

Terminal Blocks/Wiring Systems/Signal Conditioners

Table of Contents

IEC Accessories and Technical Specifications

• DIN Mounting Rails	Page 12-79
• End Barriers	Page 12-80
• End Anchors/Retainers	Page 12-81
• Partition Plates	Page 12-82
• Jumpers	Page 12-83
• Test Plugs	Page 12-87
• General Accessories	Page 12-89
• Marking Systems	Page 12-90
• Specifications	Page 12-95

NEMA/EEMAC Terminal Blocks

• Open Construction Blocks	Page 12-102
• Isolation Switch Blocks	Web†
• Fuse Blocks	Web†
• Voltage Indicating Blocks	Web†

Panel Mount Blocks Page 12-107

NEMA Accessories and Technical Specifications

• Mounting Rails	Page 12-109
• Stacking Bridge Kits	Page 12-110
• End Anchors	Page 12-111
• Side Jumpers/Fanning Strips	Page 12-111
• Fuse Puller/Test Sockets	Page 12-112
• Marking Systems	Page 12-113
• Specifications	Page 12-114

Finger-Safe Terminal Blocks

• High Density	Web†
• Fuse Blocks and Surge Suppressor Blocks	Web†
• Resistor Blocks, Voltage Indicating Blocks, and Electrical Component Blocks	Web†

Power Blocks Page 12-118

Programmable Controller Wiring Systems Page 12-127

• Bulletin 1756 ControlLogix	Page 12-142
• Bulletin 1769 CompactLogix	Page 12-148
• Bulletin 1762 MicroLogix 1200	Page 12-153
• Bulletin 1764 MicroLogix 1400	Page 12-153
• Bulletin 1794 Flex	Page 12-154
• Bulletin 700H and 700S PowerFlex Drive	Page 12-157
• Bulletin 1746 SLC 500	Web†
• Bulletin 1771 PLC-5	Web†

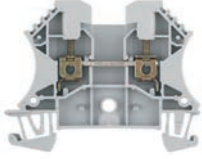
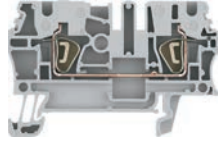
I/O Wiring Conversion Systems

• PLC-5 Bulletin 1771 to 1756 ControlLogix	Page 12-163
• Modicon 800 to 1756 ControlLogix	Page 12-171

Signal Conditioners Page 12-176

• Current/Voltage	Page 12-182
• RTD	Page 12-193
• Thermocouple	Page 12-195
• Line-Monitoring	Page 12-198
• Bridge/Frequency/HART	Page 12-203
• Universal	Page 12-206

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

		
Bulletin	1492-J, -W	1492-L
Type	Screw Type Terminal Blocks	Spring-Clamp Terminal Blocks
Technology	Screw terminations are a time-proven method of wire connection. Their greatest advantage is the ability to land multiple wires to a single terminal, potentially saving panel space. Screw type blocks can often accept up to five solid or stranded wires per terminal. They also typically provide the best visual indication of the wire connection.	Compared to screw type terminations, spring clamp terminations can be a significantly faster method of connection and can often reduce wire connection time by 30...50%. Because the wire is under constant tension from the spring clamp, spring type terminations also produce very favorable results in high vibration applications.
Certifications	UR, CSA	UR, CSA
Standards Compliance	IEC, CE	IEC, CE
Product Types	• Mini blocks • Feed-through blocks • Multi-conductor blocks • Plug-in style blocks • Grounding blocks • Fuse blocks • Two level terminal blocks • Three-Level Sensor blocks • Electrical Component blocks • Isolation blocks	• Mini blocks • Fuse blocks • Feed-through blocks • Grounding blocks • Multi-circuit blocks • Plug-in style blocks • Isolation blocks • Sensor blocks • Electrical component blocks
Product Selection	Page 12-6	Page 12-47

Certifications

Allen-Bradley terminal blocks generally have been designed to meet the requirements of one or more regulatory bodies. Most products have also been tested per additional standards. The following is a listing of some of the regulatory bodies and standards which apply to Allen-Bradley terminal block products. See the particular product description for information on specific certifications and ratings.



(Underwriters Laboratories) — Devices in this catalog with one of these ratings have been tested by Underwriters Laboratories and meet the requirements of one or more of the following United States Standards:

- UL 467 — Grounding and Bonding Equipment
- UL 486E — Equipment Wiring Terminals for Use with Aluminum and/or Copper Conductors
- UL 1059 — Standard for Terminal Blocks

Reference UL files E34648, E40735, E160646



(Underwriters Laboratories) — Devices in this catalog with this rating have been tested by Underwriters Laboratories and meet the requirements of the following Canadian Standard:

- CSA 22.2 No. 158 — Terminal Blocks

Reference UL file E40735



(Canadian Standards Association) — Devices in this catalog with this rating have been tested by the Canadian Standards Association and meet the requirements of the following Canadian Standard:

- CSA 22.2 No. 158 — Terminal Blocks

Reference CSA files LR67896



Terminal blocks listed in this catalog meet the requirements of the Low Voltage Directive put forth by the European Union. Devices have been tested and comply with one or more of the following European Norms:

- EN 60947-1 — Low Voltage Switchgear and Controlgear: General Rules
- EN 60947-7-1 — Low Voltage Switchgear and Controlgear: Terminal Blocks for Copper Conductors
- EN 60947-7-2 — Low Voltage Switchgear and Controlgear: Protective Conductor Terminal Blocks for Copper Conductors
- EN 60947-7-3 — Low Voltage Switchgear and Controlgear: Safety Requirements for Fuse Terminal Blocks



ATEX — Devices listed in this catalog with “ATEX” ratings meet the following European Norms per DEMKO or KEMA, Approval Certification Bodies for the European Union:

- EN 60079-7 — Electrical Apparatus for Potentially Explosive Atmospheres — General Requirements
- EN 60079-0 — Electrical Apparatus for Potentially Explosive Atmospheres — Increased Safety “e”

Contact your local Rockwell Automation sales office or Allen-Bradley distributor for a copy of the certificate.



Screw Connection Terminal Blocks

Certifications/Introduction

Ex e II — Many 1492-J, 1492-K, 1492-L, and 1492-W terminal blocks in this catalog meet the following Canadian Standards per Underwriters Laboratories:

CAN/CSA E 60079-7 — Electrical Apparatus for Explosive Atmospheres — Part 0 — General Requirements

CAN/CSA E 60079-0 — Electrical Apparatus for Explosive Atmospheres — Part 7 — Increased Safety “e”

These products are suitable for Class I, Zone 1 Hazardous Locations. Reference UL file E187022. Contact your local Allen-Bradley distributor for more information.

AEx e II — Devices listed in this catalog with an “AEx e II” rating meet the following United States Standard per Underwriters Laboratories:

- ANSI/UL 60079-0 and 60079-7 — Standard for Electrical Equipment for Use in Class I, Zone 0, 1, and 2 Hazardous (Classified) Locations

These products are suitable for Class I, Zone 1 Hazardous Locations. Reference UL file E187022. Contact your local Rockwell Automation sales office or Allen-Bradley distributor for more information.

Lloyd's Register — Many 1492-H, 1492-J, 1492-L, and 1492-W terminal blocks in this catalog have been certified for use in marine, off-shore, and industrial installations per the following standard:

- Lloyd's Register Test Specification No. 1:1996

Contact your local Rockwell Automation sales office or Allen-Bradley distributor for a copy of the certificate.

The Allen-Bradley Line of IEC Terminal Blocks... International Products for a Worldwide Marketplace

The Allen-Bradley Bulletin 1492-J line of internationally approved IEC style terminal blocks offers a wide range of features and benefits ideally suited for many industrial applications. The 1492-J line has been designed to meet the tough requirements of almost every industrial application. Functional, internationally approved, finger-safe, and cost-effective — the Allen-Bradley Bulletin 1492-J line.

Products Available in the Bulletin 1492 Screw Terminal Block Line

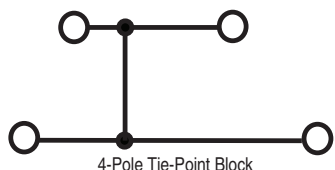
Our family of IEC terminal blocks consists of many different types of blocks, from general feed-through terminal blocks for control wiring to specialty blocks for grounding and isolating. We even offer thermocouple terminal blocks, specifically designed for temperature-dependent process control applications.

Products offered within the Bulletin 1492 Screw Terminal Block line include:

- **Feed-Through Blocks**, capable of accommodating #30...2/0 AWG (0.2...70 mm²) wire
- **Grounding Blocks** for grounding a given circuit to the DIN Rail
- **Mini Blocks** for applications where panel space is at a premium
- **Two-Level Blocks** that double circuit wiring density
- **Multi-Conductor Blocks** that allow splitting or joining of control circuits
- **Three-Level Sensor Blocks** for coordination of three-wire sensor groups
- **Isolation Blocks** for circuit isolation during testing and troubleshooting
- **Fuse Blocks**, with and without blown fuse indication, for easily integrated overcurrent protection
- **Electrical Component Blocks** that allow the insertion of fixed components into control circuits. Available components include resistors, diodes, surge suppression circuits, and shunt bars.

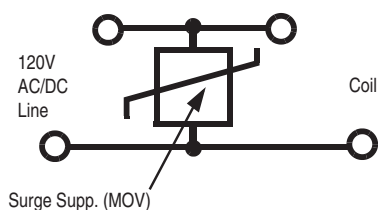
Tie-Point Block
 (Cat. No. 1492-JD3C)

Incorporates a shunt bar between the upper and lower current bars to provide a common point among all four terminals.



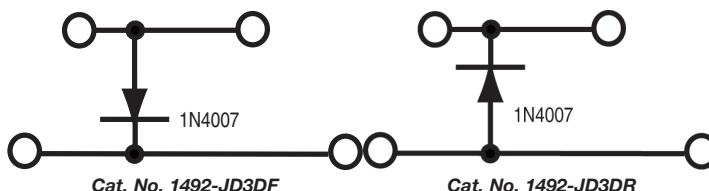
Surge Suppression Block (Cat. No. 1492-JD3SS)

Provides a convenient means of incorporating transient suppression for relays, contactors, and solenoids into a control system.



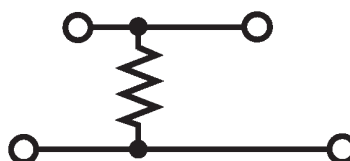
Diode Block
 (Cat. Nos. 1492-JD3DF, 1492-JD3DR)

Uses a 1N4007 diode between the upper and lower levels for insertion into a control circuit. This block is useful in low voltage DC control circuits for directioning and suppression.



Resistor Block
 (Cat. No. 1492-JD3RB, -JD3RC001)

Permits the introduction of a 10 Ω ...4.75 M Ω resistor into a control circuit.



- **Return Blocks** that have both terminations on the same side of the terminal block allowing the rail to be mounted next to the wall of an enclosure
- **Plug-In Style Blocks** that allow the insertion of removable plugs into control circuits. Available plugs include a Disconnect Plug, a Fuse Plug, and a Component Plug which will accommodate various electrical components.
- **Thermocouple Terminal Blocks** (Types B, E, J, K, N, S, T) for temperature control applications
- A wide variety of **Snap-In Markers** for individual or group circuit identification
- Multi-pole insulated **Center Jumpers** which provide a convenient method of commoning control circuits

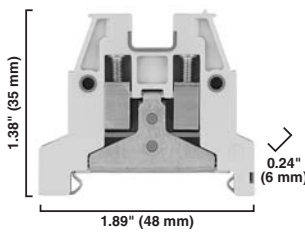
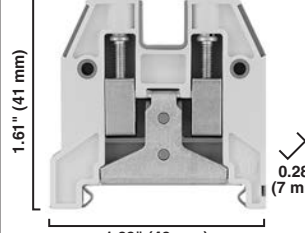
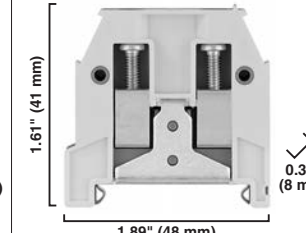
Materials and Design Features

The Bulletin 1492-J line is designed for safety, installation ease, and ruggedness. Features using these design criteria include the following:

- Tin-plated terminals and steel screws for corrosion resistance (Bulletin 1492-W terminal blocks have nickel-plated terminals and stainless steel screws)
- High copper content copper alloy for excellent conductivity
- Four-sided wire funnel guides for easy wire insertion
- Finger-safe housings to prevent accidental contact with live circuits
- International approvals for worldwide use
- DIN Rail (Cat. No. 199-DR1) mountability, allowing terminal blocks to be placed on the same channel as contactors, starters, relays, and other DIN Rail-mounted control devices
- Self-extinguishing, polyamide 6.6 housing material with UL 94-V0 flammability rating (Bulletin 1492-W terminal blocks have UL 94-V2 flammability rating)
- Backed out screws for fast wiring

Screw Connection Terminal Blocks

Space-Saver Grounding Blocks

	1492-WG4				1492-WG6				1492-WG10S		
Dimensions are not intended to be used for manufacturing purposes. Note: Height dimension is measured from top of rail to top of terminal block.											
	Single-circuit grounding terminal block.				Single-circuit grounding terminal block.				Single-circuit grounding terminal block.		
Certifications		IEC	CSA	ATEX		IEC	CSA	ATEX		CSA	IEC
Voltage Rating	—	—	—	—	—	—	—	—	—	—	—
Maximum Current	Grounding				Grounding				Grounding		
Wire Range (Rated Cross Section)	#22...12 AWG	4 mm ²	#22...12 AWG	4 mm ²	#22...10 AWG	6 mm ²	#22...10 AWG	6 mm ²	#22...8 AWG	#22...8 AWG	10 mm ²
Wire Strip Length	0.43 in. (11 mm)				0.47 in. (12 mm)				0.43 in. (11 mm)		
Recommended Tightening Torque	5.6...6.8 lb•in (0.7 N•m)				5.6...6.8 lb•in (0.7 N•m)				7.1 lb•in (0.8 N•m)		
Density	50 pcs/ft (166 pcs/m)				43 pcs/ft (142 pcs/m)				38 pcs/ft (125 pcs/m)		
Housing Temperature Range	-40...+195 °F (-40...+90 °C)				-40...+195 °F (-40...+90 °C)				-40...+195 °F (-40...+90 °C)		
Terminal Blocks	Cat. No.	Pkg Qty.			Cat. No.	Pkg Qty.			Cat. No.	Pkg Qty.	
Color: Green/Yellow	1492-WG4	50			1492-WG6	50			1492-WG10S	10	
Accessories	Cat. No.	Pkg Qty.			Cat. No.	Pkg Qty.			Cat. No.	Pkg Qty.	
Mounting Rails:											
1 m Symmetrical DIN (Steel)	199-DR1	10			199-DR1	10			199-DR1	10	
1 m Symmetrical DIN (Aluminum)	1492-DR5	10			1492-DR5	10			1492-DR5	10	
1 m Hi-Rise Sym. DIN (Aluminum)	1492-DR6	2			1492-DR6	2			1492-DR6	2	
1 m Angled Hi-Rise Sym. DIN (Steel)	1492-DR7	2			1492-DR7	2			1492-DR7	2	
End Barrier	1492-EB3-Y	50			1492-EB10-Y	50			1492-EB10-Y	50	
End Anchors:											
DIN Rail — Normal Duty	1492-EAJ35	100			1492-EAJ35	100			1492-EAJ35	100	
DIN Rail — Heavy Duty	1492-EAHJ35	50			1492-EAHJ35	50			1492-EAHJ35	50	
Marking Systems:											
Snap-in Marker Card	1492-MS6X12 (80/card)	5			1492-MS6X12 (80/card)	5			1492-MS6X12 (80/card)	5	