



# FREEZE STATS

## Manual & Automatic with Relay(s)

The FS Series are low limit controllers, also known as "Freeze Stats". These devices were designed for use on HVAC equipment that require low-temperature cutout protection to prevent cooling coils from freezing. They should be mounted between the heating and cooling coils on the supply side of the fan unit and respond to the lowest temperature sensed along any one foot section of the sensing element. The FS Series has manual and automatic reset versions, as well as, models that feature one or two sets of SPDT contacts. Numerous capillary lengths are also available.

The ACI Freeze Stat is covered by ACI's Two (2) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's website, [www.workaci.com](http://www.workaci.com).

### PRODUCT SPECIFICATIONS

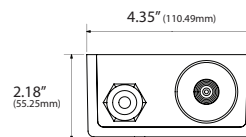
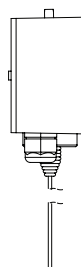
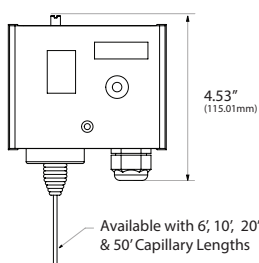
<b>Thermostat Type:</b>	Self-contained, electromechanical
<b>Sensing Element:</b>	Vapor-filled capillary
<b>Sensing Media:</b>	Temperature in air
<b>Sensing Temperature Operating Range:</b>	14°F to 54°F (-10°C to 12°C)
<b>Sensing Capillary Overload Temperature:</b>	392°F (200°C), maximum 60 minutes
<b>Sensing Response:</b>	To lowest temperature sensed by any 1 ft section of the capillary element
<b>Sensing Capillary Material:</b>	Copper
<b>Sensing Capillary Installation:</b>	Duct and across coil mounted
<b>Sensing Capillary Length:</b>	See Ordering Grid on Back of Data Sheet
<b>Sensing Capillary Diameter:</b>	Ø0.08 in. (2 mm) (6' Length models have a larger bulb at the end)
<b>Type of Control:</b>	ON/OFF, low-level single-stage or cut-out control, with One (1) microswitch output
<b>Low-Level Setpoint (Factory Set):</b>	At 39°F (4°C), and safety-lock secured
<b>Low-Level Setpoint Visual Range:</b>	14°F to 54°F
<b>Low-Level Setpoint Adjustment:</b>	Over full operating range, via screwdriver slot
<b>Contact Form:</b>	Form 1C (SPDT Contact)
<b># of Relays:</b>	See Ordering Grid on Back of Data Sheet
<b>Maximum Contact Switching Voltage:</b>	250 VAC
<b>Maximum Contact Switching Current:</b>	15 (8) A
<b>Switching Differential:</b>	1.8°F (1°K), auto- or manual reset
<b>Enclosure Operating Temperature Range:</b>	14°F to 131°F (-10°C to 55°C)
<b>Operating Humidity Range:</b>	0 to 95% RH, non-condensing
<b>Storage Temperature Range:</b>	14°F to 158°F (-10°C to 70°C)
<b>Enclosure Base Material:</b>	Steel, galvanized
<b>Enclosure Cover Material:</b>	ABS, fire retardant
<b>Enclosure Color:</b>	Silver / Light Gray
<b>Enclosure NEMA Rating:</b>	NEMA 1 (IP40)
<b>Cable Entry:</b>	One (1) M20 compression fitting, removable, hole fits 1/2 in. conduit connector
<b>Wire Connections:</b>	Terminal with wire-retaining screws
<b>Maximum Wire Size:</b>	14 AWG (2.5 mm <sup>2</sup> )
<b>Agency Approvals:</b>	CE
<b>Product Weight:</b>	1.6 lbs (0.7 kg)
<b>Enclosure Product Dimensions (L x W x H):</b>	4.1" (105 mm) x 3.3" (83 mm) x 2.1" (53 mm)



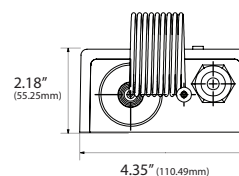
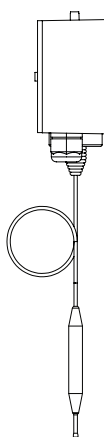
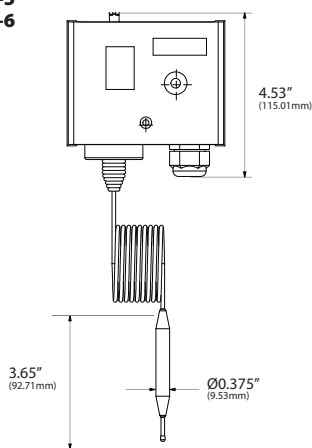


**DIMENSIONAL DRAWING**

FS-1  
FS-2  
FS-3  
FS-4  
FS-50



FS-5  
FS-6



Front View

Right View

Top View

**STANDARD ORDERING**

Model # Example: FS-50A -OR- 142962

Model #	Item #	Capillary Length	# of Relays	Contact Form	Reset
FS-1	102482	20' (6m)	1	Form 1C (SPDT Contact)	Manual
FS-1A	102483	20' (6m)	1	Form 1C (SPDT Contact)	Auto
FS-2	102484	20' (6m)	2	Form 1C (SPDT Contact)	Manual
FS-2A	105904	20' (6m)	2	Form 1C (SPDT Contact)	Auto
FS-3	106291	10' (3m)	1	Form 1C (SPDT Contact)	Manual
FS-3A	106292	10' (3m)	1	Form 1C (SPDT Contact)	Auto
FS-4	106293	10' (3m)	2	Form 1C (SPDT Contact)	Manual
FS-4A	106294	10' (3m)	2	Form 1C (SPDT Contact)	Auto
FS-5	106295	6' (1.8m)	1	Form 1C (SPDT Contact)	Manual
FS-5A	106296	6' (1.8m)	1	Form 1C (SPDT Contact)	Auto
FS-6	106297	6' (1.8m)	2	Form 1C (SPDT Contact)	Manual
FS-6A	106298	6' (1.8m)	2	Form 1C (SPDT Contact)	Auto
FS-50	142963	50' (16m)	2	Form 1C (SPDT Contact)	Manual
FS-50A	142962	50' (16m)	2	Form 1C (SPDT Contact)	Auto

**ACCESSORIES ORDERING**

Model # Example: UNIVERSAL CLIP 50 -OR- 145430

Model #	Item #	Description
UNIVERSAL CLIP 6	145421	Universal Mounting Clip (Quantity 6)
UNIVERSAL CLIP 50	145430	Universal Mounting Clip (Quantity: 50)

