



### »» Features

- Heavy duty 30A 240VAC, 25A 240VAC power type.
- AC & DC coils are both available.
- PCB terminals and quick terminal types.
- Optional for special large contact gap 3.0mm version.  
SPNO-ST & DPNO-ST contact configuration.
- Comply with RoHS-Directive 2002/95/EC.

### »» Type List

| Terminal style     | Contact form | Enlarge spacing type | Designation  |              |               |                      |
|--------------------|--------------|----------------------|--------------|--------------|---------------|----------------------|
|                    |              |                      | Dust cover   | Flux tight   | Flanged cover | Sealed type washable |
| S (Quick terminal) | 1A (SPDM)    | -----                | 841-S-1A-D   | 841-S-1A-C   | 841-S-1A-C1   | 841-S-1A-S           |
|                    |              | H                    | 841-S-1A-D-H | 841-S-1A-C-H | 841-S-1A-C1-H | 841-S-1A-S-H         |
|                    | 2A (DPDM)    | -----                | 841-S-2A-D   | 841-S-2A-C   | 841-S-2A-C1   | 841-S-2A-S           |
|                    |              | H                    | 841-S-2A-D-H | 841-S-2A-C-H | 841-S-2A-C1-H | 841-S-2A-S-H         |
| P (PCB terminal)   | 1A (SPDM)    | -----                | 841-P-1A-D   | 841-P-1A-C   | -----         | 841-P-1A-S           |
|                    |              | H                    | 841-P-1A-D-H | 841-P-1A-C-H | -----         | 841-P-1A-S-H         |
|                    | 2A (DPDM)    | -----                | 841-P-2A-D   | 841-P-2A-C   | -----         | 841-P-2A-S           |
|                    |              | H                    | 841-P-2A-D-H | 841-P-2A-C-H | -----         | 841-P-2A-S-H         |

### »» Ordering Information

841 - S - 1A - F - C - H  
 1        2        3        4        5        6

- |   |   |
|---|---|
| <p>1. 841 -- Basic series designation</p> <p>2. S -- Quick terminal<br/>                 P -- PCB terminals</p> <p>3. 1A -- Form A, single-pole, double-make (SPDM)<br/>                 2A -- Form A, double-pole, double-make (DPDM)</p> <p>4. Blank -- Standard type<br/>                 F -- Class F</p> | <p>5. C -- Flux tight<br/>                 D -- Dust cover<br/>                 V -- Sealed type<br/>                 S -- Sealed type washable<br/>                 C1 -- Flanged cover<br/>                 D1 -- Dust cover with flange<br/>                 S1 -- Plastic sealed washable with flange</p> <p>6. Blank -- Standard type<br/>                 H -- Enlarged insulation spacing type</p> |
|---|---|

### »» Contact Rating

| Load type               | 1A (SPDM)  | 2A (DPDM)  |
|-------------------------|------------|------------|
| Rated load (Resistive)  | 30A 220VAC | 25A 220VAC |
| Max. Switching Current  | 30A        | 25A        |
| Max. Switching Voltage  | 277VAC     | 277VAC     |
| Max. Switching Capacity | 6600VA     | 5500VA     |

## »» Coil Rating (DC)

| Rated voltage (V) | Rated current $\pm 10\%$ at 23° C (mA) | Coil resistance $\pm 10\%$ at 23° C ( $\Omega$ ) | Max. continuous voltage at 70° C | Pick up voltage(Max) at 23° C | Drop out voltage(Min) at 23° C | Power consumption at rated voltage |
|-------------------|--|--|----------------------------------|-------------------------------|--------------------------------|------------------------------------|
| 3                 | 638                                    | 4.7  | 160 % of rated voltage           | 75 % of rated voltage         | 10 % of rated voltage          | approx. 1.92W                      |
| 6                 | 319                                    | 18.8   |                                  |                               |                                |                                    |
| 12                | 160                                    | 75   |                                  |                               |                                |                                    |
| 24                | 80                                     | 300  |                                  |                               |                                |                                    |
| 48/50             | 40/41.6                                | 1200   |                                  |                               |                                |                                    |
| 100               | 19.2                                   | 5200   |                                  |                               |                                |                                    |
| 110               | 17.4                                   | 6300   |                                  |                               |                                |                                    |
| 200               | 9.5                                    | 21000  |                                  |                               |                                |                                    |

## »» Coil Rating (AC)

| Rated voltage (V) | Rated current $+15/-20\%$ at 23° C (mA) | Coil resistance $+15/-20\%$ at 23° C ( $\Omega$ ) | Max. continuous voltage at 70° C | Pick up voltage(Max) at 23° C | Drop out voltage(Min) at 23° C | Power consumption at rated voltage |
|-------------------|---|---|----------------------------------|-------------------------------|--------------------------------|------------------------------------|
| 6                 | 275                                     | 15  | 160 % of rated voltage           | 80 % of rated voltage         | 10 % of rated voltage          | approx. 1.7VA ~ 2.7VA              |
| 12                | 138                                     | 75  |                                  |                               |                                |                                    |
| 24                | 74                                      | 300   |                                  |                               |                                |                                    |
| 48/50             | 39/40                                   | 1,200   |                                  |                               |                                |                                    |
| 100/120           | 18.7/22.1                               | 5,200   |                                  |                               |                                |                                    |
| 200/240           | 9.1/10.8                                | 21,000  |                                  |                               |                                |                                    |

## »» Specification

|                                      |                                |                             |
|--------------------------------------|--------------------------------|-----------------------------|
| Contact material                     | AgSnO alloy                    |                             |
| Contact resistance <sup>(1)</sup>    | 100 m $\Omega$ Max.            |                             |
| Operate time <sup>(1)</sup>          | 30 ms Max.                     |                             |
| Release time <sup>(1)</sup>          | 30 ms Max.                     |                             |
| Insulation resistance <sup>(1)</sup> | 1000 M $\Omega$ Min. (DC 500V) |                             |
| Dielectric strength <sup>(1)</sup>   | Between open contact           | : AC 2000V , 50/60Hz 1 min. |
|                                      | Between contact and coil       | : AC 4000V , 50/60Hz 1 min. |
|                                      | Between contact circuits       | : AC 2000V , 50/60Hz 1 min. |
| Vibration resistance                 | Operating extremes             | 10~55Hz , amplitude 1.5 mm  |
|                                      | Damage limits                  | 10~55Hz , amplitude 1.5 mm  |
| Shock resistance                     | Operating extremes             | 10G                         |
|                                      | Damage limits                  | 100G                        |

|                               |                         |  |
|-------------------------------|-------------------------|--|
| Life expectancy               | Mechanical              | 5,000,000 operations<br>(frequency 18,000 operations/hr) |
|                               | Electrical              | 100,000 operations<br>(frequency 900 operations/hr)      |
| Operating ambient temperature | -55~+70°C (no freezing) |  |
| Weight                        | Approx. 90 g            |  |

Note : (1) initial value.

### »» Safety Approval

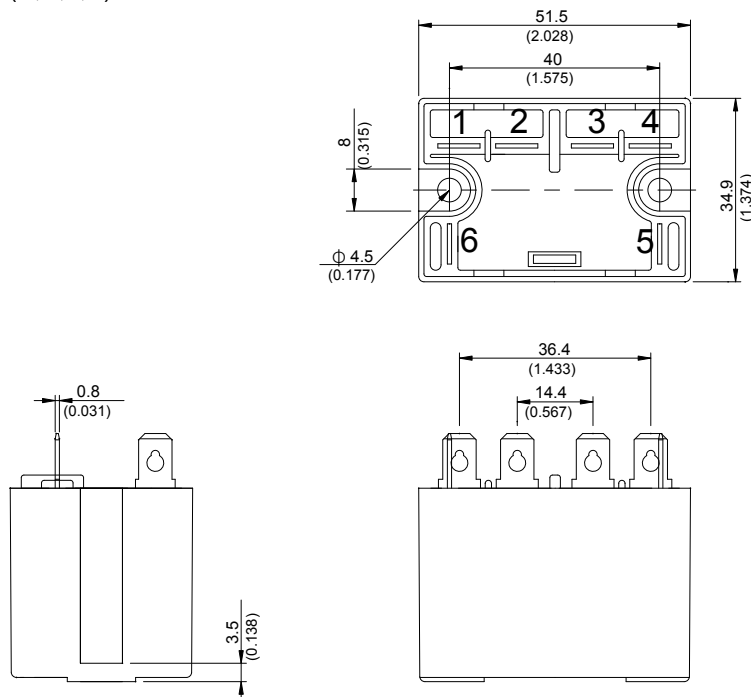
| Certified | UL / CUL | TUV      |
|-----------|----------|----------|
| File No.  | E88991   | R9653713 |

### »» Safety Approval Rating

| UL / CUL  |   | TUV  |   |
|---|---|--|---|
| 1A  | 2A  | 1A   | 2A                                      |
| 30A 277VAC<br>TV-10<br>10A 277VAC<br>1.5HP 20FLA, 125VAC<br>3HP 14.1FLA, 277VAC | 25A 277VAC<br>TV-10<br>10A 277VAC<br>1HP 16FLA, 125VAC<br>2HP 9.96FLA, 277VAC | 30A 250VAC<br>25A 250VAC $\cos\phi 0.4$<br>30A 125VAC $\cos\phi 0.4$ | 25A 250VAC<br>25A 250VAC $\cos\phi 0.4$ |

### »» Outline Dimensions

#### ◆ 841-S-2A (C,D,V,S)

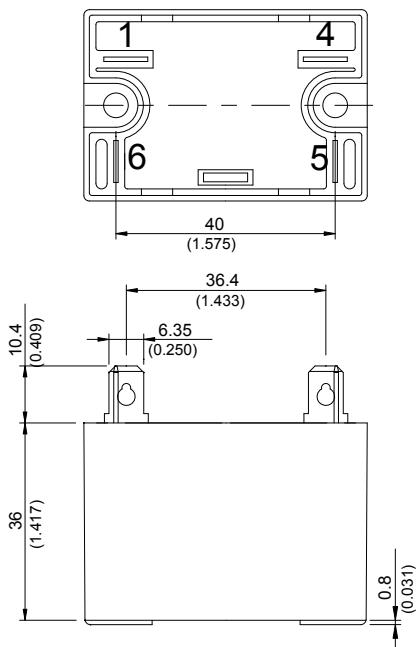


# 841

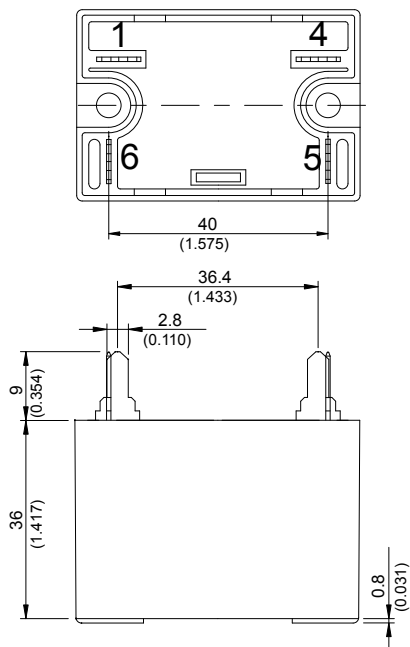
◆841-P-2A (C,D,V,S)



◆841-S-1A (C,D,V,S)



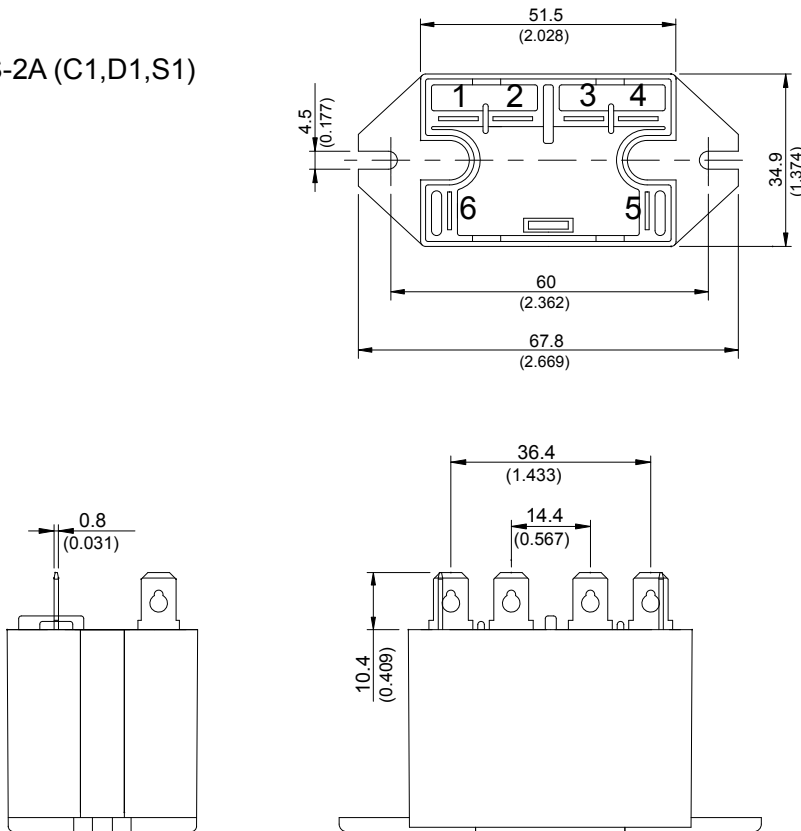
◆841-P-1A (C,D,V,S)



◆841-S-1A (C1,D1,S1)



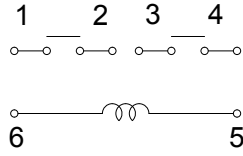
◆841-S-2A (C1,D1,S1)



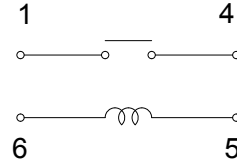
# 841

## »» Wiring Diagram BOTTOM VIEW

2A

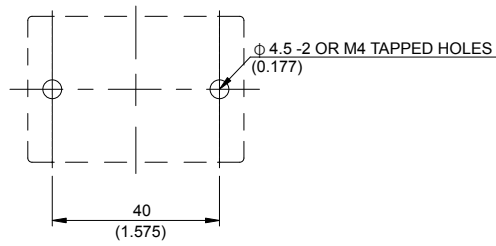


1A

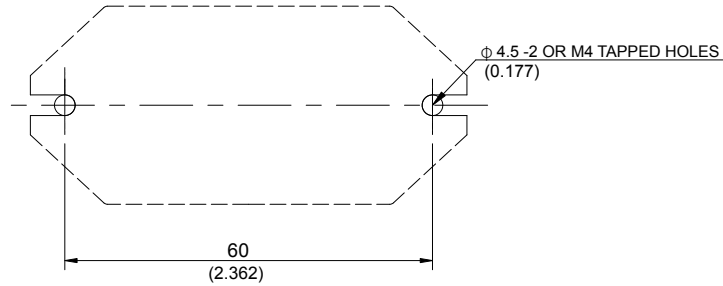


## »» Mounting Holes BOTTOM VIEW

◆841-S



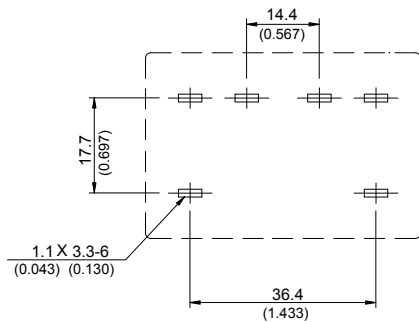
◆841-S (C1,D1,S1)



## »» PC Board Layout BOTTOM VIEW

◆841-P

2A



1A

