

Thermocouple Compensation

Trio Model 885

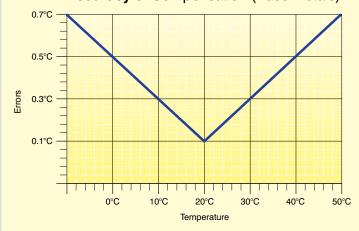
- Three Channel Referencing System
- Accurate
- Convenient

The Isotech Trio is a low-cost, accurate, portable unit designed to compensate three thermocouples for the variations in EMF caused by the cold junction not being at the standard reference temperature of 0°C.

Tables are available for each thermocouple combination which give the voltage versus temperature variation. The Trio senses the ambient temperature and generates an electrical voltage to cancel out the variation, thus providing equivalent of a 0°C cold junction reference bath. The Isotech Trio contains three electronic networks, incorporating a temperature-sensitive element which is thermally integrated with the thermocouple cold junction for maximum precision.

The unit is mains operated. The Trio is manufactured to the highest standards and after assembly each unit is calibrated to ensure conformance to the relevant thermocouple table. A wide range of thermocouple types are available. As standard, six thermocouple combinations are offered to customer requirements. The internal structure of the Trio allows either one, two or three thermocouple types to be compensated.

Accuracy of Compensation (Base Metals)



Note

The Trio has a common power supply and in some circumstances with grounded thermocouples earth loops can form causing apparent errors in compensation.



Model

Reference Temperature 0°C (others by arrangement)

885

Operating Temperature 0 to 55°C

Output Impedance Less than 200 ohms

Power 10 Watts typical

100-130 or 208-240 VAC 50/60Hz

Accuracy See Graph

Error due to Supply

Variations

Negligible

Compensation for type K, T, J, E, U, N

U Wire used for R & S types unless

otherwise specified

Stability Typically 0.02% p.a.

Dimensions Height 38mm Width 80mm

Depth 150mm

Weight 349g

How to order

Trio Model 885

Specify 3 thermocouple types and supply voltage

e.g. Trio K.K.E. 220V 50Hz.