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

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ISO9001:2008

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, Divition1 or 2 Group.C,D
Class II, Divition 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 weather 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.)

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 ignitible 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.

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 equiped 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 of 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 steell
- 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

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Catalogue Number:

(Mitsubishi Circuit Breaker)

Breaker Frame Size	Ampere Trip	Cat.,No. 2 - Pole	Cat.,No. 3 - Pole	Enclosure Only ✦	Interrupting Capacity (IC) ✥
32 A.	3	ECB27x5-003M	ECB305-003M	JBB 8106	2-Pole:
(NF32-SW)	4	ECB27X5-004M	ECB305-004M	JBB 8106	7x5 : 7.5 kA. At 230V.
	6	ECB27X5-006M	ECB305-006M	JBB 8106	3-Pole:
	10	ECB27X5-010M	ECB305-010M	JBB 8106	05 : 5kA. At 400V.
	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.	10	ECB2□□ - 010M1	ECB3□□ - 010M1	JBB 8126	2-Pole:
(NF63-CW,	16	ECB2□□ - 016M1	ECB3□□ - 016M1	JBB 8126	x5 : 7.5 kA. At 230V.
NF63-HW)	20	ECB2□□ - 020M1	ECB3□□ - 020M1	JBB 8126	25 : 25kA. At 230V.
	25	ECB2□□ - 025M1	ECB3□□ - 025M1	JBB 8126	3-Pole:
	32	ECB2□□ - 032M1	ECB3□□ - 032M1	JBB 8126	05 : 5kA. At 400V.
	40	ECB2□□ - 040M	ECB3□□ - 040M	JBB 8126	10 : 10kA. At 400V.
	50	ECB2□□ - 050M	ECB3□□ - 050M	JBB 9146H	
	63	ECB2□□ - 063M	ECB3□□ - 063M	JBB 9146H	
125 A.	16	ECB2□□ - 016M2	ECB3□□ - 016M2	JBB 8126	2-Pole:
(NF125-SW,	20	ECB2□□ - 020M2	ECB3□□ - 020M2	JBB 8126	50 : 50kA. At 230V.
NF125-HW)	32	ECB2□□ - 032M2	ECB3□□ - 032M2	JBB 8126	1X : 100kA. At 230V.
	40	ECB2□□ - 040M1	ECB3□□ - 040M1	JBB 8126	3-Pole:
	50	ECB2□□ - 050M1	ECB3□□ - 050M1	JBB 9146H	30 : 30kA. At 400V.
	63	ECB2□□ - 063M1	ECB3□□ - 063M1	JBB 9146H	50 : 50kA. At 400V.
	80	ECB2□□ - 080M	ECB3□□ - 080M	JBB 9187	
	100	ECB2□□ - 100M	ECB3□□ - 100M	JBB 9187	
	125	ECB2□□ - 125M	ECB3□□ - 125M	JBB 9187	
250 A.	125	ECB2□□ - 125M1	ECB3□□ - 125M1	JBB 10209	2-Pole:
(NF250-CW,	150	ECB2□□ - 150M	ECB3□□ - 150M	JBB 10209	35 : 35kA. At 230V.
NF250-SW,	175	ECB2□□ - 175M	ECB3□□ - 175M	JBB 162610	50 : 50kA. At 230V.
NF250-HW)	200	ECB2□□ - 200M	ECB3□□ - 200M	JBB 162610	1X : 100kA. At 230V.
	225	ECB2□□ - 225M	ECB3□□ - 225M	JBB 162610	3-Pole:
	250	ECB2□□ - 250M	ECB3□□ - 250M	JBB 162610	18 : 18kA. At 400V.
					30 : 30kA. At 400V.
					50 : 50kA. At 400V.
400 A.	250	ECB2□□ - 250M1	ECB3□□ - 250M1	JBB 162910	2-Pole:
(NF400-CP,	300	ECB2□□ - 300M	ECB3□□ - 300M	JBB 162910	50 : 50kA. At 230V.
NF400-SP,	350	ECB2□□ - 350M	ECB3□□ - 350M	JBB 162910	85 : 85kA. At 230V.
NF400-SEP)	400	ECB2□□ - 400M	ECB3□□ - 400M	JBB 162910	3-Pole:
	200-400 ADJ.	-	ECB345 - A400M	JBB 162910	36 : 36kA. At 400V.
					45 : 45kA. At 400V.
630 A.	500	-	ECB3□□ - 500M	JBB 203210	3-Pole:
(NF630-CP,	600	-	ECB3□□ - 600M	JBB 203210	36 : 36kA. At 400V.
NF630-SP,	630	-	ECB3□□ - 630M	JBB 203210	45 : 45kA. At 400V.
NF-630-SEP)	300-630 ADJ.	-	ECB345 - A630M	JBB 203210	
800 A.	600-800 ADJ.	-	ECB336 - A800M	JBB 203611	3-Pole:
(NF800-CEP,	400-800 ADJ.	-	ECB345 - A800M	JBB 203611	36 : 36kA. At 400V.
NF800-SEP)					45 : 45kA. At 400V.

✦ Enclosure dimensions, refer on page 12

✥ Specify IC code in □□ of Cat.,No.

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(ABB Circuit Breaker)

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

✧ Enclosure dimensions, refer on page 12

✥ Specify IC code in □□ of Cat.,No.

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Dimensions:

Figure 1

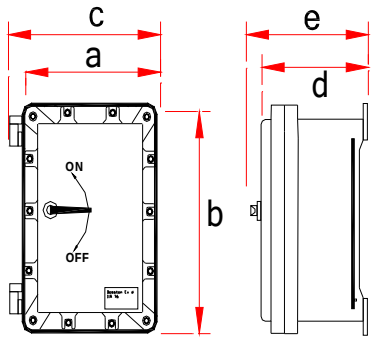
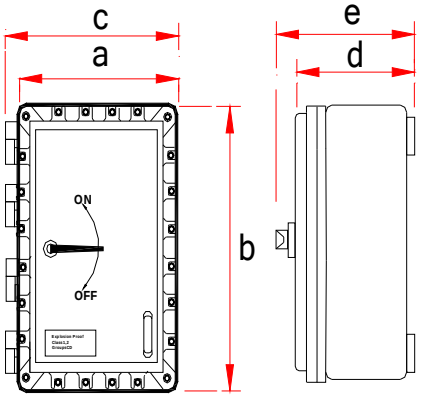


Figure 2



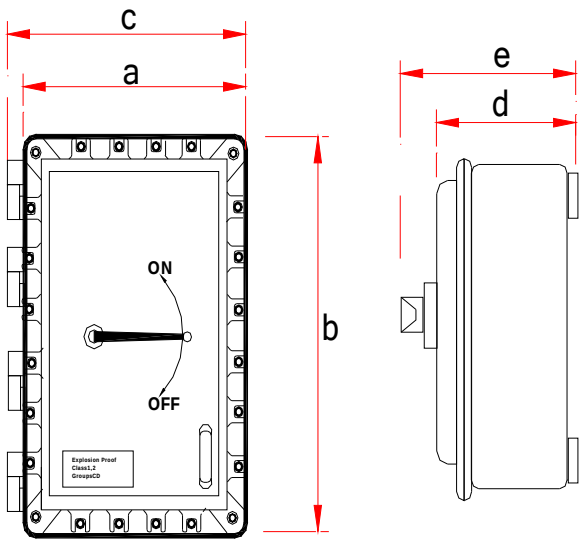


Figure 3

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