

ACTUATOR

Mix Actuators (Switching/Blind/Fancoil/Heating/Logic)

KNX MIX ACTUATOR MX104-16A



KNX MIX ACTUATOR MX108-16A



KNX MIX ACTUATOR MX112-16A



KNX MIX ACTUATOR MX116-16A



KNX MIX ACTUATOR MX120-16A



KNX MIX ACTUATOR MX124-16A



■ MAIN FEATURES

Actuators has 7 main function groups;

1. Switching
The switching mode is used for switching lighting devices. The output is controlled by using time, logic and safety functions.
2. Heating
Heating mode uses 1 output channel. It basically controls valve which controls hot water fluid in pipes. The configuration of heating option helps energy consumption.
3. Shutter/Blind
Shutter\Blind may be employed for a variety of reasons, including controlling the amount of sunlight that enters a room, to provide privacy, security, to protect against weather or unwanted intrusion or damage and to enhance the aesthetics of a building. There are two different functionality such as "shutter" and "blind". These options have same capabilities. "Blind" has some additional functionalities for slat usage.
4. Fan coil
A fan coil is a device basically consisting of one or two heat exchangers, one or two control valves and a fan. It is part of an HVAC system connected to a central heating and cooling water supply. The main aim is to heat, cool or ventilate a room in residential, commercial, and industrial buildings.
5. Logic
You can use up to 4 logic operation function. In every logic operation function you can use 4 different inputs. In logic function you can use AND operation, OR operation and XOR operation.
6. Converter
You can use up to 4 different converter operations. Each operation has its own objects. You have to select input type and value and the value which you want to be converted to. There are 6 types for input and output. Object type changes according to your selection.
7. Sequence
This function allows you to set a relation between selected objects. You can select 1-Bit objects as well as 1-Byte objects. There are 4 different sequence functions. Each sequence function has 1 input object and maximum 4 output objects. Number of output object is selectable.

ACTUATOR

KNX Switching/Blind Actuators

TECHNICAL DATA

General	
KNX interface	TP1
Configuration mode	S-Mode
Bus voltage	21-32V DC
Supply voltage	230V AC
Mains frequency	50Hz
Installation type	DIN rail
Mounting width	4 Channels – 72 mm 8/12 Channels – 144 mm 16/20/24 Channels– 252 mm
Ambient temperature	-5 °C ...+45 °C
Storage temperature	-10 °C ... +55 °C
Transportation temperature	-25 °C ... +70 °C
Connection	
Bus connection	KNX bus terminal
Connection type	Screw terminals
Max. cable cross section	Single wire: 1.5 mm ² to 4 mm ² or 2 x 1.5 mm ² to 2x2.5 mm ² Stranded wire without ferrule: 0.75...4 mm ² Stranded wire with ferrule: 0.5 mm ² to 2.5 mm ²
Output contact type	Potent al-free closing contacts
Switching Voltage AC	0-230V AC ±10%, 50/60Hz
Switching capacity at 230V AC	16A (PF=1), 3A (PF=0,6)
Switching Voltage DC	0-50 V DC
Switching capacity at 50V DC (Resistive Load)	16A (PF=1), 3A (PF=0,6)
Current load rating per device	
WRKT4604E5NC	Sum of C1. . . C4 max mum 40A
WRKT4608J5NC	Sum of C1. . . C8 max mum 80A
WRKT4612J5NC	Sum of C1. . . C12 max mum 120A
WRKT4616Q5NC	Sum of C1. . . C16 max mum 160A
WRKT4620Q5NC	Sum of C1. . . C20 max mum 200A
WRKT4624Q5NC	Sum of C1. . . C24 max mum 240A
Overll load current rating of neighbouring outputs	Max 20A Σ max. 20 A Σ max. 20 A Σ max. 20 A { C1 C2 C3 C4 }
Max. connect on load per output	
Ohmic load	3680W
Capacitive load	max. 21 µF at 16A
Induct ve load (shutter...)	600W
Max. inrush current	80A / 20 ms

Max. lamp load per output	
Incandecent / Halogen load	2000W
230V halogen lamps	1800W
Low voltage halogen lamps with electr. switching power supply	800W
Low voltage halogen lamps with inductive transformers	800VA
Fluorescent lamp load (conventional) parallel-corrected	2 x 58W (7 µF), 3 x 36W (4,5 µF), max. 120W (14 µF)
Fluorescent lamp load (conventional) series corrected	14 x 58W, 20 x 36W, max. 1000VA
Fluorescent lamp load with EB	3 x 36W, 2 x 58W, max. 120W
Energy saving lamps	6 x 7W, 4 x 11W, 2 x 15W, 2 x 20W, 2 x 23W

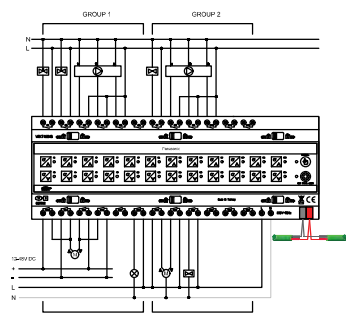
PRODUCT CODES

Product	Product codes
KNX MIX ACTUATOR MX-104 16A	WRKT4604E5NC
KNX MIX ACTUATOR MX-108 16A	WRKT4608J5NC
KNX MIX ACTUATOR MX-112 16A	WRKT4612J5NC
KNX MIX ACTUATOR MX116-16A	WRKT4616Q5NC
KNX MIX ACTUATOR MX120-16A	WRKT4620Q5NC
KNX MIX ACTUATOR MX124-16A	WRKT4624Q5NC

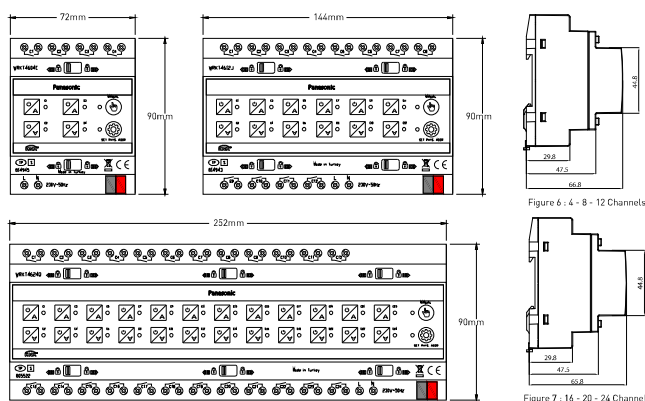
PRODUCT VERSION

Product Features	WRKT4604E5NC (MX104)	WRKT4608J5NC (MX108) WRKT4612J5NC (MX112) WRKT4616Q5NC (MX116) WRKT4620Q5NC (MX120) WRKT4624Q5NC (MX124)
Switching - Lighting	✓	✓
Switching - Heating	✓	✓
Shutter/Blind	✓	✓
Shutter/Blind DC	✓	✓
Fan Coil 2 Pipe	✓	✓
Fan Coil 4 Pipe	-	✓
Logic	✓	✓
Converter	✓	✓
Sequence	✓	✓

CONNECTION



DIMENSIONS



ACTUATOR Switching/Blind Actuators

KNX Switching/Blind Actuator 12/6 Gang



KNX Switching/Blind Actuator 8/4 Gang



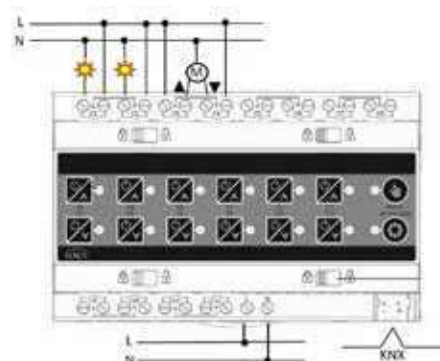
KNX Switching/Blind Actuator 4/2 Gang



■ MAIN FEATURES

- On-site operation possible on the device (e.g. for installation testing), drives also possible without a bus voltage
- Status LED for each channel
- High switching capacity (16A with high-inrush current capacity)
- Different channel functions can be selected: Switching, On/Off Delay, Pulse, Staircase, Roller Shutter, Venetian Blind
- Possible integration of the channels into a maximum of 8 scenes
- Adjustable response to bus failure and restoration of the bus/mains power
- Central UP/DOWN object
- 3 safety objects and function
- Flexible reaction to safety telegrams: individually adjustable for each drive for start and end of the safety status
- Adjustable response to bus failure and restoration of the bus/mains power

■ CONNECTION



ACTUATOR

Switching/Blind Actuators

TECHNICAL DATA

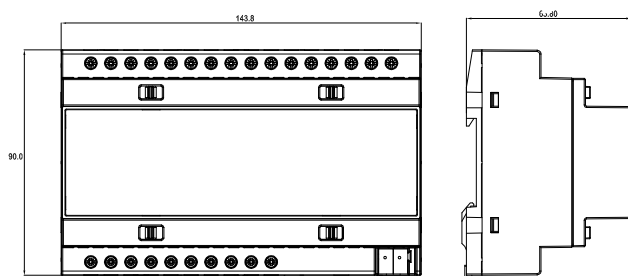
KNX Medium	TP1
Mode of commissioning	S-Mode
KNX supply	21-32V DC
Mains supply	230V AC
Mains frequency	50/60Hz
Installation type	DIN rail
Mounting width	12/6 Channels – 144 mm (8 modules) 8/4 Channels – 144 mm (8 modules) 4/2 Channels– 72 mm (4 modules)
Ambient temperature	-5 °C ... +45 °C
Storage temperature	-25 °C ... +55 °C
Transportation temperature	-25 °C ... +70 °C
Connection	
KNX	KNX bus terminal
Mains and outputs	Screw terminals
Max. cable cross section	Single wire: 1.5 mm ² to 4 mm ² or 2 x 1.5 mm ² to 2x2.5 mm ² Stranded wire without ferrule: 0.75...4 mm ² Stranded wire with ferrule: 0.5 mm ² to 2.5 mm ²
Output contact type	NO , potential-free µ-contact, monostable
Switching Voltage AC	0-230V AC ±10%, 50/60Hz
Switching capacity at 230V AC	16A cos = 1 3A cos = 0.6

Loads per output	
Resistive load	3680W
Capacitive load	max. 21µF at 16A
Motors (shutter or fan)	600W
Max. inrush current	80A / 20 ms
Lamp loads	
Incandescent / Halogen load	2000W
230V halogen lamps	1800W
LV halogen lamps with Tronic transformers	800W
LV halogen lamps with inductive transformers	800VA
Fluorescent lamp load (conventional) parallel-corrected	2 x 58W (7 µF), 3 x 36W (4,5 µF), max. 120W (14 µF)
Fluorescent lamp load (conventional) not corrected	14 x 58W, 20 x 36W, max. 1000VA
Fluorescent lamp (EB - Electronic ballast)	3 x 36W, 2 x 58W, max. 120W
Energy saving lamps	6 x 7W, 4 x 11W, 2 x 15W, 2 x 20W, 2 x 23W

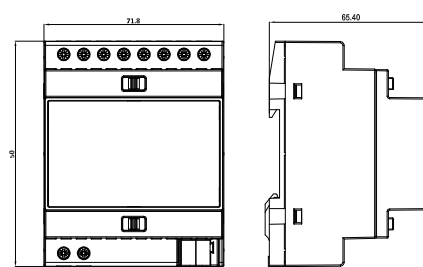
PRODUCT CODES

Product	Product codes
KNX Switching/Blind Actuator 12/6 Gang	WRKT4512J5NC
KNX Switching/Blind Actuator 8/4 Gang	WRKT4508J5NC
KNX Switching/Blind Actuator 4/2 Gang	WRKT4504E5NC

DIMENSIONS



For only 12/6 and 8/4.



For only 4/2

ACTUATOR

Mix Actuators (Switching/Blind/Fancoil/Heating/Logic)

KNX MIX ACTUATOR MX208 - 16 A



KNX MIX ACTUATOR MX212 - 16 A



KNX MIX ACTUATOR MX216 - 16 A



KNX MIX ACTUATOR MX220 - 16 A



KNX MIX ACTUATOR MX224 - 16 A



Discover the KNX Mix Actuators – your affordable gateway to smart home control through the KNX bus. Streamline your space with versatile features:

■ MAIN FEATURES

Switching – Lighting: Effortlessly control lighting loads and electric consumers.

Switching – Heating: Optimize comfort by switching heating products or valves.

Shutter/Blind Control: Drive AC and DC motors for precise control over shutters and blinds.

Fan Coil Management: Tailor your environment with 2-pipe and 4-pipe system control, featuring up to 6 fan levels.

No Additional Power Supply: Powered directly via the KNX bus, eliminating the need for extra voltage supply.

Versatile Relay Options: Choose from versions with 8, 12, 16, 20, or 24 relays to match your automation needs.

Powerful Auxiliary Functions: Unlock creativity with 24 customizable functions, offering 14 different types from sequencers to presence detectors.