

# ECB Circuit Breaker and Enclosures

EXPLOSIONPROOF

For UL.60079-1 Standard Class I,II Div.1 and 2 Groups C,D,E,F and G

For IEC.60079-0/1 Standard Zone 1 and Zone 2



**Bosston**

A QUALITY PRODUCT

## ● Technical data

Type of Protection: Ex d IIA T6

Conforming to : Standards IEC 60079-1 or UL 60079-0/1

Marking for test : Ex II2G

Degree of Protection : IP65/66 acc.To IEC 60529

Ambient Temp. (Ta) : -20 °C to + 55 °C

Type : ECB

Protection class for UL. : Class I, Division1 or 2 Group.C,D

Class II, Division 1 or 2 Groups.E,F,G

Class III

Protection class for IEC : Zone1and Zone 2

Electrical Rating : 32 to 800 Ampere frame sizes.

Options : O-Ring gasket.

Drain fitting.

Internal accessories of circuit breaker

- **Alarm switch** (Indicates that the breaker has tripped.)
- **Auxiliary switch** (Indicates whether the breaker is ON or OFF)
- **Shunt trip** (Trip the breaker electrically by Mushroom-head push button.)
- **Undervoltage trip** (Trip the breaker automatically when the voltage drops.)

## ● Features:

- Compact rectangular shape enclosure with bolted cover.
- Four mounting lugs and ground-point are provided.
- Breaker handle can be locked in "OFF" position.
- Optional O-Ring gasket is equipped at flange of the cover to protect against the ingress of moisture or liquid for outdoor use.
- **Circuit breaker is mounted on steel plate.**
- Mitsubishi or ABB circuit breaker are supplied as standard. for the other brands - consult factory.

## ● Standard Materials:

- Body,cover and operating handle : Copper-free aluminium
- Mounting plate : Sheet steel
- Bolts and bush : Stainless steel
- CB's mechanism : Steel

## ● Standard Finishes:

- Copper-free aluminium : Epoxy-polyester powder
- Stainless steel : Natural
- Sheet steel : Zinc electro-plated



ISO9001:2008

## ● Applications:

The ECB circuit breakers and enclosures are suitable for

- use in hazardous areas due to the presence of flammable gases or vapors, combustible dusts or ignitable fibers.
- installation in petroleum refineries, chemical plants, storage areas where hazardous substances are handled.
- short circuit and overcurrent protection of service entrance,feeder branch circuit, lighting or motor circuit and serve as a disconnecting mean.
- indoor or outdoor in damp, wet or corrosive locations.



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● **Catalogue Number:**

(Mitsubishi Circuit Breaker)

Breaker Frame Size	Ampere Trip	Cat.,No.		Enclosure Only ✦	Interrupting Capacity (IC) ⊕
		2 - Pole	3 - Pole		
32 A. (NF32-SW)	3	ECB27X5-003M	ECB305-003M	JBB 8106	<b>2-Pole:</b> 7x5 : 7.5 kA. At 230V.
	4	ECB27X5-004M	ECB305-004M	JBB 8106	
	6	ECB27X5-006M	ECB305-006M	JBB 8106	
	10	ECB27X5-010M	ECB305-010M	JBB 8106	
	16	ECB27X5-016M	ECB305-016M	JBB 8106	
	20	ECB27X5-020M	ECB305-020M	JBB 8126	
	25	ECB27X5-025M	ECB305-025M	JBB 8126	
	32	ECB27X5-032M	ECB305-032M	JBB 8126	
63 A. (NF63-CW, NF63-HW)	10	ECB2□□ - 010M1	ECB3□□ - 010M1	JBB 8126	<b>2-Pole:</b> x5 : 7.5 kA. At 230V.
	16	ECB2□□ - 016M1	ECB3□□ - 016M1	JBB 8126	
	20	ECB2□□ - 020M1	ECB3□□ - 020M1	JBB 8126	
	25	ECB2□□ - 025M1	ECB3□□ - 025M1	JBB 8126	
	32	ECB2□□ - 032M1	ECB3□□ - 032M1	JBB 8126	
	40	ECB2□□ - 040M	ECB3□□ - 040M	JBB 8126	
	50	ECB2□□ - 050M	ECB3□□ - 050M	JBB 9146H	
	63	ECB2□□ - 063M	ECB3□□ - 063M	JBB 9146H	
125 A. (NF125-SW, NF125-HW)	16	ECB2□□ - 016M2	ECB3□□ - 016M2	JBB 8126	<b>2-Pole:</b> 50 : 50kA. At 230V.
	20	ECB2□□ - 020M2	ECB3□□ - 020M2	JBB 8126	
	32	ECB2□□ - 032M2	ECB3□□ - 032M2	JBB 8126	
	40	ECB2□□ - 040M1	ECB3□□ - 040M1	JBB 8126	
	50	ECB2□□ - 050M1	ECB3□□ - 050M1	JBB 9146H	
	63	ECB2□□ - 063M1	ECB3□□ - 063M1	JBB 9146H	
	80	ECB2□□ - 080M	ECB3□□ - 080M	JBB 9187	
	100	ECB2□□ - 100M	ECB3□□ - 100M	JBB 9187	
125	ECB2□□ - 125M	ECB3□□ - 125M	JBB 9187		
250 A. (NF250-CW, NF250-SW, NF250-HW)	125	ECB2□□ - 125M1	ECB3□□ - 125M1	JBB 10209	<b>2-Pole:</b> 35 : 35kA. At 230V.
	150	ECB2□□ - 150M	ECB3□□ - 150M	JBB 10209	
	175	ECB2□□ - 175M	ECB3□□ - 175M	JBB 162610	
	200	ECB2□□ - 200M	ECB3□□ - 200M	JBB 162610	
	225	ECB2□□ - 225M	ECB3□□ - 225M	JBB 162610	
	250	ECB2□□ - 250M	ECB3□□ - 250M	JBB 162610	
400 A. (NF400-CP, NF400-SP, NF400-SEP)	250	ECB2□□ - 250M1	ECB3□□ - 250M1	JBB 162910	<b>2-Pole:</b> 50 : 50kA. At 230V.
	300	ECB2□□ - 300M	ECB3□□ - 300M	JBB 162910	
	350	ECB2□□ - 350M	ECB3□□ - 350M	JBB 162910	
	400	ECB2□□ - 400M	ECB3□□ - 400M	JBB 162910	
	200-400 ADJ.	-	ECB345 - A400M	JBB 162910	
630 A. (NF630-CP, NF630-SP, NF-630-SEP)	500	-	ECB3□□ - 500M	JBB 203210	<b>3-Pole:</b> 36 : 36kA. At 400V.
	600	-	ECB3□□ - 600M	JBB 203210	
	630	-	ECB3□□ - 630M	JBB 203210	
	300-630 ADJ.	-	ECB345 - A630M	JBB 203210	
800 A. (NF800-CEP, NF800-SEP)	600-800 ADJ.	-	ECB336 - A800M	JBB 203611	<b>3-Pole:</b> 36 : 36kA. At 400V.
	400-800 ADJ.	-	ECB345 - A800M	JBB 203611	

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(ABB Circuit Breaker)

Breaker Frame Size	Ampere Trip	Cat.,No.		Enclosure Only 	Interrupting Capacity (IC) 
		2 - Pole	3 - Pole		
125 A. (S1B, S1N)	10	ECB2 <input type="checkbox"/> <input type="checkbox"/> - 010A	ECB3 <input type="checkbox"/> <input type="checkbox"/> - 010A	JBB 8126	2-Pole: 25: 25kA.at 220/230V.
	16	ECB2 <input type="checkbox"/> <input type="checkbox"/> - 016A	ECB3 <input type="checkbox"/> <input type="checkbox"/> - 016A	JBB 8126	
	20	ECB2 <input type="checkbox"/> <input type="checkbox"/> - 020A	ECB3 <input type="checkbox"/> <input type="checkbox"/> - 020A	JBB 8126	40: 40kA.at 220/230V.
	25	ECB2 <input type="checkbox"/> <input type="checkbox"/> - 025A	ECB3 <input type="checkbox"/> <input type="checkbox"/> - 025A	JBB 8126	3-Pole: 16: 16kA.at 380/415V.
	32	ECB2 <input type="checkbox"/> <input type="checkbox"/> - 032A	ECB3 <input type="checkbox"/> <input type="checkbox"/> - 032A	JBB 8126	
	40	ECB2 <input type="checkbox"/> <input type="checkbox"/> - 040A	ECB3 <input type="checkbox"/> <input type="checkbox"/> - 040A	JBB 8126	25: 25kA.at 380/415V.
	50	ECB2 <input type="checkbox"/> <input type="checkbox"/> - 050A	ECB3 <input type="checkbox"/> <input type="checkbox"/> - 050A	JBB 9146H	
	63	ECB2 <input type="checkbox"/> <input type="checkbox"/> - 063A	ECB3 <input type="checkbox"/> <input type="checkbox"/> - 063A	JBB 9146H	
	80	ECB2 <input type="checkbox"/> <input type="checkbox"/> - 080A	ECB3 <input type="checkbox"/> <input type="checkbox"/> - 080A	JBB 9146H	
	100	ECB2 <input type="checkbox"/> <input type="checkbox"/> - 100A	ECB3 <input type="checkbox"/> <input type="checkbox"/> - 100A	JBB 9146H	
	125	ECB2 <input type="checkbox"/> <input type="checkbox"/> - 125A	ECB3 <input type="checkbox"/> <input type="checkbox"/> - 125A	JBB 9146H	
	160 A. (S2N)	16	ECB250 - 016A1	ECB335 - 016A1	JBB 8126
20		ECB250 - 020A1	ECB335 - 020A1	JBB 8126	
25		ECB250 - 025A1	ECB335 - 025A1	JBB 8126	3-Pole: 35: 35kA.at 380/415V.
32		ECB250 - 032A1	ECB335 - 032A1	JBB 8126	
40		ECB250 - 040A1	ECB335 - 040A1	JBB 8126	
50		ECB250 - 050A1	ECB335 - 050A1	JBB 9146H	
63		ECB250 - 063A1	ECB335 - 063A1	JBB 9146H	
80		ECB250 - 080A1	ECB335 - 080A1	JBB 9146H	
100		ECB250 - 100A1	ECB335 - 100A1	JBB 9146H	
125		ECB250 - 125A1	ECB335 - 125A1	JBB 9146H	
160 A. (S3H)	50	ECB21H - 063A2	ECB365 - 050A2	JBB 9146H	2-Pole: 1H : 100kA.at 220/230V.
	80	ECB21H - 080A2	ECB365 - 080A2	JBB 9146H	
	100	ECB21H - 100A2	ECB365 - 100A2	JBB 9146H	3-Pole: 65: 65kA.at 380/415V.
	125	ECB21H - 125A2	ECB365 - 125A2	JBB 10209	
	160	ECB21H - 160A2	ECB365 - 160A2	JBB 10209	
250 A. (4N, S4H, S4L)	160	ECB2 <input type="checkbox"/> <input type="checkbox"/> - 160A2	ECB3 <input type="checkbox"/> <input type="checkbox"/> - 160A2	JBB 162610	2-Pole: 65: 65kA.at 380/415V.
	250	ECB2 <input type="checkbox"/> <input type="checkbox"/> - 160A	ECB3 <input type="checkbox"/> <input type="checkbox"/> - 160A	JBB 162610	
400 A. (S5N, S5H, S5L)	320	ECB2 <input type="checkbox"/> <input type="checkbox"/> - 320A	ECB3 <input type="checkbox"/> <input type="checkbox"/> - 320A	JBB 162910	2H : 200kA.at 220/230V.
	400	ECB2 <input type="checkbox"/> <input type="checkbox"/> - 400A	ECB3 <input type="checkbox"/> <input type="checkbox"/> - 400A	JBB 162910	
630 A. (S5N, S5H, S5L)	630	-	ECB3 <input type="checkbox"/> <input type="checkbox"/> - 630A	JBB 203210	3-Pole: 35: 35kA.at 380/415V.
800 A. (S6N, S6H, S6L)	800	-	ECB3 <input type="checkbox"/> <input type="checkbox"/> - 800A	JBB 203611	65: 65kA.at 380/415V.
					1H : 100kA.at 380/415V.

Enclosure dimensions, refer on page 12

 Specify IC code in  of Cat.,No.**M**



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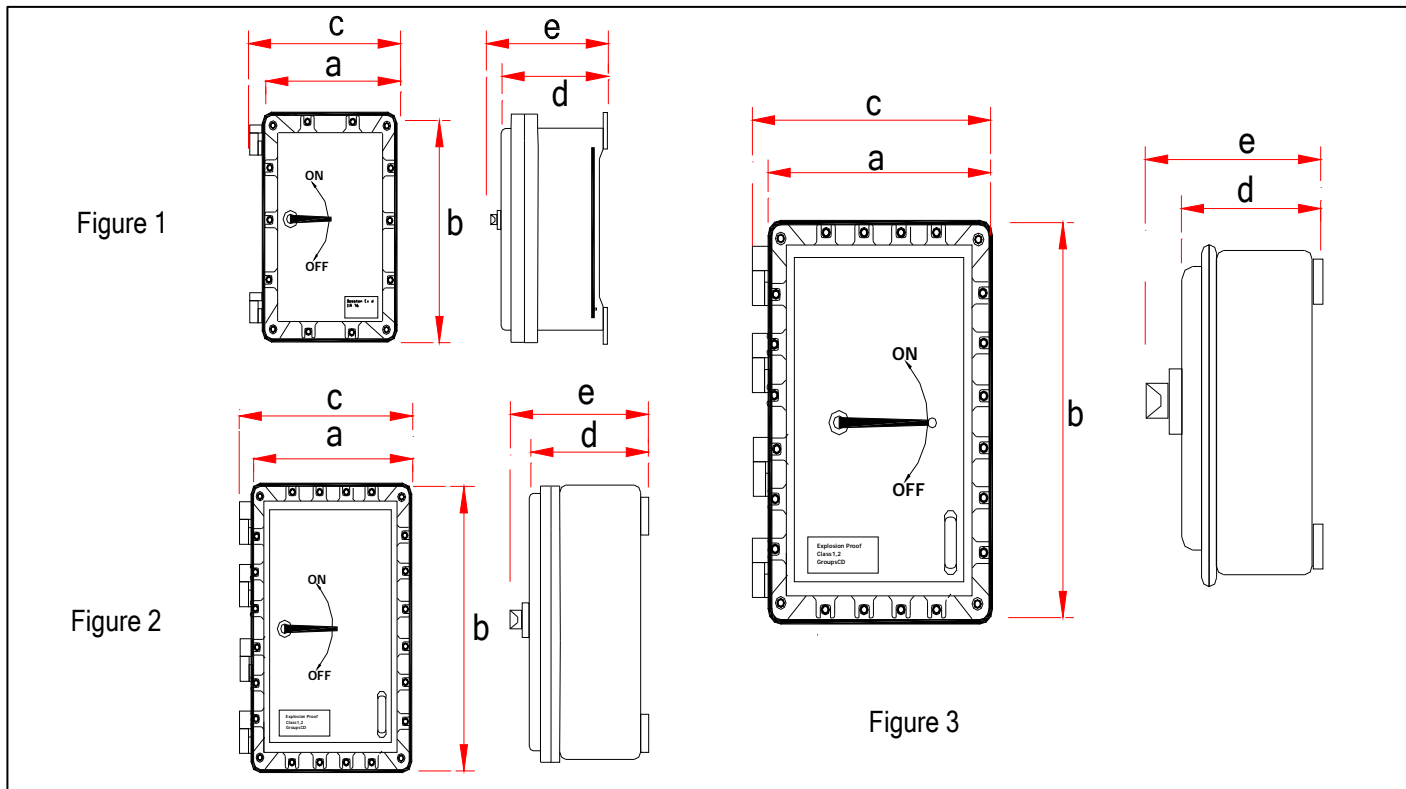
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**Dimensions:**



Enclosure	Dimension in mm.					Figure
	a	b	c	d	e	
JBB 8126	205	313	225	145	175	1
JBB 9146H	228	363	248	148	178	1
JBB10209	254	508	274	222	252	2
JBB 162610	405	660	425	258	288	3
JBB 162910	405	725	425	260	290	3
JBB 203210	508	810	528	260	290	3
JBB 203611	519	924	539	302	332	3