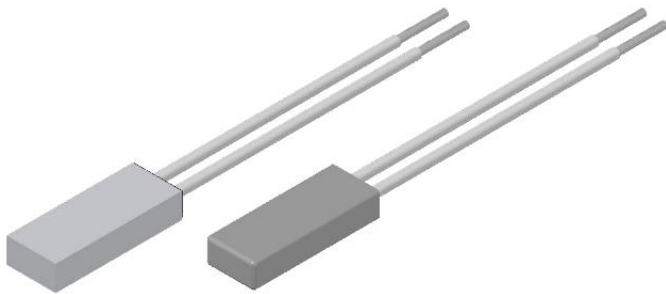


Thermal Protector BW-D Series with gold-plated contacts



- gold-plated contacts
- Normally open or normally closed
- Very small, compact design
- Not sensitive to current
- Plastic or metal housing
- Metal housing is not energized
- Suitable for impregnation processes

Applications

Over temperature protection in small electrical appliances, as winding protection, in transformers, electric motors, electromagnetic coils, thermal protection in small electrical appliances and also as thermal sensor.

Function

The temperature switches of the BW-D series work independently of the current.

The temperature recorded by using a bimetal snap disk.

The BW-D series can be designed as a normally closed (NC) or a normally open (NO).

Thanks to the gold-plated contacts, the BW-D series can reliably switch even the smallest currents over long periods.

After cooling down and reaching the reset temperature of the bimetal disc, the temperature switch automatically back to its starting position. (automatic reset).

Technical Data

Function	Normally closed (NC) SPST	Normally open (NO) SPST
Nominal switching temperature in 5K steps	40°C ... 145°C (130°C UL recognized)	40°C ... 145°C
Tolerance	± 5K (standard) ± 3K (improved)	± 5K (standard) ± 3K (improved)
Switching capacity	10.000 cycles @ AC 250V / 6,0A 10.000 cycles @ DC 24V / 6,0A	10.000 cycles @ AC 250V / 6,0A 10.000 cycles @ DC 24V / 6,0A
Contact resistance	≤ 15mΩ	≤ 15mΩ
Stranded wire length (standard)	60 ± 3mm / 10mm semi-strip	60 ± 3mm / 10mm semi-strip
recognized standards	VDE EN60730-2-9 UL 873	---
Protection class	For installation in devices of protection class I and II (VDE)	

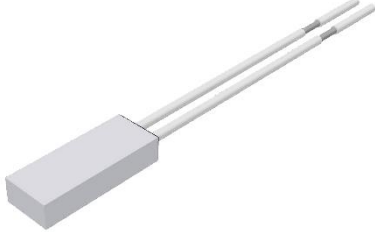
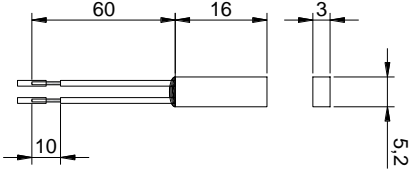
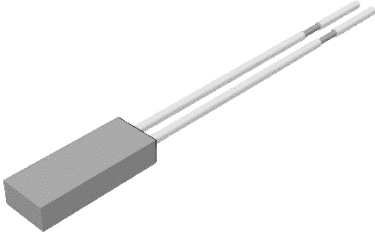
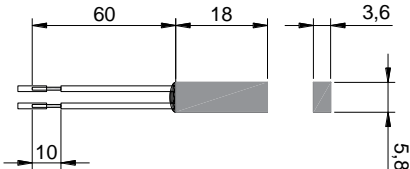
Available switching & reset temperatures

Switching temperature	Reset temperature
40°C ± 5K	≥ 27°C
45°C ± 5K	≥ 30°C
50°C ± 5K	≥ 33°C
55°C ± 5K	34-47°C
60°C ± 5K	35-52°C
65°C ± 5K	36-57°C
70°C ± 5K	38-60°C
75°C ± 5K	38-63°C
80°C ± 5K	55 ± 15K
85°C ± 5K	60 ± 15K
90°C ± 5K	65 ± 15K

Switching temperature	Reset temperature
95°C ± 5K	70°C ± 15K
100°C ± 5K	70°C ± 15K
105°C ± 5K	75°C ± 15K
110°C ± 5K	75°C ± 15K
115°C ± 5K	80°C ± 15K
120°C ± 5K	85°C ± 15K
125°C ± 5K	90°C ± 15K
130°C ± 5K	95°C ± 15K
135°C ± 5K	100°C ± 15K
140°C ± 5K	105°C ± 15K
145°C ± 5K	105°C ± 15K

Changes and errors expected

Variants

Type	Model	Illustration	Dimensions (mm)	Description
BW-D	P			Plastic housing
BW-D	M			Metal housing (no approvals)

Order Code

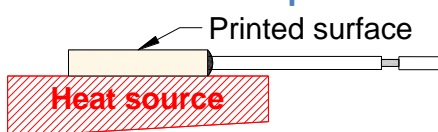
Type: BW-D	Function: C = Normally closed (NC) O = Normally open (NO) (without VDE & UL)	Model: P = Plastic housing M = Metal housing (no approvals)	Nominal switching temperature: 35°C ... 145°C in 5K steps	Tolerance: 05 (± 5K) → Standard 03 (± 3K)	Stranded wire length: Standard = 60mm / 60mm Semi-strip = 7mm
BW-D C P . 125 . 05 . 60-7/60-7					

Example: BW-DCP.125.05.60-7/60-7

Available stranded wire specifications

Insulation material	Temperature max.	Size	UL-Style
XLPE (white)	150°C	AWG 22	3398

Installation of temperature switches



Accessories

- Mounting bracket
CB.00.35.000
[Datasheet](#)



Changes and errors expected