



BACring. The powerful control system
for smoke dampers

Technical Datasheet DPM-M1E

[DUP] BACring - Control system

VERSION 1.14

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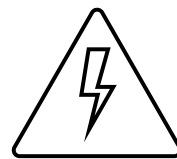


Safety Instructions and Warranty Conditions

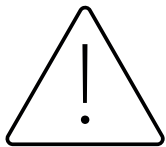
WARNING: DANGER TO LIFE!



Before working on the device, it must be disconnected from the power supply (unplug the mains plug). Work on the device may only be carried out by a qualified electrician.

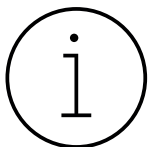


Warranty Conditions



Installation and commissioning must be performed by a qualified electrician! Please read the technical data sheet before installation!

Information



The individual modules are built and tested in accordance with applicable standards and laws and left the factory in perfect condition. To maintain this condition and ensure safe operation, the instructions contained in the user manual must be observed.

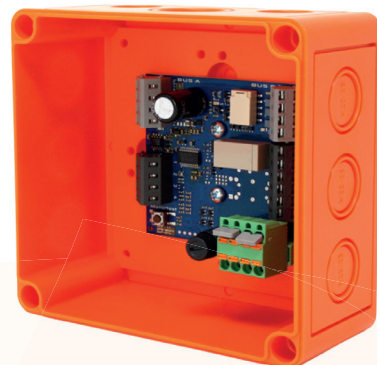


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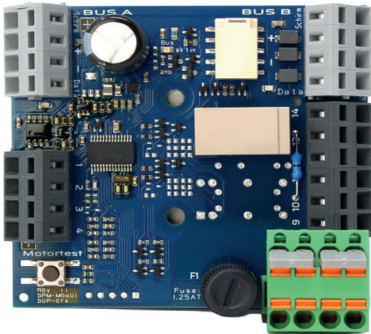
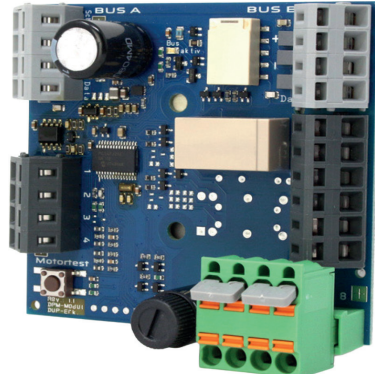
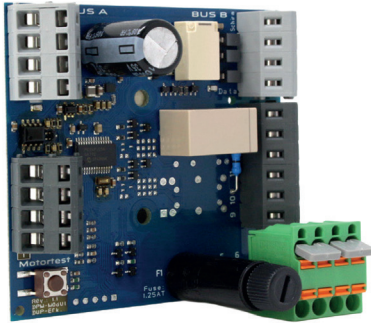


Views





Views





Description

The DPM-M1E fieldbus module is used to control and monitor the end positions of a motorized fire protection or smoke exhaust damper. Communication with the DPB bus controller takes place via the BACring bus protocol. The damper actuator is controlled via a bistable relay output, while two digital inputs (I1 and I2) monitor the damper's end positions (closed/open). In addition, the module monitors the actuator's motor current. The result of the motor current monitoring is provided via the virtual input I3.

For applications with increased requirements regarding functional integrity, the DPM-M1E fieldbus module can be integrated into the DPH-Fire Safety-E90 enclosure.

In combination with the DPH-Fire Safety-E90 enclosure, the DPM-M1E fieldbus module fulfills the requirements of DIN EN 1363-1:2020-05 for functional integrity in accordance with Section 5.3.1 of MLAR 2005 and thus achieves the required functional integrity of at least 90 minutes.



Technical Data

Power Supply bus	20 V DC $\pm$ 2 % (via DPB-Buscontroller)
Power Supply motor	0 - 250V AC/DC
Indicators	Green LED for "BUS activity"
Operating keys	Test key motor relay 1
Bus protocol	BACring protocol; Setting the outputs within 90 ms; Polling the inputs within < 1.5 s (independent of the size of the ring bus)
Digital inputs	2 digital inputs for limit contacts, not isolated, referring to bus ground; 1 digital input shows the existence of motor current
Relay motor output	1 relay (bistable) with change-over contacts, galvanic isolated, max. load 1A / 250 V
Motor fuse	One 1,25 A / time lag 5x20mm fuse
Connectors	Bus ports : WAGO cage-clamp terminals type 236 , light gray; Inputs and motor outputs : WAGO cage-clamp terminals type 236 , dark gray; Motor supply : Phoenix Contact TFKC 2,5/4-ST-5,08 (4-pin)
EMC conformity	2014/35/EU, EN61000-6-1, EN61000-6-3, EN61000-4-2...5
Maintenance	Maintenance-free
Mounting	Wall mount
Storage temperature	-30° to +100°C
Operation temperature	-20° to +75°C
Humidity	Storage: 0% - 100%, non-condensing; Operation: 0% - 100%, non-condensing
Protection Class	IP 66 (M20, M25 fittings)
Dimensions (W x H x D)	130 mm x 130 mm x 75 mm
Housing	Spelsberg (TK PS 1313-7-tm)
Weight	Approx. 0,4 kg



Connection Diagram

