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*Photo may vary from actual product.

RoHS compliant

Product Number	AFP7TC8
Part Number	AFP7TC8
Product	FP7 Temperature input units
Product name	FP7 Temperature input units

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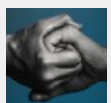
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As of July 16, 2018
 Specifications and design of the products are subject to change without notice for the product improvement.

Spec Detail

Item	Specifications
Product Number	AFP7TC8
Part Number	AFP7TC8
Number of channels	8 channels
Input range(resolution):Thermocouple(resolution: 0.1°C 32.18F)	K1: -100.0 to 600.0degrees -148.0 to 1112.0degrees Fahrenheit / K2: -200.0 to 1000.0degrees -328.0 to 1832.0degrees Fahrenheit J1: -100.0 to 400.0degrees -148.0 to 752.0degrees Fahrenheit / J2: -200.0 to 750.0degrees -328.0 to 1382.0degrees Fahrenheit T: -270.0 to 400.0degrees -270.0 to 752.0degrees Fahrenheit / N: -270.0 to 1300.0degrees -270.0 to 2372.0degrees Fahrenheit R: 0.0 to 1760.0degrees 32.0 to 3200.0degrees Fahrenheit / S: 0.0 to 1760.0degrees 32.0 to 3200.0degrees Fahrenheit B: 0.0 to 1820.0degrees 32.0 to 3308.0degrees Fahrenheit / E: -270.0 to 1000.0degrees -270.0 to 1832.0degrees Fahrenheit PL1: 0.0 to 1390.0degrees 32.0 to 2534.0degrees Fahrenheit / WRe5-26: 0.0 to 2315.0degrees 32.0 to 4199.0degrees Fahrenheit
Input range(resolution):Voltage	-10 to 10V DC (resolution: 1/62,500) 0 to 5V DC (resolution: 1/31,250) 1 to 5V DC (resolution: 1/25,000)(Note) -100 to 100mV DC (resolution: 1/62,500) Resolution: max. 16 bits (Note) The full scale (F.S.) ranges of accuracy is 1 to 5 V DC for current input, respectively.
Input range(resolution):Current	0 to 20 mA (resolution: 1/31,250) 4 to 20 mA (resolution: 1/25,000)(Note) Resolution: max. 16 bits (Note) The full scale (F.S.) ranges of accuracy is 0 to 20 mA for current input, respectively.
Conversion speed	5 ms/channel + 5 ms (Note) 25 ms/channel + 25 ms Add the drift compensation measuring time to the number of measuring channels. (Note) The AC noise removal is disabled.

Overall accuracy	plus or minus 0.1%F.S.or less(at 25degrees 77degrees Fahrenheit) plus or minus 0.3%F.S.or less(at 0 to +55degrees +32 to +131degrees Fahrenheit)
Reference contact compensation accuracy	plus or minus 1.0degrees 33.8degrees Fahrenheit (with thermocouple input)
Input impedance:Voltage	1 MOhm
Input impedance:Current	250 Ohm
Insulation method:Between input terminals and internal circuit	Photocoupler and isolated DC/DC converter
Insulation method:Between channels	PhotoMOS relay
Conversion execution / non-execution channel setting	Selectable per channel unit
Input range change method	Selectable per channel
Digital processing:Averaging	Cycle, time, moving
Digital processing:Scale conversion setting	Any value within plus or minus 30,000 (Voltage and current range only)
Digital processing:Offset setting	Any value within plus or minus 3,000
Digital processing:Gain setting	plus or minus 10%
Comparison of upper and lower limit values	Selectable for one channel
Max. and min. value holding	Selectable for one channel
Broken wire detection	Available
Connection method	Connector type terminal block

COMMON GENERAL SPECIFICATIONS

Item	Specifications
Ambient temperature	0 to +55 degrees +32 to +131 degrees Fahrenheit , at storage: -40 to +70 degrees -40 to +158 degrees Fahrenheit
Ambient humidity	10 to 95 % RH (at 25 degrees 77 degrees Fahrenheit , no condensation), at storage: 10 to 95 % RH (at 25 degrees 77 degrees Fahrenheit , no condensation)
Breakdown voltage	500 V AC for 1 minute
Insulation resistance	100 MOhm or more (at 500 V DC)
Vibration resistance	5 to 8.4 Hz, single amplitude of 3.5 mm 0.138 in, 1 sweep/min. (IEC61131-2); 8.4 to 150 Hz, constant acceleration of 9.8 m/s ² , 1 sweep/min. (IEC61131-2), 10 times each in X, Y, and Z directions
Shock resistance	147 m/s ² or more , 3 times each in X, Y, and Z directions (IEC61131-2)
Noise immunity	1,000 V [p-p] with pulse width 50 ns and 1 micro s (using a noise simulator)
Operating condition	Free from corrosive gasses and excessive dust

INDIVIDUAL GENERAL SPECIFICATIONS

Item	Specifications
Rated voltage range	-
Current consumption	80 mA or less
Net weight	145 g approx.
Accessory	-

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