

EPBR-63M/H Series (Electronic/Electro-magnetic) Residual Current Operated Circuit Breaker(RCBO)

Technical data






Standard	EN/IEC61009-1
Breaking capacity	6kA ,10kA
Protection	Ground fault, overcurrent and short circuit
Rated current, I_n	6,10,13, 16,20,25,32,40, 50, 63A
Operating, I_{Δn}	10,30,100,300mA
Characteristic	B,C Curve
Rated residual current operated making & breaking capacity I_{Δm}	500A
Rated residual non-operated current I_{Δn}	0.5I _{Δn}
Rated impulse withstand voltage U_{imp}	4kV
Number of poles	1P+N
Rated voltages 2pole	240VAC
Ambient temperature (°C)	-25~+40,Max. 95%humidity
Residual current off-time	≤0.1 sec
Type of trip	Ground fault Electronic/Electro-magnetic Over current Thermal-magnetic
Protection degree	IP20
Terminal capacity	10mm ² flexible/16mm ² rigid
Installation	35mm DIN rail
Width	2 modules
Type of terminal	Lug type and Pin type



EPBR-63M



EPBR-63H







EPBR-63M-RCBO	Rated current(A)	$I_{\Delta n}$	Type AC 		Type A 		Packing unit
			B curve	C curve	B curve	C curve	
	10mA	6	EPBR-63M-B6/10	EPBR-63M-C6/10	EPBR-63M-B6/10-A	EPBR-63M-C6/10-A	1
		10	EPBR-63M-B10/10	EPBR-63M-C10/10	EPBR-63M-B10/10-A	EPBR-63M-C10/10-A	1
		13	EPBR-63M-B13/10	EPBR-63M-C13/10	EPBR-63M-B13/10-A	EPBR-63M-C13/10-A	1
		16	EPBR-63M-B16/10	EPBR-63M-C16/10	EPBR-63M-B16/10-A	EPBR-63M-C16/10-A	1
		20	EPBR-63M-B20/10	EPBR-63M-C20/10	EPBR-63M-B20/10-A	EPBR-63M-C20/10-A	1
		25	EPBR-63M-B25/10	EPBR-63M-C25/10	EPBR-63M-B25/10-A	EPBR-63M-C25/10-A	1
		32	EPBR-63M-B32/10	EPBR-63M-C32/10	EPBR-63M-B32/10-A	EPBR-63M-C32/10-A	1
		40	EPBR-63M-B40/10	EPBR-63M-C40/10	EPBR-63M-B40/10-A	EPBR-63M-C40/10-A	1
		50	EPBR-63M-B50/10	EPBR-63M-C50/10	EPBR-63M-B50/10-A	EPBR-63M-C50/10-A	1
		63	EPBR-63M-B63/10	EPBR-63M-C63/10	EPBR-63M-B63/10-A	EPBR-63M-C63/10-A	1
	30mA	6	EPBR-63M-B6/30	EPBR-63M-C6/30	EPBR-63M-B6/30-A	EPBR-63M-C6/30-A	1
		10	EPBR-63M-B10/30	EPBR-63M-C10/30	EPBR-63M-B10/30-A	EPBR-63M-C10/30-A	1
		13	EPBR-63M-B13/30	EPBR-63M-C13/30	EPBR-63M-B13/30-A	EPBR-63M-C13/30-A	1
		16	EPBR-63M-B16/30	EPBR-63M-C16/30	EPBR-63M-B16/30-A	EPBR-63M-C16/30-A	1
		20	EPBR-63M-B20/30	EPBR-63M-C20/30	EPBR-63M-B20/30-A	EPBR-63M-C20/30-A	1
		25	EPBR-63M-B25/30	EPBR-63M-C25/30	EPBR-63M-B25/30-A	EPBR-63M-C25/30-A	1
		32	EPBR-63M-B32/30	EPBR-63M-C32/30	EPBR-63M-B32/30-A	EPBR-63M-C32/30-A	1
		40	EPBR-63M-B40/30	EPBR-63M-C40/30	EPBR-63M-B40/30-A	EPBR-63M-C40/30-A	1
		50	EPBR-63M-B50/30	EPBR-63M-C50/30	EPBR-63M-B50/30-A	EPBR-63M-C50/30-A	1
		63	EPBR-63M-B63/30	EPBR-63M-C63/30	EPBR-63M-B63/30-A	EPBR-63M-C63/30-A	1
	100mA	6	EPBR-63M-B6/100	EPBR-63M-C6/100	EPBR-63M-B6/100-A	EPBR-63M-C6/100-A	1
		10	EPBR-63M-B10/100	EPBR-63M-C10/100	EPBR-63M-B10/100-A	EPBR-63M-C10/100-A	1
		13	EPBR-63M-B13/100	EPBR-63M-C13/100	EPBR-63M-B13/100-A	EPBR-63M-C13/100-A	1
		16	EPBR-63M-B16/100	EPBR-63M-C16/100	EPBR-63M-B16/100-A	EPBR-63M-C16/100-A	1
		20	EPBR-63M-B20/100	EPBR-63M-C20/100	EPBR-63M-B20/100-A	EPBR-63M-C20/100-A	1
		25	EPBR-63M-B25/100	EPBR-63M-C25/100	EPBR-63M-B25/100-A	EPBR-63M-C25/100-A	1
		32	EPBR-63M-B32/100	EPBR-63M-C32/100	EPBR-63M-B32/100-A	EPBR-63M-C32/100-A	1
		40	EPBR-63M-B40/100	EPBR-63M-C40/100	EPBR-63M-B40/100-A	EPBR-63M-C40/100-A	1
		50	EPBR-63M-B50/100	EPBR-63M-C50/100	EPBR-63M-B50/100-A	EPBR-63M-C50/100-A	1
		63	EPBR-63M-B63/100	EPBR-63M-C63/100	EPBR-63M-B63/100-A	EPBR-63M-C63/100-A	1
	300mA	6	EPBR-63M-B6/300	EPBR-63M-C6/300	EPBR-63M-B6/300-A	EPBR-63M-C6/300-A	1
		10	EPBR-63M-B10/300	EPBR-63M-C10/300	EPBR-63M-B10/300-A	EPBR-63M-C10/300-A	1
		13	EPBR-63M-B13/300	EPBR-63M-C13/300	EPBR-63M-B13/300-A	EPBR-63M-C13/300-A	1
		16	EPBR-63M-B16/300	EPBR-63M-C16/300	EPBR-63M-B16/300-A	EPBR-63M-C16/300-A	1
		20	EPBR-63M-B20/300	EPBR-63M-C20/300	EPBR-63M-B20/300-A	EPBR-63M-C20/300-A	1
		25	EPBR-63M-B25/300	EPBR-63M-C25/300	EPBR-63M-B25/300-A	EPBR-63M-C25/300-A	1
		32	EPBR-63M-B32/300	EPBR-63M-C32/300	EPBR-63M-B32/300-A	EPBR-63M-C32/300-A	1
		40	EPBR-63M-B40/300	EPBR-63M-C40/300	EPBR-63M-B40/300-A	EPBR-63M-C40/300-A	1
		50	EPBR-63M-B50/300	EPBR-63M-C50/300	EPBR-63M-B50/300-A	EPBR-63M-C50/300-A	1
		63	EPBR-63M-B63/300	EPBR-63M-C63/300	EPBR-63M-B63/300-A	EPBR-63M-C63/300-A	1

Type AC

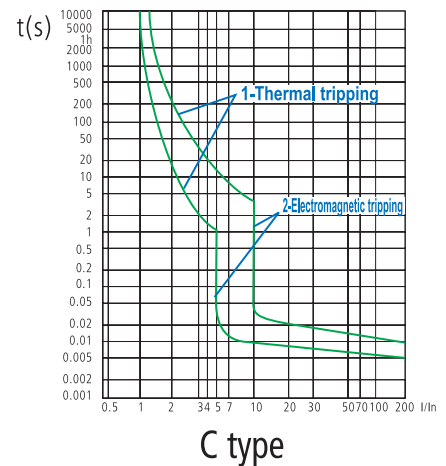
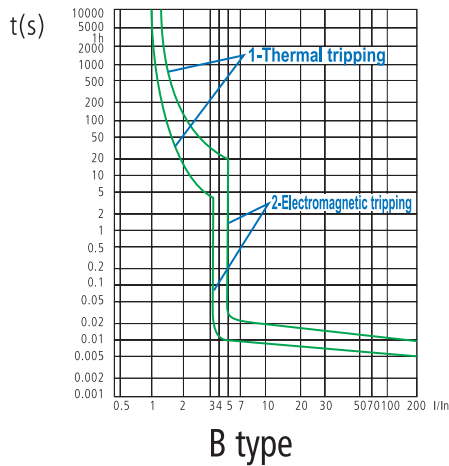


Type A



EPBR-63H-RCBO	Rated current(A)	$I_{\Delta n}$	Type AC 		Type A 		Packing unit
			B curve	C curve	B curve	C curve	
	6	10mA	EPBR-63H-B6/10	EPBR-63H-C6/10	EPBR-63H-B6/10-A	EPBR-63H-C6/10-A	1
	10		EPBR-63H-B10/10	EPBR-63H-C10/10	EPBR-63H-B10/10-A	EPBR-63H-C10/10-A	1
	13		EPBR-63H-B13/10	EPBR-63H-C13/10	EPBR-63H-B13/10-A	EPBR-63H-C13/10-A	1
	16		EPBR-63H-B16/10	EPBR-63H-C16/10	EPBR-63H-B16/10-A	EPBR-63H-C16/10-A	1
	20		EPBR-63H-B20/10	EPBR-63H-C20/10	EPBR-63H-B20/10-A	EPBR-63H-C20/10-A	1
	25		EPBR-63H-B25/10	EPBR-63H-C25/10	EPBR-63H-B25/10-A	EPBR-63H-C25/10-A	1
	32		EPBR-63H-B32/10	EPBR-63H-C32/10	EPBR-63H-B32/10-A	EPBR-63H-C32/10-A	1
	40		EPBR-63H-B40/10	EPBR-63H-C40/10	EPBR-63H-B40/10-A	EPBR-63H-C40/10-A	1
	50		EPBR-63H-B50/10	EPBR-63H-C50/10	EPBR-63H-B50/10-A	EPBR-63H-C50/10-A	1
	63		EPBR-63H-B63/10	EPBR-63H-C63/10	EPBR-63H-B63/10-A	EPBR-63H-C63/10-A	1
	6	30mA	EPBR-63H-B6/30	EPBR-63H-C6/30	EPBR-63H-B6/30-A	EPBR-63H-C6/30-A	1
	10		EPBR-63H-B10/30	EPBR-63H-C10/30	EPBR-63H-B10/30-A	EPBR-63H-C10/30-A	1
	13		EPBR-63H-B13/30	EPBR-63H-C13/30	EPBR-63H-B13/30-A	EPBR-63H-C13/30-A	1
	16		EPBR-63H-B16/30	EPBR-63H-C16/30	EPBR-63H-B16/30-A	EPBR-63H-C16/30-A	1
	20		EPBR-63H-B20/30	EPBR-63H-C20/30	EPBR-63H-B20/30-A	EPBR-63H-C20/30-A	1
	25		EPBR-63H-B25/30	EPBR-63H-C25/30	EPBR-63H-B25/30-A	EPBR-63H-C25/30-A	1
	32		EPBR-63H-B32/30	EPBR-63H-C32/30	EPBR-63H-B32/30-A	EPBR-63H-C32/30-A	1
	40		EPBR-63H-B40/30	EPBR-63H-C40/30	EPBR-63H-B40/30-A	EPBR-63H-C40/30-A	1
	50		EPBR-63H-B50/30	EPBR-63H-C50/30	EPBR-63H-B50/30-A	EPBR-63H-C50/30-A	1
	63		EPBR-63H-B63/30	EPBR-63H-C63/30	EPBR-63H-B63/30-A	EPBR-63H-C63/30-A	1
	6	100mA	EPBR-63H-B6/100	EPBR-63H-C6/100	EPBR-63H-B6/100-A	EPBR-63H-C6/100-A	1
	10		EPBR-63H-B10/100	EPBR-63H-C10/100	EPBR-63H-B10/100-A	EPBR-63H-C10/100-A	1
	13		EPBR-63H-B13/100	EPBR-63H-C13/100	EPBR-63H-B13/100-A	EPBR-63H-C13/100-A	1
	16		EPBR-63H-B16/100	EPBR-63H-C16/100	EPBR-63H-B16/100-A	EPBR-63H-C16/100-A	1
	20		EPBR-63H-B20/100	EPBR-63H-C20/100	EPBR-63H-B20/100-A	EPBR-63H-C20/100-A	1
	25		EPBR-63H-B25/100	EPBR-63H-C25/100	EPBR-63H-B25/100-A	EPBR-63H-C25/100-A	1
	32		EPBR-63H-B32/100	EPBR-63H-C32/100	EPBR-63H-B32/100-A	EPBR-63H-C32/100-A	1
	40		EPBR-63H-B40/100	EPBR-63H-C40/100	EPBR-63H-B40/100-A	EPBR-63H-C40/100-A	1
	50		EPBR-63H-B50/100	EPBR-63H-C50/100	EPBR-63H-B50/100-A	EPBR-63H-C50/100-A	1
	63		EPBR-63H-B63/100	EPBR-63H-C63/100	EPBR-63H-B63/100-A	EPBR-63H-C63/100-A	1
	6	300mA	EPBR-63H-B6/300	EPBR-63H-C6/300	EPBR-63H-B6/300-A	EPBR-63H-C6/300-A	1
	10		EPBR-63H-B10/300	EPBR-63H-C10/300	EPBR-63H-B10/300-A	EPBR-63H-C10/300-A	1
	13		EPBR-63H-B13/300	EPBR-63H-C13/300	EPBR-63H-B13/300-A	EPBR-63H-C13/300-A	1
	16		EPBR-63H-B16/300	EPBR-63H-C16/300	EPBR-63H-B16/300-A	EPBR-63H-C16/300-A	1
	20		EPBR-63H-B20/300	EPBR-63H-C20/300	EPBR-63H-B20/300-A	EPBR-63H-C20/300-A	1
	25		EPBR-63H-B25/300	EPBR-63H-C25/300	EPBR-63H-B25/300-A	EPBR-63H-C25/300-A	1
	32		EPBR-63H-B32/300	EPBR-63H-C32/300	EPBR-63H-B32/300-A	EPBR-63H-C32/300-A	1
	40		EPBR-63H-B40/300	EPBR-63H-C40/300	EPBR-63H-B40/300-A	EPBR-63H-C40/300-A	1
	50		EPBR-63H-B50/300	EPBR-63H-C50/300	EPBR-63H-B50/300-A	EPBR-63H-C50/300-A	1
	63		EPBR-63H-B63/300	EPBR-63H-C63/300	EPBR-63H-B63/300-A	EPBR-63H-C63/300-A	1

1. Curves



2. Wiring

The suitable conductors should be used for connection, see table below for relative parameters.

Rated current I_n (A)	Cross section area s (mm ²)	Tightening torque (N.m)
6	1	2
10	1.5	2
13	1.5	2
16-20	2.5	2
25	4	2
32	6	2
40-50	10	2
63	16	2

3. Types

Both RCCBs and RCBOs are divided into types depending on the operating function:

Type AC : For which tripping is ensured for residual sinusoidal alternating currents, whether suddenly applied or slowly rising.

Type A : For which tripping is ensured for residual sinusoidal alternating currents and residual pulsating direct currents, whether suddenly applied or slowly rising.

4. Tripping sensitivity data

RCD with a rated residual current of maximum 30mA are used for personnel, material and fire protection, as well as for protection against direct contact.

RCD with a rated residual current of maximum 300mA are used as preventative fire protection in case of insulation faults.

RCD with a rated residual current of 100mA co-ordinated with the earth system according to the formula $I_{\Delta n} < 50/R$, to provide protection against indirect contacts.

5. Overall and mounting dimensions

