



# SERVICE AND APPLICATION NOTES

## Low Ambient Kit (208/240 Applications Only)

### OVERVIEW

The low ambient kit cycles the outdoor fan while allowing the compressor to operate in the cooling mode in ambient temperatures below 65°F (18°C). This intermittent outdoor fan operation maintains the pressure differential across the thermostatic expansion valves (TXV) at lower ambient temperatures.

**IMPORTANT** — Use ONLY thermostatic expansion valve metering devices on units with low ambient kits.

### ON/OFF Low Ambient Kit {Applications from 65°F down to 30°F (18°C to -1°C)}

Low Ambient Kit	HCFC-22	HFC-410A
Air Conditioning	24H77 (LB-57113BC)	34M72 (LB-101123A)
Heat Pumps	27J00 (LB-57113BM)	54M89 (LB-101123B)
Multi-Stage Motors	Not Applicable	68M04 (LB-101123C)

### Modulating Low Ambient Kits {Applications from 65°F down to 0°F (18°C to -18°C)}

Parts required for both applications:

Low Ambient Kit	HCFC-22	HFC-410A
Air Conditioning Only	X5867 (speed control kit)	X5867 (speed control kit)
	56N41 (weatherproof kit)	56N41 (weatherproof kit)

**NOTE:** Single speed motors ONLY. Control has built in Transformer for 115, 208/230 and 460 volt.

Parts required for both applications:

Outdoor Fan Motor (Cat #)	Part Number	HP	RPM	Voltage	Phase	Shaft Down	Run Capacitor
47W86	100483-23	1/10	1075	208/230	1	Yes	5.0/370
63W25	100483-27	1/6	825	208/230	1	Yes	5.0/370
43W49	100483-21	1/5	1075	208/230	1	Yes	5.0/370
49W86	100483-24	1/4	825	208/230	1	Yes	10.0/370
61W89	100483-25	1/4	1075	208/230	1	Yes	7.5/370
69W97	100483-30	1/3	825	208/230	1	Yes	10.0/370
69W96	100483-29	1/3	1075	208/230	1	Yes	7.5/370
92W51	100483-33	1/6	825	208/230	1	Yes	5.0/370
92W75	100483-34	1/4	825	208/230	1	Yes	10.0/370
96W83	100483-35	1/10	1075	208/230	1	Yes	5.0/370

**NOTE:** All above single speed ball bearing motors have studs for shaft down mounting. Refer to engineering handbook to match motor RPM to motor being replaced.

Crankcase Heater (Cat #)	Part Number	Watts	Voltage	Diameter Range (inches)	Compressor Frame Size (diameter / inches)
93M04	100499-01	40	240	4.72 - 7.01	53 (5.5")
93M05	100499-02	40	240	6.35 - 8.64	63 (6.5")
93M06	100499-03	70	240	6.35 - 8.64	73 (7.3")

## FREEZE-STAT INSTALLATION

Install the freeze-stat (see figure 1) at the exit line of the indoor coil. The freeze-stat senses outlet temperature of the indoor coil and will cycle the compressor **OFF** when the temperature falls below its set-point. The freeze-stat will open at 29° (-2°C) and close at 58°F (-10°C).

Catalog Number	Tubing Size	Wire Length	Wire Gauge
93G35	3/8"	90-13/16"	18
50A93	5/8"	36-1/2"	18

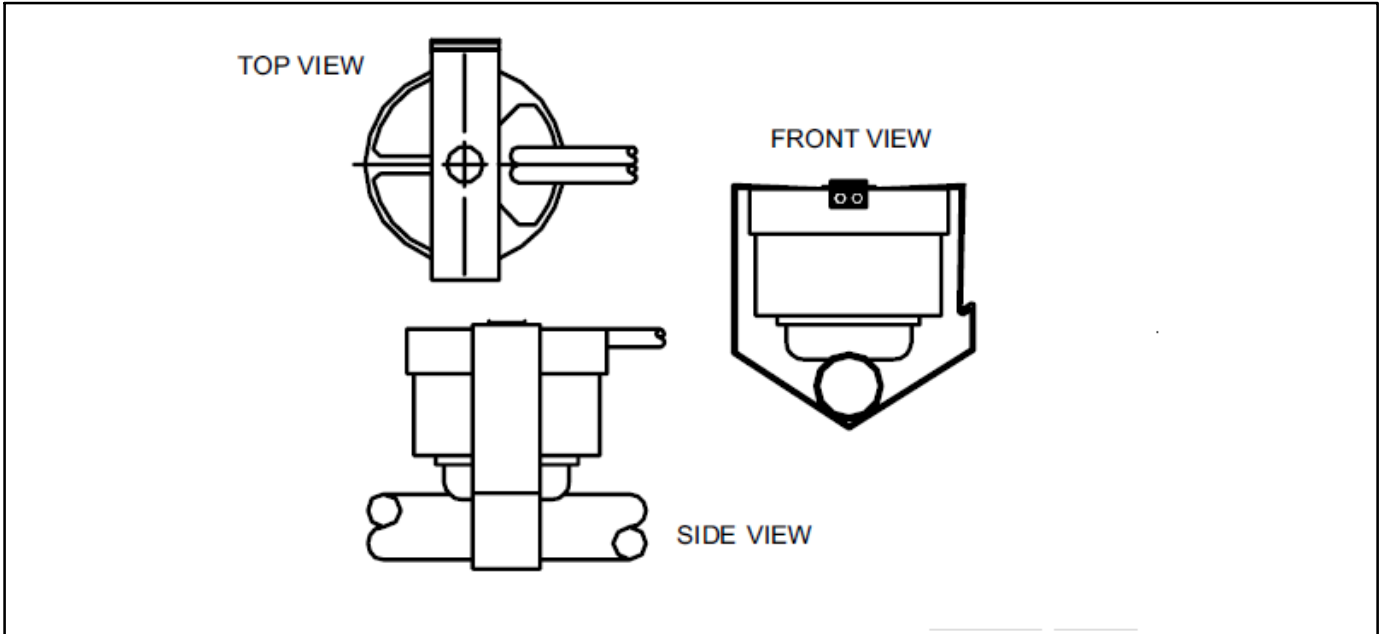


Figure 1. Freeze-Stat