

# **A283 PLUG-IN & FLANGE MOUNT RELAYS**

### **UL CONTACT LOAD RATINGS TABLE**







COMPLIES WITH REQUIREMENTS OF

- \* IEC STANDARDS 947-4-1 AND 947-5-1 LOW VOLTAGE DIRECTIVE
- \* IEC = INTERNATIONAL ELECTROTECHNICAL COMMISSION
- \* CE TESTING AND EVALUATION PERFORMED BY THE UNDERWRITERS LABORATORIES AS A THIRD PARTY PARTICIPANT



CURRENT LIMITED TO RATING OF RELAY OR SOCKET WHICHEVER IS LESS

| CONTACT<br>CONFIGURATION  | CURRENT OR<br>HORSE POWER | LOAD<br>VOLTAGE | LOAD VOLTAGE<br>FREQUENCY | TYPE OF<br>LOAD |
|---------------------------|---------------------------|-----------------|---------------------------|-----------------|
| 1 POLE<br>THRU<br>3 POLES | 15 AMP                    | 240 VAC         | 50/60 Hz                  | RESISTIVE       |
|                           | 10 AMP                    | 28 VDC          | DC                        | RESISTIVE       |
|                           | 1/3 HP                    | 120 VAC         | 50/60 Hz                  | MOTOR           |
|                           | 1/2 HP                    | 240 VAC         | 50/60 Hz                  | MOTOR           |
|                           | 3 AMP                     | 600 VAC         | 50/60 Hz                  | RESISTIVE       |

# UL CONTACT LOAD RATINGS TABLE FOR DC SWITCHING

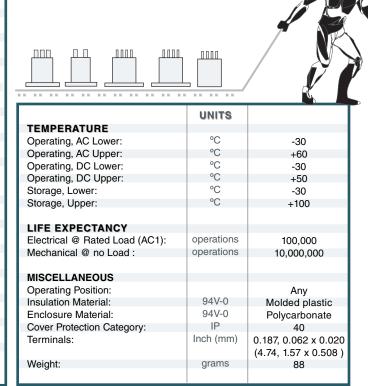
(WITH OPTIONAL MAGNETIC BLOWOUT: CODE 69)

MANUFACTURED UNDER ISO 9002 & QS 9000

| CONTACT<br>CONFIGURATION | CURRENT OR<br>HORSE POWER | LOAD<br>VOLTAGE | TYPE OF<br>LOAD |
|--------------------------|---------------------------|-----------------|-----------------|
| DPDT                     | 3 AMP                     | 150 VDC         | RESISTIVE       |
| DPST - NO                | 5 AMP                     | 150 VDC         | RESISTIVE       |
| SPST - NO<br>(DM)        | 10 AMP                    | 150 VDC         | RESISTIVE       |
| SPDT<br>(DB and DM)      | 10 AMP                    | 150 VDC         | RESISTIVE       |

# **GENERAL SPECIFICATIONS (@ 25°C)**

|   | UNITS        |                  |
|---|--------------|------------------|
| COIL                                    |              |                  |
| Pull-in Voltage AC (50/60 Hz):≤         | % of nominal | 85               |
| Pull-in Voltage DC:≤                    | % of nominal | 80               |
| Dropout Voltage AC (50/60 Hz):≥         | % of nominal | 10               |
| Dropout Voltage DC:≥                    | % of nominal | 10               |
| Maximum Voltage:                        | % of nominal | 110              |
| Resistance:                             | % ±          | 10               |
| Coil Power AC (60 Hz):                  | VA           | 2.75             |
| Coil Power DC:                          | W            | 2                |
| Insulation System Per UL Standard 1446: |              | Class B (130 °C) |
| Duty:                                   |              | Continuous       |
|   |              |                  |
| CONTACTS                                |              |                  |
| Contact Material:                       |              | Silver alloy     |
|   |              | gold flashed     |
| Contact Rating AC Amperes (AC1):        | A            | 15               |
| Contact Rating AC Voltage:              | V            | 240              |
| Contact Rating DC Amperes (DC1):        | A            | 10               |
| Contact Rating DC Voltage:              | V            | 28               |
| Horse Power (AC):                       | HP           | 1/3 @ 120 V      |
| Horse Power (AC):                       | V            | 1/2 @ 240 V      |
| Minimum Recommended Load:               | ma           | 100 @ 5 VDC      |
|   |              | or 0.5 W         |
| DIELECTRIC STRENGTH                     |              |                  |
| Coil to Contacts:                       | V rms        | 2000             |
| Across Open Contacts:                   | V rms        | 500              |
| Pole to Pole:                           | V rms        | 2000             |
| Contacts to Frame:                      | V rms        | Not applicable   |
| Insulation Resistance:                  | megohms      | 1000 @ 500       |
|   | minimum @VDC |                  |



# **A283 PLUG-IN & FLANGE MOUNT RELAYS**



### **PLUG-IN**

### **FLANGE MOUNT**

### **RECOMMENDED** PRINTED CIRCUIT LAYOUT (TOP VIEW)

0.437 (11.1)

0.829

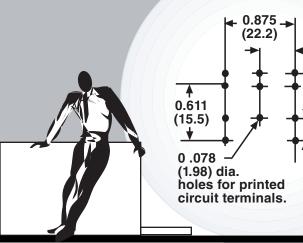
(21.0)

0.287

(7.28)









**A283 XCX** C1 240A

### **CONTACT CONFIGURATION: -**

SPDT: XAX DPDT: XBX DPST-NO: BXX 3PDT: XCX SPST -NO-DM: HXX SPDT -DB and DM: XHX

#### OPTIONAL: -

CLASS:

MAGNETIC BLOWOUT: CODE 69

#### **CONSTRUCTION STYLE:** -

\* ENCLOSED, PLAIN COVER: CODE C ENCLOSED, FLANGE COVER: CODE C1 **ENCLOSED TOP FLANGE MOUNT: CODE C3** 

#### **ENCLOSED DIN MOUNT: CODE C4**

#### TERMINAL STYLE: -

QUICK CONNECT SOLDER TERMINALS: NO CODE PRINTED CIRCUIT TERMINALS: CODE T

#### OPTIONS:

11 11 11

BI - POLAR L.E.D. STATUS LAMP: CODE L PUSH BUTTON: CODE M

#### COIL VOLTAGE: -

6, 12, 24, 120, 240 ADD "A" FOR AC COILS 6, 12, 24, 48, 110 ADD "D" FOR DC COILS

Note: Code C recommended to be used with printed circuit terminals or Plug-in applications only.

**OPTIONAL** PRINTED CIRCUIT **TERMINAL** 



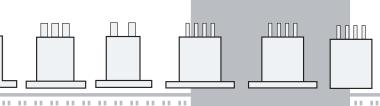








1...29



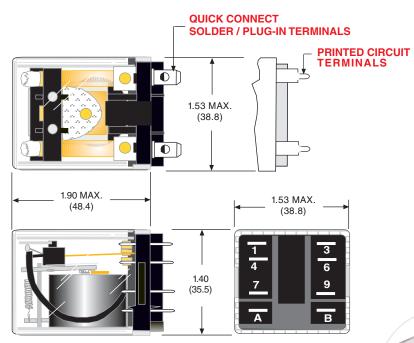
# **A283 PLUG-IN RELAY FOR DC SWITCHING**



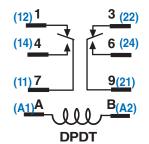
# DPDT, SPST-NO-DM 3, 5 & 10 AMPS 150 VDC SWITCHING

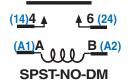
## **OUTLINE DIMENSIONS**

DIMENSIONS SHOWN IN INCHES & (MILLIMETERS).



WIRING DIAGRAM (VIEWED FROM PIN END)

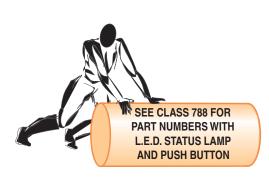




ALTERNATE NEMA OR IEC () NUMBERS VIEWED FROM PIN SIDE

BLOWOUT MAGNET STANDARD FEATURE

THE BLOWOUT MAGNET STYLES HAVE
THE SAME LOAD SPECIFICATIONS AS
THE A283 ENCLOSED PLUG-IN RELAYS,
PLUS THE ADDITIONAL DC LOAD RATINGS.
SEE A283 GENERAL SPECIFICATIONS.



Mating Sockets 70-463-1: SCREW/DIN 70-124-1: SOLDER

70-178-1, 70-178-2: PRINTED CIRCUIT 70-788EL/SL-1, 70-124-2: QUICK CONNECT

See section 7

|   |                               | COIL MEASURED @ 25 ℃        |                                 |  |  |
|---|-------------------------------|-----------------------------|---------------------------------|--|--|
| STANDARD<br>PART<br>NUMBERS             | CONTACT<br>CONFIGU-<br>RATION | NOMINAL<br>INPUT<br>VOLTAGE | NOMINAL<br>RESISTANCE<br>(OHMS) |  |  |
| AC OPERATED WITH BLOWOUT MAGNET, 3 AMP  |                               |                             |                                 |  |  |
| A283XBX69C-120A                         | DPDT                          | 110/120 VAC, 50/60Hz        | 2250 $\Omega$                   |  |  |
| DC OPERATED WITH BLOWOUT MAGNET, 3 AMP  |                               |                             |                                 |  |  |
| A283XBX69C-12D                          | DPDT                          | 12 VDC                      | 120 Ω                           |  |  |
| A283XBX69C-24D                          | DPDT                          | 24 VDC                      | 472 Ω                           |  |  |
| A283XBX69C-110D                         | DPDT                          | 110/125 VDC                 | 10,000 $\Omega$                 |  |  |
| AC OPERATED WITH BLOWOUT MAGNET, 10 AMP |                               |                             |                                 |  |  |
| A283HXX69C-120A                         | SPST-NO (DM)                  | 110/120 VAC, 50/60Hz        | 2250 Ω                          |  |  |
| DC OPERATED WITH BLOWOUT MAGNET, 10 AMP |                               |                             |                                 |  |  |
| A283XHX69C-48D                          | SPDT-NO (DB-DM)               | 48 VDC                      | 1800 Ω                          |  |  |
| DC OPERATED WITH BLOWOUT MAGNET, 5 AMP  |                               |                             |                                 |  |  |
| A283BXX69C-24D                          | DPST-NO                       | 24 VDC                      | 472 Ω                           |  |  |
| A283BXX69C-48D                          | DPST-NO                       | 48 VDC                      | 1800 Ω                          |  |  |
| DC OPERATED WITH BLOWOUT MAGNET, 10 AMP |                               |                             |                                 |  |  |
| A283HXX69C-12D                          | SPST-NO (DM)                  | 12 VDC                      | 120 Ω                           |  |  |
| A283HXX69C-24D                          | SPST-NO (DM)                  | 24 VDC                      | 472 Ω                           |  |  |
| A283HXX69C-48D                          | SPST-NO (DM)                  | 48 VDC                      | 1800 Ω                          |  |  |
| A283HXX69C-110D                         | SPST-NO (DM)                  | 110/125 VDC                 | 10,000 $\Omega$                 |  |  |
|   |                               |                             |                                 |  |  |