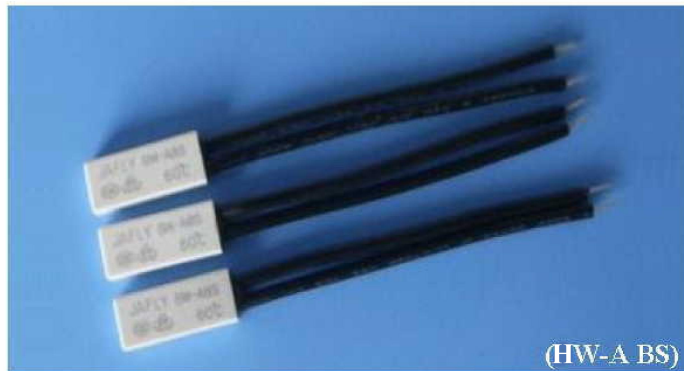


Thermal Protector Data Sheet

(HW-A Series)



(HW-A BS)



(HW-A BJ)



絃緯科技股份有限公司
Honest-Well Co., Ltd.

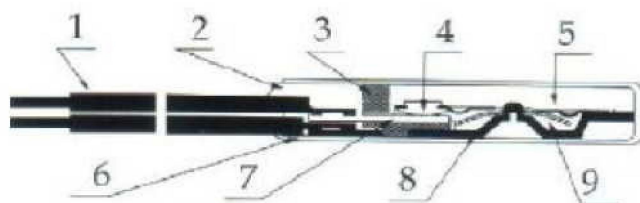
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1. Application

HW-A series with the advantages of miniature size, insulated case, snap-shot action and 10,000 cycles, the series is for the application of both over heat and over current protection in motors, induction cooker, vacuum cleaner, coils, transformer, electric heater, ballast, heating appliance, fluorescent lighting ballast, automobile motor, integrated circuit and general electrical facilities.

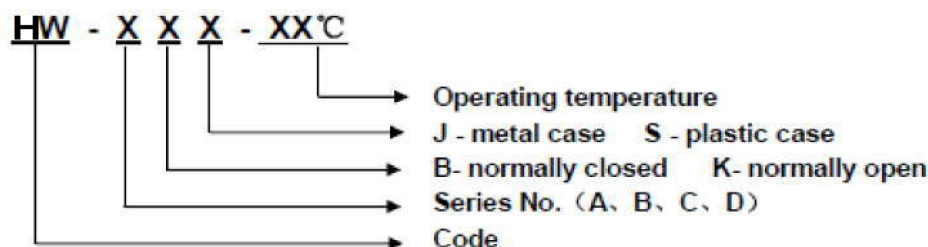


1-引出线 2-环氧树脂 3-陶瓷塞块 4-动触头
5-动触片 6-外壳 7-静触片 8-底座 9-感温片

2. Configuration

The bimetal with its own small geometrical form is one of the most important parts. There are no other assistant parts in HW-A series thermal protector. The bimetal is also sensitive to temperature and current, if it is placed in circuitry in series. When it reaches the operating temperature in circuitry, the bimetal will rapidly cut off or connect the circle.

3. Product code instruction



Sample: **HW-BBJ-80°C**

HW — code
 B — series no.
 B — normally closed
 J — metal case
 80°C — operating temperature

4. Dimension

S plastic case 4.2mm x 8.0mm x 20.0mm
 J metal case 3.8mm x 7.4mm x 20.0mm

5. Appearance

There is no burr, crack, distortion and rust on case.
 Marks should be correct, clear and durability.

6. Performance

6.1 Contact Capacity

15A/12VDC, 12A/24VDC, 10A/120VAC, 8A/250VAC

6.2 Operating & Reset temperature

ITEM NO.	OPERATING TEMPERATURE(°C)	RESET TEMPERATURE(°C)
HW-AB(K)J(S)-50°C	50±5	30±8
HW-AB(K)J(S)-55°C	55±5	35±10
HW-AB(K)J(S)-60°C	60±5	40±10
HW-AB(K)J(S)-65°C	65±5	45±10
HW- AB (K)J(S)-70°C	70±5	45±15
HW- AB (K)J(S)-75°C	75±5	50±15
HW- AB (K)J(S)-80°C	80±5	55±15
HW- AB (K)J(S)-85°C	85±5	55±15
HW- AB (K)J(S)-90°C	90±5	60±15
HW- AB (K)J(S)-95°C	95±5	65±15
HW-AB (K)J(S)-100°C	100±5	65±15
HW-AB (K)J(S)-105°C	105±5	70±15
HW-AB (K)J(S)-110°C	110±5	75±15
HW-AB (K)J(S)-115°C	115±5	75±15
HW-AB (K)J(S)-120°C	120±5	80±15
HW-AB (K)J-125°C	125±5	85±15
HW-AB (K)J-130°C	130±5	90±15
HW-AB (K)J-135°C	135±5	95±15
HW-AB (K)J-140°C	140±5	100±15
HW-AB (K)J-145°C	145±5	105±15
HW-AB (K)J-150°C	150±5	110±15

● CUSTOM-MADE PRODUCT IS AVAILABLE

6.3 Contact resistance

When the thermal protector is closed, the contact resistance is less than 30MΩ

6.4 Insulation performance

Under normal condition, resistance between leads and insulation sleeve should be more than 100MΩ by ohmmeter of DC500V.

6.5 Electricity Performance

6.5.1 After thermal protector' s opening the leads should endure AC 500V/50Hz with 1Ma leak current lasting for 1 minute. After the trial there is no flashover.

6.5.2 After thermal protector' s closed, the leads and insulation sleeve should endure 1500V/50Hz with 1Ma leak current lasting for 1 minute. After the trial there is no flashover.

6.6 Damp Endurance

After 10 hours in the condition of ambient temperature 25°C and 95% of the relative humidity, there is no distortion or damage to the tested product based on item 6.4, 6.5.

6.7 Heat Endurance

6.7.1 After being put into the condition of ambient temperature -20°C or +90°C ten times, 2 hours one time, there is no distortion or damage to the tested product based on item 6.4, 6.5.

6.7.2 After 10 hours in the condition of ambient temperature 140°C, there is no distortion or damage to the tested product based on item 6.4, 6.5.

6.8 Low temperature Endurance

Keep the thermal protector in the temperature of -20°C for 10 hours, and after the test, there is no distortion or damage to the tested product based on item 6.4, 6.5.

6.9 Repeat open & close

After being tested 2000 times under the condition of over-load at 50Hz, 220VAC, COS ϕ =0.7, the tolerance of the operating temperature remain in the range of $\pm 5^\circ\text{C}$, the contact remain undamaged, and still working normally after being tested 5000 times.

6.10 Anti-vibration Endurance

After the 90S test with vibration amplitude of 0.35mm, frequency change of 50Hz, the operating temperature is in accordance with the data in the form of item 6.2.

6.11 Shocking Endurance

There is no damage happen after it falls on the concrete floor 3 times from 1200mm height.

6.12 Lead wire performance

After pulling the lead wire for 5S with no less than 30N, there is no rupture, loose and break-off.

7. Attention

7.1 Temperature test

Testing be done in the oven that the precision of constant temp is $\pm 1^\circ\text{C}$. When testing, the thermocouple or thermometer should be place nearest to samples. During temperature rising, when the temperature reaches 10°C less than rated temperature, the temperature rising rate should be less than 0.5°C per minute and the testing current should be no more than 0.1A.

7.2 Employed Conditions

Do not place thermal protector in the condition of 130°C for long time, it would damage the plastic case and make the product unuseful.

Do not place thermal protector under condition of alkali and acid for a long time.

7.3 Installation & Connection

Do place correct side of thermal protector in sensitivity point of being protected object closely.

During installation, do notice the following to prevent the case from damaging:

a. Do not press the protector with sharp tool.

b. Do not hammer the protector.

When doing some welding, do not let the strong current through the product or that will damage the thermal protector.

8. Storage Condition

During the transport and storage, the packaging cases shall not be invaded by snows or rains, extruded or damaged, and the relative humidity of air shall be no more than 90%.

9. Certificates

CQC, VDE, UL, CB, SGS