

THERMOSTATS & CONTROLLERS

70°

LOW-LIMIT TEMPERATURE CONTROL TSA, TF142

DESCRIPTION

Models TSA and TF142 provide low-limit temperature control in operating dampers, valves, compressors, or fan motors in HVAC systems. Manual and automatic reset models are available with SPDT or DPDT switching action. **Models TSA and TF142** respond to the lowest temperature sensed along any 1' (0.3m) section of the capillary element.

FEATURES

- **SPDT and DPDT models**
- **Manual and automatic reset models**
- **Easy set point adjustment**
- **Manual test lever**
- **One year warranty**



TSA



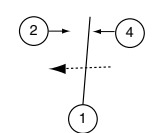
TF142



SPECIFICATIONS

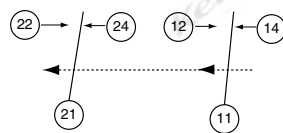
Model	TSA-		TF142-			
	DOP	COP	SODP06	SODP20	SOAP06	SOAP20
Reset	Manual	Automatic	Manual		Automatic	
Setpoint Range	35° to 68°F (2° to 20°C)		34° to 70°F (1° to 21°C)			
Differential	4.5°F (2.5°C) fixed		4.5°F (2.5°C) fixed			
Switch Type	SPDT, snap acting		DPDT, snap acting			
Contact Rating	Inductive 24 FLA, 144 LRA @ 120-240 VAC 2 hp @ 120 VAC; 3 hp @ 240 VAC Pilot duty 720 VA max @ 120-600 VAC 144 VA max @ 24 VAC		Inductive 14 FLA, 84 LRA @ 120 VAC; 12 FLA, 72 LRA @ 240 VAC 3/4 hp @ 120 VAC; 2 hp @ 240 VAC Pilot duty 720 VA max @ 120-600 VAC 144 VA max @ 24 VAC			
Sensing Element	Tin-plated copper capillary tube (vapor filled with R134A)					
Length	20' (609.6 cm)		10' (304.8 cm)	20' (609.6cm)	10' (304.8 cm)	20' (609.6cm)
Diameter	5/64" (0.2 cm)		3/32" (0.24 cm)			
Operating Temperature	-60° to 160°F (-51° to 71°C) Sensing Element 300°F (149°C) max		-60° to 160°F (-51° to 71°C) Sensing Element 300°F (149°C) max			
Dimensions	2.94"H x 3.34"W x 1.56"D (7.47 x 8.48 x 3.56 cm)		3.63"H x 5.5"W x 2.63"D (9.21 x 13.97 x 6.67 cm)			
Weight	1 lb (0.45 Kg)		2.8 lb (1.3 Kg)			
Approvals	CE, UL File # E85974, E300881					
Warranty	1 year					
Accessories	CC-1G-K plastic capillary mounting clip or M-648-K copper capillary mounting clip (sold separately)		Mounting clips supplied with each control			

WIRING



TSA

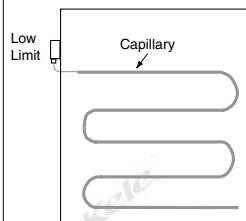
Switch action on decrease in temperature
(Contact 1 to 4 Opens;
Contact 1 to 2 Closes)



TF142

Switch action on decrease in temperature
(Contacts 11-14 and 21-24 Open;
Contacts 11-12 and 21-22 Close)

INSTALLATION



Install capillary element in a horizontal serpentine pattern across the duct on the downstream side of the coil so it is exposed to areas where low temperatures will occur. Do not kink or apply excessive force to the capillary element.

ORDERING INFORMATION

MODEL
TSA-DOP
TSA-COP
TF142-SODP20
TF142-SODP06
TF142-SOAP20
TF142-SOAP06

DESCRIPTION
Low-limit temperature control, SPDT, manual reset, 20 ft cap
Low-limit temperature control, SPDT, automatic reset, 20 ft cap
Low-limit temperature control, DPDT, manual reset, 20 ft cap
Low-limit temperature control, DPDT, manual reset, 10 ft cap
Low-limit temperature control, DPDT, automatic reset, 20 ft cap
Low-limit temperature control, DPDT, automatic reset, 10 ft cap

RELATED PRODUCTS

CC-1G-K
ES1051
M-648-K

Plastic capillary and sensor holder mounting clip
Freeze spray, 8 fl oz
Copper-clad capillary mounting clip