



BACring. The powerful control system
for smoke dampers

Technical Datasheet DPM-I402C

[DUP] BACring - Control system

VERSION 1.14

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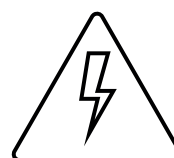


Safety Instructions and Warranty Conditions

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.

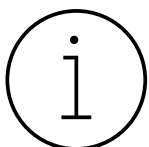


Warranty Conditions



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





Description

The DPM-I402C module is installed in a control cabinet and is used for status monitoring and control of AHU and ventilation systems.

It features two potential-free relay outputs (5 A, bistable relay contacts) and four digital inputs.

System-wide communication is performed via the BACring bus protocol. Bus activity is indicated by a green LED.

With the DPM-I402C module, the complete fire protection functionality of an AHU system can be implemented. The four digital inputs allow the acquisition of all relevant fire protection and system signals, such as:

- Fire alarm signals
- Smoke detector signals
- Feedback from the AHU system
- Acknowledgement after activation

The two potential-free switching outputs enable the implementation of central control and safety functions, including:

- Switching the AHU fan on and off
- Forwarding status or alarm messages to other systems

Of course, the module can also be used for other applications that require digital inputs and potential-free switching outputs.

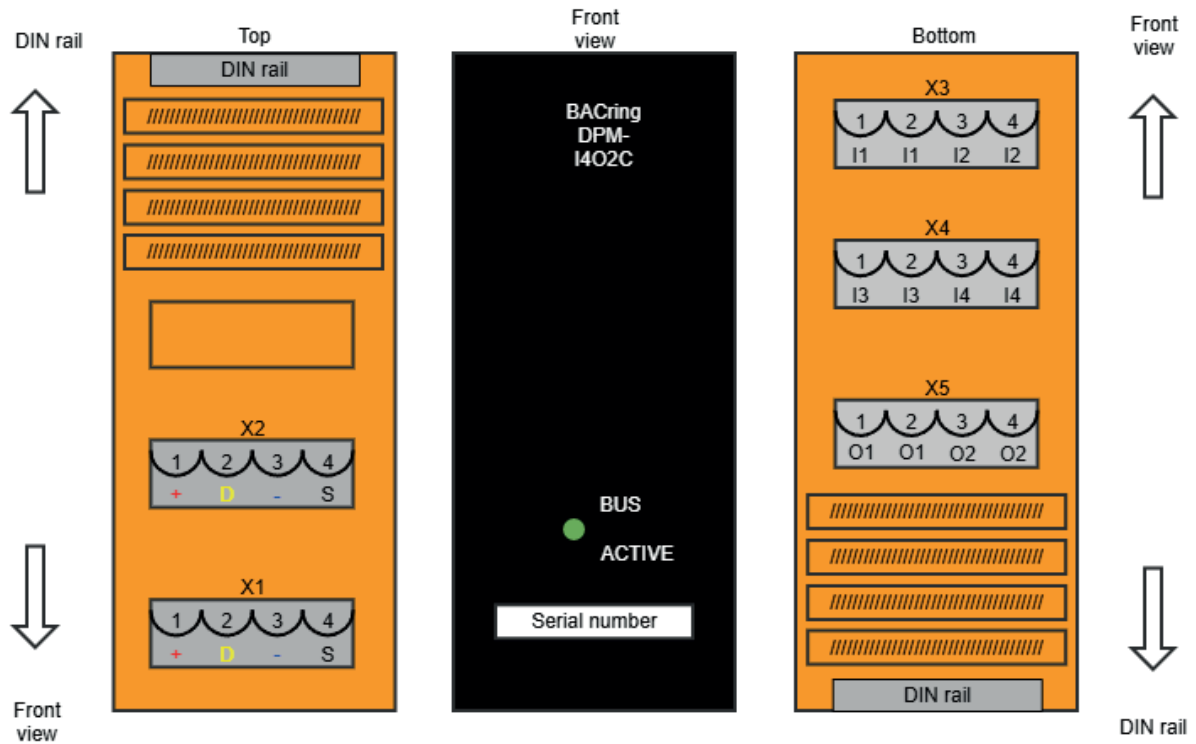


Technical Data

Power Supply bus	20 V DC $\pm$ 2 % (via DPB-Buscontroller)
Indicators	Green LED for "BUS Activity"
Operating keys	None
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)
Ring bus ports A and B	4-pin BACring bus port A and B, (3-wires BACring bus plus shield)
Digital inputs	4 digital potential free inputs (not isolated, reference to GND (0V))
Digital outputs	2 relay outputs (bistable, normal-closed contact), galvanically isolated, 5A / 250V
Connectors	Bus ports: 2 x Phoenix Contact FKCT 2,5/4-STKMGY (4-pin, female); 4 inputs: 2 x Phoenix Contact FKCT 2,5/4-STKMGY (4-pin, female); 2 outputs: 1 x Phoenix Contact FKCT 2,5/4-STKMGY (4-pin, female)
EMC conformity	2014/35/EU, EN61000-6-1, EN61000-6-3, EN61000-4-2..-5
Maintenance	Maintenance-free
Mounting	DIN-rail mounting
Storage temperature	-20° to +100°C
Operation temperature	-10° to +75°C
Humidity	Storage: 0% - 80%, non-condensing; Operation: 0% - 70%, non-condensing
Protection Class	IP 20
Dimensions (W x H x D)	23 mm x 114 mm x 120 mm
Housing	Phoenix Contact ME-MAX (orange)
Weight	Approx. 0.3 kg



Connection Diagram



Terminal	Description
BUS ACTIVE	LED shows bus activity
X1	Bus Port A connection (PLUS (1), DATA (2), MINUS (3) and SHIELD (4))
X2	Bus Port B connection (PLUS (1), DATA (2), MINUS (3) and SHIELD (4))
X3	Connection for potential free inputs I1 (1,2) and I2 (3,4)
X4	Connection for potential free inputs I3 (1,2) and I4 (3,4)
X5	Connection for potential free output O1 (1,2) and O2 (3,4). max. 5A / 250V