

88 Series Thermal Circuit Breaker DataSheet



Technical sheet of

88 Series Thermal Circuit Breaker

Rating:

3A~30A 125/250Vac 32Vdc

Interruption Capacity:

1000AmpX125Vac 200AmpX250Vac

Dilectric Strength:

1500Vac X 1Minute

Resettable Overload Capacity:

6 Times Rated Current

Voltage Drop:

Less Than 0.25V

Reset Time:

Within 60sec

Temperature Rise at Terminal Block:

Less than 65°C at 100% of rated current applied continuously

Insuiation Resistance:

>500 M ohm

Contact Endurance:

125Vac X150% of rated current >500 cycles

Approve

cUL 3A-30A 125/250Vac TC2/OL0/C1

cUL 3A-15A 125/250Vac TC2/OL1/C1

TUV 3A-20A 125/250Vac 32Vdc

CSA 3A-16A 125Vac TC1/OL1/U3 125Vac 0.4KA

CCC 3A-20A 125/250Vac

Complies with Rohs

Mechanical/Environmental data

Operating Temperature Range:-20°C to +60°C

Termination:6.35mm quick connects. (see order guide)

Mounting: Various options. (see order guide and drawings.)

Approximate weight : 14.3g

Applications:

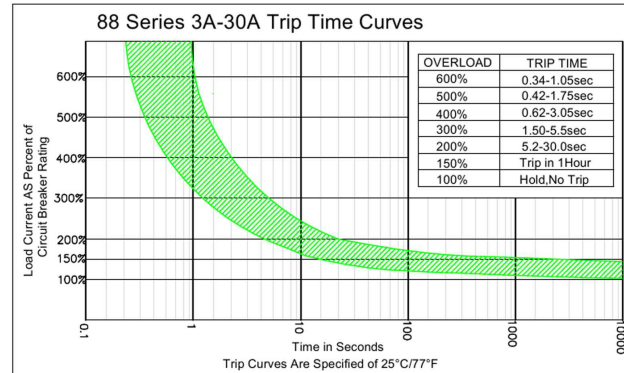
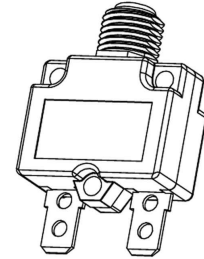
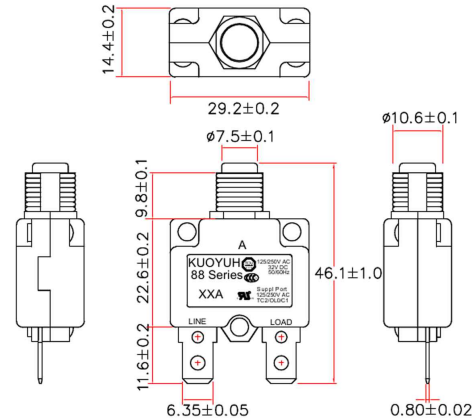
Power tools

Industrial equipment

Medical equipment

Power generators

UPS



Max.Internal Resistance	
Amp rating	Max resistance
3.0 - 5.0Amp	<0.225 Ohms
6.0 - 8.0Amp	<0.175 Ohm
9.0 - 12.0Amp	<0.125 Ohm
13.0 - 16.0Amp	<0.050 Ohm
17.0 - 20.0Amp	<0.040 Ohm
21.0 - 25.0Amp	<0.030 Ohm
26.0 - 30.0Amp	< 0.020 Ohm

Ambient temperature	-10°C	0°C	10°C	25°C	35°C	40°C	50°C	60°C
Multiplication factor	*1.30	*1.20	*1.10	1.00	*0.94	*0.85	*0.73	*0.68

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

Example:

Normal Continuous Current = 10A

Ambient Temperature = 45°C

Multiplication Factor = 0.85

Recommended Rating= 10A/0.85=11.8A

Select the Nearest Rating = 12A

△				TOLERANCE		APPROVED	CHECK	DESING	DRAWER	UNIT	mm	
△				DIMENSION	TOLERANCE					SCALE	1:1	
△				XX.XX	±0.05					REV	E/1	
△				XX.X	±0.1					DATE	2012.06.01	
△				XX	±0.15					TITLE	88 Series Datasheet	
△				ANGLE	TOLERANCE	FILE NO	88 Series Thermal Circuit Breaker			DRAWING NO	88-001	
				X	±1°	國 際 企 業 股 份 有 限 公 司						
				X.X	±0.5°							

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.	3=125/250Vac, 4=125/250Vac 32Vdc(Tags), 5=Client designation 7=Only 7A, 10A, 12A, 15A 125/250Vac 32Vdc (APM on body) 9=CSA 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 O=No plate										
Body Type.	B=Black W=White										

(Table B) Bushing Type

Bushing type= P1 Plastic M11XP1.0 	Bushing type= P2 Plastic M12XP1.0 	Bushing type= P3 Plastic 3/8"-27T 	Bushing type= P4 Plastic M11XP1.0
Bushing type= PS Plastic Snap In 	Bushing type= KF Plastic Snap In 	Bushing type= HK Plastic Snap In 	Bushing type= PC Plastic M11XP1.0
Bushing type= AW/AB Plastic 	Bushing type= PL Plastic 	Bushing type= P0 Plastic 	
Bushing type= A1 Metal M11XP1.0 	Bushing type= B1 Metal M11XP1.0 	Bushing type= A3 Metal 3/8"-27T 	Bushing type= B3 Metal 3/8"-27T
P1, PC, A1, B1 Panel Hole 	P2 	P3, A3, B3 	P4
AW/AB 	P0 	PS, KF, HK 	

(Table A) Standard Rating

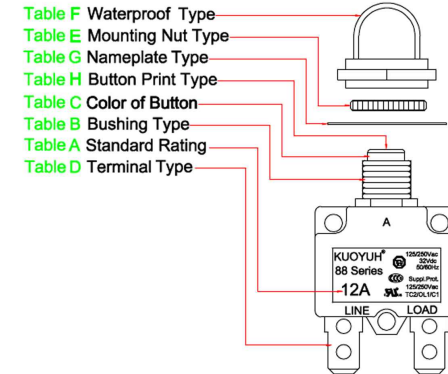
03= 3.0A	12= 12.0A
3.5= 3.5A	13= 13.0A
04= 4.0A	15= 15.0A
05= 5.0A	16= 16.0A
06= 6.0A	17= 17.0A
07= 7.0A	18= 18.0A
08= 8.0A	20= 20.0A
09= 9.0A	22= 22.0A
10= 10.0A	25= 25.0A
11= 11.0A	30= 30.0A

(Table C) Color of Button Type

B	Black
W	White
R	Red
1	Black button w/ver White print
5	White button w/ver Black print
6	Red button w/ver White print

(Table D) Terminal Type

Type=1 Straight 11.8mm 	Type=2 90° bend up 	Type=3 90° bend Load pin 	Type=4 90° bend Load pin 	Type=5 90° bend Line pin 	Type=6 Straight 8.0mm 	Type=8 45° bend up
Type=9 45° bend down 	Type=X Straight 3.2mm 	Type=F Screws #8-32 	Type=L Screws #8-32 90° bend up 	Type=J Screws #8-32 90° bend down 	Type=K Screws #8-32 Load pin 90° bend 	Type=G Line pin 90° bend Screws #8-32 Load pin 90° bend



(Table E) Mounting Nut Type

0	Type= P	Type= Q	Type= A	Type= B	Type= C	Type= 4	Type= 5
None	Integrated Kunrnut	Kunrnut	Kunrnut	Hexnut M11 H=14 M12 H=15	Plastic+Metal	Plastic+Metal	Plastic+Metal

(Table F) Waterproof Type

0	Type= R	Type= T	Type= F	Type= V	Type= U
None					

(Table G) Nameplate Type

0	B	A	S
None	Black plate	Black plate	Black plate
	White plate		White plate

△				TOLERANCE	APPROVED	CHECK	DESING	DRAWER	UNIT	mm	
4				DIMENSION	TOLERANCE				SCALE	1:1	
3				XX.XX	±0.05	總經理 2013.3.18 黃獻明	製造部 2013.3.18 林登松	品研部 2013.3.18 黃信凱	REV	E/3	
2				XX	±0.15				DATE	2013.3.18	
△				ANGLE	TOLERANCE	FILE NO	88 Series Thermal Circuit Breaker	TITLE	88 Series Orderguide		
				X	±1°	國 郁 企 業 股 份 有 限 公 司			DRAWING NO	88-002	
NO	DESCRIPTION	APPROVED	DATE	X.X	±0.5°						