

# TECHNICAL DATA

## XM-441 EXPANSION RELAY MODULE

The award winning, Allen-Bradley XM® series is the world's most comprehensive family of distributed machine condition monitoring and protection devices.

With the XM series discreet or networked monitoring solutions can be quickly and cost effectively deployed for steam, gas and hydro turbines, motors, compressors, pumps, fans, blowers and most other rotating machinery.

The XM-441 offers 4 high power relays suitable for use in most protection applications. When used with the XM-440 Master Relay Module or any of the 6-channel measurement modules, the XM-441 can support one additional XM-441 linked to it, providing a total expansion capability of up to 8 additional relays.

The XM-441 is not an intelligent XM module. It must be linked to a standard XM measurement or master relay module in order to function.

Designed to insure the utmost in reliability, the XM-441 does not utilize the DeviceNet bus. Rather, it simply extends the circuitry of its host module through the integral side connector. This methodology eliminates dependence on the DeviceNet bus, and any external wiring, thus providing a level of reliability equivalent to integral relays.

No configuration of the XM-441 is required. Setup and operation of the XM-441 is performed by and through its host XM measurement or XM-440 Master Relay module.

## ADDITIONAL RELAYS WHERE YOU NEED THEM



## SPECIFICATIONS

### Communications

Communications interface is via the integral side connector between the Expansion Relay Module and the XM measurement or relay module mounted directly to the LEFT of the XM-441.

**Side Connector:** All XM measurement and relay modules include side connectors that allow interconnecting adjacent modules thereby simplifying the external wiring requirements. The Interconnect provides primary power, DeviceNet communication and the circuits necessary to support expansion modules such as the XM-441 Expansion Relay module.

*Note: Besides the Expansion Module Extended Circuitry, the interconnect passes DeviceNet communication, which is not used by the XM-441, and primary power through the module's terminal base to modules connected on either side of the XM-441.*

### Indicators

5 LEDs:

- Module Status -red/green
- Relay 1 - off/red
- Relay 2 - off/red
- Relay 3 - off/red
- Relay 4 - off/red

## Relays

**Number:** Four, two sets of contacts each - DPDT (2 Form C)

### Rating:

- Max. Voltage = 150 Vdc, 250 Vac
- Max. Current = 3 A
- Min. Current = 100 mA @ 5 Vdc
- Max. Power = 240 W, 750 VA

### Failsafe:

- Normally energized (failsafe), or
- Normally de-energized (non-fail-safe)

**Latching:** Defined, managed or controlled by the mated XM measurement or Master Relay module. Refer to the applicable module's specifications for details.

- Latching, or
- Non-latching

**Time Delay:** Host specific

**Voting Logic:** Host specific

**Reset:** Host specific

**Activation On:** Host specific

## Physical

### Dimensions:

- Height: 3.8in (97mm)
- Width: 3.7in (94mm)
- Depth: 3.7in (94mm)

### Weight:

- Module: 5.7 ounces (162 grams)
- Terminal Base: 8.2 ounces (232 grams)

## Power

**Redundant Power:** All XM Measurement and Relay modules support redundant power. Each module includes redundant power inputs on its terminal base.

**Module:** 21.6 - 26.4Vdc

**Consumption:** Max: 120mA

**Heat Production:** Max: 2.9 Watts (9.9 BTU/hr)

## Environmental

**Operating Temperature:** -20 to +65°C (-4 to 149°F)

**Storage Temperature:** -40 to +85°C (-40 to 185°F)

**Relative Humidity:** 95% non-condensing

**Conformal Coating:** All printed circuit boards are conformal coated:

- Per material specifications  
MIL-I-46058C / IPC-CC-830
- In accordance with IPC-A-610C

## Approvals

CE, C-Tick, ODVA,  
CSA Class I, Div 2, Groups A B C D,  
UL, EEX

## HOW TO ORDER

The XM-441 Series Expansion Relay modules can be ordered by contacting your local authorized Allen-Bradley distributor or Rockwell Automation sales office.

Catalog Number	Description
1440-REX00-04RD	XM-441 Expansion Relay Module*
1440-TB-D	Terminal Base D for XM-441
1440-SCDB9FXM2	XM Serial Communications Cable

\* Requires Terminal Base D

[www.rockwellautomation.com](http://www.rockwellautomation.com)

### Power, Control and Information Solutions

Americas: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204-2496 USA, Tel: (1) 414.382.2000, Fax: (1) 414.382.4444

Europe/Middle East/Africa: Rockwell Automation SA/NV, Vorstlaan/Boulevard du Souverain 36, 1170 Brussels, Belgium, Tel: (32) 2.663.0000, Fax: (32) 2.663.0640

Asia Pacific: Rockwell Automation, Level 14, Core F, Cyberport 3, 100 Cyberport Road, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846