

BCDO0016MB Digital Output Module

Modular I/O expansion module with 16 relay outputs (normally open, max. 1 A / 250 V) and RS485 Modbus RTU communication – for boiler rooms and cooling plants in scalable control systems.

Key features

- Control of pumps, valves, fans and other switching devices
- 16 relay outputs (SPST, normally open) in two groups, each with a shared Com terminal
- Integration into building management systems (BMS) via Modbus RTU over RS485
- Modular design: flexible control strategies, outputs can be added without changing the system architecture
- Optimised for reliable use in the field – stable operation even under demanding conditions
- Suitable for new installations and modernisation projects with decentralised output requirements

Inputs / Outputs

- **16 × relay outputs (normally open), max. 1 A / 250 V with resistive load (2 groups of 8 outputs)**
- **1 × RS485 port for connection to controllers and building management systems (Modbus RTU)**
- **Supply voltage: 24 V DC**

Specifications

Relay outputs

Number of outputs	16
Output type	Relay, normally open (SPST-NO)
Output groups	2 × 8 with shared Com
Switching current	max. 1 A (resistive load)
Switching voltage	max. 250 V AC / 30 V DC
Minimum load	10 mA at 5 V DC
Response time	≤ 10 ms (on) / ≤ 5 ms (off)
Mechanical durability	≥ 10 million operations
Isolation voltage	1500 V AC (output – logic)

Communication

Interface	RS485 (A+, B−)
Protocol	Modbus RTU
Baud rate	9,600 … 115,200 bit/s
Address range	1 … 247

Power supply and indication

Supply voltage	24 V DC
Power consumption	2 W
Green LED	Power/Comm
Red LED	Comm Error

Mechanical and environmental

Mounting	35 mm DIN rail (EN 60715)
Connection	Screw terminals, max. 2.5 mm²
Dimensions (W × H × D)	approx. 106 × 90 × 58 mm
Weight	approx. 0.30 kg
Degree of protection	IP20
Operating temperature	−10 … +55 °C
Storage temperature	−25 … +70 °C
Relative humidity	10 … 95 %, non-condensing
Compliance	RoHS, CE