

Thermoelectric valve drive, 24 V

Article no.
639126



Function

The 24 V thermoelectric valve drive is used to open and shut valves in heating, ventilation and air conditioning technology. It is controlled by a room temperature control unit (24 V) with a two-step output or pulse width modulation.

A large selection of valve adapters ensures that it conforms perfectly to a range of valve bodies and heating circuit distributors. The 24 V thermoelectric valve drive therefore has universal applicability and is suitable for a diverse range of systems.

Functions

De-energised - closed

The control mechanism of the thermoelectric valve drive works with a PTC-heated expanding element and a compression spring. The expanding element is heated when the operating voltage is applied. After the delay period has expired, the valve will open uniformly. When the operating voltage is switched off, the expanding element will cool down and, when the idle time has expired, the valve will be closed uniformly by the closing pressure of the compression spring. The closing pressure of the compression spring (90 N controlling torque) has been matched to the closing pressure of commercially available valves and holds the valve closed in its de-energised state.

First-open function

In the supplied state, the 24 V thermoelectric valve drive is opened without current using the first-open function. This makes it possible to operate the heating during the shell construction phase, even if the electrical wiring of the single room heating has not been completed. When started up at a later stage, the first-open function is automatically released when the operating voltage is applied (for longer than 6 min), and the 24 V thermoelectric valve drive is then ready to function normally.

Functional display

The functional display of the thermoelectric valve drive (all-round display) makes it possible to see the operating status (valve "open", "closed" or in an intermediate position) at a glance.

Features

- Functional display
- Adjustment control
- Disassembly protection by
- 360° installation position
- Valve leak protection
- First-open function
- Plug-in connecting cable
- Valve adapter
- Plug-in assembly
- Functional design
- Compact construction, small dimensions

Application

- For two-step control in heating, air conditioning and ventilation systems
- Single room heating of radiant panel heating
- Easy control of heating circuit distributors, radiators, convectors, cooling ceilings and similar devices

Scope of delivery

- 1 24-V thermoelectric valve drive with 1-m cable
- 1 installation manual

Accessories

Valve adapter for the most common valves on the market		
VA 10	art. no. 639110	(Dumser; Vescal; Simplex)
VA 50	art. no. 639150	(Honeywell & Braukmann; Reich; Landis & Gyr; MNG; Cazzagniga)
VA 78	art. no. 639178	(Danfoss RA)
VA 80	art. no. 639180	(Heimeier; Herb; Onda; Schlösser (from 1993); Oventrop M30x1.5; TeSa)


Optional longer connecting cable (max. 2 m)

Protective cap AA SK 1000 (available on request).

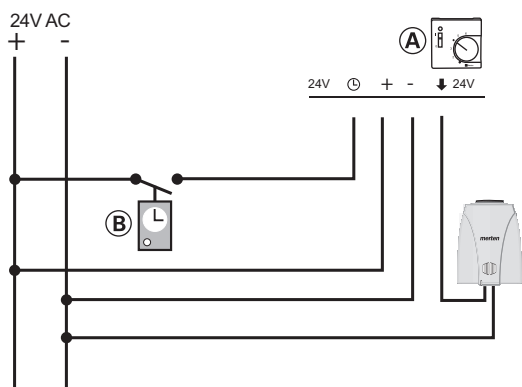


To install the protective cap, a higher valve adapter must be used. Check compact radiators in advance to see if they are suitable.

Notes on installation/planning

 Risk of fatal injury from electrical current! All work on the device should only be carried out by skilled electrician. Please observe the country-specific regulations.

Overview of connections



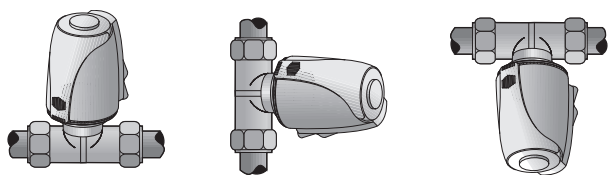
- (A) Room temperature control unit (e.g. art. no. 536302)
- (B) Time switch (e.g. art. no. 5800xx, 5840xx, 5860xx)

For the installation of a 24 V system, we recommend the following cables:

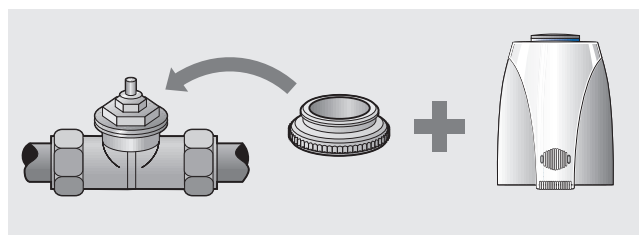
Light plastic-sheathed cable: NYM 1.5 mm²

Flat webbed cable: NYIF 1.5 mm²

Recommended installation positions



Valve adjustment



The valves are adjusted using a valve adapter, various versions of which can be supplied for the most widely used valve bodies and heating circuit distributors. (remember when ordering)

Technical data

Version	de-energised closed
Voltage	24 V AC/DC, +20%...-10%, 0 to 60 Hz
Making current max.	250 mA for max. 200 min
Operating current	75 mA
Operating capacity	1.8 W
Opening/closing times	approx. 3 min.
Travel	approx. 4 mm
Positioning force	100 N +/- 5%
Operating temperature	0 to +50 °C
Media temperature	0 to +100 °C
Storage temperature	-25 to +60 °C
Ambient temperature	0 to +50 °C
Relative humidity	max. 80%, non- condensing
Type of protection/Protection class	IP 54 / II
CE conformity in accordance with	EN 60730
Surge protection	integrated
Housing/Colour of housing	polyamide/white
Weight	73 g without adapter and connecting cable
Connecting cable/Cable length	2 x 0.75 mm ² PVC, grey 1 m

Dimensions

