

Actuators

Switching 2-gang

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	Ref.-No.
KNX switch actuator,	
2-gang, 16 A	2132.16 REG (will be replaced by 2302.16 RECHM)
ETS-product family:	Output
Product type:	2-gang binary output
Series embodiment (SE)-device (4 units)	

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The switching actuator 2-gang receives telegrams and switches electrical loads by two floating contacts. The switch performance of the output is configured as a make-contact. Depending on the parameter, the actuator can be switched On/Off directly, with On/Off time delays or as a time switch. Additionally it offers the possibility of logical link and acknowledge operation. The behaviour of a bus voltage drop/recovery can be parameterised. The device provides 2 hardware slide switches to be actuated manually without any effect on the bus.

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Technical data

Supply Voltage:	24 V DC (+6 V / -4 V)	
Power consumption:	max. 150 mW	
Connection:	KNX connection block	
Output Number:	2	
Performance:	2 floating make-contacts	
Rated voltage:	230 V AC; 400 V AC	
Max. current:	16 A / AC-1; 10 A / AC-3 at 230 V AC 10 A / AC-1; 6 A / AC-3 at 400 V AC	
Capacity:	Incandescent :	2500 W
	Fluorescent, not comp. cos. $\varphi = 0,5$:	2500 W
	Fluorescent, parallel comp. cos. $\varphi = 1$:	1300 W / 140 μ F
	Fluorescent, duo-circuit, cos. $\varphi = 1$:	2 x 2500 W
	HV- halogen:	2500 W
Connection:	screw terminals: 0,2 – 4 mm ²	
Protection:	IP 20	
Operation temperature:	-5°C ... +45°C	
Storage temperature:	-25°C ... +70°C	
Mounting:	on DIN rail 35 x 7.5	

Notes:

- Different lines can be connected to the device.
- A manual switching by the slide switches is not detected by the software! If a channel is blocked via bus, it can be switched by the slide switch.
- The two relay outputs do not switch simultaneously, there is always a small time delay between due to the power supply from the bus. This has to be considered with applications having a high switching frequency.

5 Description of software application

- Switching of 2 independent channels.
- Hand operation possible.
- Outputs can be adjusted as make or brake contacts.
- Preferred contact position in case of bus voltage drop or recovery adjustable.
- 3 objects per output: switching, acknowledge and additional function.
- Adjustable additional functions:
 - Logical link with 3 logical parameter
 - Disable function
 - Forced position function
- Acknowledge object can be inverted.
- Switch ON and/or switch OFF time delay can be adjusted for each channel separately.

Objects

Number of addresses (dynamic):	32
Number of assignments (dynamic):	32
Communication objects:	6

Object	Name	Function	Type	Flag
0	Output 1	Switching	1 Bit	C,W
1	Output 2	Switching	1 Bit	C,W
Logical link function to the corresponding channel 1 – 2				
8	Output 1*	Logical link	1 Bit	C,W
9	Output 2*	Logical link	1 Bit	C,W
Disable link function to the corresponding channel 1 – 2				
8	Output 1*	Disable	1 Bit	C,W
9	Output 2*	Disable	1 Bit	C,W
Forced link function to the corresponding channel 1 – 2				
8	Output 1*	Forced position	2 Bit	C,W
9	Output 2*	Forced position	2 Bit	C,W
Acknowledge objects to the corresponding channel 1 – 2				
12	Output 1	Acknowledge	1 Bit	C,T
13	Output 2	Acknowledge	1 Bit	C,T

Objects marked with* can be assigned to any channel.

Notes to software application:

Forced position object

With the forced position object the switching channel can be forced separately via a 2 Bit telegram to a desired position, independent of its switching object. Here the parameter "relay-operation" is also effective.

The 2 Bit-telegram must be built up as follows:

Bit 1	Bit 0	Function
0	X	Priority not active → 'switching' object
0	X	Priority not active → 'switching' object
1	0	Priority active → switch Off
1	1	Priority active → switch On

The first Bit (Bit 0) of the forced position object, sets the forced switching position. The second Bit (Bit 1) releases the forced position function. At active 'forced position' function (priority), the incoming telegrams will be evaluated internally. Afterwards, at inactive 'forced position' function (priority), the actual internal switching condition will adjust the switching object accordingly.

Acknowledge object

The acknowledge object will be updated e.g. at bus voltage recovery and can be read out by any display or visualization (set R-flag!).