

# Cut-Out Capillary Thermostats



DBTF

## DESCRIPTION

Manual and automatic reset and fixed differential, low temperature, cut-out capillary thermostats.

## APPLICATION

Control and monitor frost temperature of make-up air heater coils.

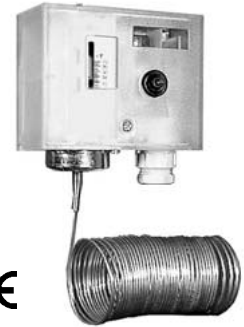
## FEATURES

- Auto & manual reset
- Six to twenty feet capillary
- Low temperature setpoint safety lock

## SPECIFICATIONS

<b>Type of operation</b>	On/Off, single-stage, micro switch
<b>Output</b>	1 SPDT, or 2 SPDT, 24 to 250 VAC, 15 (8) A
<b>Differential switching</b>	1.8°F (1°K), fixed for auto reset
<b>Control range</b>	14°F to 54°F (-10°C to 12°C)
<b>Setpoint safety lock</b>	At 35.6°F (2°C) factory set, field adjustable
<b>Setpoint adjustment</b>	Screw driver slot
<b>Sensing element</b>	Vapor-filled copper capillary
<b>Capillary size</b>	Diameter 0.08 in. (2 mm)
<b>Permissible ambient temperature</b>	
- Capillary, max.	392°F (200°C) max. 60 min.
- Storage, max.	-4°F to 158°F (-20°C to 70°C)
<b>Wire</b>	
- Connection	Terminal with wire retaining screws
- Size	Maximum 14 AWG (2.5 mm <sup>2</sup> )
<b>Cable entry</b>	M20 fitting, replaceable by 1/2" conduit connection
<b>Housing</b>	
- Material	Metal base, galvanized, ABS cover, fire retardant
- Color	Gray
- Protection	NEMA 1 (IP 40)
- Dimensions	4.1 x 3.3 x 2.1 in. (105 x 83 x 53 mm)
<b>Installation</b>	Duct and across coil mounted
<b>Ship weight</b>	2.0 lb (0.9 kg)

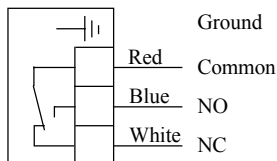
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"Bulb on 6-ft capillary stores excess gas; still responds to the lowest temperature along any one foot of entire capillary length."

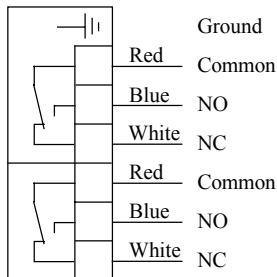
## WIRING DIAGRAM

DBTF



Falling temperature and attained low cut-out point, contact connection: Red to Blue

DBTF-.2



Vapor-filled capillary; control responds to the lowest temperature along any one foot of entire capillary length.

Capillary Length ft (m)	SPDT 15(8)A	Reset	Part Number
6 (1.8)	1	Auto	DBTF-3-US
6 (1.8)	1	Manual	DBTF-3R-US
10 (3)	1	Auto	DBTF-5-US
10 (3)	1	Manual	DBTF-5R-US
20 (6)	1	Auto	DBTF-1-US
20 (6)	1	Manual	DBTF-1R-US
6 (1.8)	2	Auto	DBTF-32-US
6 (1.8)	2	Manual	DBTF-3R2-US
10 (3)	2	Auto	DBTF-52-US
10 (3)	2	Manual	DBTF-5R2-US
20 (6)	2	Auto	DBTF-12-US
20 (6)	2	Manual	DBTF-1R2-US
Capillary mntg. brackets, hi-impact plastic (6 pcs)			DBZ-05
Capillary mntg. brackets, brass (6 pcs)			DBZ-05/0
Housing mntg. bracket			DBZ-07