

EMS Motor Starter 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



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 : EMS

Protection class for UL. : Class I, Division 1 or 2 Group C,D

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

Class III

Protection class for IEC : Zone 1 and Zone 2

Options : Silicone rubber for outdoor IP66 (Type S)

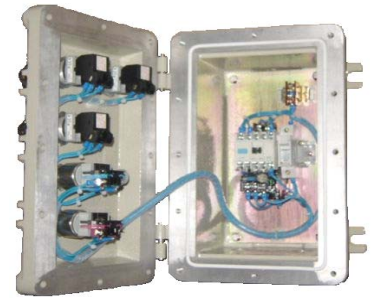
Conduit Bottom 2 x 3/4" NPT.

Electrical Rating Supply 3-Phases 380/220V.AC. 50Hz.

Magnetic contactor ; 0.37 to 132 kw.



ISO9001:2008



Applications:

The EMS motor starters and enclosures are suitable for

- use in hazardous areas due to the presence of flammable gases or vapors, combustible dust or ignitable fibers.
- direct-on-line, single speed, non-reversing starting and stopping of AC squirrel cage induction motors at full voltage.
- providing motor overload protection.
- indoor or outdoor in damp, wet or corrosive locations.

Features:

- Rectangular shape compact designed.
- Magnetic contactor with overload relay is mounted on steel plate.
- START / STOP push buttons and transformer - type pilot lights are mounted in the front of panel.
- Overload relay can be reset with an external button.
- Four mounting lugs and ground-point are provided.
- Optional O-Ring gasket is equipped at flange of the cover to protect against the ingress of moisture or liquid for outdoor use.
- Mitsubishi or Telemecanique magnetic contactor are supplied as standard.
- Remote control for START / STOP motor is optional provided on request.

Standard Materials:

- Body and cover : Copper-free aluminium
- Bolts : Stainless steel
- Mounting plate : Sheet steel
- Lamp guard : Brass
- Gasket★ : Neoprene

Standard Finishes:

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

Options:★

- O - Ring gasket.
- Drain fitting.
- Space heater, 220V.AC. 20W.
- MAN. - AUTO. Selector switch.
- Other push buttons or pilot lights modification.
- Other control voltage or control transformer.
- Seal Silicone rubber on cover push button for IP 66

Remark:

- Silicone rubber for cover on pushbutton Type *R* for IP66





EMS Motor Starter 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

● **Catalogue Number:**

Direct-on-line Motor Starters

3 - Phase 380 V.AC. 50 Hz.

Single speed , Non-reversing

Max. Output		MC. Rating. AC3(Amp)		Overload Relay (Amp.)		Cat.,No.	Enclosure Only	
KW.	HP.	Mitsu.	Tele.	Mitsu.	Tele.		Mitsu.	Tele.
0.37	1/2.	12	9	1 - 1.6	1 - 1.6	EMS 037 ☐	JBB 9146H	JBB 9146H
0.55	3/4.	12	9	1.4 - 2	1.25 - 2	EMS 055 ☐	JBB 9146H	JBB 9146H
0.75	1	12	9	1.7 - 2.5	1.6 - 2.5	EMS 075 ☐	JBB 9146H	JBB 9146H
1.1	1 1/2	12	9	2. - 3	2.5 - 4	EMS 101 ☐	JBB 9146H	JBB 9146H
1.5	2	12	9	2.8 - 4.4	2.5 - 4	EMS 105 ☐	JBB 9146H	JBB 9146H
2.2	3	12	9	4. - 6	4. - 6	EMS 202 ☐	JBB 9146H	JBB 9146H
3	4	12	9	5.2 - 8	5.5 - 8	EMS 300 ☐	JBB 9146H	JBB 9146H
3.7	5	12	12	7. - 11	7. - 10	EMS 307 ☐	JBB 9146H	JBB 9146H
4	5 1/2	12	12	7. - 11	7. - 10	EMS 400 ☐	JBB 9146H	JBB 9146H
5.5	7 1/2	22	18	9 - 13.	9 - 13.	EMS 505 ☐	JBB 9146H	JBB 9146H
7.5	10	22	18	12 - 18.	12 - 18.	EMS 705 ☐	JBB 9146H	JBB 9146H
11	15	30	25	18 - 26.	17 - 25	EMS 1100 ☐	JBB 10209	JBB 10209
15	20	40	32	24 - 34.	23 - 32	EMS 1500 ☐	JBB 10209	JBB 10209
18.5	25	50	40	30 - 40	30 - 40	EMS 1805 ☐	JBB 10209	JBB 10209
22	30	62	50	34 - 50	37 - 50	EMS 2200 ☐	JBB 10209	JBB 10209
30	40	85	65	43 - 65	48 - 65	EMS 3000 ☐	JBB 13219	JBB 13219
37	50	85	80	54 - 80	63 - 80	EMS 3700 ☐	JBB 13219	JBB 13219
45	60	105	95	65 - 93	80 - 93	EMS 4500 ☐	JBB 13219	JBB 13219
55	75	120	115	85 - 125	80 - 125	EMS 5500 ☐	JBB 162910	JBB 203210
75	100	150	150	100-150	100-160	EMS 7500 ☐	JBB 162910	JBB 203210
90	125	180	185	120-180	125-200	EMS 9000 ☐	JBB 162910	JBB 203210
110	150	250	265	140-220	160-250	EMS 11000 ☐	JBB 203210	JBB 203611
132	180	300	265	200-300	200-315	EMS 13200 ☐	JBB 203611	JBB 203611

● **Note:**

☐ Specify code for equipment brand ; M - Mitsubishi, T - Telemecanique



A QUALITY PRODUCT

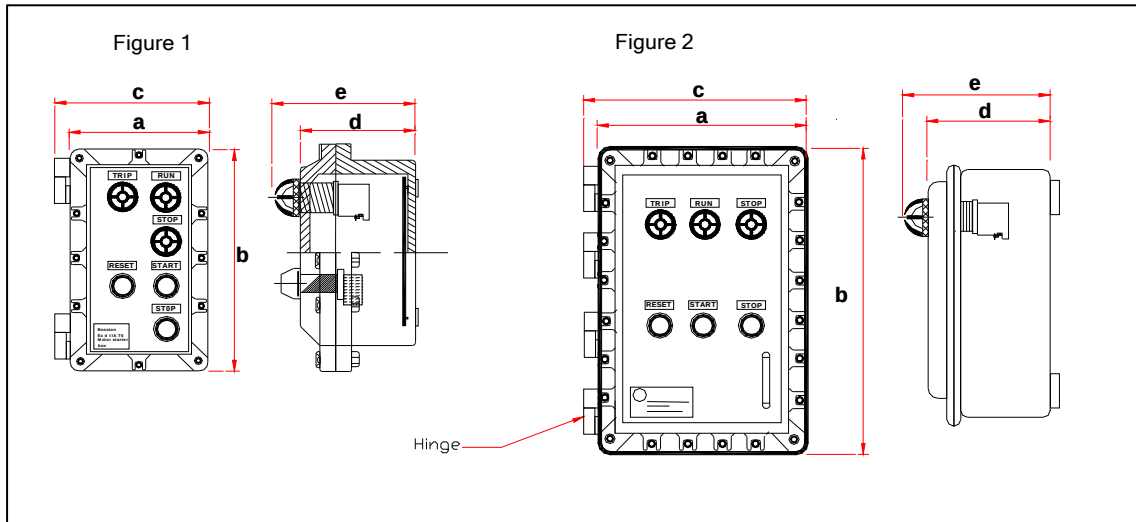
EMS Motor Starter and Enclosures

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

Dimensions: (in mm.)



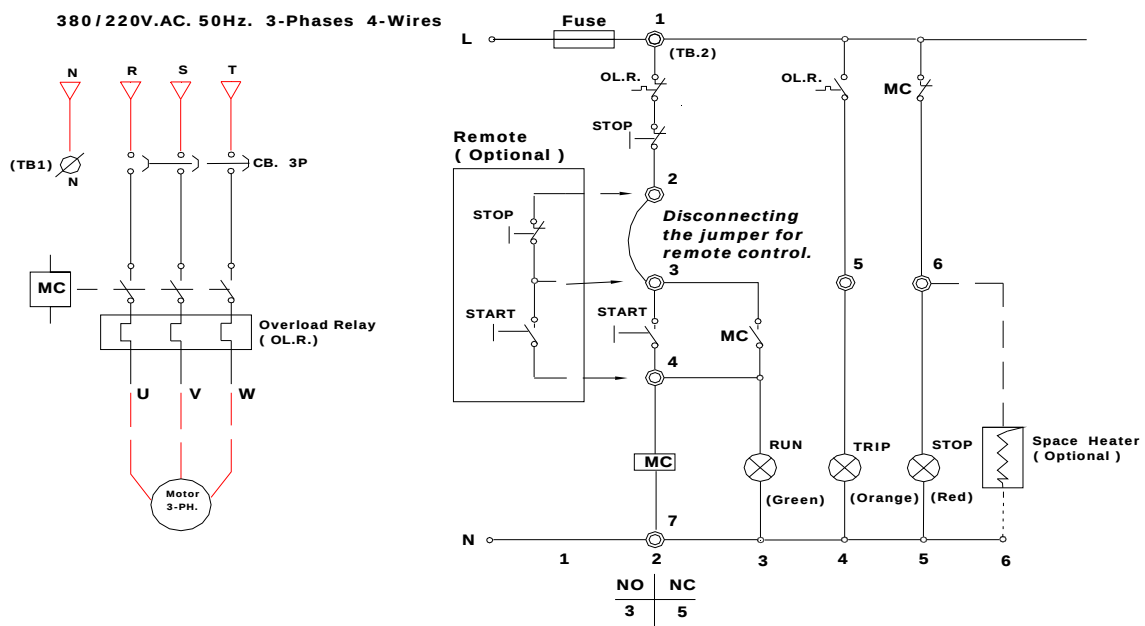
Dimension in mm.

Enclosure	a	b	c	d	e	Figure
Direct-on-line						
JBB 9146H	228	363	248	148	193	1
JBB 10209	254	508	274	222	267	1
JBB 13219	332	535	352	245	290	1
JBB 162910	405	725	425	260	305	2
JBB 203210	508	810	528	260	305	2
JBB 203611	519	924	539	302	347	2

Schematic Diagram

Direct-on-line Starter

380/220V.AC. 50Hz. 3-Phases 4-Wires



ECS Combination Motor Staters and Enclosures



A QUALITY PRODUCT

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



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 : ECS

Protection class for UL. : Class I, Division 1 or 2 Group C,D

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

Class III

Protection class for IEC : Zone 1 and Zone 2

Magnetic Contactor: 0.37 to 132kw. For DOL starting

3 to 110 kw. For Star-Delta starting

Electrical Rating : Supply 3Phase 380/220V.AC. 50Hz.

Circuit Breaker : 32,63,125,160,400 Ampere frame.

Magnetic contactor ; 0.37 to 132 kw.

Options : Silicone rubber for outdoor IP66 (Type S)

O-Ring gasket.

Drain fitting.

Space heater, 220V.AC.20w.

MAN.-AUTO. Selector switch.

Other push buttons or pilot lights modification.

Other control voltage or control transformer.

Features:

- Rectangular shape compact designed.
- Circuit breaker, magnetic contactor with overload relay and control equipment are combined in one enclosure.
- Components are mounted on steel plate.
- START/STOP push buttons and transformer-type pilot lights are mounted in the front of panel.
- Overload relay can be reset with an external button.
- Breaker handle can be locked in "OFF" position.
- Four mounting lugs and ground-point are provided.
- Optional O-Ring gasket is equipped at flange of the cover to protect against the ingress of moisture or liquid for outdoor use.
- Mitsubishi or ABB circuit breakers and Mitsubishi or Telemecanique magnetic contactor are supplied as standard.
- Remote control for START / STOP motor is optional provided on request.

Remark:

- Silicone rubber for cover on pushbutton Type *R* for IP66



Applications:

The ECS Combination

- use in hazardous areas due to the presence of flammable gases or vapors, combustible dusts or ignitable fibers.
- single speed, non-reversing starting and stopping of AC squirrel cage induction motors.
- direct-on-line or star-delta starting method.
- providing disconnecting means for motor branch circuit short-circuit protection.
- providing motor overload protection.
- indoor or outdoor in damp, wet or corrosive locations.



Standard Materials:

- Body, cover and operating handle : Copper-free aluminium
- Mounting plate : Sheet steel
- Lamp guard : Brass
- Gasket ★ : Neoprene

Standard Finishes:

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



ECS Combination Motor Staters 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

Catalogue Number:

Direct-on-line Motor Starters

3 - Phase 380/220 V.AC. 50 Hz. Single speed , Non-reversing

(Mitsubishi Circuit Breaker and Magnetic Contactor)

Max.	Output	Circuit Breaker	MC.Rating,AC3	Overload Relay	Cat.,No.	Enclosure Only
KW.	HP.	Amp. Trip (A1.)	Amp.	Amp.		
0.37	1/2.	6	12	1 - 1.6	ECSC x37M	JBB 10209
0.55	3/4.	6	12	1.4 - 2	ECSD x55M	JBB 10209
0.75	1	6	12	1.7 - 2.5	ECSD x75M	JBB 10209
1.1	1 1/2	10	12	2. - 3	ECSD 1x1M	JBB 10209
1.5	2	10	12	2.8 - 4.4	ECSD 1x5M	JBB 10209
2.2	3	10	12	4. - 6	ECSC 2x2M	JBB 10209
3	4	16	12	5.2 - 8	ECSD 3M	JBB 10209
3.7	5	20	12	7. - 11	ECSD 3x7M	JBB 10209
4	5 1/2	20	12	7. - 11	ECSD 4M	JBB 10209
5.5	7 1/2	32	22	9 - 13.	ECSD 5x5M	JBB 13219
7.5	10	32	22	12 - 18.	ECSD 7x5M	JBB 13219
11	15	50	30	18 - 26.	ECSD 11M	JBB 16209
15	20	63	40	24 - 34.	ECSD 15M	JBB 16209
18.5	25	80	50	30 - 40	ECSD 18x5M	JBB 16209
22	30	100	62	34 - 50	ECSD 22M	JBB 16209
30	40	125	85	43 - 65	ECSD 30M	JBB 20209
37	50	150	85	54 - 80	ECSD 37M	JBB 20209
45	60	175	105	65 - 93	ECSD 45M	JBB 20209
55	75	200	120	85 - 125	ECSD 55M	JBB 20249
75	100	250	150	100-150	ECSD 75M	JBB 20249
90	125	300	180	120-180	ECSD 90M	JBB 203210
110	150	350	250	140-220	ECSD 110M	JBB 203611
132	180	400	300	200-300	ECSD 132M	JBB 284411

(ABB Circuit Breaker, Telemecanique Magnetic contactor)

Max.	Output	Circuit Breaker	MC.Rating,AC3	Overload Relay	Cat.,No.	Enclosure Only
KW.	HP.	Amp. Trip (AT.)	Amp.	Amp.		
1.1	1.1/2	10	12	2.5 - 4	ECSD 1x1A	JBB 10209
1.5	2	10	12	2.5 - 4	ECSD 1x5A	JBB 10209
2.2	3	10	12	4. - 6	ECSD 2x2A	JBB 10209
3	4	16	12	5.5 - 8	ECSD 3A	JBB 10209
3.7	5	20	12	7. - 10	ECSD 3X 7A	JBB 10209
4	5.1/2	20	12	7. - 10	ECSD 4A	JBB 10209
5.5	7.1/2	25	22	9. - 13	ECSD 5X 5A	JBB 13219
7.5	10	32	22	12. - 18	ECSD 7X 5A	JBB 13219
11	15	50	30	17. - 25	ECSD 11A	JBB 13219
15	20	63	40	23. - 32	ECSD 15A	JBB 13219
18.5	25	80	50	30. - 40	ECSD 18X 5A	JBB 13219
22	30	100	62	37. - 50	ECSD 22A	JBB 13219
30	40	125	85	48. - 65	ECSD 30A	JBB 20209
37	50	160	85	63. - 80	ECSD 37A	JBB 20209
45	60	160	105	80. - 93	ECSD 45A	JBB 20209
55	75	200	120	80. - 125	ECSD 55A	JBB 202410
75	100	250	150	100. - 160	ECSD 75A	JBB 202410
90	125	320	180	125 - 200	ECSD 90A	JBB 203210
110	150	320	250	160 - 250	ECSD 110A	JBB 203611
132	180	400	300	200 - 315	ECSD 110A	JBB 284411



Enclosure dimensions, refer on page 7





ECS Combination Motor Starters 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



Catalogue Number:

Star-Delta Starter

3 - Phase 380/220 V.AC. 50 Hz. Single speed , Non-reversing

(Mitsubishi Circuit Breaker and Magnetic Contactor)

Max.	Output	Circuit Breaker	MC.Rating,AC3		Overload Relay	Cat.,No.	Enclosure Only
KW.	HP.	Amp. Trip (AT.)	Main & Delta	Star	Amp.		
3	4	16	12	12	2.8-4.4	ECSS 3M	JBB 16209
3.7	5	20	12	12	4.-6	ECSS 3X7M	JBB 16209
4	5.1/2	20	12	12	4.-6	ECSS 4M	JBB 16209
5.5	7.1/2	32	12	12	5.2-8	ECSS 5X5M	JBB 16209
7.5	10	32	12	12	7.-11	ECSS 7X5M	JBB 16209
11	15	50	22	12	12.-18	ECSS 11M	JBB 16209
15	20	63	22	12	16-22	ECSS 15M	JBB 16209
18.5	25	80	30	22	18-26	ECSS 18X5M	JBB 20209
22	30	100	40	22	24-34	ECSS 22M	JBB 20209
30	40	125	50	22	30-40	ECSS 30M	JBB 162910
37	50	150	50	30	34-50	ECSS 37M	JBB 162910
45	60	175	62	30	43-65	ECSS 45M	JBB 203210
55	75	200	85	40	43-65	ECSS 55M	JBB 203611
75	100	250	105	50	65-93	ECSS 75M	JBB 203611
90	125	300	120	62	85-125	ECSS 90M	Consult Factory
110	150	350	150	62	100-150	ECSS 110M	Consult Factory

(ABB Circuit Breaker, Telemecanique Magnetic contactor)

Max.	Output	Circuit Breaker	MC.Rating,AC3		Overload Relay	Cat.,No.	Enclosure Only
KW.	HP.	Amp. Trip (AT.)	Main & Delta	Star	Amp.		
3	4	16	9	9	2.5 - 4	ECSS 3A	JBB 16209
3.7	5	20	9	9	4. - 6	ECSS 3x7A	JBB 16209
4	5.1/2	20	9	9	4. - 6	ECSS 4A	JBB 16209
5.5	7.1/2	25	9	9	5.5 - 8	ECSS 5x5A	JBB 16209
7.5	10	32	12	9	7. - 10	ECSS 7x5A	JBB 16209
11	15	50	18	9	12. - 18	ECSS 11A	JBB 16209
15	20	63	25	12	17. - 25	ECSS 15A	JBB 20209
18.5	25	80	25	12	17. - 25	ECSS 18x5A	JBB 20209
22	30	100	32	18	23. - 32	ECSS 22A	JBB 20209
30	40	125	40	25	30. - 40	ECSS 30A	JBB 162910
37	50	160	50	32	37. - 50	ECSS 37A	JBB 162910
45	60	160	65	32	48. - 65	ECSS 45A	JBB 203210
55	75	200	80	40	48. - 65	ECSS 55A	JBB 203611
75	100	250	95	50	80. - 93	ECSS 75A	JBB 203611
90	125	320	115	65	80. - 125	ECSS 90A	Consult Factory
110	150	400	150	65	100- 160	ECSS 110A	Consult Factory



Enclosure dimensions, refer on page 7

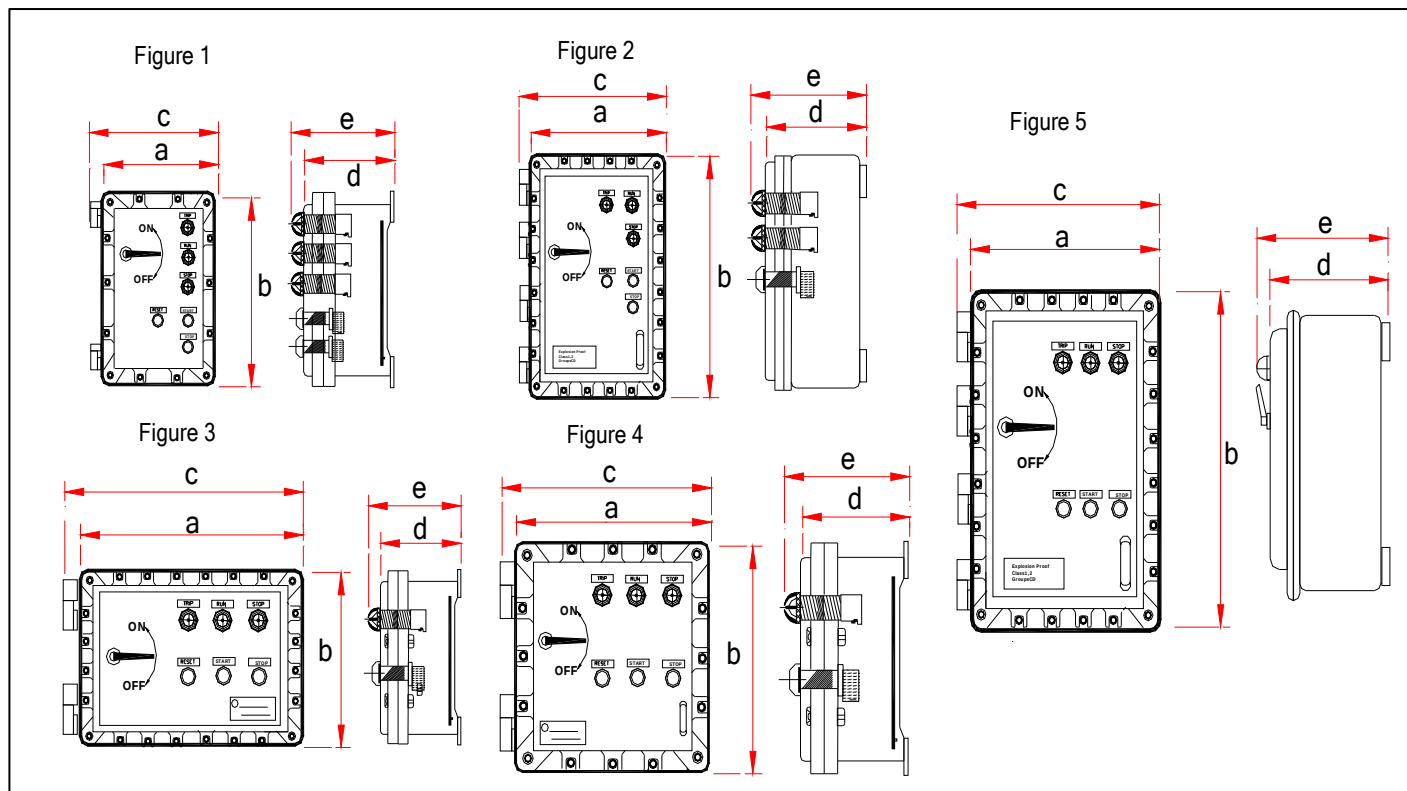
ECS Combination Motor Staters and Enclosures

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

● Dimensions:



Enclosure	Dimension in mm.					Figure	Enclosure	Dimension in mm.					Figure
	a	b	c	d	e			a	b	c	d	e	
Direct-on-line							Star-Delta						
JBB 10209	254	508	274	222	267	1	JBB 16209	507	405	527	230	275	3
JBB 13219	332	535	352	245	290	1	JBB 20209	505	505	525	230	275	4
JBB16209	405	507	425	230	275	2	JBB 162910	725	405	745	260	305	3
JBB 20209	556	556	576	230	275	4	JBB 203210	810	508	830	260	305	3
JBB 20249	500	664	520	220	265	2	JBB 203611	924	519	944	302	347	3
JBB 203210	508	810	528	260	305	5							
JBB 203611	519	924	539	302	347	5							
JBB 284411	700	1100	720	285	330	5							

ECS Combination Motor Staters and Enclosures


Bosston

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EXPLOSIONPROOF

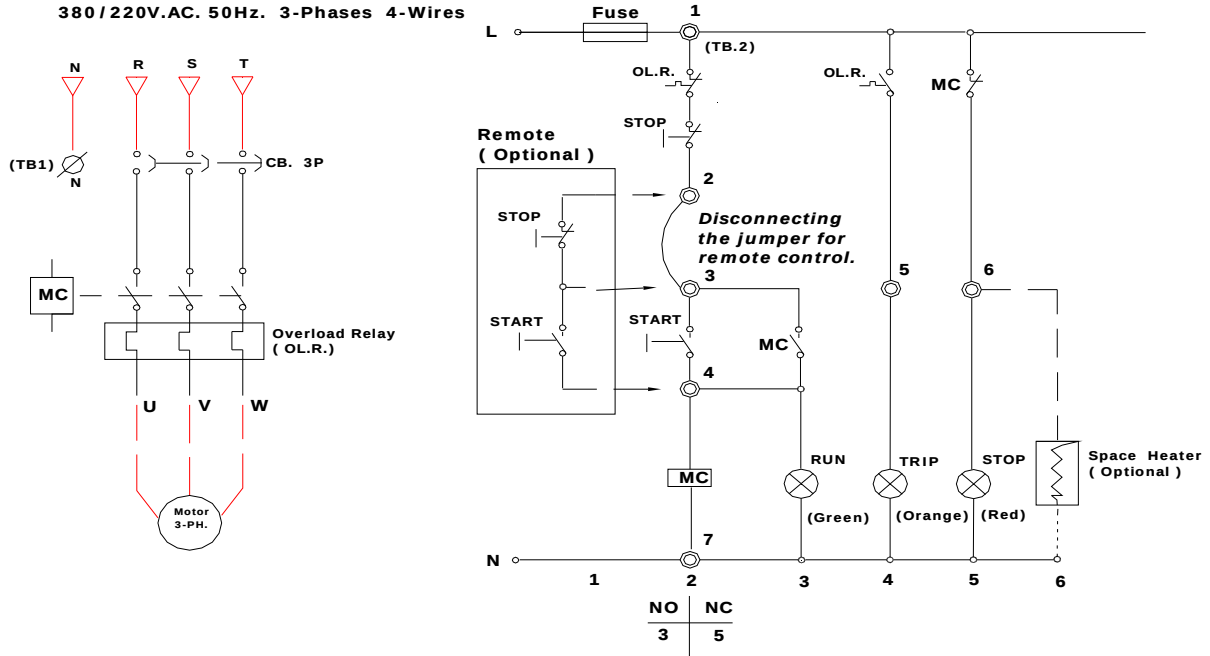
For UL.60079-1 Standard Class I,II Div.1 and 2 Groups C,D,E,F and G

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

Schematic Diagram

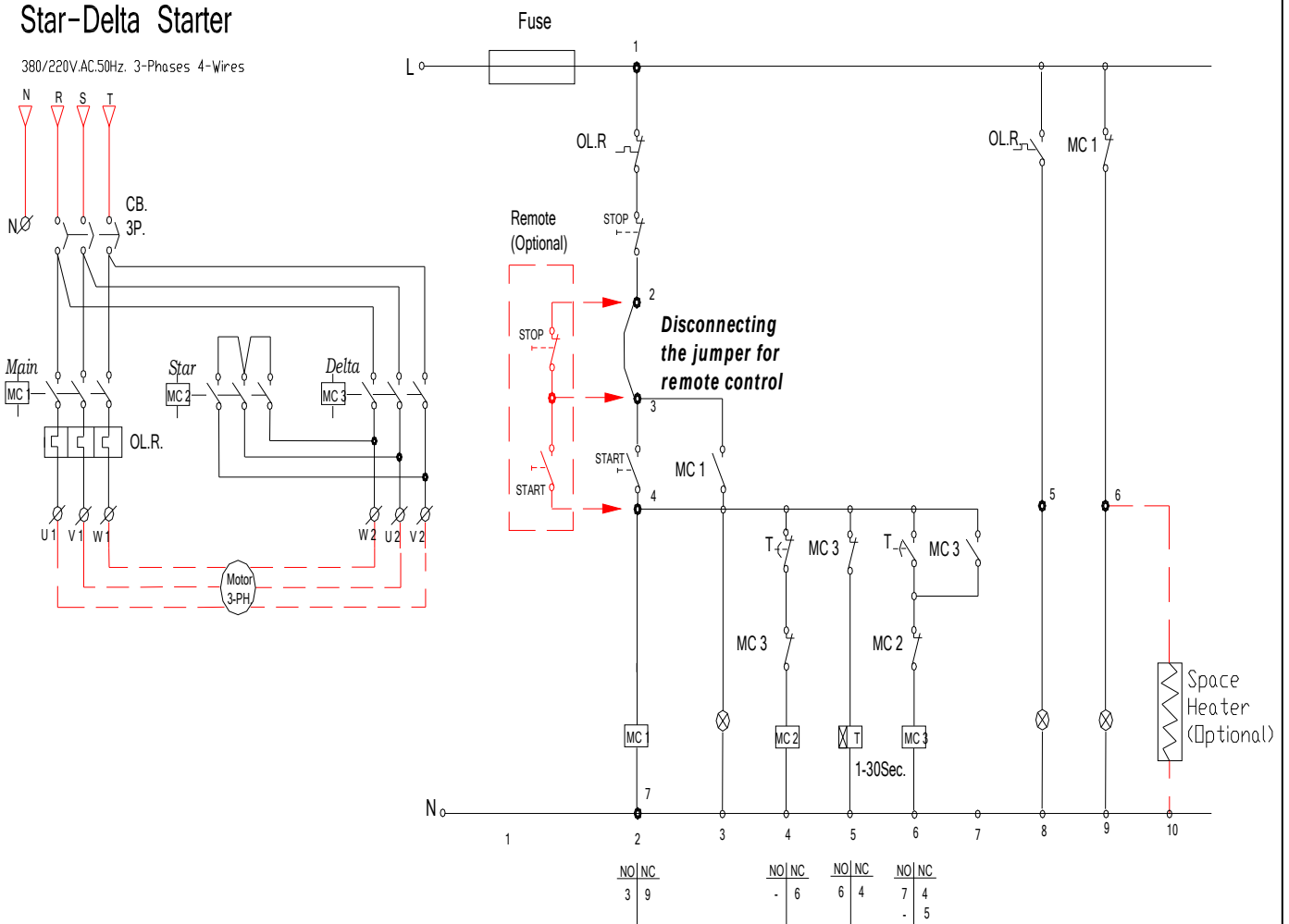
Direct-on-line Starter

380/220V.AC. 50Hz. 3-Phases 4-Wires



Star-Delta Starter

380/220V.AC.50Hz. 3-Phases 4-Wires



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

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.



ISO9001:2008

Standard Finishes:

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

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

 **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	2-Pole:
	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. (NF63-CW, NF63-HW)	10	ECB2□□ - 010M1	ECB3□□ - 010M1	JBB 8126	2-Pole:
	16	ECB2□□ - 016M1	ECB3□□ - 016M1	JBB 8126	x5 : 7.5 kA. At 230V.
	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. (NF125-SW, NF125-HW)	16	ECB2□□ - 016M2	ECB3□□ - 016M2	JBB 8126	2-Pole:
	20	ECB2□□ - 020M2	ECB3□□ - 020M2	JBB 8126	50 : 50kA. At 230V.
	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	
250 A. (NF250-CW, NF250-SW, NF250-HW)	125	ECB2□□ - 125M1	ECB3□□ - 125M1	JBB 10209	2-Pole:
	150	ECB2□□ - 150M	ECB3□□ - 150M	JBB 10209	35 : 35kA. At 230V.
	175	ECB2□□ - 175M	ECB3□□ - 175M	JBB 162610	50 : 50kA. At 230V.
	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. (NF400-CP, NF400-SP, NF400-SEP)	250	ECB2□□ - 250M1	ECB3□□ - 250M1	JBB 162910	2-Pole:
	300	ECB2□□ - 300M	ECB3□□ - 300M	JBB 162910	50 : 50kA. At 230V.
	350	ECB2□□ - 350M	ECB3□□ - 350M	JBB 162910	85 : 85kA. At 230V.
	400	ECB2□□ - 400M	ECB3□□ - 400M	JBB 162910	3-Pole:
	200-400 ADJ.	-	ECB345 - A400M	JBB 162910	36 : 36kA. At 400V.
630 A. (NF630-CP, NF630-SP, NF-630-SEP)	500	-	ECB3□□ - 500M	JBB 203210	3-Pole:
	600	-	ECB3□□ - 600M	JBB 203210	36 : 36kA. At 400V.
	630	-	ECB3□□ - 630M	JBB 203210	45 : 45kA. At 400V.
	300-630 ADJ.	-	ECB345 - A630M	JBB 203210	
800 A. (NF800-CEP, NF800-SEP)	600-800 ADJ.	-	ECB336 - A800M	JBB 203611	3-Pole:
	400-800 ADJ.	-	ECB345 - A800M	JBB 203611	36 : 36kA. At 400V.
					45 : 45kA. At 400V.



Enclosure dimensions, refer on page 12



Specify IC code in □□ of Cat.,No.

ECB Circuit Breaker and Enclosures



A QUALITY PRODUCT

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***(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 ☐ ☐ - 010A	ECB3 ☐ ☐ - 010A	JBB 8126	2-Pole:
	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. (S2N)	16	ECB250 - 016A1	ECB335 - 016A1	JBB 8126	2-Pole:
	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. (S3H)	50	ECB21H - 063A2	ECB365 - 050A2	JBB 9146H	2-Pole:
	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. (4N, S4H, S4L)	160	ECB2 ☐ ☐ - 160A2	ECB3 ☐ ☐ - 160A2	JBB 162610	2-Pole:
	250	ECB2 ☐ ☐ - 160A	ECB3 ☐ ☐ - 160A	JBB 162610	65: 65kA.at 380/415V.
400 A. (S5N, S5H, S5L)	320	ECB2 ☐ ☐ - 320A	ECB3 ☐ ☐ - 320A	JBB 162910	1H : 100kA.at 220/230V.
	400	ECB2 ☐ ☐ - 400A	ECB3 ☐ ☐ - 400A	JBB 162910	2H : 200kA.at 220/230V.
630 A. (S5N, S5H, S5L)	630	-	ECB3 ☐ ☐ - 630A	JBB 203210	3-Pole:
					35: 35kA.at 380/415V.
800 A. (S6N, S6H, S6L)	800	-	ECB3 ☐ ☐ - 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.


Bosston

A QUALITY PRODUCT

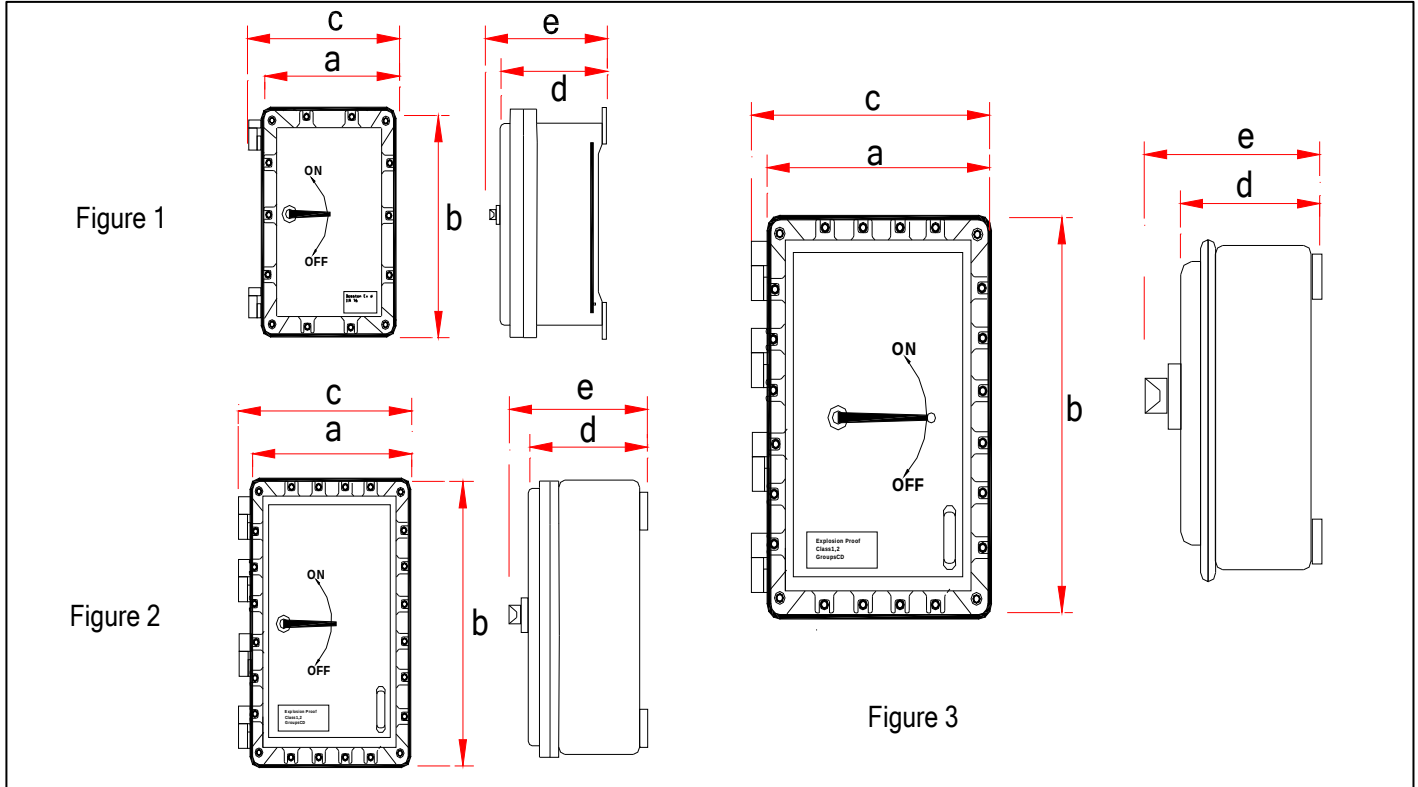
ECB Circuit Breaker and Enclosures

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

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