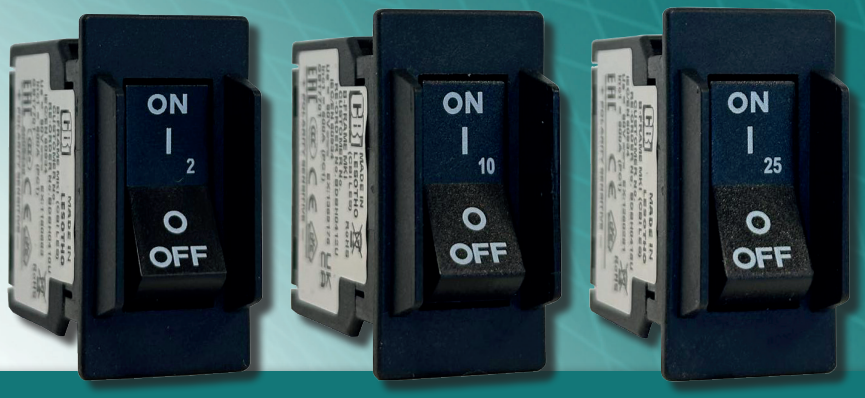


B-Frame Standard DC Range

The B-Frame Hydraulic-Magnetic Circuit Breaker Range is the most compact and robust hydraulic-magnetic circuit breaker with current rating up to 30A. It's a perfect solution as a distribution circuit breaker where the space is limited, and you would like to easily switch of a load. It has all international approvals.

Emcomp have chosen to create a standard range which is always kept on stock for best cost and availability. Other options exist as well, contact us for further information. The standard-rangeis built for DC voltages up to 80 VDC with rated current from 2A up to 30A. The handle is the popular "protected rocker" with side protection to avoid accidental switching of the breaker.
The characteristics is a medium time delay. Mounting is done just by "click in" the circuit breaker in a defined hole size.

Applications

- MCB Distributions
- Lighting equipment
- Office equipment
- Power supplies
- Telecom power distribution
- Small generators and motors
- Railway signalling systems
- Entertainment systems
- Vending machines
- Power distribution units (PDU)
- Suitable for motor starting
- Solar and renewable power

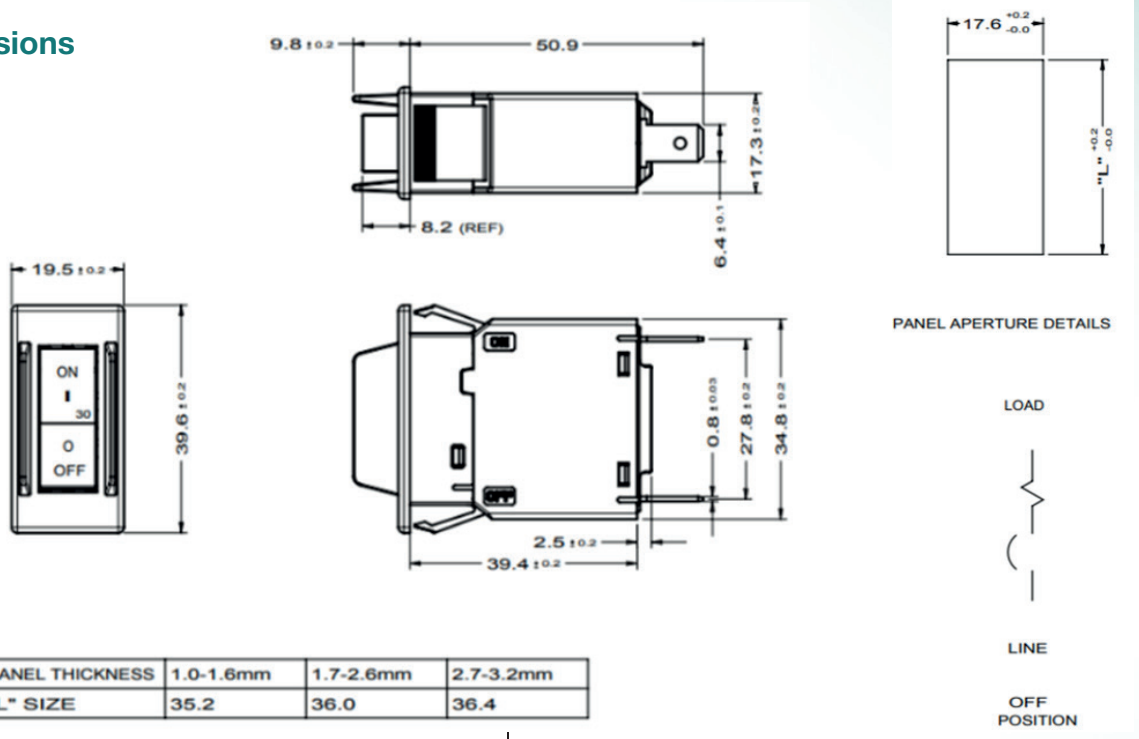
Features

- DC Circuit Breaker
- Hydraulic-Magnetic Technology
- 100% Rating Capability Independent of Ambient Temperature
- VDE and CCC approved
- UL Listed (UL 489A)
- IEC/EN 60934
- Ratings up to 30A
- Precision Tripping
- Ultra Compact
- Reset Immediately After Overload
- Switch and circuit breaker in one shell

TECHNICAL DATA	
Product Type	Circuit Breaker
Tolerance	± 0.4 Mm Unless Stated
Casing Material	Polyamide (V0 at 0.8 Mm)
Configuration	Hydraulic-Magnetic Circuit Breaker
Maximum Operating Voltage	80Vdc
Interrupting Capacity	0.6kA at 80Vdc
Operating Temperature	-40° C to +85° C
Approvals	UL489A VDE (IEC/EN 60934)
Handle	Black (I/O & ON/OFF & Amp Rating)

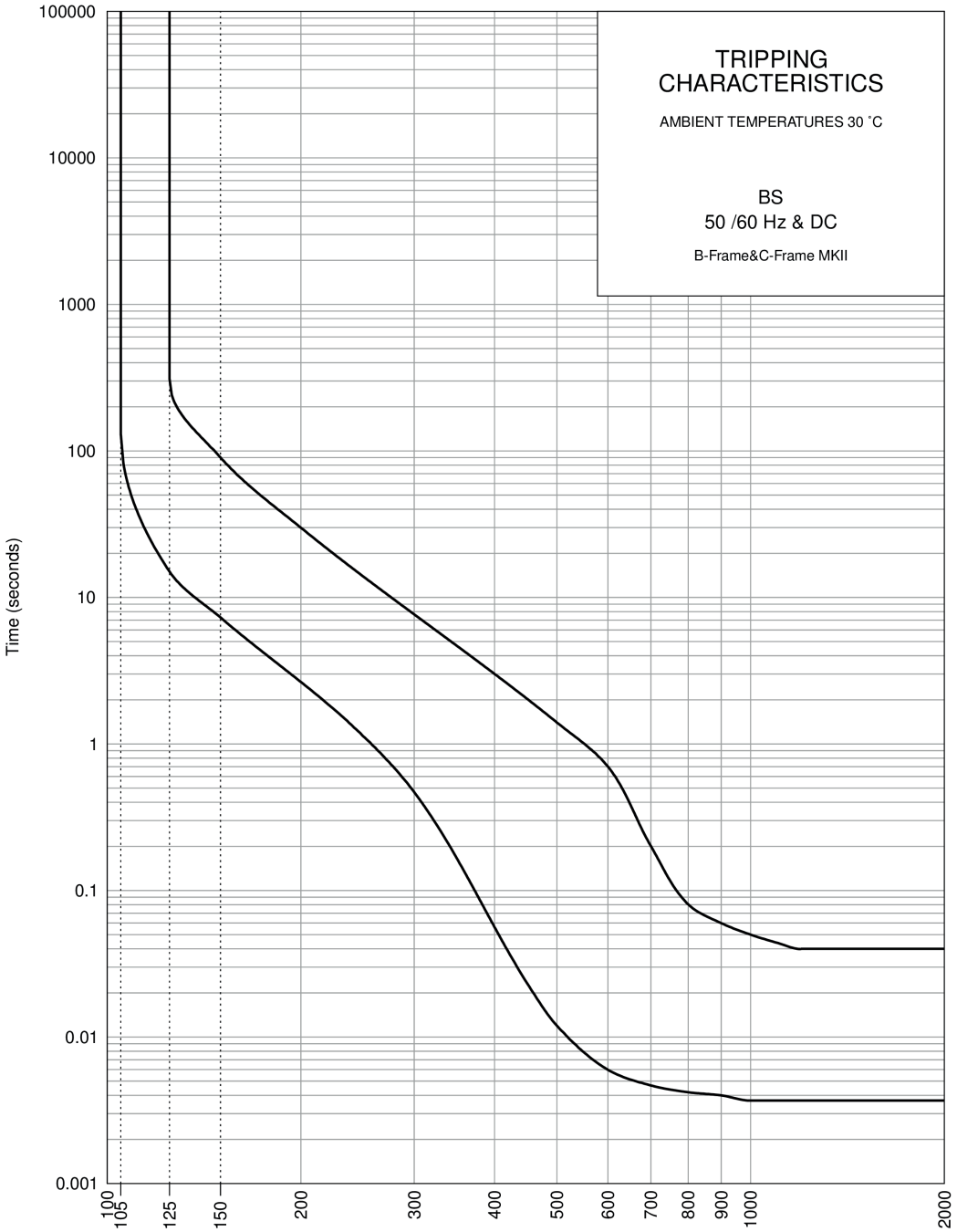
Item No	Voltage Range	Rated Current
BDBH0410U	12-80VDC	2A
BDBH0424U	12-80VDC	4A
BDBH0411U	12-80VDC	6A
BDBH0412U	12-80VDC	10A
BDBH0413U	12-80VDC	16A
BDBH0414U	12-80VDC	20A
BDBH0415U	12-80VDC	25A
BDBH0416U	12-80VDC	30A

Outline Dimensions



PANEL THICKNESS	1.0-1.6mm	1.7-2.6mm	2.7-3.2mm
"L" SIZE	35.2	36.0	36.4

Medium Time Delay Curve- BS Curve

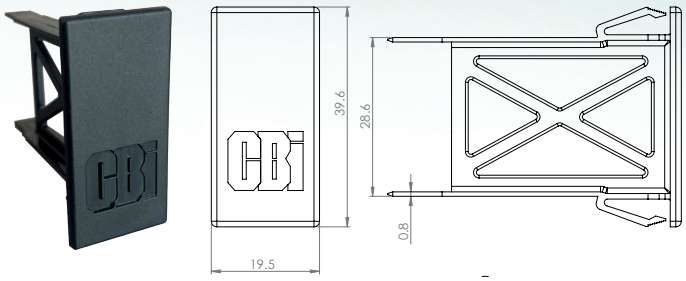


Percentage of rated current

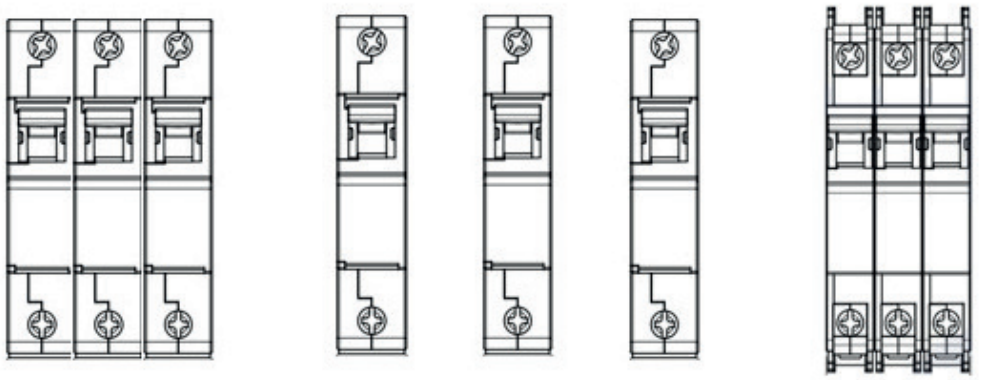
PERCENTAGE OF RATED CURRENT	100%	125%	135%	150%	200%	300%	400%	500%	600%	700%	800%	900%	1000%	1200%
MINIMUM TRIP TIME IN SECONDS	NO TRIP	15	10.5	7.3	2.6	0.47	0.06	0.012	0.006	0.0047	0.0042	0.004	0.0037	0.0036
MAXIMUM TRIP TIME IN SECONDS	NO TRIP	300	147	90	30	8	3.2	1.4	0.7	0.2	0.08	0.05	0.045	0.04

Accessories

Cover for empty positions in your distribution. Works for both snap-in in a front plate as well as mounted in female terminal contacts. Esthetical as well as safe solution. Escutcheon blanks for empty slots, Item Number EC204704-2



Thermal-Magnetic vs Hydraulic-Magnetic

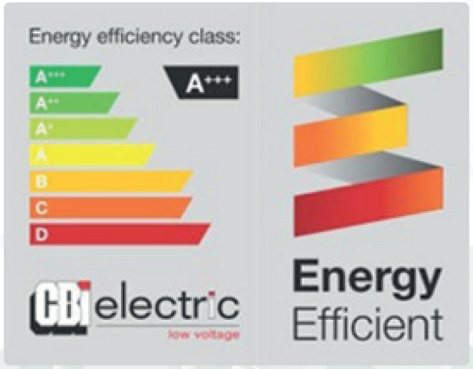


Nominal current	16A	16A	16A
Operating at 30° C	10.8A	11.9A	16A
Operating at 45° C	9.6A	10.6A	16A

Due to the Hydraulic-Magnetic technology the MCB will keep rated current regardless of the ambient temperature. No de-rating needed.

Advantages

- Not sensitive to ambient temperatures
- Always keep rated current regardless of temperature, classified from -40° to 85° C
- Dedicated AC and DC products with correct approvals
- Immediate re-set after tripping –no cooling down period
- World wide approval profile
- Possibility to customize products
- Energy efficient alternative –45% lower internal resistance



EMCOMP EQUIPMENT FOR HARSH ENVIRONMENT | CBI electric Europe