Features

- ☐ Low cost and low profile miniature PCB Relays.
- ☐ UL/CUL, TUV approved.
- ☐ High rating 12A SPDT, 8A DPDT.
- ☐ 3.5mm & 5mm pinning are both available.
- ☐ Standard coil 700mW and high sensitivity coil 530mW.
- ☐ SPNC, SPNO, SPDT, DPNO, DPNC, DPDT contact configurations.
- ☐ General purpose application including UPS, power supply controls, Home Appliances of heating element controls, motor control for access control, etc.
- ☐ PC board type socket & hold down clips can be offered with relay for automation control application.
- ☐ Comply with RoHS-Directive 2002/95/EC.

Type List

◆Standard Type

Terminal style	Contact form	High capacity	UL Insulation system approval	Designation		
				Flux tight	Sealed type	Sealed type washable
PCB terminal	1A (SPNO)	H	----------	845H-1A-C	845H-1A-V	845H-1A-S
	1C (SPDT)	H	----------	845H-1C-C	845H-1C-V	845H-1C-S
	2A (DPNO)	-----	----------	845-2A-C	845-2A-V	845-2A-S
	2C (DPDT)	-----	----------	845-2C-C	845-2C-V	845-2C-S
	2A (DPNO)	H	----------	845H-2A-C	845H-2A-V	845H-2A-S
	2C (DPDT)	H	----------	845H-2C-C	845H-2C-V	845H-2C-S
	1A (SPNO)	H	F	845H-1A-F-C	845H-1A-F-V	845H-1A-F-S
	1C (SPDT)	H	F	845H-1C-F-C	845H-1C-F-V	845H-1C-F-S
	2A (DPNO)	-----	F	845-2A-F-C	845-2A-F-V	845-2A-F-S
	2C (DPDT)	-----	F	845-2C-F-C	845-2C-F-V	845-2C-F-S
	2A (DPNO)	H	F	845H-2A-F-C	845H-2A-F-V	845H-2A-F-S
	2C (DPDT)	H	F	845H-2C-F-C	845H-2C-F-V	845H-2C-F-S

◆High Sensitivity Type

PCB terminal	1A (SPNO)	H	----------	845HN-1A-C	845HN-1A-V	845HN-1A-S
	1C (SPDT)	H	----------	845HN-1C-C	845HN-1C-V	845HN-1C-S
	2A (DPNO)	-----	----------	845N-2A-C	845N-2A-V	845N-2A-S
	2C (DPDT)	-----	----------	845N-2C-C	845N-2C-V	845N-2C-S
	2A (DPNO)	H	----------	845HN-2A-C	845HN-2A-V	845HN-2A-S
	2C (DPDT)	H	----------	845HN-2C-C	845HN-2C-V	845HN-2C-S
	1A (SPNO)	H	F	845HN-1A-F-C	845HN-1A-F-V	845HN-1A-F-S
	1C (SPDT)	H	F	845HN-1C-F-C	845HN-1C-F-V	845HN-1C-F-S

PCB terminal	2A (DPNO)	-----	F	845N-2A-F-C	845N-2A-F-V	845N-2A-F-S
	2C (DPDT)	-----	F	845N-2C-F-C	845N-2C-F-V	845N-2C-F-S
	2A (DPNO)	H	F	845HN-2A-F-C	845HN-2A-F-V	845HN-2A-F-S
	2C (DPDT)	H	F	845HN-2C-F-C	845HN-2C-F-V	845HN-2C-F-S

Ordering Information

845 H N - 1A - F - C
1 2 3 4 5 6

1. 845 -- Basic series designation

2. Blank -- Standard type
   H -- High capacity type

3. Blank -- Standard type
   N -- High sensitivity type

4. 1A -- Single pole normally open
   1B -- Single pole normally closed
   1C -- Single pole double throw
   2A -- Double pole normally open
   2B -- Double pole normally closed
   2C -- Double pole double throw

5. Blank -- Standard type
   F -- Class F

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

Contact Rating

Load type	(845H) 1A , 1B , 1C	(845) 2A , 2B , 2C	(※) (845H) 2A , 2B , 2C
Rated load (resistive)	10A 240VAC	5A 240VAC	8A 240VAC
Max. switching current	10A	5A	8A
Max. switching voltage	277VAC	277VAC	277VAC
Max. switching capacity	2400VA	1200VA	1920VA

Coil Rating (DC)

◆Standard Type

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	234	12.8	160 % of rated voltage	75 % of rated voltage	10 % of rated voltage	approx. 0.7W
5	139	36				
6	118	51				
9	78	116				
12	58	206				
18	39	460				
24	29	825				
36	19.5	1850				
48	15	3300				
60	11.7	5100				
110	6.4	17,230				

◆High Sensitivity Type

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	176	17	170 % of rated voltage	80 % of rated voltage	10 % of rated voltage	approx. 0.53W
5	105	47.7				
6	88	68				
9	60	150				
12	44	275				
18	29.5	610				
24	22	1100				
36	14.8	2440				
48	11	4400				
60	8.8	6800				

Specification

Contact material	Ag SnO alloy	
Contact resistance (1)	100mΩ Max.	
Operate time (1)	20ms Max.	
Release time (1)	10ms Max.	
Insulation resistance (1)	1000 MΩ Min. (DC 500V)	
Dielectric strength (1)	Between open contact : AC 1000V , 50/60Hz 1 min.	
	Between contact and coil : AC 5000V , 50/60Hz 1 min.	
	Between contact circuits : AC 3000V , 50/60Hz 1 min. (for 2pole only)	
Vibration resistance	Operating extremes	10～55Hz , amplitude 1.5 mm
	Damage limit	10～55Hz , amplitude 1.5 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 (※) 50,000 operations (frequency 1,200 operations/hr)
Operating ambient temperature	-40°C～+85°C (no freezing)	
Weight	Approx. 14g	

Note：(1) initial value

Safety Approval

Certified	UL / CUL	TUV
File No.	E88991	R09754104

Safety Approval Rating(UL/CUL)

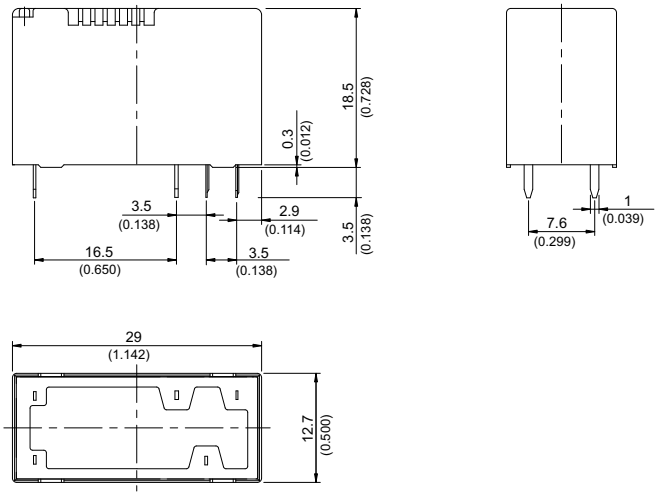
845 2A , 2B , 2C	845H 2A , 2B , 2C	845H 1A , 1B , 1C
5A 277VAC	8A 277VAC	12A 277VAC
5A 30VDC	8A 30VDC	12A 30VDC
1/8HP 125VAC/250VAC	1/4HP 125VAC/250VAC	1/2HP 125VAC/250VAC
TV-3 (NO contact only)	TV-3 (NO contact only)	TV-5 (NO contact only)

Safety Approval Rating(TUV)

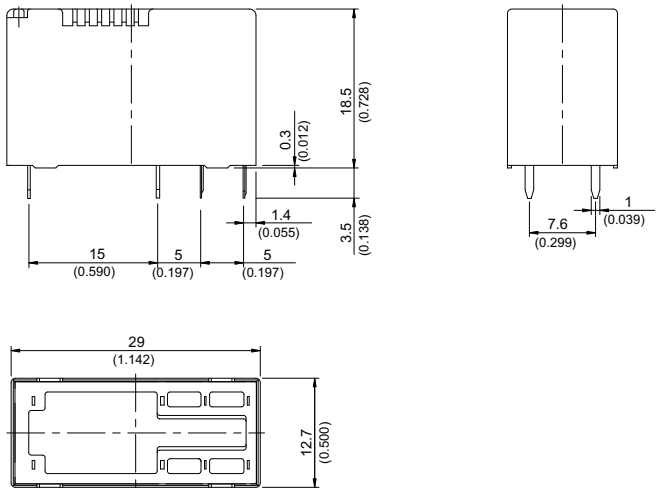
845 2A , 2B , 2C	845H 2A , 2B , 2C	845H 1A , 1B , 1C
5A 250VAC	8A 250VAC	12A 250VAC
5A 30VDC	8A 30VDC	12A 30VDC
3A 250VAC cosϕ 0.4	5A 250VAC cosϕ 0.4	10A 250VAC cosϕ 0.4

Outline Dimensions

◆845 1P

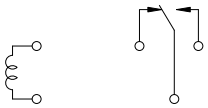


◆845 2P

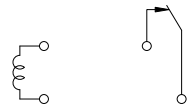


Wiring Diagram
BOTTOM VIEW

1C

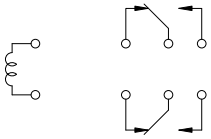


1B

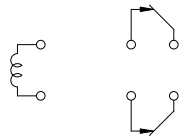


1A

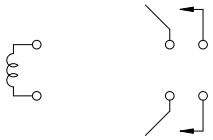
2C



2B

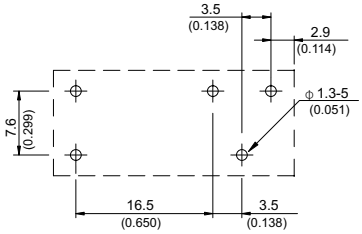


2A

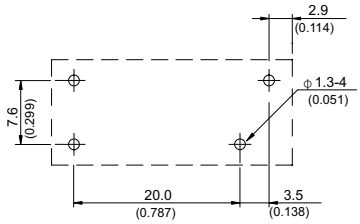


PC Board Layout
BOTTOM VIEW

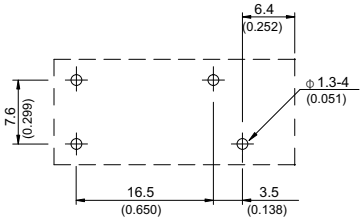
1C



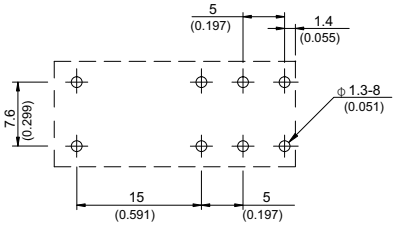
1A



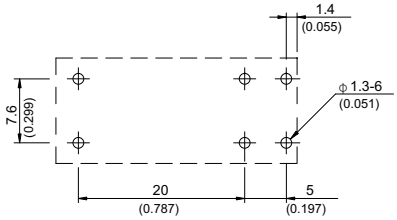
1B



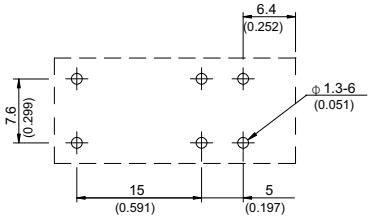
2C



2A



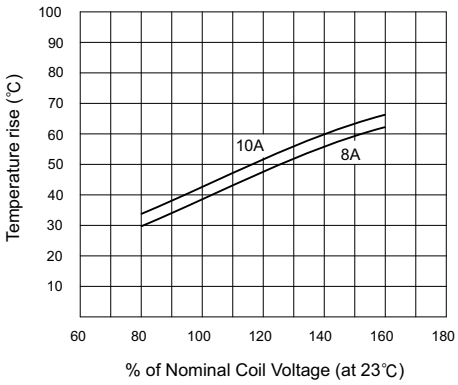
2B



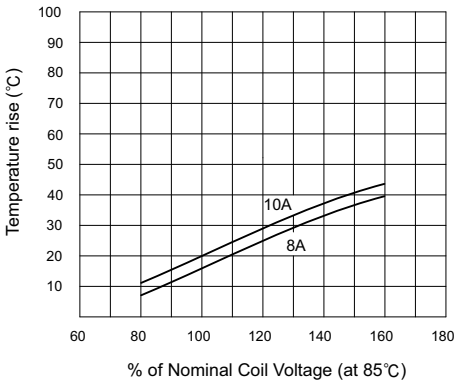
Engineering Data

◆845H-1P

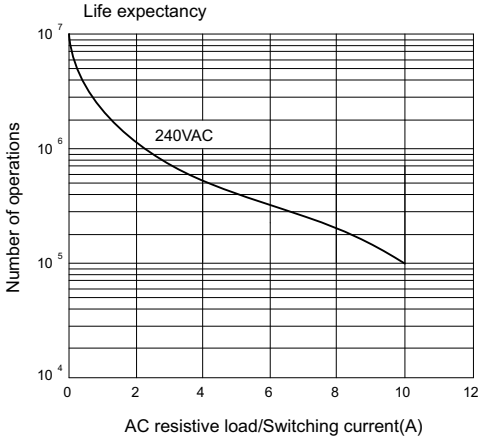
Coil temperature rise



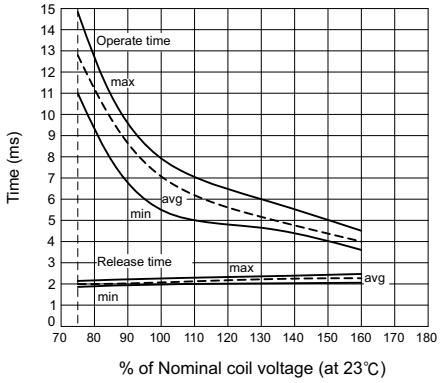
Coil temperature rise



Life expectancy

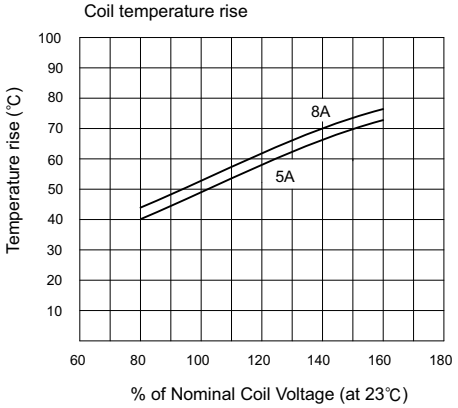


Operate time/Release time

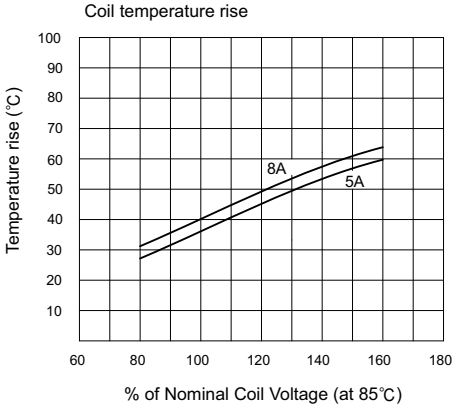


◆845-2P

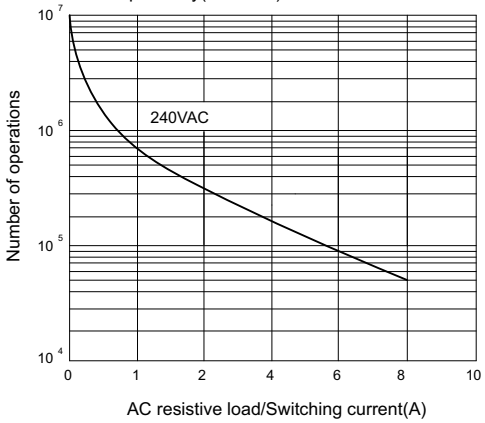
Coil temperature rise



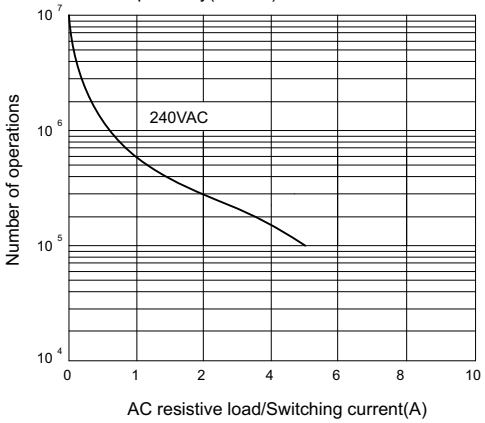
Coil temperature rise



Life expectancy(845H 2P)



Life expectancy(845 2P)



Operate time/Release time