



EMERSON COPELAND Application Engineering Instruction Manual

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Application Engineering COPELAND™ ASSEMBLY INSTRUCTIONS

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Application Engineering Europe

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NTC Mounting Recommendations

1. The sensor must be installed in a copper sleeve, to improve response time and to reduce setoff. The copper sleeve must be brazed on the surface of the pipe – **see Figure 1.**
2. Protect the sensor from being moved or removed by transport, vibration etc.
3. Use thermal compound to improve the heat transfer from the sleeve to the sensor. Thermal compounds must be approved for these temperature ranges.
4. To reduce the impact of ambient temperature the pipe including the sensor or thermostat must be insulated.

5. The sensor should be on the upper side of the pipe in a region of 45° as shown in **Figure 2**.
6. If a sensor is placed after a bend it should be on the inner side of the bend at around 22.5° from the top of the pipe.
7. Make sure the sensor cables are not installed along with other high voltage cables.
8. For positioning of the sensor, please refer to Table 1 below.

Sensor	Position
Suction (compressor) temperature sensor	120 mm from the compressor inlet
Liquid temperature sensor	120 mm from the condenser or liquid receiver
Discharge temperature sensor (DLT)	120 mm from the compressor outlet
Suction (evaporator) temperature	400-600 mm from evaporator outlet (this must be validated by the OEM)

Table 1: Sensor positions



Figure 1: Discharge line temperature sensor C30.11/0419/E

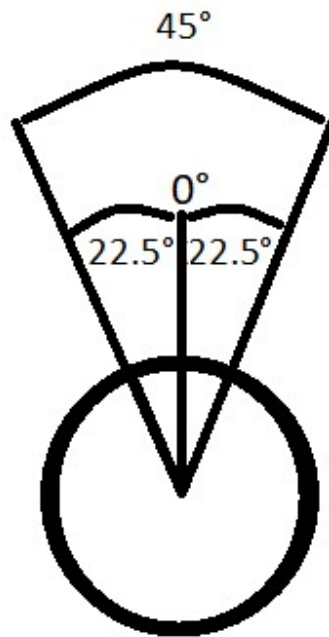


Figure 2: Sensor position on pipe 1/1

Documents / Resources

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