

Foxboro - Foxboro 200 Series FBM**FBM242**

Sixteen-Channel Isolated Discrete Output Module

Verified model data

Manufacturer	Schneider Electric / Foxboro
Part number	FBM242
Product family	Foxboro 200 Series FBM
Product type	Sixteen-Channel Isolated Discrete Output Module
Output channels	16, individually galvanically isolated
Field supply	15 to 60 VDC, externally sourced
Maximum channel current	2.25 A functional limit
Load-current inrush	8 A maximum for 20 ms per channel at 30°C; 6.4 A at 70°C
On-state voltage drop	0.2 V maximum at 2.25 A
Off-state leakage current	0.1 mA maximum
Channel isolation test	600 VAC for 1 minute

Selection summary

Foxboro FBM242 converts controller commands into sixteen individually isolated DC output circuits for solenoids, interposing relays and other field loads.

The electronic module is powered from the baseplate while each output uses the installed external field supply routed through the selected termination assembly.

Its isolated-channel design supports mixed field references, but load current, inrush, suppression, wiring polarity and TA selection must be verified channel by channel.

Foxboro - Foxboro 200 Series FBM

FBM242

Additional verified data

Module supply	24 VDC +5/-10%
Maximum module power	3 W
Maximum heat dissipation	6.5 W at 24 VDC with all outputs at 1.5 A
Calibration requirement	Module and termination assemblies do not require calibration
Storage temperature	-40 to +70°C
Vibration	0.75 g from 5 to 500 Hz
Mounting	DIN rail-mounted FBM on a supported baseplate
Module dimensions	4.5 × 10.2 × 10.4 cm (W × H × D); 11.4 cm height including mounting lugs
Module net weight	0.284 kg
Operating temperature	-20 to +70°C
Relative humidity	5 to 95%, non-condensing

Output Circuits

- Match each field supply and load polarity
- Calculate steady current and inrush for every channel
- Use external suppression where required by the load design

Isolation and TA

- Keep channel references separated as engineered
- Match the exact TA and Type 4 cable arrangement
- Do not assign TA weight or dimensions to the module body

Commissioning

- Clear forces and maintenance bypasses before testing
- Command one output at a time under controlled conditions
- Confirm safe response to loss of field power and communication

Application checkpoints

- Solenoid and valve control in process units
- Isolated interposing-relay outputs for plant equipment
- Externally powered discrete-output service in critical DCS cabinets

Evidence boundary: The official FBM242 specification identifies the module ratings and RH916TA as the module part number. The -20 to +70°C operating range must not be replaced with the altitude-derated FBM228 temperature value.

Source basis: Schneider Electric Foxboro FBM242 official product specification sheet.