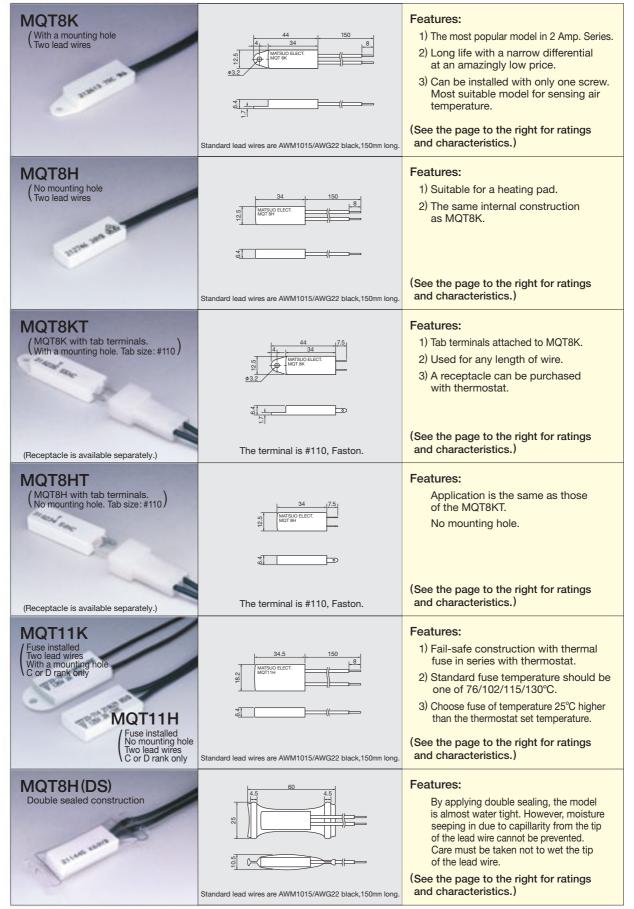


IM MATSUO Temperature Power Sensor

2 amp. Series (AC125V/2A, AC250V/1.3A)

Each model is available in a double sealed construction.





MATSUO Temperature Power Sensor

2 amp. Series (AC125V/2A, AC250V/1.3A)

Ratings and Characteristics:

Tolerance of Temperature Setting and Differential vs. Temperature Setting

Temperature Setting		-10℃~0℃	1℃~50℃	51℃~75℃	76℃~110℃						
Setting Tolerance	(Standard)	±3℃	±3℃	±4℃	±5℃						
	(Special)	~ ±2℃	~ ±1.5℃	~ ±2℃	~ ±3℃						
Differential	(Standard)	X=C(6.5°C), Y=B(4.5°C)	X=C(6.5°C), Y=B(4.5°C)	X=C(6.5°C), Y=B(4.5°C)	X, Y=D(10℃)						
	(Special)	X=A·B·D, Y=A·C·D	X=A·B·D, Y=A·C·D	X=A·B·D, Y=A·C·D	X, Y=C						

Relation between Operating Voltage/Differential Rank and Contact Capacity (based on 100,000 operations)

	Current	Standard contact			Crossbar contact (small current application)			
Voltage		Differential rank	Current(unit	powe	er factor 1)	Differential rank	С	Current(unit power factor 1)
_	DC48V	Α	50mA	~	0.3A	Α	١	
		В	50mA	~	0.3A	В		1mA ~ 100mA
		C	50mA	~	0.3A	C	(TITIA ~ TOOTTIA
		D	50mA	~	0.6A	D	1	
	DC24V	A	50mA	~	0.6A	A	۱	
AC250V		В	50mA	~	0.9A	В		1mA ~ 100mA
AC230 V		C	50mA	~	1.3A	C	(TITIA ~ TOUTIA
		D	50mA	~	1.3A	D	1	
	DC12V	A	50mA	~	1A	A	1	
AC125V		В	50mA	~	1.5A	В		1mA ~ 100mA
AC 125V		C	50mA	~	2A	С	(1111A ~ 10011IA
		D	50mA	~	2A	D	IJ,	

NOTE: 1. "2 Ampere series" represents the standard maximum current at AC125V.

2. A fluctuation by the unit power factor a half of the current at unit power factor by 0.75 power factor, 1/5 of the current at unit power factor by 0.4 power factor.

3. The spark killer might be required for a load in direct voltage.

Temperature setting range : $-10\,^{\circ}\text{C} \sim 110\,^{\circ}\text{C}$ (tolerance/differential will change in the higher temp.)(see the above table)

Differential : rank A 3 \pm 1 (2~4)

rank B4.5 \pm 1.5 (3~6) rank C6.5 \pm 1.5 (5~8) rank D $10 \pm 2 (8 \sim 12)$

Contact configuration : 1b(X), or 1a(Y)

Operating temperature : $-30\,^{\circ}\text{C} \sim 105\,^{\circ}\text{C}$ (standard), $-30\,^{\circ}\text{C} \sim 125\,^{\circ}\text{C}$ (special) (no icing, no condensing)

(use within 60 degrees above the set temperature.)

Temperature setting tolerance : Standard tolerance for temperature up to 50° C is ± 3 (see the above table)

Insulation resistance : $100M\Omega$ or more

Contact resistance : $30m\Omega$ or less (lead wire resistance not included)

Voltage tolerance: AC2000V for 2sec. (600V for 1minute between contacts)

Vibration tolerance : Selected from JIS·C·0911-1984

Constant vibration; 50Hz fixed/0.2mm fixed (1G) Sweep vibration; $10\sim55$ Hz/0.35mm fixed (0.1 \sim 2.2G) Withstands 2 hour each in directions X, Y and Z.

Impact tolerance: No damage when dropped three times from the height of 40cm onto a concrete floor (about 70G).

No damage for double sealed model when dropped three times from the height of 1m onto a concrete floor (about 240G). Withstands substantial impact after being put in a package or mounted in equipment.

Life : 2 million mechanical operations, 100,000 electrical operations at rated load. (see page 15 for details.)

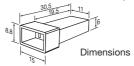
Handling precautions: The thermostat withstands vibration and impact applied along Y and Z axis, but does not tolerate impact from X direction.

(see page 12.) It is recommended that the thermostats be installed to minimize stresses applied along the X axis.

NOTE: "2 Ampere" refers to the value for C rank products at AC125V/DC12V. Please note that the contact capacity of A and B rank products is a little smaller than 2A.

Tab Terminals Type

Thermostat provided with #110 tabs to be connected to the dedicated double-pole receptacles. The problem of the previous type with lead wires was that the required length of wire could not be provided. (standard lead wire was 150mm long only.) We solved this problem with revolutionary tab terminals type thermostat. Customers can specify any length.



• The connection of required length of lead wire to female housing must be done by the customer.

MQT8KT thermostat (with #110 tab) Dedicated double-pole female housing No.110 Tab-on connector Crimping this portion must be done by the customer.

NOTE: #110 tab on connector can be crimped automatically since the supply will be by the reel.