# BIMETALLIC THERMOSTATS AM04 SERIES

## **KEY BENEFITS**

- Good sealed, can prevent product failure from vacuum impregnation process
- Small size, suitable to be embedded inside coil
- Metal case, up to 50kg coil shaping pressure, has high thermal conductivity and temperature sensitive
- Pure temperature action type products, bimetaldisc without current and heat effect, accurate temperature control

## APPLICATION

- Motors
- Transformers
- Coils
- Electronics, sensor

#### **INTEGRATION OF RESOURCES**

- Integration of global supply chain resources, we buy bimetal-disc from the world's largest bimetal-disc
  material manufacturer EMS in the United States and case from German supplier who uses stamping forming
  technology.
- Spring which material comes from NGK Japan and manufactured by Japanese stamping supplier.
- Silver plating technology on case and spring which greatly reduces the contact resistance.
- The key component bimetal-disc produced by fully automated molding equipment and sorted by tunnel oven separation equipment is good consistency and stable performance.

## **TECHNICAL DATA**

	Normally closed	Normally open
Nominal Switching Temperature, in 5K-step (Tk)	60~180°C	60~180°C
Tolerance-Standard	±5K	±5K
Reset temperature range	-30K ± 15K	-30K ± 15K
Max. operating voltage	500VAC 60VDC	500VAC 60VDC
Working current	250VAC 5A	250VAC 5A
Cycles at 250VAC/3.0A cosΦ1.0	10000	0
Cycles at 250VAC/6.3A cosΦ1.0	3000	0
Cycles at 250VAC/4.0A cosΦ0.45	1000	0
Cycles at 250VAC/1.0A cosΦ0.45	10000	0
Contact resistance	<50mΩ	0
Insulation voltage	2.5KV	2.5KV
Insulation sleeve length "a"	>16mm	>16mm
Diameter "d"	<9.2mm	<9.2mm
Height "h"	<5.0mm	<5.0mm
Lead wire-standard	UL10362 AWG22 600V 250°C	UL10362 AWG22 600V 250°C
Lead wire-electric	UL3398 AWG22 300V 150°C	UL3398 AWG22 300V 150°C
Lead wire-silicone	UL3135 AWG24 600V 200°C	UL3135 AWG24 600V 200°C
Outgoing line length-standard	L1=L4=520±10mm L2=L3=200±5mm L5=L6=55±5mm	L1=L4=520±10mm L2=L3=200±5mm L5=L6=55±5mm







# ADVANTAGES



Contact: Silver alloy, with long lifetime, over-current capability

Spring: Beryllium copper imported from Japan, with good elasticity

Case: Brass, better thermal conduction, precision control within 0.02mm, the thickness of silver plated on the surface up to 3um

# DIMENSIONAL DRAWING OF DIFFERENT CAPSULATION

Туре	AM07	AM08	AM09	AM10	AM04
Illustration					
Drawing dimensions (mm)		Allow South	<u>30+02</u> <u>485+03</u>	9.6±0.4 53303 110 110 110 110 110 110 110 110 110	
Technical specifications	With shrink cap insulation	With shrink cap insulation	Without expoxy cover and lead wire	With expoxy cover	Transparent shrink cap insulation

Туре	AM01	AM06	67LXX	AM08S	AM08H
Illustration					
Drawing dimensions (mm)					Children in the second
Technical specifications	PBT insulating case	With M4 threaded case	Housing of PBT, leadframe leads, grid dimension 5.08 potted	Thickness 2.5mm	With PTC self-hold