


Control Circuit and Load Protection Products

Bulletin Numbers 188, 1489, 1492, 1692



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.



1492-D Circuit Breakers
Overcurrent and short circuit protection for higher voltage DC circuits. Also Miniature Circuit Breakers as defined by IEC Standards.



188-J 10 kA Regional Circuit Breakers
Protective devices applied at the equipment level. Regional certifications only. Available for purchase in China and Europe.



188-K 6 kA Regional Circuit Breakers
Protective devices applied at the equipment level. Regional certifications only. Available for purchase in China and Europe.

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			Trip Current [A]									
	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		★	●	●	●	●	●	♣	●	●	♣		●	●	●		●		●				●		
1492-D		★	●	●	●		●		●					●			●		●			●	●		
188-J,-K				●	●	●	●	●	●	●	●	●	●	●	●		●		●				●		
1492-RCD		●		●	●	●			●		●														
1492-MC	●		●				●		●	●															
1492-GH,-GS		●	●	●	●		●		●	●						●	●	●	●	●	●	●	●	●	●

★ UL Recognized only.
♣ 1+N and 3+N devices are not cURus or CSA certified.

Electronic Circuit Protectors

Product	Certifications				Circuits		Output Current Rating [A]								
	cULus	CE	C1D2	NEC C2	4	2x2	1	2	3	4	6	10	3/6	6/12	
1692	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●



**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.



**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
- Computers
- Solenoids
- Transformers

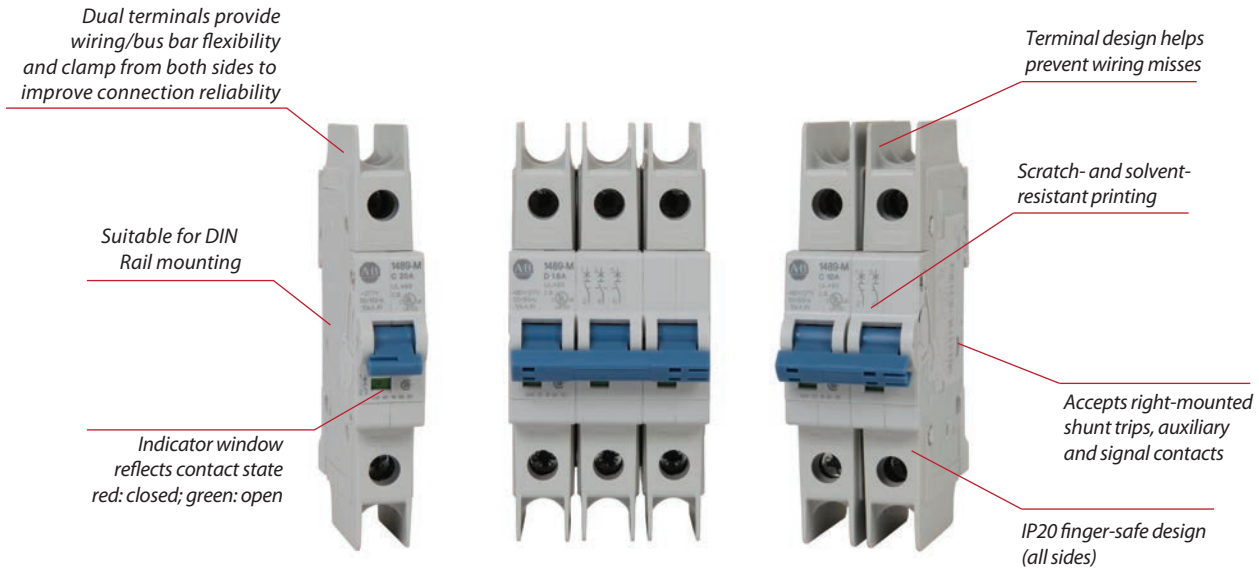
Rated Current [A]																									
3	4	5	6	7	8	10	12	13	15	16	20	25	30	32	35	40	45	50	55	60	63	70	80	90	100
●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●		●		●	●				
●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●		●		●					
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●	●		●		●	●		●		●	●	●		●		●		●		●					
			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

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	●	●	●	●	●	●	●	●	●	●	●	●	●

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.

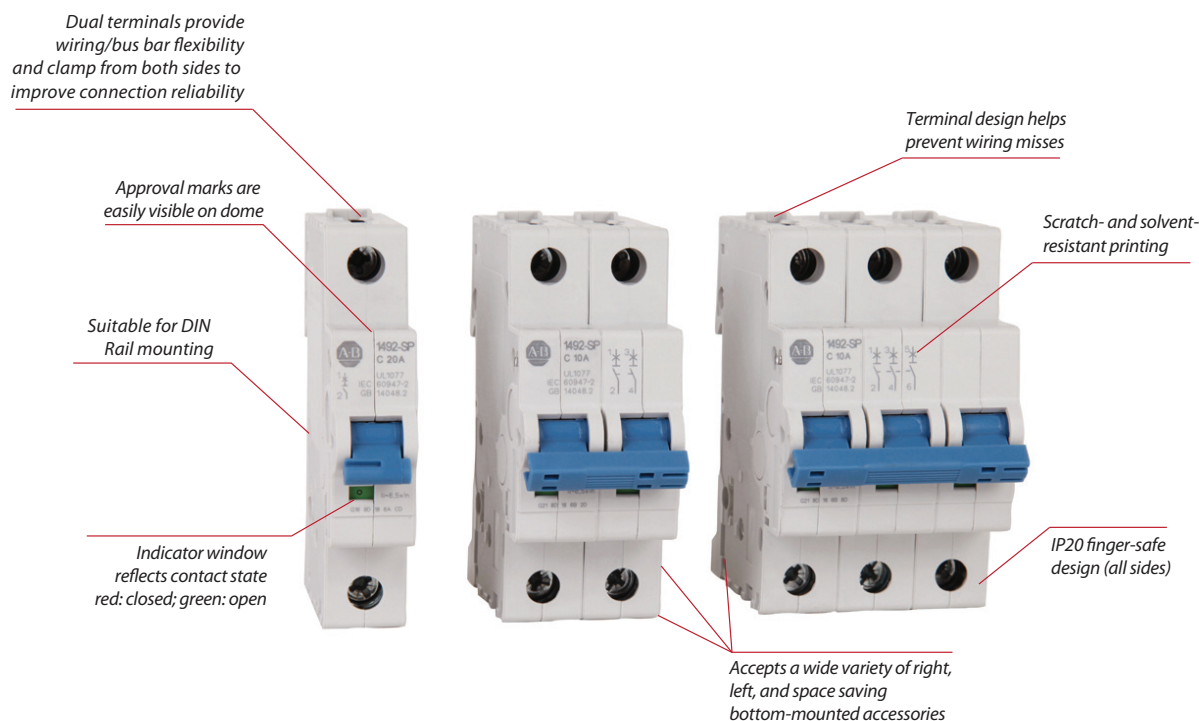
Features

- Current limiting
- Fast breaking time
- High rated voltage
- Dual terminals provide a more secure connection of up to four wires, or two wires and a bus bar
- Superior shock and vibration resistance to help prevent nuisance tripping
- 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_g 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

1492-SP Supplementary Protectors



Bulletin 1492-SP thermal magnetic Supplementary Protectors provide overcurrent protection for equipment where branch circuit protection is already provided, or is not required. These devices are also Miniature Circuit Breakers as defined by IEC Standards.

These supplementary protectors are offered as a broad portfolio of pole variants, current ratings, and trip curves to match the appropriate level of protection for your application. They may be used with UL 508 Listed bus bars for convenience in panel assembly, a wide range of left-, right- and space saving bottom-mount accessories, and lock out attachments for safety during maintenance.

Features

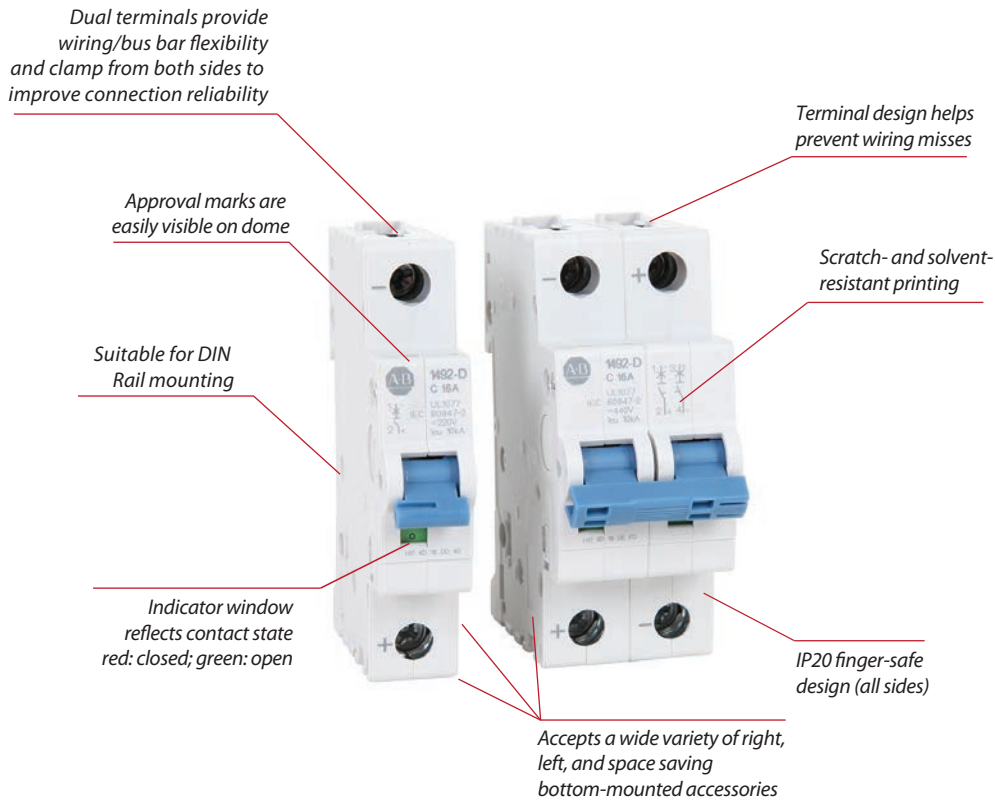
- Current limiting
- Fast breaking time
- Existing installations can be easily upgraded to include an auxiliary using the bottom mounted auxiliary contact options, which require no DIN Rail space
- 40 °C calibration temperature (UL/CSA) eliminates need to derate for 508A industrial control panel installations
- Installation of up to six accessories on the same circuit breaker
- Dual terminals provide a more secure connection of up to four wires, or two wires and a bus bar
- Superior shock and vibration resistance to prevent nuisance tripping
- 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

1492-SP Supplementary Protectors

Rated Voltage	UL/CSA: Max. 480Y/277V AC IEC: U_e 230/400V AC
Interrupting Capacity	UL/CSA: 5...10 kA IEC: 15 kA
Current Ratings	0.5...63 A
Poles	1, 2, 3, 1+N, 3+N
Trip Curves	B, C, D
Standards Compliance	UL 1077 CSA C22.2 No. 235 EN 60947-2 GB 14048.2
Certifications	UL Recognized, File No. E65138 ★ CSA Certified, File No. 259391 ★ CE Marked CCC Certified VDE Certified RoHS Compliant

* 1+N and 3+N devices are not UL recognized or CSA certified.

1492-D Circuit Breakers



Bulletin 1492-D Miniature Circuit Breakers provide overcurrent and short circuit protection for higher voltage DC circuits. These devices are also Miniature Circuit Breakers as defined by IEC Standards.

These thermal magnetic breakers are offered in two pole variants and a wide range of current ratings to match the appropriate level of protection for your application. They may be used with UL 508 Listed bus bars for convenience in panel assembly, a wide range of left-, right- and space saving bottom-mount accessories, and lock out attachments for safety during maintenance.

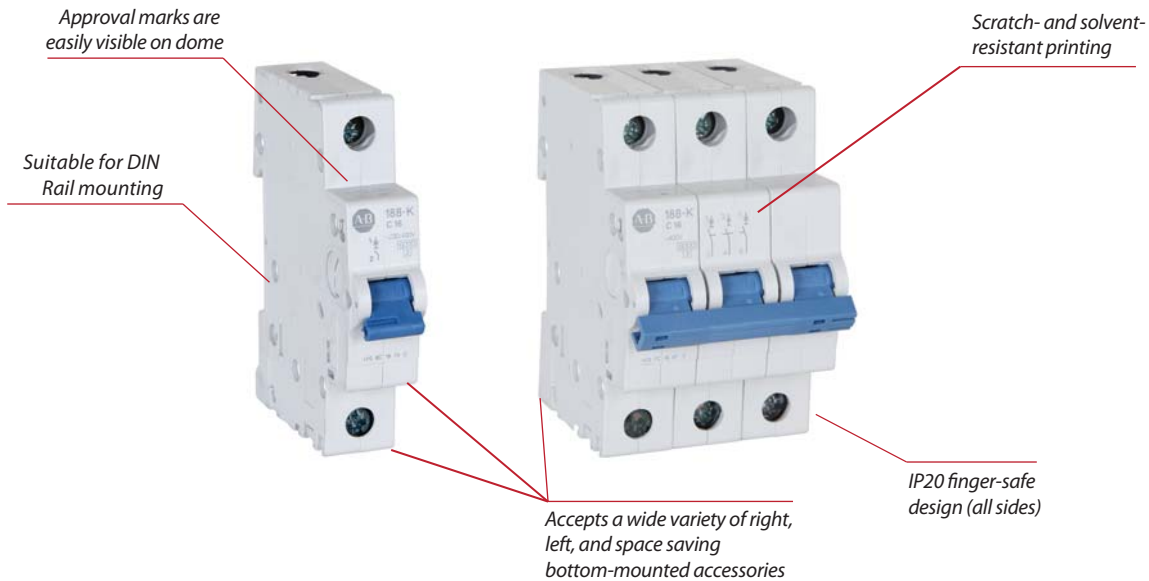
Features

- Specially designed for higher voltage DC circuits with a permanent magnet to direct the arc into the arc splitters
- Dual terminals provide a more secure connection of up to four wires, or two wires and a bus bar
- Existing installations can be easily upgraded to include an auxiliary using the bottom mounted auxiliary contact options, which require no DIN Rail space
- Installation of up to six accessories on the same circuit breaker
- Superior shock and vibration resistance to prevent nuisance tripping
- Terminal design helps prevent wiring misses by directing wires into the terminal openings, even while tightening
- Single and multi-pole toggle mount lock out attachments available for Lockout/Tagout (LOTO)
- RoHS compliant and fully-recyclable device

1492-D Circuit Breakers

Rated Voltage	UL/CSA: Max. 500V DC (2-pole) IEC: U_p : Max. 440V DC (2-pole)
Interrupting Capacity	UL/CSA: 10 kA IEC: 10 kA
Current Ratings	0.5...63 A
Poles	1, 2
Trip Curves	C
Standards Compliance	UL 1077 CSA C22.2 No. 235 EN 60947-2
Certifications	UL Recognized, File No. E65138 CSA Certified, File No. 259391 CE Marked VDE Certified RoHS Compliant

188 Regional Circuit Breakers



Bulletin 188 thermal magnetic Circuit Breakers are protective devices applied at the equipment level. They are offered as a broad portfolio of pole variants, current ratings and trip curves to match the appropriate level of protection for your application. They may be used with IEC rated bus bars for convenience in panel assembly. A wide range of left-, right- and space saving bottom-mount accessories (common to the Bulletin 1492-SP devices) are available.

Note: Bulletin 188 Regional Circuit Breakers have regional certifications only. They are available in China and Europe.

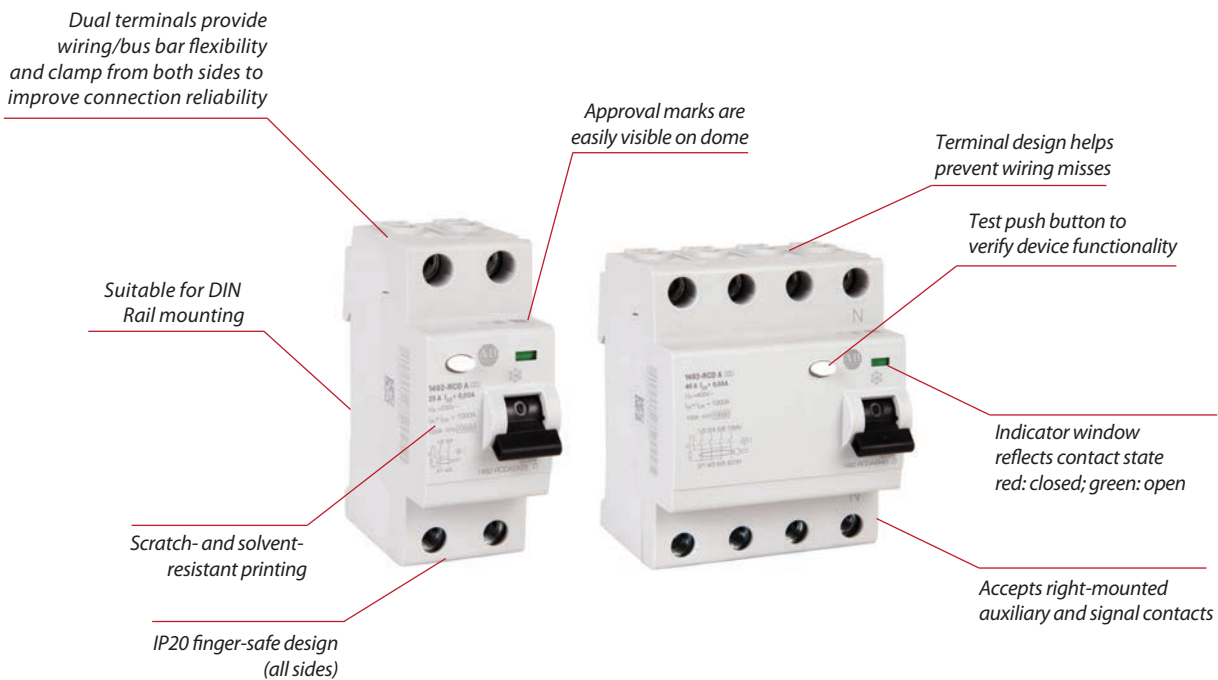
Features

- Current limiting
- Fast breaking time
- Broad portfolio of pole variants, current ratings and trip curves
- Available with 6 kA (188-K) and 10 kA (188-J) interrupting capacity
- Installation of up to six accessories on the same circuit breaker
- Existing installations can be easily upgraded to include an auxiliary using the bottom mounted auxiliary contact options
- Superior shock and vibration resistance to help prevent nuisance tripping
- Reversible line and load connections
- Single and multi-pole lock out attachments available for Lockout/Tagout (LOTO)
- RoHS compliant and fully recyclable device
- Suitable for extreme ambient conditions

188 Regional Circuit Breakers

Rated Voltage	IEC: U_g 230/400V AC
Interrupting Capacity	IEC: 6 kA, 10 kA
Current Ratings	0.5...63 A
Poles	1, 2, 3, 4, 1+N, 3+N
Trip Curves	B, C, D
Standards Compliance	EN 60898-1 GB 10963
Certifications	CE Marked CCC Certified VDE Certified RoHS Compliant

1492-RCD Residual Current Devices



The Bulletin 1492-RCD line includes Residual Current Devices, also known as Residual Current Circuit Breakers, for detecting and interrupting leakage current to ground. By detecting small leakage currents and disconnecting all ungrounded connectors quickly, RCDs can prevent injury to exposed personnel and damage to equipment.

RCDs are used in series with miniature circuit breakers for additional circuit protection from not only overload and short circuit, but also ground fault. Many short circuits begin as undetected ground faults. Using an RCD in an application may detect problems before costly equipment damage and downtime occurs.

These devices are Type A Residual Current Devices to IEC Standards.

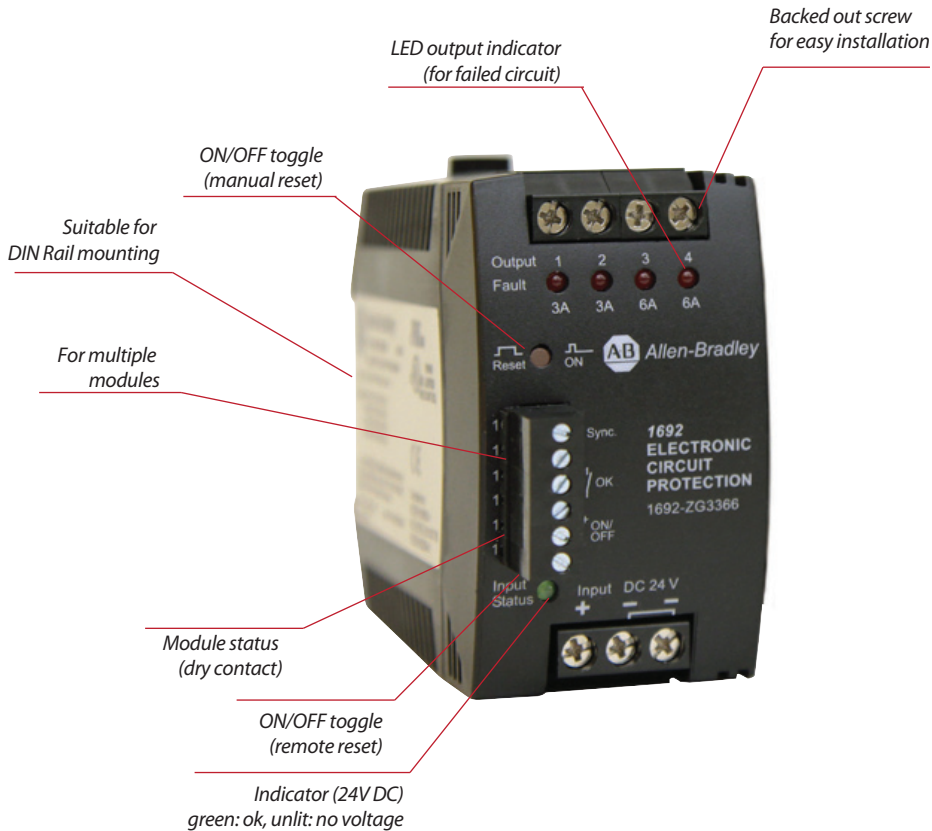
Features

- Provides protection against current leakage to ground (earth) caused by an insulation loss between a live conductor and an exposed conductive part (such as an abraded wire, or a grounded person touching the live conductor)
- Suitable for protection against AC and pulsating DC (rectified AC) earth leakage current
- 30 mA sensitivity devices for personnel protection (consult local requirements)
- 100, 300 and 500 mA sensitivity devices for equipment protection
- Dual terminals allow a more secure connection of two wires, or both a wire and bus bar
- Reversible line and load connections

* Catalog numbers with -US suffix are not EN or VDE certified.

1492-RCD Residual Current Devices	
Current Ratings	25, 40, 63, 80 A
Rated Sensitivity I_{Δn}	30, 100, 300, 500 mA
Poles	2, 4
Standards Compliance	UL 1053 ANSI/NFPA 70 EN 61008 * CSA C22.2 No.144 GB 16916
Certifications	cURus Recognized, File No. E53935 CE Marked CCC Certified VDE Certified * RoHS Compliant

1692 Electronic Circuit Protectors



Bulletin 1692 Electronic Circuit Protection Modules protect the secondary circuits of 24V DC switched mode power supplies. These modules monitor both supply voltage and load currents, and you can monitor and control the modules both locally and remotely.

Designed for 24VDC circuits, the 1692 provides comprehensive protection against short circuit and overcurrent conditions while allowing for inrush current.

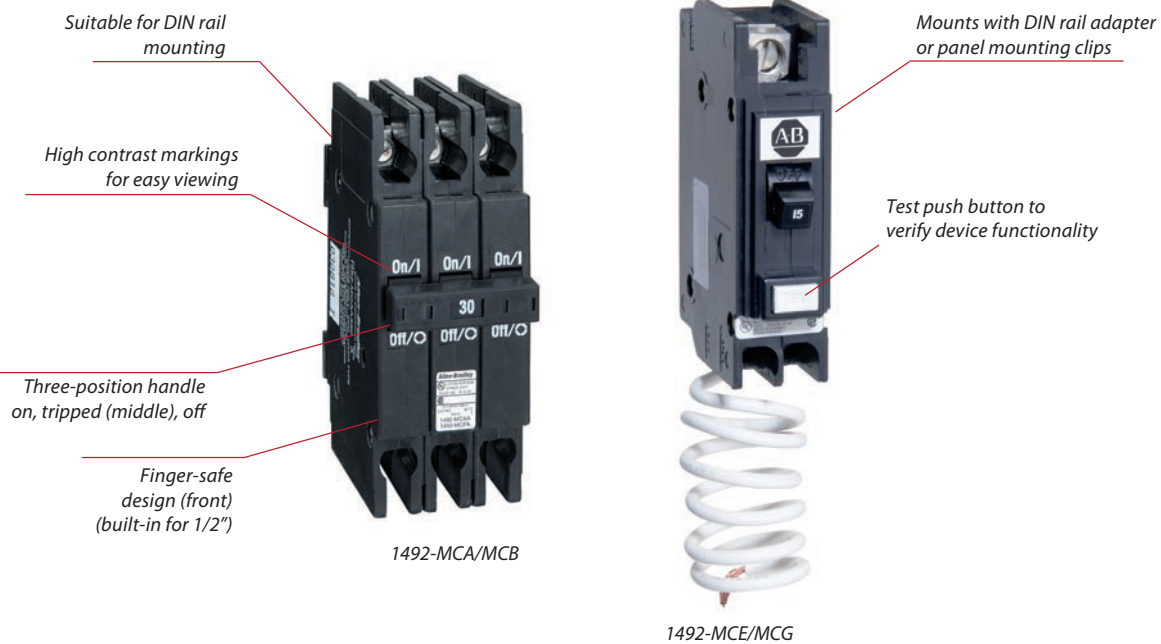
Features

- Input voltage monitoring
- Current monitoring and limitations of the 4 outputs
- Fast tripping
- Select devices offer certified NEC Class 2 circuits

1692 Electronic Circuit Protectors

Voltage	24V DC (18...30V DC)
Output Current	1 A...12 A, (select devices – NEC Class 2)
Standards Compliance	ATEX 94/9 EC & 2014/34/EU CSA Class I, Division 2, Groups A, B, C, and D CSA C22.2, No. 142 EN 60950-1 ISA 12.12 NEC Class 2 (select devices) UL 508 UL 2367
Certifications	ATEX CE Marked CSA cULus File No. E56639 cURus Recognized

1492-MC Circuit Breakers



1492-MCA/MCB Circuit Breakers

Bulletin 1492-MC thermal magnetic Circuit Breakers are general-purpose devices suitable for branch circuit protection in industrial applications. They combine thermal and magnetic trip actions and provide accurate overload and short-circuit protection for conductors and connected equipment.

Features

- Thermal-magnetic protection
- Available in 1/2" and 1" pole widths
- 10 kA interrupting capacity

1492-MCE/MCG Ground Fault Circuit Breakers

This line of ground fault sensing breakers are designed, manufactured and certified to North American and the equivalent CSA standards.

The 1492-MCE devices are Ground Fault Equipment Protectors (GFEPs) that protect from low-level fault currents. With a sensing threshold of 30 mA, these devices are suitable for equipment protection.

The 1492-MCG devices are Ground Fault Circuit Interrupters (GFCIs) that protect from low-level fault currents. With a sensing threshold of 5 mA, these devices are suitable for personnel protection.

The 1492-MCGA devices are Ground Fault Circuit Interrupters (GFCIs) with inherent self test capability as required by the UL 943 standard.

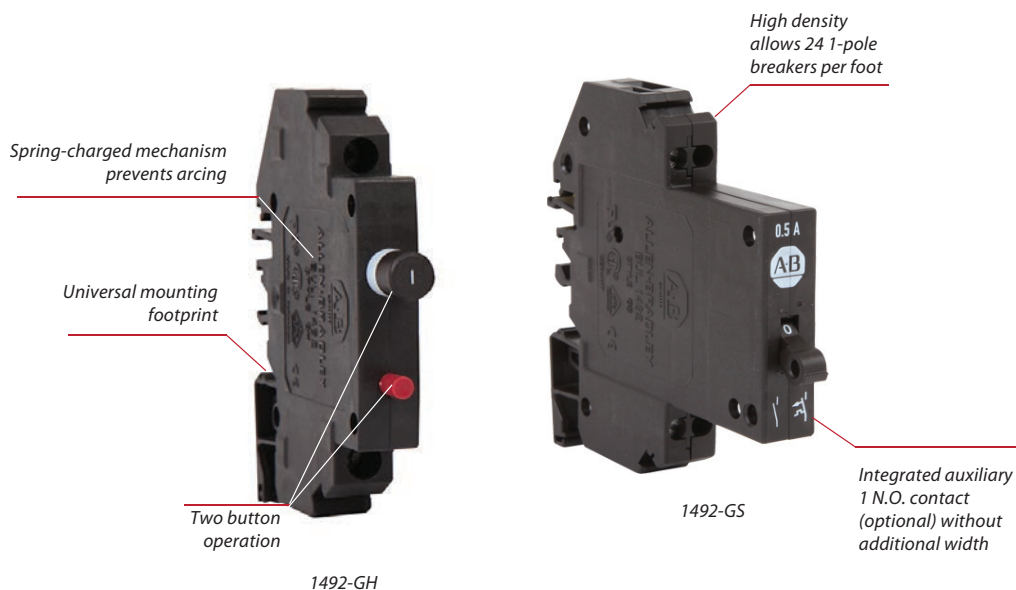
Features

- UL 489 circuit breaker with GFCI (5 mA sensitivity) or GFEP (30 mA sensitivity)
- 10 kA interrupting capacity

1492-MC Circuit Breakers

Rated Voltage	120/240V AC, 240V AC
Interrupting Capacity	10 kA
Current Ratings	10...100 A
Poles	1, 2, 3
Standards Compliance	UL 489 CSA C22.2 No. 5 HACR (10...100 A) SWD (15 and 20 A) for Switching Duty for fluorescent lighting applications
1492-MCE only	UL 1053 CSA C22.2 No. 144
1492-MCG only	UL 943 CSA C22.2 No. 144
Certifications	UL Listed, File No. E197878 CSA Certified, File No. 216034

1492-GH/-GS — Supplementary Protectors



Bulletin 1492-GH/GS high density miniature circuit breakers are thermal magnetic type supplementary protectors. These products are a high-density design often used when panel space (width) is a premium. Up to 24 one-pole breakers can be mounted per foot.

Features

- Low current ratings and numerous rated currents for precise circuit requirements
- Can be ordered with auxiliary contacts that do not add any additional space
- AC and DC voltage ratings in one convenient device
- A positively trip-free mechanism (breaker operation cannot be defeated by holding the handle in the ON position)
- Superior shock and vibration resistance capabilities; to help prevent nuisance tripping

1492-GH Supplementary Protectors

Bulletin 1492-GH breakers are 1-pole devices. They use a push-to-set mechanism for circuit actuation and come with a manual trip button for manually opening the circuit.

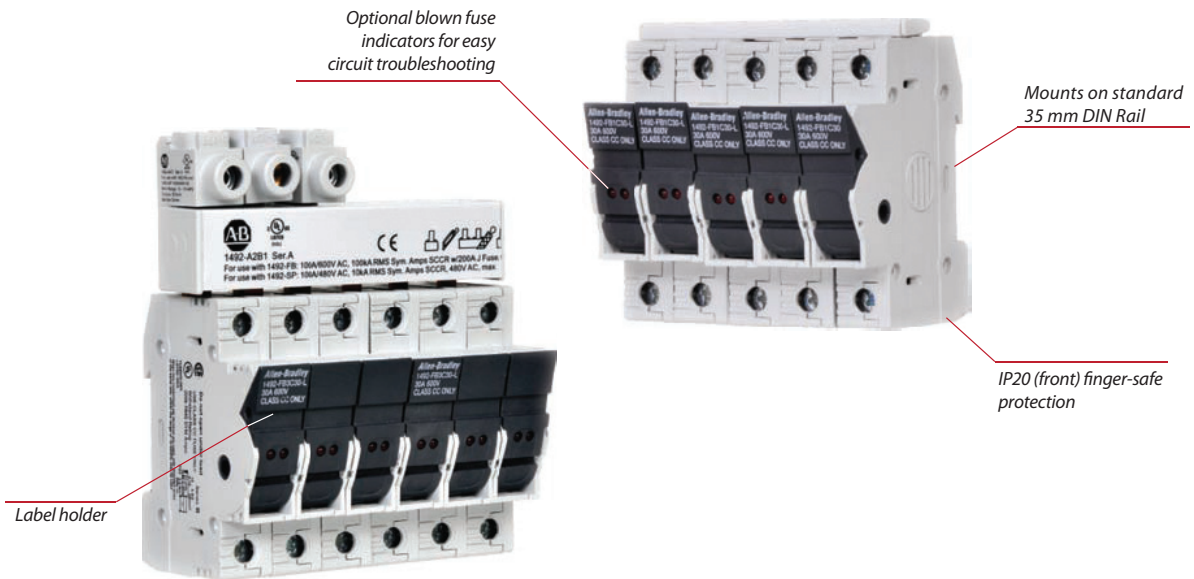
1492-GS Supplementary Protectors

Bulletin 1492-GS breakers are available in 1-, 2-, and 3-pole devices. They use a toggle style handle mechanism for circuit actuation. These breakers may also be ordered with an internally mounted N.O. auxiliary contact that requires no additional mounting space.

1492-GS/GH Supplementary Protectors

Rated Voltage	-GH	250V AC 50/60 Hz
	-GS	480Y/277V AC 50/60 Hz
Current Ratings	-GH	0.2...15 A
	-GS	0.2...25 A
Poles	-GH	1
	-GS	1, 2, 3
Standards Compliance	UL 1077	
	CSA C22.2 No.235	
	EN 60934	
Certifications	UL Recognized, File No. E65138	
	CSA Certified, File No. 72348	
	CE Marked	
	VDE Certified	
	RoHS Compliant	

1492-FB Fuse Holders



The 1492-FB fuse holder family is designed for use in many OEM applications, such as power supplies, equipment protection, primary and secondary control transformers, solenoids, lighting and heater loads, and drives.

Bulletin 1492-FB fuse holders provide a safe and convenient means for installation of Class CC, J, and Midget fuses. To support correct fuse type installation, the Class CC fuse holder is designed to reject a Midget fuse or international 10 x 38 mm fuse. The Class J fuse holder will reject all fuses other than a Class J fuse.

All Allen-Bradley Class CC, J, and Midget fuse holders are UL Listed and CSA Certified for branch circuit protection. They are excellent for wire protection, small motor loads, and group protection of small motor loads. The Midget fuse holder is also CE Marked for 10 x 38 mm IEC Midget fuses.

Features

- Compact size requires less panel space than open-style fuse holders
- Handle isolates the fuse from top-wired power when installing or removing fuse
- Terminals are shipped in open position and ready for wiring
- Suitable for use in field wiring applications

1492-FB Fuse Holders		
Poles	1, 2, 3	
Fuse Types	Midget 30 A	
	Class CC 30 A	
	Class J 30 A	
Standards Compliance	Midget	UL 4248-1 CSA 22.2 No. 39 EN 60947-1 & 3
	Class CC	UL 4248-4 CSA 22.2 No. 39
	Class J	UL 4248-8 CSA 22.2 No. 39
	Certifications	UL Listed, File No. E34648 CSA Certified, File No. 71101 CE Marked RoHS Compliant