

COMMONLY ASKED QUESTIONS

IQ-1000 and RTD Module

Q: Is there any way to test the IQ-1000 to ensure that it is working properly?

A: The IQ-1000 must be tested on three-phase current; therefore, if testing is to be done, the customer must have a three-phase current source.

Q: Can the IQ-1000 be used if a customer has power factor correction capacitors on the line?

A: Yes. The ground fault protection can be programmed for a start delay (up to 20 cycles). This will disable the ground fault protection for the programmed delay time and allow the capacitors to charge.

Q: Can the IQ-1000 operate on an ungrounded system?

A: Yes. However, in this application, ground fault protection would be disabled.

Q: Can the IQ-1000 be used to protect a two-speed motor?

A: The IQ-1000 can be programmed for one set of motor parameters of one motor. A two-speed motor would have two different sets of parameters; therefore, one of two choices must be made in order to protect the motor using an IQ-1000:

- (1) Use two IQ-1000's. One would contain the setpoints of the lower speed, and the other would contain the setpoints of the higher speed. The appropriate IQ would have to be brought on-line when the corresponding speed was chosen.
- (2) Use one IQ, but program for the higher speed. This would fully protect in high speed applications, but underprotect in lower speed operation.

Q: What are RTD's and when should the RTD module be used?

A: The RTD module is used on motors that have Resistive Temperature Detectors (RTD's). When a motor is manufactured, RTD's are sometimes placed in the motor windings. The resistance of an RTD changes as the motor's temperature changes. (The RTD module senses the resistance of each RTD, and then transmits a digital signal back to the IQ-1000 giving the IQ true temperature information.) The RTD Module needs only to be used on motors that have RTD's. The RTD module can accept up to 10 RTD's (6 motor winding, 2 motor bearing and 2 load bearing).

Q: If an RTD Module is being used, how far can it be mounted from the IQ-1000?

A: Maximum distance is 500 ft.

Q: Can the same set of CT's be used on the IQ-1000 and IQ Data Plus II?

A: Yes. The CT burden of either device is 0.003VA.