

Approved Sheet

Customer:
Customer port no:
Item Name:
Model: Thermal Circuit Protector
MFR part: 88-16-PSW14-000
Rating: 16A 125/250Vac; 32Vdc

Maker:

APPROVED	DESING	DRAWER
		

KUOYUH W.L.Enterprise Co.,Ltd.

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AUTYORIZED		SIGNATURE	

88 Series Thermal Circuit Breaker

Single Pole Push to Reset

•Technical data

- Current rating range 3-30A
- Input voltage rating 125/250VAC; 32/50VDC
- Interrupting Capacity 125/250VAC x 1,000A(UL 1077)
- Typical life 1,000 operations at 200% overload.
- Insulation co-ordination Rated impulse withstand voltage 2.5kV
- Dielectric Strength > 1.500VAC/min.
- Insulation Resistance >100MOHM (DC 500V)
- Degree of protection Terminal area IP00, operating area IP40
- Reset Time <60 ses; at25°C
- Tripping Type Thermal
- Voltage Drop Less Than 1.0V

•Mechanical/Environmental Data

- Operating Ambient Temperature: -10°C to +65°C
- Termination: 250''(6.35mm) quick connects or solder terminals
- Mounting: Various options. See Ordering Information and drawings
- Compliance with Rohs
- Compliance with REACH, PAHS, PH1, PH2, PH3
- Ignition Proof Yes, UL PEQZ2.E155159

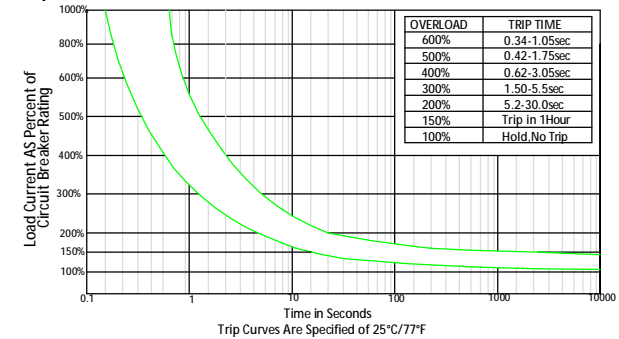
•Calibration(at25°C)

- 100% of Rated Current: Hold , No Trip
- 150% of Rated Current: Trip Within 1 Hour.
- 200% of Rated Current: 5-30 sec Trip
- 300% of Rated Current: 1.5-5.0 sec Trip

•Approval

- CUL UL 3A-30A 125/250VAC;50Vdc
- TUV SUD 3A-30A 125/250VAC;32Vdc
- CSA 102199 3A-16A 125VAC
- CCC 3A-20A 125/250VAC

•Trip Time Curves



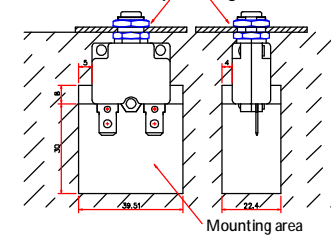
•Ambient Temperature Correction Factor

Ambient temperature	-10°C	0°C	10°C	25°C	35°C	45°C	55°C	65°C
Division factor	*1.30	*1.20	*1.10	1.00	*0.94	*0.85	*0.73	*0.69

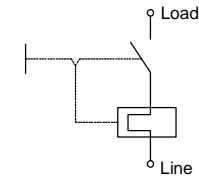
The time/current characteristic curve depends on the ambient temperature prevailing. In order to eliminate nuisance tripping, please multiply the circuit breaker current ratings by the derating factor shown below.

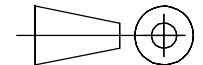












Example: Normal Continuous Current = 10A
Ambient Temperature = 45°C
Division Factor = 0.85
Recommended Rating= 10A/0.85=11.8A
Select the Nearest Rating = 12A

•Internal connection diagram operating area

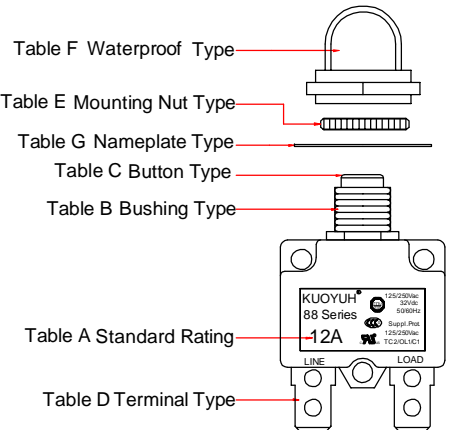


•Internal connection diagram



NO	DESCRIPTION	APPROVED	DATE	TOLERANCE		APPROVED	DESING	DRAWER	Unit(單位)	mm	
				DIMENSION	TOLERANCE						
				XX.XX	±0.05				Scale(比例)	1 : 1	Thermal Circuit Breaker
	TUV 由3A-20A 增加為 3-30A; 125/250VAC; 32VDC	黃獻明	2021.09.30	XX.X	±0.1				國郁企業股份有限公司	Title(品名)	
	UL1500 Ignition Protected Approved	黃獻明	2013.05.20	XX	±0.15				Rev(版本)	G/3	Thermal Circuit Breaker
	UL+CUL 21-30A TC2/OLO/C1 Approved	黃獻明	2012.10.10	ANGLE	TOLERANCE				國郁企業股份有限公司	Title(品名)	
				X	±1°				Material(材質)		Thermal Circuit Breaker
				X.X	±0.5°				國郁企業股份有限公司	Title(品名)	
									Drawing no.(圖號,料號)	88 Series Thermal Data	

Order Guide	88-12-A1 B 1 4-P 0 0 N B
Series No.	
Amp Rating.	(Table A)
Bushing Type.	(Table B)
Color of Button.	(Table C)
Terminal Type.	(Table D)
Voltage.	1=UL& CSA 125Vac, 2=TUV & CCC 250Vac, 3=1+2 125/250Vac, 4=UL+TUV+CCC 125/250Vac;32Vdc, 5=Client designation 6=UL 125/250Vac;50Vdc, 8=VDE 125/250Vac, 9=CSA 125Vac U3 type
Mounting Nut Type.	(Table E)
Waterproof Type.	(Table F)
Nameplate Type.	(Table G)
Terminal Finish.	S=Plate with Tin N=Plate with Nickel 0=No plate
Body Type.	B=Black W=White



03= 3.0A	12= 12.0A
3.5= 3.5A	13= 13.0A
04= 4.0A	15= 15.0A
05= 5.0A	16= 16.0A
06= 6.0A	17= 17.0A
07= 7.0A	18= 18.0A
08= 8.0A	20= 20.0A
09= 9.0A	22= 22.0A
10= 10.0A	25= 25.0A
11= 11.0A	30= 30.0A

P1 Plastic M11XP1.0	P2 Plastic M12XP1.0	P3 Plastic 3/8"-27T	PL Plastic No thread
KF Plastic Snap in	PS Plastic Snap in	AW (White) Plastic No thread	P0 Plastic No thread
A1 Metal M11XP1.0	B1 Metal M11XP1.0	A3 Metal 3/8"-27T	B3 Metal 3/8"-27T

P1,A1,B1	A2,P2	P3,A3,B3	AW/AB	P0	PS,KF
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B = Black button (黑推桿)	W = White button (白推桿)	R = Red button (紅推桿)
Normal Amp stamp Amps=white	Normal Amp stamp Amps=black	NORMAL AMP STAMP Amps=white
1	5	6
7	8	9
X	Y	Z

1 Straight 11.8mm	2 90° bend	3 90° bend	4 Line pin 90° bend Load pin Straight	5 Line pin Straight Load pin 90° bend	7 Line pin 90° bend down Load pin 90° bend up	8 45° bend up	9 45° bend down
X Straight 4.0mm	F Screw #8-32 Straight	L Screw #8-32 90° bend up	J Screw #8-32 90° bend down	K Line pin SQ .25 Straight Load pin Screw #8-32 90° bend	G Line pin Screw #8-32 90° bend Load pin SQ .25 Straight	H Line pin Screw #8-32 90° bend Load pin Screw Straight	

0 None	P Plastic Integrated Knurl nut	A Plastic Knurl nut	B Metal Hexnut M11 H=14 M12 H=15	C Metal	4 Metal	5 Metal	6 Metal	7 Metal
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0 None	R #12.0±0.5	F #13.0±0.5	T #12.0±0.5	V #12.0±0.5	U or C #8.5±0.5
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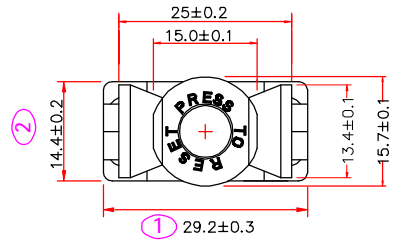
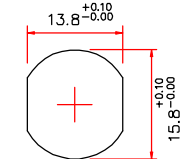
0 None	B Black plate	A Black plate	S Black plate	L Black plate
W White plate	X White plate	For Waterproof		

TUV 由3A-20A 增加為 3-30A; 125/250VAC; 32VDC	黃獻明	2021.09.30	TOLERANCE		APPROVED	DESING	DRAWER	Unit(單位)	mm	
			XX.XX	±0.05	總經理 2019.01.01 黃獻明	品研部 2019.01.01 陳政作	品研部 2019.01.01 黃威誠	Scale(比例)	1 : 1	
UL1500 Ignition Protected Approved	黃獻明	2013.05.20	XX	±0.15				Material(材質)		
UL+CUL 21-30A TC2/OLO/C1 Approved	黃獻明	2012.10.10	ANGLE	TOLERANCE	國郁企業股份有限公司			Title(品名)	88 Series Thermal Circuit Breaker	
NO	DESCRIPTION	APPROVED	DATE	X.X	±0.5°	KUOYUH W.L. Enterprise Co.,Ltd.			Drawing no.(圖號,料號)	88 Series OrderGuide

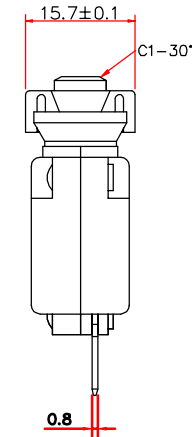
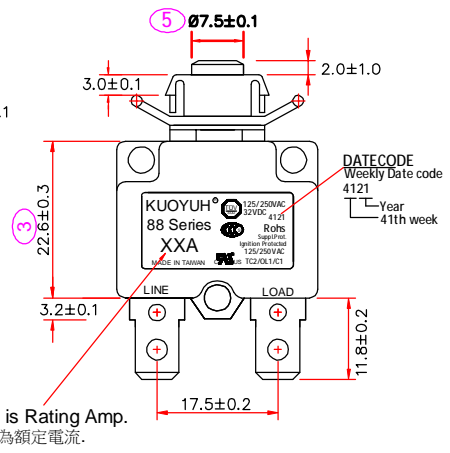
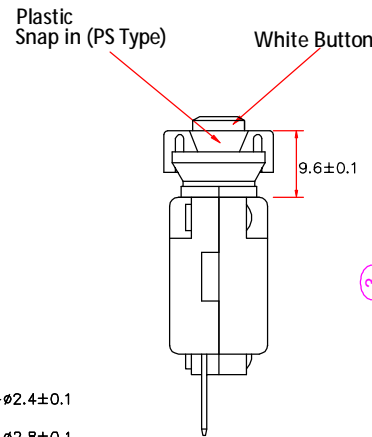
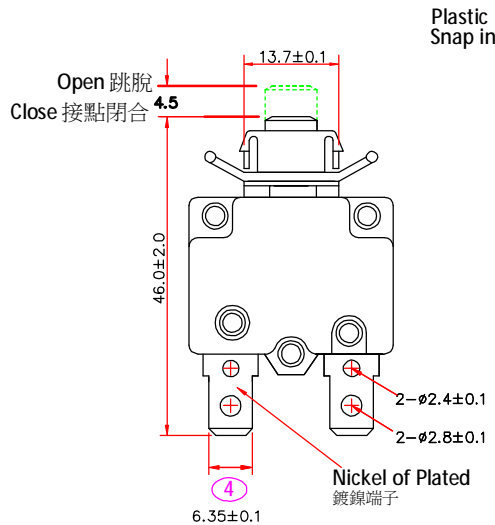
88-XX-PSW14-000

NO.	Dimensions
①	29.2±0.3
②	14.4±0.2
③	22.6±0.3
④	6.35±0.1
⑤	∅7.5±0.1

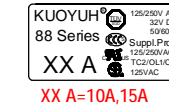
Panel Cutout



OVERLOAD	TRIP TIME
600%	0.34-1.05sec
500%	0.42-1.75sec
400%	0.62-3.05sec
300%	1.50-5.5sec
200%	5.2-30.0sec
150%	Trip in 1Hour
100%	Hold, No Trip



Marking: Follow the rated, XXA is Rating Amp.



備註 Remark:
 1. XXA 表示額定電流。 XXA is Rating Amp.
 2. 安規 Approve mark:
 CUL 3A-30A 125/250VAC; 50VDC
 TUV 3A-30A 125/250VAC; 32VDC
 CCC 3A-20A 125/250VAC
 CSA 10A ; 15A 125VAC
 3. 過錫爐時溫度為235±5°C,
 60W烙鐵加熱時,溫度為350±5°C, 加熱時間為3秒內,最多不可超過5秒。
 When tin stove processing temperature is 235±5°C, time is 3-5sec;
 60W wending iron processing, temp is 350±5°C, within 3 secs,
 can't over 5 sec.
 4. 符合歐盟RoHS指令 2011/65/EU 要求。(按點使用排除條款)
 The product accord with the requirement of ROHS(EU 2011/65/EU)
 Contacts use Exempted item of RoHS Directive 2010/571/EU 8(b)
 5. ⊗表示必檢尺寸, The size of the need to check
 6. 已符合UL1500 點火保護 第三版。
 The devices have been evaluated for Ignition Protection in accordance
 with UL 1500, Third Edition.

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				X	±1°					
				X.X	±0.5°					