



### »» Features

- 8A/12A miniature PCB Power Relay.
- Large contact gap : 2mm/1.5mm.
- High dielectric strength and comply with IEC 16950.
- Epoxy seal type and sealed flux free are both available.
- Design for UPS and power supply application.
- Comply with RoHS-Directive 2002/95/EC.

### »» Type List

#### ◆ Standard Type

Terminal style	Contact form	Contact gap	Designation (provided with)		
			Flux tight	Sealed type	Sealed type washable
PCB terminal	2A (DPNO)	1.5mm	894-2AC1-F-C	894-2AC1-F-V	894-2AC1-F-S
			894-2ACA1-F-C	894-2ACA1-F-V	894-2ACA1-F-S
		2.0mm	894-2AC2-F-C	894-2AC2-F-V	894-2AC2-F-S
			894-2ACA2-F-C	894-2ACA2-F-V	894-2ACA2-F-S
		1.5mm	894-2AH1-F-C	894-2AH1-F-V	894-2AH1-F-S
			894-2AHA1-F-C	894-2AHA1-F-V	894-2AHA1-F-S
	2.0mm	894-2AH2-F-C	894-2AH2-F-V	894-2AH2-F-S	
		894-2AHA2-F-C	894-2AHA2-F-V	894-2AHA2-F-S	
	2C (DPDT)	1.5mm	894-2CC1-F-C	894-2CC1-F-V	894-2CC1-F-S
			894-2CCA1-F-C	894-2CCA1-F-V	894-2CCA1-F-S
		2.0mm	894-2CC2-F-C	894-2CC2-F-V	894-2CC2-F-S
			894-2CCA2-F-C	894-2CCA2-F-V	894-2CCA2-F-S
		1.5mm	894-2CH1-F-C	894-2CH1-F-V	894-2CH1-F-S
			894-2CHA1-F-C	894-2CHA1-F-V	894-2CHA1-F-S
	2.0mm	894-2CH2-F-C	894-2CH2-F-V	894-2CH2-F-S	
		894-2CHA2-F-C	894-2CHA2-F-V	894-2CHA2-F-S	

#### ◆ High Power Type

PCB terminal	2A (DPNO)	1.5mm	894H-2AC1-F-C	894H-2AC1-F-V	894H-2AC1-F-S
			894H-2ACA1-F-C	894H-2ACA1-F-V	894H-2ACA1-F-S
		2.0mm	894H-2AC2-F-C	894H-2AC2-F-V	894H-2AC2-F-S
			894H-2ACA2-F-C	894H-2ACA2-F-V	894H-2ACA2-F-S
		1.5mm	894H-2AH1-F-C	894H-2AH1-F-V	894H-2AH1-F-S
			894H-2AHA1-F-C	894H-2AHA1-F-V	894H-2AHA1-F-S
	2.0mm	894H-2AH2-F-C	894H-2AH2-F-V	894H-2AH2-F-S	
		894H-2AHA2-F-C	894H-2AHA2-F-V	894H-2AHA2-F-S	
	2C (DPDT)	1.5mm	894H-2CC1-F-C	894H-2CC1-F-V	894H-2CC1-F-S
			894H-2CCA1-F-C	894H-2CCA1-F-V	894H-2CCA1-F-S



PCB terminal	2C (DPDT)	2.0mm	894H-2CC2-F-C	894H-2CC2-F-V	894H-2CC2-F-S
			894H-2CCA2-F-C	894H-2CCA2-F-V	894H-2CCA2-F-S
		1.5mm	894H-2CH1-F-C	894H-2CH1-F-V	894H-2CH1-F-S
			894H-2CHA1-F-C	894H-2CHA1-F-V	894H-2CHA1-F-S
		2.0mm	894H-2CH2-F-C	894H-2CH2-F-V	894H-2CH2-F-S
			894H-2CHA2-F-C	894H-2CHA2-F-V	894H-2CHA2-F-S

◆ High Sensitivity Type

Terminal style	Contact form	Designation (provided with)		
		Flux tight	Sealed type	Sealed type washable
PCB terminal	2A (DPNO)	894N-2AC-F-C	894N-2AC-F-V	894N-2AC-F-S
		894N-2ACA-F-C	894N-2ACA-F-V	894N-2ACA-F-S
		894N-2AH-F-C	894N-2AH-F-V	894N-2AH-F-S
		894N-2AHA-F-C	894N-2AHA-F-V	894N-2AHA-F-S
	2C (DPDT)	894N-2CC-F-C	894N-2CC-F-V	894N-2CC-F-S
		894N-2CCA-F-C	894N-2CCA-F-V	894N-2CCA-F-S
		894N-2CH-F-C	894N-2CH-F-V	894N-2CH-F-S
		894N-2CHA-F-C	894N-2CHA-F-V	894N-2CHA-F-S

»» Ordering Information

894 H N - 2C C 1 - F - C  
 1 2 3 4 5 6 7 8

- 1. 894 -- Basic series designation
- 2. Blank -- Standard type  
H -- High power type
- 3. Blank -- Standard type (0.8 W; 1.4 W for 2CX2 only)  
N -- High sensitivity type (0.53 W)
- 4. 2A -- Double pole normally open  
2B -- Double pole normally closed  
2C -- Double pole double throw
- 5. C -- Contact material AgNi
- 6. Blank -- Standard type  
1 -- Contact gap ≥ 1.5mm  
2 -- Contact gap ≥ 2.0mm
- 7. Blank -- Standard type  
F -- Class F
- 8. C -- Flux tight  
V -- Sealed type  
S -- Sealed type washable
- CA -- Contact material AgNi + Au  
H -- Contact material AgSnO  
HA -- Contact material AgSnO+ Au

»» Contact Rating

Type	894	894H
Resistive load	8A 240VAC	NO : 12A 240VAC NC : 10A 240VAC

## »» Coil Rating (DC)

### ◆ Standard Type

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	265	11.3	150 % of rated voltage	# of rated voltage (See note)	5 % of rated voltage	approx. 0.8W
5	161	31				
6	133	45				
9	89.1	101				
12	66.6	180				
18	44.4	405				
24	32.4	740				
48	16.7	2880				
60	13.3	4500				
110	7.3	15125				

Notes : # = 75% Contact form 2A / Contact gap 1.5mm only  
 # = 85% Contact form 2C / Contact gap 1.5mm only  
 # = 85% Contact form 2A / Contact gap 2.0mm only

### ◆ Standard Type (for "-2CX2" only)

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	468	6.4	130 % of rated voltage	85 % of rated voltage	5 % of rated voltage	approx. 1.4W
5	277	18				
6	230	26				
9	155	58				
12	117	102				
18	78	230				
24	58	410				
48	29	1650				
60	23	2570				
110	13	8640				

## ◆ High Sensitivity Type

Rated voltage (V)	Rated current ±10% at 23°C (mA)	Coil resistance ±10% at 23°C (Ω)	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	175	17.1	150 % of rated voltage	75 % of rated voltage	5 % of rated voltage	approx. 0.53W
5	107	46.7				
6	87	68.7				
9	59	153.2				
12	44	272				
18	30	610				
24	22	1,081				
48	11	4,350				
60	8.8	6,790				
110	4.8	22,800				

## »» Specification

Contact material	AgNi / AgSnO alloy	
Contact resistance <sup>(1)</sup>	100mΩ Max.	
Operate time <sup>(1)</sup>	20ms Max.	
Release time <sup>(1)</sup>	15ms Max.	
Insulation resistance <sup>(1)</sup>	1000MΩ Min. (DC 500V)	
Dielectric strength <sup>(1)</sup>	Between open contact	: AC 2500V , 50/60Hz 1 min. AC 1000V , 50/60Hz 1 min. (for 894N/894HN)
	Between contact circuits	: AC 2500V , 50/60Hz 1 min.
	Between contact and coil	: AC 5000V , 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	3,000,000 operations (frequency 18,000 operations/hr)
		300,000 operations (for contact gap 2mm type) (frequency 9,000 operations/hr)
	Electrical	30,000 operations (frequency 360 operations/hr)
Operating ambient temperature	-40~+70°C (no freezing)	
Weight	Approx. 17 g	

Note : (1) initial value

### »» Safety Approval

Certified	TUV	CSA / CUS	UL / CUL	VDE
File No.	R 50008226	1223057	E88991	40007827

### »» Safety Approval Rating

#### ◆UL/CUL、CSA/CUS

894		894H	
C、CA	H、HA	C、CA	H、HA
8A 277VAC 1/4HP 125VAC 1/2HP 250VAC	8A 277VAC 1/4HP 125VAC 1/2HP 250VAC TV-3 (NO)	12A 277VAC 1/3HP 125VAC	12A 277VAC 1/3HP 125VAC 3/4HP 250VAC (NO) TV-5(NO)

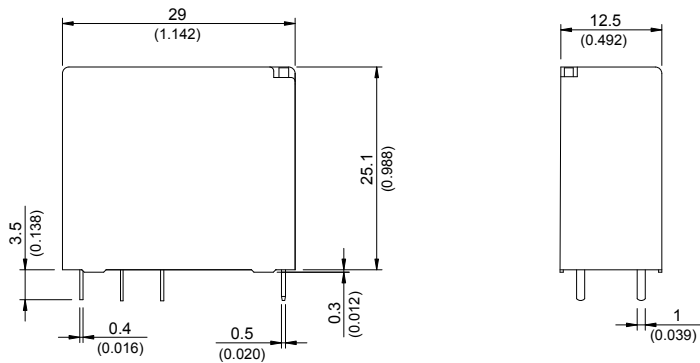
#### ◆VDE

894	894N	894H	894HN
8A 250VAC T55	8A 250VAC T70	10A 250VAC T55	10A 250VAC T70

#### ◆TUV

894	894H
8A 277VAC	12A 250VAC

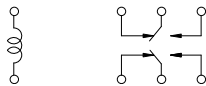
### »» Outline Dimensions



### »» Wiring Diagram

BOTTOM VIEW

2C

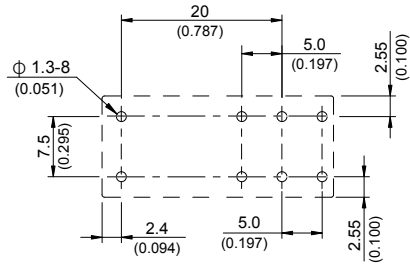


2A

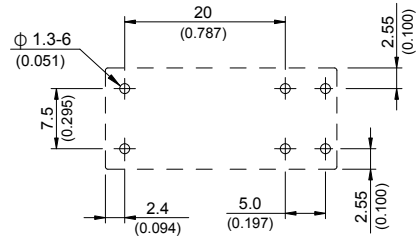


## PC Board Layout BOTTOM VIEW

2C

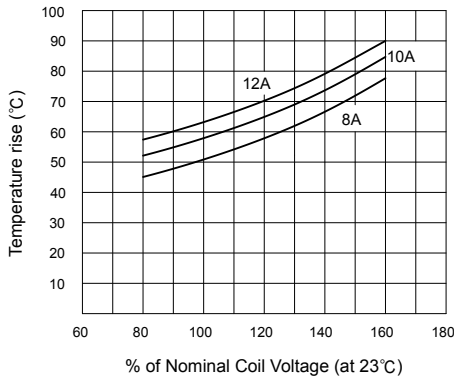


2A

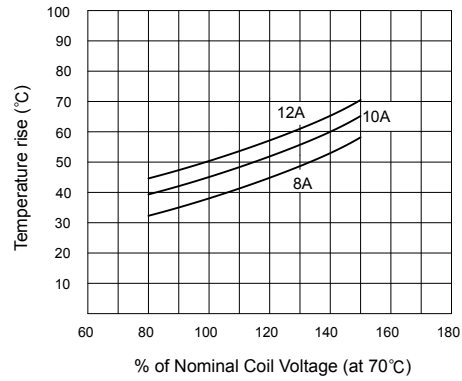


## Engineering Data

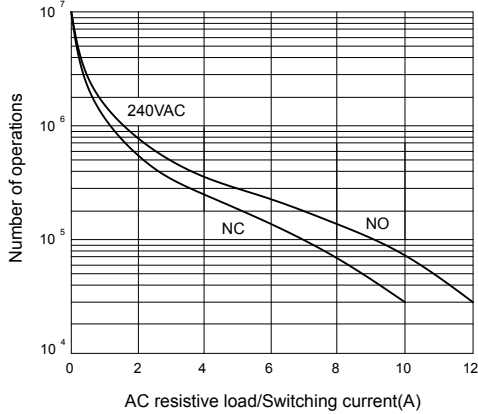
Coil temperature rise



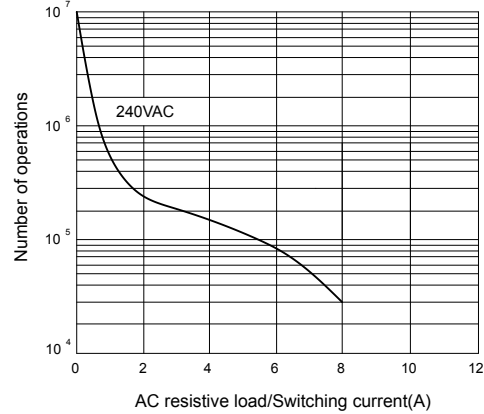
Coil temperature rise



Life expectancy(894H)



Life expectancy(894)



Operate time/Release time

