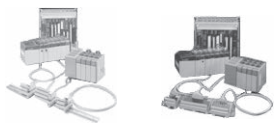


Programmable Controller Wiring Systems

Overview

 Analog Wiring Systems  Digital Wiring Systems with Field-Removable Terminal Blocks	Bulletin 1492 Programmable Controller Wiring Systems - Increases machine building productivity - Simplifies design and engineering time - Reduces wiring time and wiring errors - Benefits from quality-looking panels Standards Compliance and Certifications - Agency Certifications for Modules and Cables cULus: Hazardous Locations: Class I Div 2 (all except modules with relays); Groups A, B, D, and D. Temperature Code: T3C @ 60 °C. UL File No. E10314, Guide No. NRAQ cULus: Ordinary Locations; Module with relays; UL File No. E11372 Guide No. NRAQ - Agency Certification Modules 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 - CE Certifications Compliant for all applicable directives	Table of Contents Catalog Number Explanation 12-129 Selection Tables 12-141 Digital IFM Specifications 12-160 Standards Compliance and Certifications, Continued - UL 508 - UL 1604 - CSA C22.2 No. 14 - CSA C22.2 No. 213 - EN/IEC 61131-2
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Bulletin	1746	1756	1762	1764	1769	1794	1771	Bulletin 700H and 700S
Description	SLC 500	ControlLogix	MircoLogix 1200	MicroLogix 1500	CompactLogix	Flex	PLC-5	PowerFlex Drive
Product Selection	Web *	12-142	12-153	12-153	12-148	12-154	Web *	12-157

* Information for this product is available on the Industrial Controls Catalog website: www.ab.com/catalogs

Benefits

Reduced Wiring Time

Wiring is completed in a fraction of the time when wiring systems are used, as compared with the traditional method of wiring each point to the I/O swing arm and field-side terminal blocks. Pre-wired cables are factory-wired to the I/O wiring arm on one end and a connector for the Interface Module (IFM) on the other. IFMs enhance the capability of the I/O systems with added terminations, field-side LED status indicators, isolation circuits, overcurrent protection, and higher amperage outputs. Both standard and specific build-to-order length cables are available, providing the correct length for any panel in a neat, space-efficient wiring solution.

Reduced Wiring Errors

Wiring system cables are pre-tested to ensure 100% accurate connections and eliminate the need for point-to-point checking of wiring. No more crossed wires and loose connections between the I/O module and the terminal block. Even one error in wiring 128 I/O points in a point-to-point system may require a complete check of the wiring. Wiring errors can take several minutes to track down and correct before the panel is ready for startup. When IFMs and cables are snapped in place, they fit every time — no need to find the wrong or loose connection, resulting in a much higher rate of success at system startup.

Faster Troubleshooting and Easier Maintenance

Normal terminal blocks can't offer the benefits of IFMs, such as LED indication on each I/O point. Wiring systems improve system startup and ease troubleshooting and maintenance. Diagnostic capabilities in the form of fuses, blown fuse indication, and field-side ON-State LEDs — in a reduced space — allow maintenance personnel to quickly locate faults, reduce downtime, and improve overall productivity.

Increased Volume and Productivity

Cable interconnections for a wiring system can be up to 30 times faster to install than traditional point-to-point wiring, enabling OEMs and panel builders using wiring systems to build panels faster and produce more machines.

Reduced Wire Preparation and Routing

Pre-wired cables eliminate the time and costs associated with stripping and cutting wires. Routing wires is much easier with wiring systems, since engineers only have to worry about routing one pre-wired cable versus the 20 or 40 wires needed in the traditional wiring method.

Labeling and Marking

Pre-printed, I/O-specific adhesive label strips for quick marking of IFM terminals save labor compared with point-to-point wiring that requires labor-intensive wire markers. Pre-wired cables require no wire labels. Pre-printed I/O-specific labels ensure neat, easy-to-read identification of wires and I/O points for all users.

The marking of traditional terminal blocks has even caused some OEMs to move toward a high-tech approach of plotting markers, requiring additional equipment in the form of a plotter system and a PC to run the plotter software.

Simplified Design

Design engineers can simplify their panel drawings by calling out an IFM and pre-wired cable instead of having to detail every single wire and terminal block on their drawings. Simplified panel drawings aid not only the installer, but also the end customer who receives the panel.

Increased DIN Rail Density

An increasing trend in the industry is to pack more products into the same DIN Rail space. Wiring systems support this trend, as they require less DIN Rail space than traditional terminal blocks. For example, if an OEM were to use a 40-point IFM in place of 40 terminal blocks, DIN Rail space can be reduced by more than 50%. All IFMs have terminals for connecting the I/O field wiring. In addition, extra terminal, sensor, fusible, and relay IFMs contain common terminals that are used as power busses for sensor and actuators. No additional terminal blocks are needed to provide power to the sensors/actuators — saving valuable panel/DIN Rail space.

To further reduce panel space, narrow IFMs (e.g., Cat. No. 1492-IFM20FN) have been designed. They require 45% less space than the standard length IFMs, making them well-suited for tightly packed enclosures. The high density narrow IFMs have two rows of 10 field-wiring terminals with an overall length of 60 mm (2.36 in.).

Quality-Looking Panels

The pre-wired cables and IFMs organize the wiring in your panel and provide a consistent look. Pre-printed adhesive labels for the terminals neatly identify field-wiring connections, which correspond to the I/O module address. A large marking area is also available for identifying I/O information on the IFM.

Fewer Parts, Less Inventory, and Lower Carrying Cost

A wiring system involves an IFM and the cable, versus the block, barrier, jumper, markers, wires, and swing arms associated with traditional hardwired systems. Therefore, it requires fewer components and, in turn, less inventory and lower carrying costs.

Design Flexibility

To develop a cost-effective system, the hardware components must meet the needs of the design engineer. Rockwell Automation provides the broadest range of digital and analog systems in the industry. Allen-Bradley wiring systems deliver a lower life cycle cost.

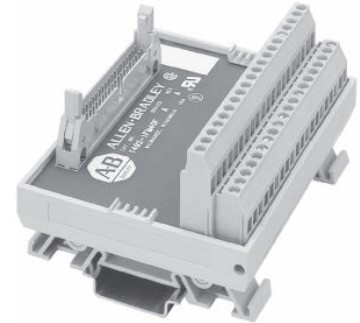
Digital Interface Modules (IFMs)

General Information

Digital IFMs are available with either a 20- or 40-pin cable connector. This is determined by the number of connections required for the I/O module.

Important: The following catalog number breakdown is for explanatory purposes only. It is not a product configurator. Not all combinations of fields are valid catalog numbers. Use this breakdown for verification and explanation only.

The cables used for Relay Master/Expander XIMs are the same as those used for Digital I/O Modules with the exception of the Cat. No. 1746-OA16 output module, which uses the 1492-CABLE*CR cable.



40-pin Connection Interface Module

1492 – IFM 20 F120 – 2
a
b
c
d

a

Modules	
Code	Description
IFM	Digital Interface Modules with Fixed Terminal Block
RIFM	Digital Interface Modules with Removable Terminal Block
TIFM	Digital Interface Module for SIL2 (Safety Integrity Level 2)

b

Digital Cable Connector Size	
Code	Description
20	20 pins
40	40 pins

c

Module Type (all types do not configure a catalog number)	
Code	Description
A	Input Module
F	Feedthrough
F24	Fused 24 Volt
F120	Fused 120 Volt
FS	Fused Isolated
D	LEDs
N	Narrow
24	24 Volt
120	120 Volt
240	240 Volt

d

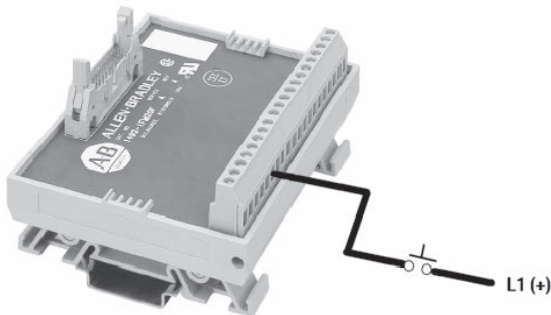
Number of Field Side Wiring Terminals	
Code	Description
Blank	One per I/O connection (Standard Terminals)
2	Two per I/O connection (Extra Terminals)
3	Three per I/O connection (Sensor Terminals)
4	Four per I/O connection (Special Terminal)

The number of terminals varies with the type of IFM — from one to four terminals per I/O point.

Standard terminal IFMs provide **one field-side** wiring terminal per programmable controller input or output point, as well as enough terminals for the I/O module power connections. The standard terminals are ideal for applications where the I/O device commons are terminated in the field or remotely from the I/O panel.

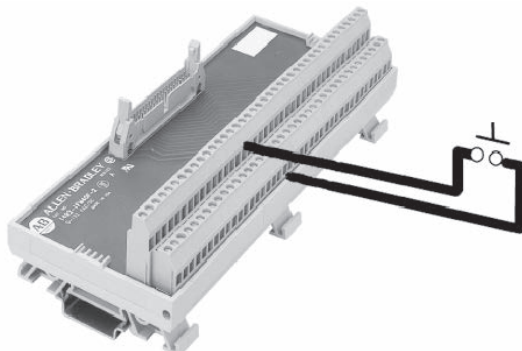
Isolated IFMs have terminals isolated into 8 or 16 groups, which allows each group of I/O devices to reference a different power source. The extra terminal IFMs are beneficial in applications where the I/O devices are terminated within the same panel as the I/O modules — eliminating the need for many additional terminal blocks.

Sensor IFMs provide three field-side terminals per input point. The middle and lower rows of the terminals are commoned together in groups of 18, and serve as power busses for 3-wire sensor types of devices — eliminating additional terminals, blocks, and jumpering systems.

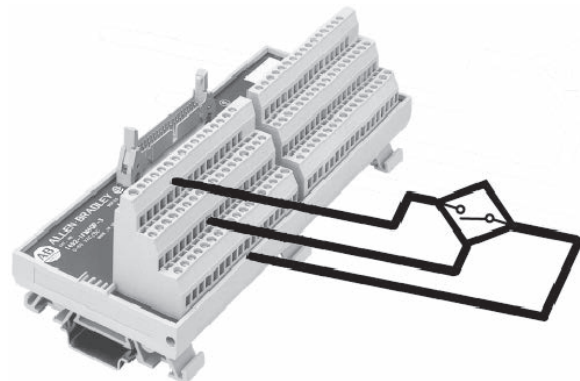


Standard Terminal Interface Module

Extra terminal IFMs provide **two or four field-side** terminals per input or output point. Non-isolated IFMs have two terminals per input or output point. Isolated IFMs have two or four terminals per input or output.



Extra Terminal Interface Module

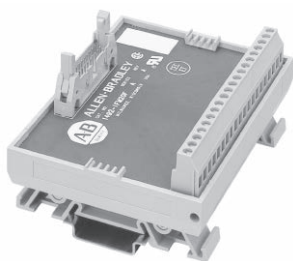


Three-Level Sensor Terminal Interface Module

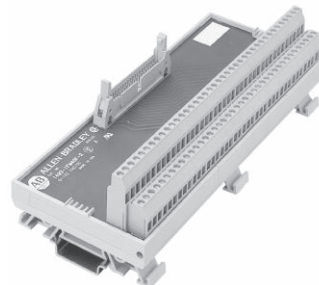
Digital Interface Modules (IFMs)

Feed-Through

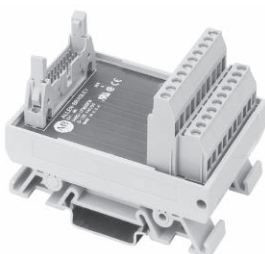
Feed-through IFMs provided the same capability as normal terminal blocks, but in a more condensed package.



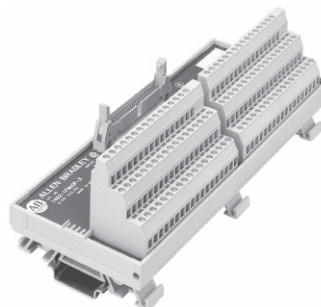
Feed-through Standard
For 20-point: Cat. No. 1492-IFM20F
For 40-point: Cat. No. 1492-IFM40F



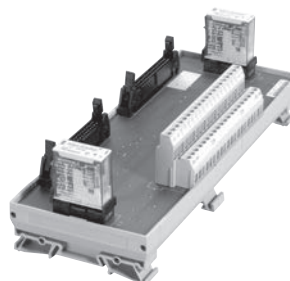
Feed-through Extra Terminal Products
For 20-point: Cat. No. 1492-IFM20F-2
For 40-point: Cat. No. 1492-IFM40F-2



Feed-Through Narrow
Cat. No. 1492-IFM20FN



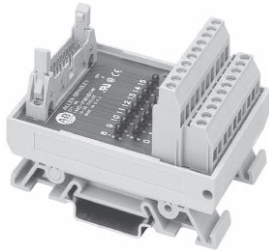
Feed-through Sensor Terminal Products
For 20-point: Cat. No. 1492-IFM20F-3
For 40-point: Cat. No. 1492-IFM40F-3



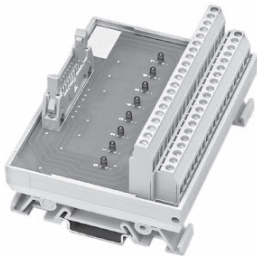
Safety Integrity Level (SIL 2)
Cat. No. 1492-TIFM40F-F24-2

Digital Interface Modules (IFMs) LED-Indicating

Voltage-indicating LEDs are available on standard, extra terminal, and sensor IFMs. The LEDs provide field-side troubleshooting diagnostics: the on/off status of an input device or the on/off status of the programmable controller output circuit. When used in conjunction with the logic-side programmable controller LEDs, the IFM LEDs can help determine whether a problem resides in the I/O module or in the field device/wiring. LED IFMs are available in both Isolated (Cat. No. 1492-IFM20DS24-4) and non-Isolated (Cat. No. 1492-IFM20D120) versions for 24V, 120V, and 240V applications.



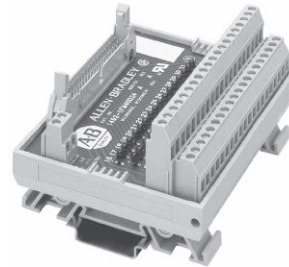
LED Indicating Standard
 For 20-point:
 Cat. No. 1492-IFM20D24,
 1492-IFM20D120, 1492-IFM20D120N
 For 40-point: Cat. No. 1492-IFM40D24



20-pin cable connector
ON-state LED Narrow module for 24V:
 Cat. No. 1492-IFM20D24N

20-point LED module for 120V:
 Cat. No. 1492-IFM20D120,

20-pin cable connector
LED Isolated module for 24V:
 Cat. No. 1492-IFM20DS24-4

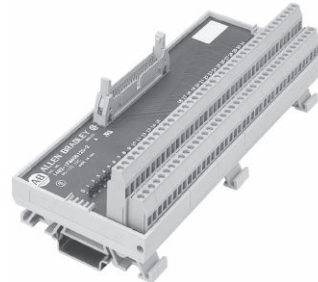


LED Indicating Extra Terminals

**For 20-point: Cat. No. 1492-IFM20D24-2, 1492-IFM20D24A-2,
 1492-IFM20D120-2, 1492-IFM20D120A-2,
 1492-IFM20D240-2, 1492-IFM20D240A-2**

**For 40-point: Cat. No. 1492-IFM40D24-2, 1492-IFM40D24A-2,
 1492-IFM40D120-2, 1492-IFM40D120A-2**

LED Indicating Sensor Terminal Products
 For 20-point: Cat. No. 1492-IFM20D24-3
 For 40-point: Cat. No. 1492-IFM40D24-3



LED Indicating 4 Terminals

For 20-point: Cat. No. 1492-IFM20DS24-4, 1492-IFM20DS120-4

**For 40-point: Cat. No. 1492-IFM40DS24-4, 1492-IFM40DS24A-4,
 1492-IFM40DS120-4, 1492-IFM40DS120A-4, 1492-IFM40DS240-4**



40-pin cable connector
ON-state LED module for 24V:
 Cat. No. 1492-IFM40D24

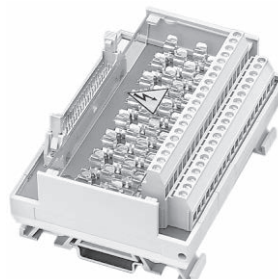
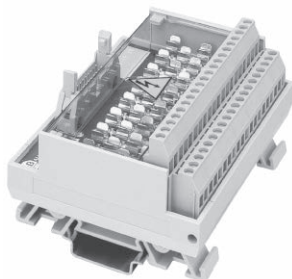
40-pin cable connector
LED module for 120V with extra terminals:
 Cat. No. 1492-IFM40D120-2

40-pin cable connector
LED Isolated Input module for 24V:
 Cat. No. 1492-IFM40DS24A-4

Digital Interface Modules (IFMs)

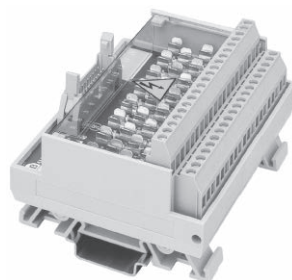
Fusible

Fusible modules provide a convenient method of adding overcurrent protections into your programmable controller wiring. These modules have 5 x 20 fuse holders on-board and are available with and without blown fuse indication. The 24V, 120V, and 240V blown fuse indicators reduce the troubleshooting time to locate and replace a blown fuse on the IFM. Fusible modules have an easy-to-remove, transparent plexiglass cover that prevents objects from contacting fuse circuitry under normal operation. Removal of fuses from the standard fuse holder is aided by fuse pullers (fuses not provided). The fusible modules also have two or four terminals per I/O point to create a power bus for input and output load connections. Fusible modules are available in both isolated (Cat. No. 1492-IFM20F-FS24-2) and nonisolated (Cat. No. 1492-IFM20F-F24-2) versions. There are a select number of fusible IFMs available for input modules provided. The fusible modules also have two or four terminals per I/O point to create a power bus for input and output load connections. Fusible modules are available in both isolated (Cat. No. 1492-IFM20F-FS24-2) and nonisolated (Cat. No. 1492-IFM20F-F24-2) versions. There are a select number of fusible IFMs available for input modules.

**Fused Extra Terminals**

For 20-point: Cat. No. 1492-IFM20FS-F120-4,
1492-IFM20FS-F120A-4, 1492-IFM20FS-F240-4

For 40-point: Cat. No. 1492-IFM40FS-F24-4, 1492-IFM40FS-F24A-4,
1492-IFM40FS-F120-4, 1492-IFM40FS-F120A-4,
1492-IFM40FS-F240-4, 1492-IFM40F-FS240A-4

**Fused Extra Terminals**

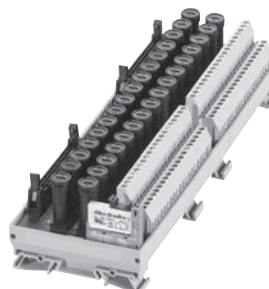
For 20-point: Cat. No. 1492-IFM20F-F-2, 1492-IFM20F-F24-2,
1492-IFM20F-F24A-2, 1492-IFM20F-F120-2, 1492-IFM20F-F120A-2,
1492-IFM20F-F240-2, 1492-IFM20FS-F-2, 1492-IFM20FS-F24-2,
1492-IFM20FS-F24A-2

For 40-point: Cat. No. 1492-IFM40F-F-2, 1492-IFM40F-F24-2,
1492-IFM40F-F120-2, 1492-IFM40FS-F-2, 1492-IFM40FS-F24-2,
1492-IFM40FS-F120-2, 1492-IFM40FS-F24-4, 1492-IFM40FS-F24A-4,
1492-IFM40FS-F120-4, 1492-IFM40FS-F120A-4, 1492-IFM40FS-F240-4



40-pin cable connector Isolated Fusible module
(no fuse blown indication): Cat. No. 1492-IFM40F-FS-2

40-pin cable connector Isolated Fusible module with 24V blown fuse
indication: Cat. No. 1492-IFM40F-FS24A-2



Safety Integrity Level (SIL2)
Cat. No. 1492-TIFM40F-F24A-2

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 E. 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.

