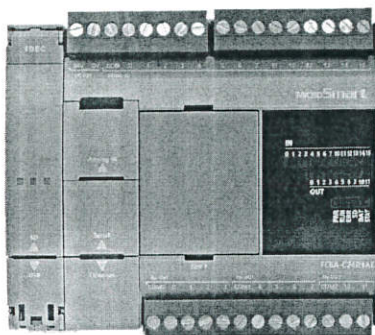


MicroSmart FC6A PLC CPU Module Specifications



KEY FEATURES

- Embedded Ethernet port
- Embedded SD memory port
- Modbus TCP and RTU
- Embedded RS232C/RS485 user selectable
- Maximum 520 digital I/O
- Maximum 126 analog I/O
- Data Logging
- Web Server Functions
- Large programming and data memory
- SAE J1939 CPU

Standard Base Module

Part Number	Total I/O	Power Voltage	Input Voltage	Output Type	Maximum Digital I/O	Maximum Analog I/O
FC6A-C16R1AE	16 (9 inputs, 7 outputs)	100-240V AC	24V DC Sink/Source	Relay	400	100
FC6A-C16R1CE		24V DC		Relay		
FC6A-C16P1CE				Transistor Source		
FC6A-C16K1CE				Transistor Sink		
FC6A-C24R1AE	24 (14 inputs, 10 outputs)	100-240V AC	24V DC Sink/Source	Relay	504	124
FC6A-C24R1CE		24V DC		Relay		
6A-C24P1CE				Transistor Source		
FC6A-C24K1CE				Transistor Sink		
FC6A-C40R1AE	40 (24 inputs, 16 outputs)	100-240V AC	24V DC	Relay	520	126
FC6A-C40R1CE		24V DC		Relay		
FC6A-C40P1CE				Transistor Source		
FC6A-C40K1CE				Transistor Sink		
FC6A-C40R1DE	12V DC	12V DC Sink/Source	Relay	40	6	
FC6A-C40P1DE			Transistor Source			
FC6A-C40K1DE			Transistor Sink			

CAN J1939 Base Module

Part Number	Total I/O	Power Voltage	Input Voltage	Output Type	Maximum Digital I/O	Maximum Analog I/O
FC6A-C40R1AEJ	40 (24 inputs, 16 outputs)	100-240V AC	24V DC Sink/Source	Relay	250	126
FC6A-C40R1CEJ		24V DC		Relay		
FC6A-C40P1CEJ				Transistor Source		
FC6A-C40K1CEJ				Transistor Sink		
FC6A-C40R1DEJ	12V DC	12V DC Sink/Source	Relay	40	6	
FC6A-C40P1DEJ			Transistor Source			
FC6A-C40K1DEJ			Transistor Sink			

SPECIFICATIONS

Part Number		FC6A-C16R1AE FC6A-C16R1CE FC6A-C16P1CE FC6A-C16K1CE	FC6A-C24R1AE FC6A-C24R1CE FC6A-C24P1CE FC6A-C24K1CE	FC6A-C40R1AE FC6A-C40R1CE FC6A-C40P1CE FC6A-C40K1CE FC6A-C40R1DE FC6A-C40P1DE FC6A-C40K1DE	FC6A-C40R1AEJ FC6A-C40R1CEJ FC6A-C40P1CEJ FC6A-C40K1CEJ FC6A-C40R1DEJ FC6A-C40P1DEJ FC6A-C40K1DEJ
Rated Power Voltage		AC: 100 to 240V AC, DC: 24V DC, 12V DC			
Allowable Voltage Range		AC: 85 to 264V AC 24V DC: 20.4 to 28.8V DC (including ripple), 12V DC: 10.2 to 18.0V			
Rated Frequency		AC: 50/60Hz (47 to 63 Hz)			
Maximum Power Consumption (CPU module)	AC	FC6A-C16R1AE: 100-240V AC, 33VA FC6A-C24R1AE: 100-240V AC, 35VA FC6A-C40R1AE: 100-240V AC, 41VA FC6A-C40R1AEJ: 100-240V AC, 37VA			
	DC	FC6A-C16R1CE: 24V DC 140mA, 3.36W FC6A-C24R1CE: 24V DC 155mA, 3.72W FC6A-C40R1CE: 24V DC 195mA, 4.68W FC6A-C16P1CE: 24V DC 190mA, 4.5W FC6A-C24P1CE: 24V DC 200mA, 4.8W FC6A-C40P1CE: 24V DC 205mA, 5.0W	FC6A-C16K1CE: 24V DC 190mA, 4.6W FC6A-C24K1CE: 24V DC 200mA, 4.8W FC6A-C40K1CE: 24V DC 205mA, 5.0W FC6A-C40R1DE: 12V DC 345mA, 4.14W FC6A-C40P1DE: 12V DC 260mA, 3.12W FC6A-C40K1DE: 12V DC 260mA, 3.12W	FC6A-C40R1CEJ: 24V DC 205mA, 5.0W FC6A-C40P1CEJ: 24V DC 175mA, 4.2W FC6A-C40K1CEJ: 24V DC 175mA, 4.2W FC6A-C40R1DEJ: 12V DC 340mA, 4.08W FC6A-C40P1DEJ: 12V DC 320mA, 3.9W FC6A-C40K1DEJ: 12V DC 320mA, 3.9W	
Allowable Momentary Power Interruption		10 ms (at rated voltage)			
Dielectric Strength		Between power and ground terminals: 1,500V AC, 1 minute Between I/O and ground terminals: 1,500V AC, 1 minute			
Insulation Resistance		Between power and ground terminals: 100 MΩ minimum (500V DC megger) Between I/O and ground terminals: 100 MΩ minimum (500V DC megger)			
Noise Resistance		AC or DC power terminal: 1.5kV (DC type: 1kV), 50 ns to 1 μs I/O terminals (coupling clamp): 1.5kV, 50ns to 1μs coupling adapter			
Inrush Current		AC: 40A maximum 24V DC: 35A maximum 12V DC: 35A maximum			
Power Supply Wire		AWG22, AWG18			
Operating Temperature		-10 to +55°C (no freezing)			
Storage Temperature		-25 to +70°C (no freezing)			
Relative Humidity		Level RH1 (IEC 61131-2-10 to 95% (no condensation)			
Altitude		Operation: 0 to 2,000m, 795 to 1,013hPa, Transport: 0 to 3,000m, 701 to 1,013hPa			
Pollution Degree		2 (IEC 60664-1)			
Corrosion Immunity		Free from corrosive gases			
Degree of Protection		IP20 (IEC 60529)			
Ground		D-type ground (Class 3 ground)			
Grounding Wire		AWG16			
Vibration Resistance		5 to 8.4 Hz amplitude 3.5 mm, 8.4 to 150 Hz acceleration 9.8 m/s ² (1G), 2 hours per axis on each of three mutually perpendicular axes (IEC 61131-2)			
Shock Resistance		147 m/s ² (15G), 11 ms duration, 3 shocks per axis on three mutually perpendicular axes			
Mounting		DIN rail or panel mounting			
Weight	AC: 350g DC: 340g	AC: 420g DC: 400g	AC: 560g DC (relay): 530g DC (transistor): 480g	AC: 560g DC (relay/24V DC): 530g DC (relay/12V DC): 560g DC (transistor/24V DC): 480g DC (transistor/12V DC): 530g	

SPECIFICATIONS CONT.

Part Number	FC6A-C16R1AE FC6A-C16R1CE FC6A-C16P1CE FC6A-C16K1CE	FC6A-C24R1AE FC6A-C24R1CE FC6A-C24P1CE FC6A-C24K1CE	FC6A-C40R1AE FC6A-C40R1CE FC6A-C40P1CE FC6A-C40K1CE	FC6A-C40R1DE FC6A-C40P1DE FC6A-C40K1DE	FC6A-C40R1AEJ FC6A-C40R1CEJ FC6A-C40P1CEJ FC6A-C40K1CEJ	FC6A-C40R1DEJ FC6A-C40P1DEJ FC6A-C40K1DEJ
Control System	Stored program system					
Instruction Words	Basic	42				
	Advanced	124				
Program Capacity ¹	384KB (48,000 steps)/72KB (9,000 steps) ²				640KB (80,000) 72KB (9,000 steps) ²	
User Program Storage	Serial Flash Memory (100,000 times rewritable)					
Processing Time	Basic Instruction	42us/1,000 steps				
	END Processing ³	1ms maximum				
I/O Points	Input	9 points	14 points		24 points	
	Output	7 points	10 points		16 points	
Expandable Modules	4 modules	7 modules	7 modules		7 modules	
Expandable I/O Points with Expansion Modules	128 points	224 points	224 points		224 points	
Expandable Modules with Expansion Interface Modules		8 modules		n/a	8 modules	
Expandable I/O Points with Expansion Interface Modules		256 points			256 points	
Internal Relay	12,400 points					
Special Internal Relay	256 points					
Shift Register	256 points					
Data Register	54,000 points					
Special Data Register	500 points					
Counter	512 points					
Timer (1ms, 10ms, 100ms, 1s)	1,024 points					
Clock	Clock accuracy: ±30 sec/month (typical) at 25°C					
RAM Backup	Backup Data	Internal relay, shift register, counter, data register, timer, special data register, special internal relay				
	Battery	Lithium primary battery (BR2032)				
	Battery Life	Approx. 4 years				
	Replaceability	Possible				
Self-diagnostic Function	Keep data, user program sum check (EEPROM), user program sum check (RAM), timer/counter preset value sum check, user program syntax check, user program execution check, WDT check, user program write check, power failure, clock error, data link connection check, I/O bus initialization check					
Input Filter	0 ms (without filter), 3 to 15ms (selectable in increments of 1ms)					
Catch Input/Interrupt Input	Six inputs 10, 11, 16, 17 Minimum turn on pulse width: 5µs max. Minimum turn off pulse width: 5µs max.			13, 14 Minimum turn on pulse width: 35µs max. Minimum turn off pulse width: 35µs max.		
High-speed Counter	Maximum Counting Frequency and High-speed Counter Points	Total 6 points Single/two-phase selectable: 100 kHz (single-phase: 4 points, two-phase: 2 points) Single-phase: 5 kHz (2 points)				
	Counting Range	0 to 4,294,967,295 (32 bits)				
	Operation Mode	Rotary encoder mode, adding counter mode, frequency measurement mode				
Analog Potentiometer	Quantity	1 point				-
	Data Range	0 to 1,000				-
Analog Voltage Input	Quantity	1 point				-
	Input Voltage Range	0 to 10V				-
	Input Impedance	Approx. 100KΩ				-
	Digital Resolution	Approx. 1,000 steps (10 bits)				-
Pulse Output	Quantity	4 points				
	Maximum Frequency	High speed output port: 100 kHz (2 points) maximum Middle speed output port: 5 kHz (2 points maximum)			High speed output port: 100 kHz maximum	
External Power Supply for Sensor (AC only)	Output Voltage/Current	24V (+10%, -15%) / 250mA				
	Overload Detection	Impossible				
	Isolation from the internal circuit	Transformer-isolated				
USB Port	USB mini-B (maintenance communication)					
Serial Port 1, CAN Port	RS232C or RS485 ⁴				CAN J1939	
Ethernet Port 1	Ethernet (maintenance communication, user communication, user communication, Modbus TCP server/client)					
SD Card Slot	Embedded					
Cartridge (option)	One cartridge can be added			Two cartridges can be added		
II Module (option)	Yes	Yes	Yes	Yes	Yes	Yes

Note: The maximum number of relay outputs that can be turned on simultaneously is limited.

Note 1: 1 step equals 8 bytes.

Note 2: When 72KB is selected, download function can be used during RUN.

Note 3: Not including expansion I/O service time, counter timer processing time, data link processing time, and interrupt processing time.

Note 4: Maintenance communication, user communication, data link, Modbus RTU master/slave communication.

USB Port Specifications

Part Number	FC6A-C16R1AE FC6A-C16R1CE FC6A-C16P1CE FC6A-C16K1CE	FC6A-C24R1AE FC6A-C24R1CE FC6A-C24P1CE FC6A-C24K1CE	FC6A-C40R1AE FC6A-C40R1CE FC6A-C40P1CE FC6A-C40K1CE FC6A-C40R1DE FC6A-C40P1DE FC6A-C40K1DE	FC6A-C40R1AEJ FC6A-C40R1CEJ FC6A-C40P1CEJ FC6A-C40K1CEJ FC6A-C40R1DEJ FC6A-C40P1DEJ FC6A-C40K1DEJ
USB Type	USB mini-B			
USB Standard	USB 2.0 full speed			
Isolation	Not isolated from the internal circuit			
Communication Function	Maintenance communication to PC			

Ethernet Port 1 Specifications

Part Number	FC6A-C16R1AE FC6A-C16R1CE FC6A-C16P1CE FC6A-C16K1CE	FC6A-C24R1AE FC6A-C24R1CE FC6A-C24P1CE FC6A-C24K1CE	FC6A-C40R1AE FC6A-C40R1CE FC6A-C40P1CE FC6A-C40K1CE FC6A-C40R1DE FC6A-C40P1DE FC6A-C40K1DE	FC6A-C40R1AEJ FC6A-C40R1CEJ FC6A-C40P1CEJ FC6A-C40K1CEJ FC6A-C40R1DEJ FC6A-C40P1DEJ FC6A-C40K1DEJ
Communication Type	IEEE802.3 compliant			
Data Transfer	10BASE-T, 100BASE-TX			
Connector	RJ45			
Cable	CAT.5STP			
Maximum Cable Length	100m			
Isolation	Pulse trans isolation			
Communication Function	Maintenance communication server, user communication server, Modbus TCP (server/client), PING, SNTP			

Serial Port 1, CAN Port Specifications

Part Number	FC6A-C16R1AE FC6A-C16R1CE FC6A-C16P1CE FC6A-C16K1CE	FC6A-C24R1AE FC6A-C24R1CE FC6A-C24P1CE FC6A-C24K1CE	FC6A-C40R1AE FC6A-C40R1CE FC6A-C40P1CE FC6A-C40K1CE FC6A-C40R1DE FC6A-C40P1DE FC6A-C40K1DE	FC6A-C40R1AEJ FC6A-C40R1CEJ FC6A-C40P1CEJ FC6A-C40K1CEJ FC6A-C40R1DEJ FC6A-C40P1DEJ FC6A-C40K1DEJ
Port Type	Serial port 1		CAN port	
Communication Type	RS232C or RS485 selectable		CAN	
Connector	RJ45		Terminal Block (5-pole)	
Cable	CAT. 5STP		SAE J1939-11/SAE J1939-15	
Maximum Baud Rate Maximum Cable Length	115,200bps RS232C: 5m, RS485: 200m		SAE J1939-11: 250bps: 40m, stubs, 1m maximum SAE J1939-15: 250bps: 40m, stubs, 3m maximum	
Isolation	Not isolated from the internal circuit		Isolated from the internal circuit	
Communication Function	Maintenance communication, user communication, Modbus RTU (master/slave)		J1939	

CAN J1939 Specifications

Part Number	FC6A-C40P1CEJ FC6A-C40K1CEJ FC6A-C40P1DEJ FC6A-C40K1DEJ	FC6A-C40R1AEJ FC6A-C40R1CEJ FC6A-C40R1DEJ	
Supported SAE J1939	SAE J1939-11: Physical Layer, 250K bits/s, Twisted Shielded Pair SAE J1939-15: Reduced Physical Layer, 250K bits/s, Unshielded Twisted Pair SAE J1939-21: Data Link Layer SAE J1939-71: Vehicle Application Layer SAE J1939-73: Application Layer - Diagnostics SAE J1939-75: Application Layer - Generator Sets and Industrial SAE J1939-81: Network Management		
Transmit/Receive Message	Maximum No. of Send Message	100	
	Maximum No. of Receive Message	200	
	Transmittable PGN	Optional	
	Maximum Length of Transmit/Receive Message	1 to 252 bytes/message	
Transmission Function	Transmission Type	Event transmission/periodical transmission	
	Event Transmission	Transmission Method	Internal relay
	Cycle Transmission	Transmission Method	Internal relay
Receive Function	Receive Method	10 to 655,350 ms (in increments of 10ms)	
	Receive Cycle Monitor	Polling reception ² 0, 10 to 655,350 ms (disabled at 0)	
Request Function		Yes	
Network Management Function		Static address/dynamic address management	
NAME		Optional (automatic switching of static address /dynamic address management at highest-order bit)	
Number of Nodes Manageable		128 nodes	
PGNs used Internally		00EA00h: Request PGN	
		00E800h: Acknowledgement	
		00EB00h: TP.DT	
		00EC00h: TP.CM	
		00EE00h: Address claim	

Note 1: Message is transmitted in END processing. Actual transmission cycle is affected by the ladder execution cycle.
Note 2: Receive message is transferred from internal buffer to data register in END processing.

Input Specifications

Part Number	FC6A-C16R1AE FC6A-C16R1CE FC6A-C16P1CE FC6A-C16K1CE	FC6A-C24R1AE FC6A-C24R1CE FC6A-C24P1CE FC6A-C24K1CE	FC6A-C40R1AE FC6A-C40R1CE FC6A-C40P1CE FC6A-C40K1CE FC6A-C40R1DE FC6A-C40P1DE FC6A-C40K1DE	FC6A-C40R1AEJ FC6A-C40R1CEJ FC6A-C40P1CEJ FC6A-C40K1CEJ FC6A-C40R1DEJ FC6A-C40P1DEJ FC6A-C40K1DEJ
Input Points	9 (9/1 common)	14 (14/1 common)		24 (24/1 common)
Rated Input Voltage	AC, 24V DC: 24V DC sink/source input signal 12V DC: 12V DC sink/source input signal			
Input Voltage Range	AC, 24V DC: 0 to 28.8V DC 12V DC: 0 to 18.0V DC			
Rated Input Current	AC, 24V DC: high speed input port: 5mA/pt, middle/normal speed input port 7mA/pt 12V DC: high speed input port: 5mA/pt, middle/normal speed input port 6mA/pt			
Input Impedance	AC, 24V DC: high speed input port: 4.9k Ω , middle/normal speed input port: 3.4k Ω 12V DC: high speed input port: 1.8k Ω , middle/normal speed input port: 2.0k Ω			
Turn ON Time	High-speed input port: 5 μ s + filter value Middle-speed input port: 35 μ s + filter value Normal-speed input port: 35 μ s + filter value			
Turn OFF Time	High-speed input port: 5 μ s + filter value Middle-speed input port: 35 μ s + filter value Normal-speed input port: 100 μ s + filter value			
Isolation	Between input terminals: Not isolated Internal circuit: Photocoupler-isolated			
Input Type	Type1 (IEC 61131-2)			
External Load for I/O Interconnection	Not needed			
Signal Determination Method	Static			
Effect of Improper Input Connection	Both sinking and sourcing input signals can be connected, therefore reverse connection does not cause damage. If any input exceeding the rated value is applied, permanent damage may be caused.			
Cable Length	3m in compliance with electromagnetic immunity			
Insertion Durability	100 times minimum			
Connector	1-wire: AI 0.5-8 WH (Phoenix Contact) 2-wire: AI-TWIN 2x0.5-8 WH (Phoenix Contact)			

Transistor Output Specifications

Part Number	FC6A-C16P1CE FC6A-C16K1CE	FC6A-C24P1CE FC6A-C24K1CE	FC6A-C40P1CE FC6A-C40K1CE FC6A-C40P1DE FC6A-C40K1DE	FC6A-C40P1CEJ FC6A-C40K1CEJ FC6A-C40P1DEJ FC6A-C40K1DEJ
Transistor Output Points	7 (7/1 common)	10 (10/1 common)		16 (8/1 common)
Output Type	Transistor Sink FC6A-C16K1CE/FC6A-C24K1CE/FC6A-C40K1CE/FC6A-C40K1DE/FC6A-C40K1CEJ/FC6A-C40K1DEJ Transistor Source FC6A-C16P1CE/FC6A-C24P1CE/FC6A-C40P1CE/FC6A-C40P1DE/FC6A-C40P1CEJ/FC6A-C40P1DEJ			
Rated Load Voltage	24V DC: 24V DC 12V DC: 12V DC			
Voltage Tolerance	24V DC: 19.2 to 28.8V DC 12V DC: 10.2 to 18.0V DC 24V DC: 19.2 to 28.8V DC 12V DC: 10.2 to 16.0V DC			
Rated Load Current	Per Point 0.5A Per Common 3.5A 5A 4A			
Voltage Drop (ON Voltage)	1V max (voltage between COM and output terminal when output is on.)			
Inrush Current	1A			
Leakage Current	0.1mA maximum			
Clamping Voltage	24V DC: 39V \pm 1V 12V DC: 27V \pm 1V			
Maximum Lamp Load	12W			
Inductive Load	24V DC: L/R=10ms (28.8V DC, 1Hz) 12V DC: FC6A-C40P1DE/FC6A-C40K1DE, L/R=10ms (18.0V DC 1Hz), FC6A-C40P1DEJ/FC6A-C40K1DEJ, L/R=10ms (16.0V DC, 1Hz)			
Overcurrent Protection	Transistor Sink Output: No Transistor Source Output: Overcurrent is detected by current limit resistance. ¹			
External Current Draw	24V DC: 100mA maximum, 24V DC (power voltage at the +V terminal, -V terminal at source) 12V DC: 100mA maximum, 12V DC (power voltage at the +V terminal, -V terminal at source)			
Isolation	Between output terminal and Internal circuit: Photocoupler-isolated Between output terminals: Not isolated			
Insertion Durability	100 times minimum			
Connector	1-wire: AI 0.5-8 WH (Phoenix Contact) 2-wire: AI-TWIN 2x0.5-8 WH (Phoenix Contact)			
Turn ON Time	High speed input port: 5 μ s Middle speed input port: 30 μ s Normal speed input port: 300 μ s		High speed input port: 5 μ s Middle speed input port: 300 μ s	
Turn OFF Time	High speed input port: 5 μ s Middle speed input port: 30 μ s Normal speed input port: 300 μ s		High speed input port: 5 μ s Middle speed input port: 300 μ s	

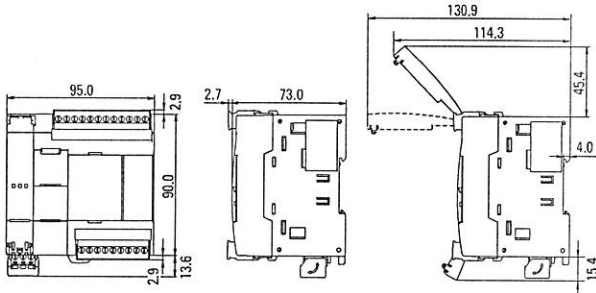
Note 1: This overcurrent signals consist of one signal per 4 point outputs. When microprocessor gets this overcurrent signal by interrupt input, microprocessor turns off 4pt outputs of this category at fixed time (approx. 1 second).

Relay Output Specifications

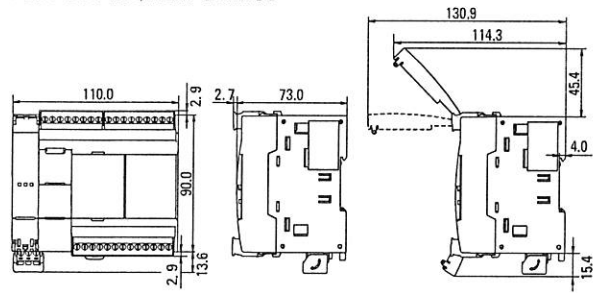
Part Number		FC6A-C16R1AE FC6A-C16R1CE	FC6A-C24R1AE FC6A-C24R1CE	FC6A-C40R1AE FC6A-C40R1CE FC6A-C40R1DE	FC6A-C40R1AEJ FC6A-C40R1CEJ FC6A-C40R1DEJ
Relay Output Points		7	10		16
Output Points per Common Line	COM1	4	4		4
	COM2	3	4		4
	COM3	—	2		4
	COM4	—	—		4
Output Type				1NO	
Maximum Load Current	Per Point			2A	
	Per Common	COM1: 7A COM2: 6A	COM1: 7A COM2: 7A	COM3: 4A	COM1: 7A COM2: 7A COM3: 7A COM4: 7A
Minimum Switching Load		1mA/5V DC (reference value)			
Initial Contact Resistance		30 mΩ maximum			
Electrical Life		100,000 operations minimum (rated load 1,800 operations/hour)			
Mechanical Life		20,000,000 operations minimum (no load 18,000 operations/hour)			
Rated Load		Resistive load: 240V AC 2A, 30V DC 2A Inductive load: 240V AC 2A (cos φ = 0.4), 30V DC 2A (L/R = 7 ms)			
Dielectric Strength		Between output and ground terminals: 1,500V AC, 1 minute Between output terminal and internal circuit: 1,500V AC, 1 minute Between output terminals (COMs): 1,500V AC, 1 minute			
Connector	Insertion/ Removal Durability	100 times minimum			
	Applicable Ferrule	1-wire: AI 0.5-8 WH (Phoenix Contact) 2-wire: AI-TWIN 2x0.5-8 WH (Phoenix Contact)			

DIMENSIONS (all dimensions are in mm)

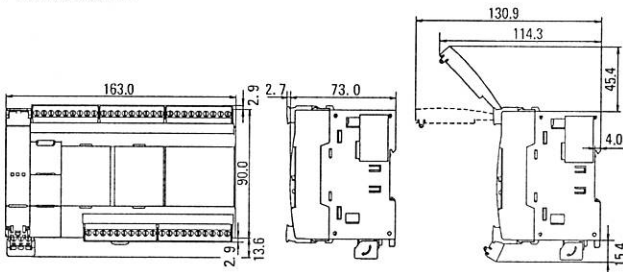
FC6A-C16R1AE/FC6A-C16R1CE
FC6A-C16P1CE/FC6A-C16K1CE



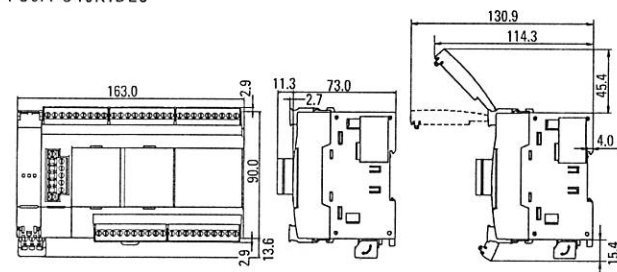
FC6A-C24R1AE/FC6A-C24R1CE
FC6A-C24P1CE/FC6A-C24K1CE



FC6A-C40R1AE/FC6A-C40R1CE
FC6A-C40P1CE/FC6A-C40K1CE
FC6A-C40R1DE/FC6A-C40P1DE
FC6A-C40K1DE



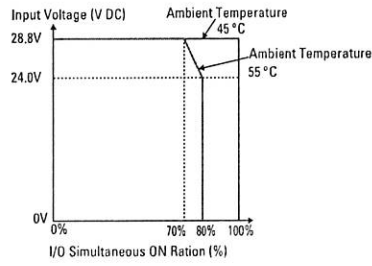
FC6A-C40R1AEJ/FC6A-C40R1CEJ
FC6A-C40P1CEJ/FC6A-C40K1CEJ
FC6A-C40R1DEJ/FC6A-C40P1DEJ
FC6A-C40K1DEJ



Temperature derating curves: Input voltage vs. I/O Simultaneous ON Ratio (%)

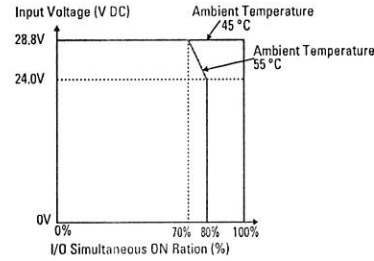
Input (with cartridge)

FC6A-C16K1CE FC6A-C40K1CEJ
 C6A-C24K1CE FC6A-C40K1DEJ
 C6A-C40K1CE
 FC6A-C40K1DE



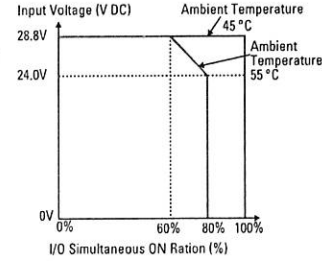
Output (with cartridge)

FC6A-C16K1CE FC6A-C40K1DE
 FC6A-C24K1CE FC6A-C40K1CEJ
 FC6A-C40K1CE FC6A-C40K1DE



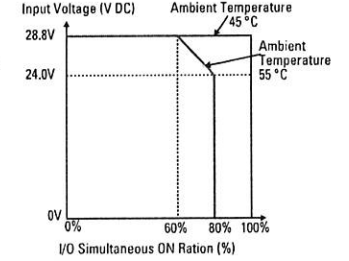
Input (w/o cartridge)

FC6A-C24P1CE FC6A-C40P1CEJ
 FC6A-C40P1CE FC6A-C40P1DEJ
 FC6A-C40P1DE



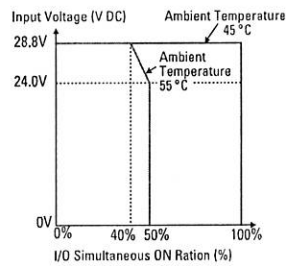
Output (w/o cartridge)

FC6A-C24P1CE FC6A-C40P1DEJ
 FC6A-C40P1CE
 FC6A-C40P1DE
 FC6A-C40P1CEJ



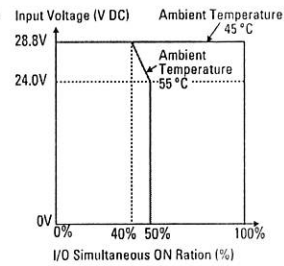
Input (with cartridge)

FC6A-C24P1CE FC6A-C40P1DEJ
 FC6A-C40P1CE
 FC6A-C40P1DE
 FC6A-C40P1CEJ



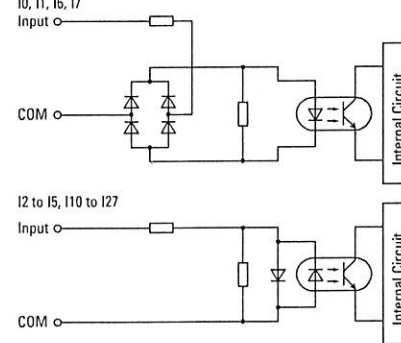
Output (with cartridge)

FC6A-C24P1CE FC6A-C40P1CEJ
 FC6A-C40P1CE FC6A-C40P1DEJ
 FC6A-C40P1DE

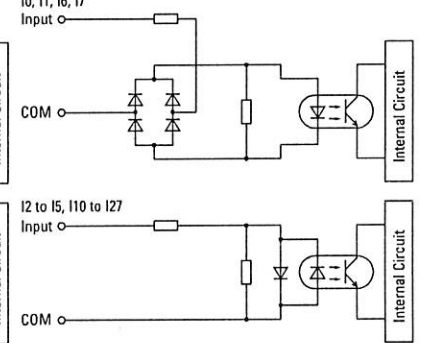


Input Internal Circuit

100V to 240V AC, 24V DC
 Transistor Sink Output

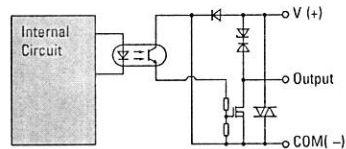


12V DC
 Transistor Sink Output

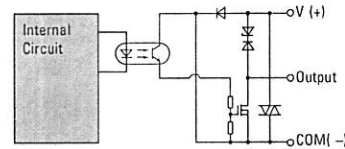


Output Internal Circuit

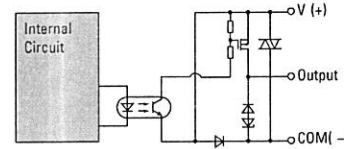
100V to 240V AC, 24V DC
 Transistor Sink Output



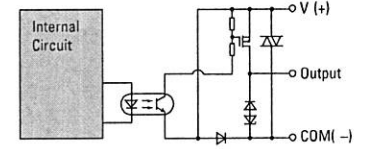
12V DC
 Transistor Sink Output



100V to 240V AC, 24V DC
 Transistor Source Output



12V DC
 Transistor Source Output





NRAG7.E211795

Programmable Controllers for Use in Hazardous Locations Certified for Canada

Page Bottom

Programmable Controllers for Use in Hazardous Locations Certified for Canada

[See General Information for Programmable Controllers for Use in Hazardous Locations Certified for Canada](#)

IDEC CORP

E211795

6-64 NISHIMIYAHARA 2-CHOME
YODOGAWA-KU, OSAKA 532-0004 JAPAN

Class I, Division 2, Groups A, B, C and D.

Programmable controllers, CPU modules, "FT1A Series" Models FT1A-B12RA, -B12RC, -H12RA, -H12RC, -B24RA, -B24RC, -H24RA, -H24RC, -B40RKA, -B40RSA, -B40RC, -H40RKA, -H40RSA, -H40RC, -B48KA, -B48SA, -B48KC, -B48SC, -H48KA, -H48SA, -H48KC, -H48SC.

Open-type programmable controllers, LOGO, Cat. Nos. FL1D-K2B2, FL1E-H12RCE, FL1E-H12SND, FL1B-M008B1S2, FL1B-J2B2, FL1D-K2BM2, FL1E-RD1, FL1E-PM4, FL1E-PB1, FL1E-PG1.

Cat. Nos. FL1F-H12SCD, FL1F-H12RCE, FL1F-H12RCA, FL1F-H12RCC, FL1F-B12RCE, FL1F-B12RCA, FL1F-B12RCC, FL1F-M008B1S2, FL1F-M008B2R2, FL1F-M08D2R2, FL1F-M08C2R2, FL1F-J2B2, FL1F-K2BM2, FL1F-J2BR2, FL1F-RD1.

Programmable controllers, FC4A and FC5A Series, Base Modules: FC4A-C10R2, -C10R2C, -C16R2, -C16R2C, -C24R2, -C24R2C, -D20K3, -D20S3; Base Modules: FC4A-D20RK1, -D20RS1, -D40K3, -D40S3, may be followed by -DS02B; Base Modules: FC5A-C10R2, -C10R2C, -C10R2D, -C16R2, -C16R2C, -C16R2D, -C24R2, -C24R2C, -C24R2D, -D16RK1, -D16RS1, -D32K3, -D32S3, -D12K1E, -D12S1E; Expansion Modules: FC4A-R081, -R161, -T08K1, -T08S1, -T08SP1, -T16K3, -T16S3, -T16SP3, -T32K3, -T32S3, -T32SP3, -K4A1, -N08B1, -N16B1, -N16B3, -N32B3, -M08BR1, -M24BR2, -L03AP1, -L03A1, -J2A1, -K1A1, -N08A11, -J4CN1, -J8C1, -J8AT1, -K2C1; Expansion Interface Modules: FC5A-EXM1M, -EXM1S, -EXM2; Communication Modules: FC4A-HPC1, -HPC2, -HPC3, AS-I, FC5A-SIF2, FC5A-SIF4; Master Module: FC4A-AS62M; Web server units: FC4A-SX5ES11, -SX5ES1E.

Programmable display operator Interface HG1F Series, Base Modules: HG1F-SB22BF-B, -SB22BF-W, -SB22YF-B, -SB22YF-W.

Programmable display operator Interface HG2G Series, Base Modules: HG2G-SS22VF-B, -SS22VF-W, -SS22VF-S, HG2G-SS22TF-B, -SS22TF-W, -SS22TF-S, HG2G-SB22VF-B, -SB22VF-W, -SB22VF-S, HG2G-SB22TF-B, -SB22TF-W, -SB22TF-S.

Programmable Display Operator Interfaces, HG3G Series, Modules HG3G-8JT22TF-W, -8JT22TF-B, -8JT22MF-W, -8JT22MF-B, HG3G-AJT22TF-W, -AJT22TF-B, -AJT22MF-W, -AJT22MF-B.

Programmable display operator Interface modules, Modules: HG2G-SS21VF-B, -SS21VF-W, -SS21VF-S, HG2G-SS21TF-B, -SS21TF-W, -SS21TF-S, HG2G-SB21VF-B, -SB21VF-W, -SB21VF-S, HG2G-SB21TF-B, -SB21TF-W, -SB21TF-S; HG4G Series modules HG4G-CJT22TF-B, and HG4G-CJT22MF-B, HG4G-CJT22TF-W, HG4G-CJT22MF-W, may be followed by -MK1495.

Programmable display operator Interface, HG2G Series, Modules: HG2G-5ST22VF-W, -5ST22VF-B, -5ST22VF-S, HG2G-5ST22TF-W, -5ST22TF-B, -5ST22TF-S, HG2G-5FT22TF-W, -5FT22TF-B, -5FT22TF-S.

Programmable controllers, FT1A Series, Models FT1A-C12RA-B, FT1A-C12RA-S, FT1A-C12RA-W, FT1A-M12RA-B, FT1A-M12RA-S and FT1A-M12RA-W, FT1A-M14SA-W, FT1A-M14SA-B, FT1A-M14SA-S, FT1A-M14KA-W, FT1A-M14KA-B, FT1A-M14KA-S, FT1A-C14SA-W, FT1A-C14SA-B, FT1A-C14SA-S, FT1A-C14KA-W, FT1A-C14KA-B, FT1A-C14KA-S.

Optional modules for programmable controller, Models FT1A-M14SA-X, FT1A-M14KA-X, FT1A-C14SA-X and FT1AC14KA-X: FC6A-PJ2A: 2-Analog Input, FC6A-PJ2CP: 2-Analog Input, FC6A-PK2AV: 2-Analog Output, FC6A-PK2AW: 2-Analog Output.

Programmable controllers, FC6A Series - CPU Modules : FC6A-M16R1, -M16R4, -M16R1E, -M16R4E, -M16P1, -M16P4, -M16P1E, -M16P4E, -M32P3, -M32P3E.

Programmable controllers, FC6A Series CPU Modules Brick Types : FC6A-C16R1A, -C16R1AE, -C24R1A, -C24R1AE, -C40R1A, -C40R1AE, -C16P1C, -C16P1CE, -C24P1C, -C24P1CE, -C40P1C, -C40P1CE, -C16K1C, -C16K1CE, -C24K1C, -C24K1CE, -C40K1C, -C40K1CE.

Programmable controllers, FC6A Series - Input Modules : FC6A-N08B1, -N08B4, -N16B1, -N16B4, -N16B3, -N32B3, -N08A11 -N08A14.

Programmable controllers, FC6A Series - Output Modules : FC6A-R081, -R084, -R161, -R164, -T08P1, -T08P4, -T16P1, -T16P4, -T16P3, -T32P3, -T08K1, -T08K4, -T16K1, -T16K4, -T16K3, -T32K3.

Programmable controllers, FC6A Series - I/O Mixture Modules : FC6A-M08BR1, -M08BR4, -M24BR1, -M24BR4, -TYS4.

Programmable controllers, FC6A Series - Analog Modules : FC6A-J2C1, -J2C4, -J4A1, -J4A4, -J8A1, -J8A4, -K2A1, -K2A4, -K4A1, -K4A4, -L06A1, -L06A4, -L03CN1, -L03CN4, -J4CN1, -J4CN4, -J8CU1, -J8CU4, -F2MR1, -F2MR4, -F2M1, -F2M4.

Programmable controllers, FC6A Series - Option Modules : FC6A-PJ2A, -PJ2CP, -PK2AV, -PK2AW, -PC1, -PC2.

Programmable display operator Interface, HG2G Series, Models HG2G-5Txx2Tx-W, HG2G-5Txx2Tx-B, HG2G-5Txx2Tx-S, where xx equals N22, T22 or U72.

Trademark and/or Tradename:  **idec**, **idec**, **idec**, **idec**, **idec**, **idec**, **idec**, **idec**

idec

Last Updated on 2015-12-01

[Questions?](#)

[Print this page](#)

[Terms of Use](#)

[Page Top](#)

© 2016 UL LLC

The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under UL's Follow-Up Service. Only those products bearing the UL Mark should be considered to be Certified and covered under UL's Follow-Up Service. Always look for the Mark on the product.

UL permits the reproduction of the material contained in the Online Certification Directory subject to the following conditions: 1. The Guide Information, Assemblies, Constructions, Designs, Systems, and/or Certifications (files) must be presented in their entirety and in a non-misleading manner, without any manipulation of the data (or drawings). 2. The statement "Reprinted from the Online Certifications Directory with permission from UL" must appear adjacent to the extracted material. In addition, the reprinted material must include a copyright notice in the following format: "© 2016 UL LLC".