

### »» Features

- Miniature 25A 250VAC Power Relay.
- UL/CUL, VDE approved.
- With and without quick connect terminals on top.
- Inductive load  $\cos \phi = 0.7$ , 20A 250VAC, inrush 80A 250VAC, 400ms suitable for compressor load switching and HVAC applications.
- Comply with RoHS-Directive 2011/65/EU.



### »» Type List

Terminal style	Contact form	Designation
W (Quick terminal)	SPNO	852-W-1A-C1
P (PCB terminal)	SPNO	852-P-1A-C
WP (Quick terminal & PCB terminal)	SPNO	852-WP-1A-C

### »» Ordering Information

852 - W - 1A -  - C

1            2            3            4            5            6

- |  |  |
|--|--|
| <p>1. 852 -- Basic series designation</p> <p>2. W -- With quick terminals<br/>P -- With PCB terminals<br/>WP -- With quick and PCB terminals</p> <p>3. 1A -- Single pole normally open</p> | <p>4. Blank -- Standard type<br/>F -- Class F</p> <p>5. C -- Dust cover<br/>C1 -- Flanged cover</p> <p>6. <input type="checkbox"/> -- Coil voltage (please refer to the coil rating data for the availability)</p> |
|--|--|

### »» Contact Rating

Resistive load	25A 250VAC
Inductive load ( $\cos \phi = 0.7$ )	20A 250VAC (Inrush 80A)

### »» 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
5	180	27.8	150 % of rated voltage	75 % of rated voltage	10 % of rated voltage	approx. 0.9W
6	150	40				
9	100	90				
12	75	160				
24	38	640				
48	19	2560				

## »» Specification

Contact material	AgSnO alloy	
Contact resistance <sup>(1)</sup>	30mΩ Max. (1A/6VDC by 4 pipes mΩ meter)	
Operate time <sup>(1)</sup>	20ms Max.	
Release time <sup>(1)</sup>	10ms Max.	
Insulation resistance <sup>(1)</sup>	100 MΩ Min. (DC 500V)	
Dielectric strength <sup>(1)</sup>	Between open contact	: AC 1200V, 50/60Hz 1 min.
	Between contact and coil	: AC 3600V, 50/60Hz 1 min.
Vibration resistance	Operating extremes	10~50Hz , amplitude 1.0 mm
	Damage limits	10~50Hz , amplitude 2.0 mm
Shock resistance	Operating extremes	10G
	Damage limits	100G
Life expectancy	Mechanical	10,000,000 operations (frequency 18,000 operations/hr)
	Electrical	100,000 operations (frequency 1,200 operations/hr)
Operating ambient temperature	-25 ~ +70°C (no freezing)	
Weight	Approx. 31.5g	

Note : (1) initial value

## »» Safety Approval

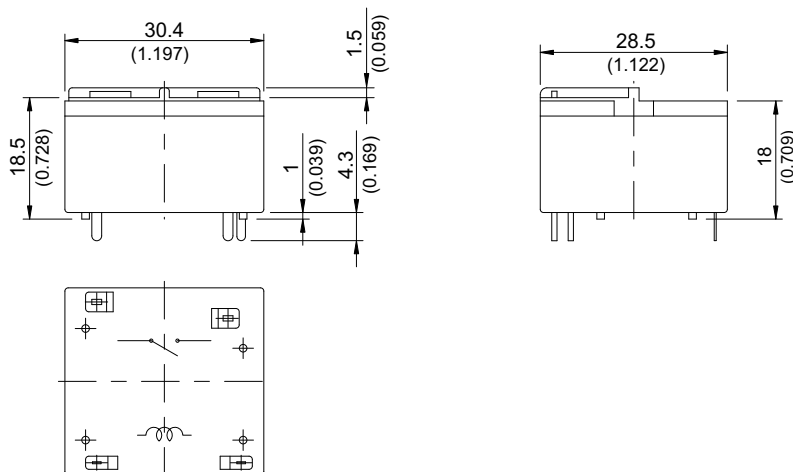
Certified	UL / CUL	VDE
File No.	E88991	40004735

## »» Safety Approval Rating

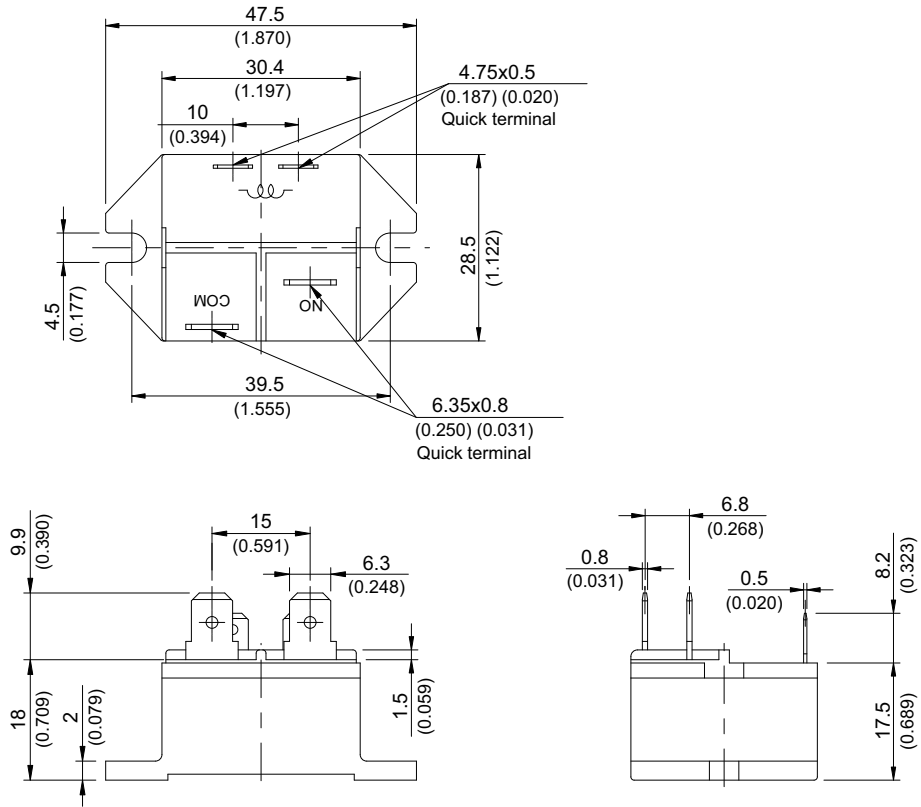
UL / CUL	VDE
25A 277VAC 1HP 125VAC 1.5HP 250VAC 30A 277VAC (NO)	25A 250VAC T105 20A 250VAC cosφ 0.7

## »» Outline Dimensions

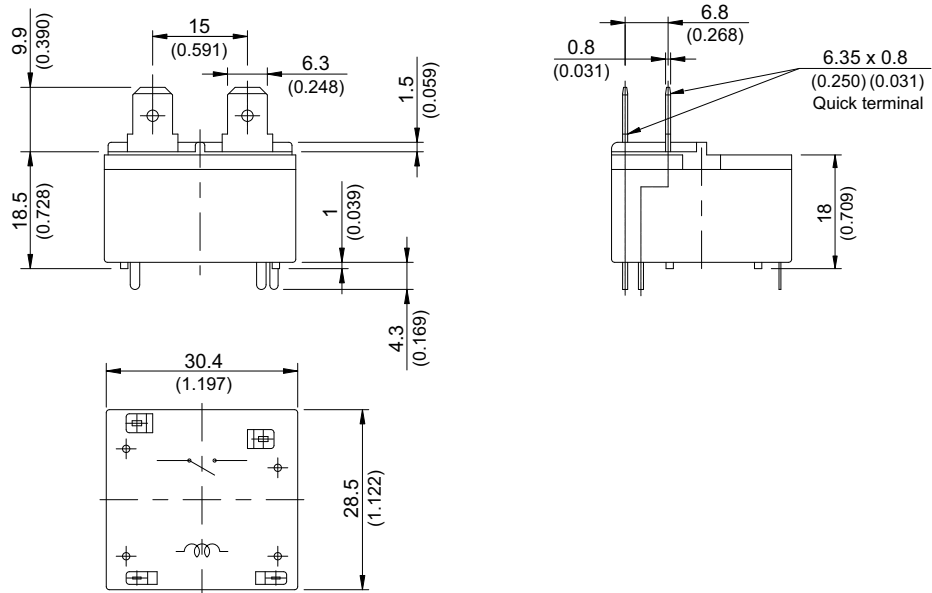
### ◆852-P



◆ 852-W

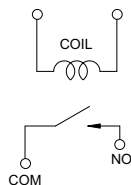


◆ 852-WP

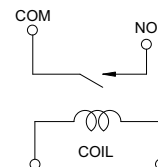


»» Wiring Diagram  
BOTTOM VIEW

◆ 852-W



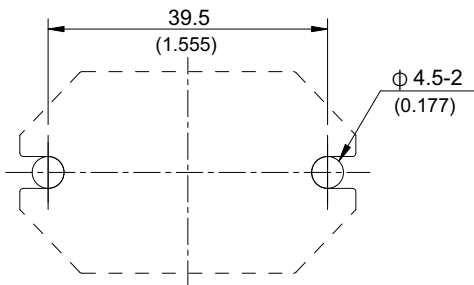
◆ 852-P/WP



# 852

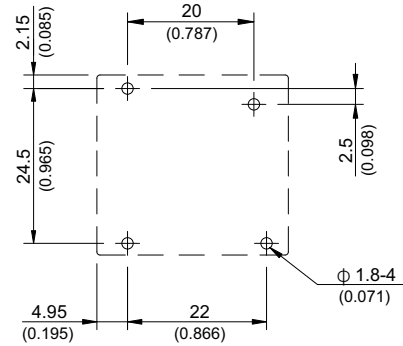
## Mounting Holes BOTTOM VIEW

◆ 852-W



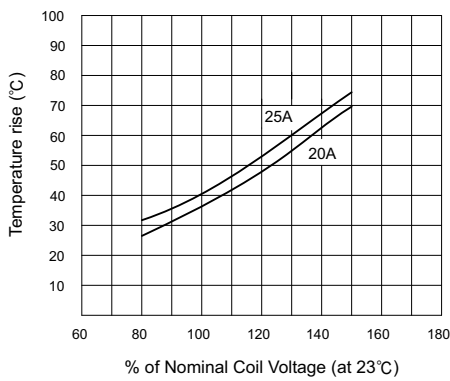
## PC Board Layout BOTTOM VIEW

◆ 852-P/WP

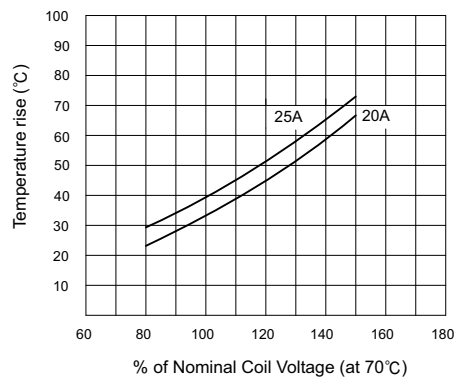


## Engineering Data

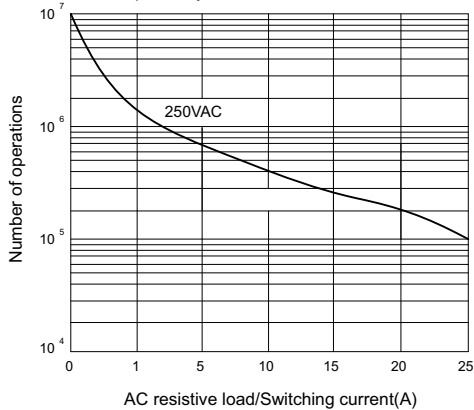
Coil temperature rise



Coil temperature rise



Life expectancy



Operate time/Release time

