

Tender specification:

Oventrop electromotive actuator KNX/EIB “Aktor M ST EIB” for the direct connection to the European installation bus control system (KNX/EIB). Power is supplied through the bus control system so that a separate power supply is not needed. The actuator automatically adjusts to neutral point and features one or two integrated binary entries. The bus and the binary entries are connected via a 4- or 6-core cable.

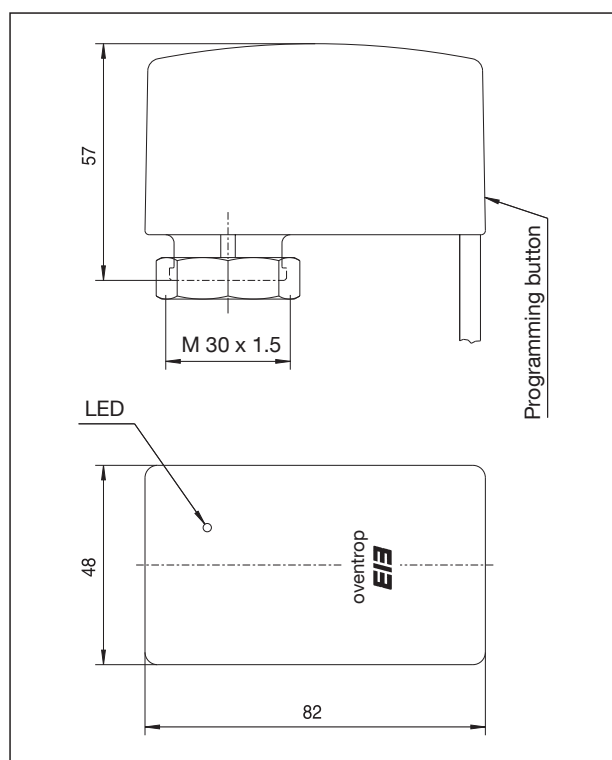
Models:	Item no.:
“Uni EIB H” Connection thread M 30 x 1.5, with one binary entry	1156065
“Uni EIB D” with adapter for radiators with integrated distributor with squeeze connection and M 23.5 x 1.5, with one binary entry	1156075
“Uni EIB H” Connection thread M 30 x 1.5, with two binary entries	1156066
“Uni EIB D” with adapter for radiators with integrated distributor with squeeze connection and M 23.5 x 1.5, with two binary entries	1156076

Technical data:

Power supply:	through KNX/EIB bus control system (SELV) 24 V DC (+6 V/-4 V)																				
Power consumption:	< 200 mW (< 10 mA at 20 V DC)																				
Number per line:	maximum of 64 participants																				
Communication objects:	<table> <tr> <td>Object 0</td><td>1 Byte</td></tr> <tr> <td>Nominal value/Correcting variable</td><td></td></tr> <tr> <td>Object 1</td><td>1 Byte</td></tr> <tr> <td>Nominal value/Correcting variable</td><td></td></tr> <tr> <td>Object 2</td><td>1 Bit</td></tr> <tr> <td>Entry/Compulsory setting</td><td></td></tr> <tr> <td>Object 3</td><td>1 Bit</td></tr> <tr> <td>Local entry/binary entry</td><td></td></tr> <tr> <td>Object 4</td><td>1 Byte</td></tr> <tr> <td>Operating status/Status</td><td></td></tr> </table>	Object 0	1 Byte	Nominal value/Correcting variable		Object 1	1 Byte	Nominal value/Correcting variable		Object 2	1 Bit	Entry/Compulsory setting		Object 3	1 Bit	Local entry/binary entry		Object 4	1 Byte	Operating status/Status	
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Bus coupling:	integrated (Bus Interface Module BIM)																				
Binary entry:	1 or 2 parametric binary entries (maximum connectable total cable length 5 m) Signal voltage: 5 V DC Input impedance: 10 kΩ																				
Max. piston stroke:	4.5 mm																				
Control piston stroke:	2.6 mm - 4.0 mm																				
Resolution:	8 Bit (256 steps)																				
Operating power:	> 90 N																				
Floating time:	about 30 s/mm																				
Protection:	IP 44 according to EN 60529																				
Protective system:	III according to EN 60730																				
Electromagnetic compatibility:	according to EN 50082-2, EN 50081-1																				
Max. fluid temperature:	+100 °C																				
Ambient temperature:	-5 °C up to +45 °C, not condensing																				
Storage temperature:	-25 °C up to +70 °C, not condensing																				
Connecting cable:	Item no. 115 60 65/75: J-Y(St)Y 2 x 2 x 0.6, close connection Item no. 115 60 66/76: (J)EYY 3 x 2 x 0.6, close connection 1 m long																				



“Aktor M ST EIB”



Dimensions

Installation:

Installation must only be carried out by a qualified tradesman who has detailed knowledge of the KNX/EIB bus control system. The connecting cable must not come into contact with the hot radiator or pipe as excessive heat will accelerate the ageing of the cable insulation.

The Oventrop electromotive actuators KNX/EIB can be installed in any position, except for vertical downward position.

The electrical connection is carried out via the EIB bus clamp. Connect the red lead to plus and the black lead to minus. The binary entry 1 is connected with the yellow and white lead and the binary entry 2 (only item no. 1156066/76) with the green and brown lead.

A product data bank to load the specific data into the ETS (EIB Tool Software) data base is available on a 3.5" diskette or can be downloaded from the website www.ventrop.com.

Application:

In combination with Oventrop valves and the corresponding temperature controllers, the Oventrop electromotive actuators KNX/EIB allow for precise individual room temperature control. Depending in the layout of the pipework, it is possible to control a number of radiators (zones) with one control valve only.

Within the installation bus system KNX/EIB, the electromotive actuators are used for heating, ventilation and air-conditioning. In combination with conventional radiators, radiators with integrated distributor, distributors/collectors for surface heating systems, radiant ceiling systems, chilled ceiling systems and induction air systems, the actuators allow for room temperature control.

The electromotive actuators KNX/EIB can be combined with the following Oventrop valves:

- All thermostatic radiator valves (except for valves “ADV 9/ADV 6” and “KTB”)
- Distributors/collectors for surface heating systems (please observe ambient temperature within the cabinet)
- Regulating valves “Cocon 2TZ”
- Pressure independent control valves “Cocon QTZ”
- Regulating valves “Hycococon ETZ/HTZ”
- Three-way diverting and mixing valves

Note:

The actuator is preloaded with optimised characteristic lines for use with different valves. The choice of the corresponding valve type and the characteristic line involved is made via the parameter settings in the ETS (EIB Tool Software). Setting of the valve type has to be carried out carefully as a trouble-free function is no longer given in case of improper application.

The integrated binary entries can, for instance, be connected to a window contact or a dew point sensor. The signal of the binary entry 1 can be read-out via the bus and can also be processed internally (compulsory setting) if required. The signal of the binary entry 2 (only item no. 1156066/76) can also be read-out via the bus but it cannot be processed internally.

Initialisation:

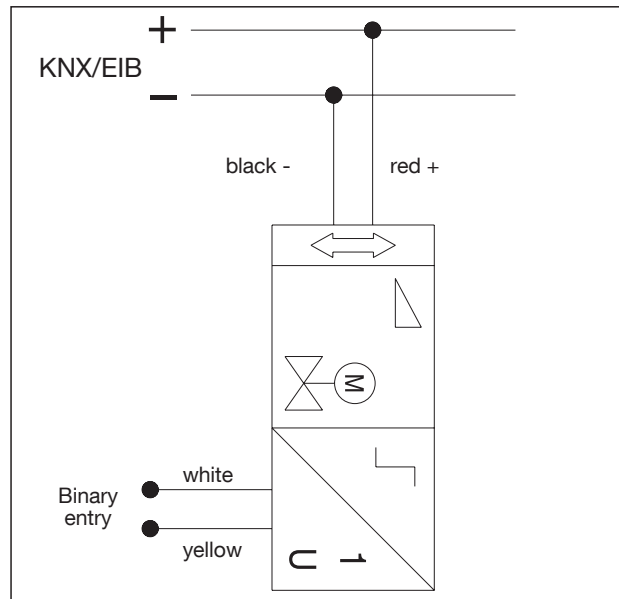
Allocation and assignment of the physical address as well as programming of the specific project data are made via the ETS (EIB Tool Software). Programming of the physical address is confirmed by pressing the programming button with the LED lighting up shortly.

Accessories:

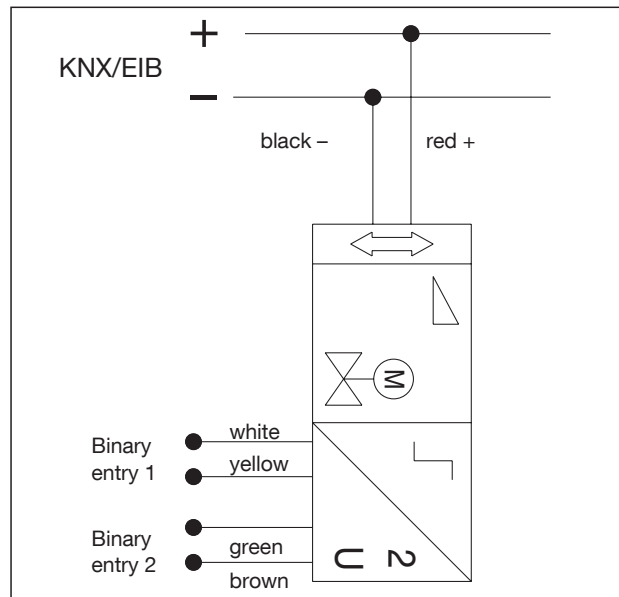
Product data bank KNX/EIB

Item no.:

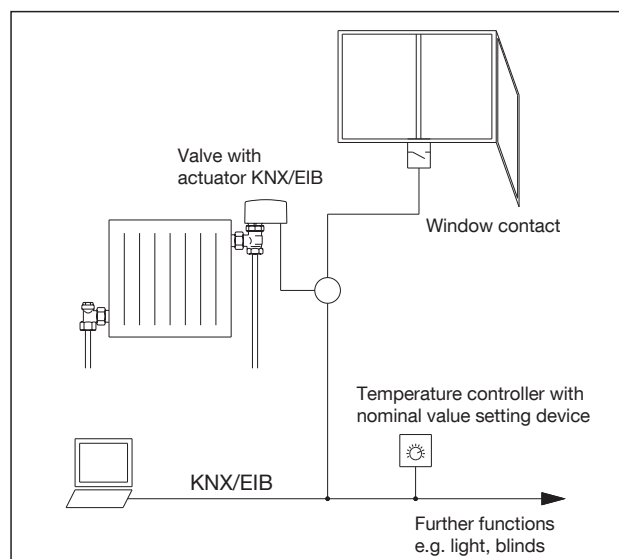
1156051



Wiring diagram, item no. 1156065/75



Wiring diagram, item no. 1156066/76



System illustration

Subject to technical modifications without notice.

Product range 1
 ti 131-EN/20/MW
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