

## TWO CHANGE OVER - DC COIL VOLTAGE (WITH G2R RELAY)

### Features

- Available in 1/2/4/8/16 Channels
- Coil Voltage 5/12/24/48/110V DC
- Switching Current 5A at 30V DC/230V AC
- Freewheeling Diode across relay coil for protection
- Jumpers are provided for selection between positive/negative looping
- LED indication to denote relay actuation
- Available with pluggable relays, directly soldered on request.
- Available with Fully Sealed Relay on request
- Mountable on Universal DIN Rail



### TECHNICAL INFORMATION

#### GENERAL DATA

|                               |  |
|-------------------------------|--|
| Number of Channels            | 1/2/4/8/16 channels other than specified 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              | Free wheeling diode 1N4007 across relay coil                           |
| Relay Socket                  | Paramount or equivalent  |
| 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               |

#### RELAY COIL DATA

| Rated coil voltage             | 12V DC                    | 24V DC | 48V DC | 100V DC |
|--------------------------------|---------------------------|--------|--------|---------|
| Coil resistance (Ohms)         | 275                       | 1100   | 4170   | 18860   |
| Rated coil current (mA)        | 43.6                      | 21.8   | 11.5   | 5.3     |
| Must operate voltage           | 80% max. of rated voltage |        |        |         |
| Must release voltage           | 30% max. of rated voltage |        |        |         |
| Maximum voltage                | 140% at 23°C              |        |        |         |
| Power consumption (mW Approx.) | 530                       | 530    | 530    | 530     |

#### RELAY DATA

|                 |   |
|-----------------|---|
| Relay make      | OMRON G2RL Series, Relay other than OMRON make available on request |
| Contact type    | 2 C/O (DPDT)  |
| Relay approvals |   |

#### RELAY CONTACT DATA

|   |  |
|---|--|
| Contact material                            | Ag-alloy (Cd free)                                   |
| Rated current (Resistive)<br>(Inductive)    | 5A at 250V AC/ 30V DC<br>2A at 250V AC, 3A at 30V DC |
| Maximum switching voltage                   | 380V AC, 125V DC                                     |
| Contact resistance                          | 50mOhm max.  |
| Operate time                                | 15 ms max.   |
| Release time                                | DC: 5 ms max. & AC: 10 ms max.                       |
| Insulation resistance                       | 1000 M Ohm min.                                      |
| Di-electric strength between coil & contact | 5000V AC, 50/60 Hz for 1 min                         |
| Maximum mechanical operating frequency      | 18000 operation/hour                                 |
| Maximum electrical operating frequency      | 1800 operation/hour (under rated load)               |

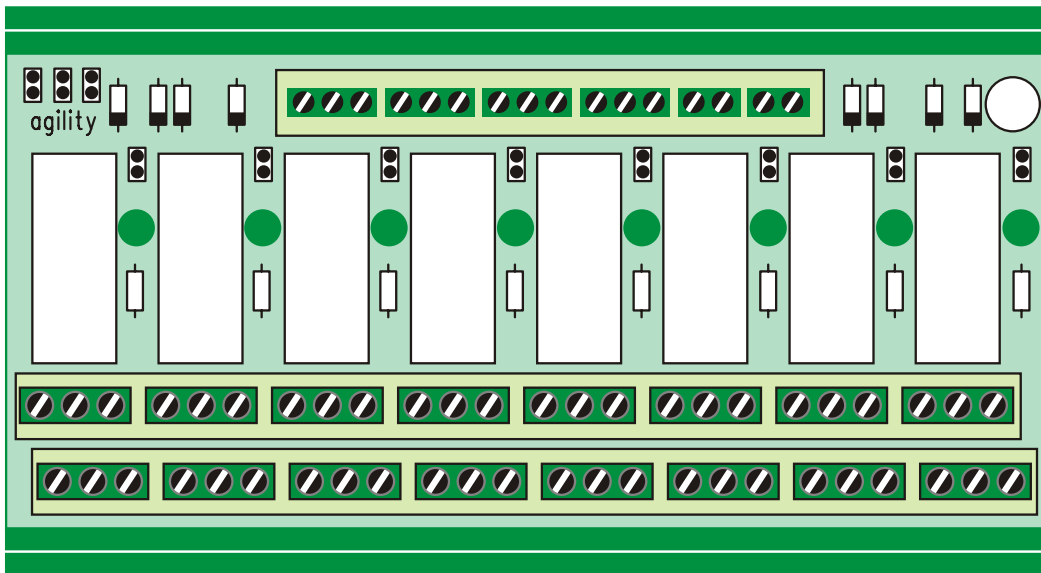
#### CONNECTION DATA

|                                   |   |
|-----------------------------------|---|
| Input (Coil) Side                 | PCB Terminals Screw<br>(Nominal current: 24A, Rated voltage: 250V,<br>Type of connection: Screw connection) |
| Output (Contact Side)             | PCB Terminals Screw<br>(Nominal current: 22A, Rated voltage: 250V,<br>Type of connection: Screw connection) |
| Cross section of permissible wire | Solid Min/Max: 0.2/4.0 mm <sup>2</sup><br>Stranded Min/Max: 0.2 / 2.5 mm <sup>2</sup>                       |
| Make                              | Phoenix Contact or equivalent   |

## ORDERING INFORMATION

| 2 C/O 24V DC |                       |                      | 2 C/O 12V DC |                       |                      |
|--------------|-----------------------|----------------------|--------------|-----------------------|----------------------|
| Article Nos. | Descriptions          | Dimension LxWxH (mm) | Article Nos. | Descriptions          | Dimension LxWxH (mm) |
| 11100006     | AE-01-024D-2-B(G2R)   | 24 x 90 x 68         | 11100021     | AE-01-012D-2-B(G2R)   | 24 x 90 x 68         |
| 11100007     | AE-02-024D-2-B-C(G2R) | 44 x 90 x 68         | 11100022     | AE-02-012D-2-B-C(G2R) | 44 x 90 x 68         |
| 11100008     | AE-04-024D-2-B-C(G2R) | 82 x 90 x 68         | 11100023     | AE-04-012D-2-B-C(G2R) | 82 x 90 x 68         |
| 11100009     | AE-08-024D-2-B-C(G2R) | 159 x 90 x 68        | 11100024     | AE-08-012D-2-B-C(G2R) | 159 x 90 x 68        |
| 11100010     | AE-16-024D-2-B-C(G2R) | 312 x 90 x 68        | 11100025     | AE-16-012D-2-B-C(G2R) | 312 x 90 x 68        |

### Layout Diagram of AE-08-024D-2-B-C(G2R)



### Connection Diagram of AE-08-024D-2-B-C(G2R)

