

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





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● **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

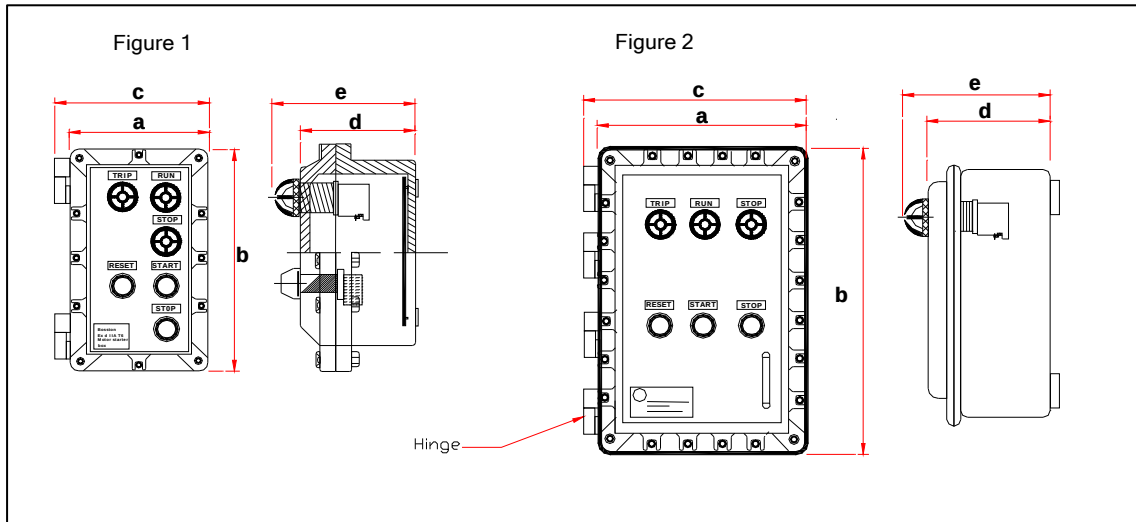
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Dimensions: (in mm.)



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

