

RS-485 Remote Relay/Analog Output Modules



**PolyGard
REL5-5R-2A**



Relay/Analog Output Module "EP5-05"
NRTL Tested & Certified
Conforms to STD
UL 2017

DESCRIPTION

Wall-mounted, digital RS-485 communicating, addressable relay and analog output modules, for direct daisy-chain / multi-drop link to the DGC5 digital controller.

APPLICATION

To control remotely installed addressable relays and provide 4-20 mA analog output signals via the RS-485 digital bus of the DGC5 controller.

FEATURES

- RS-485 serial communication
- (5) Relay outputs, SPDT, 8 A
- (2) Analog 4-20 mA outputs, selectable for low, high or averaging
- Simple switch addressing
- Modular technology
- NEMA 4X enclosure
- Maintenance-free

SPECIFICATIONS

Electrical

Power supply -15%/20%, 50/60 Hz
 - REL5-5R-2A-24 24 VAC/DC
 - REL5-5R-2A-120* 120/208/240 VAC
 Power consumption 3 VA typical, 40 VA max.
 RF/EMI protected 4.0 W @ 3 ft. (1 m) radiated

Type of Control

Relay/Analog Output module "EP5-05" Five (5) SPDT relays and two (2) 4-20 mA outputs controlled by a remote DGC5 controller

Input/output signal for serial communication Digital RS-485, proprietary protocol, switch addressable

Relay outputs w/status LEDs Five (5) SPDT, 8 A 24 VAC/DC - 250 VAC contact resistance 100 mΩ, max

Analog output Two (2) independent 4-20 mA signal, 500 Ω, max. load, selectable as low, high or averaging of sensor inputs

VDC output supply, only w/REL5-5R-2A-120 24 VDC, 0.5 A

Environmental

Permissible ambient
 - working temperature 14°F to 122°F (-10°C to 50°C)
 - storage temperature 32°F to 122°F (0°C to + 50°C)
 - humidity 15-95% RH non-condensing
 - working pressure Atmospheric ± 10 %

Physical

Enclosure (panel)
 - material Polycarbonate, UL 94-HB, fire-retardant

- conformity
 - color
 - protection
 - installation
 Dimensions (H x W x D)

Cable entry
 Wire connection
 Wire size
 - power supply input
 - inputs/outputs
 Weight
Approvals / Listings
 - module "EP5-05"

UL 50 standards
 Light gray
 NEMA 4X (IP 65)
 Wall (surface) mounted
 7.09 x 7.17 x 3.54 in.
 (180 x 182 x 90 mm)
 4 holes for 1/2 in. conduit, covered
 Terminal blocks, push-on connect and screw type for lead wire
 Min. 16 AWG (1.5 mm²)
 Max. 14 AWG (2.5 mm²)
 Min. 20 AWG (0.5 mm²)
 Max. 16 AWG (1.5 mm²)
 Max. 3.3 lbs. (1.5 kg)

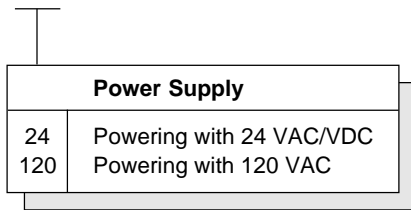
- transformer
 - enclosure (panel)
 - unit rating
 REL5-5R-2A-24
 *REL5-5R-2A-120
 NTRL Tested & Certified –
 Conforms to STD ANSI/UL 2017
 CE
 EMV-Compliance 89/336/EWG
 Low voltage directive 73/23/EWG
 UL Listed, CSA Certified
 UL Listed, E208470
 CSA Certified E208470

NTRL Tested & Certified –
 Conforms to STD ANSI/UL 2017
 Certification to STD
 ANSI/UL 61010-1 – "Pending"
 Two years material and workmanship

Warranty

ORDERING INFORMATION

REL5-5R-2A-120



Standard remote relay/analog output module, **ordering part number:**

REL5-5R-2A-120

Configuration includes:

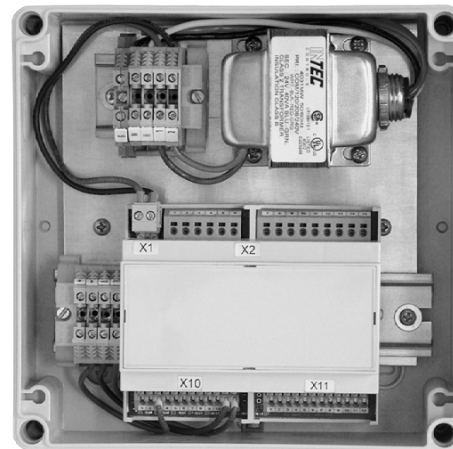
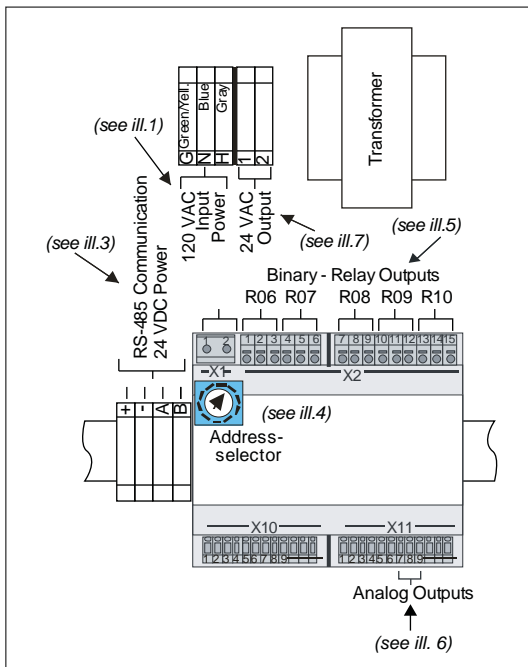
Panel enclosure, wall mount, NEMA 4X, power supply 120 VAC, 208 VAC, and 240 VAC, digital RS-485 serial communication, addressable

Input/Output: • RS-485 trunk connection

- Outputs:
- (5) Relays, SPDT, 8 A
 - (2) 4-20 mA
 - (1) 24 VDC, 0.5 A

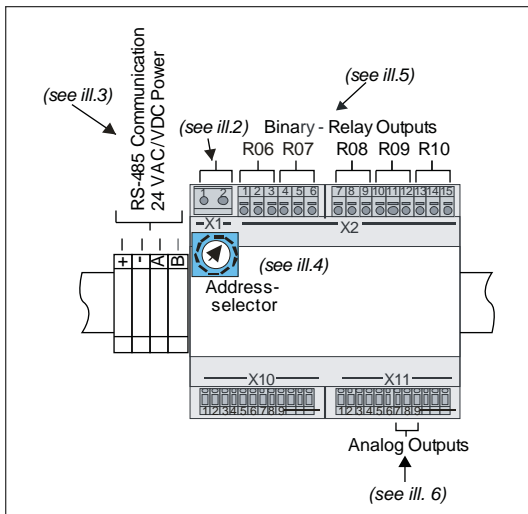
FIELD WIRING CONFIGURATION

REL5-5R-2A-120, for 120/208/240 VAC powering

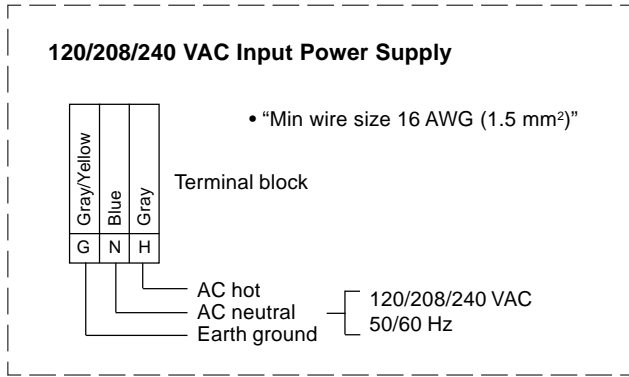


REL5-5R-2A-120

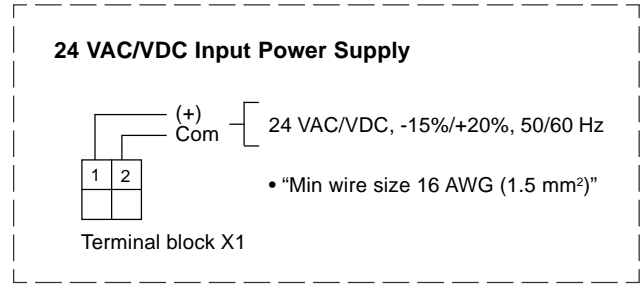
REL5-5R-2A-24, for 24 VAC/VDC powering



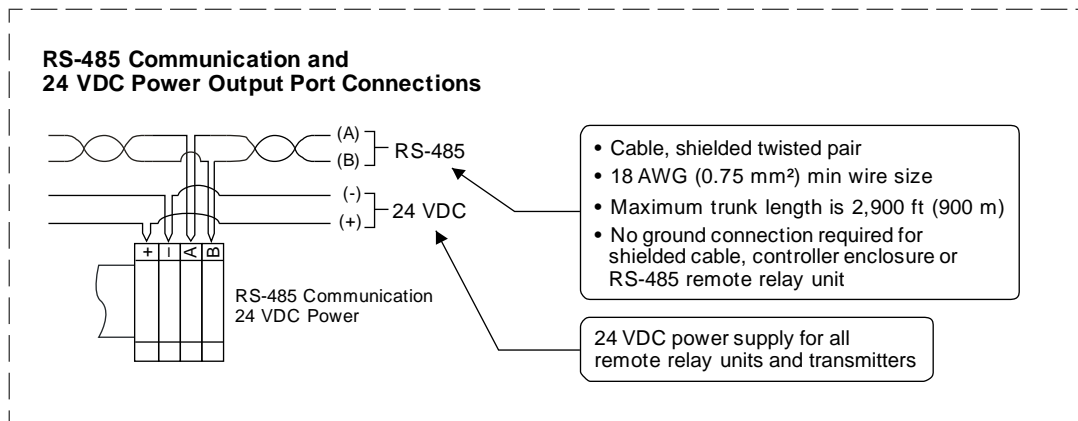
FIELD WIRING CONFIGURATION (cont...)



ill. 1



ill. 2



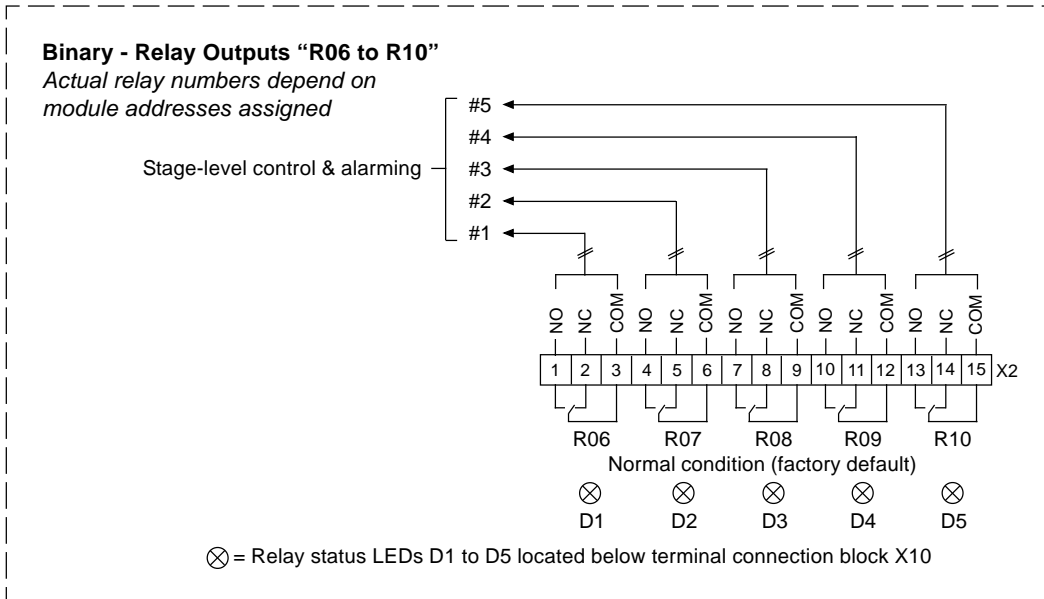
ill. 3

Selecting Module Address
(Rotary switch setting)

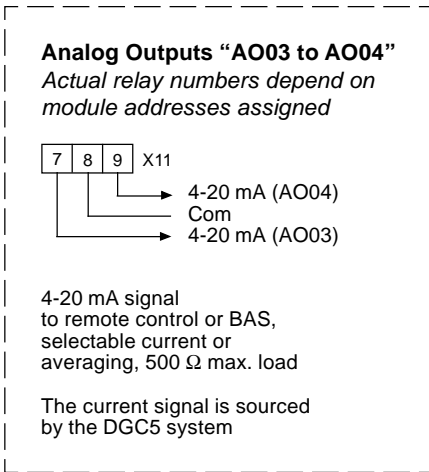
Module Address	Relay No.	Analog Output No.
01	06 to 10	03 to 04
02	11 to 15	05 to 06
03	16 to 20	07 to 08
04	21 to 25	09 to 10
05	26 to 30	11 to 12

ill. 4

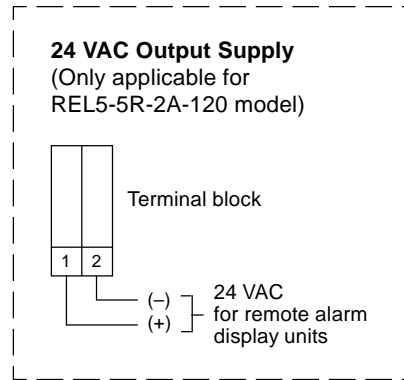
FIELD WIRING CONFIGURATION (cont...)



ill. 5



ill. 6



ill. 7