Technical Specification Of 02 Thermal Protector

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Distributed by Conrad Electronic SE, 92240 Hirschau, Germany

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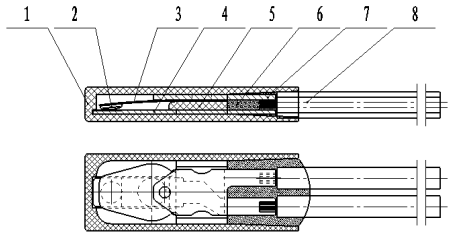
1 Usage

02 thermal protector possess the benefits of miniature size、shell insulation、sensitive in action、long life etc.Widely used in electric power points、electrical appliances、fluorescent ballasts、transformers、automobile motor、integrated circuit and general electric equipment of dual hot flow protection function.

2 Appearance and structure：



NO	Name of parts	Name of material	NO	Name of parts	Name of material
1	shell	PBT CRN7030	5	Fixed block pieces	PBT CRN7030
2	Dynamic contact	AgNi/BZn	6	epoxy	9002A
3	Dual metal	30R	7	Dynamic contact pieces	BZn
4	Static contact	AgNi10/BZn	8	Lead wire	22# 3266

Note: 200 ° c, heat-resistant material shell combustion level V

3 Property

3.1 Voted current

4A/DC12V、3A/DC24V、3A/AC115V、2A/AC250V.

3.2 Disconnect temperature: 30 ~ 155 °c ,reset temperature 20~110 °c (see “opening and reset temperature drawing”).

3.3 Ant-tension test: Product test pins should with no fault, sliding out when bearing ＞＝20N.

3.4 Insulation voltage:

a. Products in the lead when disconnect between AC660V shall withstand, 1min without breakdown flashover phenomenon;

b. Product leads and insulated shell, between AC1500V can withstand 2S without breakdown flashover phenomenon.(striking current is 0.5mA)

3.5 Insulation resistance: under normal conditions, fuses and insulation shell insulation resistance in 100M Ω above. (used forDC500V meter)

3.6 Contact resistance:Product contact resistance shall not be more than 50mΩ。

3.7 High temperature resistant test: The action temperature should keep in 96h in temperature of 50 ° c rated movements in air environment.

3.8 Low temperature resistance test: product should keep in 96h when in air environment - 40 ° c

3.9 Ant-vibration test: thermal protectors shall withstand amplitude, frequency changing 1.5 mm 10 ~ 55Hz, scanning change cycle 3-5 times/min, vibration direction X,Y,Z, in each direction, each successive 2h vibration.

3.10 Drop test: products high free fall from 0.7 m.

3.11 Compression test: products shall stand 1min in100N static pressure.

3.7,3.8,3.9,3.10,3.11should meet the following requirements:

a.Disconnect temperature charges in the initial value should be within +7℃

b.contact resistance should be below 100mΩ;

c.appearance should be no obvious deformation;

d.wires should without cracking damage.

4 Life

Products in the rated voltage, current, power factor for 0.7 conditions, plus 6,000 times that the action of heat, should satisfy as below:

a. Disconnect temperature changes in the initial value should be within + 5 ° c,

b.Contact resistance should be belowin100mΩ

continue experiment in 10000times after action。

5 Other items:

5.1 Disconnect the temperature detection 5.1 heating rate should be controlled for 1 ° c / 1min, Use process cannot bear strong impact and stress.

5.2 Models of specifications

02——production specifications

XXX℃——voted disconnect temperature

6 This standard should separately conclude when not related to other matters or customer requirements.

opening and reset temperature drawing

NO.	Disconnect temp.	Reset temp.	NO.	Disconnect temp.	Reset temp.
30	30±3℃	≥20℃	95	95±5℃	70±15℃
35	35±3.5℃	≥25℃	100	100±5℃	70±15℃
40	40±4℃	≥30℃	105	105±5℃	75±15℃
45	45±4.5℃	≥33℃	110	110±5℃	75±15℃
50	50±5℃	≥35℃	115	115±5℃	80±15℃
55	55±5℃	42±6℃	120	120±5℃	85±15℃
60	60±5℃	45±8℃	125	125±5℃	85±15℃
65	65±5℃	48±10℃	130	130±5℃	90±15℃
70	70±5℃	50±12℃	135	135±5℃	95±15℃
75	75±5℃	53±14℃	140	140±5℃	100±15℃
80	80±5℃	55±15℃	145	145±5℃	100±15℃
85	85±5℃	60±15℃	150	150±5℃	105±15℃
90	90±5℃	65±15℃	155	155±5℃	110±15℃