

# Wiring Systems for CompactLogix 5370 L1 and L2 Controllers



## Bulletin 1492 Wiring Systems

### Features and Benefits

Significant reduction in installation and commissioning time

- Reduce wiring time by 75% (plug and play)
- Reduction of troubleshooting (100% factory tested)
- Reduction of design details
- One “cable” between I/O module and field terminals
- Rockwell Automation provides the full wiring diagram of design

One IFM versus multiple separate terminal blocks

- Multiple interface module designs provide connection flexibility
  - Feed-through
  - LED Indication
  - Fusing
  - Interposing relay and other options
  - Specialty



### 5370 L1 Controller Options

#### DIGITAL



I/O-Ready Flying Leads Cable



Combined Input and Output IFM Connection



Two Individual Cables:  
(1) Input IFM Connection and  
(1) Output IFM Connection

### 5370 L2 Controller Options

#### DIGITAL



I/O-Ready Flying Leads Cable



Combined IFM Input and Output



Split IFM Cable:  
(1) Input and (1) Output

#### ANALOG



Single IFM Analog Connection



Dual IFM Analog Connection

*Wiring systems now available for L1 and L2 controllers.*

*Reducing wiring time by 75 percent, avoiding wiring errors and troubleshooting.*

Now users with applications for CompactLogix 5370 L1 and L2 controllers with embedded I/O can take advantage of the time savings offered by the bulletin 1492 I/O wiring systems.

Bulletin 1492 I/O wiring systems replace the point-to-point wiring between the I/O module and individual terminal blocks, reducing wiring time by 75%. The system also helps to avoid wiring errors and troubleshooting since the cables are 100% tested. The wiring system consists of a pre-wired interface cable that mounts directly to the controller's I/O terminals on one end, while the other end of the cable connects to an interface module or has individual flying wire leads.

LISTEN.  
THINK.  
SOLVE.

# L1 Controllers

1769-L16ER-BB1B									
1769-L18ER-BB1B									
1769-L18ERM-BB1B									
IFM Module Selection	PLC Input/ Output	Wiring System Type	Description	Terminals per Channel	Fixed or Removable Terminals	Wiring System Module Cat. No.	RTB Required		Cable Cat. No. <sup>1</sup>
							Screw	Push-in	
I/O-Ready Cables							---		1492-CAB***DIOL1
Separate Input and Output Interface Modules (Choose 2 IFMs)	Input or Output	Feed Through	Standard	1	F	1492-IFM20F	-	-	1492-CAB***20L1
				1	R	1492-RIFM20F	RTB20N	RTB20P	1492-CAB***20L1
			Narrow	1	F	1492-IFM20FM	-	-	1492-CAB***20L1
				1	R	1492-RIFM20FM	RTB20N	RTB20P	1492-CAB***20L1
			Extra Terminals	2	F	1492-IFM20F-2	-	-	1492-CAB***20L1
				2	R	1492-RIFM20F2	RTB20N	RTB20P	1492-CAB***20L1
		Feed Through Reduced Height	Standard Reduced Height	1	F	1492-IFM20FH	-	-	1492-CAB***20L1
				1	R	1492-RIFM20FH	RTB20N	RTB20P	1492-CAB***20L1
			Narrow Reduced Height	1	F	1492-IFM20FNH	-	-	1492-CAB***20L1
				1	R	1492-RIFM20FNH	RTB20N	RTB20P	1492-CAB***20L1
			Extra Terminals Reduced Height	2	F	1492-IFM20FNH-2	-	-	1492-CAB***20L1
				2	R	1492-RIFM20FNH-2	RTB20N	RTB20P	1492-CAB***20L1
	Fusible	Extra Terminals	2	F	1492-IFM20F-F-2	-	-	1492-CAB***20L1	
			2	R	1492-RIFM20F-F-2	RTB20N	RTB20P	1492-CAB***20L1	
		Blown Fuse Indicator, Extra Terminals	2	F	1492-IFM20F-F24-2	-	-	1492-CAB***20L1	
			2	R	1492-RIFM20F-F24-2	RTB20N	RTB20P	1492-CAB***20L1	
	Output Only	High-Density Relay	Electromechanical Relay	1	F	1492-XIMTR2024-16R	-	-	1492-CAB***20L1
				1	R	1492-RXIMTR2024-16R	RTB20N	RTB20P	1492-CAB***20L1
			Solid State Relay	1	F	1492-XIMTS2024-16R	-	-	1492-CAB***20L1
				1	R	1492-RXIMTS2024-16R	RTB20N	RTB20P	1492-CAB***20L1
		Master/ Expander Relays	Electromechanical Relay	1	F	1492-XIM2024-16R	-	-	1492-CAB***20L1
				1	F	1492-XIM2024-8R	-	-	1492-CAB***20L1
			Electromechanical Relay	1	F	1492-XIM24-8R	-	-	1492-CAB***20L1
				1	F	1492-XIM24-8R	-	-	1492-CAB***20L1
Combined Input and Output Interface Module (1 IFM)	Input and Output (Combined)	Feed Through	Standard	1	F	1492-IFM40F	-	-	1492-CAB***40L1
				1	R	1492-RIFM40F	RTB20N	RTB20P	1492-CAB***40L1
			Extra Terminals	2	F	1492-IFM40F-2	-	-	1492-CAB***40L1
		2		R	1492-RIFM40F-2	RTB20N	RTB20P	1492-CAB***40L1	
		Feed Through Reduced Height	Standard Reduced Height	1	F	1492-IFM40FH	-	-	1492-CAB***40L1
				1	R	1492-RIFM40FH	RTB20N	RTB20P	1492-CAB***40L1
	Extra Terminals Reduced Height		2	F	1492-IFM40FH-2	-	-	1492-CAB***40L1	
		2	R	1492-RIFM40FH-2	RTB20N	RTB20P	1492-CAB***40L1		
	Fusible	Extra Terminals	2	F	1492-IFM40F-F-2	-	-	1492-CAB***40L1	
			2	R	1492-RIFM40F-F-2	RTB20N	RTB20P	1492-CAB***40L1	
			2	F	1492-IFM40F-F24-2	-	-	1492-CAB***40L1	
		Blown Fuse Indicator, Extra Terminals	2	F	1492-IFM40F-F24-2	-	-	1492-CAB***40L1	
2			R	1492-RIFM40F-F24-2	RTB20N	RTB20P	1492-CAB***40L1		
2			R	1492-RIFM40F-F24-2	RTB20N	RTB20P	1492-CAB***40L1		

<sup>1</sup>Note: Replace \*\*\* with length code from 0.1 to 30 meters. Example: 010 = 1.0 meters.

## L2 Controllers Digital I/O

1769-L24ER-QB1B										
1769-L24ER-QBFC1B										
1769-L27ERM-QB1B										
Digital Input/Outputs										
IFM Module Selection	PLC Input/Output	Wiring System Type	Description	Terminals per Channel	Fixed or Removable Terminals	Wiring System Module Cat. No.	RTB Required		Cable Cat. No. <sup>1</sup>	
							Screw	Push-in		
I/O-Ready Cables						---			1492-CAB***DIOL2	
Separate Input and Output Interface Modules (Choose 2 IFMs)	Input or Output	Feed Through	Standard	1	F	1492-IFM20F	-	-	1492-CAB***20DIOL2	
				1	R	1492-RIFM20F	RTB20N	RTB20P	1492-CAB***20DIOL2	
			Narrow	1	F	1492-IFM20FM	-	-	1492-CAB***20DIOL2	
				1	R	1492-RIFM20FM	RTB20N	RTB20P	1492-CAB***20DIOL2	
			Extra Terminals	2	F	1492-IFM20F-2	-	-	1492-CAB***20DIOL2	
				2	R	1492-RIFM20F2	RTB20N	RTB20P	1492-CAB***20DIOL2	
		Feed Through Reduced Height	Standard Reduced Height	1	F	1492-IFM20FH	-	-	1492-CAB***20DIOL2	
				1	R	1492-RIFM20FH	RTB20N	RTB20P	1492-CAB***20DIOL2	
			Narrow Reduced Height	1	F	1492-IFM20FNH	-	-	1492-CAB***20DIOL2	
				1	R	1492-RIFM20FNH	RTB20N	RTB20P	1492-CAB***20DIOL2	
			Extra Terminals Reduced Height	2	F	1492-IFM20FNH-2	-	-	1492-CAB***20DIOL2	
				2	R	1492-RIFM20FNH-2	RTB20N	RTB20P	1492-CAB***20DIOL2	
	Fusible	Extra Terminals	2	F	1492-IFM20F-F-2	-	-	1492-CAB***20DIOL2		
			2	R	1492-RIFM20F-F-2	RTB20N	RTB20P	1492-CAB***20DIOL2		
		Blown Fuse Indicator, Extra Terminals	2	F	1492-IFM20F-F24-2	-	-	1492-CAB***20DIOL2		
			2	R	1492-RIFM20F-F24-2	RTB20N	RTB20P	1492-CAB***20DIOL2		
		Output Only	High-Density Relay	Electromechanical Relay	1	F	1492-XIMTR2024-16R	-	-	1492-CAB***20DIOL2
					1	R	1492-RXIMTR2024-16R	RTB20N	RTB20P	1492-CAB***20DIOL2
	Solid State Relay			1	F	1492-XIMTS2024-16R	-	-	1492-CAB***20DIOL2	
				1	R	1492-RXIMTS2024-16R	RTB20N	RTB20P	1492-CAB***20DIOL2	
	Master/Expander Relays		Electromechanical Relay	1	F	1492-XIM2024-16R	-	-	1492-CAB***20DIOL2	
				1	F	1492-XIM2024-16RF	-	-	1492-CAB***20DIOL2	
			Electromechanical Relay	1	F	1492-XIM2024-8R	-	-	1492-CAB***20DIOL2	
				1	F	1492-XIM24-8R	-	-	1492-CAB***20DIOL2	
Combined Input and Output Interface Module (1 IFM)	Input and Output (Combined)		Feed Through	Standard	1	F	1492-IFM40F	-	-	1492-CAB***40DIOL2
					1	R	1492-RIFM40F	RTB20N	RTB20P	1492-CAB***40DIOL2
				Extra Terminals	2	F	1492-IFM40F-2	-	-	1492-CAB***40DIOL2
					2	R	1492-RIFM40F-2	RTB20N	RTB20P	1492-CAB***40DIOL2
		Feed Through Reduced Height	Standard Reduced Height	1	F	1492-IFM40FH	-	-	1492-CAB***40DIOL2	
				1	R	1492-RIFM40FH	RTB20N	RTB20P	1492-CAB***40DIOL2	
			Extra Terminals Reduced Height	2	F	1492-IFM40FH-2	-	-	1492-CAB***40DIOL2	
				2	R	1492-RIFM40FH-2	RTB20N	RTB20P	1492-CAB***40DIOL2	
		Fusible	Extra Terminals	2	F	1492-IFM40F-F-2	-	-	1492-CAB***40DIOL2	
				2	R	1492-RIFM40F-F-2	RTB20N	RTB20P	1492-CAB***40DIOL2	
			Blown Fuse Indicator, Extra Terminals	2	F	1492-IFM40F-F24-2	-	-	1492-CAB***40DIOL2	
				2	R	1492-RIFM40F-F24-2	RTB20N	RTB20P	1492-CAB***40DIOL2	

<sup>1</sup>Note: Replace \*\*\* with length code from 0.1 to 30 meters. Example: 010 = 1.0 meters.

## L2 Controllers Analog I/O

1769-L24ER-QB1B									
1769-L24ER-QBFC1B									
1769-L27ERM-QB1B									
High-Speed Counter, Analog Input/Outputs, Temperature Sensing Input/Outputs									
IFM Module Selection		Wiring System Type	Description	Terminals per Channel	Fixed or Removable Terminals	Wiring System Module Cat. No.	RTB Required		Cable Cat. No. <sup>1</sup>
							Screw	Push-in	
# of IFMs									
1	HSC	High-speed counter	Feed through	1	F	1492-AIFMCE4	-	-	1492-ACAB***HSCL2
			Feed through, fused	1	F	1492-AIFMCE4-F	-	-	1492-ACAB***HSCL2
2	HSC and AIO – Current	High-speed counter (choose 1)	Feed through	1	F	1492-AIFMCE4	-	-	1492-ACAB***HSCAIOCL2
			Feed through, fused	1	F	1492-AIFMCE4-F	-	-	
		Feed through (choose 1)	Feed through	3	F	1492-AIFM8S-3	-	-	
			Feed through	3	R	1492-RAIFM8S-3	RTB20N	RTB20P	
2	HSC and AIO – Voltage	High-speed counter (choose 1)	Feed through	1	F	1492-AIFMCE4	-	-	1492-ACAB***HSCAIOVL2
			Feed through, fused	1	F	1492-AIFMCE4-F	-	-	
		Feed through (choose 1)	Feed through	3	F	1492-AIFM8S-3	-	-	
			Feed through	3	R	1492-RAIFM8S-3	RTB20N	RTB20P	
2	HSC and RTD	High-speed counter (choose 1)	Feed through	1	F	1492-AIFMCE4	-	-	1492-ACAB***HSCRTDL2
			Feed through, fused	1	F	1492-AIFMCE4-F	-	-	
		Feed through (choose 1)	Feed through	3	F	1492-AIFM8S-3	-	-	
			Feed through	3	R	1492-RAIFM8S-3	RTB20N	RTB20P	
2	HSC and TC	High-speed counter (choose 1)	Feed through	1	F	1492-AIFMCE4	-	-	1492-ACAB***HSCRTDL2
			Feed through, fused	1	F	1492-AIFMCE4-F	-	-	
		Feed through (choose 1)	Feed through	3	F	1492-AIFM8TC-3	-	-	
			Feed through with CJC	3	R	1492-RAIFM8TC-3	RTB20N	RTB20P	
1	AIO – Current	Single-ended current	Feed through	3	F	1492-AIFM8S-3	-	-	1492-ACAB***AIOCL2
			Feed through	3	R	1492-RAIFM8S-3	RTB20N	RTB20P	
		Differential current	Feed through	3	F	1492-AIFM8S-3	-	-	
			Feed through	3	R	1492-RAIFM8S-3	RTB20N	RTB20P	
1	AIO – Voltage	Single-ended voltage	Feed through	3	F	1492-AIFM8S-3	-	-	1492-ACAB***AIOVL2
			Feed through	3	R	1492-RAIFM8S-3	RTB20N	RTB20P	
		Differential voltage	Feed through	3	F	1492-AIFM8S-3	-	-	
			Feed through	3	R	1492-RAIFM8S-3	RTB20N	RTB20P	
1	RTD	RTD	Feed through	3	F	1492-AIFM8S-3	-	-	1492-ACAB***RTDL2
			Feed through	3	R	1492-RAIFM8S-3	RTB20N	RTB20P	
1	TC	TC	Feed through with CJC	3	F	1492-AIFM8TC-3	-	-	1492-ACAB***TCL2
			Feed through with CJC	3	R	1492-RAIFM8TC-3	RTB20N	RTB20P	

<sup>1</sup>Note: Replace \*\*\* with length code from 0.1 to 30 meters. Example: 010 = 1.0 meters.

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