



# 812H/812BH

## »» Features

- Miniature PCB Power Relays 10A 250VAC.
- High CTI 250 and New Glow Wire Approved material.
- UL Insulation Class F.
- VDE 0435, UL/CUL, TUV, CSA approved.
- Comply with RoHS-Directive 2002/95/EC.



## »» Type List

### ◆ 812H

Terminal style	Contact form	UL Insulation system approval	Designation (provided with)		
			Flux tight	Sealed type	Sealed type washable
PCB terminal	1C (SPDT)	-----	812H-1C-C	812H-1C-V	812H-1C-S
		F	812H-1C-C FXXVDC	812H-1C-V FXXVDC	812H-1C-S FXXVDC
	1A (SPNO)	-----	812H-1A-C	812H-1A-V	812H-1A-S
		F	812H-1A-C FXXVDC	812H-1A-V FXXVDC	812H-1A-S FXXVDC
	1B (SPNC)	-----	812H-1B-C	812H-1B-V	812H-1B-S
		F	812H-1B-C FXXVDC	812H-1B-V FXXVDC	812H-1B-S FXXVDC

### ◆ 812BH

Terminal style	Contact form	UL Insulation system approval	Designation (provided with)		
			Flux tight	Sealed type	Sealed type washable
PCB terminal	1C (SPDT)	-----	812BH-1C-C	812BH-1C-V	812BH-1C-S
		F	812BH-1C-C FXXVDC	812BH-1C-V FXXVDC	812BH-1C-S FXXVDC
	1A (SPNO)	-----	812BH-1A-C	812BH-1A-V	812BH-1A-S
		F	812BH-1A-C FXXVDC	812BH-1A-V FXXVDC	812BH-1A-S FXXVDC

## »» Ordering Information

812 BH - 1A - C E FXXVDC  
 1 2 3 4 5 6

- |   |   |
|---|---|
| <p>1. 812 -- Basic series designation</p> <p>2. BH -- High power type with insulation barrier<br/>H -- High power type</p> <p>3. 1A -- Single pole normally open<br/>1B -- Single pole normally closed<br/>1C -- Single pole double throw</p> | <p>4. C -- Flux tight<br/>V -- Sealed type<br/>S -- Sealed type washable</p> <p>5. Blank -- Standard type<br/>E -- CTI 250V</p> <p>6. Blank -- Standard type<br/>F -- Class F</p> |
|---|---|

## »» Contact Rating

Resistive load	NO: 10A/240VAC 12A/120VAC NC: 8A/240VAC 10A/120VAC
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## »» 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 85 °C	Pick up voltage(Max) at 23 °C	Drop out voltage(Min) at 23 °C	Power consumption at rated voltage
3	120	25	160 % of rated voltage	75 % of rated voltage	10 % of rated voltage	approx. 0.36W
5	73	69				
6	60	100				
9	40	225				
12	30	400				
18	20	900				
24	15	1600				
48	7.5	6400				

## »» Specification

Contact material	AgSnO alloy	
Contact resistance <sup>(1)</sup>	100m $\Omega$ Max.	
Operate time <sup>(1)</sup>	15ms Max.	
Release time <sup>(1)</sup>	5ms Max.	
Insulation resistance <sup>(1)</sup>	100M $\Omega$ Min. (DC 500V)	
Dielectric strength <sup>(1)</sup>	Between open contact	: AC 750V , 50/60Hz 1 min. (for 812H) : AC 1000V, 50/60Hz 1 min. (for 812BH)
	Between contact and coil	: AC 1500V , 50/60Hz 1 min. (for 812H) : AC 2000V, 50/60Hz 1 min. (for 812BH)
Vibration resistance	Operating extremes	10~50Hz , amplitude 1.0 mm
	Damage limits	10~50Hz , amplitude 1.0 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 900 operations/hr)
Operating ambient temperature	-40~+85 °C (no freezing)	
Weight	Approx. 9 g	

Note : (1) initial value

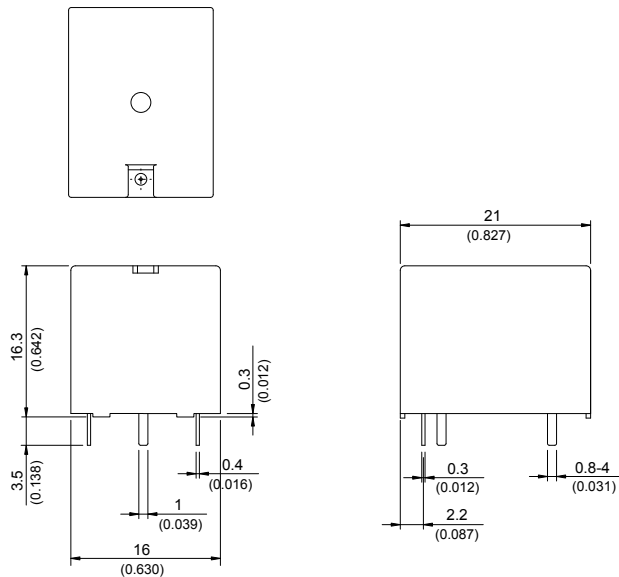
## »» Safety Approval

Certified	UL / CUL	CSA	VDE	TUV
File No.	E88991	1129068	122905	R50041911

## »» Safety Approval Rating

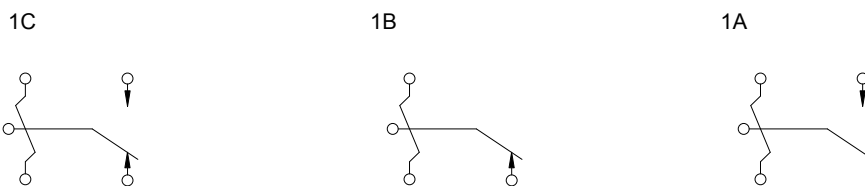
UL / CUL, CSA		VDE	TUV
NO	NC		
20A 125VAC	20A 125VAC	12A 250VAC T85 10A 250VAC T105	7A 250VAC 10A 125VAC 7A 30VDC
16A 277VAC	12A 277VAC		
1/2 HP 125VAC	1/2HP 125VAC		
1HP 250VAC	1HP 250VAC		
10A 30VDC	7A 30VDC		
TV 8			

## »» Outline Dimensions



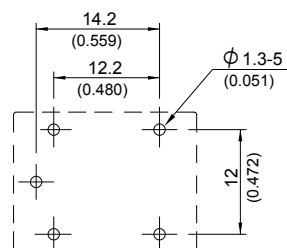
## »» Wiring Diagram

BOTTOM VIEW



## »» PC Board Layout

BOTTOM VIEW



# 812H/812BH

## »» Engineering Data

