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.

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
	1B (SPNC)	----------	812BH-1B-C	812BH-1B-V	812BH-1B-S
		F	812BH-1B-C FXXVDC	812BH-1B-V FXXVDC	812BH-1B-S FXXVDC

Ordering Information

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

1. 812 -- Basic series designation

2. BH -- High power type with insulation barrier
   H -- High power type

3. 1A -- Single pole normally open
   1B -- Single pole normally closed
   1C -- Single pole double throw

4. C -- Flux tight
   V -- Sealed type
   S -- Sealed type washable

5. Blank -- Standard type
   E -- CTI 250V

6. Blank -- Standard type
   F -- Class F

812H/812BH

Contact Rating

	812H	812BH
Resistive load	12A 120VAC (※) 10A 120VAC, 7A 240VAC	1C：7A 240VAC 1A：10A 240VAC

Coil Rating (DC)

Rated voltage (V)	Rated current ±10 % at 23˚C (mA)	Coil resistance ±10 % at 23˚C (Ω)	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 (1)	50mΩ Max.	
Operate time (1)	15ms Max.	
Release time (1)	5ms Max.	
Insulation resistance (1)	100MΩ Min. (DC 500V)	
Dielectric strength (1)	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 (※30,000 operations) (frequency 900 operations/hr) (for 812H) (frequency 360 operations/hr) (for 812BH)
Operating ambient temperature	-40～+85˚C (no freezing)	
Weight	Approx. 10 g	

Note：(1) initial value

812H/812BH

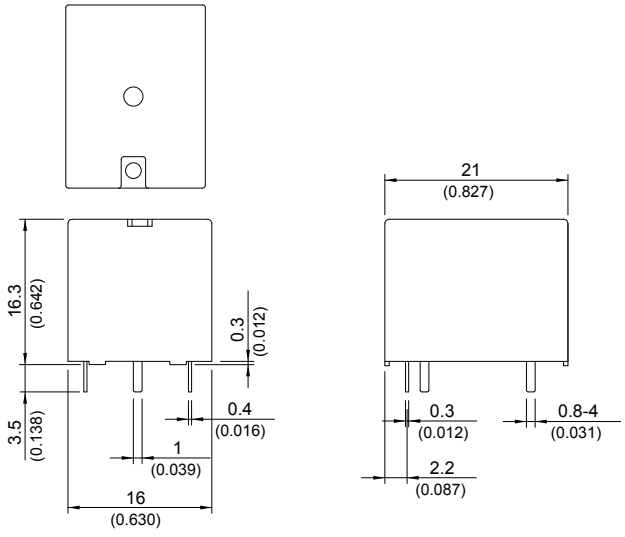
Safety Approval

Certified	812H/BH	812H		812BH
	UL / CUL	CSA	TUV	VDE
File No.	E88991	LR90143	R50041911	122905

Safety Approval Rating

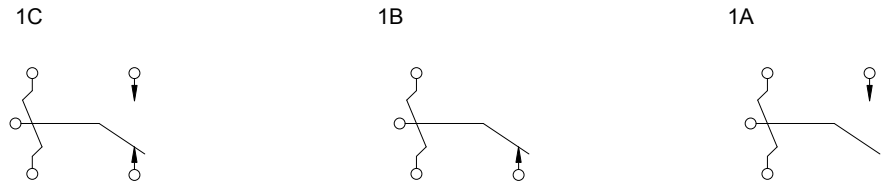
812H/BH	812H		812BH
UL / CUL	CSA	TUV	VDE
20A 125VAC 10A 250VAC (NO) 7A 250VAC (NC) 12A 277VAC 7A 30VDC 1/4HP 125VAC/ 250VAC (NO) 1/10HP 125VAC (NC) TV-5 (NO)	12A 125VAC 7A 250VAC 7A 30VDC	7A 250VAC 10A 125VAC 7A 30VDC	NO：10A 250VAC T85 NC：7A 250VAC T85

Outline Dimensions



Wiring Diagram

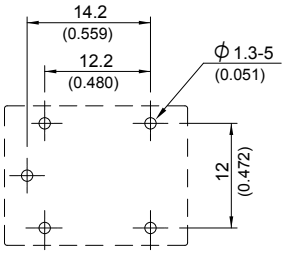
BOTTOM VIEW



812H/812BH

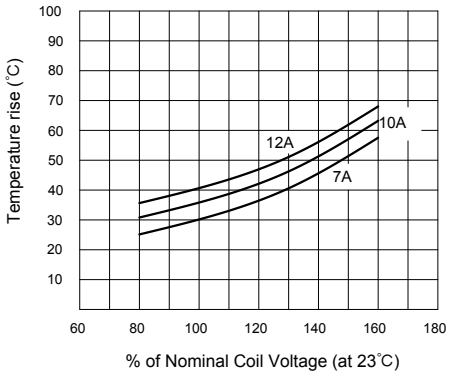
PC Board Layout

BOTTOM VIEW

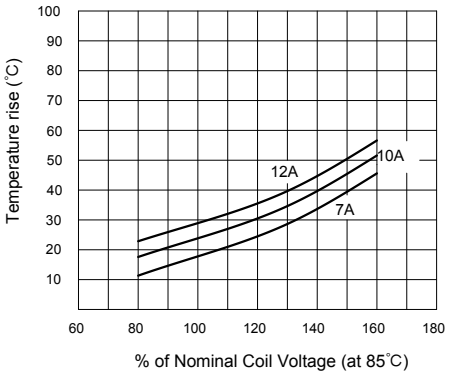


Engineering Data

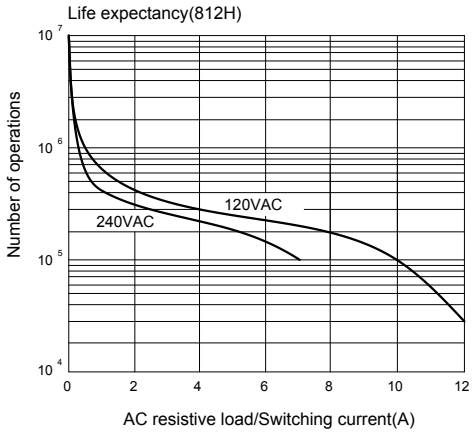
Coil temperature rise



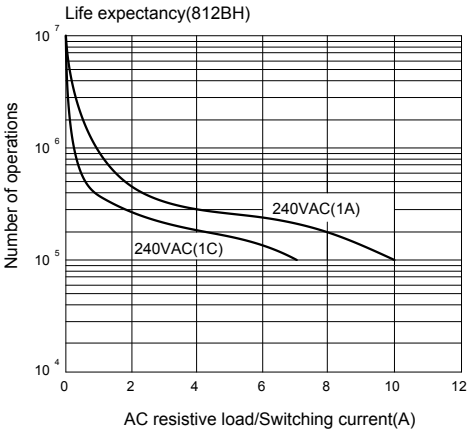
Coil temperature rise



Life expectancy(812H)



Life expectancy(812BH)



Operate time/Release time