



BACring. The powerful control system
for smoke dampers

Technical Datasheet DPM-O24C

[DUP] BACring - Control system

VERSION 1.14

April 2026

Eurocircuits Erkelenz GmbH
Brüsseler Allee 12
41812 Erkelenz

Tel.: +49 (0) 2431 955 18 01

Web: <https://www.bacring.de>

E-Mail: kontakt@bacring.de

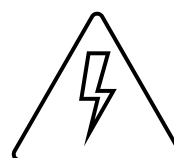


Safety Instructions and Warranty Conditions

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.

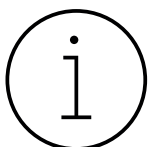


Warranty Conditions



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.

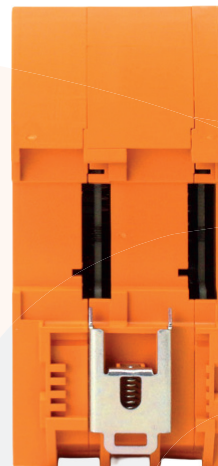


Table of Contents

Safety Instructions and Warranty Conditions	2
Table of Contents	3
Views	4
Description & Connection Diagram	5-6
Technical Data	7



Views





Description

The maintenance-free DPM-O24C control cabinet module provides 24 digital, 24 V powered, freely programmable switching outputs.

Communication with the BACring-System is carried out via the BACring bus protocol.

LEDs provide a clear indication of the power supply (Power), bus activity, and the individual status of outputs O1 to O24.

The module is particularly often used when multiple switching signals are required at a central location.

A typical application is installation in a fire brigade control panel. In the event of smoke extraction, the DPM-O24C controls the LED indicators of the smoke extraction zones, such as:

- Ready for operation
- Fault
- Activated

Of course, the DPM-O24C—like all BACring modules—can also be used for other applications where a large number of digital switching signals need to be provided.

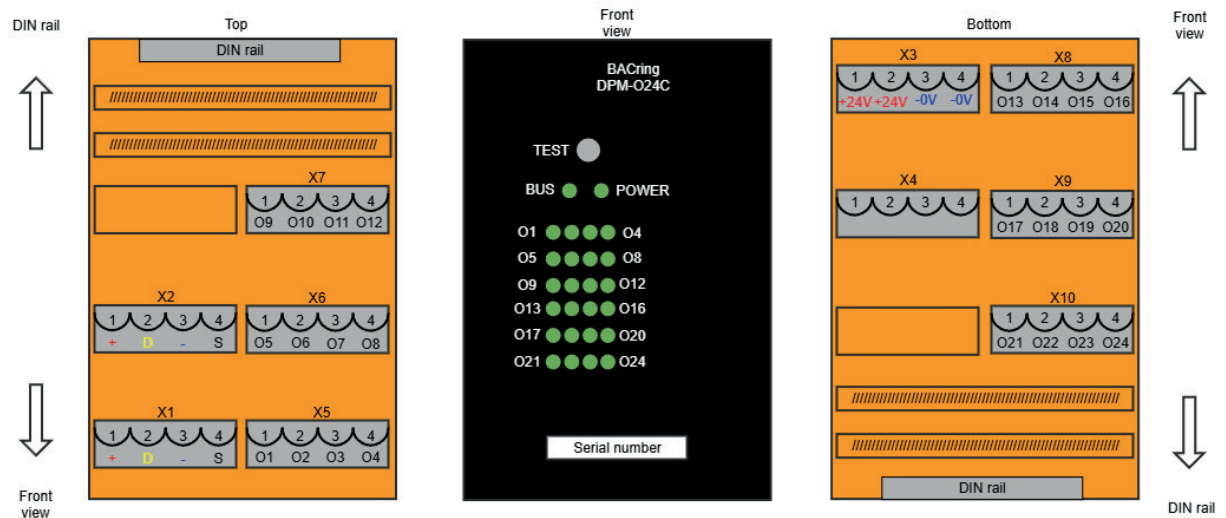


Technical Data

Bus voltage	20V DC +/- 2% (via Buscontroller)
24V power supply outputs	+18 - 26V DC / own consumption 0.03 - 0.08 A I _{max} = 200mA per output, Total current: max. 2A (internal 3.15A fuse), galvanically isolated transistor output. Incandescent bulbs cannot be used on the 24V outputs.
Displays	2 green LEDs for the 'POWER' indicator and 'BUS Activity' 24 green LEDs indicate the status of outputs O1 – O24
Controls	'TEST' button to switch on all 24 outputs simultaneously
Ringbus Ports A and B	4-pin BACring bus ports A and B (3 BACring bus lines plus shield)
Bus protocol	BACring protocol, Setting the outputs within 90 msec
Connections	Bus-Ports: 2 x Phoenix Contact FKCT 2,5/4-STKMGY (4-pin, female); 24 Outputs: 6 x Phoenix Contact FKCT 2,5/4-STKMGY (4-pin, female); +24V Supply: 1 x Phoenix Contact FKCT 2,5/4-STKMGY (4-pin, female); Testinput: 1 x Phoenix Contact FKCT 2,5/4-STKMGY (4-pin, female)
EMV Compliance	2014/35/EU, EN61000-6-1, EN61000-6-3, EN61000-4-2 ...-5
Maintenance	Maintenance free
Assembly	DIN rail mounting
Temperature	0° to +50°C
Humidity Storage :	0% - 80%, non-condensing;
Operation:	0% - 70%, non-condensing
Safety class	IP 20
Dimensions (W x H x D)	46 mm x 114 mm x 120 mm
Housing	Phoenix ME MAX
Weight	Approx. 0.3 kg



Connection Diagram



Terminal	Description
Test	Test key to turn ON all outputs, not in use anymore
BUS	LED bus activity
POWER	LED indicating 24V supply for the outputs
O1 - O24 LED	LED display for the outputs O1 - O24. LED on = output drives 24V
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 the 24V supply (18 - 26 VDC / own usage approx. 0.1 A (+24V(1,2), 0V (3,4))
X4	Not used
X5	Connection for outputs O1 (1), O2 (2), O3 (3), O4 (4)
X6	Connection for outputs O5 (1), O6 (2), O7 (3), O8 (4)
X7	Connection for outputs O9 (1), O10 (2), O11 (3), O12 (4)
X8	Connection for outputs O13 (1), O14 (2), O15 (3), O16 (4)
X9	Connection for outputs O17 (1), O18 (2), O19 (3), O20 (4)
X10	Connection for outputs O21 (1), O22 (2), O23 (3), O24 (4)