Panasonic

Building Automation Systems

KNX Mix Actuator

- WRKT4708J5NC
- WRKT4712J5NC
- WRKT4716Q5NC
- WRKT4720Q5NC
- WRKT4724Q5NC



GENERAL INFORMATION

KNX Low-Cost Mix Actuators are used to control switching relays from KNX bus where the following functions can be implemented:

1. Switching lighting loads and electric consumers.
2. Driving shutter / blind AC and DC motors.
3. Switching heating products or valves.
4. Controlling fan coils 2-pipe and 4-pipe systems.

Furthermore, many complex configurations and creative scenarios can be done thanks to the powerful auxiliary functions.
The versions of the device differ with number of relays 8-12-16-20-24.
The devices are provided with voltage via KNX bus.

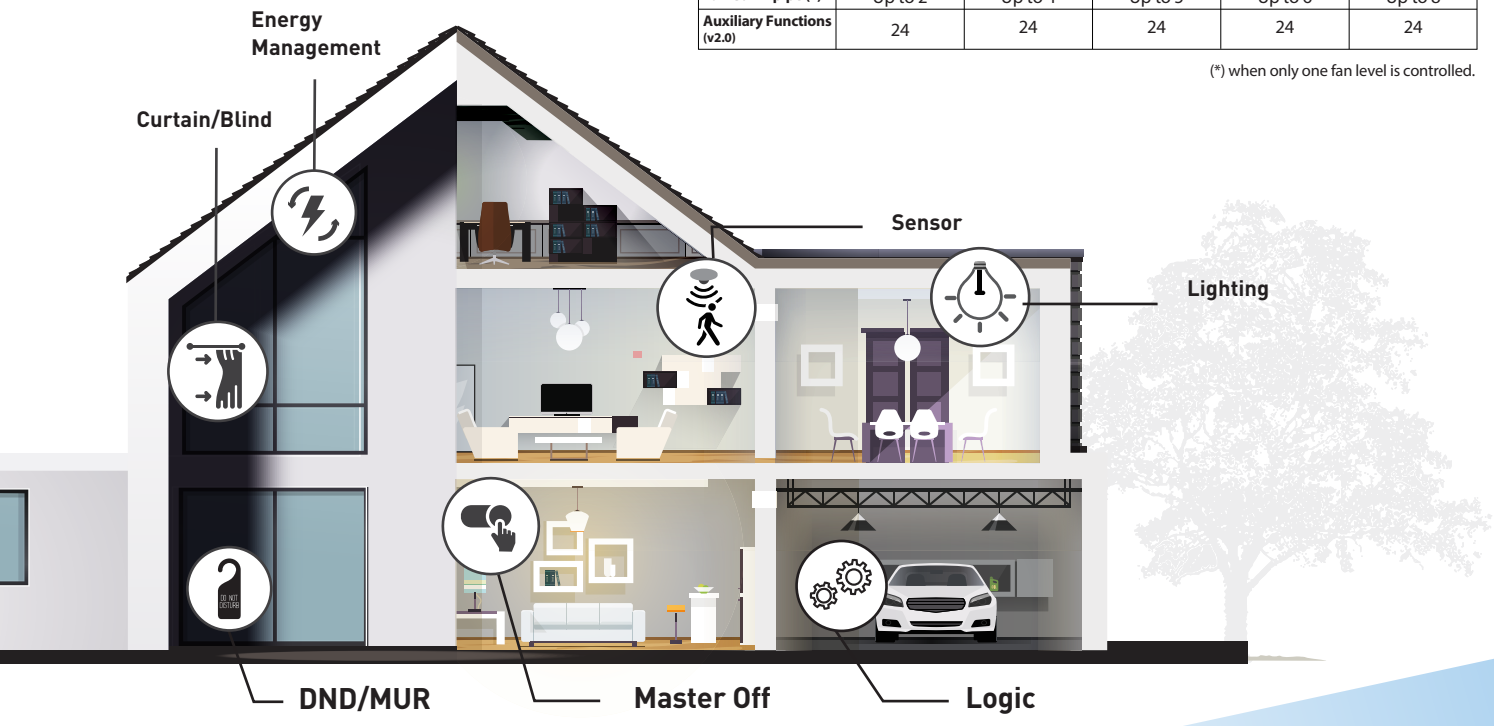
MAIN FEAUTURES

- Switching – Lighting and Heating
- With Fan coil feature you can control 2 pipe and 4 pipe systems up to 6 fan levels.
- The device is powered via KNX bus and does not require an additional auxiliary voltage supply.
- With Shutter/Blind feature you can control AC shutters as well as DC shutter.
- 24 auxiliary functions. The type of each function can be selected from 14 different types (Sequencer, Counter, Scene actuator, Filter, Converter, Logic gate, Presence detector, Controllers ...).

PRODUCT VERSIONS

Product Versions	WRKT4708J5NC (MX208)	WRKT4712J5NC (MX212)	WRKT4716Q5NC (MX216)	WRKT4720Q5NC (MX220)	WRKT4724Q5NC (MX224)
Switching-Lighting	Up to 8	Up to 12	Up to 16	Up to 20	Up to 24
Switching-Heating	Up to 8	Up to 12	Up to 16	Up to 20	Up to 24
Shutter Blind AC	Up to 4	Up to 6	Up to 8	Up to 10	Up to 12
Shutter Blind DC	Up to 2	Up to 3	Up to 4	Up to 5	Up to 6
Fan Coil 2-pipe (*)	Up to 4	Up to 6	Up to 8	Up to 10	Up to 12
Fan Coil 4-pipe (*)	Up to 2	Up to 4	Up to 5	Up to 6	Up to 8
Auxiliary Functions (v2.0)	24	24	24	24	24

(*) when only one fan level is controlled.



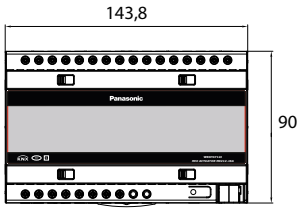
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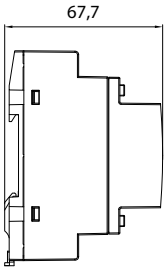
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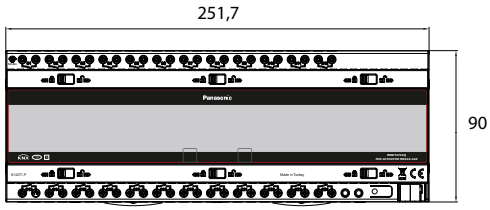
DIMENSIONAL DRAWINGS

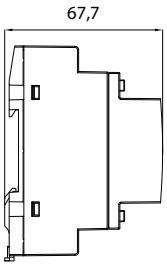
8 – 12 Outputs Devices



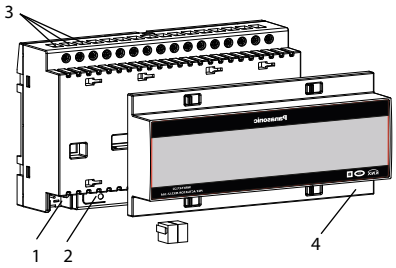


16 – 20 – 24 Outputs Devices





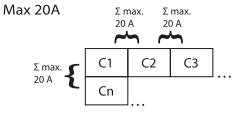
PRODUCT COMPONENTS



1- KNX Programming Button and LED
2- KNX Bus Terminal
3- Terminals of Output Relays
4- Upper Cover

TECHNICAL DATA

KNX	
KNX interface	TP1
Configuration mode	S-Mode
Bus voltage	21 - 32 V DC SELV
Power	
Operating voltage (Power supply)	DC 21 - 32 V (from KNX bus)
Current consumption (bus) / W/O switching	< 5mA
Current consumption (bus)/switching	< 12mA
Environmental Conditions	
Ambient temperature	-5 °C … +45 °C
Storage temperature	-10 °C … +55 °C
Transportation temperature	-25 °C … +70 °C
Ambient humidity	5…93% (non-condensing)
Housing (Mechanical Design)	
Installation type	DIN rail (IEC60715 35mm top-hat rail TH35)
Mounting width	8 Channels - 144mm (8 modules) 12 Channels - 144mm (8 modules) 16 Channels - 252mm (14 modules) 20 Channels - 252mm (14 modules) 24 Channels - 252mm (14 modules)
Bus connection	KNX Bus terminal (243-211 Wago)
Connection type	Screw terminals
Max. Cable cross section for screw terminals	Single wire: 1.5 mm² to 4 mm² or 2x1.5 mm² to 2x2.5mm² Stranded wire without ferrule: 0.75..4 mm² Stranded wire with ferrule: 0.5mm² to 2.5mm²
Weight	8 Channels – 320gr 12 Channels – 370gr 16 Channels – 575gr 20 Channels – 625gr 24 Channels – 675gr

Electrical Safety	
Protection type (IEC60529)	IP 20
Pollution degree (IEC60664)	2
Protection class (IEC61140)	II
Overvoltage category (IEC60664)	III
Standards	
EMC - LVD	EN 60669-2-1, EN 50428
KNX	EN 50090
Current Load Rating Per Device	
WRKT4708J-	Sum of C1..C8 maximum 80A
WRKT4712J-	Sum of C1..C12 maximum 120A
WRKT4716Q-	Sum of C1..C16 maximum 160A
WRKT4720Q-	Sum of C1..C20 maximum 200A
WRKT4724Q-	Sum of C1..C24 maximum 240A
Overall load current rating of neighbouring outputs	
Output, (Rated Values)	
Switching Nominal Voltage	230 V AC 50/60 Hz
Switching Nominal Current (at 230 V AC)	16A (PF=1)
Output contact type	Potential-free closing contacts, μ contact
DC Switching Capacity	5A 30V DC (Resistive)
Maximum connection Load Per Output	
Resistive	3680 W
Inductive load (shutter)	600 W
Incandescent / Halogen load	1200 W
Max. inrush current	100A