# MicroSmart FC6A PLC

FC6A-K2A1





#### **KEY FEATURES**

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







### **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 2×0.5-10 (Phoenix Contact)	
Weight (approx.)		115g	

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

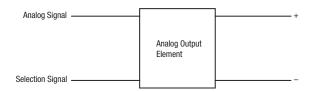
#### **OUTPUT SPECIFICATIONS**

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: $1\mathrm{k}\Omega$ minimum Current output: $300\Omega$ 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	
	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 Error	Output Voltage Drop		No damage	
Output Error	Non-lineality		±0.2% of full scale	
	Output Ripple		20mV maximum	
	Overshoot		0%	
	Total Error		±1% of full scale	

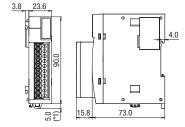
## **OUTPUT SPECIFICATIONS (CON'T)**

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	Recommended Cable for Noise Immunity		Pair shielded cable	
Resistance	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)**

