Song Chuan / Relay Catalog

>>>> Type List

♦ Standard Type

Not for new design Replacement: 507





>>>> Features

☐ High rating miniature PCB Relay.

888

- $\hfill\square$ AC & DC coil are both available.
- UL/CUL and VDE approved.
- □ 17A 277VAC SPDT.
- □ 12A 277VAC DPDT.
- $\hfill\square$ Low profile 15.7mm and high insulation system Class F.
- ☐ High CTI 250 material & New Glow Wire Approved.

(E version)

- Special version for inrush rating application is available.
 - (888-IR type)
- □ Comply with RoHS-Directive 2002/95/EC.

Terminal	Contact	UL Insulation	Designation (provided with)		
style	form	system approval	Flux tight	Sealed type washable	
	1A	F	888-1AC-F-C	888-1AC-F-S	
	(SPNO)		888-1AH-F-C	888-1AH-F-S	
	1C	F	888-1CC-F-C	888-1CC-F-S	
PCB terminal	(SPDT)	Г	888-1CH-F-C	888-1CH-F-S	
PCB terminar	2A	F	888-2AC-F-C	888-2AC-F-S	
	(DPNO)		888-2AH-F-C	888-2AH-F-S	
	2C	F	888-2CC-F-C	888-2CC-F-S	
	(DPDT)		888-2CH-F-C	888-2CH-F-S	

◆ High Sensitivity Type (N) / Ultra-Sensitivity Type (N1)

	1			
			888N-1AC-F-C	888N-1AC-F-S
	1A	F	888N1-1AC-F-C	888N1-1AC-F-S
	(SPNO)	F	888N-1AH-F-C	888N-1AH-F-S
			888N1-1AH-F-C	888N1-1AH-F-S
			888N-1CC-F-C	888N-1CC-F-S
	1C	F	888N1-1CC-F-C	888N1-1CC-F-S
PCB terminal	(SPDT)	F	888N-1CH-F-C	888N-1CH-F-S
			888N1-1CH-F-C	888N1-1CH-F-S
	2A	F	888N-2AC-F-C	888N-2AC-F-S
	(DPNO)	F	888N-2AH-F-C	888N-2AH-F-S
	2C (DPDT)	F	888N-2CC-F-C	888N-2CC-F-S
		F	888N-2CH-F-C	888N-2CH-F-S

♦ High Power Type

	1A	F	888H-1AC-F-C	888H-1AC-F-S
PCB terminal	(SPNO)	F	888H-1AH-F-C	888H-1AH-F-S
	1C		888H-1CC-F-C	888H-1CC-F-S
	(SPDT)	F	888H-1CH-F-C	888H-1CH-F-S

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◆ High Power Type 、 High Sensitivity Type

888

	1A	F	888HN-1AC-F-C	888HN-1AC-F-S
	(SPNO)	PNO)	888HN-1AH-F-C	888HN-1AH-F-S
PCB terminal	1C	F	888HN-1CC-F-C	888HN-1CC-F-S
	(SPDT)	F	888HN-1CH-F-C	888HN-1CH-F-S

Note: 888A—Special footprint 5.0mm pinning version can be selected

◆ Inrush Type (only for 0.53W)

PCB terminal	1A (SPNO)	F	888H-1AH-F-C IR	888H-1AH-F-S IR
PCB terminal	1C (DPDT)	F	888H-1CH-F-C IR	888H-1CH-F-S IR

>>>> Ordering Information

888	H N1	-	1C	С	-	F	-	С	IR	
1	23		4	5		6		7	8	
1.888	Ba	sic sei	ries de	signat	tion				2B	Double pole normally closed
									2C	Double pole double throw
2. Blank	 State 	andarc	l type							
	(11	P - Ter	minal _I	pitch 3	3.5mm)			5. C	Contact material AgNi
	(21	P - Ter	minal _I	pitch 5	5.0mm)			CA	Contact material AgNi + Au
А	Sta	andarc	l type a	and sp	pecial	termiı	nal pi	tch	Н	Contact material AgSnO
	(11	P - Ter	minal _I	pitch &	5.0mm	ı)			HA	Contact material AgSnO+ Au
Н	Hig	gh pow	/er type	e (only	y for 1	P typ	e)			
									6. Blan	k Standard type
3. Blank	c Sta	andarc	l type						F	Class F
	(D	C: 0.5	3 W) (A	AC: 0.	75 VA)				
Ν	Hiệ	gh sen	sitivity	type (0.40 \	N)			7. C	Flux tight
N1	Ult	ra-sen	sitivity	type	(0.25 \	W)			S	Sealed type washable
	(0	nly for	1P typ	e)						
									8. Blan	k Standard type
4.1A	Siı	ngle po	ole nor	mally	open				IR	888 Inrush type (only for H、1A/1C
1B	Siı	ngle po	ole nori	mally	closed	k				type)
1C	Sii	ngle po	ole dou	ible th	irow				Е	CTI 250V
	_									

2A -- Double pole normally open

>>>> Contact Rating

-						
Turpo		2P				
Туре	888 \ 888N	888N1	888H v 888HN	888 <u>×</u> 888N		
Rated load (resistive)	12A 240VAC	10A 240VAC	16A 240VAC	8A 240VAC		
Max. switching current	12A	10A	17A	8A		
Max. switching voltage	277VAC	277VAC	277VAC	277VAC		
Max. switching capacity	2880VA	2400VA	4080VA	1920VA		
♦ Inrush type						
Tungsten Lamp	NO:1500W 240VAC 30,000 ops. (Inrush 110A)					
Halogen Lamp	NO:1500W 240VAC	30,000 ops. (Inrush 1	110A)			

888



Standard Type

- Otaria	аго туре					
Rated	Rated current	Coil resistance	Max. continuous	Pick up	Drop out	Power consumption
voltage	±10 % at 23°C	±10 % at 23°C	voltage	voltage(Max)	voltage(Min)	at rated
(V)	(mA)	(Ω)	at 85∘C	at 23°C	at 23∘C	voltage
3	176	17				
5	106	47				
6	88	68				
9	59	153	150 % of	75 % of	10 % of	
12	44	272	rated	rated	rated	approx 0.52W/
15	35	425	voltage	voltage	voltage	approx. 0.53W
18	29	611				
24	22	1,087				
36	15	2,445				
48	11	4,347				

◆High Sensitivity Type (N)

Rated	Rated current	Coil resistance	Max. continuous	Pick up	Drop out	Power consumption
voltage	±10 % at 23°C	±10 % at 23°C	voltage	voltage(Max)	voltage(Min)	at rated
(∨)	(mA)	(Ω)	at 85°C	at 23°C	at 23∘C	voltage
3	133	22.5				
5	80	62				
6	67	90				
9	44	203	150 % of	70 % of	10 % of	
12	33	360	rated	rated	rated	approx. 0.40W
18	23	771	voltage	voltage	voltage	
24	17	1,440				
36	11	3,240				
48	9	5,520				

◆ Ultra-Sensitivity Type (N1)

Rated	Rated current	Coil resistance	Max. continuous	Pick up	Drop out	Power consumption
voltage	±10 % at 23°C	±10 % at 23°C	voltage	voltage(Max)	voltage(Min)	at rated
(V)	(mA)	(Ω)	at 85°C	at 23°C	at 23°C	voltage
3	83	36				
5	50	100				
6	42	144	150 % of	75 % of	10 % of	
9	28	324	rated	rated	rated	25 M
12	21	576	voltage	voltage	voltage	approx. 0.25W
18	14	1,296				
24	10	2,304				
36	7	5,184				



>>>> Coil Rating (AC)

Rated	Rated current	Coil resistance	Max. continuous	Pick up	Drop out	Power consumption
voltage	±10% at 23°C	±10% at 23°C	voltage	voltage(Max)	voltage(Min)	at rated
(V)	(mA)	(Ω)	at 70°C	at 23°C	at 23∘C	voltage
6	124	18.8				
12	62.5	79.8				
24	31.2	334				
42	17.9	966	150 % of	80 % of	15 % of	
48	15.5	1,340	rated	rated	rated	approx. 0.75VA
100/110	7.53	6,840	voltage	voltage	voltage	
110/120	6.8	7,360				
200/220	3.75	23,800				
220/240	3.4	27,400				

>>>> Specification

Contact material	AgNi / AgSnO alloy				
Contact resistance ⁽¹⁾	100mΩ Max.				
Operate time ⁽¹⁾	20ms Max.				
Release time ⁽¹⁾	10ms Max.				
Insulation resistance (1)	1000MΩ Min. (D	C 500V	()		
	Between open c	ontact	: AC 1000V, 50/60Hz 1 min.		
Dielectric strength ⁽¹⁾	Between contact	and co	il : AC 5000V, 50/60Hz 1 min.		
	Between contact	circuits	 AC 3000V, 50/60Hz 1 min. (for 2P DC type) AC 2500V, 50/60Hz 1 min. (for 2P AC type) 		
Surge voltage withstand	Between contact	and co	il :10KV (1.2X50) μS		
Vibration resistance	Operating extrer	nes	$10 \sim 55 Hz$, amplitude 1.5 mm		
	Damage limits		10~55Hz , amplitude 1.5 mm		
Shock resistance	Operating extrer	nes	10G		
	Damage limits		100G		
Life expectancy	Mechanical		30,000,000 operations (frequency 72,000 operations /hr) 5,000,000 operations (for 2P AC type) (frequency 18,000 operations /hr)		
	Electrical		100,000 operations (frequency 360 operations /hr)		
On anothing and him the many state	DC coil	-40 ~	- +85°C (no freezing) ⁽²⁾		
Operating ambient temperature	AC coil	-40 ~	-+70°C (no freezing)		
Weight	Approx. 10 g				

Note : (1) initial value

(2) special version of high temperature 105°C can be selected.

888



>>>> Safety Approval

Certified	UL / CUL	VDE
File No.	E88991	40006746

>>>> Safety Approval Rating (VDE)

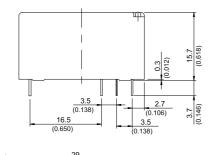
► DC coil				
888H v 888HN	888 · 888N · 888N1	888 × 888N	888H	888
	1P	2P	000П	
17A 250VAC T105	12A 250VAC T105	12A 250VAC T85	17A 250VAC T85	1P: 12A 250VAC T85
		10A 250VAC T105		2P: 10A 250VAC T85

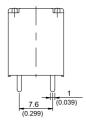
>>>> Safety Approval Rating (UL/CUL)

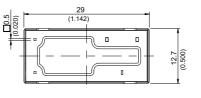
888 (1P)		999 (20)	888N1
C \ CA	H < HA	888 (2P)	000101
NO/NC: 17A 277VAC	NO/NC: 17A 277VAC	NO/NC: 12A 277VAC	17A 277VAC
NO:12A 30VDC	NO: 1HP 120/240/480VAC	NO: 1/2HP 120/240VAC	12A 30VDC
1HP 480VAC	TV-8	TV-5 (H ∖ HA type only)	
NC: 1/2HP 120/240/480VAC	NC: 12A 30VDC	NC: 1/3HP 120/240VAC	
	1/2HP 120/240/480VAC		

»» Outline Dimensions

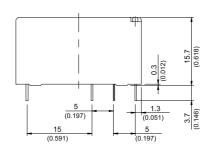
♦888 1P

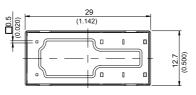


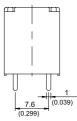




◆888H 1P







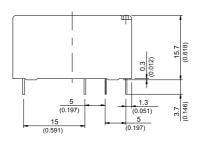
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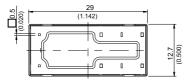
(0.299



888

♦888 2P

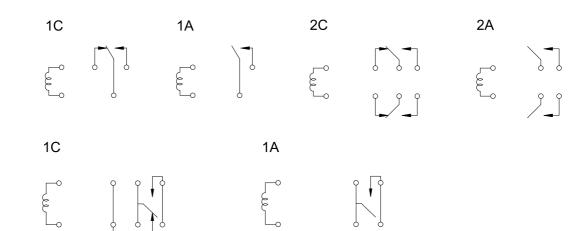




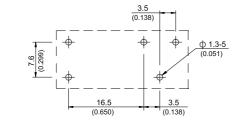
Wiring Diagram BOTTOM VIEW

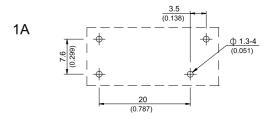
♦888

♦888H



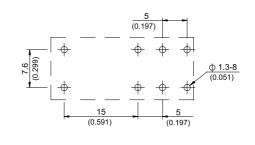
>>>> PC Board Layout BOTTOM VIEW **♦**888

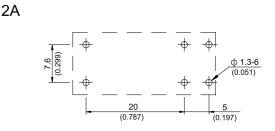






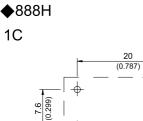
1C





888





1A

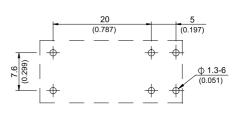
<u>5</u> (0.197)

Φ 1.3-8

0.051

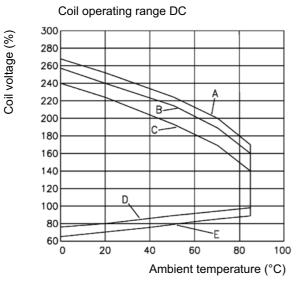
φ φ

(0.197)

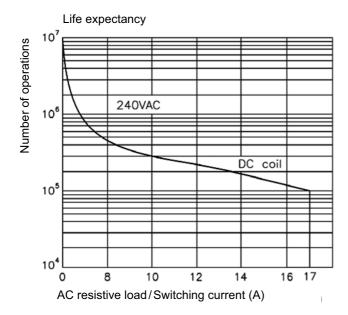


>>>> Engineering Data

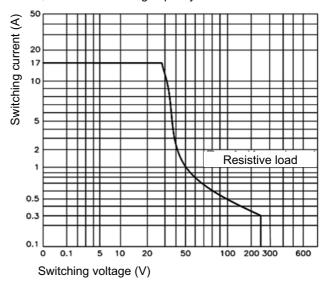
1 pole DC coil



- A: contact resistive load 0A
- B: contact resistive load 8A
- C: contact resistive load 17A
- D: pick-up voltage with preenergized coil, 1.1 Un and contact current 17A
- E: pick-up voltage



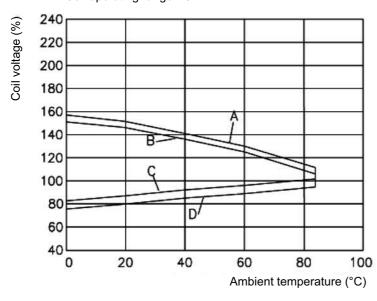
Maximum switching capacity DC load





1 pole AC coil

Coil operating range AC



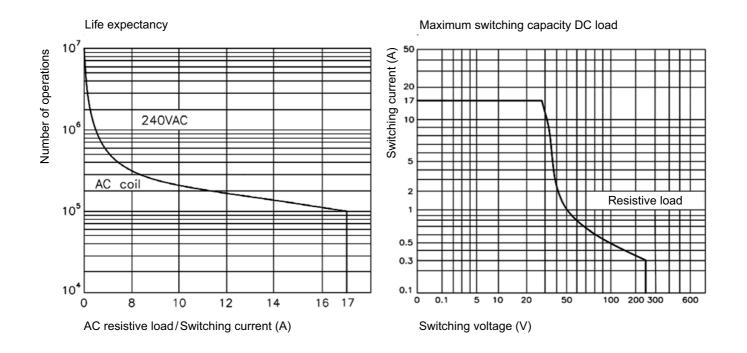
888

A: contact resistive load 0A

B: contact resistive load 17A

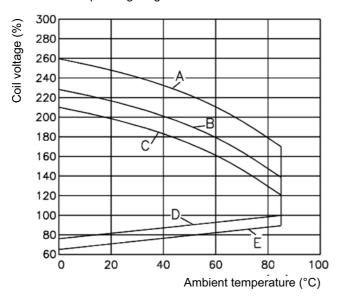
C: pick-up voltage with preenergized coil, 1.1 Un and contact current 17A

D: pick-up voltage



2 poles DC coil

Coil operating range DC



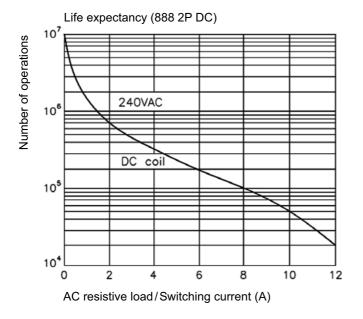
A: contact resistive load 0A

B: contact resistive load 2x8A

C: contact resistive load 2x12A

D: pick-up voltage with preenergized coil, 1.1 Un and contact current 2x8A

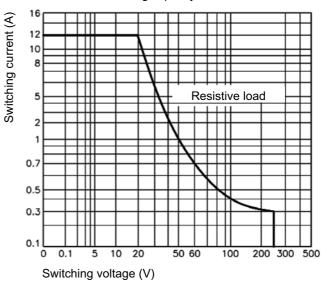
E: pick-up voltage



Maximum switching capacity DC load

888

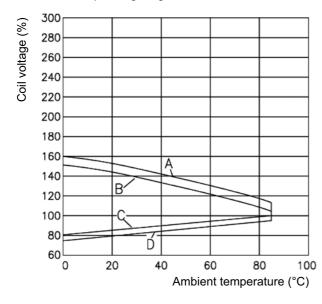
Song CHUAN





2 poles AC coil

Coil operating range AC

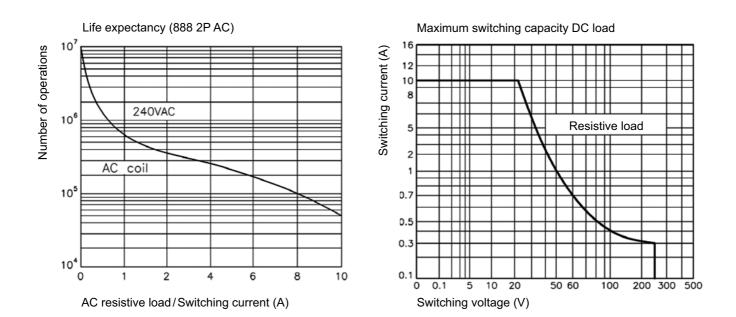


A: contact resistive load 0A

B: contact resistive load 2x10A

C: pick-up voltage with preenergized coil, 1.1 Un and contact current 2x8A

D: pick-up voltage



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Song Chuan:

<u>888H-1AH-F-S-IR-12VDC</u> <u>888HN-1CC-C-12VDC</u> <u>888H1AHFSIR24VDC</u> <u>888H-1AH-F-C-IR-24VDC</u> <u>888HN-1AH-F-S-</u> IR-12VDC <u>888-2CC-F-S-24VDC</u> <u>888HN-1CH-F-C-12VDC</u> <u>888N-2CC-F-C-12VDC</u> <u>888HN-1AC-F-C</u> <u>12VDC</u>