







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



### **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			
<b>Current Ratings</b>	1 - 20 A			
AIC	10 kA			

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Ultimate S/C Breaking Capacity (Icu)	5 kA			

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Approvals	GB 14048.2
Number of Poles	1, 2
Maximum Voltages	240 Vac
<b>Current Ratings</b>	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		
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		



## **Ordering Information**

Group 1:	Code	Description		Comments				
Frame	C C-Frame							
	Code	Description			Comments			
Group 2: Type	K	C-Frame MKV						
Group 3:			Comments					
Mounting			Maximum penetration depth into the mounting screw is 5.4 mm, 0.21 inch					
	Code	Description				Comme	ents	
	Н	Flush Rocker Handle			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 handle			
	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	scription	
Number of	1	Sing	Single pole - METRIC			Single p	ole - IMPER	RIAL
Poles	2	Doub	ole pole - ME	TRIC	В	Double p	ole - IMPEF	RIAL
Group 7:	Code		Description			Comme	ents	
Rated Voltage and Frequency	J	240	Vac single p	ole				
- Main Circuit	S	240 '	Vac multipole	pole				
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			Examples only - specific Amp ratings possible from 1 A - 20 A			
(Main Circuit)	0500	5 A						
Only - Specific	1000	10 A						
Amp Ratings Possible	1500	15 A						
	2000		20 A					
Group 10:	Code	ZUA Description			Comments			
Circuit Configuration (Circuit Breaker's Internal Construction)	вх	Circuit breaker (Series trip, current coil in series)						
Group 11: Auxiliary	Code	Code Description		Comments				
and Alarm Switches (No approvals)	х	Not applicable						
Group 12: Voltage and	Code	de Description		Comments				
Current Ratings for Dual Control, Shunt and Relay Trip Cons	xx	Not applicable						

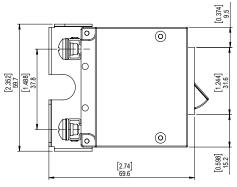


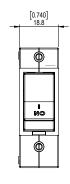
### **Ordering Information**

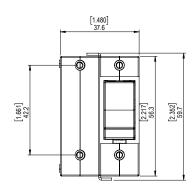
Ordering	Information							
Group 13:	Code	Description	Comments					
Voltage and Current Ratings for Dual Control, Shunt and Relay Trip Construction	×	Not applicable						
Group 14:	Code	Description	Comments					
Future use	Х	Not applicable						
Group 15:	Code	Description	Comments					
Customer specific	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					
	Х	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					
	Code	Description	Comments					
Group 17:	Н	I - O / ON - OFF and AMP RATING	Not applicable					
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						
Group 20:	Code	Description	Comments					
Inter-phase	С	Z Inter-phase barrier						
Barrier	Х	Not applicable						
Group 21:	Code	Description	Comments					
Approvals (Product	2	UL listed UL489, CUL, IEC/EN60947-2, CE, UKCA	Normally certified to these specifications					
Normally Approved to)	Z	No Approvals						
Group 22:	Code	Description	Comments					
Safety Marks	С	CCC, GB14048.2	CCC. Refer to Certificate					



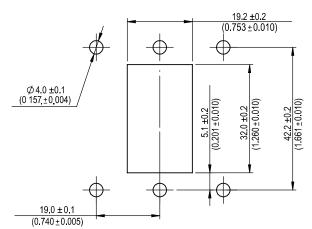
### **Outline Dimensions: C-Frame MKV**

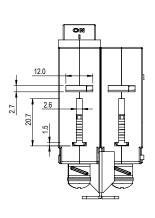




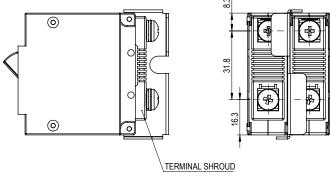








4Y VERSION - SPACE BETWEEN TERMINALS 31.8mm



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

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