



Topic: CLO Operation

Model Affected: 38, 48, 50 Series Units

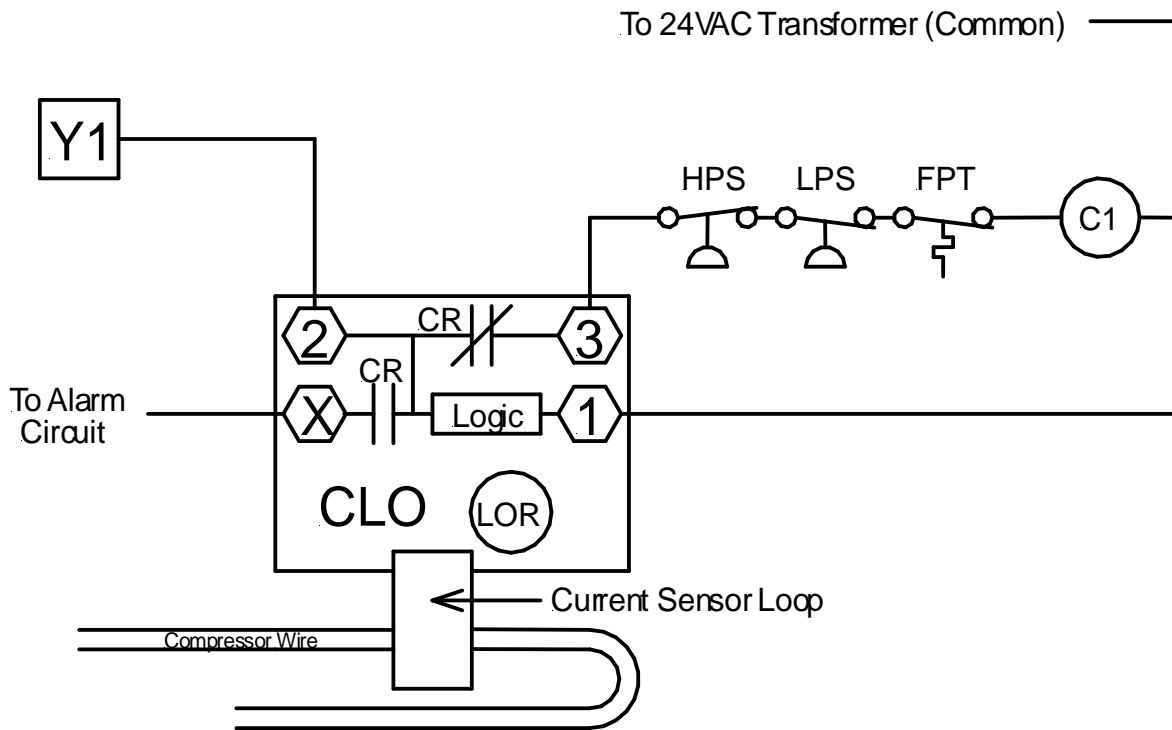
Serial Number Range: All

Special Tools Needed: None

CLO stands for **C**urrent -**S**ensing **L**ock **O**ut. It may also be referred to as a **C**ompressor **L**ock **O**ut. A CLO board provides a lockout function in the event of a safety trip. Its main function is to prevent the restart of the compressor or unit if the safety devices themselves are not manual reset. The CLO will keep the compressor or unit locked out until power is momentarily interrupted to the CLO.

With 18 to 30 VAC applied to Terminals 1 & 2, and 2.5 amps applied simultaneously through the current sensor loop, the control relay mounted on the CLO must remain de-energized. When current through the current sensing loop is reduced to 0.5 amps, the control relay must energize within 1 second and open a normally-closed contact between Terminals 2 & 3, and close a normally-closed contact between Terminals 2 & X (X is energized to provide an signal an alarm condition).

Below is the typical control circuit to which a CLO is applied:



In the above diagram, if the HPS (High Pressure Switch), LPS (Low Pressure Switch), or FPT (Freeze Protection Thermostat) should open, Compressor Contactor (C1) will be locked out.

Below is a more accurate representation of the CLO printed circuit board.

