

Panasonic

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.

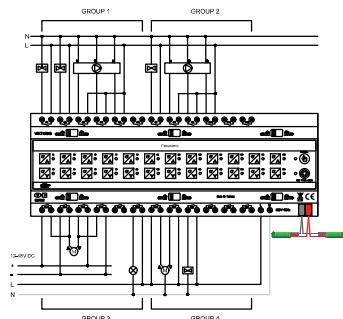
ACTUATOR

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. sum 40A
WRKT4608J5NC	Sum of C1...C8 max. sum 80A
WRKT4612J5NC	Sum of C1...C12 max. sum 120A
WRKT4616Q5NC	Sum of C1...C16 max. sum 160A
WRKT4620Q5NC	Sum of C1...C20 max. sum 200A
WRKT4624Q5NC	Sum of C1...C24 max. sum 240A
Overall load current rating of neighbouring outputs	Max. 20A Σ max. 20 A Σ max. 20 A Σ max. 20 A { C1 C2 C3 Cn }
Max. connect on load per output	
Ohmic load	3680W
Capacitive load	max. 21 µF at 16A
Inductive load (shutter...)	600W
Max. inrush current	80A / 20 ms

CONNECTION



Max. lamp load per output	
Incandescent / 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

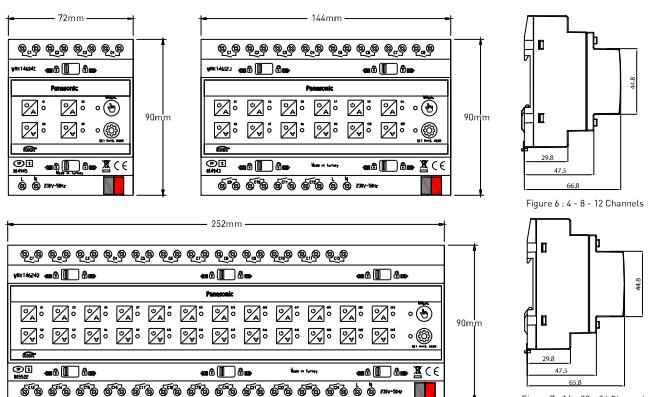
PRODUCT CODES

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	✓	✓

DIMENSIONS



Panasonic

ACTUATOR Switching/Blind Actuators

KNX Switching/Blind Actuator 12/6 Gang



KNX Switching/Blind Actuator 8/4 Gang



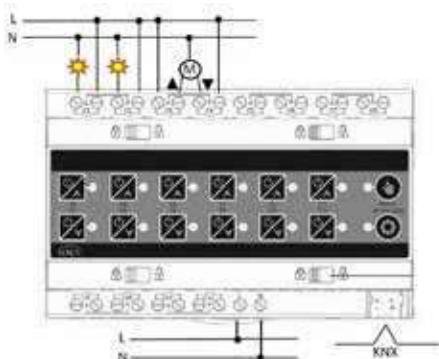
KNX Switching/Blind Actuator 4/2 Gang



■ 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

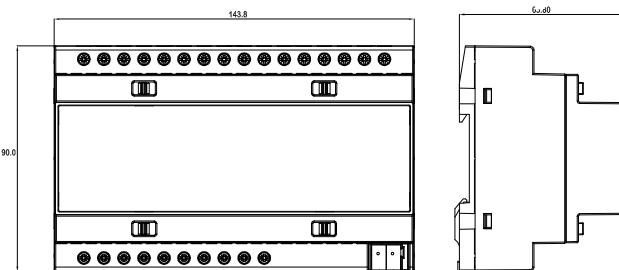
KNX Medium	TP1
Mode of commissioning	S-Mode
KNX supply	21-32V DC
Mains supply	230V AC
Mains frequency	50/60Hz
Installation type	DIN rail
Mounting width	12/6 Channels – 144 mm (8 modules) 8/4 Channels – 144 mm (8 modules) 4/2 Channels – 72 mm (4 modules)
Ambient temperature	-5 °C ...+45 °C
Storage temperature	-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
Capasitive load	max. 21uF at 16A
Motors (shutter or fan)	600W
Max. inrush current	80A / 20 ms
Lamp loads	
Incandescence / 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

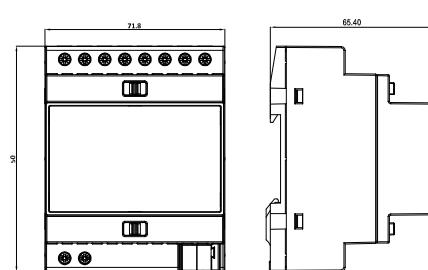
PRODUCT CODES

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

Panasonic

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.