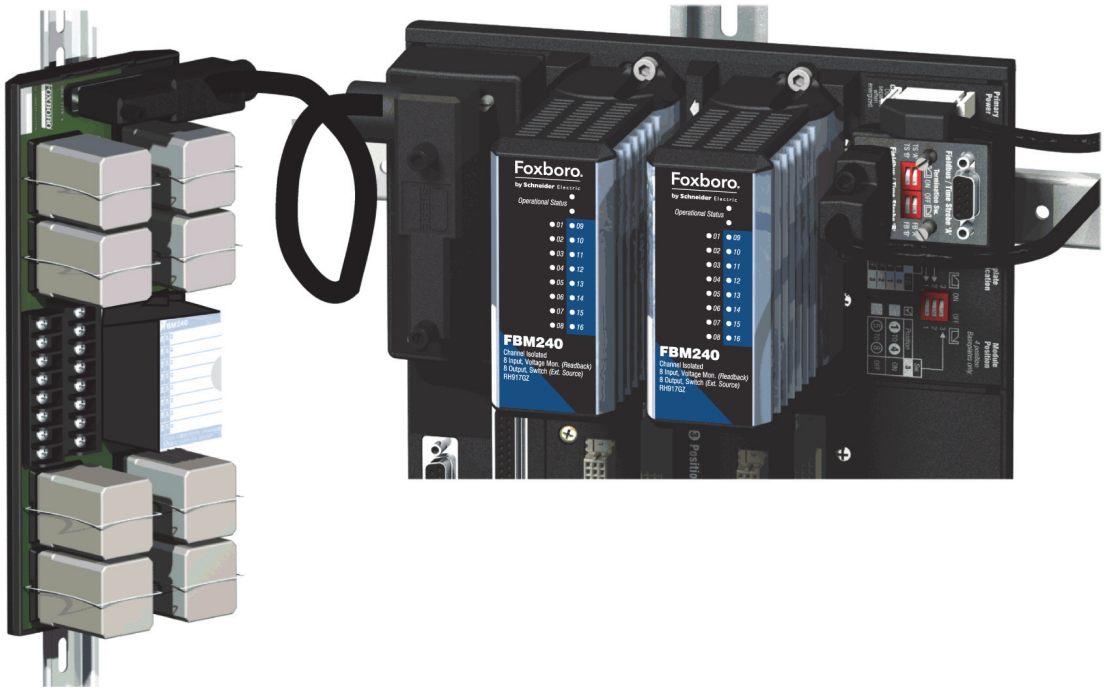
Foxboro Evo™ Process Automation System

Product Specifications

Foxboro by Schneider Electric

PSS 31H-2S240

FBM240, Redundant with Readback, Discrete Output Module



Critical control circuits require knowledge that the actual contact output state is matched to the demanded state. The FBM240 provides both redundancy to maintain control integrity in the presence of a fault as well as readback of the output state for comparison with the demanded state.

OVERVIEW

The FBM240 provides 8 voltage monitor discrete input channels and 8 discrete output channels with readback. Each of the channels are individually isolated from each other. Integral to each of the FBM output channels, is a demand state readback signal that provides the state (ON or OFF) of the signal that drives the output solid state switch. The output demand state readback signal is compared to the desired output drive state, and if there is a mismatch the channel is marked “BAD”.

The FBM provides both single and redundant operational modes. When redundant, a pair of FBM240 have I/O channels wired in parallel from a redundancy adapter to a common Termination Assembly (TA). The 8 channel Relay output companion TAs are designed to utilize the 8 input channels as output relay contact monitor readback signals. The inputs, when used as readback signals of contact status, can be used in the control strategy to determine if the relay output contacts have acquired the proper state. The 8 input channels can

be configured on a per channel basis to alarm on a miscompare between the desired output state and the input channel readback value. When the relay output TAs are used, the 8 inputs are not available to the customer for field wiring.

FEATURES

The key features of the FBM240 are:

- Eight discrete isolated outputs
- Eight discrete isolated inputs
- Integral output drive state read-back
- Single or Redundant operation
- Termination Assemblies that support:
  - Eight 15-60 V dc INs and eight 15-60 V dc @ 2A fused OUTs
  - Eight 80-120 V ac @ 10A relay OUTs with Contact State Readback
  - Eight 80-125 V dc @ 5 A relay OUTs with Contact State Readback
  - Eight 15-30 V ac @ 10 A relay OUTs with Contact State Readback
  - Eight 80-120 V ac @ 5 A relay OUTs with Contact State Readback
- Redundant Operation Failure Detection
  - Output contact monitor readback and High coverage of internal FBM failures allows redundant partner to automatically continue to drive discrete outputs and to monitor inputs.
- Internal Per Channel Output Demand State failure detection
  - Output Channel is marked BAD in both Single and Redundant Operation if the demand state read-back indicates a state a miss-compare.

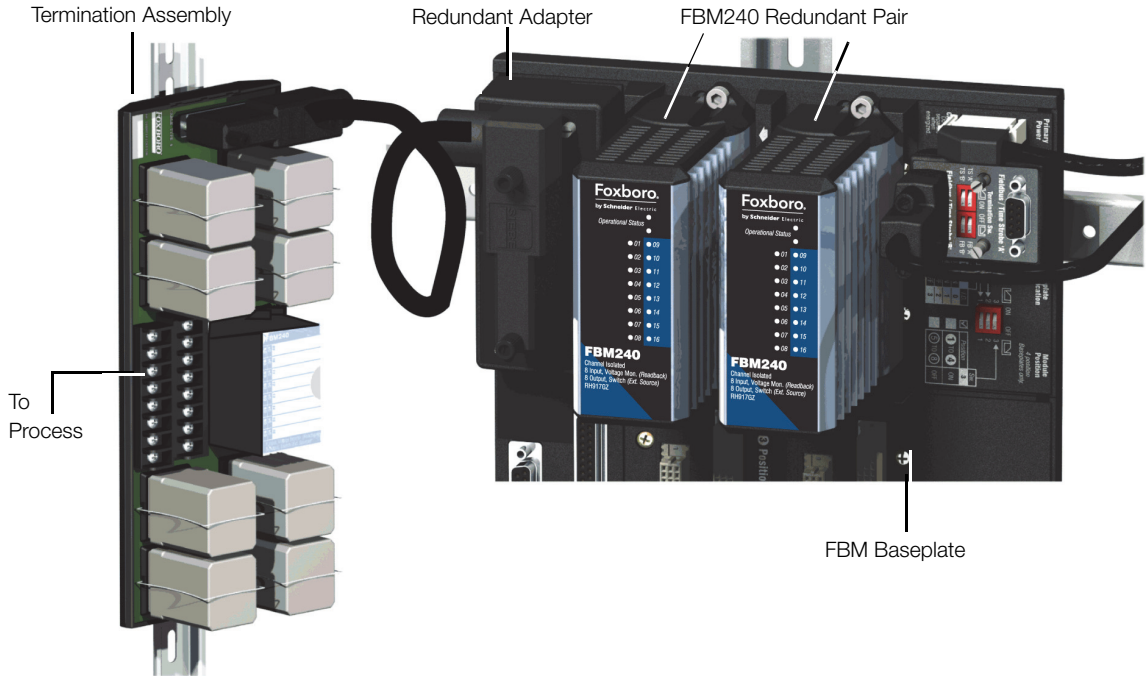


Figure 1. FBM240 Redundant I/O Configuration

READBACK

The FBM240 output channels each have a verification path which is used to insure that the output state on the isolated side of the channel within the FBM matches the demand state from the processor. In addition to this level of security, the relay output TAs make connections from the output contacts to the discrete inputs. This provides a readback of the voltage across the contacts that can be used for alarms or other control purposes. Note that when using the relay output TAs, and the contacts are in the OPEN state, a small current is required to flow into the input circuit in order to satisfy the contact read-back function, see Figure 2. This current also flows in the load. In some cases this small current may not allow the load to fully enter into the de-energized state due to drop out specifications below that required by the input channel read-back. When the loads on the relay TA's outputs are relay coils, small on/off solenoid valves, or electronically controlled Motor Operated Valves, a detail worst case review of the drop out specifications must be done to insure proper OPEN contact load states. See Figure 2 showing the functional connections of a channel of the FBM and relay output of the TA.

The states of these channels are displayed on LEDs on the front panel of the FBM240. When external power is applied to the relay contact of each channel, the LED for that channel is ON when the relay contact is CLOSED, and OFF when the relay contact is OPEN. If the state of the contact disagrees with the state of the corresponding output channel, the channel is marked BAD.

The FBM also monitors each of its eight outputs and sets the corresponding output channel BAD if the output is in the wrong state.

If the channel or input power is marked BAD, the CP presents that information to the Foxboro Evo system for display as a System Management alarm and as a control block alarm.

The relay termination assemblies (TAs) are available with a 5 A or a 10 A relay per channel and support the following discrete outputs:

FBM	Contact Readback	Outputs
FBM240 with 10A relay	120 V ac, or 125 V dc (external power source)	120 V ac at 10 A, or 125 V dc at 5 A Switch (external power source)
FBM240 with 5A relay	120 V ac (external power source)	120 V ac at 5 A Switch (external power source)
FBM240 with 5A relay	30 V dc (external power source)	30 V dc at 5 A Switch (external power source)

Each discrete output is galvanically isolated from other channels and ground.

When used with the RH916AQ (supersedes P0916AQ)/RH916AR (supersedes P0916AR) termination assembly, each of the I/O channels is galvanically isolated from all other channels and ground and the outputs are fused to protect them from overload. Configuration options allow the inputs to be used independently of the outputs with this termination assembly. The eight voltage monitor inputs and switch outputs operate at 15 to 60 V dc.

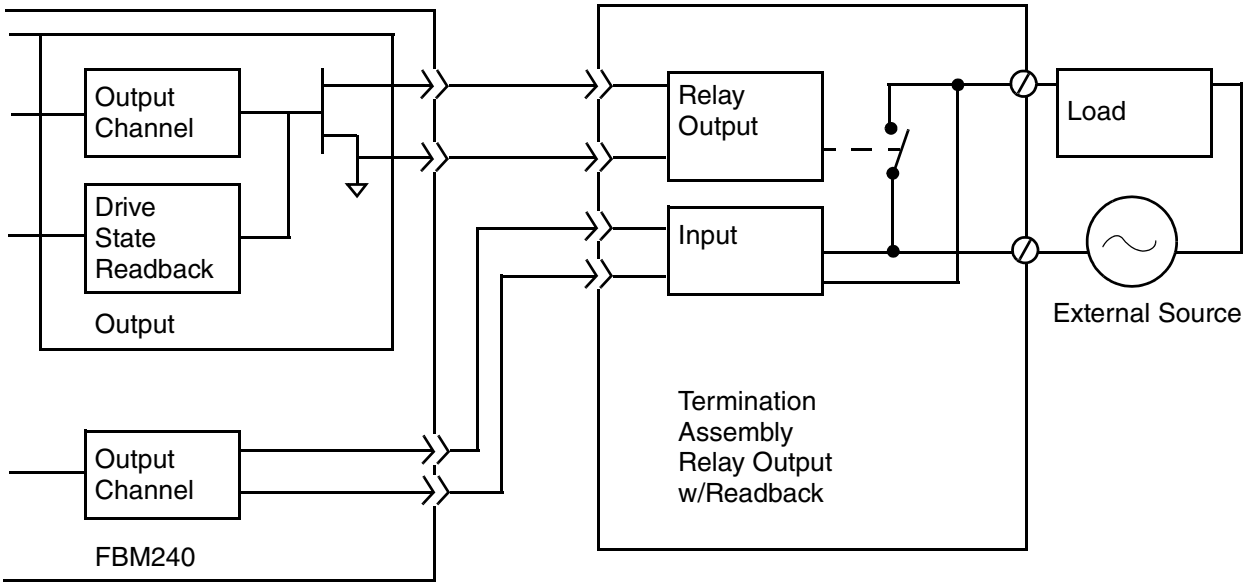


Figure 2. FBM240 with Relay Output TA Showing Internal Readback and Output Contact State Readback

REDUNDANT OUTPUTS

A redundant contact output function block, COUTR, is used for each redundant pair of outputs. The COUTR block handles output writes and initialization logic for the redundant channels. On each write of the COUTR block, identical output writes are sent to both modules, fully exercising the Fieldbus and the logic circuitry of each module. You can select a sustained output that follows the block input or a pulsed output with a selectable pulse width.

When a failure is detected in one of the modules, its output is marked bad and the corresponding channel in the good module automatically continues to drive the discrete outputs.

Each output channel drives an externally powered load. Power for each FBM240 module is diode OR'd together in the redundant adapter to assure redundant power. The microprocessor of each module executes the digital output application program, plus diagnostic routines that validate the health of the FBM.

FAIL-SAFE

Configurable options for output safety include:

- Digital Output Fail-Safe Fallback Data - specifies the channel fallback value (0 or 1) for each of the eight digital outputs
- Mask option - determines which of the eight digital outputs hold its current value and which outputs assume the fallback values
- Fieldbus Fail-Safe Delay Time - length of time the FBM waits for a communication from the CP before entering a communications fail.

Redundant Modules

For redundant modules, the Fail-Safe Fallback Data and mask options are configurable. An additional option is provided so that the module data will fall back to zero (0) when the module is put off-line for maintenance functions so that it will not interfere with the remaining module which is still on-line.

The FBM240 requires version 1.40N or later firmware to support this feature.

Single Modules

For single modules the Fail-Safe Fallback Data and Mask options are configurable.

STANDARD DESIGN

The module has a rugged extruded aluminum exterior for physical protection of the circuits. Enclosures specially designed for mounting the FBMs provide various levels of environmental protection, up to G3 harsh environments, per ISA Standard S71.04.

HIGH AVAILABILITY

The redundancy of the module pair, coupled with the high coverage of faults, provides a very high subsystem availability time.

The module performs signal conversion required to interface electrical input signals from field sensors to the optionally redundant Fieldbus. It executes the Discrete I/O program, with the following configurable options: Input Filter Time, Fail-Safe Configuration, and Sustained or Momentary Outputs. If the Momentary Output configuration is selected, then Pulse Output Interval is also configurable.

When redundant, either module may be replaced without upsetting field input or output signals to the good module. The module can be removed/replaced without removing field device termination cabling, power, or communications cabling.

FIELDBUS COMMUNICATION

The Fieldbus Communications Module (FCM) or the Field Control Processor (FCP) interfaces to the redundant 2 Mbps module Fieldbus used by the FBMs. The FBM240 accepts communication from either path of the redundant 2 Mbps Fieldbus - should one path fail or be switched at the system level, the module continues communication over the active path.

MODULAR BASEPLATE MOUNTING

The FBM240 module mounts on a DIN rail mounted Modular Baseplate, which accommodates up to four or eight Fieldbus Modules. The Modular Baseplate is either DIN rail mounted or rack mounted, and includes signal connectors for the redundant Module Fieldbus, redundant independent dc power, and termination cables.

Redundant modules must be located in odd and even adjacent positions on the baseplate (positions 1 and 2, 3 and 4, 5 and 6, or 7 and 8). To achieve the redundancy, a redundant adapter module is placed on the two adjacent baseplate termination cable connectors to provide a single termination cable connection (see Figure 1).

To system configurator applications and to other systems monitoring through SMON, System Manager, and SMDH, redundant FBM240s appear to be separate, nonredundant modules. The functional redundancy for these modules is provided by their associated control blocks.

TERMINATION ASSEMBLIES

Field I/O signals connect to the FBM subsystem via DIN rail mounted termination assemblies (TAs). The TAs used with the FBM240 provide:

- output signal connection points
- external power connection point
- 5 A unsealed relay or a 10 A unsealed relay for each output
- 15-60 V dc switch and voltage monitor inputs

The relay TAs have a high voltage input circuit that monitors the voltage across the contacts of each output relay. Monitor circuits are located on daughter card assemblies mounted on the TAs. There are two daughter cards per TA, each with four monitor circuits. The TAs are:

- RH917YF (supersedes P0917YF) - 80 to 125 V dc at 5 A or 80 to 120 V ac at 10A
- RH917HU (supersedes P0917HU) - 80 to 120 V ac at 5 A
- RH926SZ (supersedes P0926SZ) - 15 to 30 V dc at 5 A
- RH916AQ (supersedes P0916AQ)/RH916AR (supersedes P0916AR) - 15 to 60 V dc voltage monitor and 2 A switch.

NOTE

When the FBM240 output opens, the TA contacts still apply current to the circuit due to the TA's readback circuitry, as described in Table 2 and Table , "Consumption" in "Functional Specifications" and "Termination Assembly Switching Relays" in "Physical Specifications" below.

The RH916AQ (supersedes P0916AQ)/RH916AR (supersedes P0916AR) passive TA provides fused 2A outputs and independent inputs for use with 15-60 V dc.

The redundant adapter connects the redundant FBMs baseplate connectors together. The redundant adapter provides a single termination connection to a single TA.

The DIN rail mounted termination assemblies connect to the redundant adapter by means of a removable termination cable. The cable is available in a variety of lengths, up to 30 meters (98 feet), allowing the termination assembly to be mounted in either the same enclosure or in an adjacent enclosure.

FUNCTIONAL SPECIFICATIONS

I/O Channels
Eight input and eight output channels. Each channel is isolated and independent from the other channels.

Filter/Debounce Time(1)
Configurable (No Filtering, 4, 8, 16, or 32 ms)

Voltage Monitor Function (with TA (RH916AQ (supersedes P0916AQ)/RH916AR (supersedes P0916AR))

INPUT

On-State Voltage
15 to 60 V dc
Off-State Voltage
0 to 5 V dc
Current
(Single module) 1.4 mA (typical) at 5 to 60 V dc
(Redundant modules) 2.8 mA (typical) at 5 to 60 V dc

SOURCE RESISTANCE LIMITS

On-State
1 k Ω (maximum) at 15 V dc
Off-State
100 k Ω (minimum) at 60 V dc

Output Switch with External Source

APPLIED VOLTAGE
60 V dc (maximum)

LOAD CURRENT
2.0 A (maximum)

OFF-STATE LEAKAGE CURRENT
0.1 mA (maximum)

Inductive Loads
TA output may require a protective diode or metal oxide varistor (MOV) connected across the inductive load.

I/O Channel Isolation
Each channel is galvanically isolated from all other channels and earth (ground). The TA/module withstands, without damage, a potential of 600 V ac applied for one minute between any channel and ground, or between a given channel and any other channel.

I/O Channel Isolation (Cont.)
When used with a relay TA, the input and output channels are not isolated from each other, but are isolated as an I/O pair.

CAUTION

This does not imply that these channels are intended for permanent connection to voltages of these levels. Exceeding the limits for input voltages, as stated elsewhere in this specification, violates electrical safety codes and may expose users to electric shock.

Process I/O Communications
Communicates with its associated FCM or FCP via the redundant 2 Mbps module Fieldbus

Power Requirements

INPUT VOLTAGE RANGE (REDUNDANT)
24 V dc +5%, -10%

CONSUMPTION

Module
5 W (maximum) total for redundant pair
Termination Assembly
5 A relay (RH917HU (supersedes P0917HU) or RH926SZ (supersedes P0926SZ)) - 7.6 W
10 A relay (RH917YF (supersedes P0917YF)) - 15.2 W

HEAT DISSIPATION

Module
5 W (maximum) total for redundant pair
Termination Assembly
5 A relay (RH917HU (supersedes P0917HU) or RH926SZ (supersedes P0926SZ)) - 7.6 W
10 A relay (RH917YF (supersedes P0917YF)) - 15.2 W

(1) Digital filtering available for 200 Series FBM or competitive migration modules with version 1.25H or later firmware.

FUNCTIONAL SPECIFICATIONS (CONTINUED)

8 CHANNEL RELAY OUTPUT TERMINATIONS FUNCTIONAL SPECIFICATIONS:

RH917YF: 8 Channel Single Pole/Single Throw relay output

TA Contact rating[1]:
80 to 125 V dc @ 5 A
80 to 120 V ac @ 10 A

Open contact leakage current[2]: 2.5mA typical @ 50 to 120 V ac or 50 to 125 V dc

Open contact Output read-back threshold: 55VAC or DC

RH917HU: 8 Channel Single Pole/Single Throw relay output

TA Contact rating[1]:
80 to 120 V ac @ 5 A

Open contact leakage current[2]: 2.5mA typical @ 50 to 120 V ac

Open contact Output readback threshold: 55 V ac or dc

RH926SZ: 8 Channel Single Pole/Single Throw relay output

TA Contact rating1 :
15 to 30 V dc @ 5 A

Open contact leakage current2: 4.5mA typical @ 30 V dc

Open contact Output read-back threshold: 5 V dc @ 1mA

CAUTION[1].

The specified contact rating is de-rated from the relay vendor specifications listed in Tables 2 and 3. Contacts must not be used beyond the de-rated specifications listed above.

CAUTION[2].

The open contact leakage current is required to provide the contact output state read-back signal and must be taken into account when outputs are used to drive loads that may remain in the activated state at low current levels. Loads such as small relays, solenoids or Motor Operated Valves may require lower current levels to guarantee deactivation and as such should not be considered as loads for these TAs.

Regulatory Compliance

ELECTROMAGNETIC COMPATIBILITY (EMC)

European EMC Directive 2004/108/EC (Prior to April 20, 2016) and 2014/30/EU (Beginning April 20, 2016)

Meets: EN61326-1:2013 Class A Emissions and Industrial Immunity Levels

RoHS COMPLIANCE

Complies with European RoHS Directive 2011/65/EU

FUNCTIONAL SPECIFICATIONS (CONTINUED)

PRODUCT SAFETY - FBM240 MODULE

Underwriters Laboratories (UL) for U.S. and Canada

UL/UL-C listed as suitable for use in UL/UL-C listed Class I, Groups A-D; Division 2; temperature code T4 enclosure based systems when connected to specified Foxboro Evo processor modules as described in the *Standard and Compact 200 Series Subsystem User's Guide* (B0400FA). Communications circuits also meet the requirements for Class 2 as defined in Article 725 of the National Electrical Code (NFPA No.70) and Section 16 of the Canadian Electrical Code (CSA C22.1). Conditions for use are as specified in the *Standard and Compact 200 Series Subsystem User's Guide* (B0400FA).

European Low Voltage Directive 2006/95/EC (Prior to April 20, 2016) and 2014/35/EU (Beginning April 20, 2016) and Explosive Atmospheres (ATEX) directive 94/9/EC (Prior to April 20, 2016) and 2014/34/EU (Beginning April 20, 2016)

DEMKO certified as Ex nA IIC T4 for use in certified Zone 2 enclosure when connected to specified I/A Series processor modules as described in the *Standard and Compact 200 Series Subsystem User's Guide* (B0400FA).

PRODUCT SAFETY - TERMINATION ASSEMBLY

Underwriters Laboratories (UL) for U.S. and Canada

UL/UL-C listed as suitable for use in UL/UL-C listed Class I, Groups A-D; Division 2; temperature code T4 enclosure based systems when connected to specified Foxboro Evo processor modules as described in the *Standard and Compact 200 Series Subsystem User's Guide* (B0400FA).

European Low Voltage Directive 2006/95/EC (Prior to April 20, 2016) and 2014/35/EU (Beginning April 20, 2016) and Explosive Atmospheres (ATEX) directive 94/9/EC (Prior to April 20, 2016) and 2014/34/EU (Beginning April 20, 2016)

DEMKO certified as Ex nA IIC T4 for use in certified Zone 2 enclosure when connected to specified I/A Series processor modules as described in the *Standard and Compact 200 Series Subsystem User's Guide* (B0400FA).

MARINE CERTIFICATION

ABS Type Approved and Bureau Veritas Marine certified for Environmental Category EC31.

Calibration Requirements

Calibration of the module and termination assembly is not required.

ENVIRONMENTAL SPECIFICATIONS(2)

Operating

TEMPERATURE

FBM240
-20 to +70°C (-4 to +158°F)
Termination Assembly
-20 to +70°C (-4 to +158°F)

RELATIVE HUMIDITY
5 to 95% (noncondensing)

ALTITUDE
-300 to +3,000 m (-1,000 to +10,000 ft)

Storage

TEMPERATURE
-40 to +70°C (-40 to +158°F)

RELATIVE HUMIDITY
5 to 95% (noncondensing)

ALTITUDE
-300 to +12,000 m (-1,000 to +40,000 ft)

Contamination

Suitable for use in Class G3 (Harsh) environments as defined in ISA Standard S71.04, based on exposure testing according to EIA Standard 364-65, Class III.

Vibration

7.5 m/S^2 (0.75 g) from 5 to 500 Hz

(2) The environmental limits of this module may be enhanced by the type of enclosure containing the module. [Refer to the applicable Product Specification Sheet (PSS) which describes the specific type of enclosure that is to be used.]

PHYSICAL SPECIFICATIONS

Mounting

MODULE
The FBM240 mounts on a Modular Baseplate. The Modular Baseplate can be mounted on a DIN rail (horizontally or vertically), or horizontally on a 19-inch rack using a mounting kit. Redundant modules must be located in odd and even adjacent positions on the baseplate (positions 1 and 2, 3 and 4, 5 and 6, or 7 and 8). See PSS 31H-2SBASPLT for details.

TERMINATION ASSEMBLY
The TA mounts on a DIN rail and accommodates multiple DIN styles including 32 mm (1.26 in) and 35 mm (1.38 in).

Weight

FBM240 MODULE
284 g (10 oz) approximate (each module)

TERMINATION ASSEMBLIES
5 A- 454 g (1 lb) approximate
10 A - 908g (2 lb) approximate
2 A - 363g (0.8 lb) approximate

Dimensions - Module

HEIGHT
102 mm (4 in)
114 mm (4.5 in) including mounting lugs

WIDTH
45 mm (1.75 in)

DEPTH
104 mm (4.11 in)

Dimensions - Termination Assemblies

See page 15 to page 17

Part Numbers

FBM240 MODULE
RH917GZ (supersedes P0917GZ)

TERMINATION ASSEMBLIES (EXTERNAL SOURCED) WITH READBACK
RH917YF (supersedes P0917YF) - 80 to 125 V dc at 5 A or 80 to 120 V ac at 10A
RH917HU (supersedes P0917HU) - 80 to 120 V ac at 5 A
RH926SZ (supersedes P0926SZ) - 15 to 30 V dc at 5 A

TERMINATION ASSEMBLY (PASSIVE)
RH916AQ (supersedes P0916AQ)/RH916AR (supersedes P0916AR) - 15 to 60 V dc at 2 A

REDUNDANT ADAPTER
RH927BM (supersedes P0927BM)

Termination Cables

CABLE LENGTHS
Up to 30 m (98 ft)

CABLE MATERIALS
Polyurethane or Low Smoke Zero Halogen (LSZH)

TERMINATION CABLE TYPE
Type 4 - Refer to Table 1

CABLE CONNECTION
37-pin male D-subminiature

Construction - Termination Assembly

TERMINAL BLOCKS
Outputs - 2 tiers, 8 positions
I/O - 2 tiers, 16 positions

RING LUG - ACCEPTED WIRING SIZES
#6 size connectors (0.375 in (9.5 mm))
0.5 to 4 mm^2/22 AWG to 12 AWG

Termination Assembly Switching Relays

ELECTRICAL SERVICE LIFE
100,000 operations at rated resistive load
5,000,000 operations at no load.

5 A RELAY

Type
Single-Pole, Single-Throw, Normally Open (SPST_NO)

Switching Current
5 A at 30 V dc, 5 A at 80 to 120 V ac (see Table 2)

10 A RELAY

Type
Single-Pole, Single-Throw, Normally Open (SPST_NO)

Switching Current
5 A at 80 to 125 V dc, or 10 A at 80 to 120 V ac (see Table)

PHYSICAL SPECIFICATIONS (CONTINUED)

Table 1. Cables Types and Part Numbers

Cable Length m (ft)	Type 4 P/PVC[a]	Type 4 LSZH[b]
0.5 (1.6)	RH916FG (supersedes P0916FG)	RH928BA (supersedes P0928BA)
1.0 (3.2)	RH916FH (supersedes P0916FH)	RH928BB (supersedes P0928BB)
2.0 (6.6)	RH931RQ (supersedes P0931RQ)	RH928BC (supersedes P0928BC)
3.0 (9.8)	RH916FJ (supersedes P0916FJ)	RH928BD (supersedes P0928BD)
5.0 (16.4)	RH916FK (supersedes P0916FK)	RH928BE (supersedes P0928BE)
10.0 (32.8)	RH916FL (supersedes P0916FL)	RH928BF (supersedes P0928BF)
15.0 (49.2)	RH916FM (supersedes P0916FM)	RH928BG (supersedes P0928BG)
20.0 (65.6)	RH916FN (supersedes P0916FN)	RH928BH (supersedes P0928BH)
25.0 (82.0)	RH916FP (supersedes P0916FP)	RH928BJ (supersedes P0928BJ)
30.0 (98.4)	RH916FQ (supersedes P0916FQ)	RH928BK (supersedes P0928BK)

(a) P/PVC is polyurethane outer jacket and semi-rigid PVC primary conductor insulation. PVC is rated from -20 to +80°C (-4 to 176°F).

(b) Low smoke zero halogen or low smoke free of halogen (LSZH) is a material classification used for cable jacketing. LSZH is composed of thermoplastic or thermoset compounds that emit limited smoke and no halogen when exposed to high sources of heat. Temperature range; -40 to +105°C (-40 to +221°F).

PHYSICAL SPECIFICATIONS (CONTINUED))

Table 2. Termination Assembly Relay (P0165CL) 5 A Contact Data

Load	1-Pole Type	
	Resistive Load (p.f. = 1)	Inductive Load (p.f. = 0.4) (L/R = 7 ms)
Rated load	5 A at 250 V ac 0.6 A at 125 V dc	2 A at 250 V ac 0.4 A at 125 V dc
Contact material	0.187 silver cadmium oxide, gold flashed	
Carry current	5 A @ 250 V ac (see Note); 5 A @ 30 V dc	
Maximum operating voltage	380 V ac, 125 V dc	
Maximum operating current	5 A (see Note)	
Maximum switching capacity	1250 VA, 150 W	500 VA, 90 W
Minimum permissible load	100 mA, 5 V dc	
Note: These specifications apply only to the relay. When used in the TA, they have been derated due to UL and temperature ratings.		

Table 3. Termination Assembly Relay (P0165CP) 10 A Contact Data

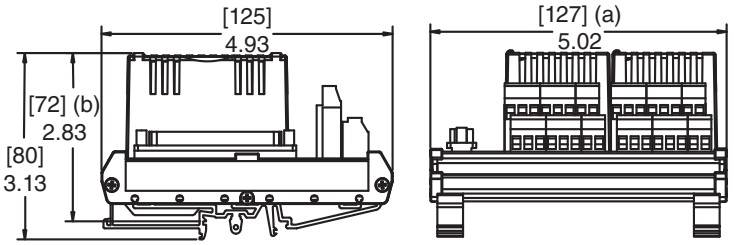
Load	1-Pole Type	
	Resistive Load (p.f. = 1)	Inductive Load (p.f. = 0.4) (L/R = 7 ms)
Rated load	10 A at 250 V ac 13A, 1/3 HP at 120 V ac 13A, ½ HP at 277 V ac 10 A at 150 V dc	7.5 A at 120 V ac 4 A at 125 V dc
Contact material	0.187 silver cadmium oxide, gold flashed	
Carry current	13 A @ 250 V ac (see Note); 10 A @150 V dc	
Maximum operating voltage	240 V ac, 150 V dc	
Maximum operating current	13 A (see Note)	
Maximum switching capacity	3250 VA, 364 W	2400 VA, 500 W
Minimum permissible load	130 mA, 5 V dc	
Note: These specifications apply only to the relay. When used in the TA, they have been derated due to UL and temperature ratings		

DIMENSIONS – NOMINAL

mm
in

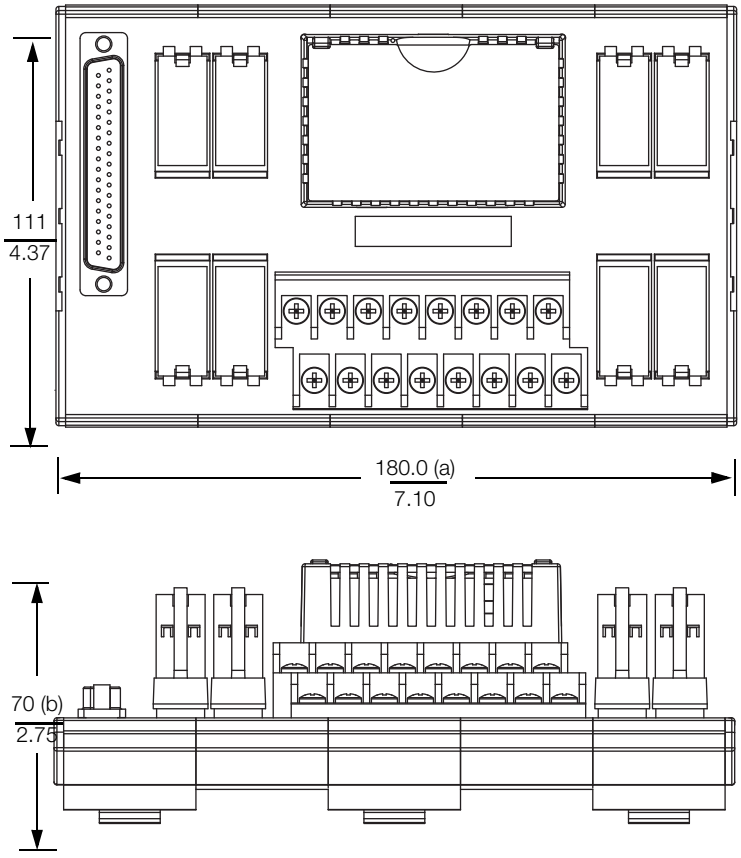
Compression Termination Assembly, 2 A Fused Switch

RH916AQ (supersedes P0916AQ)



Ring-Lug Termination Assembly, 5 A Relays

RH917HU (supersedes P0917HU), RH926SZ, (supersedes P0926SZ)

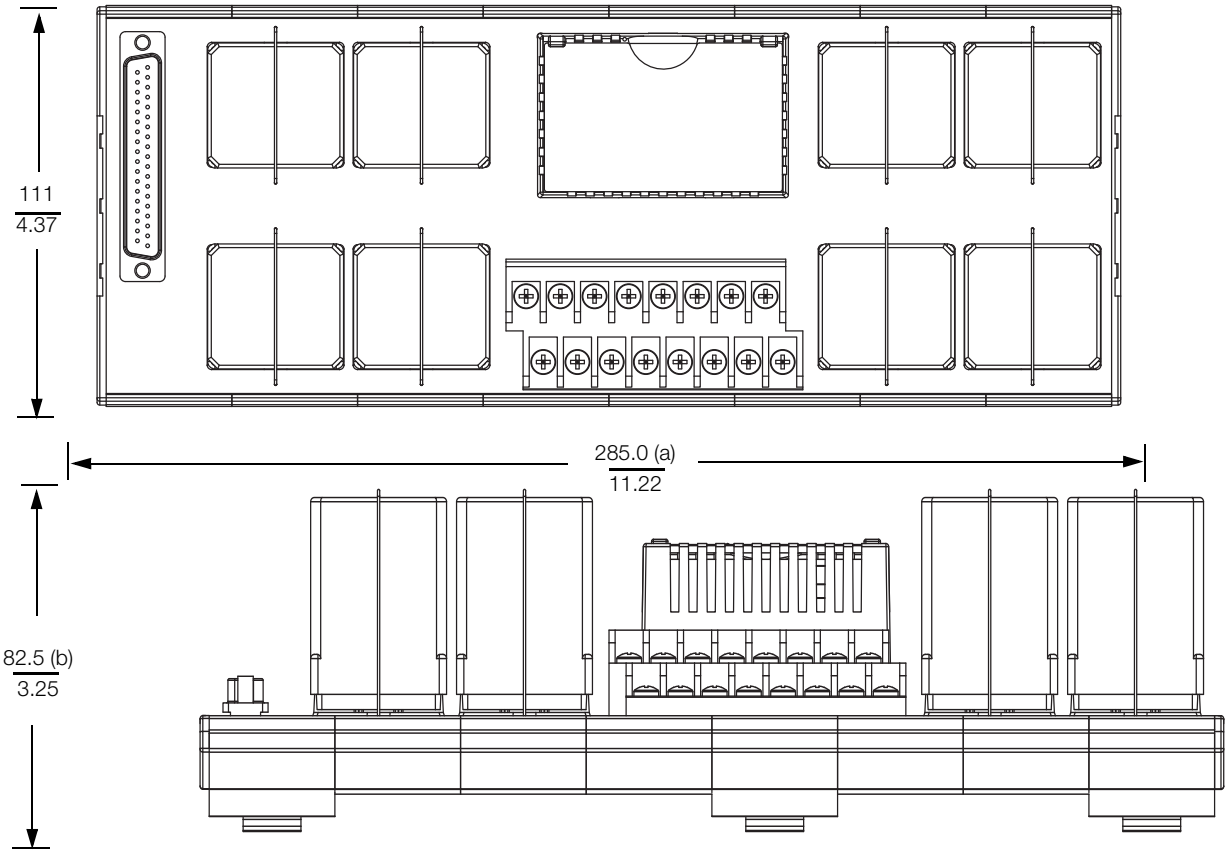


(a) Overall width – for determining DIN rail loading.
(b) Height above DIN rail (add to DIN rail height for total).

DIMENSIONS – NOMINAL (CONTINUED)

mm
in

Ring Lug Termination Assembly, 10 A Relays
RH917YF (supersedes P0917YF)

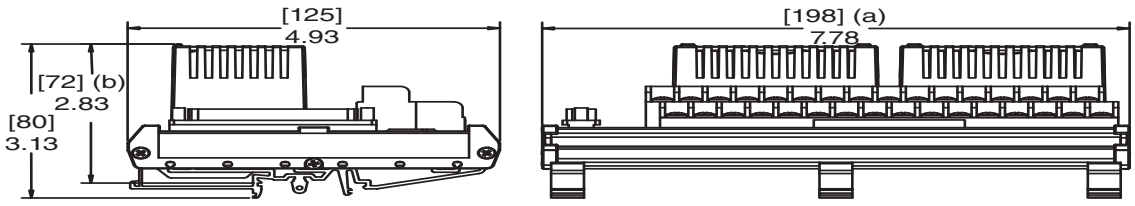


(a) Overall width – for determining DIN rail loading.
(b) Height above DIN rail (add to DIN rail height for total).

DIMENSIONS – NOMINAL (CONTINUED)

mm
in

Ring Lug Termination Assembly, 2 A Fused Switch
RH916AR (supersedes P0916AR)



(a) Overall width – for determining DIN rail loading.
(b) Height above DIN rail (add to DIN rail height for total).

RELATED PRODUCT SPECIFICATION SHEETS (PSS)

PSS Number	Description
PSS 31H-2SOV	Standard 200 Series Subsystem Overview
PSS 31H-2CERTS	Standard and Compact 200 Series I/O - Agency Certifications
PSS 31H-2SBASPLT	Standard 200 Series Baseplates

Foxboro®

by Schneider Electric

Schneider Electric Systems USA, Inc.
38 Neponset Avenue
Foxborough, MA 02035-2037
United States of America
www.schneider-electric.com

Global Customer Support
Inside U.S.: 1-866-746-6477
Outside U.S.: 1-508-549-2424
Website: https://pasupport.schneider-electric.com

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