

DC MINIATURE CIRCUIT BREAKERS


series
1110

SERIES 1110 PRODUCT PROFILE

c3controls is one of the few to introduce **Direct Current (DC) Miniature Circuit Breakers (MCBs)** designed and manufactured for all your DC industrial control, transportation, energy storage system and photovoltaic applications. With market leading design at a price that gives you an edge, this product cannot be missed. Check out the amazing features of our Series 1110 DC MCBs below.



DELIVERING SUPERIOR PRODUCT QUALITY AND MANUFACTURING EXCELLENCE

✓ Proven	Our Series 1110 DC Miniature Circuit Breakers are UL Listed per UL489B, the standard for DC photovoltaic systems and are compliant to the RoHS directives. 
✓ Compact Design	17.5mm wide per pole construction for reduced panel size, allowing for smaller control panels.
✓ Easy to Install	35mm DIN rail mounting for fast and easy installation and removal.
✓ Visible Markings	High visibility labels and markings; product part number, amperage, breaking capacity and configuration type can be seen from the front and side of the device for easy identification.
✓ Added Safety	Line and load side IP20 guarded finger-safe terminals prevent accidental contact with live parts, while allowing ring, fork, and bare wire connections.
✓ Limited Lifetime Warranty*	Every product is backed by our limited lifetime warranty—unmatched in the industry—bringing you quality components that perform in the most demanding applications.
✓ Advantage Pricing	Our approach to product development, manufacturing, and focus on servicing the OEM and Electrical Equipment Builder reduces cost. The result—the best value in the industry.

*See c3controls Terms & Conditions

UNIQUE FEATURES

Full Range Circuit Protection

- Available in single pole, two pole, three pole, and four pole constructions that includes both magnetic and thermal elements for overload and short circuit protection, finely designed to work with DC ratings.

Market Leading Ratings

- Rated 250V DC per pole, and current ratings from 0.5A to 63A. Short circuit current rating is 10kA and Breaking capacity is rated for 10kA.

Trip Free Mechanism

- Holding the operating handle in the ON position will not prevent the miniature circuit breaker from tripping.

Polarized Design

- Provides unidirectional protection for overloads and short circuits.

Customizable Options

- With up to 10 shorting link / jumper configurations, there is a plethora of options to suit all applications.



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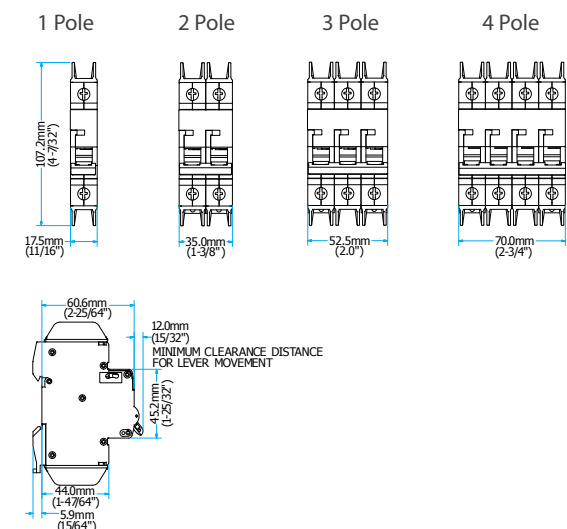
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SPECIFICATIONS

ELECTRICAL					
	UNITS	1 POLE	2 POLE	3 POLE	4 POLE
ELECTRICAL GENERAL					
Rated Operating Current	A		0.5 ~ 63		
Electrical Life	Ops.		6,000		
Tripping Curves			C, D		
ELECTRICAL UL/CSA APPLICATIONS					
Conformity to Standards		UL 489B, CSA C22.2 No. 305 as Photovoltaic Breakers			
DC Rated Operating Voltage	VDC	250	500	750	1000
MAXIMUM SHORT CIRCUIT RATING					
@ 250 VDC	kA		10		
@ 500 VDC	kA		10		
@ 750 VDC	kA		10		
@ 1000 VDC	kA		10		
MECHANICAL, ENVIRONMENTAL & CONSTRUCTION					
	UNITS	1 POLE	2 POLE	3 POLE	4 POLE
MECHANICAL					
Mechanical Endurance	Ops.		20,000		
ENVIRONMENTAL					
Ambient Operating Temperature	°C / °F		-20 to 50 / -4 to 122		
Ambient Storage Temperature	°C / °F		-25 to 80 / -13 to 176		
Calibration Temperature	°C / °F		40 / 104		
Altitude	m / ft.		2,000 / 6,562		
Shock	G		15		
CONSTRUCTION					
Poles (availability)			1, 2, 3 and 4 Pole		
Mounting			Standard 35mm DIN Rail		
Width of MCB			17.5mm		
Terminal Screws			Captive		
INGRESS PROTECTION					
Line & Load Terminations	IP		20		
WEIGHT					
	kgs	0.125	0.25	0.37	0.50
	lbs	0.275	0.55	0.825	1.10
CONDUCTOR SIZE					
UL/CSA	AWG		1 x #18 ~ #3, 2 x #18 ~ #10		
Solid, Stranded, Fine Stranded	mm²		1 x 0.82 ~ 26.7		
TERMINAL WIRING CONNECTION					
Wire Type			Copper wire only, 75°C		
TERMINAL TORQUE					
	Nm / lb-in		2.5 / 22.2		
CONTACT INDICATION					
			Green and Red		
DESIGN					
			Trip Free Design (breaker cannot be defeated by holding the handle in the "ON" position)		
ROHS COMPLIANCE					
			For RoHS compliance documentation by product, refer to c3controls.com		

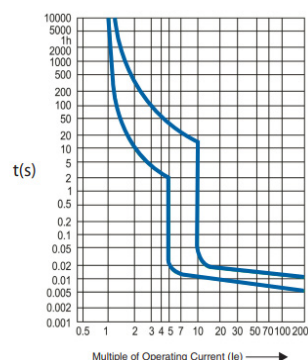
For complete ratings, detailed specifications, or to download product certifications visit c3controls.com.

DIMENSIONS

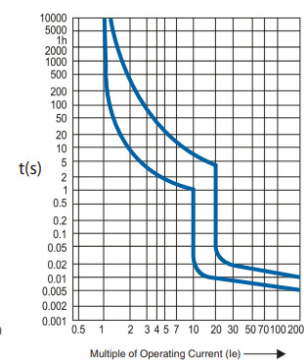


TRIP CURVES

Trip Curve C



Trip Curve D



CERTIFICATIONS

Conformity to Standards:

DC Miniature Circuit Breakers
UL 489B
CSA C22.2 No. 305



Accessories
UL 489



Certifications:

UL File#: E533935
UL File#: E533935

UL File#: E508090

