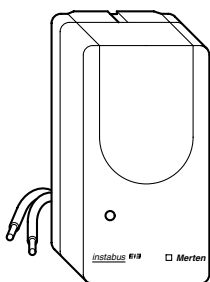


EMO valve drive



Colour **Article no.**
polar white 639119

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1. Function

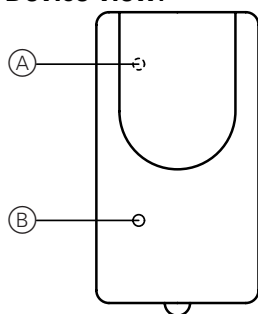
Electromotive valve drives are used in room temperature control e.g. on heaters, radiators, convectors, heat distributors for underfloor heating systems, ceiling cooling systems, ceiling radiant heating systems as well as blowers and induction devices in two- or four-wire systems. The device is suitable for installation on thermostatic valve bodies. During the commissioning or after bus voltage recovery, the lift position of the valve is determined via an adjustment routine of the valve drive by moving to the limit positions (closed and fully open). The valve lift (4.5 mm) can be controlled in 255 positions via an 8 bit control value. The motor switches off as soon as the required position (control value) is reached. The position is retained without motor power due to the self-locking gearing. The positioning force is adapted in the closing range to thermostatic valve bodies with soft valve discs. The adjustment routine is run automatically after approx. 4000 received setpoint values or readjustments of the drive and after each interruption of the bus voltage. The current position and the status of the valve drive can be sent via the bus.

2. Installation

The electromotive, proportional EMO valve drive is connected directly to the INSTABUS; a separate bus coupler is not required. An external auxiliary voltage is not necessary. It should be noted that a valve motor draws as much energy from the bus as two bus devices. The enabling of the programming of the physical address is carried out without contact using the programming magnet (art. no. 639190) or another magnet. A red programming LED is used as a status display.

The maintenance-free drive operates at low noise. The compact plastic housing accommodates the motor, gearing, lift detection and the bus coupler. The valve drive can be mounted on all Heimeier thermostatic valve bodies. The bus connection is carried out via the 1 metre long connecting cable which is fixed to the device with the help of a bus connecting terminal (art. no. 689701).

Device view:



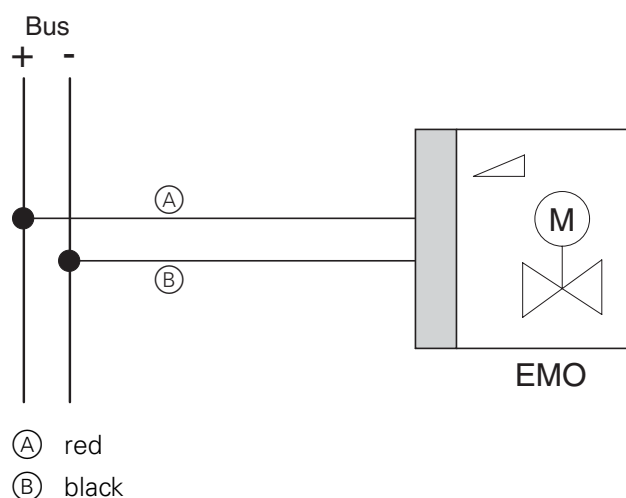
(A) Activation point for programming magnet

(B) Programming LED

3. Technical Data

Nominal voltage:	DC 24 V (+6 V / -4 V)
Leakage loss:	240 mW (same capacity as approx. 2 bus devices)
Power consumption:	approx. 12 mA
Lift:	max. 4.5 mm
Running time:	25 s/mm
Type of protection:	IP 44 in accordance with EN 60529 (vertical, upright installation)
Protection class:	III in accordance with EN 60730
Housing, colour:	Plastic, white in accordance with RAL 9010
Connection	
Connecting cable:	1 m fixed; J-Y (St) Y 1x2x0.6 mm
On the bus:	via bus connecting terminal
Temperature	
Operation:	0 °C to +50 °C
Storage:	-20 °C to +70 °C
Medium:	max. 100 °C
Installation:	Suitable for all Heimeier thermostat valve bodies. Adapters for valve bodies of other manufacturers are available from Heimeier
Operating elements:	Magnet-sensitive sensor for the assignment of the physical address
Display elements:	Red LED for checking the programming and display of a drive error
Dimensions:	88x47x61 mm (HxWxD)

Connection example



4. Settings in the EIB Tool Software (ETS)

Selection in the product database

Manufacturer:	Merten
Product family:	7.1 Heating/Single room thermostat
Product type:	7.1.12 Valve drive
Program name:	8 bit digits 4213/4
Media type:	Twisted Pair
Product name:	EMO valve drive
Order number:	639119

5. Application overview

The following application is available:

Application	Vers.	Function
8 bit digits 4213/4	4	Valve lift of the valve drive can be set in 255 positions (8 bit)
		Cyclical communication possible with the room temperature control unit
		Fault signal of the valve drive
		Priority control of the drive via a 1 bit telegram (window contact)
		Set the control action of the valve drive (break/make contact)