## **Regulatory Approvals**

Allen-Bradley Terminal Block, Circuit Protection, and Interface Module products 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 approvals 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 508 Standard for Industrial Control Equipment
- UL 512 Standard for Fuseholders
- UL 486E Equipment Wiring Terminals for Use with Aluminum and/or Copper Conductors
- UL 1059 Standard for Terminal Blocks
- UL 1077 Standard for Supplementary Protectors Reference UL files E34648, E40735, E65138, E113724, E160646

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

- CSA 22.2 No. 14-M95 Industrial Control Equipment
- 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 one or more of the following Canadian Standards:

- CSA 22.2 No. 14-M95 Industrial Control Equipment
- CSA 22.2 No. 39 Fuseholders
- CSA 22.2 No. 158 Terminal Blocks
- CSA 22.2 No. 235 Supplementary Protectors Reference CSA files LR1234, LR14074, LR19766, LR37712, LR67896

← Terminal blocks, interface modules, and circuit protection devices listed in this catalog (with the exception of the 1492-15T, -25T, -EC85, -ED103, -WTC3E, -WTC3J, -WTC3K, and -WTC3T) 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 60934 Circuit Breakers for Equipment
- 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

**IEC** (International Electrotechnical Commission) — Devices listed in this catalog with IEC ratings meet the requirements of one or more of the following standards:

- IEC 934 Circuit Breakers for Equipment
- IEC 947-1 Low Voltage Switchgear and Controlgear: General Rules
- IEC 947-7-1 Low Voltage Switchgear and Controlgear, Part 7: Ancillary Equipment, Section 1: Terminal Blocks for Copper Conductors
- IEC 947-7-2 Low Voltage Switchgear and Controlgear, Part 7: Ancillary Equipment, Section 2: Protective Conductor Terminal Blocks for Copper Conductors

**EEx e II** — Devices listed in this catalog with "EEx e II" ratings meet the following European Norms per DEMKO, an Approval Certification Body for the European Union:

- EN 50014 Electrical Apparatus for Potentially Explosive Atmospheres — General Requirements
- EN 50019 Electrical Apparatus for Potentially Explosive Atmospheres — Increased Safety "e"

Details exist in DEMKO Certificate Number 97D.122398U.

**Ex e II** — Devices listed in this catalog with an "Ex e II" rating meet the following Canadian Standards per Underwriters Laboratories:

- E79-0-95 Electrical Apparatus for Explosive Atmospheres — Part 0 — General Requirements
- E79-7-95 Electrical Apparatus for Explosive Atmospheres — Part 7 — Increased Safety "e"
   These products are suitable for Class I. Zone 1 Hazal

These products are suitable for Class I, Zone 1 Hazardous Locations. Reference UL file E187022

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

 UL 2279 — 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

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

Lloyd's Register Test Specification No. 1:1996

Contact your local Allen-Bradley Sales Office for a copy of the certificate.

# **IEC Terminal Blocks**

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

Allen-Bradley's Bulletin 1492-W line of internationally approved IEC style terminal blocks offers a wide range of features and benefits ideally suited for many industrial applications. The 1492-W 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 1492-W line.

### **Products Available in the 1492-W Line**

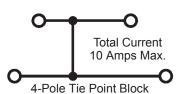
Our family of IEC terminal blocks consists of many different types of blocks, from general feed-through terminal blocks for control wiring to specialty blocks for grounding and isolating. We even offer thermocouple terminal blocks, specifically designed for temperature-dependent process control applications.

Products offered within the 1492-W line include:

- Feed-Through Blocks, capable of accommodating #22...3/0 AWG (0.5...70 mm<sup>2</sup>) wire
- · Grounding Blocks for connecting a given circuit to a ground
- 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.

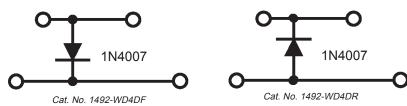
#### Tie-Point Block (Cat. No. 1492-WD4C)

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



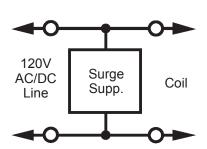
### Diode Block (Cat. Nos. 1492-WD4DF, 1492-WD4DR)

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.



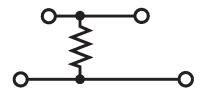
# Surge Suppression Block (Cat. No. 1492-WD4SS)

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



### Resistor Block (Cat. No. 1492-WD4R)

Permits the introduction of a 1  $\Omega$ ...100 M $\Omega$  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 accommodate various electrical components.
- · Installation Blocks for space-saving distribution of phase, neutral, and ground conductors in single-phase circuits
- Thermocouple Terminal Blocks (Types E, J, K, 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 1492-W line is specially designed for safety, installation ease, and ruggedness. Features using these design criteria include the following:

- · Nickel-plated terminals and stainless steel screws for superior corrosion resistance
- · 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 (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-V2 flammability rating
- · Backed out screws for fast wiring
- · CE mark for use in the European Union

	1492-WD4C				1492-WD4DF			1492-WD4DR		
Dimensions are not intended to be used for manufacturing purposes.  Note: Height dimension is measured from top of rail to top of terminal block.	1.91" (48.6 mm)	2.52" (64		0.24" (6 mm)		2" (64 mm)	0.24" (6 mm) ith a diode in		2" (64 mm)	0.24" (6 mm)
Specifications		reen the upproviding mu			forward bias between the upper a lower levels.		e upper and	reverse bias between the u		e upper and
Approvals	<i>UR</i> <sub>8</sub>	EEx e II	CSA	IEC	. <b>P.</b> /	CSA	IEC	<i>IR</i> <sub>6</sub>	CSA	IEC
Voltage Rating	300V AC/DC	420V	300V AC/DC	500V AC/DC	300V AC/DC	300V AC/DC	500V AC/DC	300V AC/DC	300V AC/DC	500V AC/DC
Maximum Current	20 A	32 A	20 A	32 A	1 A (Diode)	1 A (Diode)	1 A (Diode)	1 A (Diode)	1 A (Diode)	1 A (Diode)
Wire Range (Rated Cross Section)	#22 #12 AWG	4 mm <sup>2</sup>	#22 #12 AWG	0.5 4 mm <sup>2</sup>	#22 #12 AWG	#22 #12 AWG	0.5 4 mm <sup>2</sup>	#22 #12 AWG	#22 #12 AWG	0.5 4 mm <sup>2</sup>
Resistor Type		_	_			_			_	•
Resistor Range	_				_			_		
Working Voltage	_				Diode 1N4007 <b>①</b>			Diode 1N4007 <b>1</b>		
Wire Strip Length	0.39" (10 mm)				0.39" (10 mm)			0.39" (10 mm)		
Recommended Tightening Torque	5.05.6 lb-in. (0.6 Nm)			)	5.05.6 lb-in. (0.6 Nm)			5.05.6 lb-in. (0.6 Nm)		
Density	50 pcs./ft (166/m)				50 pcs./ft (166/m)			50 pcs./ft (166/m)		
Insulation Temperature Range	-40+195°F (-40+90°			°C)	–40+195°F (–40+		+90°C)	–40…+195°F (−40…		.+90°C)
Terminal Blocks	Cat. No.			Pcs./ Pkg.	Cat. No.		Pcs./ Pkg.	Cat. No.		Pcs./ Pkg.
Terminal Block	1492-WD4C		50	1492-WD4DF		1	1492-WD4DR		1	
Accessories (page 185)	Cat. No.		Pcs./ Pkg.	Cat. No.		Pcs./ Pkg.	Cat. No.		Pcs./ Pkg.	
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-EBD3	3	50	1492-EBD3		50	1492-EBD3		50
End Anchors: DIN Rail — Normal Duty	1492-EA35		50	1492-EA35		50	1492-EA35		50	
DIN Rail — Heavy Duty	1492-EAH35		10	1492-EAH35		10	1492-EAH35		10	
Jumpers: Insulated Side Jumper	1492-N42 (2-pole) 1492-SJ6-10 (10-pole)			50 10	1492-N42 (2-pole) 1492-SJ6-10 (10-pole)		50 10	1492-N42 (2-pole) 1492-SJ6-10 (10-pole)		50 10
Center Jumper — 50-pole	1492-CJD6-50		5	1492-CJD6-50		5	1492-CJD6-50		5	
Center Jumper — 10-pole	1492-CJD6-10		10	1492-CJD6-10		10	1492-CJD6-10		10	
Center Jumper — 3-pole	1492-CJD6-3		10	1492-CJD6-3		10	1492-CJD6-3		10	
Center Jumper — 2-pole	1492-CJD6-2		10	1492-CJD6-2		10	1492-CJD6-2		10	
Center Jumper Link	1492-CJDL6		10	1492-CJDL6		10	1492-CJDL6		10	
Other Accessories: Partition Plate	1492-PPD3		50	1492-PPD3		50	1492-PPD3		50	
Separation Plate	1492-SPD3		10	1492-SPD3		50	1492-SPD3		50	
Test Plug	1492-TP28		10	1492-TP28		10	1492-TP28		10	
Test Plug Adapter	1492-TA40		10	1492-TA40		10	1492-TA40		10	
Group Marking Carrier		1492-GM35	5	10	1492-GM35		10	1492-GM35		10
Marking Systems: Snap-in Marker Card	1492-SM6X9		5	1492-SM6X9		5	1492-SM6X9		5	
Individual Marker Tabs (single char.)	1492-MP <b>2</b>		10	1492-MP <b>2</b>		10	1492-MP <b>②</b>		10	

See Page 216 for Component Specifications.Cat. no. is not complete. See page 186.

## **Examples and Specifications for Custom Marking Cards**

### **Terminal Block Marker Coordination Table**

The table below coordinates the marker card with a given terminal block or terminal block prefix.

1492-SM5X5C	1492-SM5X9C		1492-SM5X12C	1492-SM6X9C		1492-SM6X12C		
1492-CP4	1492-R3	1492-RD3	1492-R3 <b>❸</b>	1492-FP4	1492-WD4N	1492-EA35	1492-R4DJ	
1492-WM3	1492-R3Q	1492-RD3DF	1492-R3Q <b>3</b>	1492-FP424	1492-WD4PSS	1492-R4 <b>3</b>	1492-R4P <b>❸</b>	
1492-WMD1	1492-R3T	1492-RD3DR	1492-R3T <b>❸</b>	1492-FP4250	1492-	1492-R4Q <b>6</b>	1492-RG4	
Point I/0	1492-RC3	1492-RD3RB	1492-RC3	1492-R4DJ	WD4PSSTP	1492-R4T <b>3</b>	1492-W4P	
	1492-RKD3	1492-RD3SS	1492-RD3 <b>3</b>	1492-R4	1492-WD4RC001	1492-W16	1492-WG4	
	1492-RTS2	1492-RG3	1492-RD3DF <b>❸</b>	1492-R4P	1492-WD4SS	1492-W16S	1492-WG6	
	1492-W3TW	1492-RTSG2	1492-RD3DR <b>❸</b>	1492-R4Q	1492-WDG4N	1492-W35	1492-WG10	
	1492-WD3	1492-WTC3T	1492-RD3RB <b>❸</b>	1492-R4T	1492-WDG4P	1492-W4	1492-WG16	
	1492-WKD3	1492-WTF3	1492-RD3SS <b>❸</b>	1492-RG4	1492-WDG4PTP	1492-W4PTP	1492-WG35	
	1492-WKD3TP	1492-WTF3LN	1492-RG3	1492-WD4	1492-WDG4PSS	1492-W6	1492-WKD6	
	1492-WR3	1492-WTF3LP	1492-RKD3 <b>6</b>	1492-WD4C	1492-	1492-W70	1492-WLD10	
	1492-WTC3E	1492-WTS3	1492-W3	1492-WD4DF	WDG4PSSTP	1492-WD6	1492-WLD10C	
	1492-WTC3J	1492-WTS3LN		1492-WD4DR	1492-WFB4 <b>0</b>			
	1492-WTC3K	1492-WTS3LP		1492-WD4P	1492-WFB424 <b>①</b>			
				1492-WD4PTP	1492-WFB4250 <b>1</b>			
				1492-WD4RA	1492-WMG4			
				1492-WDG4ND				
				1492-				
				WDG4NSS				
				1492-WM4				
1492-SM8X12C	1492-SM8X9C	1492-SMN81C	1492-SMN83C				+	
1492-ER35	1492-ER35	1492-WFB10	1492-CB					
1492-H4	1492-H4	1492-HM1	1492-GH					
1492-H5	1492-H5	1492-HM2	1492-GS					
1492-H6	1492-H6	1492-HM2	1492-WFB10 <b>1</b>					
1492-H7	1492-H7	1492-HM3						
1492-R6 <b>3</b>	1492-R6	1492-UF3						
1492-R6T <b>❸</b>	1492-R6T							
1492-RG6	1492-RG6							
1492-W10								
1492-WFB4 <b>2</b>								
1492-WFB424 <b>2</b>								
1492-WFB4250								
2								
1492-WG10S								

- Handle Marker Size.
- Base Marker Size.
- 3 Marker will block center jumper access.

### **Maximum Marking Parameters**

The following table shows the maximum number of characters allowed per label.

Marker Type	Number of	Midth (mm)	Height (mm)	Marker Orientation					
				Hori	zontal	Vertical			
	Markers	Width (mm)	Height (mm)	Rows	Characters per Row	Rows	Characters per Row		
1492-SM5X5	100	5	5	2	4	2	4		
1492-SM5X9	100	5	9	4	4	2	8		
1492-SM5X12	100	5	12	5	4	2	10		
1492-SM6X9	100	6	9	4	5	2	8		
1492-SM6X12	100	6	12	5	5	2	10		
1492-SM8X9	100	8	9	4	7	3	8		
1492-SM8X12	100	8	12	5	7	3	10		
1492-SMN81	100	6	10	4	5	2	9		
1492-SMN83	50	10	10	4	8	4	9		