



## Features

- Large switching capacity up to 50A
- Small size and light weight
- PCB pin and quick connect mounting available
- Low temperature rise at full load



## Contact Data\*

|                     |   |                           |                        |
|---------------------|---|---------------------------|------------------------|
| Contact Arrangement | 1A = SPST N.O.<br>1C = SPDT                                     | Contact Resistance        | ≤ 50 milliohms initial |
| Contact Rating      | 1A : 50A @ 14VDC<br>1C : 50A @ 14VDC N.O.<br>: 30A @ 14VDC N.C. | Contact Material          | AgSnO <sub>2</sub>     |
|                     |   | Maximum Switching Power   | 700W                   |
|                     |   | Maximum Switching Voltage | 75VDC                  |
|                     |   | Maximum Switching Current | 50A                    |

## Coil Data\*

| Coil Voltage VDC |      | Coil Resistance Ω +/- 10% |               | Pick Up Voltage VDC (max)<br>65% of rated voltage | Release Voltage VDC (min)<br>10% of rated voltage | Coil Power W | Operate Time ms | Release Time ms |
|------------------|------|---------------------------|---------------|---|---|--------------|-----------------|-----------------|
| Rated            | Max  | without Resistor          | with Resistor |   |   |              |                 |                 |
| 12               | 15.6 | 90                        | 80            | 7.8   | 1.2   | 1.6          | ≤ 10            | ≤ 10            |
| 24               | 31.2 | 360                       | 320           | 15.6  | 2.4   |              |                 |                 |

## General Data\*

|                                  |   |
|----------------------------------|---|
| Electrical Life @ rated load     | 100K cycles, average  |
| Mechanical Life                  | 10M cycles, average   |
| Insulation Resistance            | 100MΩ min. @ 500VDC initial   |
| Dielectric Strength              | Coil to Contact 750V rms min. @ sea level initial<br>Contact to Contact 500V rms min. @ sea level initial |
| Shock Resistance                 | 294m/s <sup>2</sup> for 11 ms   |
| Vibration Resistance             | 10mm double amplitude 10~22.3Hz   |
| Terminal (Copper Alloy) Strength | 8N (quick connect), 4N (PCB pins)   |
| Operating Temperature            | -40°C to +125°C   |
| Storage Temperature              | -40°C to +155°C   |
| Solderability                    | 260°C for 5 s   |
| Weight                           | 35g   |

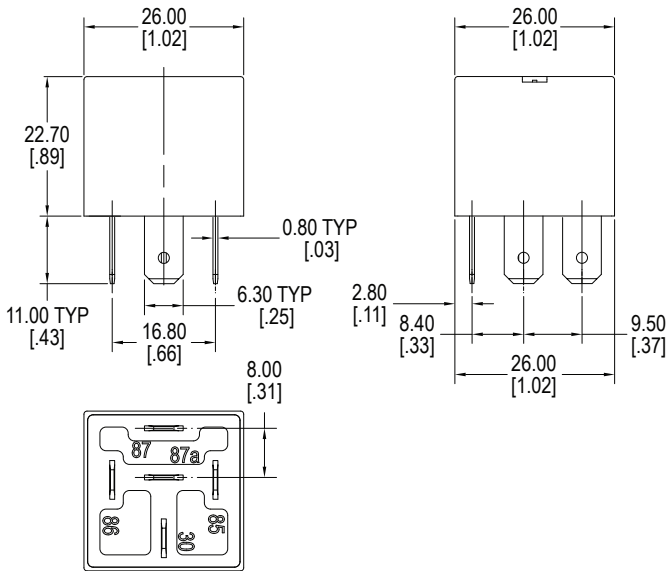
\* Values can change due to the switching frequency, desired reliability levels, environmental conditions and in-rush load levels. It is recommended to test actual load conditions for the application. It is the user's responsibility to determine the performance suitability for their specific application. The use of any coil voltage less than the rated coil voltage may compromise the operation of the relay.

## Ordering Information

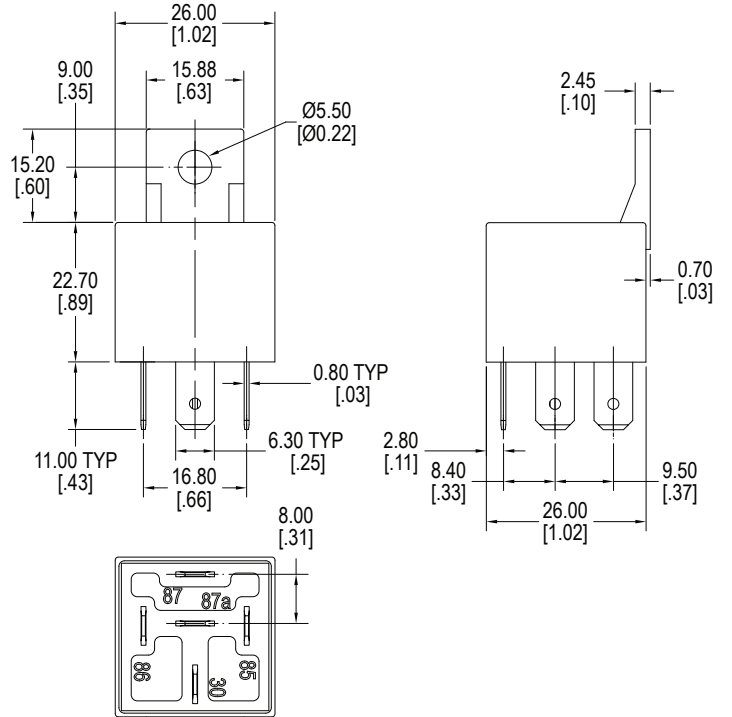
|   |     |    |   |   |       |     |
|---|-----|----|---|---|-------|-----|
| 1. Series   | A2H | 1C | S | Q | 12VDC | 1.6 |
| A2H standard<br>A2HF with mounting flange<br>A2HM with metal bracket  |     |    |   |   |       |     |
| 2. Contact Arrangement  |     |    |   |   |       |     |
| 1A = SPST N.O.<br>1C = SPDT   |     |    |   |   |       |     |
| 3. Sealing Option   |     |    |   |   |       |     |
| S = Sealed<br>C = Dust Cover  |     |    |   |   |       |     |
| 4. Termination  |     |    |   |   |       |     |
| P = PCB Pins<br>Q = Quick Connect   |     |    |   |   |       |     |
| 5. Coil Voltage   |     |    |   |   |       |     |
| 12VDC<br>24VDC  |     |    |   |   |       |     |
| 6. Coil Power   |     |    |   |   |       |     |
| 1.6 = 1.6W  |     |    |   |   |       |     |
| 7. Coil Suppression   |     |    |   |   |       |     |
| Blank = Standard<br>D = Diode (1N4005) Cathode on "86" terminal<br>R = Resistor (680Ω for 12VDC; 2700Ω for 24VDC) |     |    |   |   |       |     |

## Dimensions

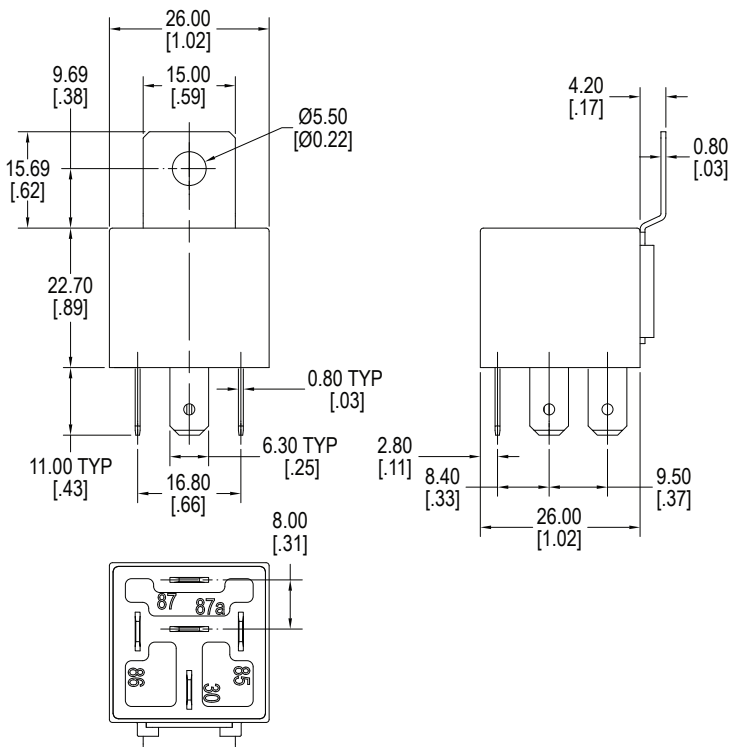
Units = mm



**A2H Standard**



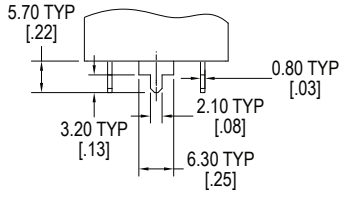
**A2HF Mounting Flange**



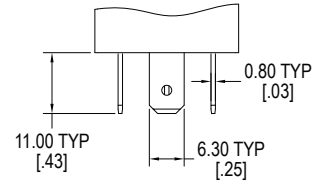
**A2HM Metal Bracket**

## Termination Options

Units = mm



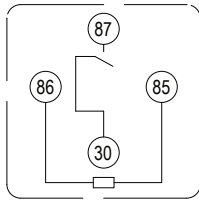
**PC Pins**



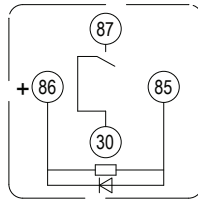
**Quick Connect**

## Schematics

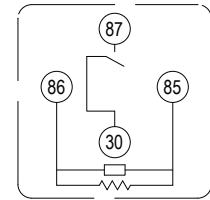
Bottom Views



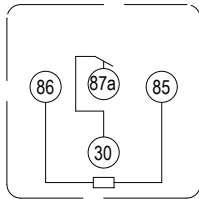
**1A**



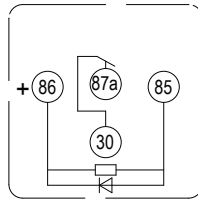
**1A with Diode**



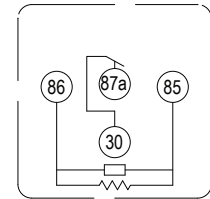
**1A with Resistor**



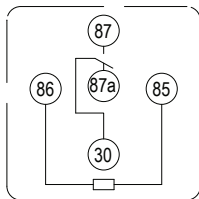
**1B**



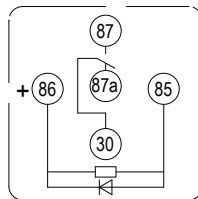
**1B with Diode**



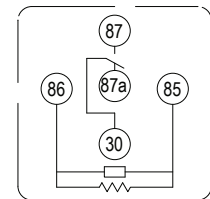
**1B with Resistor**



**1C**



**1C with Diode**



**1C with Resistor**

## Suggested Layout

Bottom Views

