

a Remert company

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
- Ratings 1 A to 20 A
- Precision tripping characteristics

Applications

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

Approvals









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



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Technical Data

Product Type	C-Frame MKV					
Ambient Operating Temperature	-40°C to +85°C					
Endurance	10 000 operations, 8 500 without current, 1 500 with current (IEC 60947-2 Clause 8.3.3.4)* 10 000 operations, 6000 with current, 4 000 without current (UL 489 Clause 7.1.5)* As per UL 489 or minimum of 1 000 operations with current					
Dielectric Strength	1 000 - 2 000 Vac for one minute (Clause 9.7)* 1 000 Vac plus twice the rated voltage for one minute (UL 489, Clause 7.1.9; UL 489A Clause 8)*					
Weight 70 g per pole (unpacked)						
Altitude	Certification tests done at altitude ≈ 2 000 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

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Approvals	IEC 60947-2
Number of Poles	1, 2
Maximum Voltages	240 Vac
Current Ratings	1 - 20 A
Ultimate S/C Breaking Capacity (Icu)	10 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)	10 kA

Torque Table

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



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Ordering Information

Group 1:	Code	Description		Comments					
Frame	C C-Frame								
	Code	Description			Comments				
Group 2: Type	K	C-Frame MKV							
Group 3:	Code	Description			Comments				
Mounting	S	Front mount rectangular aperture flush rocker handle			Maximum penetration depth into the mounting screw is 5.4 mm, 0.21 inch				
	Code Description			Comments					
	Н	Flush Rocker Handle, One colour			One colour handle				
Group 4:	М	Flush Rocker Handle, Two Tone			Two colour handle				
Handle Type	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				
	Υ	No handle, fo	or reduced ha	ndle versions		No har	ndle		
	Code		Description			Comme	ents		
Group 5: Termination	4X	Flush Rear Screw Terminal,	(M5 or 10 - 32 oad terminals						
	4Y	Flush Rear Screw Terminal, ((M5 or 10 - 32 oad terminals						
Group 6:	Code		Description		Code	De	escription		
Number of Poles	1	Sing	gle pole - MET	RIC	А	Single p	ole - IMPER	RIAL	
Poles	2	Doul	ble pole - ME	TRIC	В	Double p	ole - IMPEF	RIAL	
Group 7:	Code		Description			Commo	ents		
Rated Voltage and Frequency	J	240	0 Vac single p	ole					
- Main Circuit	S	24	10 Vac multipo	ole					
Group 8: Time Delay	Code	Description	System	Pulse Tolerance (X In)	Code	Description	System	Pulse Tolerance (X In)	
Characteristics (Curve Details); Pulse	AS	Long time delay 50/60 Hz	AC	8 - 10	BS	Medium time delay 50/60 Hz	AC	8 - 10	
Tolerance at 10 ms	OP	Instantaneous trip 50/60 Hz	AC	None	cs	Short time delay 50/60 Hz	AC	8 - 10	
	Code	Description		Comments					
Group 9: Rated Current	0100	1 A							
(Main Circuit)	0500	5 A			Examples only - specific Amp ratings possible from 1 A to 20 A				
- Examples Only - Specific	1000	10 A							
Amp Ratings Possible	1500		15 A						
	2000		20 A						
Group 10: Circuit	Code	Description				Commo	ents		
Configuration (Circuit Breaker's Internal Construction)	вх	Circuit breaker (Series trip, current coil in series)							
Group 11: Auxiliary	Code	Description		Comments					
and Alarm Switches (No approvals)	Х	Not applicable							
Group 12: Voltage and	Code	Description		Comments					
Current Ratings for Dual Control, Shunt and Relay Trip Cons	xx	Not applicable							



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Ordering Information

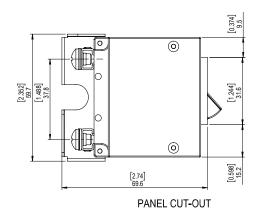
Oracining .	Information							
Group 13:	Code	Description	Comments					
Voltage and Current Ratings for Dual Control, Shunt and Relay Trip Construction	х	Not applicable						
Group 14:	Code	Description	Comments					
Future use	Х	Not applicable						
Group 15:	Code	Description	Comments					
Customer	Х	Not applicable						
specific	S	Customer specific						
	Code	Description	Comments					
	В	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					
Group 16: Handle Colour	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						
	Υ	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					
	Code	Description	Comments					
0	Н	I - O / ON - OFF and AMP RATING	Not applicable					
Group 17: Handle Markings	I	ON - I marked on functional handle, PUSH-TO-RESET and AMP RATING marked on non-functional handle						
	Х	Not applicable						
	Code	Description	Comments					
	1	Breaker mounted in Vertical Axis with LINE at the BOTTOM, marking reads left to right - normal horizontal						
Group 18: Mounting	2	Breaker mounted in Horizontal Axis with LINE at the RIGHT HAND SIDE, marking reads left to right - normal horizontal						
Orientation for Markings	Н	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						
	Х	Not Applicable						
Group 19:	Code	Description	Comments					
Front Plate Marking and	2	Black Front Plate, No Marking, Rocker Handle, Test Button						
Test Button	В	Black front plate no marking						
	Code	Description	Comments					
Group 20: Inter-phase Barrier	С	Inter-phase barrier - Z type						
	Х	Not applicable						
Group 21:	Code	Description	Comments					
Approvals	2	UL listed UL 489, IEC/EN 60947-2, CE, UKCA	Normally certified to these specifications					
(Product Normally			to mode specifications					
Approved to)	Z	No Approvals						
Group 22:	Code	Description	Comments					
Safety Marks	С	CCC, GB 14048.2	CCC. Refer to Certificate					

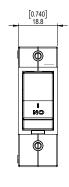


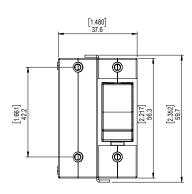
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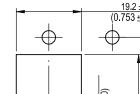
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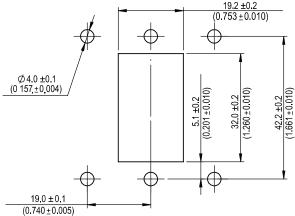
Outline Dimensions: C-Frame MKV

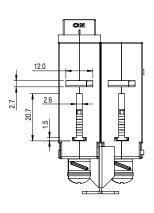




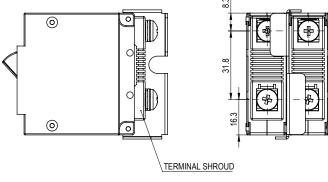








4Y VERSION - SPACE BETWEEN TERMINALS 31.8mm



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

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