Overview

IDEC MicroSmart series PLC is the next generation of programmable logic controller. These flexible, adaptable PLCs are as compact as they are powerful, so you can create the system you need without increasing your space requirements or your budget.

MicroSmart CPUs are available with built-in 10, 16, and 24 I/O All-In-One units, and 20 and 40 I/O slim style models.

Each MicroSmart CPU is designed in a compact and rugged housing. Every MicroSmart module meets IDEC strict quality standards and complies with all major international standards; cULus, CE, TUV, and Lloyds.

Each CPU is equipped with a standard power supply circuit, four high-speed counters, analog potentiometer, and password protection.

The Slim type and the 24 I/O All-in-one CPU can be expanded with the many choices of expansion modules. There are 20 modules available including four analog I/O modules, an AS-interface master communication module, and our most recent addition to the MicroSmart family, the 8-pt AC input module. In addition, 24V DC All-in-one CPUs are now available. Depending upon the CPU, you can create a system with as many as 264 I/Os.

Each MicroSmart module can be enhanced with a memory cartridge for easy maintenance, a real-time clock and calendar cartridge for real time applications, and an RS-485/RS-232 communications adapter. These adapters allow the MicroSmart CPU to data link to the MicroSmart or other IDEC PLCs, connect to operator interfaces, printers, barcode readers, or other RS-232 devices such as modems for remote communication.

MicroSmart PLCs are programmable with WindLDR, IDEC's intuitive ladder logic software. The current WindLDR version 5.03 has improved features such as a split ladder window for easy navigation, improved tag name editor and rung comment search. Download your free demo now or upgrade to WindLDR 5.03 if you have version 4.0 or later.

Key Features

- Available in Slim or All-In-One styles
- CPU units are equipped with 10, 16, 20, 24, or 40 I/Os.
- Maximum of 264 I/Os can be configured on a single MicroSmart CPU
- Your choice of many expansion modules: AC/DC inputs, relay/transistor outputs, RTD/ Thermocouple and Analog I/Os, and AS-interface Master communication module
- Standard RS232 port, optional plug-in RS485/RS232 port for data link or modem communications
- Optional plug-in HMI module for monitoring, memory cartridge, and real-time clock and calendar cartridge
- Built in Modbus-CRC, PID and Ramp functions
- 4 built-in high speed counters, interrupt and catch inputs, and password protection
- Data link for up to 32 MicroSmart or other IDEC PLCs
- cULus, CE, TUV and Lloyds approved
- Approved for Class 1 Div 2 Hazardous Locations
- Easy programming using IDEC exclusive WindLDR software
- New web server module for faster, easier ethernet connectivity

FC4A-C10R2

[The MicroSmart is available in either Slim type or the All-In-One type with expandability up to 264 I/O.]

Product Specifications

PLC Product Category	CPU Unit
Operating Voltage	120V AC, 240V AC
High Speed Counter(s)	20kHz, 5kHz
High Speed Counter Input Type	Sink, Source
On Board Communication Port	1 RS-232
Memory Card Slot	Yes
On Board Input Type	Transistor Sink, Transitor Source
On Board Output Type	Relay
I/O Expandable	No
Maximum I/O	10
On Board I/O	6/4
Real Time Clock	Yes, Separate Module Required
Connector Type	Screw Terminal
Notes	MicroSmart All-in-One Brick Style PLC. See catalog pages for further information.
I/O Range Requirement	24 or less
Floating Point Math	No
Data Processing	16 Bit
Max. Communication Ports	1

MicroSmart Performance

Features:

- Available in 10, 16, 20, 24, and 40 I/O CPUs.
- PID Controls
  -Program up to 14 PID loops
- High Speed I/O
  -Built-in 4 high speed inputs
  -Single or Dual Phase
  -Max. 20KHz frequency
- Built-in 2 High speed outputs (Slim model only)
- Configure up to 264 I/O Points
- Data link up to 32 MicroSmart and Pentra CPUs
- Using RS485 communication module/port, you can create a network of up to 32 CPUs.
- Worldwide Approvals
  -cULus listed, CE marked
  -Class 1 Div. 2 for hazardous locations
  -Lloyds Registered and ABS approved for shipping industry

MicroSmart CPU Part Numbers

All-in-One

Appearance	Part Number	Power	I/O Points	Input	Output	Expandability
	FC4A-C10R2C	24V DC	10 (6 in/ 4 out)	24V DC (Sink/Source)	Relay	N/A
	FC4A-C10R2	100-240V AC				
	FC4A-C16R2C	24V DC	16 (9 in/ 7 out)			
	FC4A-C16R2	100-240V AC				
	FC4A-C24R2C	24V DC	24 (14 in/ 10 out)			88 Maximum I/O (up to 4 expansion modules)
	FC4A-C24R2	100-240V AC				

Specifications

All-in-One

Part Number	AC Power	FC5A-C10R2	FC5A-C16R2	FC5A-C24R2	FC4A-C10R2	FC4A-C16R2	FC4A-C24R2
	DC Power	FC5A-C10R2C	FC5A-C16R2C	FC5A-C24R2C	FC4A-C10R2C	FC4A-C16R2C	FC4A-C24R2C
Rated Voltage		AC power model: 100 to 240V AC, DC power model: 24V DC					
Allowable Voltage Range		AC power model: 85 to 264V AC, DC power model: 20.4 to 28.8V DC (including ripple)					
Rated Power Frequency		AC power model: 50/60 Hz (47 to 63 Hz)					
Maximum Input Current		250mA (85V AC) 160mA (24V DC)	300mA (85V AC) 190mA (24V DC)	450mA (85V AC) [1] 360mA (24V DC) [2]	250mA (85V AC) 160mA (24V DC)	300mA (85V AC) 190mA (24V DC)	450mA (85V AC) [2] 360mA (24V DC) [3]
Maximum Power Consumption	AC Power	FC5A-C10R2/FC4A-C10R2: 30VA (264V AC) / 20VA (100V AC) [3] FC5A-C16R2/FC4A-C16R2: 31VA (264 V AC) / 22VA (100V AC) [3] FC5A-C24R2/FC4A-C24R2: 40VA (264V AC) / 33VA (100V AC) [1]					
	DC Power	FC5A-C10R2C/FC4A-C10R2C: 3.9W (24V DC) [4] FC5A-C16R2C/FC4A-C16R2C: 4.6W (24V DC) [4] FC5A-C24R2C/FC4A-C24R2C: 8.7W (24V DC) [2]					
Allowable Momentary Power Interruption		10ms (rated power voltage)					
Dielectric Strength		Between power and ⏚ or ⏥ terminals: 1500V AC, 1 minute Between I/O and ⏚ or ⏥ terminals: 1500V AC, 1 minute					
Insulation Resistance		Between power and ⏚ or ⏥ terminals: 10 MΩ minimum (500V DC megger) Between I/O and ⏚ or ⏥ terminals: 10 MΩ minimum (500V DC megger)					
Noise Resistance		AC power terminals: 1.5 kV, 50 ns to 1µs DC power terminals: 1.0 kV, 50 ns to 1µs I/O terminals (coupling clamp): 1.5 kV, 50 ns to 1µs					
Inrush Current		35A		40A	35A		40A
Power Supply Wire		UL1015 AWG22, UL1007 AWG18					
Operating Temperature		0 to 55ºC					
Storage Temperature		–25 to +70ºC (no freezing)					
Relative Humidity		Level RH1 (IEC61131-2), 1 to 95% RH (no condensation)					
Altitude		Operation: 0 to 2,000m, Transport: 0 to 3,000m					
Pollution Degree		2 (IEC60664-1)					
Corrosion Immunity		Free from corrosive gases					
Degree of Protection		IP20 (IEC60529)					
Grounding Wire		UL1007, AWG16					
Vibration Resistance		When mounted on a DIN rail or panel surface: 5 to 9 Hz amplitude 3.5 mm, 9 to 150 Hz acceleration 9.8 m/s^2 (1G), 2 hours per axis on each of three mutually perpendicular axes (IEC61131-2)					
Shock Resistance		147 m/s^2 (15G), 11ms duration, 3 shocks per axis, on three mutually perpendicular axes (IEC61131)					
Weight		AC: 230g DC: 240g	AC: 250g DC: 260g	AC: 305g DC: 310g	AC: 230g DC: 240g	AC: 250g DC: 260g	AC: 305g DC: 310g

1. CPU module (including 250mA sensor power) + 4 I/O modules
2. CPU module + 4 I/O modules
3. CPU module (including 250mA sensor power)
4. CPU module (24V DC)

All-in-One

Part Number			FC5A-C10R2 FC5A-C10R2C	FC5A-C16R2 FC5A-C16R2C	FC5A-C24R2 FC5A-C24R2C	FC4A-C10R2 FC4A-C10R2C	FC4A-C16R2 FC4A-C16R2C	FC4A-C24R2 FC4A-C24R2C
Control System			Stored program system					
Instruction Words			35 basic					
			76 advanced	76 advanced	81 advanced	38 advanced	40 advanced	46 advanced
Program Capacity [1]			13.8 KB (2,300 steps)	27 KB (4,500 steps)	54 KB (9,000 steps)	4.8 KB (800 steps)	15 KB (2,500 steps)	27 KB (4,500 steps)
User Program Storage			EEPROM (10,000 times rewritable)					
Processing Time	Basic Instruction		1.16ms (1,000 steps)			1.65ms (1,000 steps)		
	END Processing [2]		0.64ms			0.64ms		
Expandable I/O Module			—		4 modules	—		4 modules
I/O Points	Input		6	9	14	6	9	14
	Output		4	7	10	4	7	10
			Expansion: 64			Expansion: 64		
Internal Relay			2,048 points			256 points	1,024 points	
Shift Register			128 points			64 points	128 points	
Data Register			2,000 points			400 points	1,300 points	
Extra Data Register			—			—		
Counter			256 points			32 points	100 points	
Timer (1-sec, 100-ms, 10-ms, 1-ms)			256 points			32 points	100 points	
RAM Backup	Backup Data		Internal relay, shift register, counter, data register					
	Backup Duration		Approx. 30 days (typical) at 25°C after backup battery fully charged					
	Battery		Lithium secondary battery					
	Charging Time		Approx. 15 hours for charging from 0% to 90% of full charge					
	Battery Life		5 years					
	Replaceability		N/A					
Self-diagnostic Function			Power failure, watchdog timer, data link connection, user program EPPROM sum check, timer/counter preset value sum check, user program RAM sum check, keep data, user program syntax, user program writing, CPU module, clock IC, I/O bus initialize, user program execution					
Input Filter			Without filter or 3 to 15ms filter (selectable in increments of 1ms)					
Catch Input/Interrupt Input			Four inputs (I2 through I5) Minimum turn on pulse width: 40µs minimum Minimum turn off pulse width: 150µs minimum					
High-speed Counter	Maximum Counting Frequency and High-speed Counter Points		Total 4 points Single/two-phase selectable: 50KHz (1 point) Single-phase: 5KHz (3 points)			Total 4 points Single/two-phase selectable: 20KHz (1 point) Single-phase: 5KHz (3 points)		
	Counting Range		0 to 65535 (16 bits)					
	Operation Mode		Rotary encoder mode and adding counter mode					
Analog Potentiometer	Number		1 point		2 points	1 point		2 points
	Data Range		0 to 255					
Analog Voltage Input	Number		—					
	Input Voltage Range							
	Input Impedance							
	Data Range							
Pulse Output	Number		—					
	Max. Frequency							
Sensor Power Supply (AC Power Only)	Output Voltage Current		24V DC (+10% to -15%), 250mA					
	Overload Detection		N/A					
	Isolation		Isolated from the internal circuit					
Port 1			RS232C (maintenance communication, user communication)					
Port 2 Communication Adapter (option) [3]			Possible	Possible	Possible	—	Possible	Possible
Clock Cartridge (option)			Possible	Possible	Possible	Possible	Possible	Possible
Memory Cartridge (option)			Possible	Possible	Possible	Possible	Possible	Possible
HMI Module (option)			Possible	Possible	Possible	Possible	Possible	Possible

1. 1 step equals 6 bytes.
2. Not including expansion I/O service time, clock function processing time, data link processing time, and interrupt processing time.
3. Maintenance communication, user communication, Modem communication, datalink, Modbus master/slave communication (FC5A only).

Note: The maximum number of relay outputs that can be turned on simultaneously is 33 including those on the CPU module.

Communication Port (RS232C Port 1)

Model	Slim CPU	All-in-One CPU
Standards	EIA RS232C	
Maximum Baud Rate	FC5A: 57,600 bps (maintenance communication) FC4A: 19,200 bps (maintenance communication)	
Maintenance Communication	Possible	
User Communication	Possible	
Modem Communication	N/A	
Data Link	N/A	
Cable	Special cable (FC2A-KC4C, FC2A-KP1C, FC4A-KC1C, FC4A-KC2C)	
Isolation between Internal Circuit and Communication Port	Not isolated	

Input Specifications

Part Number	–	FC5A-D16RK1 FC5A-D16RS1	–	FC5A-D32K3 FC5A-D32S3	–	FC5A-C10R2 FC5A-C10R2C	FC5A-C16R2 FC5A-C16R2C	FC5A-C24R2 FC5A-C24R2C
	FC4A-D20K3 FC4A-D20S3	–	FC4A-D20RK1 FC4A-D20RS1	–	FC4A-D40K3 FC4A-D40S3	FC4A-C10R2 FC4A-C10R2C	FC4A-C16R2 FC4A-C16R2C	FC4A-C24R2 FC4A-C24R2C
Input Points	12 (12/1 common)	8 (8/1 common)	12 (12/1 common)	16 (8/1 common)	24 (12/1 common)	6 (6/1 common)	9 (9/1 common)	14 (14/1 common)
Input Voltage	24V DC sink/source input signal							
Input Voltage Range	20.4 to 26.4V DC					20.4 to 28.8V DC		
Input Current	FC5A I0, I1, I3, I4, I6, I7: 4.5mA/point (24V DC) I2, I5, I10 to I17: 7mA/point (24V DC) FC4A I0, I1, I6, I7: 5mA/point (24V DC) I2 to I5, I10 to I27: 7mA/point (24V DC)					FC5A I0 and I1: 6.4mA/point I2 to I7, I10 to I15: 7mA/point (24V DC) FC4A I0 and I1: 11mA I2 to I7, I10 to I15: 7mA/point (24V DC)		
Input Impedance	FC5A I0, I1, I3, I4, I6, I7: 4.9kΩ I2 to I5, I10 to I17: 3.4kΩ FC4A I0, I1, I6, I7: 5.7kΩ I2 to I5, I10 to I17: 3.4kΩ					FC5A I0 and I1: 3.7kΩ I2 to I7, I10 to I15: 3.4kΩ FC4A I0 and I1: 2.1kΩ I2 to I7, I10 to I15: 3.4kΩ		
Turn ON Time	FC5A I0, I1, I3, I4, I6, I7: 5µs + filter value I2 and I5: 35µs + filter value I10 to I17: 40µs + filter value FC4A I0, I1, I6, I7: 35µs + filter value I2 to I5: 35µs + filter value I10 to I27: 40µs + filter value					FC5A I0 and I1: 2µs + filter value I2 to I7: 35µs + filter value I6, I7, I10 to I15: 40µs + filter value FC4A I0 and I1: 35µs + filter value I2 to I5: 35µs + filter value I6, I7, I10 to I15: 40µs + filter value		
Turn OFF Time	FC5A I0, I1, I3, I4, I6, I7: 5µs + filter value I2 and I5: 150µs + filter value I10 to I17: 150µs + filter value FC4A I0, I1, I6, I7: 45µs + filter value I2 to I5: 150µs + filter value I10 to I27: 150µs + filter value					FC5A I0 and I1: 16µs + filter value I2 to I7: 150µs + filter value I6, I7, I10 to I15: 150µs + filter value FC4A I0 and I1: 45µs + filter value I2 to I5: 150µs + filter value I6, I7, I10 to I15: 150µs + filter value		
Connector — On Mother Board	FL26A2MA (Oki Electric Cable)	MC1.5/18-G-3.81BK (Phoenix Contact)		FL26A2MA (Oki Electric Cable)		—		
Connector — Insertion Durability	100 times minimum					—		
Isolation	Between input terminals: Photocoupler isolated Internal circuit: Not isolated							
Input	Type 1 (IEC61131-2)							
External Load for I/O Interconnection	Not needed							
Single Determination Method	Static							
Effect of Improper Input Connection	Both sinking and sourcing input signals can be connected. If any input exceeding the rated value is applied, permanent damage may be caused.							
Cable Length	3 m in compliance with electromagnetic immunity							

Transistor Sink and Source Output

Part Number		—	FC5A-D16RK1 FC5A-D16RS1	FC5A-D32K3 FC5A-D32S3
		FC4A-D20RK1 FC4A-D20RS1	—	FC4A-D40K3 FC4A-D40S3
Output Points		2 (2/1 common)	2 (2/1 common)	16 (8/1 common)
Output	Transistor Sink	FC5A-D16K1/D32K3 FC4A-D20K3/D20RK1/D40K3		
	Transistor Source	FC5A-D16RS1/D32S3 FC4A-D20S3/D20RS1/D40S3		
Load Voltage		24V DC		
Operating Load Voltage Range		20.4 to 28.8V DC		
Load Current		0.3A per output point		
Maximum Load Current		1A per common		
Voltage Drop (ON Voltage)		1V maximum (voltage between COM and output terminals when output is on)		
Inrush Current		1A		
Leakage Current		0.1mA maximum		
Clamping Voltage		39V±1V		
Maximum Lamp Load		8W		
Inductive Load		L/R = 10ms (28.8V DC, 1 Hz)		
External Current Draw		Sink output: 100mA maximum, 24V DC (power voltage at the +V terminal) Source output: 100mA maximum, 24V DC (power voltage at the –V terminal)		
Isolation		Between output terminal and internal circuit: Photocoupler isolated Between output terminals: Not isolated		
Connector on Mother Board		FL26A2MA (Oki Electric Cable)	MC1.5/16-G-3.81BK (Phoenix Contact)	FL26A2MA (Oki Electric Cable)
Connector Insertion/ Removal Durability		100 times minimum		
Output Delay	Turn ON Time	FC5A Q0 to Q2: 5µs max. Q3 to Q7, Q10 to Q17: 300µs max. FC4A Q0, Q1: 5µs max. Q2 to Q7, Q10 to Q17: 300µs max.		
	Turn OFF Time	FC5A Q0 to Q2: 5µs max. Q3 to Q7, Q10 to Q17: 300µs max. FC4A Q0, Q1: 5µs max. Q2 to Q7, Q10 to Q17: 300µs max.		

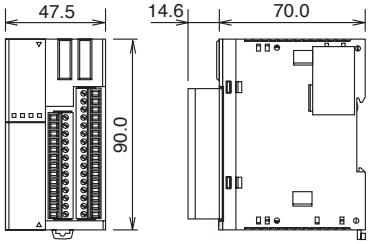
Relay Output

Part Number		FC5A-C10R2 FC5A-C10R2C	FC5A-C16R2 FC5A-C16R2C	FC5A-C24R2 FC5A-C24R2C	FC5A-D16RK1 FC5A-D16RS1
		FC4A-C10R2 FC4A-C10R2C	FC4A-C16R2 FC4A-C16R2C	FC4A-C24R2 FC4A-C24R2C	FC4A-D20RK1 FC4A-D20RS1
No. of Outputs		4	7	10	8
Output Points per Common Line	COM0	3	4	4	2 (Transistor output)
	COM1	1	2	4	3
	COM2	—	1	1	2
	COM3	—	—	1	1
Output		1 NO form A			
Maximum Load Current		2A per point 8A per common line			
Minimum Switching Load		0.1mA/0.1V 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		240V AC/2A (resistive load, inductive load cos ø = 0.4) 30V DC/2A (resistive load, inductive load L/R =7ms)			
Dielectric Strength		Between output and ⏚ 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 on Mother Board		—			*
Connector Insertion/Removal Durability		—			100 times minimum

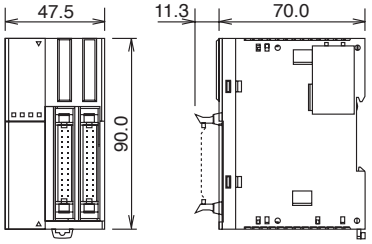
*MC1.5/16-G-3.81BK (Phoenix Contact)

Dimensions (mm)

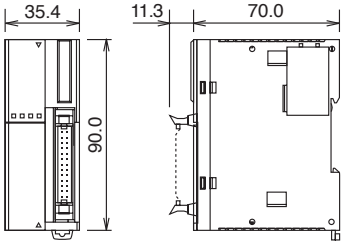
FC5A-D16RK1, FC4A-D20RK1, FC5A-D16RS1 FC4A-D20RS1



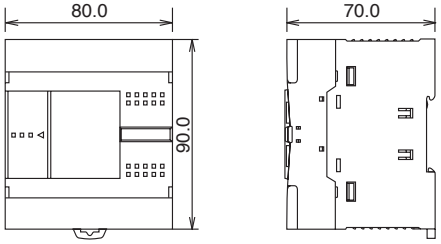
FC5A-D32K3, FC5A-D32S3 FC4A-D40K3, FC4A-D40S3



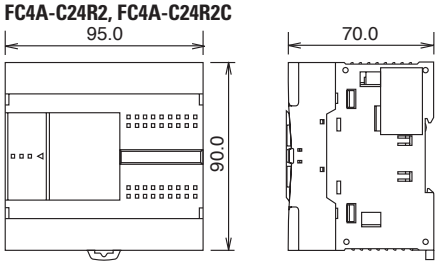
FC5A-EXM1S FC4A-D20K3, FC4A-D20S3



FC5A-C10R2, FC5A-C10R2C, FC4A-C10R2, FC4A-C10R2C, FC5A-C16R2 FC5A-C16R2C FC4A-C16R2 FC4A-C16R2C



FC5A-C24R2, FC5A-C24R2C FC4A-C24R2, FC4A-C24R2C



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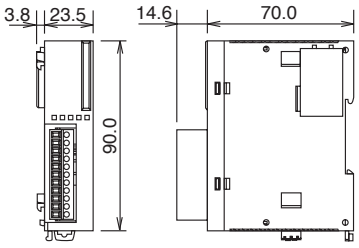
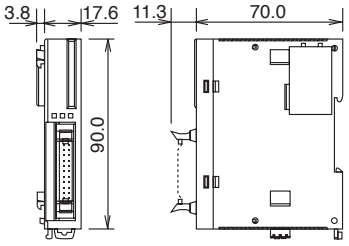
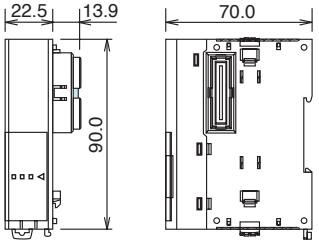


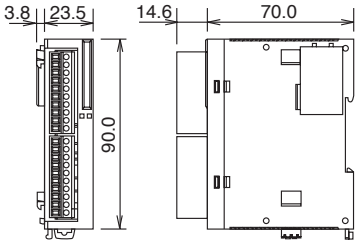
FC4A-EXM1M FC4A-N16B3, FC4A-T16K3, FC4A-T16S3



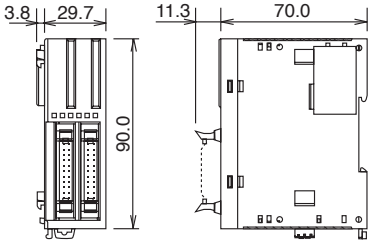
FC4A-HPC1, FC4A-HPC2, FC4A-HPC3



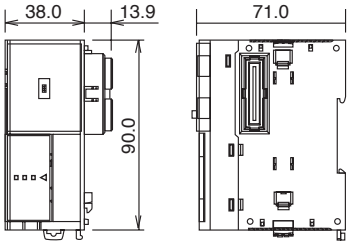
FC4A-N16B1, FC4A-R161



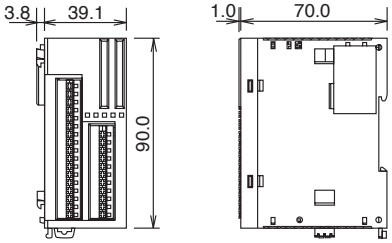
FC4A-N32B3, FC4A-T32K3, FC4A-T32S3



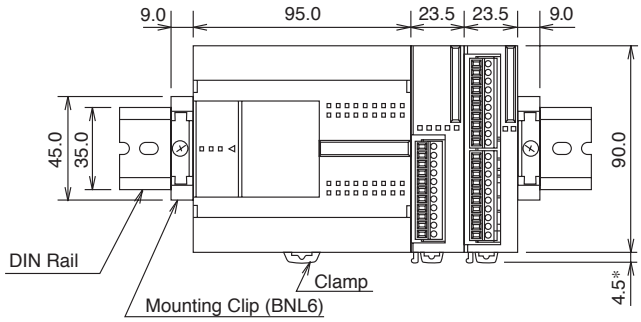
FC4A-HPH1



FC5A-EXM2, FC4A-M24BR2



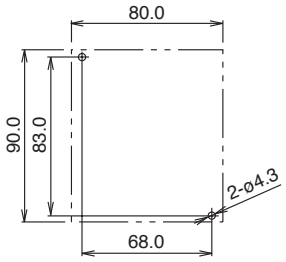
Example



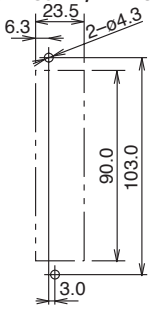
The figure illustrates a system setup consisting of the all-in-one 24-I/O CPU module, an 8-point relay output module, and a 16-point DC input module mounted on a 35-mm-wide-DIN rail using BNL6 mounting clips.

Mounting Hole Layout (mm)

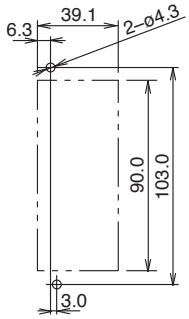
FC5A-C10R2, FC5A-C16R2
FC5A-C10R2C, FC5A-C16R2C
FC4A-C10R2, FC4A-C16R2
FC4A-C10R2C, FC4A-C16R2C



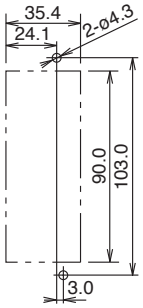
FC4A-N08A11, FC4A-R081
FC4A-R161, FC4A-T08K1
FC4A-T08S1, FC4A-M08BR1
FC4A-L03A1, FC4A-L03AP1
FC4A-J2A1, FC4A-K1A1
FC4A-J4CN1, FC4A-T8C1
FC4A-J8AT1, FC4A-K2C1



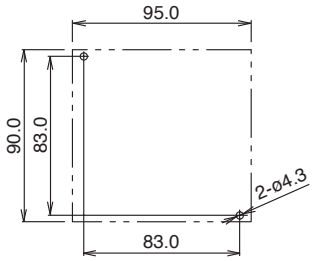
FC5A-EXM2
FC4A-M24BR2



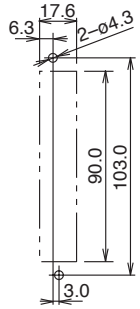
FC5A-EXM1S, FC4A-D20K3
FC4A-D20S3



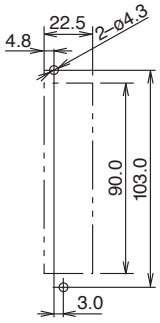
FC5A-C24R2,
FC4A-C24R2C
FC4A-C24R2,
FC4A-C24R2C



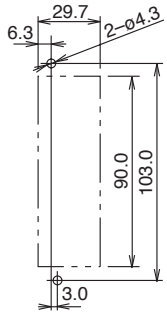
FC5A-EXM1M
FC4A-N16B3, FC4A-T16K3,
FC4A-T16S3



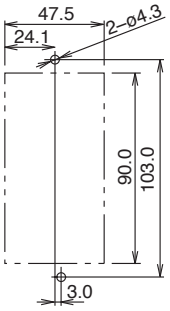
FC4A-HPC1 FC4A-HPC2
FC4A-HPC3



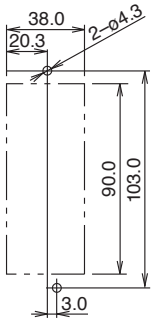
FC4A-N32B3, FC4A-T32K3,
FC4A-T32S3



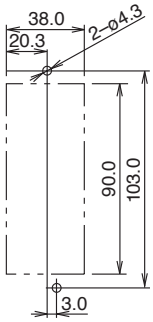
FC5A-D16RK1
FC5A-D16RS1
FC5A-D32K3
FC5A-D32S3
FC4A-D20RK1
FC4A-D20RS1
FC4A-D40K3
FC4A-D40S3



FC4A-HPH1

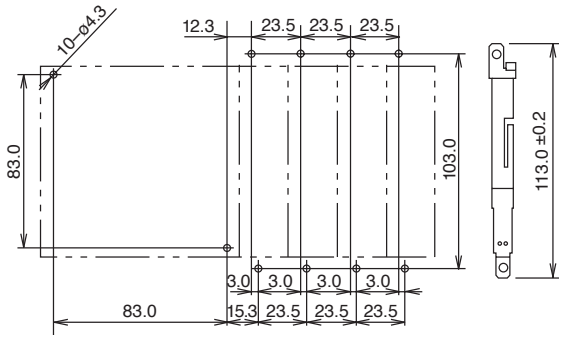


FC4A-HPH1

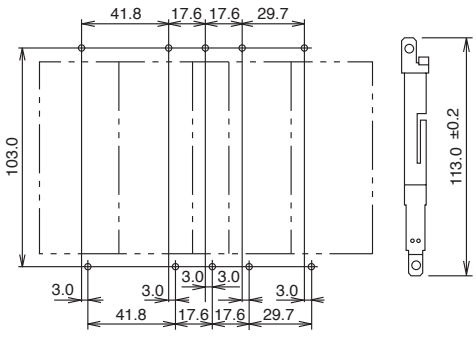


Examples

Mounting hole layout for FC5A-C24R2 or FC4A-C24R2 and four 23.5mm-wide I/O modules



Mounting hole layout from left, FC4A-HPH1, FC4A-D20K3, FC4A-N16B3, FC4A-N32B3, and FC4A-M24BR2 modules



Web Server

General Specifications

Rated Power Voltage	24V DC
Allowable Voltage Range	20.4 to 26.4V DC
Current Draw	70 mA
Allowable Momentary Power Interruption	10 ms maximum
Dielectric Strength	500V AC, 1 minute
Insulation Resistance	10 MΩ minimum (500V DC megger)
Noise Resistance	DC power terminal: 1.0 kV, 50 ns to 1 µs Ethernet cable: 0.5 kV, 50 ns to 1 µs (coupling clamp)
Inrush Current	4A maximum
Operating Temperature	0 to 55°C
Storage Temperature	–40 to +70°C (no freezing)
Relative Humidity	10 to 95% (no condensation)
Pollution Degree	2 (IEC 60664-1)
Corrosion Immunity	Free from corrosive gases
Degree of Protection	IP20 (IEC60529)
Vibration Resistance	When mounted on a DIN rail: 5 to 9 Hz amplitude 3.5 mm 9 to 150 Hz accelaration 9.8 m/s^2 (1G) 2 hours in each of 3 axes
Shock Resistance	147 m/s^2 (15G), 11 ms duration 3 shocks each in 3 axes
Weight (approx.)	150g

Interface Specifications

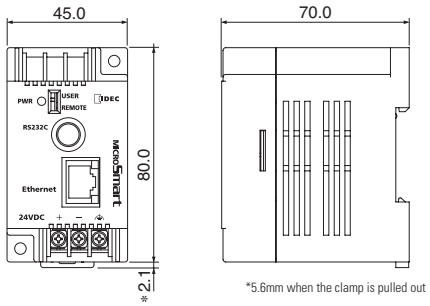
Communication	RS232C <=> Ethernet conversion function
Ethernet Specifications	Electrical characteristics: Complies with IEEE802.3 Transmission speed: 10BASE-T/100BASE-TX (Not CE compliant) Communication protocol: IP/ICMP/ARP Ethernet protocol: TCP/SMTP/HTTP/Telnet No. of TCP connections: 1
Serial Interface Specifications	Electrical characteristics: EIA RS232C Transmission speed: 9600 to 115200 bps Synchronization: Asynchronous Communication protocol: Full duplex Transmission control: RTS/CTS, XON/OFF, None
Connection Method	Ethernet interface: RJ45 Serial interface: Mini DIN 8-pin connector Cable Part No.: FC4A-KC3C
Major Functions	Remote maintenance: Uploading, downloading and monitoring using WindLDR via Ethernet
	Web server: Configure the web server unit using Internet Explorer etc. Reading and writing PLC operands using Java applet. Web file area: 512 KB Compliant browser: Internet Explorer 6.0 or higher, Netscape Navigator 7.2
	Ethernet user communication: User communication using Ethernet Message transmission: Registered outgoing message 32 message types, 63 characters maximum per message, 2 email addresses, 64 address characters maximum
Optional	Utility CD: Configuration file, PLC operand monitor sample programs, sample program configuration instructions, instruction manual (English/German/Spanish/Japanese/Chinese)

Connectable Devices

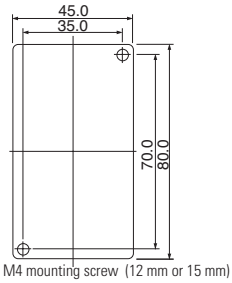
Programmable Controllers
IDEC FC5A MicroSmart
IDEC FC4A MicroSmart
IDEC FC3A OpenNet Controller

Operator Interface
(RS232C communication with PLC through Ethernet)
IDEC HG2F

Dimensions

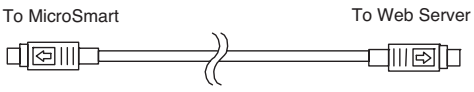


Mounting Hole Layout for Direct Mounting

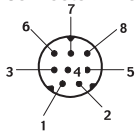


Web Server Cable (FC4A-KC3C, Cable Length: 100 mm)

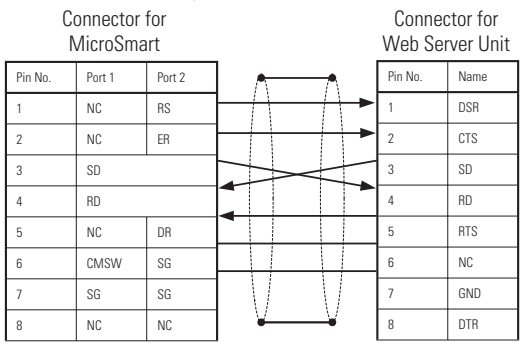
Cable Dimensions



Connector Pinout



Cable Connection Diagram



Pin No.	Port 1	Port 2
1	NC	RS
2	NC	ER
3	SD	
4	RD	
5	NC	DR
6	CMSW	SG
7	SG	SG
8	NC	NC

Pin No.	Name
1	DSR
2	CTS
3	SD
4	RD
5	RTS
6	NC
7	GND
8	DTR

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