



Bok

Huaiian Baokai

# BK 05 Series thermal protector

## Technical Specification

Document number: BK / QS-  
WKQ. 02

Company Name  
customer name

Part Number           BK 05-BB 1D -50~150  
Product

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proved

Huaiian Baokai Electric Appliance  
Co., LTD

Company Name  
customer name

**BK 05 Series  
thermal  
protector**

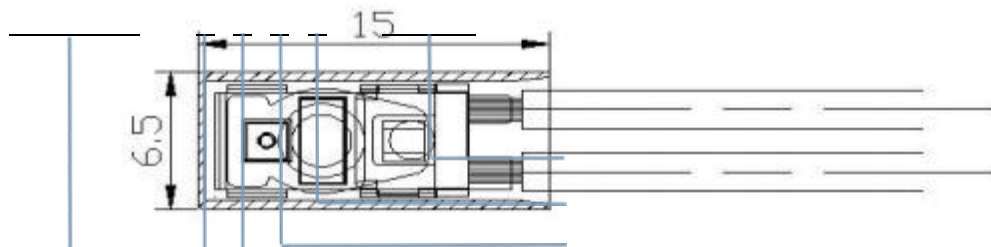
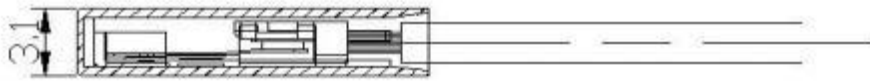
author ized streng th	examin e and verify	ratify

1. Product use

BK 05 Type thermal protector has the characteristics of small size, shell insulation, sensitive action, long life and so on, widely used for horsepower motor, light ballast, transformer, automobile motor, integrated circuit and general electrical equipment overheating and overcurrent dual protection effect.

2. Structural features

BK 05 Series thermal protector is a certain geometry of bimetallic sheet, without auxiliary mechanism, only rely on its own sense of mild current thermal effect, so that the state of bimetallic components changes rapidly, directly drive the contact to achieve automatic cut off and connect the circuit, play a role in overheating, overload protection.



3. Product classification and model number

B K 0 5 - X X X X - X X X °C

Rated action temperature

G-high resistance Z-medium resistance D-low resistance

Case type: 1-metal enclosure, 5-plastic enclosure

e protection

C-Temperature delay protection, D-current temperature delay protection

Form of electric shock: B-normally closed, K

-normally open

product model

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4. Product appearance

Iron shell: 15mm 6.5mm 3.1mm

The shell of the thermal protector shall not have burr, cracks, deformation, corrosion and other phenomena;

The identification should be correct, correct, clear, durable to wipe;

5. Product performance

5.1 Rated current (COS

=0.7) DC 24V-10A, AC

250V-5A

.25 Disconnect temperature: 30°C ~150°C reset temperature: 20°C ~110°C (see the drawing for details).

5.3 Tensile test: the lead end of the product shall be able to withstand more than or equal to 20N tension, and the wire shall not break or slip out.

5.4 Insulation voltage:

a . The product shall be able to withstand AC 660V between the disconnected leads, lasting 1min without breakdown flashover; b.

The lead between the product and the insulation shell can withstand AC 1800V, lasting 1S without breakdown flashover phenomenon;

.55 Insulation resistance: Under normal conditions, the insulation resistance between the lead wire and the insulation shell is above 100M Ω.

5.6 Contact resistance: the contact resistance of the product shall not be greater than 50m Ω.

5.7 High temperature resistance test: the product is kept in the air environment 50°C above the rated action temperature for 96h.

5.8 Low temperature resistance test: keep the product in-40°C air environment for 96h.

5.9 Anti-vibration test: the thermal protector shall be able to withstand amplitude 1.5mm, frequency change 10~55Hz, scanning change period 3~5 times / min, vibration direction X, Y, Z, each direction continuous vibration for 2h.

5.10 Drop test: the product is from 0.7m height and falls once.

5.11 Compression test: the product shall be able to withstand 100N static pressure of

1min.5.7,5.8,5.9,5.10,5.11 The following conditions shall be met after testing:

a . The disconnection temperature change should be within + 7°C of the initial value;

b . Contact resistance should be below 100m Ω;

c . The appearance shall have no obvious deformation;

d . No cracking or damage of the wire.

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factor of 0.7, the external heat source makes it operate 4000 times, and the following conditions should be met: a the disconnection temperature change should be within + 5°C of the initial value;

The b contact resistance shall be below 50m Ω;

C c continue to 6000 times.

7. Other matters:

7.1 The heating rate of disconnection temperature detection shall be controlled at 1°C / 1min;

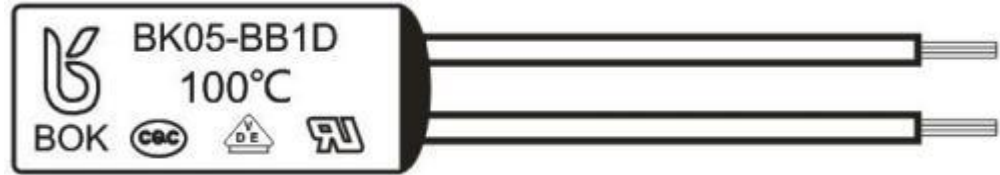
7.2 The product can not withstand the strong impact force and compression force during the use process;

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Fax: 0517-85762244

8 Effect diagram of thermal protector: product model, action temperature, certification mark are shown in the following figure.



9 Obtain the certificate:

UL : E467556

CQC : CQC 14002107176 CQC 14002107088

VDE : 40038059

RoHS :RLSHF 001582830001C

Reach :. POCE14040876RLS

10 Reference table for the action reset temperature of the thermal protector

order number	break-off temperature	Closed temperature	order number	break-off temperature	Closed temperature
30	30 3°C ±	≥20°C	95	95 5°C ±	±70 15°C
35	±35 3.5°C	≥25°C	100	100 5°C ±	±70 15°C
40	40 4°C ±	≥30°C	105	105 5°C ±	±75 15°C
45	±45 4.5°C	≥33°C	110	110 5°C ±	±75 15°C
50	50 5°C ±	≥35°C	115	115 5°C ±	±80 15°C
55	55 5°C ±	42 6°C ±	120	120 5°C ±	±85 15°C
60	60 5°C ±	45 8°C ±	125	125 5°C ±	85 15°C ±
65	65 5°C ±	48 10°C ±	130	130 5°C ±	±90 15°C
70	70 5°C ±	±50 12°C	135	135 5°C ±	±95 15°C
75	75 5°C ±	±53 14°C	140	140 5°C ±	100 15°C ±
80	80 5°C ±	±55 15°C	145	145 5°C ±	100 15°C ±
85	85 5°C ±	60 15°C ±	150	150 5°C ±	105 15°C ±
90	90 5°C ±	65 15°C ±	155	155 5°C ±	110 15°C ±

11 This standard does not involve matters or has other customer requirements.

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