# Electromotor Valve Drive, MDRC ST/K 1.1, 2CDG 120 004 R0011



The Electromotor Valve Drive ST/K 1.1 is a proportional valve drive for controlling heating valves via the ABB i-bus<sup>®</sup> KNX. The valve drive is mounted on thermostat valve bases. The control is carried out via a continuous KNX room thermostat. The Electromotor Valve Drive ST/K 1.1 also has two binary inputs which can be used e.g. for the connection of a presence contact and/or window contact. The status of these inputs can be sent on the bus.

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### **Technical data**

| Power supply                   | Operating voltage                                                         | 21 30 V DC, erfolgt über KNX                                                                                                                                                                              |  |  |
|--------------------------------|---------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
|                                | Power consumption                                                         | typ. 10 mA                                                                                                                                                                                                |  |  |
|                                | Power consumption via the KNX                                             | typ. 240 mW/max. 350 mW                                                                                                                                                                                   |  |  |
| Operating and display elements | Programming LED and button<br>5 LEDs                                      | zur Eingabe der physikalischen Adresse<br>Anzeige der Ventilstellung:<br>keine LED: 0 %<br>1. LED 1 % - 20 %<br>2. LED: 21 % - 40 %<br>3. LED: 41 % - 60 %<br>4. LED: 61 % - 80 %<br>5. LED: 81 % - 100 % |  |  |
| Drive                          | Running time                                                              | < 20 s/mm                                                                                                                                                                                                 |  |  |
|                                | Max. lift                                                                 | 7,5 mm                                                                                                                                                                                                    |  |  |
|                                | Actuating force                                                           | max. 120 N                                                                                                                                                                                                |  |  |
| Connections                    | 6-core connecting cable for:<br>2 binary inputs (per 2 cores)             | Presence and/or window contact<br>(yellow/green) and (white/brown)                                                                                                                                        |  |  |
|                                | KNX (2 cores)                                                             | Bus connecting terminal (black/red)                                                                                                                                                                       |  |  |
| Type of protection             | IP 21 in accordance with EN 60 529                                        |                                                                                                                                                                                                           |  |  |
| Protection class               | III in accordance with DIN VDE 0106 part 1                                |                                                                                                                                                                                                           |  |  |
| Ambient temperature range      | Operation                                                                 | 0 °C +50 °C                                                                                                                                                                                               |  |  |
|                                | Storage                                                                   | -20 °C +60 °C                                                                                                                                                                                             |  |  |
|                                | Transport                                                                 | -20 °C +60 °C                                                                                                                                                                                             |  |  |
|                                | Medium                                                                    | max. +100 °C                                                                                                                                                                                              |  |  |
| Design                         | Compact device for placing<br>on the valve base of thermostat             |                                                                                                                                                                                                           |  |  |
| Housing, colour                | Plastic housing, white                                                    |                                                                                                                                                                                                           |  |  |
| Installation                   | On valve base of thermostat<br>Adapter rings supplied<br>are suitable for | Danfoss RA, Heimeier, MNG, Herb<br>Schlösser 3/93, Honeywell, Onda<br>Braukmann, Dumser, Reich (distributor),<br>Landis+Gyr, Oventrop                                                                     |  |  |
|                                | Detection of the valve end stop                                           | Fully automatic                                                                                                                                                                                           |  |  |
| Dimensions                     | 82.5 x 50 x 65 mm (H x W x D)                                             |                                                                                                                                                                                                           |  |  |
|                                |                                                                           |                                                                                                                                                                                                           |  |  |

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| Weight            | 0.2 kg                                                                |
|-------------------|-----------------------------------------------------------------------|
| Mounting position | as required                                                           |
| Certification     | EIB- and KNX-certified                                                |
| CE norm           | in accordance with the EMC guideline<br>and the low voltage guideline |
|                   |                                                                       |

| Application programs      | Number of<br>communication objects | Max. number of group addresses | Max. number of associations |
|---------------------------|------------------------------------|--------------------------------|-----------------------------|
| Valve Drive Continuous /1 | 8                                  | 18                             | 18                          |
|                           |                                    |                                |                             |

### Note

For a detailed description of the application program see "Electromotor Valve Drive ST/K 1.1" product manual. It is available free-of-charge at <u>www.ABB.de/KNX</u>.

The programming is carried out with ETS from version ETS2 V1.2a onwards.

### Caution

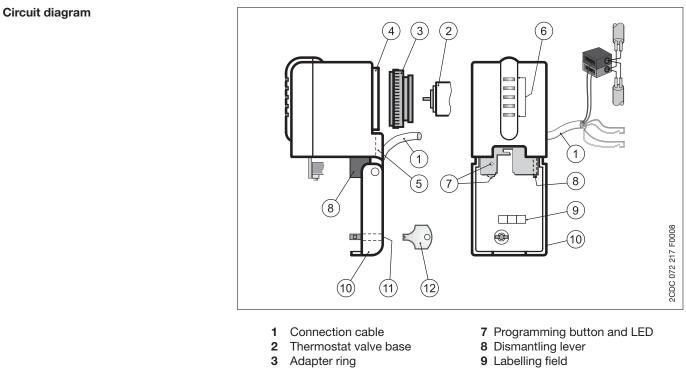
During maintenance work on the heater, the valve drive should always be dismantled and the valve should be securely closed (e.g. original protective cap).

Otherwise, the valve could be opened unexpectedly by the thermostat or valve protection function and thereby cause water damage.

When downloading the application, the Electromotor Valve Drive ST/K 1.1 must already be mounted on the valve as otherwise no adaptation can take place.

If an already adapted device is placed on another valve, the adaptation must be carried out again by downloading the application.

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- 4 Valve connection
- 5 Cable entry
- 6 Valve opening display
- 10 Hinged lid

50

С

82.5

- 11 Lock
- 12 Key
- 65



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#### **Dimension drawing**

2CDC 072 169 F0004

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