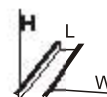


## ONE CHANGE OVER - AC COIL VOLTAGE

### Features

- Available In 1/2/4/8/16 Channels.
- Coil Voltage 24/110/230V AC.
- Switching Current 10A at 30V DC/ 250V AC.
- Freewheeling Diode across relay coil for protection.
- 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.    |
| 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             | 24V AC                           | 110V AC | 230V AC |
|--------------------------------|----------------------------------|---------|---------|
| Coil resistance (Ohms)         | 260                              | 4600    | 20200   |
| Rated coil current (mA)        | 46.5                             | 11.0    | 5.5     |
| Must operate voltage           | 80% max. of rated voltage        |         |         |
| Must release voltage           | 30% max. of rated voltage        |         |         |
| Maximum voltage                | 140% at 23°C                     |         |         |
| Power consumption (VA Approx.) | 0.9                              | 0.9     | 0.9     |
| Other coil voltages            | 12V AC are available on request. |         |         |

#### RELAY DATA

|                 |  |
|-----------------|--|
| Relay make      | OMRON G2R Series, Relay other than OMRON make available on request |
| Contact type    | 1 C/O (SPDT)   |
| Relay approvals |  |

#### RELAY CONTACT DATA

|   |  |
|---|--|
| Contact material                            | Ag-alloy (Cd free)   |
| Rated current (Resistive)<br>(Inductive)    | 10A at 250V AC & 10A at 30V DC<br>7.5A at 250V AC & 5A at 30V DC           |
| Maximum switching voltage                   | 380V AC, 125V DC   |
| Contact resistance                          | 30mOhm max.  |
| Operate time                                | 15 ms max.   |
| Release time                                | 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)                                     |
| Mechanical life expectancy                  | 10,000,000 operations min for AC coil                                      |
| Electrical life expectancy                  | 100,000 operations min. (At max. Operations frequency & max. Load current) |

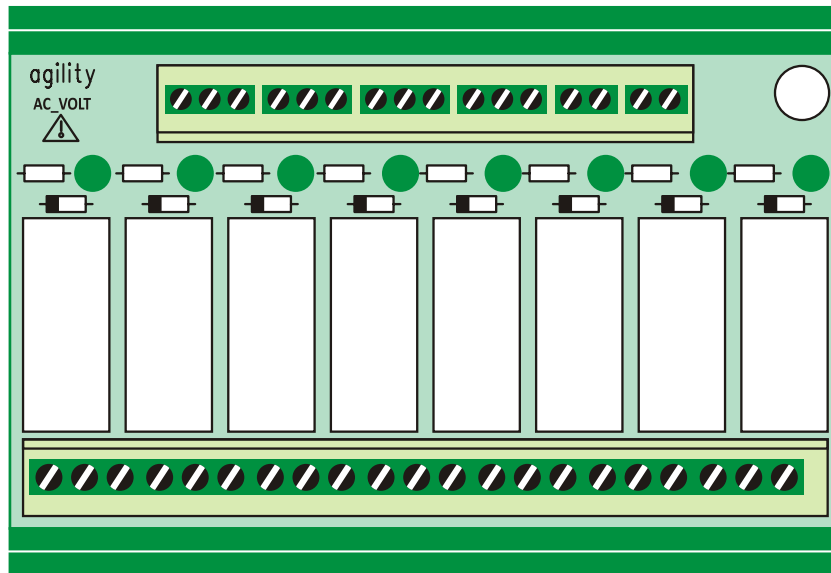
#### CONNECTION DATA

|                                   |  |
|-----------------------------------|--|
| Input (Coil) Side                 | PCB Terminals Screw<br>(Nominal current: 24A, Rated voltage: 250V, Type of connection: Screw connection) |
| Output (Contact Side)             | PCB Terminals Screw<br>(Nominal current: 24A, Rated voltage: 250V, 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**

| 1 C/O 230V AC |                |                      | 1 C/O 110V AC |                |                      |
|---------------|----------------|----------------------|---------------|----------------|----------------------|
| Article Nos.  | Descriptions   | Dimension LxWxH (mm) | Article Nos.  | Descriptions   | Dimension LxWxH (mm) |
| 11100251      | AE-01-230A-1-B | 21 x 90 x 70         | 11100252      | AE-01-110A-1-B | 21 x 90 x 70         |
| 11100250      | AE-02-230A-1-B | 36 x 90 x 70         | 11100253      | AE-02-110A-1-B | 36 x 90 x 70         |
| 11100249      | AE-04-230A-1-B | 66 x 90 x 70         | 11100254      | AE-04-110A-1-B | 66 x 90 x 70         |
| 11100234      | AE-08-230A-1-B | 128 x 90 x 70        | 11100247      | AE-08-110A-1-B | 128 x 90 x 70        |
| 11100248      | AE-16-230A-1-B | 252 x 90 x 70        | 11100255      | AE-16-110A-1-B | 252 x 90 x 70        |

**Layout Diagram of AE-08-230A-1-B**



**Connection Diagram of AE-08-230A-1-B**

