

● Features

- 40A switching capability
- PCB terminals
- 1 Form A & 1 Form C contact arrangement
- Unenclosed and Plastic sealed types available
- Environmental friendly product (RoHS compliant)
- Dimension: 26 x 21 x 21 mm



● Application

- Signal Light & Lamp Control / Audio System / A/C Control / Fuel Pump Control / Temperature Control / Seat Adjustment / Window Defoggers / Starter Solenoid Switches / Anti-theft Lock / Central Door Lock / Power Doors & Windows, etc.

● Contact Data

| | | |
|------------------------|--|---------------------------------|
| Contact Arrangement | 1A | 1C |
| Contact Material | Ag Alloy | |
| Contact Rating | 40A 14VDC 20A 120VAC, 15A 28VDC | NO: 40A 14VDC; NC: 30A 14VDC |
| Max. Switching Power | 420W | |
| Max. Switching Voltage | 14VDC | |
| Max. Switching Current | 40A | |
| Min. Contact Load | 1A 6VDC | |
| Voltage Drop (initial) | NO: Typ. 20mV, 250mV max. (at 10A) NC: Typ. 20mV, 250mV max. (at 10A) | |
| Contact Resistance | ≤ 100mΩ | |
| Electrical Endurance | 1x10 ⁵ | |
| Mechanical Endurance | 1x10 ⁷ | |

- Coil Parameter (at 23°C)

| Coil Voltage (VDC) | | Coil Resistance ($\Omega \pm 10\%$) | Pickup Voltage(max) (VDC) | Release Voltage(min) (VDC) | Coil Power Consumption (W) |
|--------------------|------|---------------------------------------|---------------------------|----------------------------|----------------------------|
| Rated | Max. | | | | |
| 6 | 7.8 | 19 | 4.2 | 0.6 | 1.9 |
| 12 | 15.6 | 90 | 8.4 | 1.2 | 1.6 |
| 24 | 31.2 | 360 | 16.8 | 2.4 | 1.6 |

- Operation Condition

| | | |
|-----------------------|--------------------------|---------------------------------|
| Insulation Resistance | | 100M Ω min (at 500VDC) |
| Dielectric Strength | Between Contacts | 500V, 50Hz 1 min. |
| | Between Contact and Coil | 750V, 50Hz 1 min. |
| Shock Resistance | | 200m/s ² 11ms |
| Vibration Resistance | | 10~40Hz double amplitude 1.27mm |
| Ambient Temperature | | -40~85°C (no freezing) |
| Operate Time | | ≤ 5 ms |
| Release Time | | ≤ 3 ms |
| Weight | | Approx. 19g (Open type), 21g |

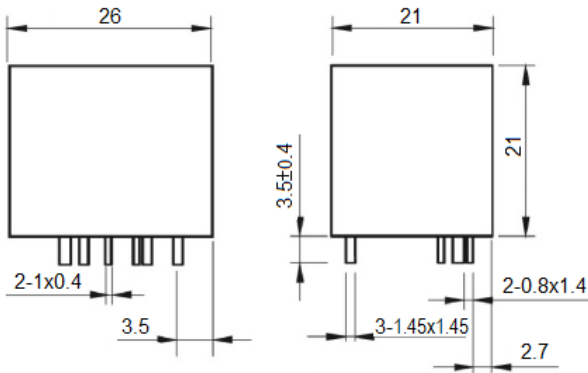
- Ordering Information

| | AHU | -12D | -A | -S | (XXX) |
|----------------------------|---|------|----|----|-------|
| Model | AHU: USA model AHE: European model | | | | |
| Coil Voltage | 6: 6VDC 12: 12VDC 24: 24VDC | | | | |
| Contact Arrangement | A: 1 Form A C: 1 Form C | | | | |
| Construction | Nil: Flux tight S: Sealed O: Open | | | | |
| Special Code | Nil: Standard XXX: Customer special requirement | | | | |

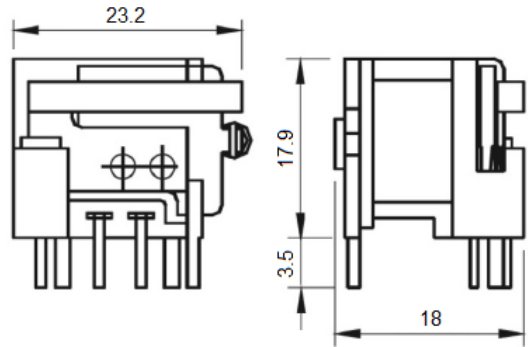
- Dimensions (UNIT: mm)

Outline Dimensions

Standard and Sealed type

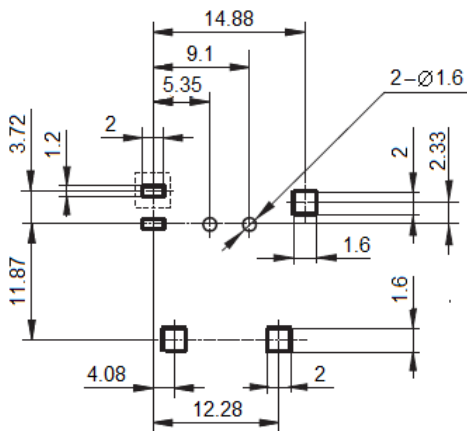


Open Type

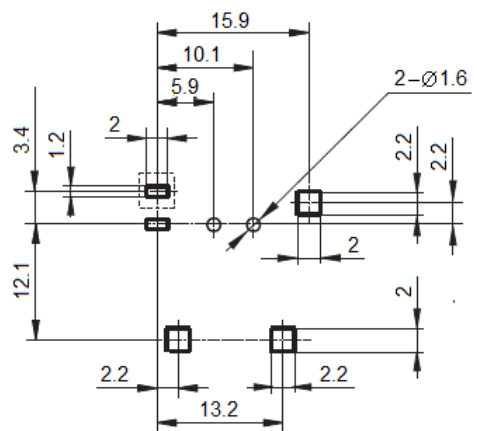


Mounting (Bottom views)

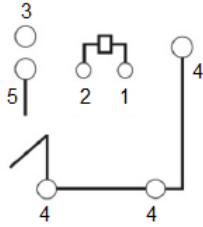
AHU type



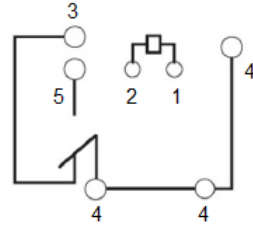
AHE Type



- **Dimensions (UNIT: mm)**
Wiring Diagram (Bottom views)

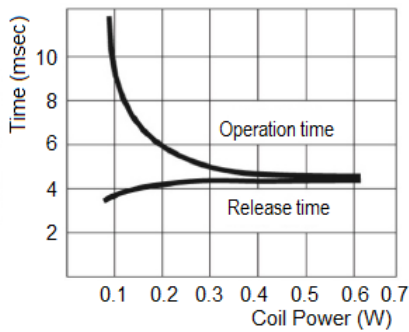


1 A

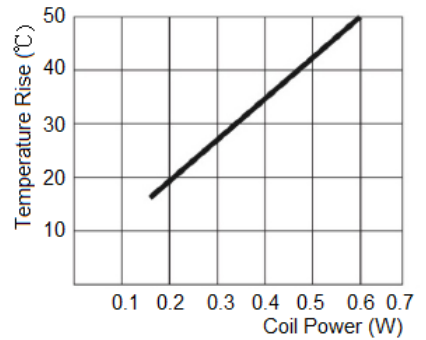


1C

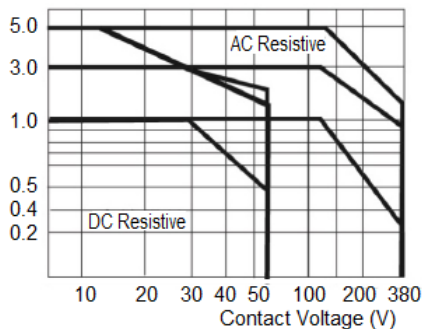
- **Engineering Data**
Operation Time



Coil Temperature Rise



Contact Switching Capacity



- Remark: 1) In case of no tolerance shown in outline dimension: outline dimension $\leq 1\text{mm}$, tolerance should be $\pm 0.2\text{mm}$; outline dimension $>1\text{mm}$ and $\leq 5\text{mm}$, tolerance should be $\pm 0.3\text{mm}$; outline dimension $>5\text{mm}$, tolerance should be $\pm 0.5\text{mm}$.
- 2) The tolerance without indicating for PCB layout is always $\pm 0.1\text{mm}$.

Disclaimer

The specification is for reference only. See to "Terminology and Guidelines" for more information. Specifications subject to change without notice. We could not evaluate all the performance and all the parameters for every possible application. Thus the user should be in a right position to choose the suitable product for their own application. If there is any query, please contact IOEC for the technical service. However, it is the user's responsibility to determine which product should be used only.

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