (single/dual-surface), blind (single/dual-surface), pulse edges trigger 1-, 2-, 4- or 8-bit telegrams, pulse edges with 2-byte telegrams, 8-bit linear regulator, scene retrieval, scene saving, signal function, fan control, operating modes, setpoint adjustment

#### Functions of the room temperature control unit:

Controller type: 2-step controller, continuous-action PI control, switching PI control (PWM) Output: continuous in the range 0 to 100% or switching ON/OFF

#### Controller mode:

- Heating with one controller output
- Cooling with one controller output
- Heating and cooling with separate controller outputs
- 2-step heating with 2 control outputs
- 2-step cooling with 2 control outputs
- 2-step heating and cooling with 4 control outputs

Operating modes: Comfort, comfort extension, standby (ECO), night reduction, frost/heat protection

Move all setpoints. Save all setpoint temperatures and operating modes when reset. External temperature monitoring. Additional output of the control value as 1 byte value on the PWM. Signal function for the actual temperature, valve protection function.

Scene function.
Operation: Touch display

Accessories: Dismantling protection MTN6270-0000

Remote sensor for universal room temperature control unit

with touch display MTN5775-0003

Note: Programmable with ETS4 and higher.

Contents: With bus connecting terminal and supporting plate.



#### Remote sensor for universal room temperature control unit with touch display



Version Art. no.

MTN5775-0003 New

For use with underfloor heating systems.

To be completed with: Universal temperature control unit insert with touch display MTN5775-0000

Programmable universal temperature control unit insert with touch display MTN5776-0000 KNX Multitouch Pro System M MTN6215-03..

61

System Design MTN6215-59..

System Design MTN6216-5910



## Push-button





Push-button, 4-gang plus		Push-button, 4-gang plus with IR receiver				
Version	Art. no.	Version	Art. no.			
white, glossy	MTN617444	white, glossy	MTN617544			
polar white,	MTN617419	polar white,	MTN617519			
active white, glossy	MTN617425	active white, glossy	MTN617525			
anthracite	MTN627814	anthracite	MTN627914			
aluminium	MTN627860	aluminium	MTN627960			

For System M.

With integrated bus coupling unit.

Push-button with 8 operating buttons, operating and status display and labelling field. The operating display can also be used as an orientation light.

The device is connected to the bus line with a bus connecting terminal.

KNX software functions: Switching, toggling, dimming (single/dual-surface), blind (single/dual-surface), pulse edges trigger 1-, 2-, 4- or 8-bit telegrams (distinction between short and long operation), pulse edges with 2byte telegrams (distinction between short and long operation), 8-bit linear regulator, scene retrieval, scene saving, disable functions. Accessories: Labelling sheets for push-but-

tons System M MTN6183.. **Contents:** With protective hood for plaster. With bus connecting terminal.

For System M.

With integrated bus coupling unit.
Push-button with 8 operating buttons, operating and status display and labelling field. The operating display can also be used as an orientation light.

The functions of each of the keys can be triggered using an IR remote control.
The push-button is pre-programmed for operation with a Merten IR remote control Distance. Many other IR remote controls (e.g.

be taught into the push-buttons.
The device is connected to the bus line with a bus connecting terminal.

existing TV or CD player remote controls) can

KNX software functions: Switching, toggling, dimming (single/dual-surface), blind (single/dual-surface), pulse edges trigger 1-, 2-, 4- or 8-bit telegrams (distinction between short and long operation), pulse edges with 2byte telegrams (distinction between short and long operation), 8-bit linear regulator, scene retrieval, scene saving, disable functions.

**Accessories:** Labelling sheets for multi-function push-button with IR receiver System M MTN6184 ..

Transmitter: IR universal remote control

MTN5761-0000

**Contents:** With protective hood for plaster. With bus connecting terminal.





Labelling sheets for push-buttons		Labelling sheets for multi-function push- button with IR receiver		
Version	Art. no.	Version	Art. no.	
polar white	MTN618319	polar white	MTN618419	
silver	MTN618320	silver	MTN618420	
For individual labelling of the System Minush		For individual labelling of the System M multi		

For individual labelling of the System M pushbuttons with text or symbols.

Accessories from: Push-button, 1-gang plus System M MTN6275.., MTN6171..., Push-button, 2-gang plus System M MTN6276..., MTN6172..., Push-button, 4-gang plus System M MTN6278..., MTN6174...

Contents: 1 sheet for every 28 products.

For individual labelling of the System M multifunction push-button with IR receiver.

Accessories from: Push-button, 4-gang plus with IR receiver System M MTN6279.., MTN6175...

Contents: 1 sheet for every 28 products.

63



#### **Movement detectors**



#### **KNX ARGUS 220**



Version	Art. no.
polar white	MTN632519
dark brazil	MTN632515
aluminium	MTN632569

KNX movement detector for outdoors. 220° surface monitoring for large house fronts and sections of the house. With integrated bus coupler. The physical address is programmed with a magnet.

- 360° short-range zone (approx. 4 m radius).
- Large wiring compartment and plug system.
- Looping is possible.
- LED function display for fast alignment at the installation site.
- Operating elements are protected under the easily accessible cover plate.
- Flexibly adjustable sensor head.
- Possible to blank out individual lens areas.

Can be installed on walls and ceilings without additional accessories. Can be mounted on inner/outer corners and stationary pipes using a mounting bracket.

KNX software functions: Five movement blocks: up to four functions can be triggered per block. Telegrams: 1 bit, 1 byte, 2 bytes.

Normal operation, master, slave, safety pause, disable function. Sensitivity, brightness and staircase timer can be set using the ETS or the potentiometer. Self-adjusting staircase timer.

Angle of detection: 220° Range: max. 16 m Number of levels: 7

Number of zones: 112 with 448 switching segments

**Light sensor:** infinitely variable from approx. 3 - 1000 lux, ∞ lux (infinite: movement detection

is independent of the position of the sensor head)

Time: can be set externally from 1 s to approx. 8 min. in 6 levels or via ETS from approx. 3 s to approx. 152 hours

Sensitivity: infinitely adjustable

Possible settings for sensor head:

Wall mounting: 9° up, 24° down, 12° left/right, ±12° axial Ceiling mounting: 4° up, 29° down, 25° left/right, ±8.5° axial

EC directives: Low-voltage guideline 2006/95/EC and EMC directive 2004/108/EC

Type of protection: IP 55

Accessories: Mounting bracket MTN565291, Programming magnet MTN639190 Contents: With cover plate and segments to limit the area of detection, screws and plugs.

#### **Programming magnet**



Version Art. no.

#### MTN639190

Non-contact programming of the physical address of the KNX ARGUS 220.

In KNX, to be completed with: KNX ARGUS 220 MTN6325.

LSB02779 / 11.2018 90 schneider-electric.com



#### **Movement detectors System M**





KNX ARGUS 180, flush-mounted			KNX ARGUS 180/2.20 m flush-mounted			
Version	Art. no.	Vers	sion	Art. no.		
white, glossy	MTN631644		white, glossy	MTN631744		
polar white,	MTN631619		polar white, glossy	MTN631719		
active white, glossy	MTN631625		active white, glossy	MTN631725		
anthracite	MTN632614		anthracite	MTN632714		
aluminium	MTN632660		aluminium	MTN632760		

For System M.

Movement detector for indoors.

When a movement is detected, a data telegram defined by the programming is transmitted.

With integrated bus coupling unit.

KNX software functions: Five movement blocks: up to four functions can be triggered per block. Telegrams: 1 bit, 1 byte, 2 bytes. Normal operation, master, slave, safety pause, disable function. Sensitivity, brightness and staircase timer can be set using the ETS or the potentiometer. Self-adjusting staircase timer.

Angle of detection: 180°

Range: 8 m (for mounting height of 1.1 m)

Number of levels: 1 Number of zones: 14

Sensitivity: infinitely adjustable (ETS or

potentiometer)

Light sensor: infinitely adjustable from approx. 10 to 2000 Lux (ETS or potentiometer)

Time: adjustable in steps from 1 s to 8 min (potentiometer) or adjustable from 1 s to 255

hours (ETS)

EC Directives: Low-voltage guideline 2006/95/EC and EMC guideline 2004/108/EC Contents: With bus connecting terminal and supporting plate.

For System M.

Indoor movement detector with anti-crawl protection.

When a movement is detected, a data telegram defined by the programming is transmitted.

With integrated bus coupling unit. For wall mounting in a size 60 mounting box, optimal installation at 2.2 m.

KNX software functions: Five movement blocks: up to four functions can be triggered per block. Telegrams: 1 bit, 1 byte, 2 bytes. Normal operation, master, slave, safety pause, disable function. Sensitivity, brightness and staircase timer can be set using the ETS or the potentiometer. Two movement sensors: the sensitivity and range can be set separately for each sensor. Self-adjusting staircase timer.

Angle of detection: 180°

Range: 8 m right/left, 12 m to the front (for a

mounting height of 2.20 m)

Mounting height: 2.2 m or 1.1 m with half

the range

Number of levels: 6 Number of zones: 46

Number of movement sensors: 2, sector-

orientated, adjustable

Sensitivity: infinitely adjustable (ETS or

potentiometer)

Light sensor: infinitely adjustable from approx. 10 to 2000 Lux (ETS or potentiometer) Time: adjustable in steps from 1 s to 8 min (potentiometer) or adjustable from 1 s to 255 hours (ETS)

EC Directives: Low-voltage guideline 2006/95/EC and EMC guideline 2004/108/EC Contents: With bus connecting terminal and supporting plate.

91

With cover segments to limit the area of

detection.





#### KNX High Bay presence detector



Version Art. no.
white MTN6354-0019 New

KNX presence detector for surface-mounted installation in rooms with high ceilings, e.g. high-bay warehouses or sports halls.

The presence detector detects the presence of persons even in the case of small movements. Control of the lighting is carried out dependent on movement (2 channels) or additionally dependent on brightness (1 channel) via KNX telegrams. If there is sufficient daylight, the lighting is switched off or adapted to a detection brightness (constant light regulation).

Devices for heating, ventilation or air conditioning (HVAC) can also be controlled (1 channel). The presence detector has two detection sensors (passive infrared), a brightness sensor, an IR receiver and an LED to indicate a detected movement, in test mode indication of the activated programming mode.

The presence detector can be used as a single detector or in master-slave mode. The setting is carried out in the ETS.

The presence detector can also be set and tested without the ETS, but with the appropriate remote control (available as an accessory).

Indoor installation on ceiling (IP 54) with surface-mounted housing with two screws and plugs.

Optionally, a protective metal basket (available as an accessory) can be installed to protect the lens

KNX software functions: Movement detection: The detected presence of a person is signalled using a KNX telegram. Lighting control: The room lighting is controlled depending on movement and brightness. If there is sufficient daylight, the lighting is switched off or dimmed to a constant level. Basic lighting: Activates basic lighting after the overtravel time has elapsed, either for a limited time or dependent on the brightness. HVAC control: Devices for heating, ventilation, air conditioning (HVAC) are switched from energy-saving mode to comfort mode dependent on movement. Operating modes: Single detector, Master, Slave, Master in parallel operation. Master: Controls the lighting and HVAC system. Additional detectors as slaves increase the area of detection. Slave: Only detects movement in its area and sends the information to the master. Master in parallel operation: Controls the lighting in its area (can be expanded with additional detectors as slaves). The only master in the installation only controls the HVAC system for the entire area. 2 logic gates

Angle of detection: 360° Opening angle: 180°

Range: Radius of max. 18 m (tangential)

Mounting height: 4 - 14 m Optimal mounting height: 12 m Time setting: 60 s - 255 min. Sensors: 2 x passive infrared Number of zones: 1416

Detection brightness: internal light sensor adjustable from approx. 2 to 1000 Lux

Protection rating: IP 54

EC Directives: Low voltage directive 2006/95/EC and EMC directive 2004/108/EC

97

Dimensions: 124 x 65 mm (Ø x H)

Accessories: Remote control for KNX presence detector MTN6300-0002

Protective basket for KNX presence detector MTN6300-0001





#### **KNX Corridor presence detector**



Version Art. no.
white MTN6355-0019 New

KNX presence detector for surface-mounted installation in long corridors.

The presence detector detects the presence of persons even in the case of small movements. Control of the lighting is carried out dependent on movement (2 channels) or additionally dependent on brightness (1 channel) via KNX telegrams. If there is sufficient daylight, the lighting is switched off or adapted to a detection brightness (constant light regulation).

Devices for heating, ventilation or air conditioning (HVAC) can also be controlled (1 channel). The presence detector has two detection sensors (passive infrared), a brightness sensor, an IR receiver and an LED to indicate a detected movement, in test mode indication of the activated programming mode.

The presence detector can be used as a single detector or in master-slave mode. The setting is carried out in the ETS.

The presence detector can also be set and tested without the ETS, but with the appropriate remote control (available as an accessory).

Indoor installation on ceiling (IP 54) with surface-mounted housing with two screws and plugs.

Optionally, a protective metal basket (available as an accessory) can be installed to protect the lens.

KNX software functions: Movement detection: The detected presence of a person is signalled using a KNX telegram. Lighting control: The room lighting is controlled depending on movement and brightness. If there is sufficient daylight, the lighting is switched off or dimmed to a constant level. Basic lighting: Activates basic lighting after the overtravel time has elapsed, either for a limited time or dependent on the brightness. HVAC control: Devices for heating, ventilation, air conditioning (HVAC) are switched from energy-saving mode to comfort mode dependent on movement. Operating modes: Single detector, Master, Slave, Master in parallel operation. Master: Controls the lighting and HVAC system. Additional detectors as slaves increase the area of detection. Slave: Only detects movement in its area and sends the information to the master. Master in parallel operation: Controls the lighting in its area (can be expanded with additional detectors as slaves). The only master in the installation only controls the HVAC system for the entire area. 2 logic gates

Angle of detection: 360° Opening angle: 45°

Range: max. 20 x 4 m (tangential)

max. 12 x 4 m (radial)

Mounting height: 2.5 - 5 m

Optimal mounting height: 2.8 m

Time setting: 60 s - 255 min.

Sensors: 2 x passive infrared

Number of zones: 280

Detection brightness: internal light sensor adjustable from approx. 2 to 1000 Lux

Protection rating: IP 54

EC Directives: Low voltage directive 2006/95/EC and EMC directive 2004/108/EC

Dimensions: 124 x 65 mm (Ø x H)

Accessories: Remote control for KNX presence detector MTN6300-0002

Protective basket for KNX presence detector MTN6300-0001

98 schneider-electric.com LSB02779 / 11.2018







#### **KNX ARGUS Presence Basic**



Version polar wh aluminiu

	Art. no.	Version	Art. no.
nite	MTN630719	aluminium	MTN630860
ım	MTN630760	polar white	MTN630819

Presence detection indoors

If KNX ARGUS Presence detects smaller movements in the room, data telegrams are transmitted via KNX to control the lighting, blind or heating at the same time.

When the lighting is controlled by brightnessdependent movement detection, the device constantly monitors the brightness in the room. If sufficient natural light is at hand, the device switches the artificial light off even if a person is present. The overshoot time can be adjusted using the ETS.

With integrated bus coupling unit. For ceiling mounting in a size 60 mounting box, optimal installation at 2.5 m. Can also be mounted to ceilings using the surface mounting housing for ARGUS Presence.

KNX software functions: Two movement/ presence blocks: up to four functions can be triggered per block. Telegrams: 1 bit, 1 byte, 2 bytes.

Normal operation (no master/slave), safety pause, disable function. Self-adjusting staircase timer. Actual brightness value: can be specified via the internal and/or an external light sensor.

Angle of detection: 360°

Range: a radius of max. 7 m (at a mounting height of 2.50 m)

Number of levels: 6

Number of zones: 136 with 544 switching

segments

Number of movement sensors: 4 Light sensor: internal light sensor infinitely adjustable from approx. 10 to 2000 Lux (ETS); external light sensor via KNX EC Directives: Low-voltage guideline 2006/95/EC and EMC guideline 2004/108/EC Accessories: Surface-mounted housing for ARGUS Presence MTN550619

Contents: With bus connecting terminal and

supporting plate.

Presence detection indoors

**KNX ARGUS Presence** 

If KNX ARGUS Presence detects smaller movements in the room, data telegrams are transmitted via KNX to control the lighting, blind or heating at the same time.

When the lighting is controlled by brightnessdependent movement detection, the device constantly monitors the brightness in the room. If sufficient natural light is at hand, the device switches the artificial light off even if a person is present. The overshoot time can be adjusted using the ETS.

With integrated bus coupling unit. For ceiling mounting in a size 60 mounting box, optimal installation at 2.5 m. Can also be mounted to ceilings using the surface mounting housing for ARGUS Presence.

KNX software functions: Five movement/ presence blocks: up to four functions can be triggered per block. Telegrams: 1 bit, 1 byte, 2 bytes.

Normal operation, master, slave, monitoring, safety pause, disable function. Four movement sensors: the sensitivity and range can be set separately for each sensor. Self-adjusting staircase timer. Actual brightness value: can be detected via the internal and/or an external light sensor. Actual value correction.

Angle of detection: 360°

Range: a radius of max. 7 m (at a mounting height of 2.50 m)

Number of levels: 6

Number of zones: 136 with 544 switching

segments

Number of movement sensors: 4, sepa-

rately adjustable

Light sensor: internal light sensor infinitely adjustable from approx. 10 to 2000 Lux (ETS); external light sensor via KNX EC Directives: Low-voltage guideline 2006/95/EC and EMC guideline 2004/108/EC

Accessories: Surface-mounted housing for ARGUS Presence MTN550619

Contents: With bus connecting terminal and

supporting plate.



## Other sensors

#### Other sensors





#### KNX brightness and temperature sensor



light grey	MTN66	3991			
version	Art. 110				

The sensor records brightness and temperature and transmits these values to the bus. It has a temperature sensor and a brightness sensor.

- 3 universal channels for single tasks or logic operations. Temperature and brightness threshold in any combination.
- Sun protection channel for blinds/roller shutter control. Objects for: twilight threshold, brightness threshold, drive control, automatic sun function, teaching, security.
- Automatic sun protection. Controls the blinds automatically during the day.
- Teaching object. With this, every brightness threshold can be reset by the touch of a key. Suitable for mounting on an outside wall.

With integrated bus coupler. The bus is connected using a bus connecting terminal.

Power consumption: max. 150 mW

Sensors: 2

Temperature measurement range: - 25 °C to + 55 °C (±5 % or ±1 degree) Brightness measurement range: 1 to 100,000 lux (±20% or ±5 lux)

Type of protection: IP 54 according to DIN EN 60529 for vertical installation with cover

**Dimensions:** 110 x 72 x 54 mm

#### KNX CO<sub>2</sub>, humidity and temperature sensor AP



Version	Art. no.
polar white	MTN6005-0001

The device is a combined sensor for CO<sub>2</sub>, temperature and humidity measurement (relative

It is used to monitor the air quality in meeting rooms, offices, schools/kindergartens, passive or low-energy houses and living areas without controlled ventilation.

The CO<sub>2</sub> content of the air is a verifiable indicator of the ambient air quality. The higher the CO<sub>2</sub> content, the worse the ambient air is.

KNX software functions: Threshold adjustment range: 500–2550 ppm. Object ""Physical value": 0-9999 ppm. There are 3 independent measured value thresholds for CO<sub>2</sub> and relative humidity and a threshold for the temperature value. An action is carried out if the thresholds are not reached or if they are exceeded: Send priority. Switching, value. Each threshold has a locking object.

Power supply: bus voltage

Current consumption from bus: max. 10 mA Ambient temperature: -5 °C ... +45 °C Measuring range, CO2: 300 – 9999 ppm Measuring range, temperature: 0 °C ... +40 °C Measuring range, humidity: linear 20 % ... 100 %

Type of protection: IP 20 in accordance with DIN EN 60529

Dimensions: 74x74x31 mm

LSB02779 / 11.2018 104 schneider-electric.com







#### Switch actuator REG-K/4x230/10 with manual mode



Version Art. no

light grey MTN649204

For independent switching of up to 4 loads via make contacts. The function of the switching channels is freely configurable. All switching outlets can be operated manually using push-button operation.

Channel status display via LEDs. A green LED indicates readiness for operation. With integrated bus coupler. For installation on DIN rails TH35 according to EN 60715. The bus is connected using a bus connecting terminal; a data rail is not necessary.

KNX software functions: Operation as break contact/make contact. Programmable behaviour for download. Delay functions for each channel. Staircase lighting function with/without manual OFF function. Cut-out warning for staircase lighting function. Scenes. Central function. Disable function. Logic operation or priority control. Status feedback function for each channel. Power supply:

Nominal voltage: AC 230 V, 50-60 Hz

For each switch output:

Nominal current: 10 A,  $cos\phi$  = 1; 10 A,  $cos\phi$  = 0.6 Incandescent lamps: AC 230 V, max. 2000 W Halogen lamps: AC 230 V, max. 1700 W

Fluorescent lamps: AC 230 V, max. 1800 W, uncompensated

AC 230 V, max. 1000 W with parallel compensation Capacitive load: AC 230 V, max. 105  $\mu$ F Device width: 4 modules = approx. 72 mm

Contents: With bus connecting terminal and cable cover.

#### KNX Switch Actuator Basic REG-K/4x/16 A with manual mode



Version Art. no.

#### MTN6700-0004

For independent switching of 4 loads via make contacts. All switch outputs can be operated with manual switches. With integrated bus coupling unit.

A green LED indicates readiness for operation after the application has been loaded. For installation on DIN rails TH35 according to EN 60715. The bus is connected using a bus connecting terminal; a data rail is not necessary.

**KNX software functions:** Staircase lighting function with/without manual OFF function, cutout warning for staircase lighting function, logic operation, status feedback per channel, central function, parameterisation for bus voltage failure and recovery.

Rated voltage (nominal voltage): AC 100-240 V, 50-60 Hz

Tolerance range: min. AC 90 V - max. AC 265 V

For each switching contact:

**Nominal current:** 16 A, inductive load  $\cos \varphi = 0.6$ 

Nominal load

Incandescent lamps: AC 100 V, max. 1600 W

AC 230 V, max. 3600 W AC 240 V, max. 3840 W

Halogen lamps: AC 100 V, max. 1080 W

AC 230 V, max. 2500 W AC 240 V, max. 2500 W

Fluorescent lamps: AC 100 V, max. 900 VA

AC 230 V, max. 2000 VA AC 240 V, max. 2000 VA parallel-compensated

Capacitive load: AC 230 V, 16 A, max. 105  $\mu$ F Device width: 4 modules = approx. 72 mm

Contents: With bus connecting terminal and cable cover.

124 schneider-electric.com LSB02779 / 11.2018





#### Switch actuator REG-K/4x230/16 with manual mode



Version Art. no.

light grey MTN647593

For independent switching of four loads via make contacts. With integrated bus coupler 2 and screw terminals. The 230 V switch output can be operated with a manual switch. A green LED indicates readiness for operation after the application has been loaded. For installation on DIN rails TH35 according to EN 60715. The bus is connected using a bus connecting terminal; a data rail is not necessary.

KNX software functions: Operation as break or make contact, delay functions for each chan-

nel, staircase lighting function with/without manual OFF function, cut-out warning for staircase lighting function, blocking and additional logic operation or priority control, scenes, status feedback function per channel, central function, comprehensive parameterisation for bus voltage failure and recovery, parameterisable download behaviour.

Nominal voltage: 230 V AC, 50-60 Hz

For each switching contact:Switching current: 16 A,  $\cos \varphi = 0.6$ 

AC1 operation: max. 16 A AC3 operation: max. 10 A AC5 operation: max. 16 A

DC current switching capacity: max. 16 A/ 24 V DC

Output life endurance: Mechanical: >106

AC1/AC3/AC5 operation: >3x104

230V, 1A resistive: >8x105Incandescent lamps: 230 V AC, max. 3600 W

Halogen lamps: 230 V AC, max. 2500 W Fluorescent lamps: AC 230 V, max. 2500 VA Capacitive load: 230 V AC, 16 A, max. 200 µF

Minimum switching performance: 100 mA/12 V AC/DC

Maximum peak inrush-current:

150µs: 600 A 250µs: 480 A 600µs: 300 A

**Device width:** 4 modules = approx. 72 mm

Contents: With bus connecting terminal and cable cover.





#### KNX Switch Actuator Basic REG-K/8x/16 A with manual mode



Version

Art. no.

#### MTN6700-0008

For independent switching of 8 loads via make contacts. All switch outputs can be operated with manual switches. With integrated bus coupler.

A green LED indicates readiness for operation after the application has been loaded.

For installation on DIN rails TH35 according to EN 60715. The bus is connected using a bus connecting terminal; a data rail is not necessary.

KNX software functions: Staircase lighting function with/without manual OFF function, cut-

out warning for staircase lighting function, logic operation, status feedback per channel, central function, parameterisation for bus voltage failure and recovery.

Rated voltage (nominal voltage): AC 100-240 V, 50-60 Hz

Tolerance range: min. AC 90 V - max. AC 265 V

For each switching contact:

**Nominal current:** 16 A, inductive load  $\cos \varphi = 0.6$ 

Nominal load

Incandescent lamps: AC 100 V, max. 1600 W

AC 230 V, max. 3600 W AC 240 V, max. 3840 W

Halogen lamps: AC 100 V, max. 1080 W

AC 230 V, max. 2500 W AC 240 V, max. 2500 W

Fluorescent lamps: AC 100 V, max. 900 VA

AC 230 V, max. 2000 VA AC 240 V, max. 2000 VA parallel-compensated

Capacitive load: AC 230 V, 16 A, max. 105 µF Device width: 8 modules = approx. 144 mm

Contents: With bus connecting terminal and cable cover.

128 schneider-electric.com LSB02779 / 11.2018





#### Switch actuator REG-K/8x230/16 with manual mode



Version

Art. no.

light grey

MTN647893

For independent switching of 8 loads via make contacts. All 230 V switch outputs can be operated with manual switches. With integrated bus coupler.

The device is connected to the mains via screw terminals; every second L connection is bridged internally. A green LED indicates readiness for operation after the application has been loaded.

For installation on DIN rails TH35 according to EN 60715. The bus is connected using a bus connecting terminal; a data rail is not necessary.

KNX software functions: Operation as break or make contact, delay functions for each channel, staircase lighting function with/without manual OFF function, cut-out warning for staircase lighting function, blocking and additional logic operation or priority control, scenes, status feedback function per channel, central function, comprehensive parameterisation for bus voltage failure and recovery, parameterisable download behaviour.

Nominal voltage: AC 100-240 V ±10%

Operating voltage: min. AC 90 V - max. AC 265 V

Mains frequency: 50-60 Hz  $\pm$ 10% For each switching contact: Switching current: 16 A,  $\cos \varphi = 0.6$ 

AC1 operation: max. 16 A AC3 operation: max. 10 A AC5 operation: max. 16 A

DC current switching capacity: max. 16 A/ 24 V DC

Output life endurance:

Mechanical: >106

AC1/AC3/AC5 operation: >3x10<sup>4</sup> 230V, 1A resistive: >8x10<sup>5</sup>

Nominal load

Incandescent lamps: AC 100 V, max. 1600 W

AC 230 V, max. 3600 W AC 240 V, max. 3840 W

Halogen lamps: AC 100 V, max. 1086 W

AC 230 V, max. 2500 W AC 240 V, max. 2608 W

Fluorescent lamps: AC 100 V, max. 1086 VA

AC 230 V, max. 2500 VA AC 240 V, max. 2608 VA parallel-compensated

Capacitive load: AC 230 V, 16 A, max. 200 µF

Minimum switching performance: 100 mA/12 V AC/DC

Maximum peak inrush-current:

150μs: 600 A 250μs: 480 A 600μs: 300 A

**Device width:** 8 modules = approx. 144 mm

Contents: With bus connecting terminal and cable cover.







#### Switch actuator REG-K/12x230/10 with manual mode



Version

Art. no.

liaht arev

MTN649212

For independent switching of up to 12 loads via make contacts. The function of the switching channels is freely configurable. All switching outlets can be operated manually using pushbutton operation.

Channel status display via LEDs. A green LED indicates readiness for operation. With integrated bus coupler. For installation on DIN rails TH35 according to EN 60715. The bus is connected using a bus connecting terminal; a data rail is not necessary.

KNX software functions: Operation as break contact/make contact. Programmable behaviour for download. Delay functions for each channel. Staircase lighting function with/without manual OFF function. Cut-out warning for staircase lighting function. Scenes. Central function. Disable function. Logic operation or priority control. Status feedback function for each channel. Power supply:

Nominal voltage: AC 230 V, 50 - 60 Hz

External auxiliary voltage (optional): AC 110 - 240 V, 50 - 60 Hz, max. 2 VA

For each switch output:

Nominal current: 10 A,  $\cos \varphi$  = 1; 10 A,  $\cos \varphi$  = 0.6 Incandescent lamps: AC 230 V, max. 2000 W Halogen lamps: AC 230 V, max. 1700 W

Fluorescent lamps: AC 230 V, max. 1800 W, uncompensated

AC 230 V, max. 1000 W parallel-compensated Capacitive load: AC 230 V, max. 105 μF Device width: 6 modules = approx. 108 mm

Contents: With bus connecting terminal and cable cover.

#### KNX Switch Actuator Basic REG-K/12x/16 A with manual mode



Version

Art. no.

#### MTN6700-0012

For independent switching of 12 loads via make contacts. All switch outputs can be operated with manual switches. With integrated bus coupler.

A green LED indicates readiness for operation after the application has been loaded. For installation on DIN rails TH35 according to EN 60715. The bus is connected using a bus connecting terminal; a data rail is not necessary.

**KNX software functions:** Staircase lighting function with/without manual OFF function, cutout warning for staircase lighting function, logic operation, status feedback per channel, central function, parameterisation for bus voltage failure and recovery.

Rated voltage (nominal voltage): AC 100-240 V, 50-60 Hz

Tolerance range: min. AC 90 V - max. AC 265 V

For each switching contact:

**Nominal current:** 16 A, inductive load  $\cos \varphi = 0.6$ 

Nominal load

Incandescent lamps: AC 100 V, max. 1600 W

AC 230 V, max. 3600 W AC 240 V, max. 3840 W

Halogen lamps: AC 100 V, max. 1080 W

AC 230 V, max. 2500 W AC 240 V, max. 2500 W

Fluorescent lamps: AC 100 V, max. 900 VA

AC 230 V, max. 2000 VA AC 240 V, max. 2000 VA parallel-compensated

Capacitive load: AC 230 V, 16 A, max.  $105 \mu F$  Device width: 12 modules = approx. 216 mm

Contents: With bus connecting terminal and cable cover.





#### Switch actuator REG-K/12x230/16 with manual mode



For independent switching of 12 loads via make contacts. All 230 V switch outputs can be operated with manual switches. With integrated bus coupler.

The device is connected to the mains via screw terminals; every second L connection is bridged internally. A green LED indicates readiness for operation after the application has been loaded.

For installation on DIN rails TH35 according to EN 60715. The bus is connected using a bus connecting terminal; a data rail is not necessary.

KNX software functions: Operation as break or make contact, delay functions for each channel, staircase lighting function with/without manual OFF function, cut-out warning for staircase lighting function, blocking and additional logic operation or priority control, scenes, status feedback function per channel, central function, comprehensive parameterisation for bus voltage failure and recovery, parameterisable download behaviour. **Nominal voltage:** 230 V AC, 50-60 Hz

For each switching contact: Switching current: 16 A,  $\cos \varphi = 0.6$ 

AC1 operation: max. 16 A AC3 operation: max. 10 A AC5 operation: max. 16 A

DC current switching capacity: max. 16 A/ 24 V DC

Output life endurance:

Mechanical: >106

AC1/AC3/AC5 operation: >3x104

230V, 1A resistive: >8x10<sup>5</sup>Incandescent lamps: 230 V AC, max. 3600 W

Halogen lamps: 230 V AC, max. 2500 W Fluorescent lamps: AC 230 V, max. 2500 VA Capacitive load: 230 V AC, 16 A, max. 200 µF

Minimum switching performance: 100 mA/12 V AC/DC

Maximum peak inrush-current:

150µs: 600 A 250µs: 480 A 600µs: 300 A

Device width: 12 modules = approx. 216 mm

Contents: With bus connecting terminal and cable cover.

132 schneider-electric.com LSB02779 / 11.2018



# Blind/switch actuators

## Blind/switch actuators



#### Blind/switch actuator REG-K/8x/16x/10 with manual mode



Version

Art. no.

light grey

MTN649908

For independent control of up to 8 blind/roller shutter drives or for switching up to 16 loads via make contacts. The function of the blind or switching channels is freely configurable. All blind/switch outputs can be operated manually using push-buttons.

The bus is connected using a bus connecting terminal; a data rail is not necessary. Channel status display via LEDs. A green LED indicates readiness for operation.

With integrated bus coupler. For installation on DIN rails TH35 according to EN 60715. The bus is connected using a bus connecting terminal; a data rail is not necessary.

KNX software functions: Blind functions: Blind type. Running time. Idle time. Step interval. Weather alarm. 8-bit positioning for height and slats. Scenes. Status and feedback function. Switch actuator functions: Operation as break contact/make contact. Programmable behaviour for download. Delay functions for each channel. Staircase lighting function with/without manual OFF function. Cut-out warning for staircase lighting function. Scenes. Central function. Disable function. Logic operation or priority control. Status feedback function for each channel.

Nominal voltage: AC 100-240 V ±10% Operating voltage: min. AC 90 V - max. AC 265 V

Mains frequency: 50-60 Hz ±10%

For each blind output:

**Nominal current:** 10 A, inductive load  $\cos \varphi = 0.6$ 

Motor load: AC 100 V, max. 434 W

AC 230 V, max. 1000 W AC 240 V, max. 1043 W For each switch output:

**Nominal current:** 10 A, ohmic load  $\cos \varphi = 1$ 

10 A, inductive load  $\cos \varphi = 0.6$ 

Nominal load

Incandescent lamps: AC 100 V, max. 869 W

AC 230 V, max. 2000 W AC 240 V, max. 2086 W

**Halogen lamps:** AC 100 V, max. 739 W AC 230 V, max. 1700 W

AC 240 V, max. 1773 W Fluorescent lamps: AC

Fluorescent lamps: AC 100 V, max. 434 VA

AC 230 V, max. 1000 VA AC 240 V, max. 1043 VA parallel-compensated

Capacitive load: AC 230 V, 10 A, max. 105 μF External auxiliary voltage (optional):

Nominal voltage: AC 110-240 V ±10% Operating voltage: min. AC 92 V - max. AC 265 V

**Device width:** 8 modules = approx. 144 mm

**Note:** The blind actuator/switch actuator cannot be used in conjunction with the weather-dependent automatic functions of the weather combi-sensor/DCF77 art. no. MTN663692. If you

require these functions then use the blind actuators art. no. MTN6498...

Contents: With bus connecting terminal and cable cover.

136 schneider-electric.com LSB02779 / 11.2018



# Blind actuators

#### **Blind actuators**





#### Blind actuator REG-K/2x/10 with manual mode

Art. no.



Version

light grey MTN649802

For independent control of 2 blind/roller shutter drives. The function of the blind channels is

freely configurable. All blind outputs can be operated manually using push-button operation. Channel status display via LEDs. A green LED indicates readiness for operation. With integrated bus coupler. For installation on DIN rails TH35 according to EN 60715. The bus is connected using a bus connecting terminal; a data rail is not necessary. KNX software functions: Blind functions: Blind type. Running time. Idle time. Step interval. Differentiated disable functions and weather alarms. 8-bit positioning for height and slat. Scenes. Manual/automatic mode. Differentiated status and status feedback functions.

For each blind output:

Nominal voltage: AC 100-240 V ±10% Operating voltage: min. AC 90 V - max. AC 265 V Mains frequency: 50-60 Hz ±10%

**Nominal current:** 10 A, inductive load  $\cos \varphi = 0.6$ 

Motor load: AC 100 V, max. 434 W

AC 230 V, max. 1000 W AC 240 V, max. 1043 W

Device width: 4 modules = approx. 72 mm

Contents: With bus connecting terminal and cable cover.

#### Blind actuator REG-K/4x24/6 with manual mode



Version Art. no. light grey MTN648704

For independent control of 4 blind/roller shutter drives. The function of the blind channels is freely configurable. All blind outputs can be operated manually using push-button operation. Channel status display via LEDs. A green LED indicates readiness for operation. With integrated bus coupler. For installation on DIN rails TH35 according to EN 60715. The bus is connected using a bus connecting terminal; a data rail is not necessary.

**KNX** software functions: Blind functions: Blind type. Running time. Idle time. Step interval. Differentiated disable functions and weather alarms. 8-bit positioning for height and slat. Scenes. Manual/automatic mode. Differentiated status and status feedback functions.

For each blind output:

Nominal voltage: DC 24 V ±10 %

Nominal current: 6 A

**Load types:** 24 V direct current drives **Device width:** 4 modules = approx. 72 mm

Contents: With bus connecting terminal and cable cover.

138 schneider-electric.com LSB02779 / 11.2018



# Dimming actuators/control units



#### KNX universal dimming actuator LL REG-K/4x230/250 W



Version Art. no.

light grey MTN6710-0004

#### LED/ESL/CFL dimmer

For switching and dimming **dimmable LED lamps**, incandescent lamps, HV halogen lamps, LV halogen lamps using dimmable wound transformers or electronic transformers or dimmable compact fluorescent lamps.

#### (leading and trailing-edge phases)

With integral bus coupler, screw terminals, short-circuit, open circuit and excess temperature protection with soft start lamp start.

Different phases can be connected.

The dimmer actuator automatically recognises the connected load. This happens in the background when switching on. Combinations of ohmic and inductive, or ohmic and capacitive loads can also be connected. Combinations of inductive and capacitive loads must not be connected. No flickering of LEDs in switched-off state.

For installation on DIN rails TH35 according to EN 60715. The bus is connected using a bus connecting terminal.

KNX software functions: Dimming operation by KNX, dimming and emergency operation by manual switch, enable/block manual mode by bus, automatic dimming operating mode or leading edge phase for certain LED/ESL/CFL lamps, load separation possible in OFF state, various dimming curves and dimming rates, same dimming time, minimum/maximum dimming value, starting behaviour, memory function, 50% brightness when starting ESL/CFL lamp, dimming/value object switches channel, ON/OFF delay, staircase lighting function (with/without manual OFF function, non-/retriggerable, time accumulating, warning function), scenes (up to 8 internally stored brightness values can be retrieved), central function, logic operations (AND/OR) or priority control, disable function (behaviour of locking), status feedback (switching state, brightness value, fault), behaviour on mains voltage recovery/bus voltage recovery/download.

Nominal voltage: AC 110 - 130 V / AC 220 - 230 V, 50/60 Hz

Channels: 4 (different phases possible)

Nominal power: 4 x 250 W/VA (230 V), 4 x 125 W/VA (110 V)

3 channels: 1 x 350 W/VA and 2 x 250 W/VA (230 V), 1 x 175 W/VA and 2 x 125 W/VA (110 V)

2 channels: 2 x 350 W/VA (230 V), 2 x 175 W/VA (110 V)

Minimum load/channel: 4 W (ohmic)

4 W (ohmic-capacitive) 25 VA (ohmic-inductive)

**Device width:** 8 HP = approx. 144 mm

Note: Information about the "Dimming LED lamps" can be obtained on the Internet at

"Schneider-Electric dimmer test". http://schneider-electric.dimmer-test.com

Contents: With bus connecting terminal and cable cover.



# Dimming actuators/control units



#### Control unit 0-10 V REG-K/3-gang with manual mode



Version Art. no.

light grey MTN646991

For connecting devices with 0-10 V interface to KNX. With integrated bus coupler and screw terminals (230 V) or plug-in screw terminals (0-10 V). Each individual 230 V switch output can be operated manually with a manual switch.

For installation on DIN rails TH35 according to EN 60715. The bus is connected using a bus

connecting terminal; a data rail is not necessary.

KNX software functions: Different dimming curves and dimming speeds, the same dimming time, memory function, ON/OFF delay, staircase time function with/without manual OFF function, scenes (up to eight stored brightness values can be retrieved), central function, logic operation or priority control, blocking function, status feedback, behaviour on bus voltage

Switch contact: for switching the electronic ballasts/transformers

Nominal voltage: AC 230 V, 50-60 Hz Nominal current: 16 A,  $\cos \varphi = 0.6$ 

Switching capacity: AC 230 V, 3600 W,  $\cos\phi$  = 1 Capacitive load: AC 230 V, 16 A, 200  $\mu$ F Incandescent lamps: AC 230 V, max. 3600 W Halogen lamps: AC 230 V, max. 2500 W

Fluorescent lamps:

AC 230 V, max. 3600 VA, uncompensated

AC 230 V, max. 2500 VA, with parallel compensation

LV- halogen lamps with wound transformer: max. 2000 VA

0-10 V interface: 0.12-100 mA Voltage range: DC 0-10 V Device width: 4 HP = ca. 72 mm

Contents: With bus connecting terminal and cable cover.

152 schneider-electric.com LSB02779 / 11.2018



## DALI



#### KNX DALI Gateway Basic REG-K/2/16/64



Version

Art. no.

MTN6725-0004

The KNX DALI Gateway connects the KNX bus to **2 DALI outputs**. The gateway is a category I DALI control device with an integrated DALI power supply for the ECGs. The device is a Single-Master Controller according to EN 62386 ed/1 and ed/2. It is able to control DALI ECGs ed/1 and ed/2 -also mixed- but according to single-master controller it cannot support DALI-2 sensors like movement- and presence detectors, switches etc. For each DALI output,

than 16 scenes.

Different colour commands (e.g. white tone control, RGB, XY and HSV) can be interpreted by KNX push-buttons, for example, and DALI DT8 lights can be activated accordingly. The operating hours meter logs the operating hours for the groups. Error messages from individual ECGs and groups can be transmitted via the KNX and visualised.

it supports the switching and dimming of up to 64 ECGs in 16 groups and the control of more

New

A colour control module allows up to 16 time switch functions for brightness and colour on a weekly basis, provided that the device is connected to a time update system. The up to 16 time programmes with up to 300 commands per DALI output can be enabled or disabled using KNX objects. DALI commissioning and configuration, group allocation and scene set-up can be carried out using the ETS application and an ETS app (DCA).

With integrated bus coupler. For installation on DIN rails TH35 according to EN 60715. The bus is connected using a bus connecting terminal; a data rail is not necessary.

KNX software functions: Switching, dimming, value and colour objects per group, plus switching, value and colour objects for broadcast control. Staircase timer function with dimmed lights, also for advance warning and normal, continuous, night and panic modes. Differentiated error analysis per EB and group. Scenes with brightness and colour. Energy saving thanks to reduction in EB standby losses due to additional KNX switching actuator. The colour control module can be used to control brightnesses and colours based on a weekly time switch. (Requirement: weekday and time synchronisation) Any time interval possible, up to 90 s. The up to 16 time programmes can be controlled using KNX objects. Operating hours can be recorded and reset by group, and transmitted by group as an alarm if a threshold value is exceeded. The firmware can be updated using an FAT32-formatted Micro-SD card.

Supply voltage: AC/DC 100-240 V, 50/60 Hz

Outputs: 2x DALI D+, D-, DC 16-18 V (basic insulation, not SELV), max. 250 mA, short

circuit-proof

Interfaces: KNX, DALI

**Type:** DALI category I control device (single master) **Wire range:** Mains supply or DALI: 1.5 - 2.5 mm<sup>2</sup>

IP protection rating: IP20

**Housing width:** 4 HP = approx. 69 mm

154 schneider-electric.com LSB02779 / 11.2018