



# O/E/N 31 - 3R/4R

## MEDIUM POWER INDUSTRIAL RELAY

- CSA Certified (file number 106405-1)
- Compact High Performance
- Direct Panel Mounting Facility
- 1 Form C, 2 Form C & 3 Form C Contacts
- Free Wheeling Diode
- DIN Rail Mounting Socket Available
- LED Indication Optional

### SPECIFICATIONS

|                           |                                         |
|---------------------------|-----------------------------------------|
| Contact Arrangement       | : 1 Form C, 2 Form C<br>3 Form C        |
| Contact Material          | : Silver alloy                          |
| Contact Rating            |                                         |
| Rated Voltage             | : 230VAC/24VDC                          |
| Max. Voltage              | : 440VAC/220VDC                         |
| Max Continuous Current    | : 10A                                   |
| @230 VAC/24VDC            |                                         |
| Max. Switching Current    | : 20A (Max. 4 S. at<br>duty cycle <10%) |
| Rated Breaking Capacity   | : 2300 VA                               |
| Nominal Coil Power        | : 1.1 Watts                             |
| Operating Power           | : 0.7 W                                 |
| Life Expectancy           |                                         |
| Mechanical                | : $10^6$ operations                     |
| Electrical                | : $10^5$ operations                     |
| Contact Resistance        | : 50m Ohms Max.<br>(Initial)            |
| Dielectric Strength       |                                         |
| Between Open Contact      | : 500 VRMS                              |
| Between Contacts and Coil | : 2000 VRMS                             |
| Insulation Resistance     | : 500M Ohms@<br>500VDC, 25°C,<br>RH50   |
| Operate time              |                                         |
| at Nominal Voltage        | : 20 milli sec. (Max)                   |
| Release time              |                                         |
| at Nominal Voltage        | : 10 milli sec. (Max)                   |
| Ambient Temperature       | : -40°C to +70°C                        |
| Weight                    | : 100 gms                               |

#### Typical applications

Industrial Control, Instrumentation, Automation, Battery Chargers, Power Conditioning Equipments.

#### Note :

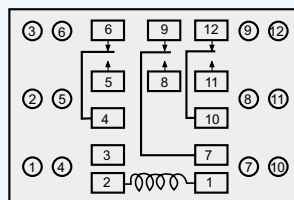
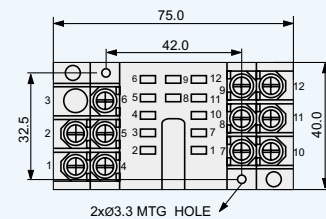
For 1 C/O Relay use terminal set 7,8 & 9  
For 2 C/O Relay use terminal set 4,5,6 & 10,11,12  
In case of Relay with clamping diode, take 2 as positive

All dimensions are in mm. Specifications subject to change without notice.

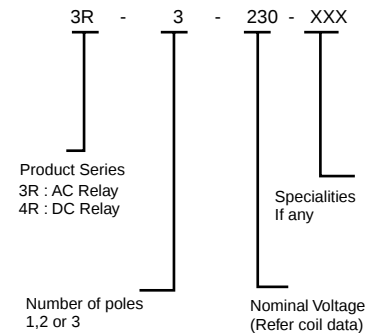
### COIL DATA

| Nominal Voltage | 4R                  |                                 | 3R                  |                                 |
|-----------------|---------------------|---------------------------------|---------------------|---------------------------------|
|                 | Pick-up Voltage VDC | Coil Resistance Ohms $\pm 10\%$ | Pick-up Voltage VAC | Coil Resistance Ohms $\pm 10\%$ |
| 6               | 4.5                 | 30                              | 4.5                 | 4                               |
| 12              | 9.0                 | 150                             | 9.0                 | 16                              |
| 18              | 14.4                | 390                             | 14.4                | 40                              |
| 24              | 18.0                | 500                             | 18.0                | 70                              |
| 48              | 36.0                | 2250                            | 36.0                | 300                             |
| 60              | 45.0                | 3000                            | 45.0                | 650                             |
| 115             | 82.5                | 10000                           | 82.5                | 2000                            |
| 230             | 184.0               | 30000                           | 184.0               | 10000                           |

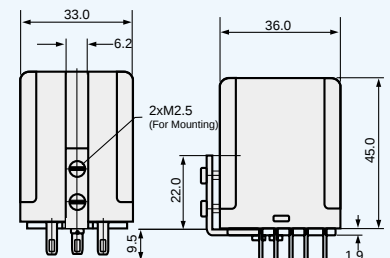
### SOCKET TERMINAL LAYOUT



### HOW TO ORDER



### DIMENSION



### RELAY SOCKET ASSEMBLY

