

Klixon 3-Phase Motor Protectors & Commercial Refrigeration Thermostats

On-Winding Overheat Protection

Klixon SL-11 kits are mounted on the windings of general purpose motors and hermetically sealed compressors. They supplement conventional current overload relays in magnetic starters providing modern total protection for most older motors in use today.



Features:

- Allow motors to perform at full-load capacity but will protect against dangerous running overloads
- Protect against blocked ventilation, high ambient temperatures, single phasing
- Each kit contains three matched motor-winding thermostats
- When starter overloads operate, the SL-11 will protect against re-starting at unsafe winding temperatures.
- These motor winding thermostats do not replace overloads in the starter
- UL & CSA listed

Installation:

SL-11 thermostats are tied in place on the end turns of appropriate winding bundles, one to each phase or buried in the windings during motor rewind. They are connected in series between the starter coil and its power supply.

Selection:

- Pick thermostat temperature to operate at the mid-point between the "maximum normal running" temperature and the "maximum allowed running temperature."
- Subtract the gradient temperature (outlined in the chart below) from the mid-point to obtain the operating temperature of the thermostat.

Epoxy-Sealed Thermostats For General Purpose Motors - Normally Closed

MARS NO.	KLIXON KIT NO	KLIXON CAT. NO	OPERATING TEMPERATURE
37075	SL-11-75	9700K51-146	75°C
37100	SL-11-100	9700K26-146	100°C
37110	SL-11-110	9700K36-146	110°C
37120	SL-11-120	9700K01-146	120°C
37130	SL-11-130	9700K11-146	130°C
37135	SL-11-135	9700K06-146	135°C
37140	SL-11-140	9700K66-146	140°C
37145	SL-11-145	9700K76-146	145°C
37150	SL-11-150	9700K46-146	150°C

Three thermostats per package

Typical Gradients	Thermostat Location		Maximum Contact Rating Amps			
	Tied On End Turns	Buried In End Turns	Klixon #	24V	115V	230V
Open Type	30°C	15°C	9700K	18	18	12
Totally Enclosed						
Fan Cooled	25°C	10°C				
Totally Enclosed Non-Ventilated	20°C	5°C				

Refrigeration Cases and Coils

MARS has selected the most popular Klixon disc-type thermostats found in commercial refrigeration. These controls cover a wide assortment of applications including supermarket cases and walk-in, reach-in, and beverage coolers.

Features:

- Used on refrigeration cases, coils, with many other commercial applications
- Long lead wires supplied to satisfy most requirements
- Used by Hussman, Friedrich, Larkin, Schaefer, etc.
- 1 inch discs fully encapsulated for trouble-free use
- Mounts directly on coil tube or surface for maximum temperature response
- UL and CSA listings available
- 25 resistive amps maximum



ELECTRICAL RATING			
		TERM. 1-3	TERM. 1-2
Full load amps	120V	13	5.8
	240V	10	2.9
Locked rotor amps	120V	60	34.8
	240V	45	17.4
Pilot Duty	120/240V	125	125
Resistive amps	120/240V	25	25
	277V	15	15

Tube Mounting

MARS NO.	KLIXON NO.	O.E.M.	O.E.M. PART NO.	SWITCH ACTION	OPERATING TEMPERATURES F°		TUBE MT. IN	LEADS IN
					OPEN	CLOSE		
33405	20420D24-106-63	Bally	—	D	70	20	5/8	18
33415	20420D24-399-350		—	D	65	20	5/8	20
33420	20428F1-4-676	Friedrich	606-038-00	F	35	55	3/8	20
33425	20420L15-913-302		794-824-00	L	40	25	5/8	11
33430	20420D1-166-336		—	D	50	35	1/2	18
33435	20420L28-229-89	Hussman	P211-119696	L	20	5	3/4	40
33455	20420F19-63-294	Schaefer	C10872-19	F	20	60	5/8	36
33460	20420L19-202-274		C10872-6	L	35	5	5/8	54
33470	20420L15-376-218		125211	L	50	30	5/8	36
33475	20420L15-722-218	Tyler Ref.	146291	L	40	20	5/8	36
33480	20420L15-767-257		146739	L	80	50	5/8	90

Surface Mounting

MARS NO.	KLIXON NO.	O.E.M.	O.E.M. PART NO.	SWITCH ACTION	OPERATING TEMPERATURES F°		LEADS IN
					OPEN	CLOSE	
33017	20425L153-B22-B54	Heatcraft	5708L	L	75	40	18 w/ quick connects

1D=SPDT, no. 1 is common (white) - no label, no. 2 either opens or closes temp. rise - red label, no. 3 is opposite of no. 2 - blue label F= close on temperature rise, SPST L= open on temperature rise, SPST 2