



for a greener tomorrow

# DIN SERIES

Miniature Circuit Breakers,  
Residual Current Circuit Breakers

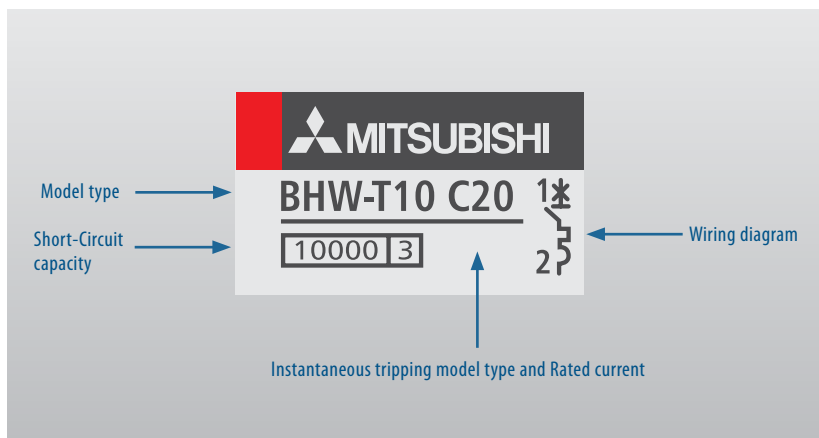


- All models fully comply with IEC regulations
- High current-limiting performance
- Compliance with IP2X protection rating (front surface)
- All models are compatible with reverse connection

# Characteristics

## Product Line-up

MODEL TYPE	No. of POLES [P]	RATING	INSTANTANEOUS TRIPPING	VOLTAGE [V]	SHORT-CIRCUIT CAPACITY [kA]	COMPLIANCE STANDARD
MCB	BHW-T10	6 to 63 A 0.5 to 63 A	Type B Type C, D	240/415 AC	10	IEC 60898-1
RCCB	BVW-T	2 (1+N), 4 (3+N)	—	240/415 AC	—	IEC 61008-1



Explanation of Markings (Example Model Type: BHW-T10)

## Construction features

### State of the art design

- Elegant appearance, cover and handle in arc shape make comfortable operation.

### Mounting/Removal

- By means of a unique snap mechanism products can be mounted on DIN rail strip or removed even from a row of devices by lifting the clip without dismantling the whole row.

### Dual position clip

- Dual position plastic clip helps in easy mounting and renewal of MCBs on DIN channel.

### Bi-connect terminals

- Both sides of terminals are bi-connect type, giving ultimate flexibility.

### High terminal capacity

- Deep serrated terminals able to accommodate 35 mm<sup>2</sup> cable.

## Miniature Circuit Breakers (MCB)

### Trip Free Mechanism

During fault MCB trips even if handle is held in ON position.

### Low watt loss

Power loss values are much lesser than IEC specified values; making it one of the most energy efficient MCB.

### Energy limiting class: 3

High current limiting performance under fault conditions achieved due to ultra fast contact opening and rapid quenching of arc.

### Circuit Identification

Legend plates for circuit identifications and hence enhanced safety.



BHW-T10

## Residual Current Circuit Breakers (RCCB)

Automatically disconnect the circuit when earth fault/leakage current occurs and exceeds the rated sensitivity and also fulfills the function of isolation.

High short-circuit current withstand capacity with backup protection fuse.

Fire resistant plastic parts endures abnormal heating and strong impact.

Independent of power supply and line voltage, and free from external interference, voltage fluctuation.

Prevents nuisance tripping due to transient voltage with help of filtering device (Immunized).

Test button "T" is provided for periodic checkup.



BVW-T

# Ordering Information

## Miniature Circuit Breakers (MCB)

REFERENCE <sup>①</sup>	CODES			
Type B	1 pole	2 poles	3 poles	4 poles
BHW-T10 □ Type B 6 A	291889	291908	291917	291926
BHW-T10 □ Type B 10 A	291890	291909	291918	291927
BHW-T10 □ Type B 16 A	291891	291910	291919	291928
BHW-T10 □ Type B 20 A	291892	291911	291920	291929
BHW-T10 □ Type B 25 A	291893	291912	291921	291930
BHW-T10 □ Type B 32 A	291894	291913	291922	291931
BHW-T10 □ Type B 40 A	291905	291914	291923	291932
BHW-T10 □ Type B 50 A	291906	291915	291924	291933
BHW-T10 □ Type B 63 A	291907	291916	291925	291934
Type C	1 pole	2 poles	3 poles	4 poles
BHW-T10 □ Type C 0,5 A	291953	291968	291983	291998
BHW-T10 □ Type C 1 A	291954	291969	291984	291999
BHW-T10 □ Type C 2 A	291955	291970	291985	292000
BHW-T10 □ Type C 3 A	291956	291971	291986	292001
BHW-T10 □ Type C 4 A	291957	291972	291987	292002
BHW-T10 □ Type C 5 A	291958	291973	291988	292003
BHW-T10 □ Type C 6 A	291959	291974	291989	292004
BHW-T10 □ Type C 10 A	291960	291975	291990	292005
BHW-T10 □ Type C 16 A	291961	291976	291991	292006
BHW-T10 □ Type C 20 A	291962	291977	291992	292007
BHW-T10 □ Type C 25 A	291963	291978	291993	292008
BHW-T10 □ Type C 32 A	291964	291979	291994	292009
BHW-T10 □ Type C 40 A	291965	291980	291995	292010
BHW-T10 □ Type C 50 A	291966	291981	291996	292011
BHW-T10 □ Type C 63 A	291967	291982	291997	292012
Type D	1 pole	2 poles	3 poles	4 poles
BHW-T10 □ Type D 0,5 A	292043	292058	292073	292088
BHW-T10 □ Type D 1 A	292044	292059	292074	292089
BHW-T10 □ Type D 2 A	292045	292060	292075	292090
BHW-T10 □ Type D 3 A	292046	292061	292076	292091
BHW-T10 □ Type D 4 A	292047	292062	292077	292092
BHW-T10 □ Type D 5 A	292048	292063	292078	292093
BHW-T10 □ Type D 6 A	292049	292064	292079	292094
BHW-T10 □ Type D 10 A	292050	292065	292080	292095
BHW-T10 □ Type D 16 A	292051	292066	292081	292096
BHW-T10 □ Type D 20 A	292052	292067	292082	292097
BHW-T10 □ Type D 25 A	292053	292068	292083	292098
BHW-T10 □ Type D 32 A	292054	292069	292084	292099
BHW-T10 □ Type D 40 A	292055	292070	292085	292100
BHW-T10 □ Type D 50 A	292056	292071	292086	292101
BHW-T10 □ Type D 63 A	292057	292072	292087	292102

① □ The white square must indicate the number of poles → 1P or 2P or 3P or 4P

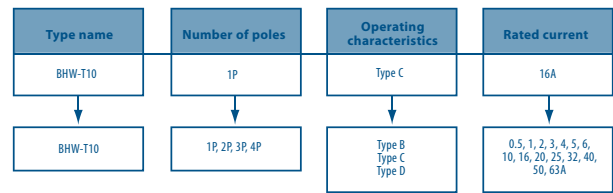
## Residual Current Breakers (RCCB)

REFERENCE <sup>①</sup>	CODES	
30 mA	2 poles	4 poles
BVW-T □ 25A 30 mA	293548	293603
BVW-T □ 40A 30 mA	293550	293605
BVW-T □ 63A 30 mA	293551	293606
300 mA	2 poles	4 poles
BVW-T □ 25A 300 mA	293598	293613
BVW-T □ 40A 300 mA	293600	293615
BVW-T □ 63A 300 mA	293601	293616

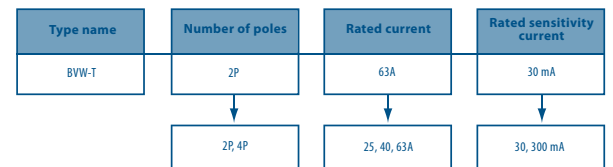
① □ The white square must indicate the number of poles → 2P or 4P

## Reference identification

### Miniature Circuit Breakers (MCB)



### Residual Current Breakers (RCCB)



# Miniature Circuit Breakers/Residual Current Circuit Breakers

## Specifications

MCB				BHW-T10							
<b>Type</b>											
<b>No. of Poles [P]</b>				1	2	3	4	1	2	3	4
<b>Instantaneous tripping</b>				Type B <sup>②</sup>				Type C, D <sup>②</sup>			
<b>Rated insulation voltage <math>U_i</math> [V]</b>				660				660			
<b>Rated current <math>I_n</math> [A] at ambient temperature 30° C</b>				6, 10, 16, 20, 25, 32, 40, 50, 63				0.5, 1, 2, 3, 4, 5, 6, 10, 16, 20, 25, 32, 40, 50, 62			
<b>Rated short-circuit capacity [kA]</b>	<b>IEC/EN 60898-1 (Icn)</b>	<b>AC</b>	<b>240 V</b>					<b>10</b>			
			<b>240 V/415 V</b>					<b>10</b>			
			<b>415 V</b>	—	<b>10</b>		—	<b>10</b>			
<b>Energy limiting class<sup>③</sup></b>											
<b>Number of operating cycles</b>	<b>Without current</b>										
	<b>With current</b>										
<b>Type of overcurrent release</b>				Thermal-magnetic							
<b>Mounting</b>				IEC 35 mm rail							
<b>Applicable wire size</b>				1 to 25 mm <sup>②</sup>							
<b>Mass [kg]</b>				0.13	0.26	0.39	0.52	0.13	0.26	0.39	0.52
<b>Accessories (optional)<sup>④</sup></b>		<b>Auxiliary switch (AX)</b>		●							
<b>Terminal connection</b>				Solderless							
<b>Based on Standard</b>				IEC/EN 60898-1							
<b>CE marking</b>				●							

② Type C: ( $5 I_n <, 10 I_n$ ), Type D: ( $10 I_n <, 20 I_n$ )

③ Except for Type D

④ Available soon

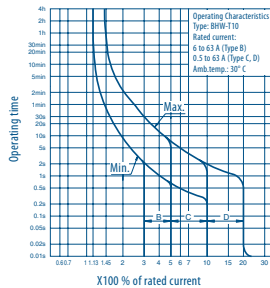
⑤ In case of installing breakers side by side, reduce the passing current to under 80 % of the rated current.

RCCB		BVW-T	
<b>Type</b>			
<b>No. of Poles [P]</b>		2 (1+N) <sup>①</sup>	4 (3+N) <sup>①</sup>
<b>Rated current <math>I_n</math> [A] at ambient temperature 30° C</b>		25, 40, 63	
<b>Rated voltage [VAC]</b>		240	415
<b>Rated current sensitivity <math>I_{\Delta n}</math> [mA]</b>		30, 300	
<b>Max. operating time at <math>I_{\Delta n}</math> [s]</b>		0.04	
<b>Pulsating current sensitivity</b>		Type AC	
<b>Rated making and breaking capacity <math>I_m</math> [A]</b>		500 (In 25, 40 A), 630 (In 63 A)	
<b>Rated conditional short-circuit current <math>I_{sc}</math> [kA]</b>		5	
<b>Rated residual making and breaking capacity <math>I_{rsm}</math> [A]</b>		500 (In 25, 40 A), 630 (In 63 A)	
<b>Rated conditional residual short-circuit current <math>I_{\Delta c}</math> [kA]</b>		6	
<b>Number of operating cycles</b>	<b>Without current</b>		4,000 <sup>②</sup>
	<b>With current</b>		2,000
<b>Type of overcurrent release</b>		—	
<b>Mounting</b>		IEC 35 mm rail	
<b>Applicable wire size</b>		1 to 25 mm <sup>②</sup>	
<b>Mass [VAC]</b>		0.22	0.44
<b>Terminal connection</b>		Solderless	
<b>Based on standard</b>		IEC/EN 61008-1	
<b>CE marking</b>		●	

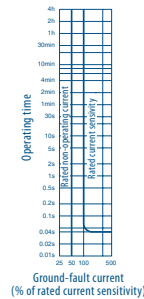
① N pole is a switched neutral pole (without overcurrent release device).

② In case of ampere rating 32, 40 and 63 A, the number of operating cycles is 3,000.

## Operating Characteristic



## Earth-Leakage Tripping Characteristics



### European Offices

<b>Germany</b> Mitsubishi Electric Europe B.V. D-40882 Ratingen Phone: +49 (0)2102 / 486-0	<b>Russia</b> Mitsubishi Electric (Russia) LLC 52, bld. 1 Kosmodromnaya emb. RU-15004 Moscow Phone: +7 495 721 2070	<b>Spain</b> Mitsubishi Electric Europe B.V. Carretera de Rubí 76-80 Jpda. 430 E-08190 Sant Cugat del Valles (Barcelona) Phone: +34 (0) 93 / 5653131	<b>Sweden</b> Mitsubishi Electric Europe B.V. Fjellvägen 8 SE-22736 Lund Phone: +46 (0) 8 625 10 00	<b>Turkey</b> Mitsubishi Electric Turkey Elektrik Ürünleri A.Ş. Serifali Mahallesi Nutuk Sokak No:5 TR-34775 Ümraniye-İSTANBUL Phone: +90 (0)216 / 969 29 00	<b>UK</b> Mitsubishi Electric Europe B.V. Travelers Lane UK-Hatfield, Herts. AL10 8XB Phone: +44 (0)1707 / 28 87 80	<b>UAE</b> Mitsubishi Electric Europe B.V. Dubai Silicon Oasis United Arab Emirates - Dubai Phone: +971 4 3724716
<b>Czech Rep.</b> Mitsubishi Electric Europe B.V. Radická 751/113e Amerl Business Park CZ-152 00 Praha 5 Phone: +420 251 551 470	<b>France</b> Mitsubishi Electric Europe B.V. 25, Boulevard des Bouvets FR-92741 Nanterre Cedex Phone: +33 (0)1 / 55 68 55 68	<b>Italy</b> Mitsubishi Electric Europe B.V. Viale Colleoni 7 Palazzo Sino I-20864 Agrate Brianza (MB) Phone: +39 039 / 60 53 1	<b>Ireland</b> Mitsubishi Electric Europe B.V. Vespene Business Park, Ballymount IRI-Dublin 24 Phone: +353 (0)1 4198800	<b>Netherlands</b> Mitsubishi Electric Europe B.V. Nijverheidsweg 23C NL-3641RP Mijdrecht Phone: +31 (0) 297 250 350	<b>Poland</b> Mitsubishi Electric Europe B.V. ul. Krakowska 50 PL-32-083 Balice Phone: +48 (0) 12 347 65 00	

### Representatives

<b>Belarus</b> OOO TECHNICON Prospect Nezavisimosti 177-9 BY-220125 Minsk Phone: +375 (0)17 / 393 1177	<b>Bosnia and Herzegovina</b> INEA RBT d.o.o. Stepe 11 SI-1000 Ljubljana Phone: +386 (0)1 / 513 8116	<b>Croatia</b> INEA CR Losinjska 4a HR-10000 Zagreb Phone: +385 (0)1 / 36 940 - 01 / -02 / -03	<b>Czech Republic</b> AutoCont C.S. S.R.O. Kafkaova 1853/3 CZ-702 00 Ostrava 2 Phone: +420 595 691 150	<b>Denmark</b> HANS FOLSGAARD A/S Thelegaard, Torv 1 DK-4600 Klage Phone: +45 4320 8600	<b>Greece</b> KALAMARAKIS - SAPOUNIS S.A. Ionias & Neomilou Str. GR-13671 Chamomilos Achamas Athens Phone: +30 (0)2102 / 406000	<b>Greece</b> UTECO A.B.E.E. S. Mavrogenous Str. GR-18542 Piraeus Phone: +30 (0)211 / 1206-900	<b>Belarus</b> MELTRADE KR. Fentó utca 14. HU-1107 Budapest Phone: +36 (0)1 / 431-9726	<b>Bosnia and Herzegovina</b> TOO Kazpromavtomatika Ul. Zhanibek 38 KAZ-100017 Karaganda Phone: +7 7212 / 50 10 00	<b>Croatia</b> ALFATRADE Ltd. 99, Paola Hill Malta-Paola PLA 1702 Phone: +356 (0)21 / 697 816	<b>Czech Republic</b> INTEHSIS SRL bld. Traian 23/1 MD-2060 Kishinev Phone: +373 (0)22 / 66 4242	<b>Denmark</b> SCANELEK AS Leivsløkken 43B NO-5179 Godvik Phone: +47 (0)5 / 50 60 00	<b>Hungary</b> INEA SR d.o.o. Ul. Karadjordjeva 122/217 SER-11300 Smederevo Phone: +386 (0)26 / 461 54 01	<b>Kazakhstan</b> SMAP SK Jino Dierka 1671 SK-911 01 Tienčin Phone: +421 (0)32 743 04 72	<b>Malta</b> INEA RBT d.o.o. Stepe 11 SI-1000 Ljubljana Phone: +386 (0)1 / 513 8116	<b>Moldova</b> INEA SR d.o.o. Ul. Karadjordjeva 122/217 SER-11300 Smederevo Phone: +386 (0)26 / 461 54 01	<b>Norway</b> Fonseca S.A. R. João Francisco do Casal 87/89 PT-3801-997 Aveiro, Esgueira Phone: +351 (0)234 / 303 900	<b>Slovakia</b> TRIELEC AG Mühlentst. 126 CH-8200 Schaffhausen Phone: +41 (0)52 / 625 84 25	<b>Slovenia</b> OOO "CSC-AUTOMATION" 4-B, M. Raskovoy St. UA-02660 Kiev Phone: +380 (0)44 / 494 33 44	<b>Sweden</b> Euro Energy Components AB Järnväggsgatan 36 SE-434 24 Kungälv Phone: +46 (0)300 / 69 00 40	<b>Switzerland</b> TRIELEC AG Mühlentst. 126 CH-8200 Schaffhausen Phone: +41 (0)52 / 625 84 25	<b>Ukraine</b> OOO "CSC-AUTOMATION" 4-B, M. Raskovoy St. UA-02660 Kiev Phone: +380 (0)44 / 494 33 44	<b>Egypt</b> Cairo Electrical Group 9, Rostoum St. Garden City, 8th Floor Apt. 37 EG-165-11516 Maghla El-Shaah, Cairo-Egypt Phone: +20 2 279 23 205	<b>Lebanon</b> CEG LIBAN Cebaco Center/Block A Autostade DORA Lebanon-Beirut Phone: +961 (0)1 / 240 445	<b>South Africa</b> CBI Ltd. Private Bag 2016 ZA-1600 Isando Phone: +27 (0)11 / 977 0770
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## Mitsubishi Electric Europe B.V.

FA - European Business Group  
Mitsubishi-Electric-Platz 1  
D-40882 Ratingen Germany  
Tel.: +49(0)2102-4860 Fax: +49(0)2102-4861120  
info@mitsubishi-automation.com  
https://eu3a.mitsubishielectric.com

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