

THERMAL PROTECTORS

A thermal protector (i.e., “O.T. Switch”) is recommended for heaters used in metal or plastic tanks. The protector is placed inside a thermowell that is positioned in contact with the heater sheath. It is a safety device that is electrically installed with a latching circuit and a power contactor to energize the heater. The creep action (slow make/slow break) bimetallic thermostat has a pre-specified switch temperature. If the liquid level drops and the surface of the heater reaches the preset overheat temperature, the thermostat in combination with the control system will cut power to the heater. After restoring the tank to the proper liquid level, the heater can be made operational by pushing the reset button on the control to restore power.



Warning

A thermal protector does not replace a liquid level control. Repeatedly tripping and resetting the thermal protector without properly controlling the liquid level may damage the heater.

Thermal protector ratings:

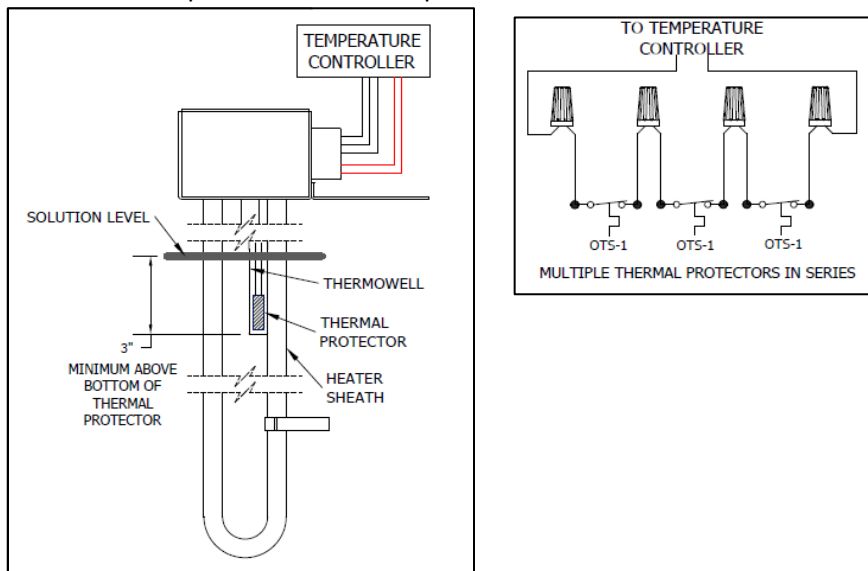
- 6 amps at 120 volts
- 3 amps at 24 vdc
- UL & c-UL rated for 100,000 cycles

Table 1: Selection Guide

RESETTABLE THERMAL PROTECTORS		
HEATER MATERIAL	HEATER STYLE	TEMPERATURE RANGE
METAL	SIDE-WALL L-SHAPED	UP TO 180°F (82°C)
FLUOROPOLYMER	SIDE-WALL L-SHAPED	UP TO 190°F (88°)

Figure 1: General Wiring

Note: Temperature control requires a reset circuit.



Warning

Liquid level controls must be used.



Warning

Do not use a resettable thermal overload protector to control or directly switch heater power. Always maintain proper solution level above thermal protector.