



Fig. 18 — 4- to 20-mA Demand Limiting

TROUBLESHOOTING

Complete Unit Stoppage and Restart — Possible causes for unit stoppage and reset methods are shown below. (See Table 30 also.)

GENERAL POWER FAILURE — After power is restored, restart is automatic through normal MBB start-up.

UNIT ENABLE-OFF-REMOTE CONTACT SWITCH IS OFF — When the switch is OFF, the unit will go through pumpout (30HL, 30GTN) and then stop immediately. Place the switch in the ENABLE position for local switch control or in the REMOTE CONTACT position for control through remote contact closure.

CHILLED FLUID PROOF-OF-FLOW SWITCH(ES) OPEN — After the problem causing the loss of flow has been corrected, reset is manual by switching the ENABLE-OFF-REMOTE CONTACT switch from ENABLE to OFF then to ENABLE within 5 seconds (QuickSet units) or resetting the alarm with the Scrolling Marquee as shown in Table 27.

OPEN LOW-PRESSURE SWITCH — If a low-pressure switch remains open for more than 2 minutes during unit operation, the compressor(s) shuts down and is locked off. The unit service light is illuminated. Determine and correct the cause of the failure. The switch automatically resets, but the unit must be reset manually by switching the ENABLE-OFF-REMOTE CONTACT switch from ENABLE to OFF then to ENABLE within 5 seconds (QuickSet units) or resetting the alarm with the Scrolling Marquee as shown in Table 27. One switch opening per day is allowed and will be reset automatically. The second (or more) trip in one day will be a manual reset condition. If this is the case, determine the cause of the loss of charge, correct the problem, and recharge the unit before restarting.

OPEN HIGH-PRESSURE SWITCH(ES) — The unit service light is illuminated. Determine and correct the cause of the failure. The switch resets automatically, but the unit must be reset manually by switching the ENABLE-OFF-REMOTE CONTACT switch from ENABLE to OFF then to ENABLE within 5 seconds (QuickSet units) or resetting the alarm with the Scrolling Marquee as shown in Table 27.

OPEN COMPRESSOR INTERNAL THERMAL PROTECTION (30HW and 30GTN Units) — This switch provides compressor overtemperature protection on 30HW018 and 30GTN015 units. The unit alarm/alert indicator light is illuminated. Determine and correct the cause of the problem. The switch resets automatically, but the unit must be reset

manually by switching the ENABLE-OFF-REMOTE CONTACT switch from ENABLE to OFF then to ENABLE within 5 seconds (QuickSet units) or resetting the alarm with the Scrolling Marquee as shown in Table 27.

OPEN OIL PRESSURE SWITCH — If oil pressure switch(es) opens for more than 2 minutes during unit operation, the unit shuts down and is locked off. The unit service light is illuminated. Determine and correct the cause of the failure. Unit must be reset by switching the ENABLE-OFF-REMOTE CONTACT switch from ENABLE to OFF then to ENABLE within 5 seconds (QuickSet units) or resetting the alarm with the Scrolling Marquee as shown in Table 27.

OPEN CONTACTS ON COMPRESSOR GROUND-CURRENT SENSOR(S) (Accessory) — The light-emitting diode (LED) on the ground current accessory board (located in field control wiring section of control box) is illuminated. See Fig. 19-23. Unit service light is also illuminated. **Check the compressor motor windings for a short to ground.** Determine and correct the cause of the failure. Unit must be reset by switching the ENABLE-OFF-REMOTE CONTACT switch from ENABLE to OFF then to ENABLE within 5 seconds (QuickSet units) or resetting the alarm with the Scrolling Marquee as shown in Table 27.

OPEN 24-V CONTROL CIRCUIT BREAKER(S) — Determine the cause of the failure and correct. Reset circuit breaker(s). Restart is automatic after MBB start-up cycle is complete.

COOLING LOAD SATISFIED — Unit shuts down when cooling load has been satisfied. Unit restarts when required to satisfy leaving fluid temperature set point.

THERMISTOR FAILURE — If a thermistor fails in either an open or shorted condition, the unit will be shut down. Replace T1, T2, or T3 as required. Unit restarts automatically when the condition has been corrected by switching the ENABLE-OFF-REMOTE CONTACT switch from ENABLE to OFF then to ENABLE within 5 seconds (QuickSet units) or resetting the alarm with the Scrolling Marquee as shown in Table 27.

▲ CAUTION

If unit stoppage occurs more than once as a result of any of the safety devices listed, determine and correct cause before attempting another restart.