

## 30 Amp Power Relay

c  US E86876

PC730



### FEATURES

- ¼ Inch Male Quick Connect Terminals
- Up to 30 Amp Switch Capacity
- Up to 1½ Horsepower Rating
- Smallest 30 Amp 2 Pole Rating
- Top or Side Flanged Case or PC Mounting
- 2A or 2C Contact Configuration



### UL / cUL RATINGS

|                                  |                         |      |
|----------------------------------|-------------------------|------|
| Contact Form                     | 2A DPST N.O.<br>2C DPDT |      |
| Rated Load                       | Voltage                 | Amps |
| General Purpose, 6K cycles, 40°C | 250VAC                  | 30A  |
| General Purpose, 6K cycles, 40°C | 277VAC                  | 20A  |
| General Purpose, 6K cycles, 40°C | 28VDC                   | 20A  |
| Resistive, 6K cycles, 40°C       | 250VAC                  | 30A  |
| Resistive, 6K cycles, 40°C       | 277VAC                  | 20A  |
| 1-½ hp                           | 240VAC                  |      |
| 1 hp                             | 120VAC                  |      |

### CHARACTERISTICS

|                       |                                                                   |
|-----------------------|-------------------------------------------------------------------|
| Insulation Resistance | 500 MΩ min. at 500 VDC                                            |
| Dielectric Strength   | 1500 Vrms, between contacts<br>2500 Vrms, between coil & contacts |
| Power Consumption     | DC Coil : 1.8W; AC Coil : 4VA                                     |
| Solderability         | 260°C 5 s ± 0.5 s                                                 |
| Operating Temperature | -40°C to 85°C                                                     |
| Storage Temperature   | -40°C to 85°C                                                     |
| Shock Resistance      | 10g functional                                                    |
| Vibration Resistance  | 2mm double amplitude 10~55Hz                                      |
| Weight                | 70g                                                               |

### CONTACT DATA

|                            |                                           |
|----------------------------|-------------------------------------------|
| Maximum Switching Power    | 7500 VA                                   |
| Maximum Switching Voltage  | 300VAC, 36VDC                             |
| Maximum Continuous Current | 30 A                                      |
| Material                   | AgCdO                                     |
| Initial Contact Resistance | 100 mΩ max.                               |
| Service Life               | Mechanical 1 x 10 <sup>7</sup> operations |
|                            | Electrical 1 x 10 <sup>5</sup> operations |

Values can change due to the switching frequency, desired reliability levels, environmental conditions, and in-rush current levels. It is recommended to test to actual load conditions for the application. It is the users responsibility to determine the performance suitability for their specific application. The use of any coil voltage less than the rated coil voltage may compromise the operation of the relay.

### ORDERING INFORMATION

|                   |                                                                                                                                |                                                            |     |       |  |  |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|-----|-------|--|--|
| Example           | PC730                                                                                                                          | -2C                                                        | -C1 | -120A |  |  |
| Model:            | PC730                                                                                                                          |                                                            |     |       |  |  |
| Contact Form:     | 2A<br>2C                                                                                                                       |                                                            |     |       |  |  |
| Mounting Version: | C1 = Side Flange<br>C3 = Top Flange<br>P = PC Pins                                                                             |                                                            |     |       |  |  |
| Coil Voltage:     | 12A = 12VAC<br>24A = 24VAC<br>48A = 48VAC<br>120A = 120VAC<br>208A = 208VAC<br>220A = 220VAC<br>240A = 240VAC<br>277A = 277VAC | 12D = 12VDC<br>24D = 24VDC<br>48D = 48VDC<br>110D = 110VDC |     |       |  |  |
| RoHS Compliance:  | Nil = RoHS Compliant                                                                                                           |                                                            |     |       |  |  |
| Insulation:       | Nil = Class B                                                                                                                  |                                                            |     |       |  |  |

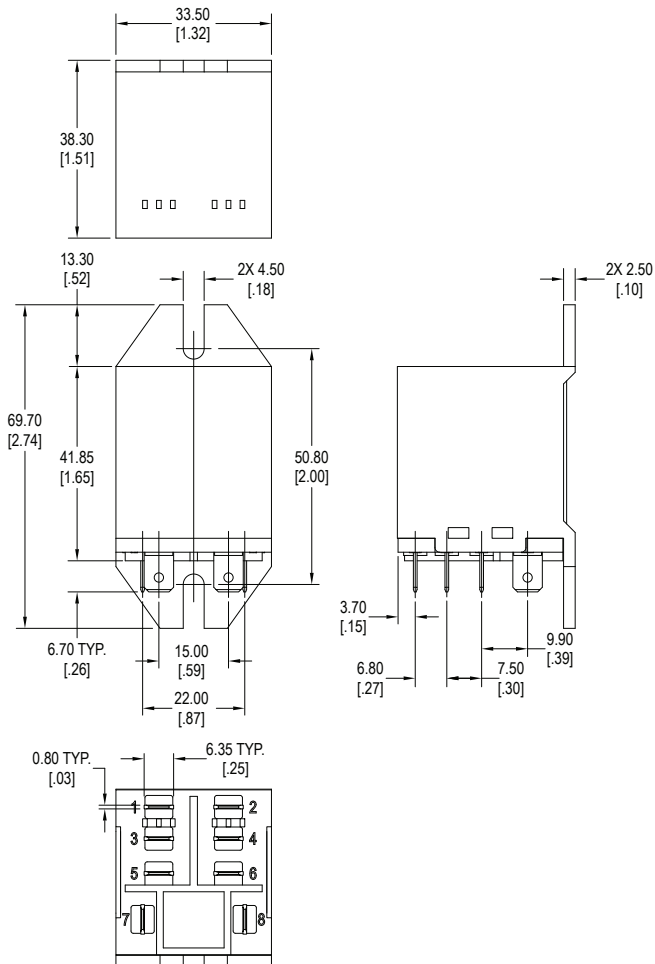
## COIL DATA

| Voltage Type | Coil Voltage |      | Resistance        | Must Operate Voltage Max (VDC) | Must Release Voltage Min (VDC) |
|--------------|--------------|------|-------------------|--------------------------------|--------------------------------|
| Coil Power   | Rated        | Max  | $\Omega \pm 10\%$ |                                |                                |
| DC<br>1.8W   | 12           | 13.2 | 80                | 9                              | 1.2                            |
|              | 24           | 26.4 | 320               | 18                             | 2.4                            |
|              | 48           | 52.8 | 1280              | 36                             | 4.8                            |

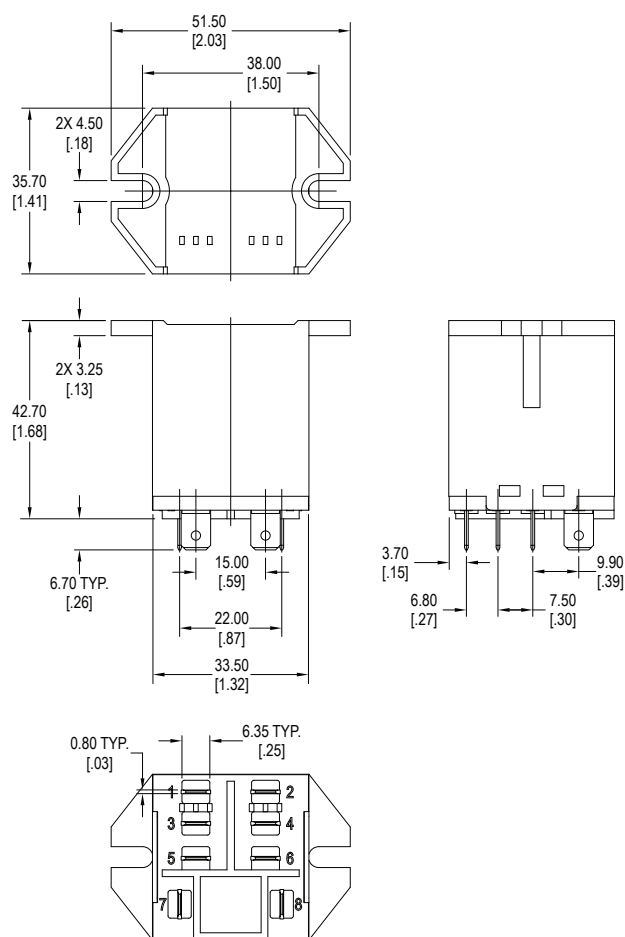
NOTE : The use of any coil voltage less than the rated voltage will compromise the operation of the relays. Must Operate Voltage is listed for test purposes only and is not to be used as design criteria. Pickup and release voltages are for test purposes only and are not to be used as design criteria.

| Voltage Type | Coil Voltage |      | Resistance        | Must Operate Voltage Max (VAC) | Must Release Voltage Min (VAC) |
|--------------|--------------|------|-------------------|--------------------------------|--------------------------------|
| Coil Power   | Rated        | Max  | $\Omega \pm 10\%$ |                                |                                |
| AC<br>4.0VA  | 12           | 13.2 | 12.1              | 9.6                            | 3.6                            |
|              | 24           | 26.4 | 48.2              | 19.2                           | 7.2                            |
|              | 48           | 52.8 | 193               | 38.4                           | 14.4                           |
|              | 120          | 132  | 1206              | 96.0                           | 36.0                           |
|              | 208          | 228  | 3623              | 166.4                          | 62.4                           |
|              | 220          | 242  | 4053              | 176.0                          | 66.0                           |
|              | 240          | 264  | 4824              | 192.0                          | 72.0                           |
|              | 277          | 305  | 6426              | 222.0                          | 83.1                           |

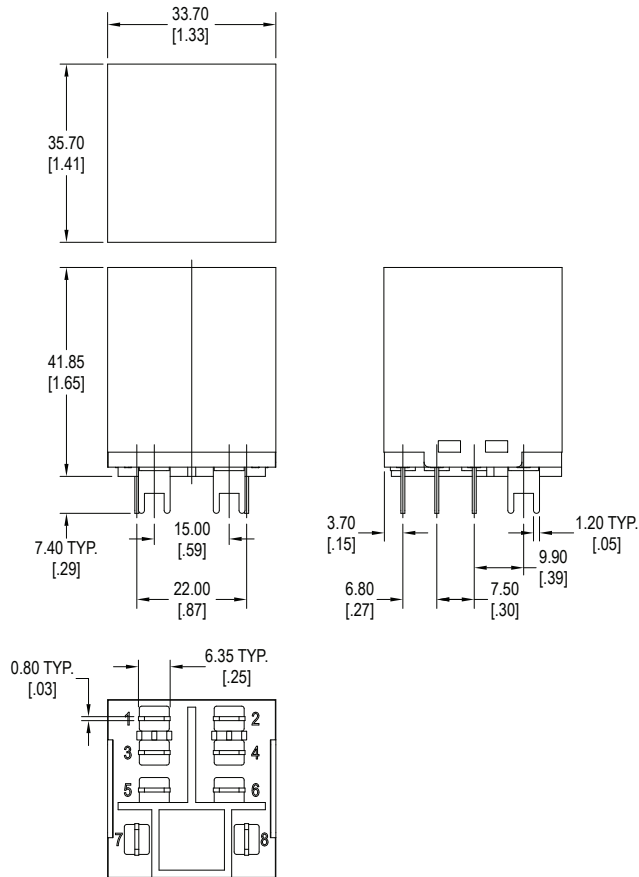
## DIMENSIONS mm (inches)



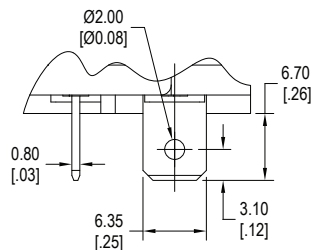
C1 - Side Flange  
20550 Commerce Blvd, Rogers, MN 55374 USA  
Sales (763) 535-2339



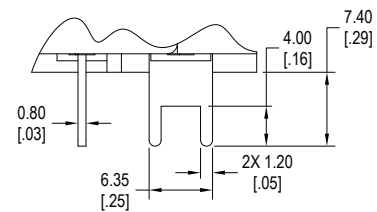
C3 - Top Flange

**DIMENSIONS** mm (inches)

P - PC Terminal

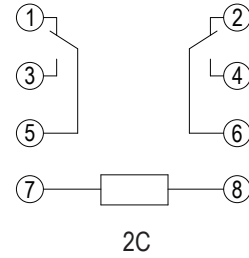
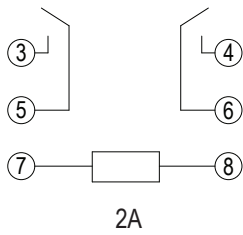
**TERMINALS** mm (inches)

Quick Connect



PC Pins

## SCHEMATICS *Bottom Views*



## PC LAYOUT

