310 080 01

theben

**CHEOPS 'drive'**
Electromotor-driven, proportional actuator

## 1. Usage

The electro-motor-driven proportional (constant) actuator is suitable for connection to the European Installation Bus EIB. The connection is made directly without any separate bus coupler. The power supply comes from the EIB.

## 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 EIB 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

The motor-driven actuator with the stroke display receives set commands from a room temperature regulator.



Display of valve opening, for example 20%

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. Open the cover of the actuator.
4. Bring the device into the vertical assembly position Fig. **2**
5. 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, see Fig. **3**, to the left
3. Remove the actuator.

Bild **1**



Bild **2**

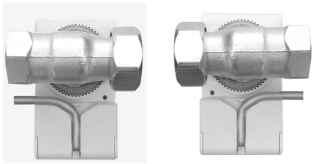


Bild **3**



## 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 |
| white/ brown: E2 | ---- ---- | ---- ---- | Presence |

## 7. Entering the physical address

Only ETS 2 can be used to assign the physical address and group addresses, and to adjust parameters

**Loading the physical address/ application:**

1. Press the 1. key. LED **2** is lit.
2. Now ETS 2 can be used to load first the physical address and then the application.




## 8. Adjusting the automatic valve

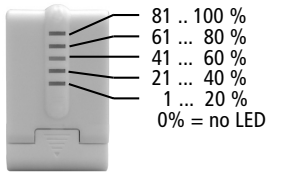
1. Apply the bus voltage. While the automatic adjustment run is in progress, one of the three lower LEDs flashes.

**Note:**
The adjustment process may last as long as 10 minutes.
When the automatic adjustment is complete, the top LED will still be lit.

**If no application is loaded:**
The actuator is opened to 50 %, and displays heating.

## 9. Display of the valve setting

**Note:**
The valve is opened as following depending on which LED is lit up.




## 10. Protection against unauthorized removal

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°.



## 11. Technical data

| | |
|---|---|
| Power supply: | Bus electrical power |
| Permitted operating temperature: | 0 °C ...+50 °C |
| Run time: | <20 s / mm |
| Set force: | >120 N |
| Adapter rings included will fit: | Danfoss RA, Heimeier, MNG, Schlösser from 3/93, Honeywell, Braukmann, Dumser (distributor), Reich (distributor), Landis + Gyr, Oventrop, Herb, Onda |
| Detection of valve limit stops: | Automatic |
| Linearization of the characteristic valve curve: | Can be performed with software |
| Protection type: EN 60529: | IP 21 |
| Dimensions: | HxBxT 82 x 50 x 65 (mm) |

## 12. Service

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