KLIXON

Supplementary Overloads from Texas Instruments

8347 and 8348 Series

- •Long life design minimizes contact wear (contacts do not break line current)
- Snap-action Klixon® disc resists vibration
- Responds rapidly to locked rotor current
- Simple proven design provides low cost protection
- Compact size for ease of installation



KLIXON® 8347 and 8348 supplementary overloads are automatic, disc-type, quick-trip devices that sense and operate on locked rotor current. They respond to motor current only. These controls were developed to supplement KLIXON motor winding thermostats in protection systems for heremetically-sealed compressors from 2 to 12 horsepower and three-phase motors. Motor winding thermostats used alone cannot provide adequate protection on locked rotor since a temperature responsive device would not react quickly enough.

Operation

Line current passes through the disc, but the disc does not break the line current. This is possible because copper pigtails welded to the disc maintain circuit continuity. When the disc operates, it causes a set of bridging contacts to open. These contacts are mechanically linked to the disc but electrically isolated from it. They are connected in series with the motor winding thermostat and also with the coil of the magnetic contactor. Consequently, when any of the sensing elements in the system are open, the contactor coil circuit is open. This, in turn, breaks the motor lines.

During locked rotor operation, the supplementary overload will cycle several times until the heat generated in the windings reaches out to the thermostat. The thermostat then takes over as the controlling device and limits the locked rotor temperature of the compressor windings.

To extend the range of application for supplementary overloads to lower current values, the KLIXON 8347 type is also available with heaters.

Temperature Characteristics - Locked Rotor

