

MicroSmart FC6A PLC

FC6A-J4CH1Y



KEY FEATURES

- 4-point Isolated Thermocouple input
- Selectable 30ms or 120ms sampling time
- Up to 15-bit resolution
- Coupler-isolated between inputs



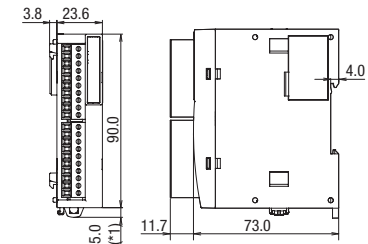
Class Div2
Hazardous
Location

SPECIFICATIONS

Part No.	FC6A-J4CH1Y	
Input Signal Type	Thermocouple	
Input Range	Type K (-200 to +1,300°C) Type J (-200 to +1,000°C) Type R (0 to 1,760°C) Type S (0 to 1,760°C) Type B (0 to 1,820°C) Type E (-200 to +800°C) Type T (-200 to +400°C) Type N (-200 to +1,300°C) Type C (0 to 2,315°C)	
Input Impedance	1 MΩ minimum	
Input Detection Current	0.1mA maximum	
AD Conversion	Sampling Time	30ms, 120ms (selectable using WindLDR)
	Sampling Repetition Time	Sampling time × valid input channels
	Total Input System Transfer Time	Sampling time + sampling repetition time + 1 scan time
	Type of Input	Differential input
	Operating Mode	Self-scan
Input Error	Conversion Method	Σ Δ type ADC
	Maximum Error at 25°C	±0.2% of full scale + cold junction compensation error (*3)
	Cold Junction Compensation Error	±4°C maximum
	Temperature Coefficient	0.01%/°C of full scale
Data	Digital Resolution	Type K: approx. 15,000 increments (14 bits) Type J: approx. 12,000 increments (14 bits) Type R: approx. 17,600 increments (15 bits) Type S: approx. 17,600 increments (15 bits) Type B: approx. 18,200 increments (15 bits) Type E: approx. 10,000 increments (14 bits) Type T: approx. 6,000 increments (13 bits) Type N: approx. 15,000 increments (14 bits) Type C: approx. 23,150 increments (15 bits)
	Input Value of LSB	0.1°C 0.1°C
	Monotonicity	Yes
	Input Data Out of Range	Detectable (*2)
	Input Filter	Soft filter (0 to 10s, selectable in increments of 0.1s) (selectable with WindLDR)
Noise Resistance	Recommended Cable for Noise Immunity	Pair cable
	Crosstalk	1LSB maximum
	Between input and power circuit	1LSB maximum
Isolation	Between input and internal circuit	Transformer-isolated
	Between inputs	Optocoupler-isolated
Effect of Improper Input Connection	No damage	
Maximum Permanent Allowed Overload (No Damage)	13V DC 40mA	
Selection of Input Signal Type and Input Range	Selectable with WindLDR	
Calibration or Verification to Maintain Rated Accuracy	Not possible	

DIMENSIONS (mm)

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*1: The data processed in the analog I/O module can be linear-converted to a value between -32,768 and 32,767. The optional range designation, and analog I/O data minimum and maximum values can be selected using data registers allocated to analog I/O modules.

*2: When an error is detected, a corresponding error code is stored to a data register allocated to analog I/O operating status.

*3: R, S: ±6 (0 to 200°C). B: no compensation. K, J, E, T, N: ±0.4% of full scale (0°C maximum)