# Not for new design Replacement: 507



888





111	T 4	
>>>	Features	

- ☐ High rating miniature PCB Relay.
- ☐ 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)

 $\hfill \square$  Special version for inrush rating application is available.

(888-IR type)

☐ Comply with RoHS-Directive 2002/95/EC.

#### >>> Type List

◆Standard Type

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)		888-1CH-F-C	888-1CH-F-S	
PCB terminal	2A	F	888-2AC-F-C	888-2AC-F-S	
	(DPNO)	Г	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)

			888N-1AC-F-C	888N-1AC-F-S
	1A	F	888N1-1AC-F-C	888N1-1AC-F-S
	(SPNO)		888N-1AH-F-C	888N-1AH-F-S
			888N1-1AH-F-C	888N1-1AH-F-S
			888N-1CC-F-C	888N-1CC-F-S
DCD to making al	1C	F	888N1-1CC-F-C	888N1-1CC-F-S
PCB terminal	(SPDT)	<b>F</b>	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)	<b>F</b>	888N-2AH-F-C	888N-2AH-F-S
	2C	F	888N-2CC-F-C	888N-2CC-F-S
	(DPDT)	F	888N-2CH-F-C	888N-2CH-F-S

#### ♦ High Power Type

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



#### High Power Type \ High Sensitivity Type

	1A	F	888HN-1AC-F-C	888HN-1AC-F-S
PCB terminal	(SPNO)		888HN-1AH-F-C	888HN-1AH-F-S
	1C	F -	888HN-1CC-F-C	888HN-1CC-F-S
	(SPDT)		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
POD terminar	1C (DPDT)	Г	888H-1CH-F-C IR	888H-1CH-F-S IR

#### >>> Ordering Information

888	Н	N1	-	1C	С	-	F	-	С	IR
1	2	3		4	5		6		7	8

1.888 -- Basic series designation 2B -- Double pole normally closed

2C -- Double pole double throw

2. Blank -- Standard type

(1P - Terminal pitch 3.5mm)

(2P - Terminal pitch 5.0mm)

5. C -- Contact material AgNi

Α

CA -- Contact material AgNi + Au

-- Standard type and special terminal pitch (1P - Terminal pitch 5.0mm)

-- Contact material AgSnO Н -- Contact material AgSnO+ Au HA

-- Standard type

-- Class F

-- High power type (only for 1P type) Н

3. Blank -- Standard type

(DC: 0.53 W) (AC: 0.75 VA)

Ν -- High sensitivity type (0.40 W)

N1 -- Ultra-sensitivity type (0.25 W)

(only for 1P type)

-- Double pole normally open

8. Blank

7. C -- Flux tight

6. Blank

F

**IR** 

S -- Sealed type washable

-- Standard type

type)

-- 888 Inrush type (only for H \ 1A/1C

4.1A -- Single pole normally open

1B -- Single pole normally closed

1C -- Single pole double throw

Ε -- CTI 250V

#### >>> Contact Rating

2A

Tuno		2P		
Туре	888 · 888N	888N1	888H · 888HN	888 × 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 110A)



# >>> Coil Rating (DC) Standard Type

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)	$(\Omega)$	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. 0.53W
15	35	425	voltage	voltage	voltage	арргох. 0.55vv
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
(V)	(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)	$(\Omega)$	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	approx 0.25W
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)	$(\Omega)$	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. (DC 500V)			
	Between open contact : AC 1000V, 50/60Hz 1 min.			
Dielectric strength (1)	Between contact and coil : AC 5000V, 50/60Hz 1 min.			
			: 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 extremes		10∼55Hz , amplitude 1.5 mm	
VIDIALIOIT TESISLATICE	Damage limits		10∼55Hz , amplitude 1.5 mm	
Shock resistance	Operating extremes		10G	
SHOCK TESISTATICE	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)	
Operating ambient temperature	DC coil -40 ~		~+85°C (no freezing) (2)	
Operating ambient temperature	AC coil -40~+70°C (no freezing)		-+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

	AC	coil
•	, ,	COI

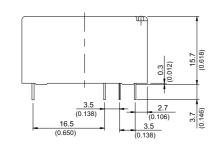
888H \ 888HN	888 · 888N · 888N1	888 · 888N	888H	888	
00011 0001111	1P	2P	000П		
17A 250VAC T105	12A 250VAC T105	12A 250VAC T85	17A 250VAC T85	1P: 12A 250VAC T85	
17A 250VAC 1105	12A 250 VAC 1 105	10A 250VAC T105	17A 250VAC 165	2P: 10A 250VAC T85	

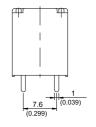
# >>> Safety Approval Rating (UL/CUL)

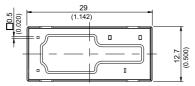
888	(1P)	000 (2D)	888N1	
C · CA	H \ HA	888 (2P)		
NO/NC: 17A 277VAC	NO/NC: 17A 277VAC	NO/NC: 12A 277VAC	17A 277VAC	
NO:12A 30VDC	NO: 1HP 120/240/480VAC	NO: 1/2HP 120/240VAC	12A 30VDC	
1HP 480VAC	TV-8	TV-5 (H \ HA type only)		
NC: 1/2HP 120/240/480VAC	NC: 12A 30VDC	NC: 1/3HP 120/240VAC		
	1/2HP 120/240/480VAC			

#### >>> Outline Dimensions

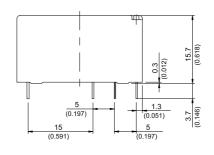
**♦**888 1P

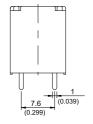


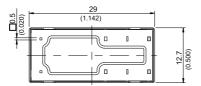




#### ◆888H 1P



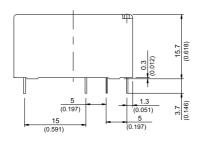


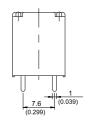


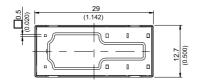


888

♦888 2P







>>> Wiring Diagram BOTTOM VIEW

**♦**888

1C

1A

2C

2A











**♦**888H

1C

1A



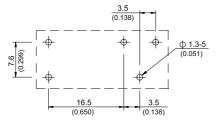




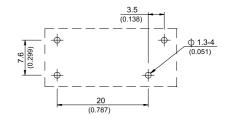
>>> PC Board Layout BOTTOM VIEW

**\$888** 

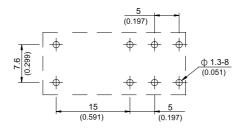
1C



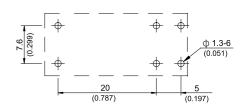
1A



2C



2A

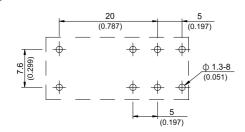


888

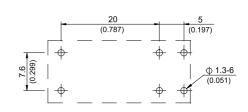
SONG CHUAN

**♦**888H

1C

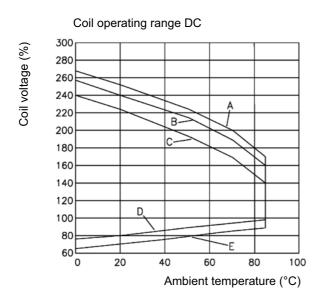


1A



#### >>> Engineering Data

# 1 pole DC coil



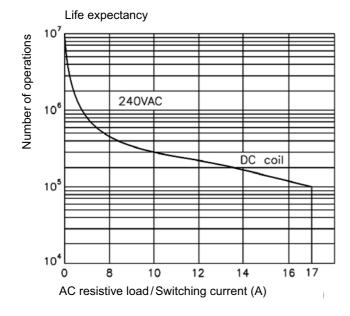
A: contact resistive load 0A

B: contact resistive load 8A

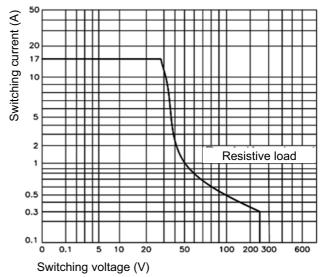
C: contact resistive load 17A

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

E: pick-up voltage

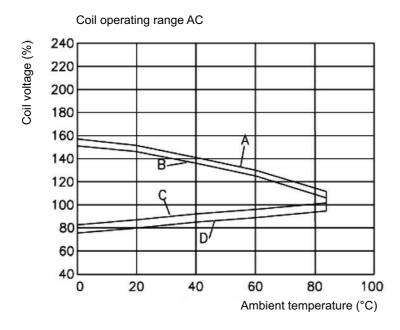


Maximum switching capacity DC load





# 1 pole AC coil

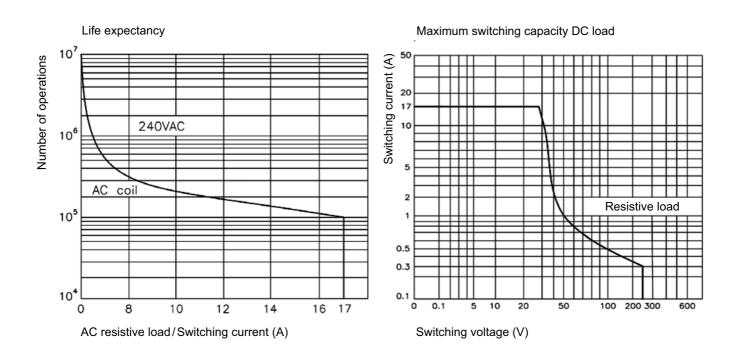


A: contact resistive load 0A

B: contact resistive load 17A

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

D: pick-up voltage

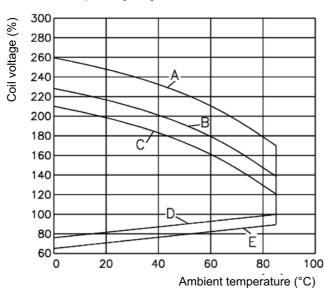






# 2 poles DC coil





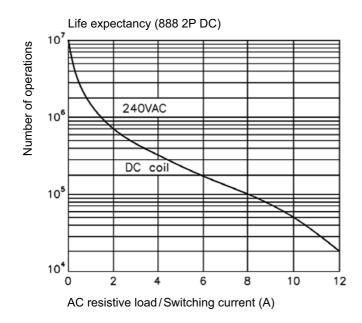
A: contact resistive load 0A

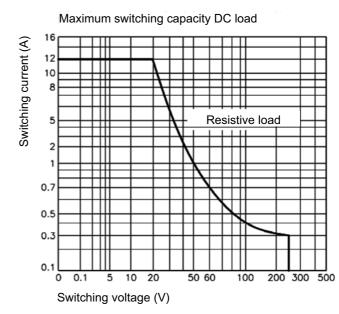
B: contact resistive load 2x8A

C: contact resistive load 2x12A

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

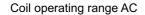
E: pick-up voltage

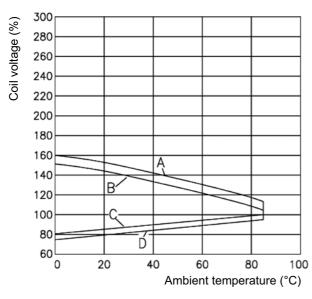






# 2 poles AC coil



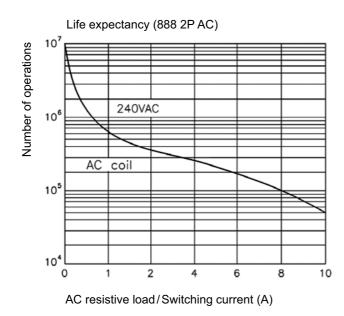


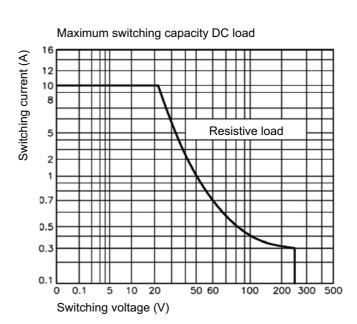
A: contact resistive load 0A

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:

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