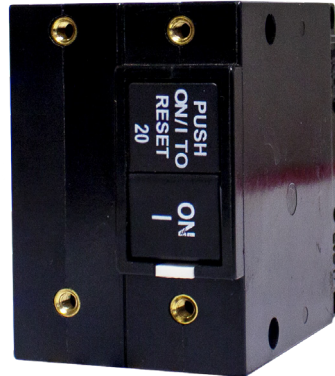


C-Frame MKV - Series Circuit Breakers



The C-Frame MKV is a Robust low profile circuit breaker designed specifically for higher breaking capacity and protection. It is capable of providing high levels of short circuit protection and is suitable for a variety of applications which requires high levels of power density.

The C-Frame MKV circuit breaker is used in power distribution units, lighting control and in a variety of other equipment. This product can be structured according to your preference and is available in 1 or 2 poles with a breaking capacity of 10 kA

Features

- AC circuit breaker
- Hydraulic-magnetic technology
- 100% rating capability independent of ambient temperature
- Up to two poles
- EAC pending, CE certified
- **Ratings 1 A to 20 A@ 10 kA AIC**
- Precision tripping characteristics

Applications

- Telecommunications, datacoms
- UPS equipment
- Mobile power generation equipment
- Alternative energy equipment
- Lighting control

Approvals



Hydraulic-Magnetic Circuit Breakers 100% rated, unaffected by ambient temperature

C-Frame MKV - Series Circuit Breakers

Technical Data

Product Type	C-Frame MKV
Ambient Operating Temperature	-40 °C to +85 °C
Endurance	10 000 operations, 8500 without current, 1500 with current (IEC60947-2 Clause 8.3.3.4)* 10 000 operations, 6000 with current, 4000 without current (UL489 Clause 7.1.5)* As per UL489 or minimum of 1000 operations with current
Dielectric Strength	1000 - 2000 Vac for one minute (Clause 9.7)* 1000 Vac plus twice the rated voltage for one minute (UL489, Clause 7.1.9; UL489A Clause 8)*
Weight	70 g per pole (unpacked)
Altitude	Certification tests done at altitude ≈ 2000 metres. Will operate at higher altitudes.
Flammability	I2 - No ignition at 850 °C with an oxygen index of ≥ 32
Toxicity	F1 - Smoke index of ≤ 20 which determines the fume class
Pollution Degree	PD2 - Normally only non-conductive pollution occurs. Temporary conductivity caused by condensation is to be expected.

* Refer to the standard for details

Product Type	Circuit Breaker
Approvals	UL 489
Number of Poles	1, 2
Maximum Voltages	240 Vac
Current Ratings	1 - 20 A
AIC	10 kA

Product Type	Circuit Breaker
Approvals	IEC60947-2
Number of Poles	1, 2
Maximum Voltages	240 Vac
Current Ratings	1 - 20 A
Ultimate S/C Breaking Capacity (Icu)	5 kA

Product Type	Circuit Breaker
Approvals	GB 14048.2
Number of Poles	1, 2
Maximum Voltages	240 Vac
Current Ratings	1 - 20 A
Ultimate S/C Breaking Capacity (Icu)	5 kA

Torque Table

Description	Size	Torque Value
Front Inserts	M3	0.5 - 0.8 N.m
	6 - 32	5 - 7 lbf.in
Rear Screws	M5	1.7 - 2.3 N.m
	10 - 32	15 - 20 lbf.in

C-Frame MKV - Series Circuit Breakers

Ordering Information

Group 1: Frame	Code	Description	Comments					
	C	C-Frame						
Group 2: Type	Code	Description	Comments					
	K	C-Frame MKV						
Group 3: Mounting	Code	Description	Comments					
	S	Front mount rectangular aperture flush rocker handle	Maximum penetration depth into the mounting screw is 5.4 mm, 0.21 inch					
Group 4: Handle Type	Code	Description	Comments					
	H	Flush Rocker Handle	One colour handle					
	M	Flush Rocker Handle, Two Tone	Two colour handle					
	Q	Flush rocker handle, Push to Reset; Use Test button to switch OFF	One colour handle					
	R	Flush rocker handle, Push to Reset- Two Tone; Use Test button to switch OFF.	Two colour handle					
	Y	No handle, for reduced handle versions	No handle					
Group 5: Termination	Code	Description	Comments					
	4X	Flush Rear Screw Terminal, (M5 or 10 - 32, 37.8 mm between line and load terminals)						
	4Y	Flush Rear Screw Terminal, (M5 or 10 - 32, 31.75 mm between line and load terminals)						
Group 6: Number of Poles	Code	Description	Code	Description				
	1	Single pole - METRIC	A	Single pole - IMPERIAL				
	2	Double pole - METRIC	B	Double pole - IMPERIAL				
Group 7: Rated Voltage and Frequency - Main Circuit	Code	Description	Comments					
	J	240 Vac single pole						
	S	240 Vac multipole pole						
Group 8: Time Delay Characteristics (Curve Details); Pulse Tolerance at 10 ms	Code	Description	System	Pulse Tolerance (X In)	Code	Description	System	Pulse Tolerance (X In)
	AS	Long time delay 50 / 60 Hz	AC	8 - 10	BS	Medium time delay 50 / 60 Hz	AC	8 - 10
	OP	Instantaneous trip 50 / 60 Hz	AC	None	CS	Short time delay 50 / 60 Hz	AC	8 - 10
Group 9: Rated Current (Main Circuit) - Examples Only - Specific Amp Ratings Possible	Code	Description	Comments					
	0100	1 A	Examples only - specific Amp ratings possible from 1 A - 20 A					
	0500	5 A						
	1000	10 A						
	1500	15 A						
2000	20 A							
Group 10: Circuit Configuration (Circuit Breaker's Internal Construction)	Code	Description	Comments					
	BX	Circuit breaker (Series trip, current coil in series)						
Group 11: Auxiliary and Alarm Switches (No approvals)	Code	Description	Comments					
	X	Not applicable						
Group 12: Voltage and Current Ratings for Dual Control, Shunt and Relay Trip Cons	Code	Description	Comments					
	XX	Not applicable						

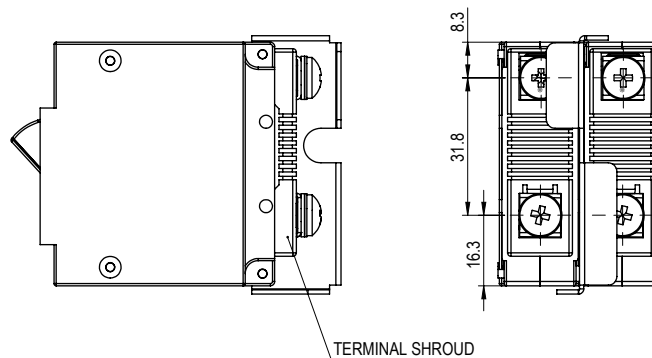
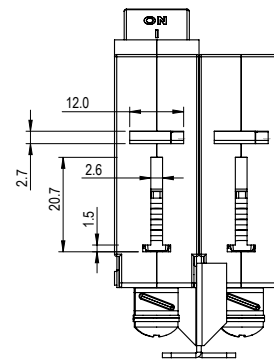
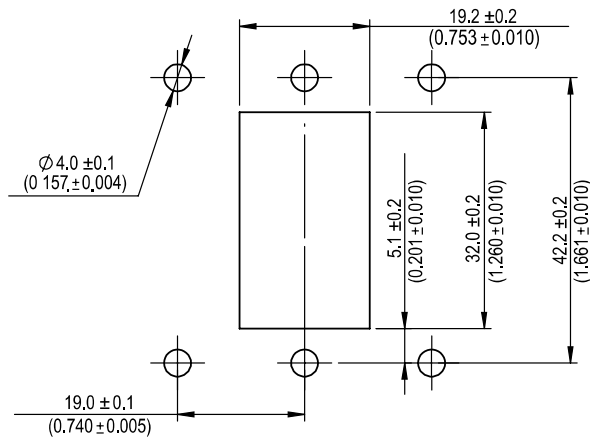
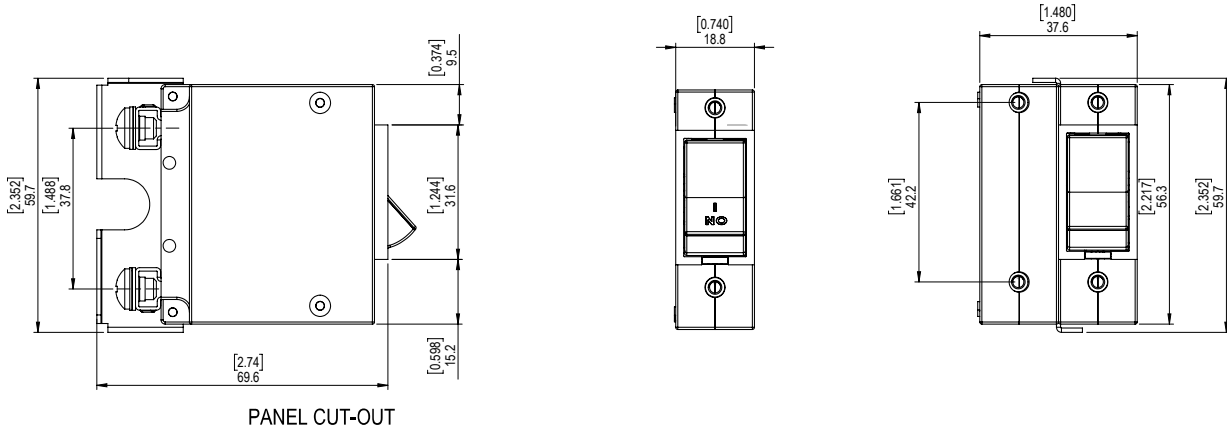
C-Frame MKV - Series Circuit Breakers

Ordering Information

Code	Description	Comments
Group 13: Voltage and Current Ratings for Dual Control, Shunt and Relay Trip Construction		
X	Not applicable	
Group 14: Future use		
X	Not applicable	
Group 15: Customer specific		
X	Not applicable	
S	Customer specific	
Group 16: Handle Colour		
B	BLACK / WHITE MARKING.	Black Colour Not available on the Two Tone Flush Rocker
G	GREEN HANDLE, WHITE MARKING (used with Code H or Q on group 4) OR BLACK HANDLE, GREEN INDICATOR AND MARKING (used with Code M or R ON group 4 - Two Tone)	Refer to Group 4
R	RED HANDLE, WHITE MARKING (used with Code H or Q on group 4) OR BLACK HANDLE, RED INDICATOR AND MARKING (used with Code M or R ON group 4 - Two Tone)	Refer to Group 4
W	WHITE HANDLE, BLACK MARKING (used with Code H or Q on group 4) OR BLACK HANDLE, WHITE INDICATOR AND MARKING (used with Code M or R ON group 4 - Two Tone)	Refer to Group 4
X	No handle	
Y	YELLOW HANDLE, WHITE MARKING (used with Code H or Q on group 4) OR BLACK HANDLE, YELLOW INDICATOR AND MARKING (used with Code M or R ON group 4 - Two Tone)	Refer to Group 4
Group 17: Handle Markings		
H	I - O / ON - OFF and AMP RATING	Not applicable
I	ON - I marked on Functional handle, PUSH TO RESET and AMP RATING marked on non-functional handle	
J	ON - I marked on functional handle, OFF - O and AMP RATING marked on non-functional handle. <i>Special agreement between manufacture and customer.</i>	
X	Not applicable	
Group 18: Mounting Orientation for Markings		
1	Breaker mounted in Vertical Axis with LINE at the BOTTOM, Marking reads left to right - normal horizontal	
2	Breaker mounted in Horizontal Axis with LINE at the RIGHT HAND SIDE, Marking reads left to right - normal horizontal	
H	Breaker mounted in Horizontal Axis with LINE at the LEFT HAND SIDE, Marking reads left to right - normal horizontal	
V	Breaker mounted in Vertical Axis with LINE at the TOP, Marking reads left to right - normal horizontal	
X	Not Applicable	
Group 19: Front Plate Marking and Test Button		
2	Black Front Plate, No Marking, Rocker Handle, Test Button	
B	Black front plate no marking	
Group 20: Inter-phase Barrier		
C	Z Inter-phase barrier	
X	Not applicable	
Group 21: Approvals (Product Normally Approved to)		
2	UL listed UL489, CUL, IEC/EN60947-2, CE, UKCA	Normally certified to these specifications
Z	No Approvals	
Group 22: Safety Marks		
C	CCC, GB14048.2	CCC. Refer to Certificate

C-Frame MKV - Series Circuit Breakers

Outline Dimensions: C-Frame MKV



Note:
 1. GENERAL TOLERANCE 0.2mm UNLESS OTHERWISE STATED
 2. DIMENSIONS IN mm, BRACKETED DIMENSIONS IN INCHES.

Please review our Customer Terms and Conditions on www.cbi-lowvoltage.co.za

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