



Catalog Number	
Notes	Type

FEATURES

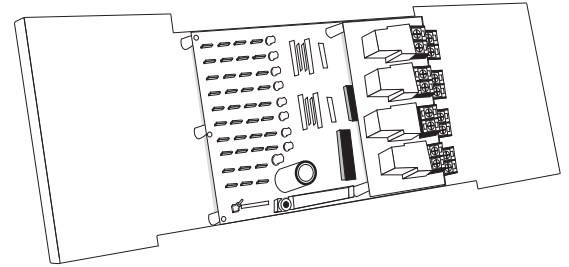
The relay module is used with the Synergy enclosure to provide low voltage switch inputs, pilot light outputs, analog inputs and line voltage output control of lighting loads. Modules can be used without the system controller (SYSC) for direct switch input to relay output control or with the controller for programmable input to output mapping. Power modules are interchangeable within the enclosure and may be ordered factory- or field-installed.

- Eight 20A relays per module
- Arcless zero cross load switching
- Eight switch inputs per module
- Eight switch/occupancy sensor inputs per module with OS option
- Two analog inputs per module
- Use with maintained, momentary or alternative action switches
- Pilot light output per relay
- 24VDC accessory power
- *On/Auto/Off* manual override switch
- Ten-year warranty on relays
- UL and C-UL listed; CEC certified

Lighting Control System

Relay Power Module

SYPM 8R



ORDERING INFORMATION

Example: **SYPM 8R**

Choose the boldface catalog nomenclature that best suits your needs and write it on the appropriate line. Order accessories as separate catalog number.

		8R					
Series		Type		Breakers/voltage		Options	
SYPM	Module for use with external circuit breakers	8R	Relay module with 8 single-pole, 20A relays	(blank)	No circuit breakers	RO	Remote override, accepts contact closure to force all relays to full in essential lighting applications. Replaces the <i>on/ auto/off</i> switch on PC board.
SYPMB	Module with circuit breakers			B1	Six 20A, 120V circuit breakers	OS	Occupancy sensor, switch inputs for contact switches or occupancy sensors ¹
				B2	Four 20A, 277V circuit breakers		
				B3	Six 15A, 120V circuit breakers		
				B4	Four 15A, 277V circuit breakers		

NOTES:

¹ When SYPM 8R is ordered with OS option, RO is provided as a standard feature.

SYPM 8R Relay Power Module

SPECIFICATIONS

MECHANICAL

- Chassis: all components mounted to steel back plane, keys into enclosure via tab and slot, secures with provided screws.

ENVIRONMENTAL

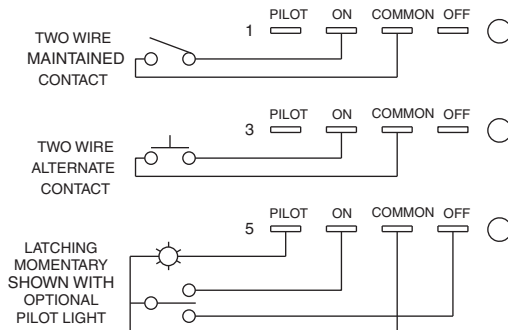
- Operation and storage temperature: 32-104°F (0-40°C).
- Humidity: 10-90% non-condensing.

ELECTRICAL

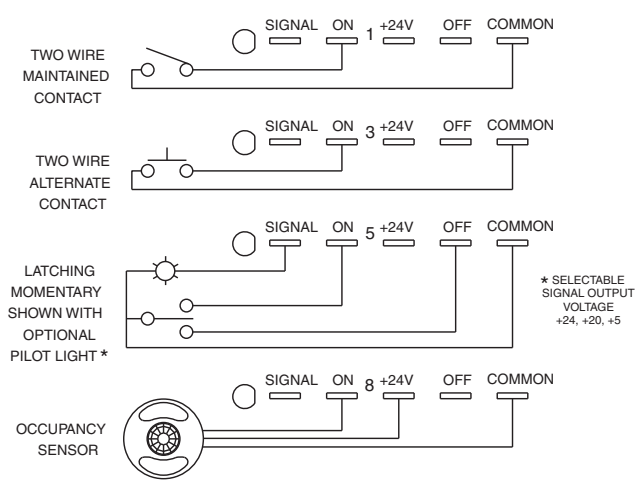
- Load relays: SPST, enclosed silver cadmium-oxide isolated contacts. N.O. maintained contact, 16A 277VAC ballast, 15A 120VAC tungsten.
- Load wire connection: board-mounted compression screw terminal blocks, #10 AWG or two #12 AWG maximum. Two terminals per load relay.
- Switch inputs: PC-board mounted press on lugs, three-wire *ON/COM/OFF* momentary or maintained contact, #14 AWG maximum, eight sets provided per module. Suitable for Class 1 or 2.
- Pilot lights: PC-board mounted press on lugs; #14 AWG maximum; one pilot output provided per relay; output voltage 24VDC, 21VDC and 5VDC selectable per module with jumper. Suitable for Class 1 or 2.
- Analog input: PC-board mounted press on lugs, three-wire +24vcom/ input, #14 AWG maximum, two provided per module for photocell and other Analog devices.
- Override: one PC-board mounted *ON/AUTO/OFF* switch per module, override of eight relays.
- 24VDC accessory power, 2.5A total per cabinet, 500mA total per SYPM 8R.
- Thermal magnetic breakers available (See table for ratings).

WIRING DIAGRAMS

STANDARD WIRING DIAGRAMS



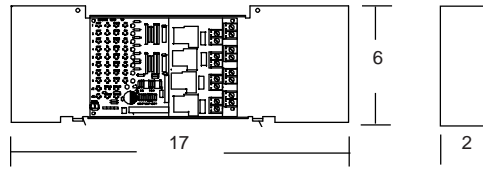
OS OPTION WIRING DIAGRAMS



DIMENSIONS

All dimensions are inches (millimeters).

Shipping weight = 4 lbs. (1.9 kg) without circuit breakers
= 9 lbs. (4.1 kg) with circuit breakers



CIRCUIT BREAKERS

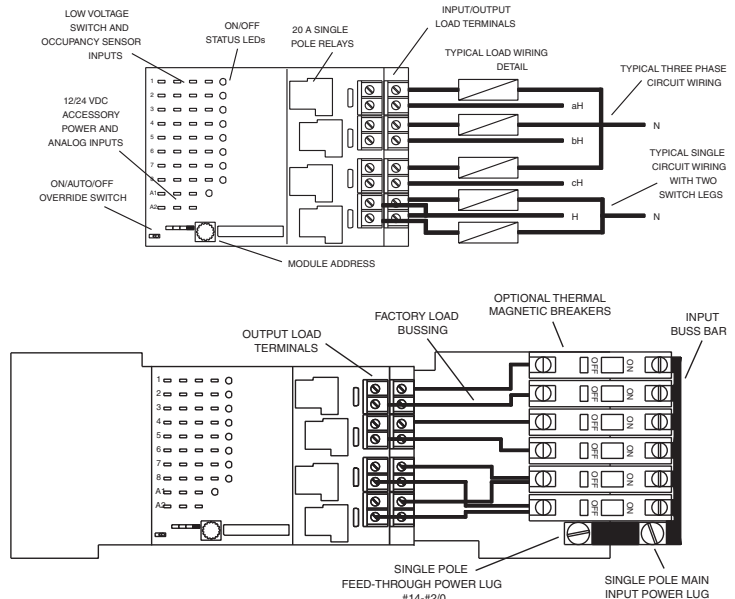
Breaker Options	Number of Breakers	AIC Rating	
		120V	277V
B1 ¹	6	10,000	N/A
B2 ²	4	64,000	14,000
B3 ¹	6	10,000	N/A
B4 ²	4	64,000	14,000

NOTES:

- Circuit breakers 5 & 6 supply two relays. (For details, see installation instructions.)
- Each circuit breaker supplies two relays. (For details, see installation instructions.)

FUNCTIONAL

STANDARD FUNCTIONAL DIAGRAMS



OS OPTION FUNCTIONAL DIAGRAM

