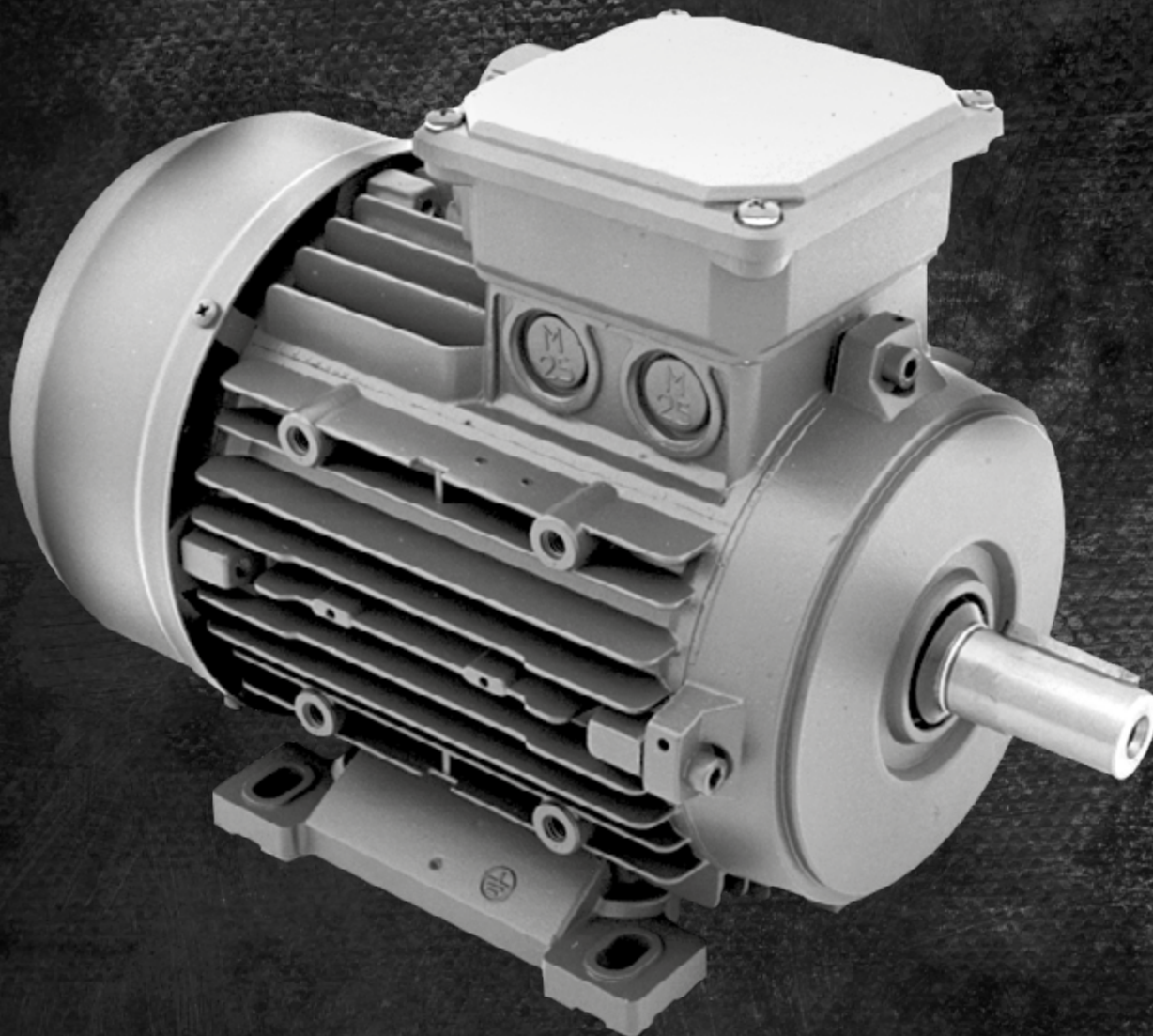




High Efficiency

PERMANENT MAGNET MOTORS

IE4 Efficiency Level - IEC Frame



A dynamic, strong and ambitious Group

Orange1 Holding is an internationally renowned group and is one of the most important European manufacturers of single-phase and three-phase asynchronous electric motors. It has an annual capacity of more than 1 million motors and 5 million stators. The group founded in 1971 by Leone Donazzan is now managed by his son Armando Donazzan and is strongly focused on technological innovation, performance and customization to meet the needs of individual customers.





Elettromeccanica Leone Donazzan was founded in 1971 in Bassano del Grappa. In 1983 the company was transformed into Eld Spa. In 1998 Armando Donazzan took over the management of the company and thanks to his determination and intuition he applied new financial and commercial policies that increased the reliability and visibility levels. In March 2006 the company changed its name to EME Spa and finally became Orange1 Electric Motors in 2018.

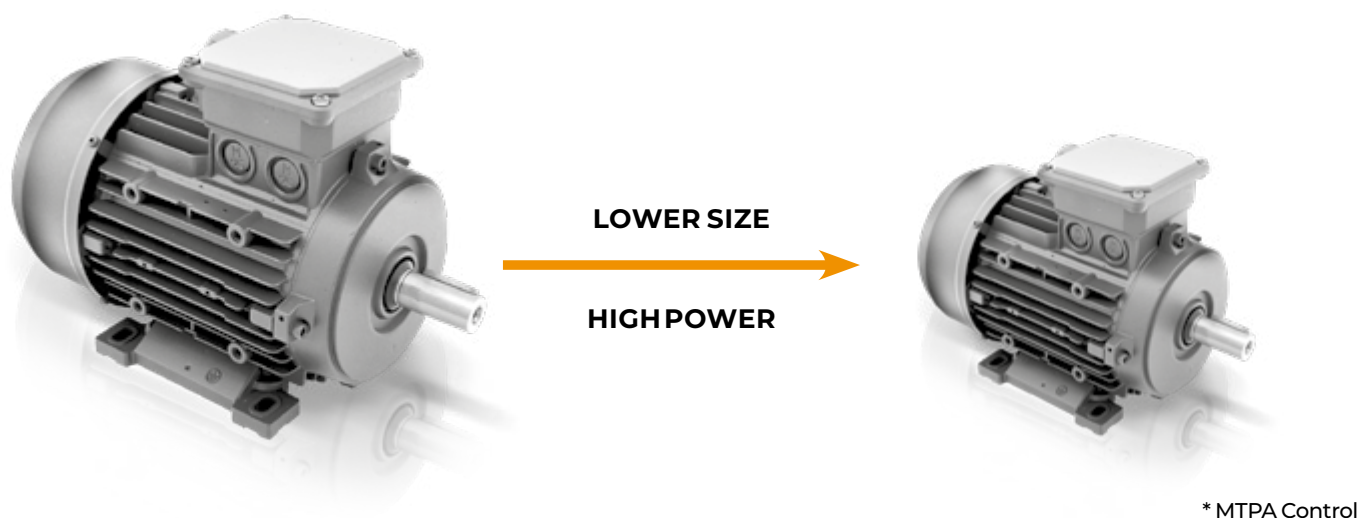
The goal of O1EM is to produce motors which are tailored to meet the customers and market expectations. The production covers a wide range of AC and DC motors, as well as brushless motors and variable frequency units. This is to provide a total solution.

PRODUCTION PLANTS

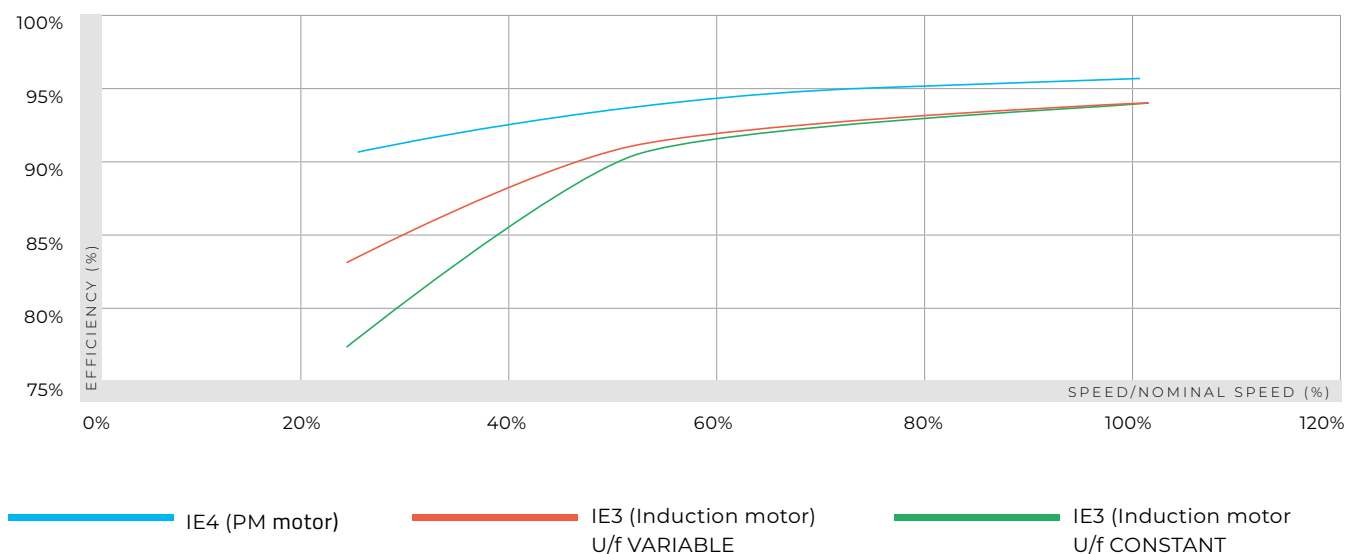
LOCATION	MOTORS PRODUCTION
ARSIÈ - ITALY 32030 (BL) Via A. Messedaglia 4	SINGLE AND THREE PHASE MOTORS HOLLOW SHAFT MOTORS IE2 AND IE3 MOTORS INVERTER AND MOTORINVERTER
S. MAURO PASCOLI - ITALY 47030 (FC) Via A. Grandi 23	GRADUAL BRAKE MOTORS HIGH TORQUE BRAKE MOTORS LOW CENTER MOTORS MOTORS FOR BURNERS
PARMA - ITALY 43122 (PR) Via Mantova 93	ATEX MOTORS HYDRAULIC MOTORS ENCAPSULATED WATERPROOF MOTORS OIL SUBMERGED MOTORS

WHY CHOOSE PM MOTORS?

- **Higher Energy Saving**
- **Guaranteed High Efficiency**
in their speed range
- **Compact Size & Weight**
compared to induction motors
- **high performance for centrifugal machines**



Efficiency comparison IE3 (induction motors) vs IE4 - Pump/Fan duty



3000 rpm; IP 55; insulation class F/B

Type	Rated Output		Inverter Voltage Supply	Rated Speed	Rated Torque	Peak Torque	Torque constant	Voltage constant	BEMP at 1000 min ⁻¹	Efficiency	Rated current	Moment inertia	Weight
	Pn			n	Mn	Mpk	Kt	Ke	Eph-ph	η	In	J	Kg
	kW	HP		V	rpm	Nm	Nm	Nm/Arms	Vs	V/1000 min ⁻¹	100%	Arms	
PM 63M 30B	0,37	0,5	400	3000	1,2	1,7	1,22	0,76	79	81,5	0,98	0,22	4,1
PM 63M 30C	0,65	0,9	400	3000	2,1	2,9	1,49	0,77	81	83,0	1,41	0,32	5,3
PM 71M 30A	1,1	1,5	400	3000	3,5	4,9	1,43	0,90	94	85,2	2,45	0,65	5,0
PM 71M 30B	2,2	3,0	400	3000	7,0	9,8	1,31	0,83	86	88,0	5,35	0,94	6,6
PM 71M 30C	3,0	4,0	400	3000	9,5	13,3	1,30	0,83	86	89,1	7,30	1,24	8,2
PM 80M 30B	3,0	4,0	400	3000	9,5	13,3	1,35	0,87	91	89,1	7,05	2,33	10,8
PM 80M 30C	4,0	5,4	400	3000	12,7	17,8	1,31	0,84	88	90,0	9,68	2,71	12,0
PM 90S 30C	4,0	5,4	400	3000	12,7	17,8	1,22	0,78	82	90,0	10,4	2,35	12,5
PM 90L 30D	5,5	7,4	400	3000	17,5	24,5	1,19	0,76	79	90,9	14,8	2,99	14,9
PM 90L 30E	7,1	9,5	400	3000	22,6	31,6	1,21	0,77	81	91,6	18,7	3,76	17,7
PM 100L 30B	7,5	10,1	400	3000	23,9	33,5	1,22	0,76	79	91,7*	19,7	4,36	19,5
PM 100L 30C	11,0	14,8	400	3000	35,0	49,0	1,26	0,79	82	93,2*	27,9	6,24	25,5
PM 112M 30C	11,0	14,8	400	3000	35,0	49,0	1,56	0,97	101	93,2*	22,4	8,87	28,4
PM 112M 30D	15,0	20,1	400	3000	47,7	66,8	1,53	0,95	100	93,3*	31,1	11,58	35

2000 rpm; IP 55; insulation class F/B

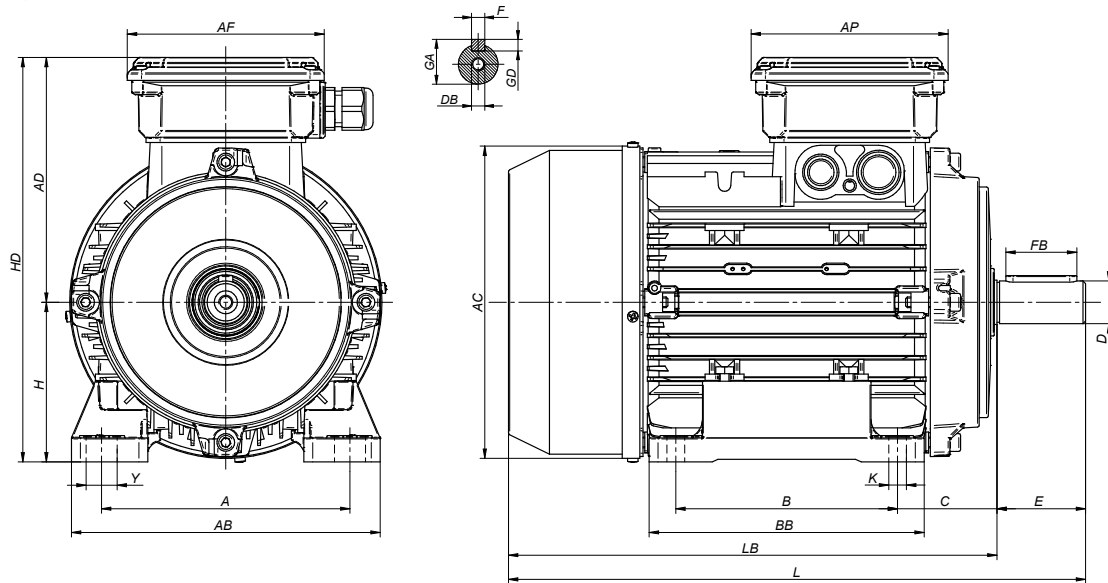
Type	Rated Output		Inverter Voltage Supply	Rated Speed	Rated Torque	Peak Torque	Torque constant	Voltage constant	BEMP at 1000 min ⁻¹	Efficiency	Rated current	Moment inertia	Weight
	Pn			n	Mn	Mpk	Kt	Ke	Eph-ph	η	In	J	Kg
	kW	HP		V	rpm	Nm	Nm	Nm/Arms	Vs	V/1000 min ⁻¹	100%	Arms	
PM 63M 20B	0,25	0,3	400	2000	1,2	1,7	1,67	1,05	110	78,1	0,72	0,22	4,1
PM 63M 20C	0,40	0,5	400	2000	1,9	2,7	1,73	1,07	112	81,5	1,10	0,32	5,3
PM 71M 20A	0,75	1,0	400	2000	3,6	5,0	2,14	1,33	139	83,5	1,68	0,65	5,0
PM 71M 20B	1,1	1,5	400	2000	5,3	7,4	2,22	1,37	143	85,2	2,39	0,94	6,6
PM 71M 20C	1,5	2,0	400	2000	7,2	10,1	2,22	1,38	144	86,5	3,25	1,24	8,2
PM 80M 20B	1,8	2,4	400	2000	8,6	12,0	2,06	1,32	138	87,2	4,17	2,33	10,8
PM 80M 20C	2,6	3,5	400	2000	12,4	17,4	1,96	1,24	130	88,6	6,34	2,71	12,0
PM 90S 20C	2,2	3,0	400	2000	10,5	14,7	2,06	1,29	135	88,0	5,09	2,35	12,5
PM 90L 20D	3,0	4,0	400	2000	14,3	20,0	2,01	1,26	132	89,1	7,12	2,99	14,9
PM 90L 20E	3,9	5,2	400	2000	18,6	26,0	1,99	1,25	131	89,9	9,33	3,76	17,7
PM 100L 20B	4,5	6,0	400	2000	21,5	30,1	1,69	1,14	119	90,9*	12,7	4,36	19,5
PM 100L 20C	6,7	9,0	400	2000	32,0	44,8	1,90	1,18	124	91,8*	16,9	6,24	25,5
PM 112M 20C	6,7	9,0	400	2000	32,0	44,8	2,29	1,43	149	91,8*	14,0	8,87	28,4
PM 112M 20D	9,0	12,1	400	2000	43,0	60,2	2,34	1,45	152	92,2*	18,4	11,58	35,0

1500 rpm; IP 55; insulation class F/B

Type	Rated Output		Inverter Voltage Supply	Rated Speed	Rated Torque	Peak Torque	Torque costant	Voltage costant	BEMP at 1000 min ⁻¹	Efficiency	Rated current	Moment inertia	Weight
	Pn			n	Mn	Mpk	Kt	Ke	Eph-ph	η	In	J	Kg
	kW	HP		V	rpm	Nm	Nm	Nm/ Arms	Vs	V/ 1000 min ⁻¹	100%	Arms	
PM 63M 15B	0,15	0,2	400	1500	1,0	1,4	2,38	1,49	156	76,3	0,42	0,22	4,1
PM 63M 15C	0,25	0,3	400	1500	1,6	2,2	2,46	1,51	159	78,6	0,65	0,32	5,3
PM 71M 15A	0,50	0,7	400	1500	3,2	4,5	2,94	1,80	188	83,2	1,09	0,65	5,0
PM 71M 15B	0,75	1,0	400	1500	4,8	6,7	3,00	1,84	192	85,7	1,60	0,94	6,6
PM 71M 15C	1,1	1,5	400	1500	7,0	9,8	3,06	1,83	191	87,2	2,29	1,24	8,2
PM 80M 15B	1,1	1,5	400	1500	7,0	9,8	2,94	1,88	197	87,2	2,38	2,33	10,8
PM 80M 15C	1,5	2,0	400	1500	9,5	13,3	2,89	1,82	190	88,2	3,29	2,71	12,0
PM 90S 15C	1,5	2,0	400	1500	9,5	13,3	2,88	1,76	184	88,2	3,30	2,35	12,5
PM 90L 15D	2,2	3,0	400	1500	14,0	19,6	2,74	1,67	175	89,5	5,11	2,99	14,9
PM 90L 15E	2,85	3,8	400	1500	18,1	25,3	2,74	1,67	175	90,2	6,60	3,76	17,7
PM 100L 15B	3,0	4,0	400	1500	19,1	26,7	2,63	1,63	171	90,9*	7,26	4,36	19,5
PM 100L 15C	4,0	5,4	400	1500	25,5	35,7	2,81	1,75	183	91,4*	9,06	6,24	25,5
PM 112M 15C	4,0	5,4	400	1500	25,5	35,7	3,25	2,01	211	92,4*	7,85	8,87	28,4
PM 112M 15D	5,5	7,4	400	1500	35,0	49,0	3,26	2,01	211	93,0*	10,8	11,58	35,0

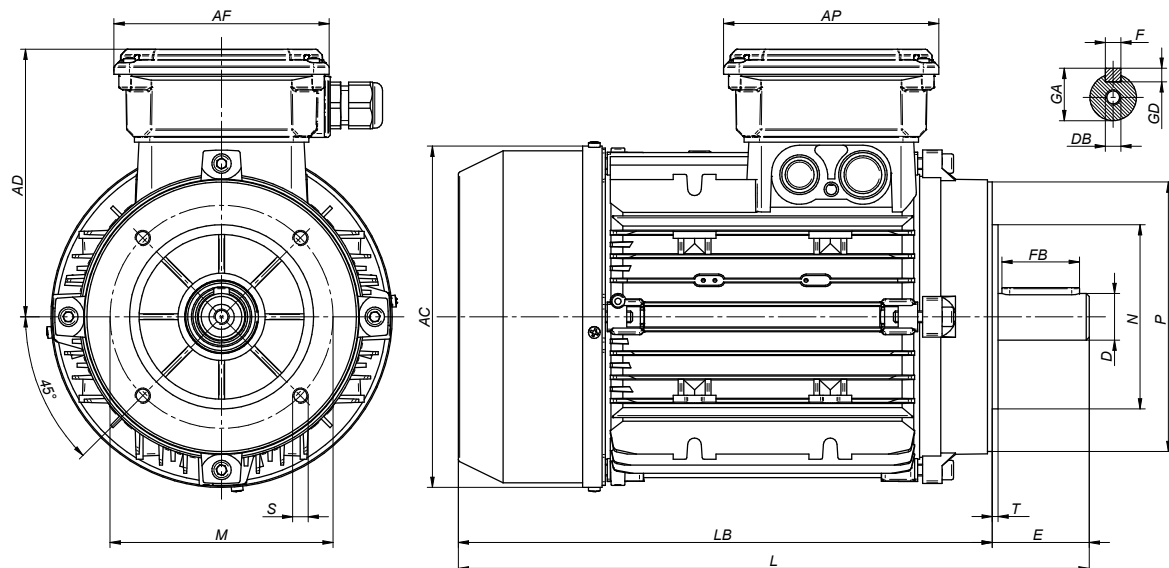
Overall Dimensions

B3 (IMB3) Dimension in "mm"



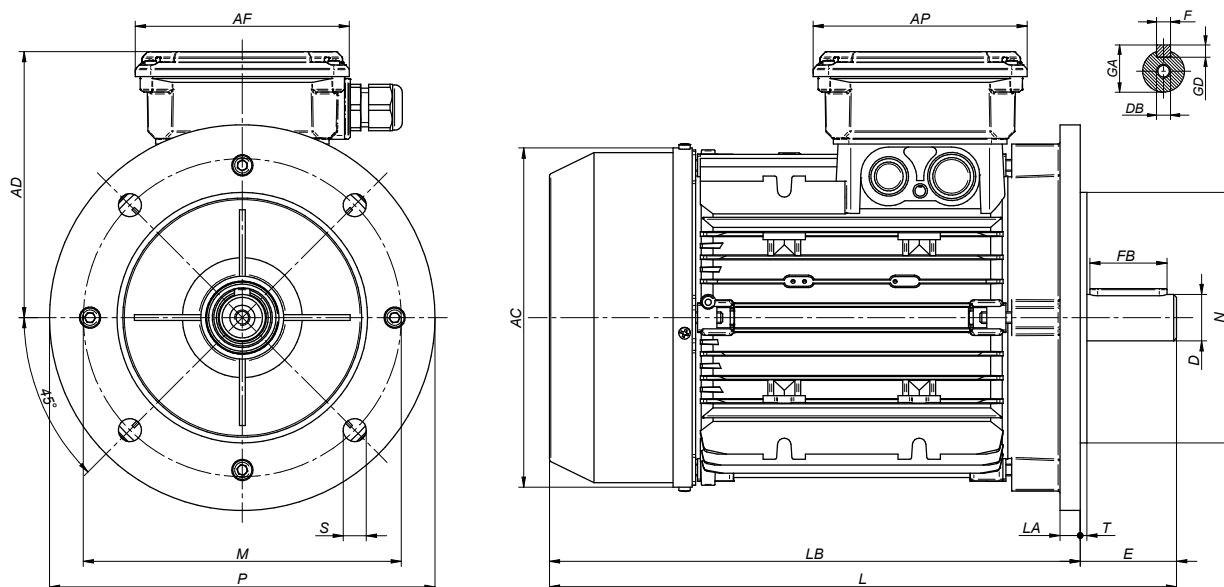
IEC Frame	A	AB	B	BB	C	D	E	H	HD	L	K	Y	AC	AD	AF	AP	F	FB	GA	GD	DB	LB
63M	100	120	80	106	40	11	23	63	176	210	7	12	123	113	93	93	4	15	12,5	4	M4	187
71M	112	136	90	108	45	14	30	71	196	245	8	12	141	125	93	93	5	20	16	5	M5	212
80M	125	155	100	126	50	19	40	80	219	279	10	17,5	158	139	114	114	6	30	21,5	6	M6	239
90S	140	170	100	129	56	24	50	90	234	315	10	17,5	176	144	114	114	8	40	27	7	M8	279
90L	140	170	125	155	56	24	50	90	234	330	10	17,5	176	144	114	114	8	40	27	7	M8	290
100L	160	192	140	175	63	28	60	100	255	370	12	20	191	155	114	114	8	50	31	7	M10	310
112M	190	223	140	176,5	70	28	60	112	277	388	12	22	220	165	114	114	8	50	31	7	M10	328

B14 (IMB14) Dimension in "mm"



IEC Frame	A	AB	B	BB	C	D	E	H	HD	L	K	Y	AC	AD	AF	AP	F	FB	GA	GD	DB	LB	P _{B14}	N _{B14}	M _{B14}	T _{B14}	S _{B14}
63M	100	120	80	106	40	11	23	63	176	210	7	12	123	113	93	93	4	15	12,5	4	M4	187	90	60	75	2,5	M5
71M	112	136	90	108	45	14	30	71	196	245	8	12	141	125	93	93	5	20	16	5	M5	212	105	70	85	2,5	M6
80M	125	155	100	126	50	19	40	80	219	279	10	17,5	158	139	114	114	6	30	21,5	6	M6	239	120	80	100	3	M6
90S	140	170	100	129	56	24	50	90	234	315	10	17,5	176	144	114	114	8	40	27	7	M8	279	140	95	115	3	M8
90L	140	170	125	155	56	24	50	90	234	330	10	17,5	176	144	114	114	8	40	27	7	M8	290	140	95	115	3	M8
100L	160	192	140	175	63	28	60	100	255	370	12	20	191	155	114	114	8	50	31	7	M10	310	160	110	130	3,5	M8
112M	190	223	140	176,5	70	28	60	112	277	388	12	22	220	165	114	114	8	50	31	7	M10	328	160	110	130	3,5	M8

B5 (IMB5) Dimension in "mm"



IEC Frame	A	AB	B	BB	C	D	E	H	HD	L	K	Y	AC	AD	AF	AP	F	FB	GA	GD	DB	LB	P_B5	N_B5	M_B5	T_B5	S_B5	LA_B5
63M	100	120	80	106	40	11	23	63	176	210	7	12	123	113	93	93	4	15	12,5	4	M4	187	90	60	75	2,5	M5	10
71M	112	136	90	108	45	14	30	71	196	245	8	12	141	125	93	93	5	20	16	5	M5	212	105	70	85	2,5	M6	9,5
80M	125	155	100	126	50	19	40	80	219	279	10	17,5	158	139	114	114	6	30	21,5	6	M6	239	120	80	100	3	M6	10,5
90S	140	170	100	129	56	24	50	90	234	315	10	17,5	176	144	114	114	8	40	27	7	M8	279	140	95	115	3	M8	11,5
90L	140	170	125	155	56	24	50	90	234	330	10	17,5	176	144	114	114	8	40	27	7	M8	290	140	95	115	3	M8	11,5
100L	160	192	140	175	63	28	60	100	255	370	12	20	191	155	114	114	8	50	31	7	M10	310	160	110	130	3,5	M8	15
112M	190	223	140	176,5	70	28	60	112	277	388	12	22	220	165	114	114	8	50	31	7	M10	328	160	110	130	3,5	M8	11,5



ORANGE1
Electric Motors Spa

Administrative Headquarter

Piazza della Repubblica 28
20124 - Milano Italy

info@orange1.eu
www.orange1.eu

follow us   

Production plants

Via Angelo Messedaglia 4
32030 - Arsìè (BL) Italy
T. +39 0439 750067
F. +39 0439 750070

Via A. Grandi 23
47030 - San Mauro Pascoli (FC) Italy
T. +39 0541 815611
F. +39 0541 815684

Via Mantova nr. 93
43122 Parma (PR) Italy
T. +39 0521 272383
F. +39 0521 272686

