

Actuators

Heating Actuator

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	Ref.-No.
KNX heating actuator,	
6-gang, 0,05 A	2136 REG HZ
ETS-product family:	Output
Product type:	6-gang binary output
Series embodiment (SE)-device (4 units)	

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The heating actuator 6-gang serves to control electro-thermal valve drives for heating applications or cooling ceilings. It offers six electronic outputs which, depending on the KNX telegrams, allow the noiseless control of valve drives. Up to four electro-thermal valve drives (e.g. make Heimeier 1835, Sauter MTX 116F200, Möhlenhoff AA2001-00-1) can be connected to each output. The outputs are either switched or controlled by a PWM-signal (Pulse Width Modulation) on a continuous PI-regulation, depending on the adjusted set value (1 Bit or 8 Bit). The actuator is able to detect any overload or short circuit at its outputs. In this case the short circuited outputs will be permanently deactivated after an identification time. It is also possible to send an overload report to the bus. Via a separate object it can be toggled between summer and winter time operation. Additionally, each output can be driven to a forced position in order to send a parameterised set value to the output by a separate object.

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Technical data

Supply	
Voltage:	24 V DC (+6 V / -4 V)
Power consumption:	typical 125 mW
Connection:	KNX connection block
Output	
Number:	6
Performance:	6 electronic (Triac) outputs
Rated voltage:	230 – 240 V AC
Rated current:	50 mA ohmic load per output
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

Note: To avoid an overload detection, the outputs never switch simultaneously.

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Description of software application:

- 6 independent outputs, 1 Bit or 1 Byte
- 1 Byte set values to control via PWM-signal. The cycle time of the output signals can be parameterised.
- Status acknowledge of each output (1 Bit or 1 Byte) automatically or on request.
- Preferred valve position in case of bus voltage drop or recovery adjustable.
- Short circuit or overload report via separate objects per output.
- Acknowledge object can be inverted.
- Cyclical monitoring time of the set value of each output adjustable.
- Summer or winter time operation adjustable via object.
- Emergency operation after detection of mechanical malfunction.
- Behaviour at bus voltage drop/recovery adjustable.

Objects

Number of addresses:	29
Number of assignments:	29
Communication objects:	29

Object	Name	Function	Type	Flag
Set values:				
0 – 5	Output 1 – 6	Set value	1 Bit	C, W, (R)
0 – 5	Output 1 – 6	Set value	1 Byte	C, W, (R)
Status set values:				
6 – 11	Output 1 – 6	Status set value	1 Bit	C, T, (R)*
6 – 11	Output 1 – 6	Status set value	1 Bit	C, R*
6 – 11	Output 1 – 6	Status set value	1 Byte	C, T, (R)*
6 – 11	Output 1 – 6	Status set value	1 Byte	C, R*
12 – 17	Output 1 – 6	Forced position	1 Bit	C, W, (R)
18 – 23	Output 1 – 6	Overload/short circuit	1 Bit	C, W, (R)
24	Power failure	Alarm message	1 Bit	C, T, (R)
25	All valves closed	Status valves	1 Bit	C, T, (R)
26	Cycl. monitoring	Alarm message	1 Bit	C, T, (R)
27	Summer/winter	Switch over	1 Bit	C, W, (R)
28	Highest set value	ACK set value	1 Bit	C, T, (R)

Objects marked with (R): Object value can be read out (set R-flag!).

Objects marked with *: Dependent on the parameter „transmit status of valve position“ the status of a control variable is sent automatically (set T-flag), or only if requested by a telegram (set R-flag).