

## Contactors - Mini Size

### Features

- Non-reversing mini contactors
- 1 Frame size up to 16A
- DIN Rail Mount
- 4 Pole Control Relay with N/O or N/C Contacts
- Front mounted auxiliary contacts can be installed directly on top of the single front mounted mechanical interlock
- IP20 Guarded
- AC Coil Voltage 50/60Hz

### Product Images



### Product Details

#### 24VAC

| Part No.  | V  | A  | Detail  |
|-----------|----|----|---------|
| COM09NO24 | 24 | 9  | 1 x N/O |
| COM09NC24 | 24 | 9  | 1 x N/C |
| COM12NO24 | 24 | 12 | 1 x N/O |
| COM12NC24 | 24 | 12 | 1 x N/C |
| COM16NO24 | 24 | 16 | 1 x N/O |
| COM16NC24 | 24 | 16 | 1 x N/C |

#### 230VAC

| Part No.   | V   | A  | Detail  |
|------------|-----|----|---------|
| COM09NO230 | 230 | 9  | 1 x N/O |
| COM09NC230 | 230 | 9  | 1 x N/C |
| COM12NO230 | 230 | 12 | 1 x N/O |
| COM12NC230 | 230 | 12 | 1 x N/C |
| COM16NO230 | 230 | 16 | 1 x N/O |
| COM16NC230 | 230 | 16 | 1 x N/C |

**Technical Specifications**

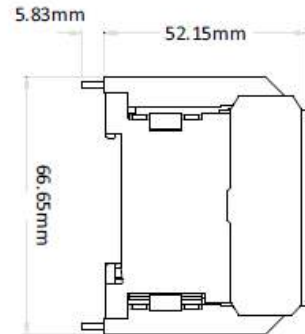
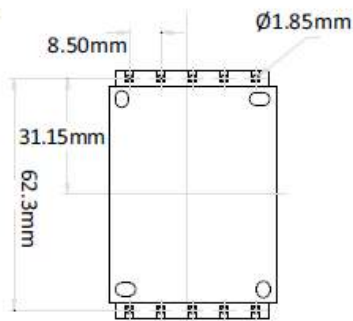
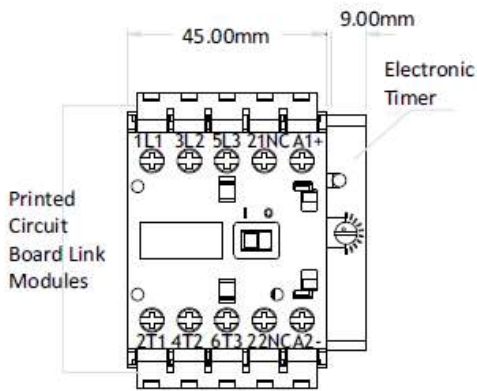
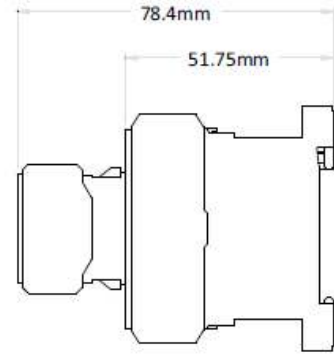
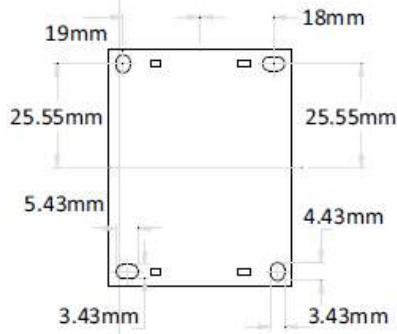
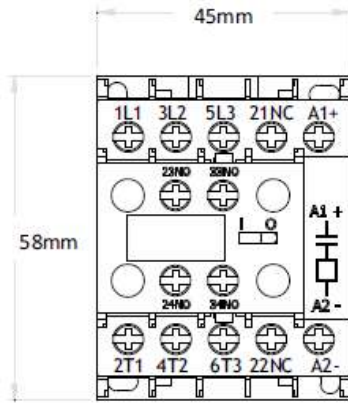
|  |    | COM09                   | COM12 | COM16 |
|--|----|-------------------------|-------|-------|
| <b>Rated Operating Frequency</b>                                   |    | AC: 50Hz, 60Hz, 50/60Hz |       |       |
| <b>IEC RATINGS</b>   |    |                         |       |       |
| <b>Rated Insulation Voltage, Ui</b>                                | V  |                         | 690   |       |
| <b>Rated Impulse Voltage withstand, Uimp</b>                       | kV |                         | 4     |       |
| <b>Rated Operating Voltage, Ue</b>                                 | V  |                         | 690   |       |
| <b>Rated Thermal Current, Ith for Ambient Temperature &lt; 55C</b> | A  | 20                      | 22    | 22    |
| <b>Making Capacity</b>   | A  | 90                      | 120   | 160   |
| <b>Breaking Capacity</b>   |    |                         |       |       |
| <b>Ue &lt; 400V</b>  | A  | 72                      | 96    | 128   |
| <b>Ue = 500V</b>   | A  | 72                      | 96    | 128   |
| <b>Ue = 690V</b>   | A  | 54                      | 72    | 96    |
| <b>AC - 1 Operating Current, Ie</b>                                |    |                         |       |       |
| <b>At 55°C</b>   |    | 20.0                    | 22.0  | 22.0  |
| <b>At 70°C</b>   |    | 16.0                    | 17.6  | 17.6  |
| <b>AC - 3 Operating Current, Ie</b>                                |    |                         |       |       |
| <b>220 – 240V</b>  | A  | 9.0                     | 12.0  | 16.0  |
| <b>380 ~ 400V</b>  | A  | 9.0                     | 12.0  | 16.0  |
| <b>415 ~ 440V</b>  | A  | 9.0                     | 12.0  | 16.0  |
| <b>500V</b>  | A  | 7.5                     | 8.8   | 13.0  |
| <b>660 ~ 690V</b>  | A  | 6.0                     | 6.6   | 9.7   |
| <b>AC - 3 Operating Power, Pe</b>                                  |    |                         |       |       |
| <b>220 – 240V</b>  | KW | 2.2                     | 3.0   | 4.5   |
| <b>380 ~ 400V</b>  | KW | 4.0                     | 5.5   | 7.5   |
| <b>415 ~ 440V</b>  | KW | 4.5                     | 5.5   | 7.5   |
| <b>500V</b>  | KW | 4.5                     | 5.5   | 7.5   |
| <b>660 ~ 690V</b>  | KW | 4.5                     | 5.5   | 7.5   |
| <b>AC - 4 Operating Current, Ie</b>                                |    |                         |       |       |
| <b>220 ~ 240V</b>  | A  | 7.5                     | 10.0  | 13.3  |
| <b>380 ~ 400V</b>  | A  | 7.5                     | 10.0  | 13.3  |
| <b>415 ~ 440V</b>  | A  | 7.5                     | 10.0  | 13.3  |
| <b>500V</b>  | A  | 6.3                     | 7.3   | 10.8  |
| <b>660 ~ 690V</b>  | A  | 5.0                     | 5.5   | 8.1   |
| <b>AC - 4 Operating Power, Pe</b>                                  |    |                         |       |       |
| <b>220 – 240V</b>  | KW | 1.5                     | 2.2   | 3.0   |
| <b>380 ~ 400V</b>  | KW | 3.0                     | 4.0   | 5.5   |
| <b>415 ~ 440V</b>  | KW | 3.0                     | 4.0   | 5.5   |
| <b>500V</b>  | KW | 3.0                     | 4.0   | 5.5   |
| <b>660 ~ 690V</b>  | KW | 4.0                     | 4.0   | 5.5   |
| <b>AC - 4 Operating Current, Ie @ 200,000 Operations</b>           |    |                         |       |       |
| <b>220 – 240V</b>  | A  | 2.7                     | 3.6   | 4.8   |
| <b>380 – 400V</b>  | A  | 2.7                     | 3.6   | 4.8   |
| <b>415 – 440V</b>  | A  | 2.7                     | 3.6   | 4.8   |
| <b>500V</b>  | A  | 2.3                     | 2.7   | 3.9   |
| <b>660 – 690V</b>  | A  | 1.8                     | 2.0   | 2.9   |

**Technical Specifications cont...**

|  | Units        | COM09 | COM12 | COM16 |
|--|--------------|-------|-------|-------|
| <b>AC - 4 Operating Power, Pe 200,000 Operations</b>                               |              |       |       |       |
| 220 ~ 240V   | KW           | 0.55  | 0.75  | 1.1   |
| 380 ~ 400V   | KW           | 1.1   | 1.5   | 1.5   |
| 415 ~ 440V   |              |       |       |       |
| 500V   | KW           | 1.1   | 1.1   | 2.2   |
| 660 ~ 690V   | KW           | 1.1   | 1.1   | 2.2   |
| <b>Maximum Electrical Switching Rate</b>   |              |       |       |       |
| AC - 1   | Ops./Hr.     | 300   |       |       |
| AC - 3   | Ops./Hr.     | 600   |       |       |
| Ac - 4   | Ops./Hr.     | 300   |       |       |
| <b>Electrical Endurance, AC-3 at Maximum Rated 3 Phase Operating Power (@400V)</b> | Ops. (mill.) | 1.3   | 1.2   | 1.1   |
| <b>Short Circuit Coordination</b>  |              |       |       |       |
|  | KA           | 5     |       |       |
| Type "1" gL/gG   | A            | 35    | 35    | 35    |
| Type "2" gL/gG   | A            | 20    | 25    | 25    |

|  |                 |                              |               |       |
|--|-----------------|------------------------------|---------------|-------|
| <b>UL Ratings</b>                              | unit            | COM09                        | COM12         | COM16 |
| General Purpose Current Rating                 | A               | 20                           | 22            | 22    |
| <b>Rated 1 Phase Operating Current, Ie</b>     |                 |                              |               |       |
| 115V   | A               | 7.2                          | 9.8           | 16.0  |
| 230V   | A               | 8.0                          | 12.0          | 12.0  |
| <b>Rated 1 Phase Operating Power, Pe</b>       |                 |                              |               |       |
| 115V   | Hp              | 1/3                          | 1/2           | 1     |
| 230V   | Hp              | 1                            | 2             | 2     |
| <b>Rated 3 Phase Operating Current, Ie</b>     |                 |                              |               |       |
| 200V   | A               | 7.8                          | 11.0          | 11.0  |
| 230V   | A               | 6.8                          | 9.6           | 9.6   |
| 460V   | A               | 7.6                          | 11.0          | 14.0  |
| 575V   | A               | 9.0                          | 9.0           | 11.0  |
| <b>Rated 3 Phase Operating Power, Pe</b>       |                 |                              |               |       |
| 200V   | Hp              | 2                            | 3             | 3     |
| 230V   | Hp              | 3                            | 3             | 5     |
| 460V   | Hp              | 5                            | 7 1/2         | 10.0  |
| 575V   | Hp              | 7 1/2                        | 7 1/2         | 10    |
| <b>SCCR</b>                                    |                 |                              |               |       |
| Standard Fault (5KA) Fuse Size                 | A               | 30                           | 30            | 40    |
| High Fault (100KA) Fuse Size                   | A               | 15                           | 20            | 25    |
| <b>Electrical Endurance</b>                    |                 |                              |               |       |
| @ Maximum Rated 3 Phase Operating Power (400V) | Ops.(mill.)     | 1.3                          | 1.2           | 1.1   |
| <b>Coil Characteristics</b>                    |                 |                              |               |       |
| Rated Insulation Voltage, Ui                   | V               | 690                          |               |       |
| <b>Operating Limits</b>                        |                 |                              |               |       |
| 50Hz, 60Hz, 50/60Hz<br>Operating               | xUc             | 0.8 ~ 1.1                    |               |       |
| Pick-Up  | xUc             | 0.40 ~ 0.76                  |               |       |
| Sealed   | xUc             | 0.25 ~ 0.65                  |               |       |
| <b>Coil Consumption</b>                        |                 |                              |               |       |
| 50Hz, 60Hz, 50/60Hz<br>Pick-Up                 | W               | 16                           |               |       |
| Hold-In  | W               | 2 ~ 4                        |               |       |
| <b>Operating Times</b>                         |                 |                              |               |       |
| AC<br>Pick-Up                                  | msec.           | 8 - 20                       |               |       |
| Drop-Out                                       | msec.           | 6 - 13                       |               |       |
| <b>Power Dissipation</b>                       |                 |                              |               |       |
| 50Hz, 60Hz, 50/60Hz                            | W               | 3                            |               |       |
| <b>Power Factor</b>                            |                 |                              |               |       |
|  | cos             | 0.27                         |               |       |
| Closed   | cos             | 0.8                          |               |       |
| Open   |                 |                              |               |       |
| <b>Mechanical</b>                              |                 |                              |               |       |
| Mechanical Endurance                           |                 | 10                           |               |       |
|  | Ops.(mill.)     |                              |               |       |
| Maximum Mechanical Switching Rate              | Ops./Hr.        | 2000                         |               |       |
| <b>Environmental</b>                           |                 |                              |               |       |
| Ambient Operating Temperature                  |                 | -25 to +55°C (-13 to +131°F) |               |       |
| Ambient Storage Temperature                    |                 | -55 to +80°C (-67 to +176°F) |               |       |
| <b>Construction</b>                            |                 |                              |               |       |
| <b>Ingress Protection</b>                      |                 |                              |               |       |
| Main Circuits                                  |                 |                              | IP20          |       |
| Control Circuit Terminations                   |                 |                              | IP20          |       |
| Weight   | Kg.             |                              | 0.18          |       |
|  | lbs.            |                              | 0.4           |       |
| <b>Terminal Capacity</b>                       |                 |                              |               |       |
| AWG Wire                                       | AWG             |                              | 2 X 20 ~ 14   |       |
| Solid  | mm <sup>2</sup> |                              | 1 X 0.5 ~ 2.0 |       |
| Stranded                                       | mm <sup>2</sup> |                              | 1 X 0.5 ~ 2.0 |       |
| Tightening Torque                              | Nm              |                              | 1 ~ 1.2       |       |
|  | lb*in           |                              | 8.8 ~ 10.6    |       |

**Dimensions**



Subject to change without notice