

# Temperature Control Circuit-Breaker KBF

Snap-action disc thermostat: Limiter with trip-release

## Description

The extremely compact KBF thermostat with snap-action disc permits electrical loads of up to 16 A and is very versatile. Working as a trip-switch it is fitted with a mechanical reset. Resetting while overtemperature conditions prevail is inhibited by the trip-release mechanism thus providing double safety features.

The KBF can be installed in the most restricted spaces wherever protection against overheating is needed.

The KBF thermostats may be used in:

- cable reels
- heating appliances
- electrical appliances
- heat exchangers, etc.

## Mode of function

The KBF thermostat (limiter with trip-switch) reacts to a set temperature which triggers the snap-action of a bimetallic disc. This spring movement of the bimetallic disc is mechanically transmitted by a transmission pin to a bridge-contact thus opening the circuit.

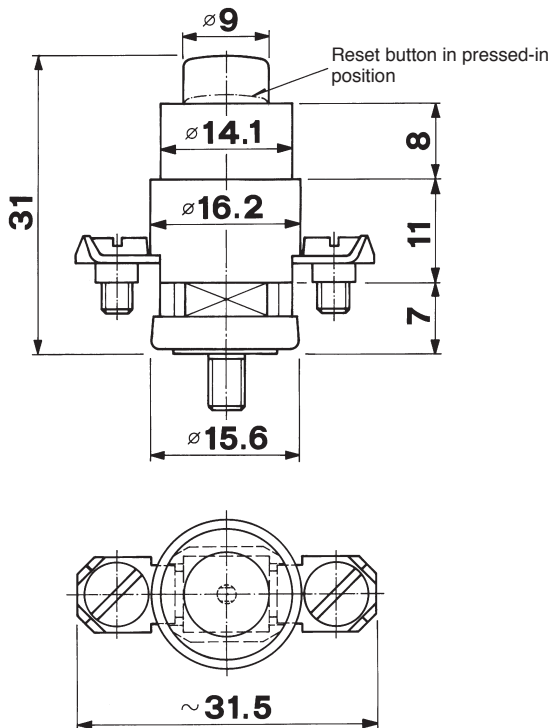
Resetting is achieved by manually depressing the reset button.



Approvals: VDE etc.

## General dimensions:

For detailed dimensions & ordering key see reverse side



## Technical specifications:

Switching performance (Test class 1):	16 (4) A 250V ac 2 000 cycles
Maximum speed of temperature change:	10 °K/min
Switching differential:	ca. 10 °K
Contact material:	Fine silver
Maximum temperature:	80 °C
Electrical strength:	> 3750 V~
Cut out:	Not affected by current



**KIENZLER AG**

UNT. BAHNHOFSTR. 27  
CH-8340 HINWIL  
SWITZERLAND  
Tel. 0041 (0)44 937 10 30  
Fax 0041 (0)44 937 24 04

E-Mail: [kienzlerinfo@kienzler.ch](mailto:kienzlerinfo@kienzler.ch) web: [www.kienzler.ch](http://www.kienzler.ch)

**Detailed dimensions**

**Reset button variants:**

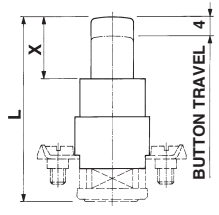


Fig. 1

**Connection variants:**

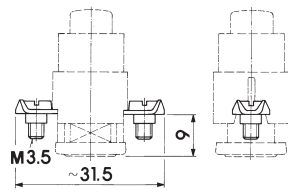


Fig. 2  
Screw lugs downwards for conductors up to 2.5 mm<sup>2</sup>

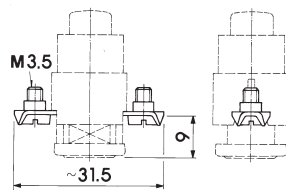


Fig. 3  
Screw lugs upwards for conductors up to 1.5 mm<sup>2</sup>

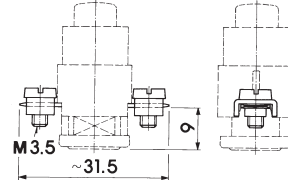


Fig. 4  
Bowlings for conductors up to 2.5 mm<sup>2</sup>

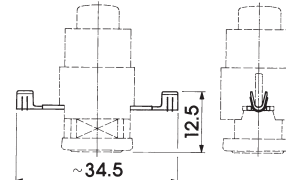


Fig. 5  
Crimp lugs for conductors up to 1.5 mm<sup>2</sup>

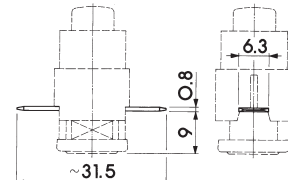


Fig. 6  
Push-on tabs 6.3 mm, sideways

**Mounting variants:**

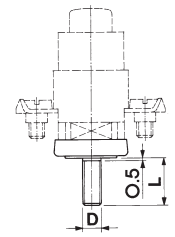


Fig. 7  
Screw mounting

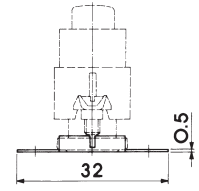
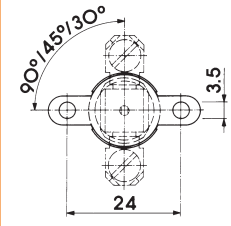


Fig. 8  
Cover with locked flange



**Ordering key:**

Fig. 1 Short button L = 31 mm  
 Fig. 1 Medium button L = 35 mm  
 Fig. 1 Long button L = 39 mm

Fig. 2 Screw lugs downwards  
 Fig. 3 Screw lugs upwards  
 Fig. 4 Bowlings  
 Fig. 5 Crimp lugs  
 Fig. 6 Push-on tabs

Flat cover without flange  
 Fig. 8 Cover with flange  
 Fig. 8 Cover with flange  
 Fig. 8 Cover with flange

Fig. 7 Screw mount.: Cover with threaded bolt  
 Fig. 7 Screw mount.: Cover with threaded bolt  
 Fig. 7 Screw mount.: Cover with threaded bolt  
 Fig. 7 Screw mount.: Cover with threaded bolt

Encapsulated bimetallic disk \_\_\_\_\_ 0  
 Uncovered bimetallic disk \_\_\_\_\_ 1

**KBF** X X X X  
 X = 5 mm — 1  
 X = 9 mm — 2  
 X = 13 mm — 3

2.5 mm<sup>2</sup> — 1  
 1.5 mm<sup>2</sup> — 2  
 2.5 mm<sup>2</sup> — 3  
 1.5 mm<sup>2</sup> — 4  
 6.3 sideways — 5

\_\_\_\_\_ 0  
 90° — 1  
 45° — 2  
 30° — 3

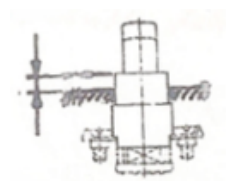
M4 x 6 mm — 4  
 M5 x 6 mm — 5  
 M4 x 10 mm — 6  
 M4 x 15 mm — 7

X X X X X  
 \_\_\_\_\_ ± 10 \_\_\_\_\_ ± 05

045  
 050  
 056  
 063  
 071  
 080

	Tolerance ± 10°K °C	Tolerance ± 5°K °C
045	45	45
050	50	50
056	—	56
063	63	63
071	—	71
080	80	80

Installation guideline  
 excess length  
 max. 4.8 mm



**Ordering example: KBF 1140 056 ± 05 = Limiter with trip-release / short button / screw lugs downwards 2.5 mm<sup>2</sup> / cover with threaded bolt M4 x 6 mm / trigger temperature 56 °C ± 5 °K**



**KIENZLER AG**

UNT. BAHNHOFSTR. 27  
 CH-8340 HINWIL  
 SWITZERLAND  
 Tel. 0041 (0)44 937 10 30  
 Fax 0041 (0)44 937 24 04

E-Mail: kienzlerinfo@kienzler.ch web: www.kienzler.ch