

**COMBINATION MOTOR STATERS , EMS SERIES
EXPLOSION PROOF**



A QUALITY PRODUCT



APPLICATION

The EMS Combination motor starters and enclosures are suitable for 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.

TECHNICAL DATA

Type of Protection	: Ex d IIB 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
Protection class for UL.	: Class I, Division1 or 2 Group.C,D : Class II, Division 1 or 2 Groups.E,F,G
Protection class for IEC	: Zone1and Zone 2

SPECIFICATION

Material enclosure	: Marine grade copper-free aluminium alloy with polyester powder coated, RAL.7032(Grey)
Mounting plate	: Sheet steell
Sealing gasket	: Silicaone - 40° C to +175° C
Lid screws	: Stainless steel

OPTION

- 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.

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BELGIUM

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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 (A.I.)	Amp.	Amp.		
0.37	1/2.	6	12	1 - 1.6	EMSDL x37M	EJB 10209
0.55	3/4.	6	12	1.4 - 2	EMSDL x55M	EJB 10209
0.75	1	6	12	1.7 - 2.5	EMSDL x75M	EJB 10209
1.1	1 1/2	10	12	2. - 3	EMSDL 1 x 1M	EJB 10209
1.5	2	10	12	2.8 - 4.4	EMSDL 1 x 5M	EJB 10209
2.2	3	10	12	4. - 6	EMSDL 2 x 2M	EJB 10209
3	4	16	12	5.2 - 8	EMSDL 3M	EJB 10209
3.7	5	20	12	7. - 11	EMSDL 3 x 7M	EJB 10209
4	5 1/2	20	12	7. - 11	EMSDL 4M	EJB 10209
5.5	7 1/2	32	22	9 - 13.	EMSDL 5 x 5M	EJB 13219
7.5	10	32	22	12 - 18.	EMSDL 7 x 5M	EJB 13219
11	15	50	30	18 - 26.	EMSDL 11M	EJB 16209
15	20	63	40	24 - 34.	EMSDL 15M	EJB 16209
18.5	25	80	50	30 - 40	EMSDL 18x5M	EJB 16209
22	30	100	62	34 - 50	EMSDL 22M	EJB 16209
30	40	125	85	43 - 65	EMSDL 30M	EJB 20209
37	50	150	85	54 - 80	EMSDL 37M	EJB 20209
45	60	175	105	65 - 93	EMSDL 45M	EJB 20209
55	75	200	120	85 - 125	EMSDL 55M	EJB 20249
75	100	250	150	100-150	EMSDL 75M	EJB 20249
90	125	300	180	120-180	EMSDL 90M	EJB 203210
110	150	350	250	140-220	EMSDL 110M	EJB 203611
132	180	400	300	200-300	EMSDL 132M	EJB 284411

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CATALOGUE NUMBER AND DIMENSION IN MM.

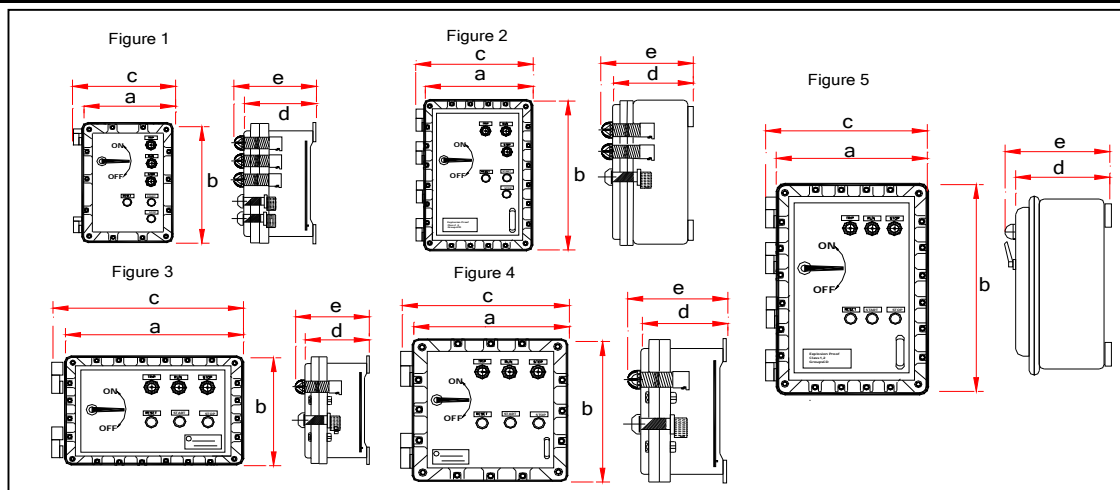
Star-Delta Starter

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

(Mitsubishi Circuit Breaker and Magnetic Contactor)

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

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						
EJB 10209	254	508	274	222	267	1	EJB 16209	507	405	527	230	275	3
EJB 13219	332	535	352	245	290	1	EJB 20209	505	505	525	230	275	4
EJB16209	405	507	425	230	275	2	EJB 162910	725	405	745	260	305	3
EJB 20209	556	556	576	230	275	4	EJB 203210	810	508	830	260	305	3
EJB 20249	500	664	520	220	265	2	EJB 203611	924	519	944	302	347	3
EJB 203210	508	810	528	260	305	5							
EJB 203611	519	924	539	302	347	5							
EJB 284411	700	1100	720	285	330	5							



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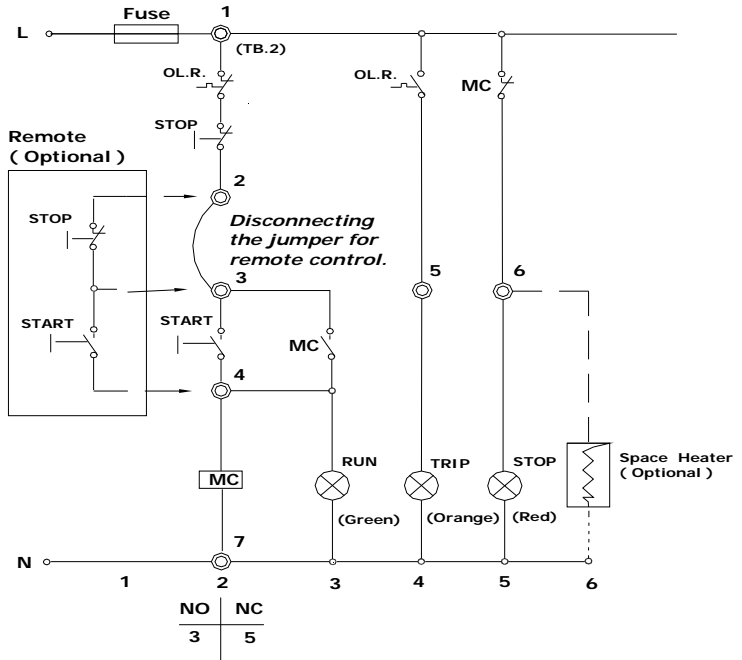
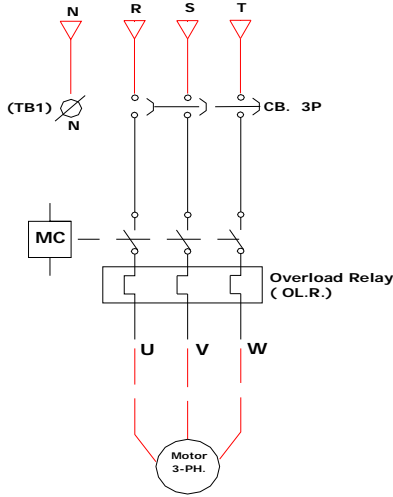


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Schematic Diagram

Direct-on-line Starter

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



Star-Delta Starter

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

