

TEMPERATURE INPUT MODULES

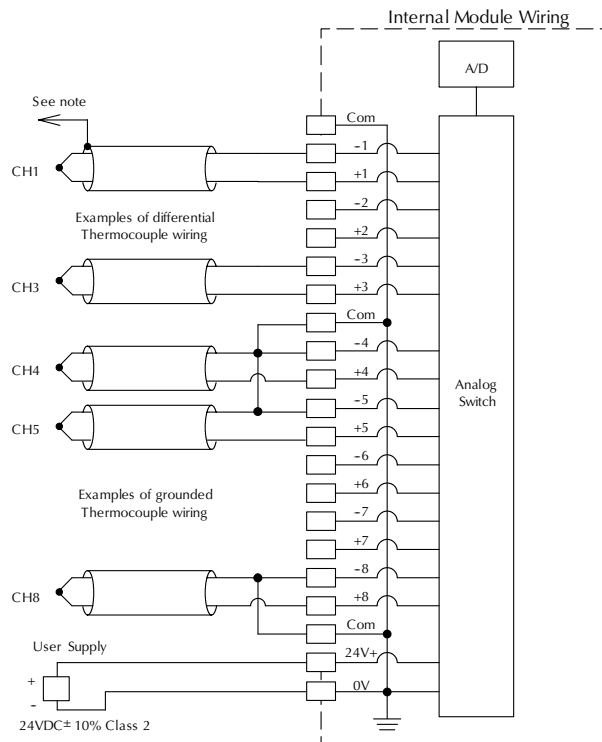
F4-08THM-n-8-Channel Thermocouple Input

When you order the module, replace the "n" with the type of Thermocouple needed. For example, to order a Type J thermocouple module, order part number F4-08THM-J or part number F4-08THM-K for a Type K module.

Number of channels	8, differential inputs
Input Ranges	Type B 529/1820°C, 984/3308°F Type C 65/2320°C, 149/4208°F Type E -270/1000°C, -450/1832°F Type J -210/760°C, -350/1390°F Type K -270/1372°C, -450/2502°F Type R 0/1768°C, 32/3214°F Type S 0/1768°C, 32/3214°F Type T -270/400°C, -450/752°F -1: 0-50 mV -2: 0-100 mV -3: 0-25mV
Resolution	12 bit (1 in 4,096)
Input Impedance	27Kohm DC
Absolute Maximum Ratings	Fault protected input, 130 Vrms or 100VDC
Cold Junction Compensation	Automatic
Conversion Time	15ms per channel, minimum 1 channel per CPU scan
Converter Type	Successive Approximation, 574

Linearity Error	± 1 count (0.03% of full scale) maximum
Full Scale Calibration Error	± 0.35% of full scale
Maximum Inaccuracy*	± 1°C for type E, J, K, and T ± 3°C for type B, C, R, and S
PLC Update Rate	1 ch. per scan min., 8 per scan max.
Digital Input Points Required	16 (X) input points (12 binary data bits, 3 channel ID bits, 1 sign bit)
Base Power Required 5V	120 mA
External Power Supply	24VDC ±10%, 50 mA current
Operating Temperature	32 to 140°F (0 to 60°C)
Storage Temperature	-4 to 158°F (-20 to 70° C)
Accuracy vs Temperature*	57 ppm/°C maximum full scale
Relative Humidity	5 to 95% (non-condensing)
Environmental Air	No corrosive gases permitted
Vibration	MIL STD 810C 514.2
Shock	MIL STD 810C 516.2
Noise Immunity	NEMA ICS3-304

Note 1: Terminate shields at the respective signal source
Note 2: Leave unused channels open (no connection)



*Max. inaccuracy is not guaranteed for temperatures lower than:
-220°C for types E & T
-200°C for types J & K
+100°C for types R & S

