

Programmable Controller Wiring Systems

Bulletin 1756 ControlLogix Modules

Digital IFMs and Cables for Bulletin 1756 ControlLogix 16-point Isolated and 32-point I/O Modules

Voltage [V]	Term. per I/O	Description	Fixed Terminal Block	Removable Terminal Block	RTB Plugs ❖	Bulletin 1756 ControlLogix I/O Module																	
						1756-IA16I	1756-IB16D	1756-IB16I	1756-IA32	1756-IB32	1756-IV32	1756-IH16I	1756-IM16I	1756-OA16I	1756-OB8EI	1756-OB16D	1756-OB16I	1756-OB16IS	1756-OB32	1756-OV32E	1756-OH8I	1756-OW16I	1756-OX8I
			Cat. No.	Cat. No.	Cat. No.	Digital Cable Cat. No. Suffix ➤																	
Feed-through																							
24... 120	1	Standard	1492-IFM40F	1492-RIFM40F	1492-RTB20❖	Y	Y	Y	Z	Z	Z	Y		Y	Y	Y	Y	Y	Z	Z	Y	Y	Y
	2	Extra Terminals	1492-IFM40F-2	1492-RIFM40F-2	1492-RTB20❖		Y		Z	Z	Z					Y			Z	Z			
	3	Sensor	1492-IFM40F-3	—	—					Z	Z												
LED Indicating																							
24	1	Standard	1492-IFM40D24	1492-RIFM40D24	1492-RTB20❖					Z	Z								Z	Z			
	2	Extr.Term.	1492-IFM40D24-2	—	—														Z	Z			
	2	Extr.Term. (input)	1492-IFM40D24A-2	1492-RIFM40D24A-2	1492-RTB20❖					Z	Z												
	3	Sensor	1492-IFM40D24-3	—	—					Z	Z												
	4	Isolated	1492-IFM40DS24-4	—	—									Y	Y ¹³	Y	Y					Y	Y
120	4	Isolated (input)	1492-IFM40DS24A-4	—	—		Y	Y															
	2	Extr.Term. (input)	1492-IFM40D120A-2	—	—					Z													
	4	Isolated	1492-IFM40DS120-4	—	—									Y								Y	Y
240	4	Isolated (input)	1492-IFM40DS120A-4	—	—	Y																	
	4	Isolated (input)	1492-IFM40DS240A-4	—	—								Y										
Fusible																							
24	2	Blown fuse LED	1492-IFM40F-F24-2	1492-RIFM40F-F24-2	1492-RTB20❖														Z	Z			
	2	Blown fuse LED	1492-IFM40F-F24D-2	—	—											Y							
	4	Blown fuse LED	1492-IFM40F-F24AD-4	—	—		Y																
24... 120	2	Extra Terminals	1492-IFM40F-F-2	—	—														Z	Z			
Fusible - Isolated																							
24	2	Extr. Term.	1492-IFM40F-FS24-2	—	—										Y	❖	Y ¹²	Y ¹²				Y	Y
	4	Blown fuse LED	1492-IFM40F-FS24-4	—	—										Y	❖	Y ¹²	Y ¹²				Y	Y
	4	Blown fuse LED (input)	1492-IFM40F-FS24A-4	—	—		‡	Y															
24... 120	2	Extr. Term.	1492-IFM40F-FS-2	—	—									Y	Y	Y	Y ¹²	Y ¹²			Y	Y	Y
	4	Extr. Term.	1492-IFM40F-FS-4	—	—									Y	Y	Y	Y ¹²	Y ¹²			Y	Y	
	4	Blown fuse LED (input)	1492-IFM40F-FSA-4	—	—		Y	Y	Y			Y											
120	2	Blown fuse LED	1492-IFM40F-FS120-2	1492-RIFM40F-FS120-2	1492-RTB20❖									Y							Y	Y	Y
	4	Blown fuse LED	1492-IFM40F-FS120-4	1492-RIFM40F-FS120-4	1492-RTB17❖									Y								Y	Y
	4	Blown fuse LED (input)	1492-IFM40F-FS120A-4	1492-RIFM40F-FS120A-4	1492-RTB17❖	Y						Y											
240	4	Blown fuse LED	1492-IFM40F-FS240-4	—	—									Y								Y	Y
	4	Blown fuse LED	1492-IFM40F-FS240A-4	—	—									Y									
Safety Integrity Level (SIL) ¹⁴																							
24	2	Blown fuse LED (input)	1492-TIFM40F-F24A-2	—	—															Z	Z		
	2	Blown fuse LED	1492-TIFM40F-24-2	—	—											Y							

See footnotes on the following page.



Programmable Controller Wiring Systems

Bulletin 1756 ControlLogix Modules

Relay XIMs and Cables for Bulletin 1756 ControlLogix 16-point Isolated and 32-point I/O Modules

Voltage [V]	Term. per I/O	Description	Fixed Terminal Block	Removable Terminal Block	RTB Plugs❖	Bulletin 1756 ControlLogix I/O Module																		
			Cat. No.	Cat. No.	Cat. No.	1756-IA16I	1756-IB16D	1756-IB16I	1756-IA32	1756-IB32	1756-IV32	1756-IH16I	1756-IM16I	1756-CA16I	1756-OB8EI	1756-OB16D	1756-OB16I	1756-OB16IS	1756-OB32	1756-OV32E	1756-OH8I	1756-OW16I	1756-OX8I	
			Digital Cable Cat. No. Suffix +																					
Relay Master (LED Indicating)\$⚡																								
24	1	8 relays	1492-XIM4024-8R	—	—															Z				
	1	16 relays	1492-XIM4024-16R	1492-RXIM4024-16R	1492-RTB14❖															Z				
	1	16 relays with fusing	1492-XIM4024-16RF	—	—															Z				
High Density Relay Master (LED Indicating)\$⚡																								
24	1	32 relays - mechanical	1492-XIMTR4024-32R	⚡	1492-RXIMTR4024-32R	1492-RTB20❖														Z	Z			
	1	32 relays - solid-state	1492-XIMTS4024-32R	⚡	1492-RXIMTS4024-32R																Z			
Relay Expander (LED Indicating)\$⚡																								
24	1	Expander with 8 relays	1492-XIM24-8R	1492-RXIM24-8R	1492-RTB12❖															➤				
Fusible Expander																								
24	2	8 Ch Blown fuse LED	1492-XIMF-F24-2	—	—																➤			
	1	16 Ch Blown Fuse LED	1492-XIM24-16RF	—	—																⚡			
Feed-Through Expander																								
120	2	8 Ch	1492-XIMF-2	—	—																➤			

➤ To order a Pre-wired Cable, add the appropriate **letter** from the selection table above to the end of the **Cat. No.** below.

0.5M Cable = 1492-CABLE005_

1.0M Cable = 1492-CABLE010_

2.5M Cable = 1492-CABLE025_

5.0M Cable = 1492-CABLE050_

Custom Length Cable = 1492-CABLEXXX_. See Catalog Number Explanation on page 12-137 for available Custom Length Codes to replace XXX in Cat. No.

❖ Order plugs separately (two plugs per catalog number). Plugs are available in screw style and push in style terminal types. To order, replace the ⚡ in the catalog number with the code for the desired terminal style. The code for screw style is **N** and the code for push in style is **P**.

⚡ Requires four RTB Plugs.

⚡ The LED indicates the PLC output status.

➤ Can have up to 2 or 3 expander modules depending upon master used (total 32 outputs or less). An extender cable is provided.

⚡ One 1492-XIM24-16RF is to be used with one 1492-XIM4024-16R or 1492-XIM4024-16RF master (32 pt. only).

§ The voltage rating is relay control/coil voltage. For relay contact ratings, refer to page 9-42.

⚡ The 1492-IFM40F-FS24-2 and 1492-IFM40F-FS24-4 module and 1492-CABLE*Y cable can be used with the 1756-OB16D module. However, due to the 1492-IFM40F-FS24-2 and 1492-IFM40F-FS24-4 module's blown fuse leakage current ratings, the "no load" diagnostic function of the 1756-OB16D will not indicate a blown or removed fuse as a no load condition. If you require this diagnostic to function for a blown or removed fuse, you must use a 1492-IFM40F-F24D-2.

⚡ The 1492-IFM40F-FS24A-4 module and 1492-CABLE*Y cable can be used with the 1756-IB16D module. However, due to the 1492-IFM40F-FS24A-4 module's blown fuse leakage current rating, the "wire off" diagnostic function of the 1756-IB16D will not indicate a blown or removed fuse as a wire off condition. If you require this diagnostic to function for a blown or removed fuse, you must use a 1492-IFM40F-F24AD-4.

¹² Do not use this module in output sinking mode with fused IFM modules as the IFM module fuses will not properly protect the circuit.

¹³ IFMs LED provides PLC output ON/OFF indication. Due to the magnitude of current through the LED, the 1756-OB16D PLC module "No Load" diagnostic function will not work. If this function is required, use the Cat. No. 1492-IFM40F-2.

¹⁴ This 1492 module is for use in SIL2 safety systems only. It does not satisfy the requirements for general I/O fault tolerance. To use this module in a SIL2 application, specially developed application software for the ControlLogix processor must be used. To obtain the latest revision of this application software contact Technical Support at 1-440-646-3434.

Programmable Controller Wiring Systems

Specifications

Digital IFM Specifications

Digital IFM Cat. No.	Voltage Range	Dimensions (W x H x D) [in.]*	Indicator Circuit Current (Nominal) [mA]	Label Card Cat. No.*
1492-IFM20F, -RIFM20F	0...264V AC/DC	4.33 x 3.27 x 2.78†	—	46006-190-01, 46006-233-01
1492-IFM20FN, -RIFM20FN	0...132V AC/DC	2.36 x 3.27 x 2.78†	—	46006-197-01, -237-01, -220-01
1492-IFM20F-2, -RIFM20F-2	0...264V AC/DC	4.33 x 3.27 x 2.78†	—	46006-192-01, -235-01, -221-01
1492-IFM20F-3	0...132V AC/DC	4.33 x 3.27 x 2.78	—	46006-210-01
1492-IFM20D24	10...30V AC/DC	4.33 x 3.27 x 2.78	2	46006-190-01, 46006-233-01
1492-IFM20D24N	10...30V AC/DC	2.36 x 3.27 x 2.78	2	46006-197-01, -237-01, -220-01
1492-IFM20D24-2	10...30V AC/DC	4.33 x 3.27 x 2.78	2	46006-192-01, -235-01, -221-01
1492-IFM20D24A-2	10...30V AC/DC	4.33 x 3.27 x 2.78	2	46006-211-01
1492-IFM20DS24-4	10...60V AC/DC	4.33 x 3.27 x 2.78	1.6	46006-209-01
1492-IFM20D24-3	10...30V AC/DC	4.33 x 3.27 x 2.78	2	46006-193-01, 46006-236-01
1492-IFM20D120	85...132V AC/DC	4.33 x 3.27 x 2.78	2.5	46006-190-01, 46006-233-01
1492-IFM20D120N	85...132V AC	2.36 x 3.27 x 2.78	2.5	46006-197-01, -237-01, -220-01
1492-IFM20D120-2	85...132V AC	4.33 x 3.27 x 2.78	2.5	46006-192-01, -235-01
1492-IFM20D120A-2	85...132V AC	4.33 x 3.27 x 2.78	2.5	46006-211-01
1492-IFM20DS120-4	85...132V AC	4.33 x 3.27 x 2.78	2.6	46006-209-01
1492-IFM20D240-2	204...264V AC	4.33 x 3.27 x 2.78	2.5	46006-192-01, -235-01
1492-IFM20D240A-2	204...264V AC	4.33 x 3.27 x 2.78	2.5	46006-211-01
1492-IFM20F-F-2, -RIFM20F-F-2	0...132V AC/DC	4.33 x 3.27 x 2.78†	—	46006-192-01, -235-01, -221-01
1492-IFM20F-F24-2, -RIFM20F-F24-2	10...30V AC/DC	4.33 x 3.27 x 2.78†	2	46006-192-01, -235-01, -221-01
1492-IFM20F-F24A-2, -RIFM20F-F24A-2	10...30V AC/DC	4.33 x 3.27 x 2.78†	2.4	46006-212-01, -189-01
1492-IFM20F-F120-2, -RIFM20F-F120-2	85...132V AC	4.33 x 3.27 x 2.78†	2.5	46006-192-01, -235-01, -221-01
1492-IFM20F-F120A-2, -RIFM20F-F120A-2	85...132V AC/DC	4.33 x 3.27 x 2.78†	1.2	46006-212-01, -189-01
1492-IFM20F-F240-2	204...264V AC	4.72 x 3.27 x 2.78	1.2	46006-192-01, -235-01
1492-IFM20F-FS-2	0...132V AC/DC	2.36 x 3.27 x 2.78	—	46006-204-01
1492-IFM20F-FS24-2	10...30V AC/DC	2.36 x 3.27 x 2.78	2	46006-204-01
1492-IFM20F-FS24A-4	10...30V AC/DC	3.15 x 3.27 x 2.78	2.4	46006-215-01
1492-IFM20F-FS120-2	85...132V AC/DC	2.36 x 3.27 x 2.78	2.5	46006-204-01
1492-IFM20F-FS120-4	85...132V AC/DC	4.33 x 3.27 x 2.78	1.2	46006-214-01
1492-IFM20F-FS120A-4	85...132V AC/DC	3.15 x 3.27 x 2.78	2.2	46006-215-01
1492-IFM20F-FS240-4	204...264V AC	4.33 x 3.27 x 2.78	1.2	46006-214-01
1492-IFM40F, -RIFM40F	0...132V AC/DC	4.33 x 3.27 x 2.78†	—	46006-191-01, -234-01, -252-01
1492-IFM40F-2	0...132V AC/DC	8.27 x 3.27 x 2.78	—	46006-224-01, -225-01, -239-01, -240-01, -253-01
1492-RIFM40F-2	0...132V AC/DC	9.05 x 3.27 x 2.78	—	46006-224-01, -225-01, -239-01, -240-01, -253-01
1492-IFM40F-3	0...60V AC/DC	8.27 x 3.27 x 2.78	—	46006-193-01, 46006-236-01
1492-IFM40D24, -RIFM40D24	10...30V AC/DC	4.33 x 3.27 x 2.78†	2	46006-191-01, -234-01, -252-01
1492-IFM40D24-2	10...30V AC/DC	8.27 x 3.27 x 2.78	2	46006-194-01, -195-01, -253-01
1492-IFM40D24A-2	10...30V AC/DC	8.27 x 3.27 x 2.78	2	46006-224-01, -225-01, -239-01, -240-01, -253-01
1492-RIFM40D24A-2	10...30V AC/DC	9.05 x 3.27 x 2.78	2	46006-224-01, -225-01, -239-01, -240-01, -253-01
1492-IFM40DS24-4	10...60V AC/DC	6.69 x 3.27 x 2.78	4.1	46006-208-01
1492-IFM40DS24A-4	10...30V AC/DC	6.69 x 3.27 x 2.78	4.1	46006-208-01
1492-IFM40D24-3	10...30V AC/DC	8.27 x 3.27 x 2.78	2	46006-193-01, 46006-236-01
1492-IFM40D120-2	85...132V AC	8.27 x 3.27 x 2.78	2.5	46006-194-01, -195-01, -253-01
1492-IFM40D120A-2	85...132V AC	8.27 x 3.27 x 2.78	2.5	46006-194-01, -195-01, 253-01
1492-IFM40DS120-4	85...132V AC	6.69 x 3.27 x 2.78	2.6	46006-208-01
1492-IFM40DS120A-4	85...132V AC	6.69 x 3.27 x 2.78	2.6	46006-208-01
1492-IFM40DS240A-4	204...264V AC	6.69 x 3.27 x 2.78	2.6	46006-208-01
1492-IFM40F-F-2	0...132V AC/DC	8.27 x 3.27 x 2.78	—	46006-194-01, -195-01, -253-01
1492-IFM40F-F24-2	10...30V AC/DC	8.27 x 3.27 x 2.78	2	46006-224-01, -225-01, -239-01, -240-01, 253-01
1492-RIFM40F-F24-2	10...30V AC/DC	8.66 x 3.27 x 2.78	2	46006-224-01, -225-01, -239-01, -240-01, 253-01
1492-IFM40F-F24D-2	10...30V AC/DC	4.72 x 3.27 x 2.78	<0.05	46006-201-01
1492-IFM40F-F24AD-4	10...30V AC/DC	7.09 x 3.27 x 2.78	<0.05	46006-206-01
1492-IFM40F-F120-2	85...132V AC	8.27 x 3.27 x 2.78	2.5	46006-194-001, -195-01, -253-01
1492-IFM40F-FS-2	0...132V AC/DC	4.72 x 3.27 x 2.78	—	46006-201-01
1492-IFM40F-FS-4	0...264V AC/DC	7.09 x 3.27 x 2.78	—	46006-207-01
1492-IFM40F-FS24-2	10...30V AC/DC	4.72 x 3.27 x 2.78	2	46006-201-01
1492-IFM40F-FS24-4	10...30V AC/DC	7.09 x 3.27 x 2.78	2.4	46006-207-01
1492-IFM40F-FS120-2, -RIFM40F-FS120-2	85...132V AC/DC	4.72 x 3.27 x 2.78†	2.5	46006-201-01
1492-IFM40F-FS120-4	85...132V AC/DC	7.09 x 3.27 x 2.78	1.4	46006-206-01
1492-RIFM40F-FS120-4	85...132V AC/DC	7.87 x 3.27 x 2.78	1.4	46006-226-01
1492-IFM40F-FS240-4	204...264V AC/DC	7.09 x 3.27 x 2.78	2.4	46006-207-01
1492-IFM40F-FS24A-4	10...30V AC/DC	7.09 x 3.27 x 2.78	3.1	46006-226-01
1492-IFM40F-FS120A-4	85...132V AC/DC	7.09 x 3.27 x 2.78	1.4	46006-226-01
1492-RIFM40F-FS120A-4	85...132V AC/DC	7.87 x 3.27 x 2.78	1.4	46006-226-01
1492-IFM40F-FSA-4	85...132V AC/DC	7.09 x 3.27 x 2.78	—	46006-226-01
1492-IFM40F-FS240A-4	85...264V AC/DC	7.09 x 3.27 x 2.78	1.4	46006-226-01
1492-TIFM40F-F24-2	24V DC	8.66 x 3.27 x 2.74	—	46006-230-01
1492-TIFM40F-F24A-2	24V DC	9.5 x 3.27 x 2.74	3	46006-230-01

* To convert to millimeters, multiply inches by 25.4

* Ships with each module. For spare part, precede the part number with the letter "W."

† Add 0.39 in. to the width dimension for Bulletin 1492-Rxxx modules.

www.ab.com/catalogs Preferred availability cat. nos. are bold.

Publication A117-CA001A-EN-P


Allen-Bradley

Programmable Controller Wiring Systems

Specifications

General Wiring System Specifications

	Catalog Number 1492-...
Agency Certifications: Modules and Cables	cULus Listed: Hazardous Locations: Class I Div 2 (all except modules with relays); Groups A, B, D, and D. Temperature Code: T3C @ 60 °C. Standard UL File No. E10314, Guide No. NRAG/NRAG7
Agency Certification Modules	cULus Standard Locations; Module with relays; UL File No. E11372, Guide No. NRAQ/NRAQ7
CE Certifications	Factory Mutual (FM): Hazardous Locations; Class I Div 2 (all except modules with relays); Groups A, B, C, and D. Temperature Rating: T3C @ 60 °C. FM File J.I.3000590
Maximum Peak Transient Voltage	Compliant for all applicable directives 600V ‡
Maximum Current (per circuit)	2 A (except relays) §
Maximum Current (per module)	12 A (except relays) ➤§
Terminal Block Wire Range (Rated Cross Section) *	Fixed Screw Style: #12...#22 AWG (4.0...0.2 mm ²) Removable Screw Style: #12 to #22 AWG 2.5...0.5 mm ²) Removable Push-in Style: #12 to #26 AWG (2.5...0.2mm ²)
Wire Strip Length	Fixed Screw Style: .32 in. (8.0 mm) Removable Screw Style: .28 in. (7.0 mm) Removable Push-in Style: .39 in. (10.0 mm)
Recommended Terminal Block Screw Tightening Torque	Fixed Screw Style: 3.5...4.5 lb-in. (0.38...0.50 Nm) Removable Screw Style: 3.5...4.5 lb-in. (0.38...0.50 Nm) Removable Push-in Style: NA (See Push-in RTB Plug Specifications)
Operating Temperature Range	0...+60 °C
Storage Temperature Cables	-20...+80 °C
Storage Temperature Modules	-40...+85 °C
Operating Humidity	5...95% non-condensing
Pollution Degree	2⊛

Max. AWG	#22	#20	#18	#16	#14	#12
Max. No. of Wires per Terminal *	3	3	3	2	1	1

➤ Cat. Nos. 1492-IFM40F-F24AD-4 and 1492-IFM40F-F24D-2 are rated at 8 A.

* Maximum number of the same gauge stranded copper conductors allowed per wire funnel.

⊛ Pollution Degree 2 is an environment where normally only non-conductive pollution occurs, except for occasional temporary conductivity caused by condensation shall be expected.

‡ For transients >600V, use UL Recognized suppression device rated at 2.5 kV withstand.

§ For relay contact ratings, refer to page 9-42.

