

Control Circuit and Load Protection



LISTEN.
THINK.
SOLVE.

Circuit Protection Portfolio



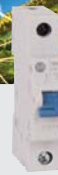
1489-M Circuit Breakers

Approved for branch circuit protection in the United States and Canada, and certified as Miniature Circuit Breakers for IEC applications.



1492-SP Supplementary Protectors

Overcurrent protection for equipment where branch circuit protection is already provided, or is not required. Also Miniature Circuit Breakers as defined by IEC Standards.



188 Regional Circuit Breakers

Protective devices applied at the equipment level. Regional certifications only. Available for purchase only in China, Singapore, and Europe.



1492-RCD

Residual Current Devices

By detecting small leakage currents and disconnecting all ungrounded connectors quickly, RCDs can prevent injury to exposed personnel and damage to equipment.

Rockwell Automation offers a wide range of Allen-Bradley circuit protection products designed for a variety of applications.

Miniature Circuit Breakers, Supplementary Protectors, and Residual Current Devices

Product	Certifications						Poles						Trip												
	cULus	cURus	CSA	CE	VDE	CCC	1	1+N	2	3	3+N	4	B	C	D	0.2	0.5	0.8	1	1.2	1.5	1.6	2	2.5	
1489-M	●		●	●	●	●	●		●	●				●	●		●					●	●		
1492-SP	★	●	●	●	●	●	●	♣	●	●	♣		●	●	●		●		●				●	●	
188				●	●	●	●	●	●	●	●	●	●	●	●		●		●					●	
1492-RCD		●	●	●	●	●			●			●													
1492-MC	●		●				●		●	●															
1492-GH,-GS	●		●	●			●		●	●						●	●	●	●	●	●		●	●	

★ 1492-SP supplementary protectors are UL Recognized only.

♣ 1+N and 3+N devices are not cULus or CSA certified.

Electronic Circuit Protectors

Product	Certifications				Circuits		Output Current Rating [A]									
	cULus	CE	C1D2	NECC2	4	2x2	1	2	3	4	6	10	3/6	6/12		
1692	●	●	●	●	●	●	●	●	●	●	●	●	●	●		



1692 Electronic Circuit Protectors

Protection for secondary circuits of 24V DC switched mode power supplies. These modules monitor both supply voltage and load currents, and can be monitored and controlled locally and remotely.



1492-MC Circuit Breakers and Ground Fault Protectors

Thermal magnetic circuit protection and sensing thresholds for personnel and equipment protection.



1492-GH, -GS High-density Supplementary Protectors

Thermal magnetic circuit breakers with a high density design useful when DIN Rail space is a premium.



1492-FB Fuse Holders

Designed for use in many OEM applications. Provides safe and convenient installation of Midget, Class CC, and Class J fuses.

- Test equipment
- Automotive systems
- Controller I/O points
- Power supplies

- Relay and contractor coils
- Medical equipment
- Control instrumentation

- Transformers
- Computers
- Solenoids

Rated Current [A]																									
3	4	5	6	7	8	10	12	13	15	16	20	25	30	32	35	40	45	50	55	60	63	70	80	90	100
●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●		●		●	●				
●	●	●	●	●	●	●		●	●	●	●	●	●	●		●		●			●				
●	●		●		●	●		●		●	●	●		●		●		●			●				
												●				●					●		●		
						●			●		●	●	●		●	●	●	●	●	●		●	●	●	●
●	●	●	●	●	●	●	●		●	●	●	●													

Typical North America Current Ratings: 0.5, 1, 2, 3, 4, 5, 6, 7, 8, 10, 15, 20, 25, 30, 40, 50, 60, 63 A.

Typical IEC Current Ratings: 0.5, 1, 1.6, 2, 3, 4, 6, 8, 10, 13, 16, 20, 25, 32, 40, 50, 63 A.

Fuse Holders

Product	Certifications			Poles			Indication			Fuse Types			
	cULus	CSA	CE	1	2	3	none	L	D1	M30	C30	J30	J60
1492-FB	●	●	●	●	●	●	●	●	●	●	●	●	●

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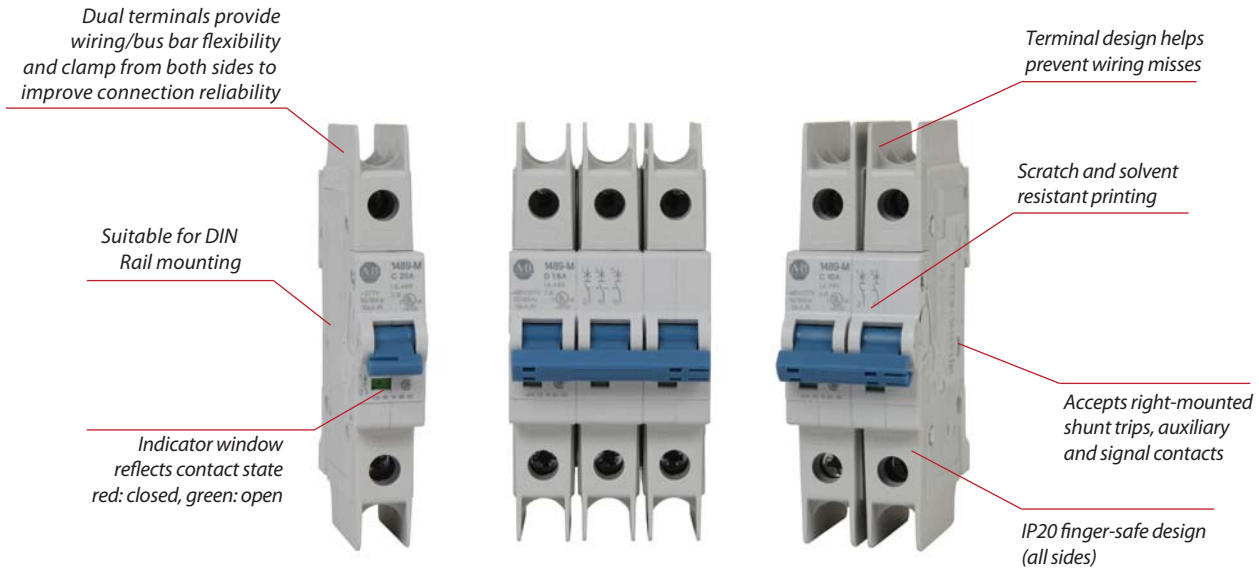


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For the full line of Allen-Bradley Circuit Protection products, please visit:
<http://literature.rockwellautomation.com>
and search for Publication 1492-SG122.

1489-M Circuit Breakers



Bulletin 1489-M thermal-magnetic Circuit Breakers are approved for branch circuit protection in the United States and Canada, and are certified as Miniature Circuit Breakers for IEC applications.

These branch protectors are compatible with many accessories to meet diverse application needs, including UL 508 Listed bus bars for convenience in panel assembly, auxiliary contacts, signal contacts and shunt trips for versatility, and lockout attachments for safety during maintenance.

Features

- Current limiting
- Fast breaking time
- High rated voltage
- Superior shock and vibration resistance to help prevent nuisance tripping
- Dual terminals allow a more secure connection of two wires, or both a wire and bus bar
- Terminal design helps prevent wiring misses by directing wires into the terminal openings, even while tightening
- Reversible line and load connections
- Single and multi-pole toggle mount lock out attachments available for Lockout/Tagout (LOTO)
- RoHS compliant and fully recyclable device
- Suitable for extreme ambient conditions

1489-M Circuit Breakers

Rated Voltage	UL/CSA: Max. 480Y/277V AC IEC: U_n 230/400V AC
Interrupting Capacity	UL/CSA: 10 kA IEC: 15 kA
Current Ratings	0.5...63 A
Poles	1, 2, 3
Trip Curves	C, D
Standards Compliance	UL 489 CSA C22.2 No. 5.1 EN 60947-2 GB 14048.2
Certifications	UL Listed, File No. E197878 CSA Certified, File No. 259391 CE Marked VDE Certified CCC Certified RoHS Compliant

Catalog Number Explanation

Note: Examples given in this section are for reference purposes. This basic explanation should not be used for product selection; some combinations may not produce a valid catalog number.

1489 - M 1 C 005

a *b* *c* *d*

<i>a</i>	
Voltage Type	
Code	Description
M	AC Circuit Breaker

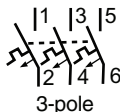
<i>b</i>	
Poles	
Code	Description
1	1-Pole
2	2-Pole
3	3-Pole

<i>c</i>	
Trip Curve	
Code	Trip Curve
C	Trip Curve C
D	Trip Curve D

<i>d</i>	
Rated Current (I_n)	
Code	Current [A]
005	0.5
010	1
016	1.6
020	2
030	3
040	4
050	5
060	6
070	7
080	8
100	10
130	13
150	15
160	16
200	20
250	25
300	30
320	32
350	35
400	40
500	50
600	60
630	63

Product Selection

3-Pole Circuit Breakers

Photo/Wiring Diagram	UL/CSA Max. Voltage	IEC/EN Max. Voltage	Continuous Current Rating (I_n) [A]	Trip Curve C Inductive 5...10 I_n Cat. No.	Trip Curve D Highly Inductive 10...20 I_n Cat. No.
  3-pole	480Y/277V AC	400V AC	0.5	1489-M3C005	1489-M3D005
			1	1489-M3C010	1489-M3D010
			1.6	1489-M3C016	1489-M3D016
			2	1489-M3C020	1489-M3D020
			3	1489-M3C030	1489-M3D030
			4	1489-M3C040	1489-M3D040
			5	1489-M3C050	1489-M3D050
			6	1489-M3C060	1489-M3D060
			7	1489-M3C070	1489-M3D070
			8	1489-M3C080	1489-M3D080
			10	1489-M3C100	1489-M3D100
			13	1489-M3C130	1489-M3D130
			15	1489-M3C150	1489-M3D150
			16	1489-M3C160	1489-M3D160
			20	1489-M3C200	1489-M3D200
			25	1489-M3C250	1489-M3D250
			30	1489-M3C300	1489-M3D300
			32	1489-M3C320	1489-M3D320
			35	1489-M3C350	1489-M3D350
	C Curve: 480Y/277V AC D Curve: 240V AC	40	1489-M3C400	1489-M3D400	
	240V AC	50	1489-M3C500	1489-M3D500	
		60	1489-M3C600	1489-M3D600	
		63	1489-M3C630	1489-M3D630	