

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†**

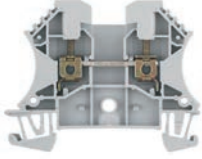
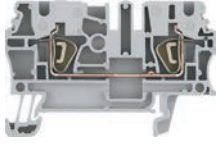
I/O Wiring Conversion Systems

- 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	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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

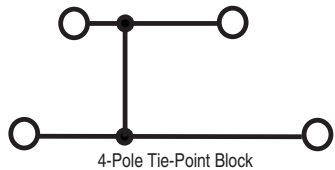
Our family of IEC terminal blocks consists of many different types of blocks, from general feed-through terminal blocks for control wiring to specialty blocks for grounding and isolating. We even offer thermocouple terminal blocks, specifically designed for temperature-dependent process control applications.

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.

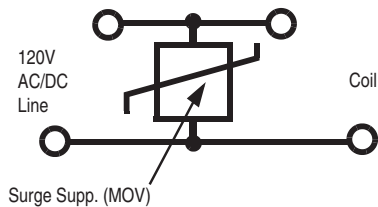
Tie-Point Block (Cat. No. 1492-JD3C)

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



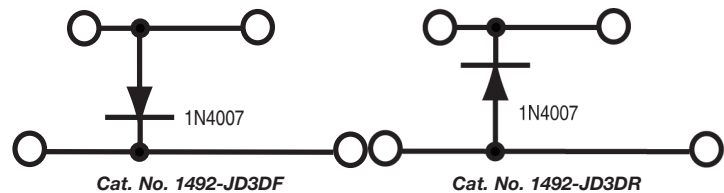
Surge Suppression Block (Cat. No. 1492-JD3SS)

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



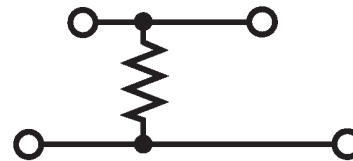
Diode Block (Cat. Nos. 1492-JD3DF, 1492-JD3DR)

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 MΩ 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

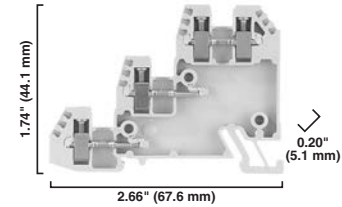
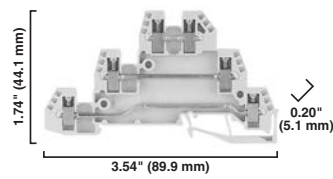
Sensor Blocks

1492-WTF3...

1492-WTS3...

Dimensions are not intended to be used for manufacturing purposes.

Note: Height dimension is measured from top of rail to top of terminal block.



Specifications	Three-circuit terminal block.			Three-level sensor block.		
Certifications		CSA	IEC		CSA	IEC
Voltage Rating	300V AC/DC		250V AC/DC	300V AC/DC		250V AC/DC
Maximum Current	10 A		24 A	10 A		24 A
Wire Range (Rated Cross Section)	#26...14 AWG		0.5...2.5mm ²	#26...14 AWG		0.5...2.5mm ²
Recommended Tightening Torque	4.2...4.6 lb•in (0.5 N•m)			4.2...4.6 lb•in (0.5 N•m)		
Density	60 pcs/ft (197 pcs/m)			60 pcs/ft (197 pcs/m)		
Housing Temperature Range	-40...+195 °F (-40...+90 °C)			-40...+195 °F (-40...+90 °C)		
Indicator Type WTF3/WTS3	No indicator			No indicator		
WTF3LP/WTS3LP	Red LED for PNP devices (10...50V)			Red LED for PNP devices (10...50V)		
WTF3LN/WTS3LN	Red LED for NPN devices (10...50V)			Red LED for NPN devices (10...50V)		
Leakage Current WTF3/WTS3	—			—		
WTF3LP/WTS3LP	2.69 mA @ 50V			2.69 mA @ 50V		
WTF3LN/WTS3LN	2.69 mA @ 50V			2.69 mA @ 50V		
Wire Strip Length	0.31 in. (8 mm)			0.31 in. (8 mm)		
Short-Circuit Current Rating	See page 12-42					

Terminal Blocks		Cat. No.	Pkg Qty.	Cat. No.	Pkg Qty.
Color:	Grey	1492-WTF3	50	1492-WTS3	50
	Blue	—	—	1492-WTS3-B	50
	Grey for PNP devices	1492-WTF3LP	50	1492-WTS3LP	50
	Grey for NPN devices	1492-WTF3LN	50	1492-WTS3LN	50
Accessories		Cat. No.	Pkg Qty.	Cat. No.	Pkg Qty.
Mounting Rails:					
1 m Symmetrical DIN (Steel)		199-DR1	10	199-DR1	10
1 m Symmetrical DIN (Aluminum)		1492-DR5	10	1492-DR5	10
1 m Hi-Rise Sym. DIN (Aluminum)		1492-DR6	2	1492-DR6	2
1 m Angled Hi-Rise Sym. DIN (Steel)		1492-DR7	2	1492-DR7	2
End Barrier		1492-EBTF3	50	1492-EBTS3	50
End Anchors and Retainers:					
Screwless End Retainer		1492-ERL35	20	1492-ERL35	20
DIN Rail — Normal Duty		1492-EAJ35	100	1492-EAJ35	100
DIN Rail — Heavy Duty		1492-EAHJ35	50	1492-EAHJ35	50
Jumpers:					
Center Jumper — 50-pole		1492-CJT5-50	5	1492-CJT5-50	5
Center Jumper — 10-pole		1492-CJT5-10	10	1492-CJT5-10	10
Center Jumper — 3-pole		1492-CJT5-3	10	1492-CJT5-3	10
Center Jumper — 2-pole		1492-CJT5-2	10	1492-CJT5-2	10
Center Jumper Link		1492-CJL5	10	1492-CJL5	10
Center Jumper Cover — Red		1492-CJCR5	10	1492-CJCR5	10
Center Jumper Cover — Blue		1492-CJCB5	10	1492-CJCB5	10
Side — 20-pole Insulated Red		1492-SJT5-20-R	10	1492-SJT5-20-R	10
Side — 20-pole Insulated Blue		1492-SJT5-20-B	10	1492-SJT5-20-B	10
Other Accessories:					
Partition Plate		1492-PPTS3	50	1492-PPTS3	50
Test Plug Adapter		1492-TA285	10	1492-TA285	10
Electrical Warning Plate	4-Pole	1492-EWP5-4	10	1492-EWP5-4	10
	1-Pole	1492-EWP5	10	1492-EWP5	10
Marking Systems:					
Snap-in Marker Card		1492-MS5X9 (80/card)	5	1492-MS5X9 (80/card)	5

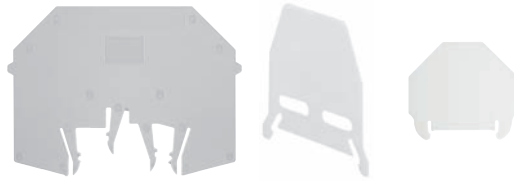
IEC Terminal Block Accessories

Partition and Separation Plates

Partition Plates and Separation Plates

Partition plates allow visual and electrical separation of terminal groups and provide the necessary electrical spacing between adjacent insulated jumpers or between exposed ends of cut jumpers.

Separation plates consist of flexible thermoplastic material and are used between terminal blocks to isolate adjacent center jumpers both visually and electrically.



Dimensions Width x Length x Height	For Use With	Color	Pkg Qty.	Cat. No.
Partition Plates				
0.118 x 3.15 x 2.48 in. (3 x 80 x 63 mm)	1492-JD3, JD3C, JD3F, JD3DF, JD3DR, JD3RC..., JD3SS	Grey	20	1492-PPJD3
0.005 x 3.54 x 2.51 in. (0.13 x 90.1 x 63.8 mm)	1492-JD3P..., JDG3P...	Beige	20	1492-PPJD3P
0.08 x 1.57 x 1.20 in. (2 x 40 x 30.5 mm)	1492-WM3, WM4, WMG3, WMG4	Grey	50	1492-PPM3
0.014 x 2.28 x 1.51 in. (0.35 x 58 x 38.3 mm)	1492-WMD1	Grey	50	1492-PPMD1
0.06 x 1.85 x 1.57 in. (1.5 x 47 x 40 mm)	1492-W3, W4, WG4	Grey	50	1492-PP3
0.06 x 2.17 x 1.81 in. (1.5 x 55 x 46 mm)	1492-W6, W10, W16S, W4TW, WG6, WG10S, WG16S	Grey	50	1492-PP10
0.014 x 2.88 x 1.85 in. (0.35 x 73.2 x 47.1 mm)	1492-WTF3..., WTS3...	Beige	50	1492-PPTS3
0.06 x 1.93 x 2.36 in. (1.5 x 49 x 60 mm)	1492-J3, J4, J6, J10, J2Q, J3TW, J3F, JG2Q, JG3, JG3TW, JKD3, JKD3TP, J3P, J3PTP, JTC3	Grey	20	1492-EBJ16
		Blue	20	1492-EBJ16-B
		Yellow	20	1492-EBJ16-Y
Separation Plates				
.014 x 1.76 x 1.57 in. (0.35 x 44.8 x 40.0 mm)	1492-W3, W4	Beige	50	1492-SP3
	All 1492-FPK2 Fuse Plugs	Beige	50	1492-SPJ3