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CHEOPS control KNX
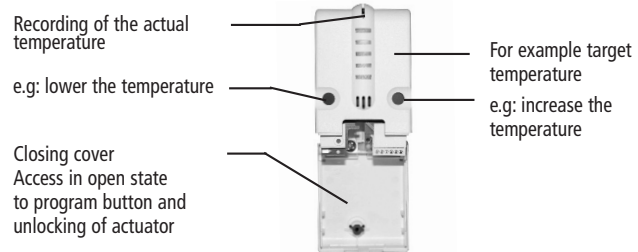Electromotor-driven, proportional actuator   7329201

1. Usage

The effect (constant) of the actuator is, that every position between two limiting values, which have to be defined, can be reached. The electro-motor-driven proportional (constant) actuator is suitable for connection to the European Installation Bus KNX. The connection is made directly without any separate bus coupler. The power supply comes from the KNX.

2. Safety

Installation and assembly of electrical equipment must only be performed by appropriately trained electricians. National requirements and safety regulations must be observed. The regulations and instructions conforming to the manual of the ZVEI/ZVEH for building system technology must be observed for proper laying of bus lines and placing the KNX devices in service! Tampering with or making changes to the machine will cause render any claims under the warrantee null and void.

3. Description of the device

Integrated control with recording of actual temperature allows for independent control of individual areas. Depending on how the parameters are set, the target temperature can be changed at any time with the manual buttons.

Recording of the actual temperature

e.g: lower the temperature

For example target temperature
e.g: increase the temperature

Closing cover
Access in open state to program button and unlocking of actuator

4. Assembly/disassembly

Assembly:

1.   Select the adapter ring that fits from those included with delivery.
2.   Tighten the adapter ring (fig 1). Finger-tight is sufficient.
3.   Bring the device into the vertical assembly position, fig. 2.
4.   Push the device onto the adapter ring until you can hear it snap into place.

Disassembly:

1.   Open the cover of the actuator.
2.   Press on the red lever to the left, see fig. 3.
3.   Remove the actuator.

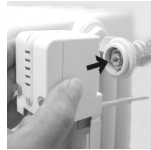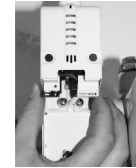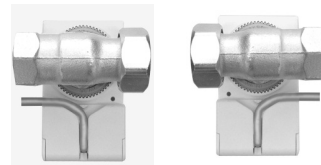Fig. **1**   Fig. **2**   Fig. **3**

When installing behind a curtain please use a remote sensor (9070191).

5. Bus connection

The connection cable can be brought to a desired mounting location in one of the cable ducts.

1.   Push the cable into the cable duct that has been prepared on the rear side of the device.
2.   Note the polarity.
3.   Connect the bus cable to the bus line (red + / black –)
Note: The two free connection cables can be used as binary inputs for window contacts and/or presence indicators, for example.

6. Connection to the window contact and/or presence indicator

yellow/ green: E1	---- ----	Window	Window	Window
white/ brown: E2	---- ----	---- ----	Presence	Actual value*

*For example with remote sensor, Order No. 9070191.

7. Entering the physical address

Only ETS can be used to assign the physical address and group addresses, and to adjust parameters

Loading the physical address/application:

1.   Press the button **1** by using the provided special key. LED **2** is lit. Pressing the button with an unsuitable tool can cause a malfunction!
2.   Now ETS can be used to load first the physical address and then the application.

2   1

8. Adjusting the automatic valve

1.   Apply the bus voltage.

**Note:** While the automatic adjustment run is in progress, one of the three lower LEDs flashes.

The adjustment process may last as long as 10 minutes. When the automatic adjustment is complete, the top LED will still be lit. The actuator is opened, see chap. 10.

9. Querying the valve setting

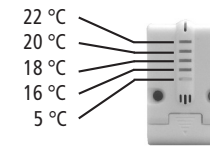1.   **Press the two keys** (red+blue) at the same time.

Note:

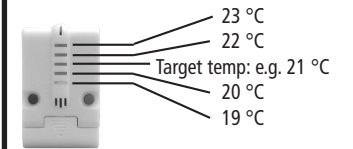The valve is opened as following depending on which LED lights up.

Valve opening in %:
81 .. 100 %
61 ... 80 %
41 ... 60 %
21 ... 40 %
 1 ... 20 %
0 % = no LED
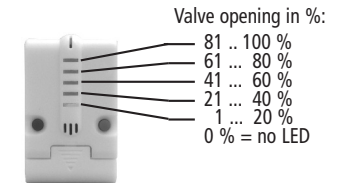
10. Display of current temperature control (standard display)

Example without loaded application

22 °C
20 °C
18 °C
16 °C
 5 °C

By pushing the red or blue button one of the fixed temperature values can be selected.

Example depends on the application that is loaded

23 °C
22 °C
Target temp: e.g. 21 °C
20 °C
19 °C

11. Protection against unauthorized removal of the actuator

1.   Close the cover to secure access to interlock of the actuator and to secure the programming button.

2.   Turn the enclosed special key, rotate the interlock by 90°.

12. Technical data

Bus voltage KNX: 29 V DC
Current consumption KNX bus   < 12 mA
Operating temperature: 0 °C ...+ 50 °C
Run time: < 20 s/mm
Set force: max. 120 N
Detection of valve limit stops: Automatic
Adapter rings included will fit: Danfoss RA, Heimeier, MNG, Schlösser from 3/93, Honeywell, Braukmann, Dumser (distributor), Reich (distributor), Landis + Gyr, Oventrop, Herb, Onda
Type of device: 1 according to EN 60730-1
Protection class: III
Protection type: IP 20 (EN 60529)
Pollution degree: 2
Rated impulse voltage: 330 V

13. Service