

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 PEQ22.E155159

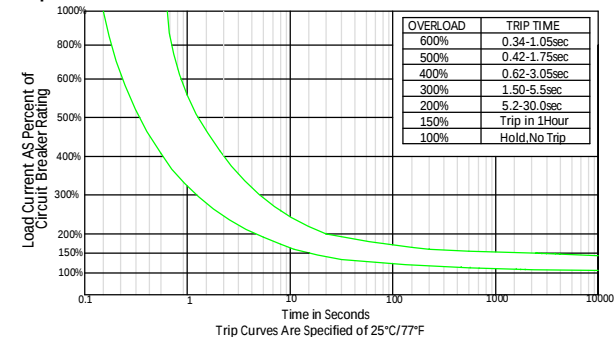
•Calibration(at25°C)

- 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



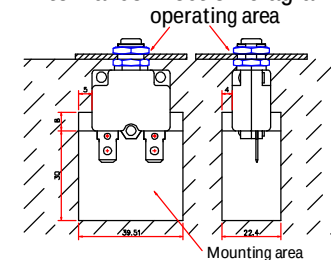
•Ambient Temperature Correction Factor

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

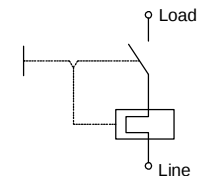
The time/current characteristic curve depends on the ambient temperature prevailing. In order to eliminate nuisance tripping. Please multiply the circuit breaker current ratings by the derating factor shown below.

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

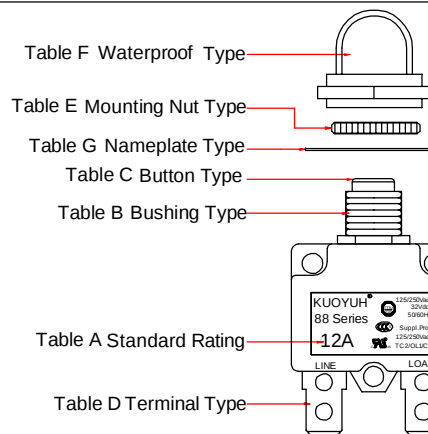


•Internal connection diagram



NO	DESCRIPTION	APPROVED	DATE	TOLERANCE	APPROVED	DESING	DRAWER	Unit(單位)	mm	
				DIMENSION				Scale(比例)	1 : 1	
				TOLERANCE				Rev(版本)	G/3	
5				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		
4				XX.X	±0.1					
3	TUV 由3A-20A 增加為 3-30A; 125/250VAC; 32VDC	黃獻明	2021.09.30	XX	±0.15					
2	UL1500 Ignition Protected Approved	黃獻明	2013.05.20	ANGLE	TOLERANCE					
1	UL+CUL 21~30A TC2/OL0/C1 Approved	黃獻明	2012.10.10	X	±1°					
				X.X	±0.5°					
國郁企業股份有限公司 KUOYUH W.L. Enterprise Co.,Ltd.								Title(品名)	88 Series Thermal Circuit Breaker	
								Drawing no.(圖號,料號)	88 Series Thermal DataDheest	

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										



Standard Rating (Table A)			
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

Bushings Type (Table B)					
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		
Panel Hole					
P1,A1,B1	A2,P2	P3,A3,B3	AW/AB	P0	PS,KF

Button Type (Table C)					
B = Black button (黑推桿)	W = White button (白推桿)	R = Red button (紅推桿)			
1	5	6			
7	8	9			
X	Y	Z			
Terminal Type (Table D)					
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	F	L	J	K	G
Straight 4.0mm	Screw #8-32 Straight	Screw #8-32 90° bend up	Screw #8-32 90° bend down	Line pin SQ 25 Straight Load pin SQ 25 90° bend	Line pin SQ 25 Straight Load pin SQ 25 90° bend
H					
Line pin Screw 90° bend	Line pin Screw 90° bend	Line pin Screw 90° bend	Line pin Screw 90° bend	Line pin Screw 90° bend	Line pin Screw 90° bend

Mounting Nut Type (Table E)							
0 None	P Plastic Integrated Knut nut	A Plastic Knut nut	B Metal Knut nut	C Metal Hexnut M11 H=14 M12 H=15	4 Metal Metal	5 Metal Metal	6 Metal Metal 2 pcs
Waterproof Type (Table F)							
0 None	R	F	T	V	U or C		
Nameplate Type (Table G)							
0 None	B Black plate	A Black plate	S Black plate	L Black plate			
	W White plate		X White plate				

△				TOLERANCE	APPROVED	DESING	DRAWER	Unit(單位)	mm	
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△	UL1500 Ignition Protected Approved	黃獻明	2013.05.20	XX	±0.15			Material(材質)	Thermal Circuit Breaker	
△	UL+CUL 21~30A TC2/OL0/C1 Approved	黃獻明	2012.10.10	ANGLE	TOLERANCE	國郁企業股份有限公司 KUOYUH W.L. Enterprise Co.,Ltd.			Title(品名)	88 Series Thermal Circuit Breaker
NO	DESCRIPTION	APPROVED	DATE	X.X	±0.5°				Drawing no.(圖號,料號)	88 Series OrderGuide