



| Coil Sensitivity | Coil Voltage Code | Nominal Voltage (VDC) | Nominal Current (mA) | Coil Resistance ( $\Omega$ ) $\pm 10\%$ | Power Consumption (W) | Pull-In Voltage (VDC) | Drop-Out Voltage (VDC) | Max-Allowable Voltage (VDC) |
|------------------|-------------------|-----------------------|----------------------|---|-----------------------|-----------------------|------------------------|-----------------------------|
| TRI              | 03                | 03                    | 240                  | 12.5                                    | abt. 0.72W            | 80% Max.              | 5% Min.                | 130% Max.                   |
|                  | 05                | 05                    | 138.9                | 36                                      |                       |                       |                        |                             |
|                  | 06                | 06                    | 120                  | 50                                      |                       |                       |                        |                             |
|                  | 09                | 09                    | 78.3                 | 115                                     |                       |                       |                        |                             |
|                  | 12                | 12                    | 60                   | 200                                     |                       |                       |                        |                             |
|                  | 24                | 24                    | 29.3                 | 820                                     |                       |                       |                        |                             |
| TRI-L            | 03                | 03                    | 126.5                | 17                                      | abt. 0.54W            | 80% Max.              | 5% Min.                | 130% Max.                   |
|                  | 05                | 05                    | 106.4                | 47                                      |                       |                       |                        |                             |
|                  | 06                | 06                    | 88                   | 68                                      |                       |                       |                        |                             |
|                  | 09                | 09                    | 58                   | 155                                     |                       |                       |                        |                             |
|                  | 12                | 12                    | 44.4                 | 270                                     |                       |                       |                        |                             |
|                  | 24                | 24                    | 21.8                 | 1100                                    |                       |                       |                        |                             |
|                  | 48                | 48                    | 10.9                 | 4400                                    |                       |                       |                        |                             |

## CONTACT RATING

| Arrangement            | SPST-NO(1a),SPDT(1c)           |   | SPST-NO(1a),SPDT(1c)           |   | DPST-NO(2a),DPST(2c)           |   |
|------------------------|--------------------------------|---|--------------------------------|---|--------------------------------|---|
|                        | E-Type                         |   | H-Type                         |   | M-Type                         |   |
| Rated load             | Resistive Load (cos $\Phi$ =1) | Inductive Load (cos $\Phi$ =0.4)                  | Resistive Load (cos $\Phi$ =1) | Inductive Load (cos $\Phi$ =0.4)                    | Resistive Load (cos $\Phi$ =1) | Inductive Load (cos $\Phi$ =0.4)                  |
|                        | 16A 277VAC<br>16A 30VDC        | 8A 250VAC<br>8A 30VDC<br>TV-8<br>1/2HP 277/125VDC | 12A 277VAC<br>12A 30VDC        | 7.5A 250VAC<br>5A 30VDC<br>TV-5<br>1/3HP 277/125VAC | 10A 277VAC<br>10A 30VDC        | 2A 250VAC<br>3A 30VDC<br>TV-3<br>1/4HP 277/125VAC |
| Carrying current       | 16A                            |   | 12A                            |   | 10A                            |   |
| Max. switching voltage | 380VAC,125VDC                  |   | 380VAC,125VDC                  |   | 380VAC,125VDC                  |   |
| Max. switching current | 16A                            |   | 12A                            |   | 10A                            |   |
| Max. switching power   | 4432VA,480W                    | 2000VA,240W                                       | 3324VA,360W                    | 1875VA,150W   | 2770VA,300W                    | 500VA,90W   |
| Min. permissible load  | 5VDC 10mA                      |   | 5VDC 10mA                      |   | 5VDC 10mA                      |   |
| Contact material       | Ag alloy                       |   |                                |   |                                |   |

## PERFORMANCE (at initial value)

| Item                          | Type | TRI-D  | TRI-L        |
|-------------------------------|------|--|--------------|
| Contact Resistance            |      | 100m $\Omega$ Max.                           |              |
| Operation Time                |      | 15msec Max.                                  | 20msec Max.  |
| Release Time                  |      | 8msec Max.                                   |              |
| Dielectric Strength           |      | 5000VAC 50/60HZ (1 minute)                   |              |
| Between coil & contact        |      | 1000VAC 50/60HZ (1 minute)                   |              |
| Between contacts              |      | 1000V (between coil & contact 1x40 msec)     |              |
| Surge Resistiveness           |      | 100 M $\Omega$ Min. (500VDC)                 |              |
| Insulation Resistance         |      | 300 operation/min                            |              |
| Max. ON/OFF Switching         |      | 30 operation/min                             |              |
| Mechanically                  |      | -30°C to +55°C                               |              |
| Electrically                  |      | -30°C to +70°C                               |              |
| Operating Ambient Temperature |      | (No water drop condensation)                 |              |
| Operating Humidity            |      | 45 to 80% RH                                 |              |
| Coil Temperature Rise         |      | 45 deg. Max.                                 | 35 deg. Max. |
|                               |      | (at rated coil voltage)                      |              |
| Vibration                     |      | 10 to 55Hz Double Amplitude 1.5mm            |              |
| Endurance                     |      | 10 to 55Hz Double Amplitude 1.5mm            |              |
| Error Operation               |      | 100G Min.                                    |              |
| Shock                         |      | 10G Min.                                     |              |
| Endurance                     |      | 10 $\times$ 10 <sup>6</sup> operations. Min. |              |
| Life Expectancy               |      | 10 $\times$ 10 <sup>4</sup> operations. Min. |              |
| Mechanically                  |      |  |              |
| Electrically                  |      |  |              |
| Weight                        |      | abt. 13grs.                                  |              |
| UL File No.                   |      | E156521                                      |              |

## REFERENCE DATA

