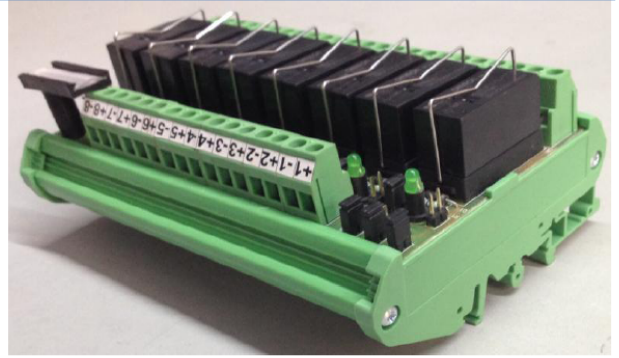


## SINGLE CHANGE OVER RELAY INTERFACE MODULE

### FEATURES

Available in DC operating voltage.  
 1/2/4/8/16/32 channels available.  
 Switching current up to 12A at 24V DC/ 230V AC.  
 Jumpers for selection between positive looping/ negative looping.  
 Freewheeling diode across relay coil for protection.  
 LED indications to indicate input status of relays.  
 Relays pluggable/ directly soldered as required.  
 Mounting Din 35 carrier rail.



### TECHNICAL INFORMATION

#### GENERAL DATA

|                               |  |
|-------------------------------|--|
| Number of channels            | 1/2/4/8/16, channels other than specified are available on request     |
| Positive/ Negative looping    | By using jumper caps, remove all jumper caps to make relay independent |
| Input indication              | 3 mm green LED for input status  |
| Relay Protection              | Freewheeling diode 1N4007 across relay coil                            |
| Ambient operating temperature | 0°C to 50 °C   |
| Housing material              | PVC/ V0 grade, Phoenix contact or equivalent                           |
| Housing color                 | Green  |
| Conformal coating             | Insulate, protect and seal electronic parts, available on request      |
| RoHS compliant                | All the components used including PCBs are RoHS approved               |

#### COIL DATA

| Rated coil voltage      | 5V DC                     | 12V DC      | 24V DC      | 48V DC      |
|-------------------------|---------------------------|-------------|-------------|-------------|
| Coil resistance (Ohms)  | 62.5                      | 760         | 1440        | 5358        |
| Rated coil current (mA) | 80                        | 33.3        | 16.7        | 8.96        |
| Must operate voltage    | 70% max. of rated voltage |             |             |             |
| Must release voltage    | 10% min. of rated voltage |             |             |             |
| Maximum voltage         | 130% (at 85°C)            |             |             |             |
| Power consumption (mW)  | Approx. 400               | Approx. 400 | Approx. 400 | Approx. 430 |

#### RELAY DATA

|                 |   |
|-----------------|---|
| Relay make      | OMRON G2RL-14 series, other than OMRON available on request |
| Contact Type    | 1 CO (SPDT)   |
| Relay approvals |   |

#### RELAY CONTACT DATA

|                        |                                  |
|------------------------|----------------------------------|
| Contact material       | Ag-alloy (Cd free)               |
| Rated load             | 12 A at 250 VAC & 12 A at 24 VDC |
| Max. switching voltage | 440 VAC, 300 VDC                 |
| Contact resistance     | 100 mΩ max.                      |
| Operate time           | 15 ms max.                       |
| Release time           | 5 ms max                         |
| Insulation resistance  | 1000 MΩ min.                     |

#### CONNECTION DATA

|                                   |   |   |   |
|-----------------------------------|---|---|---|
| Input (Coil) side                 | PCB Terminals screw (Nominal current: 24A, Rated voltage: 250V, Type of connection: Screw Type) | Di-electric strength between coil and contact | 5,000 VAC, 50/60 Hz for 1min  |
| Output (Contact) side             | PCB Terminals screw (Nominal current: 24A, Rated voltage: 250V, Type of connection: Screw Type) | Maximum mechanical operating frequency        | 18,000 operations/hr  |
| Cross section of permissible wire | Solid Min/ Max: 0.2/ 4.0 sqmm.  | Maximum electrical operating frequency        | 18,000 operations/hr (under rated voltage)                                |
| Make                              | Phoenix Contact or equivalent   | Mechanical life expectancy                    | 20,00000 operations min. for DC coil                                      |
|                                   |   | Electrical life expectancy                    | 1,00000 operations at 250 VAC, 12 A<br>1,00000 operations at 24 VDC, 12 A |

## ORDERING INFORMATION

1 C/O 24V DC

| Description        | Dimension LXWXH (mm) |
|--------------------|----------------------|
| AE-01-024-B(SLD)   | 21 X 90 X 58         |
| AE-02-024-B-C(SLD) | 36 X 90 X 58         |
| AE-04-024-B-C(SLD) | 67 X 90 X 58         |
| AE-08-024-B-C(SLD) | 128 X 90 X 58        |
| AE-16-024-B-C(SLD) | 253 X 90 X 58        |

Connection Diagram of AE-08-024-B-C(SLD)

