

Product Bulletin

KLIXON Fixed Temperature Thermostats

20490 and 20491 Series Double Pole, Automatic reset 20492 and 20493 Series Double Pole Manual Reset





Features

- Double Pole Single Throw (DPST)
- · Manual Reset/Trip free
- · Automatic Reset
- Heavy Duty Capacity up to 48 amperes per pole
- Snap-Action resists shock and vibration regardless of mounting position
- Tamperproof temperatures are factory set to customer requirements
- Molded Phenolic Case seals out lint, dust, and other contamination
- Compact easily mounted where space is limited
- · High Reliability

Automatic Reset

The Klixon 20490 and 20491 series are especially designed for the electric heat, clothes dryer, and other major appliance markets. The high capacity automatic series, 20490 and 20491, are available as limit (L) switches, which open on temperature rise, and fan (F) switches, which close on temperature rise.

The switch is enclosed within a phenolic housing and stainless steel cup assembly which protects the contacts from contamination. The stainless steel cup also provides a variety of mounting configurations.

The switch mechanism is actuated by the KLIXON snap-action, bimetal disc, which may be enclosed or exposed. Enclosed disc types should be used in all applications where response to radiant heat is not critical as it provides protection (to the bimetal element and switch assembly) against contamination and damage due to handling. Exposed disc types are used in applications where a faster thermal response to radiant heat is required.

Standardized mounting-hole dimensions allow interchangeability with our present 204 and 206 series thermostats.

The 20490 is available with the following terminal configurations: 0.250" X 0.032" flat, 45°, and 90° male quick connect; 0.187" X 0.032" 90° male quick connect; flat and 45° #8-32NC screw terminals. Only 45° #10-24 screw terminals are available on the 20491.

Temperature Setting (OF)

TEMP. RANGE	TOLERANCE OPEN CLOSE		NOMINAL TEMP. DIFFERENCE
0 to 80	±6	±7	20 to 60
81 to 200	±5	±7	20 to 60
201 to 250	±6	±8	20 to 60
251 to 300	±7	±10	30 to 60

Electrical Clearances

TYPE	THROUGH AIR	OVER SURFACE
20490	1/4"	3/8"
20491	3/8"	1/2"
	20490	20170

Manual Reset

The KLIXON 20492 and 20493 series are especially designed for the electric heat and water heater markets. The high contact capacity eliminates the need for costly back-up contactors and low capacity manual reset limit controls in electric heat applications. The contacts are enclosed for protection from contamination.

The 20492 and 20493 are designed for trip free operation. The trip free construction will not allow the contacts to be closed until the temperature of the disc is lowered to its reset point.

The 20492 is available with the following terminal configurations: 0.250" X 0.032" flat, 45°, and 90° male quick connect; 0.187" X 0.032" 90° quick connect; flat and 45° #8-32NC screw terminals. Only 45° #10-24 screw terminals are available on the 20493.

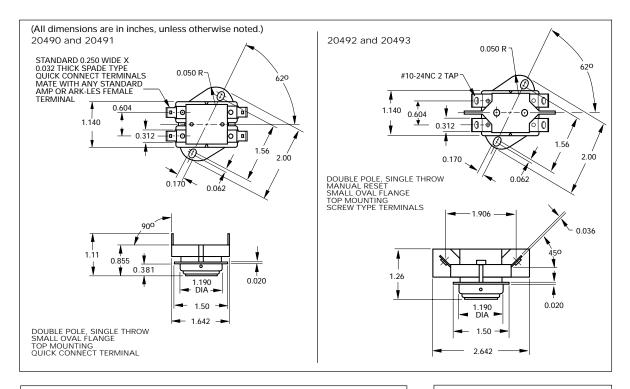
Temperature Setting (OF)

OPENING TEMP. RANGE	TOLERANCE	
100 to 200	±5	
201 to 250	±6	
251 to 300	±7	

Minimum temperature differential is 40°F.

Electrical Clearances

TYPE	THROUGH AIR	OVER SURFACE
20492	3/8"	1/2"
20493	3/8"	1/2"



Electrical Ratings		Electrical Ratings Manual Reset		
(100,000 cycles/pole) 20490*		(6,000 cycles/pole) 20492*		
Resistive	25 amperes at 240 V-ac	Resistive	25 amperes at 600 V-ac	
Motor Load	10 FLA-60 LRA at 120 V-ac	Motor Load	10 FLA-60 LRA at 120 V-ac	
	5 FLA-30 LRA at 240 V-ac		5 FLA-30 LRA at 240 V-ac	
Pilot Duty	125 volt-amperes at 120 V-ac	Pilot Duty	690 volt-amperes at 240/600 V-ac	
20491*			480 volt-amperes	
Resistive	25 amperes at 600 V-ac	20493*	at 120 V-ac	
Motor Load	4 FLA-8 LRA at 480 V-ac	Resistive	48 amperes at 600 V-ac	
Pilot Duty	690 volt-amperes at 240 V-ac to 480 V-ac	Motor Load	16 FLA-96 LRA at 120 V-ac	
			8 FLA-48 LRA at 240 V-ac	
		Pilot Duty	690 volt-amperes at 240/600 V-ac	
*UL Recognized co File MP986 U.S. Category ME Canada Category	omponent for USA and C BPR2 MBPR8	anada	480 volt-amperes at 120 V-ac	

A TI sales representative, who knows your temperature control problems and how our products solve them, is located close at hand. Use his services to eliminate needless engineering cost and give your products a competitive edge.

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