

MicroSmart FC6A PLC

FC6A-K2A1



KEY FEATURES

- 2-point Current/Voltage outputs
- Supports - 10 to 10V DC, 0/4 to 20mA
- 12-bit resolution



Class Div2
Hazardous
Location

GENERAL SPECIFICATIONS

Part No.	FC6A-K2A1	
Output Points	2	
Output Signal Style	Voltage (0 to 10V) Voltage (-10 to +10V) Current (0 to 20mA) Current (4 to 20mA)	
External Power Supply	Rated Power Voltage 24V DC, Allowable Voltage Range 20.4 to 28.8V DC	
External Current Draw (24V DC) (*1)	70mA	
Internal Power Consumption (5V DC)	40mA max.	
Internal Power Consumption(at 24V DC while all I/Os are ON)	0.27W	
Connector	Insertion/Removal Durability	100 times minimum
	Applicable Ferrule	1-wire: AI 0.5-10 (Phoenix Contact), 2-wire: AI-TWIN 2x0.5-10 (Phoenix Contact)
Weight (approx.)	115g	

*1: The external current draw is the value when all the analog inputs are used and the analog output value is at 100%.

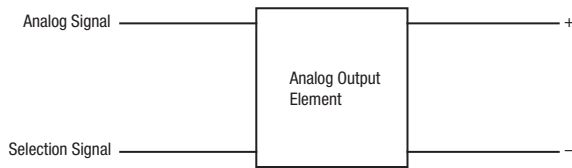
OUTPUT SPECIFICATIONS

Part No.	FC6A-K2A1	
Output Signal Style/Output Range	Voltage	0 to 10V DC -10 to +10VDC
	Current	0 to 20mA 4 to 20mA
Load	Impedance	Voltage output: 1 kΩ minimum Current output: 300Ω maximum
	Load Type	Resistive load
DA Conversion	DA Conversion Time	1ms
	Output Update Interval	1ms
	Total Output System Transfer Time	DA Conversion Time +Output Update Interval + 1 scan time
Output Error	Maximum Error at 25°C	±0.2% of full scale
	Temperature Coefficient	±0.01%/°C of full scale
	Repeatability after Stabilization Time	±0.4% of full scale
	Output Voltage Drop	No damage
	Non-linearity	±0.2% of full scale
	Output Ripple	20mV maximum
	Overshoot	0%
Total Error	±1% of full scale	

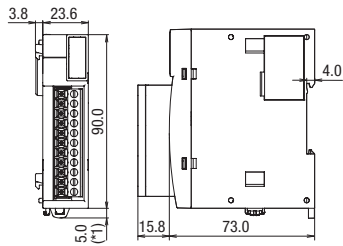
OUTPUT SPECIFICATIONS (CON'T)

Data	Digital Resolution		4,096 increments (12 bits)
	Output Value of LSB	Voltage	0 to 10V DC: 2.44mV -10 to +10V DC: 4.88mV
		Current	0 to 20mA: 4.88μA 4 to 20mA: 3.91μA
	Data Type in Application Program		Optional: -32,768 to 32,767 (selected for each channel)
	Monotonicity		Yes
	Current Loop Open		Undetectable
Noise Resistance	Recommended Cable for Noise Immunity		Pair shielded cable
	Crosstalk		1LSB
Isolation	Between output and power circuit		Transformer-isolated
	Between output and internal circuit		Optocoupler-isolated
Effect of Improper Output Connection			No damage
Selection of Analog Output Signal Type			Selectable with WindLDR
Calibration or Verification to Maintain Rated Accuracy			Not possible

OUTPUT CIRCUIT



DIMENSIONS (mm)



MOUNTING HOLE LAYOUT (mm)

