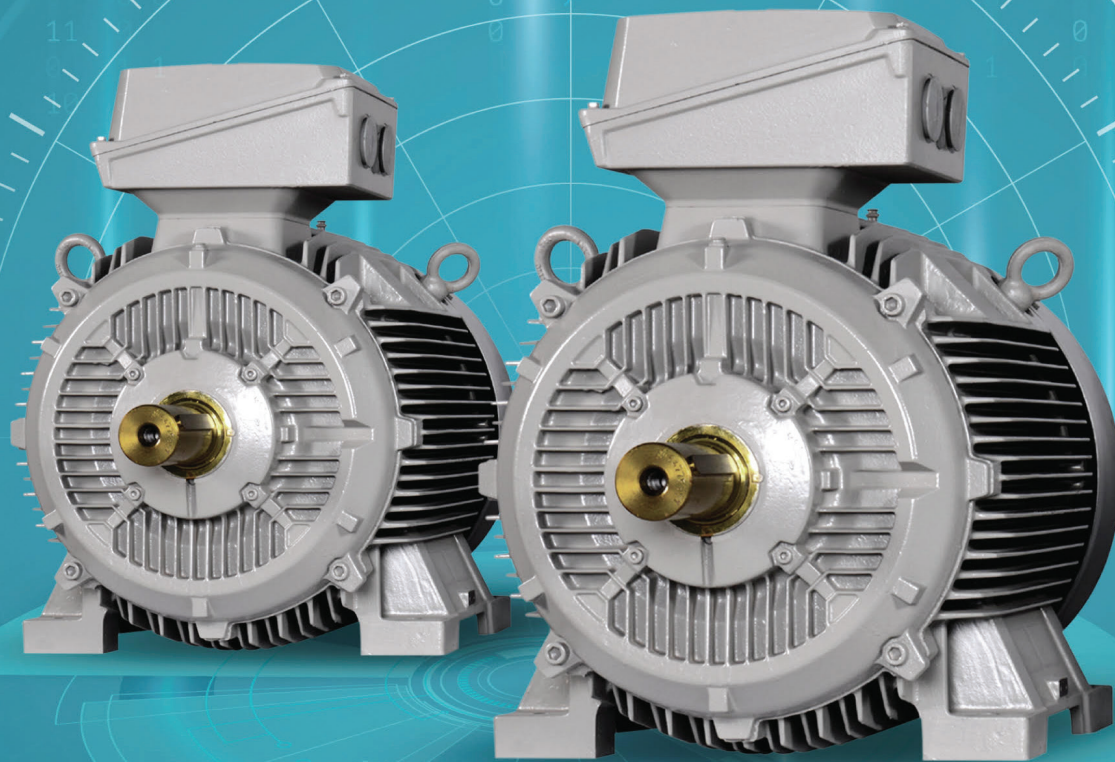


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List Price  
LP-Mot/201

w.e.f.  
1<sup>st</sup>  
January,  
2021

# Index

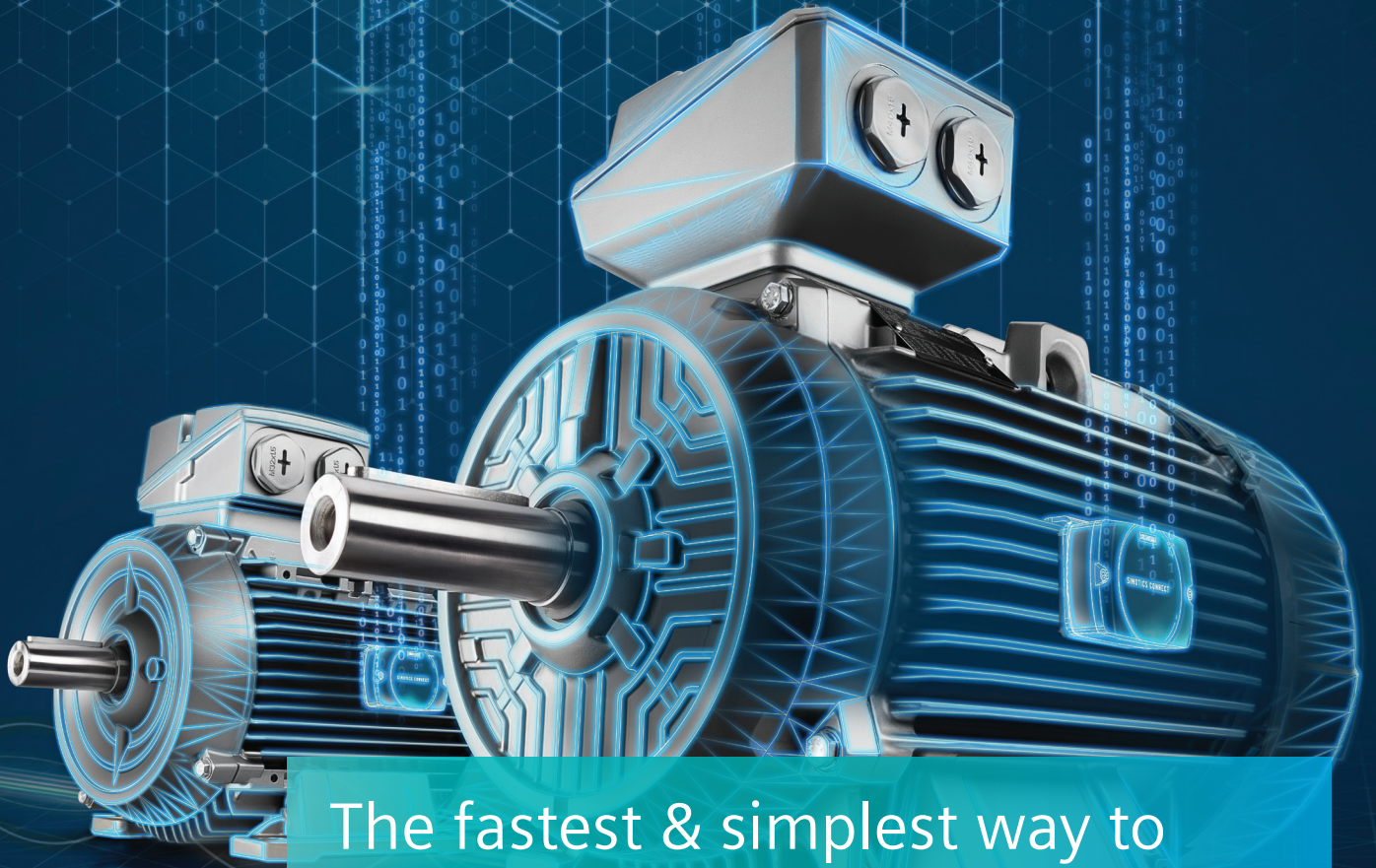
- This replaces our price list LP-Mot/200 01<sup>st</sup> October, 2020.
- Prices are subject to change without notice.
- Prices are ex-works/ex-godown and excluding GST which will be charged extra as actuals.
- While motor output is given in kW and HP, the former is binding.

Sr. No.	Topic	Page no.
<b>All motors are Totally Enclosed Fan Cooled (TEFC) with Squirrel Cage Rotor</b>		
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3	1LE7 SIMOTICS Series 71 - 225 frame 2 Pole (0.25kW - 45kW), 4 Pole (0.18kW - 45kW), 6 Pole (0.18kW - 30kW)	7
4	1LE7 SIMOTICS Series 250 - 315 frame 2 Pole (55kW - 200kW), 4 Pole (55kW - 200kW), 6 Pole (37kW - 132kW), 8 Pole (30kW - 110kW)	8
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For Technical details, Please refer catalogues or contact our nearest sales office. (details on back cover)

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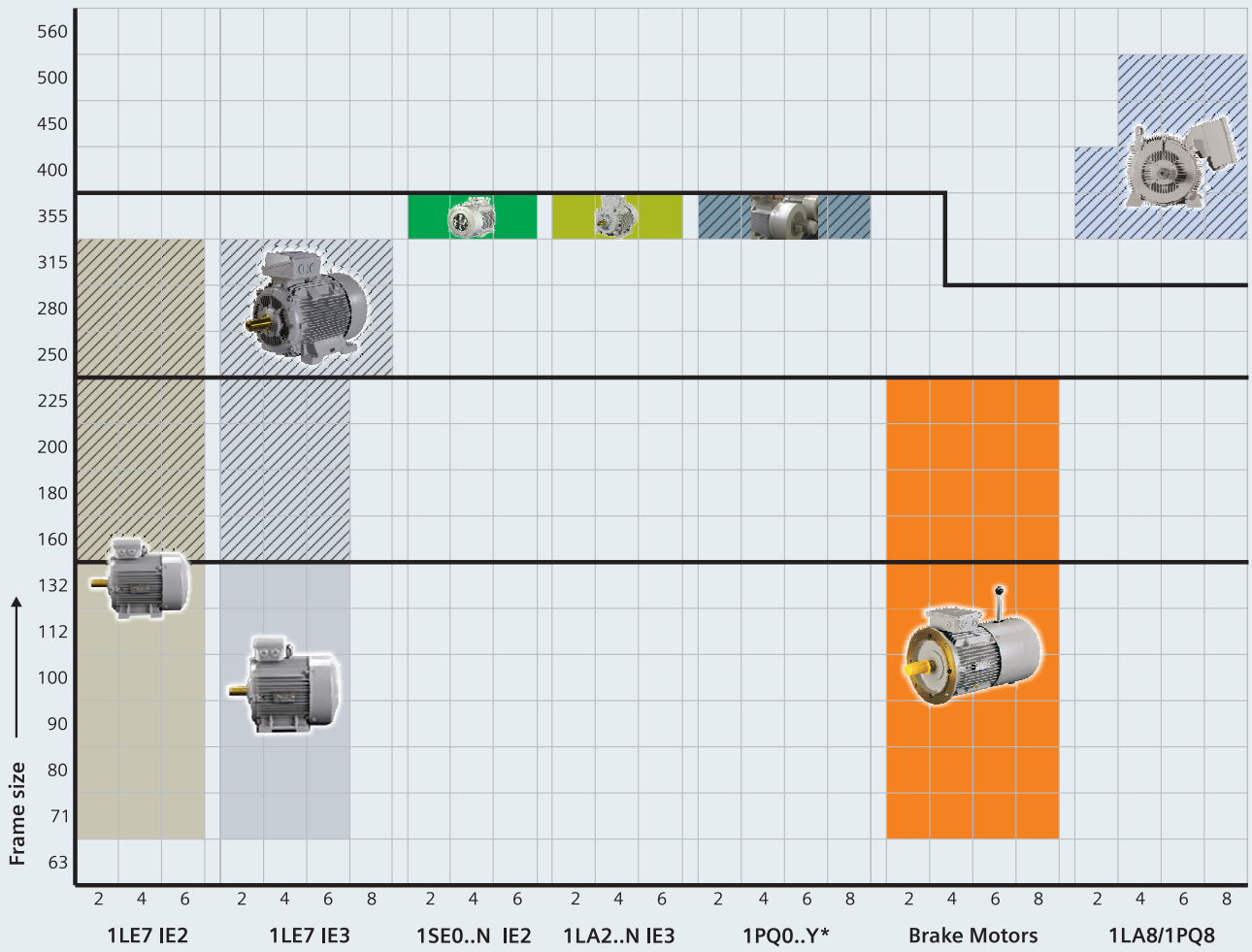



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# LV Motors Range



 IC 416 is possible for frame 160 onwards.

\* 1PQ0..Y series of motor is available in IC416 cooling only.

# SIMOTICS-Cast iron series 1LE7 - IE2



Degree of Protection IP55, Insulation Class 'F', Ambient 50°C, Cast Iron housing, Method of Cooling - IC411, 415V ± 10%, 50Hz ± 5%, combined 10%, IMB3 (foot mounted) version as per IS:12615 / IEC:60034-1

2 - Pole 3000 rev/min						
Output		Frame Size	Ordering Code (MLFB)	Unit LP in ₹	●	▲
kW	HP					
240VΔ / 415VY 50Hz*						
0.25	0.35	71	1LE7601-OCA22-3AA4	16,100	●	▲
0.37	0.5	71	1LE7501-OCA22-3AA4	16,100	●	▲
0.55	0.75	71	1LE7501-OCA32-3AA4	18,100	●	▲
0.75	1	80	1LE7501-ODA22-3AA4	19,300	●	▲
1.1	1.5	80	1LE7501-ODA32-3AA4	21,100	●	▲
1.5	2	90S	1LE7501-OEA02-3AA4	25,400	●	▲
415VΔ 50Hz						
2.2	3	90L	1LE7501-OEA43-5AA4	32,300	●	▲
3.7	5	100L	1LE7501-1AA53-5AA4	38,000	●	▲
5.5	7.5	132S	1LE7501-1CA03-5AA4	63,000	●	▲
7.5	10	132S	1LE7501-1CA13-5AA4	65,800	●	▲
11	15	160M	1LE7501-1DA23-5AA4	128,200	●	▲
15	20	160M	1LE7501-1DA33-5AA4	144,800	●	▲
18.5	25	160L	1LE7501-1DA43-5AA4	179,100	●	▲
22	30	180M	1LE7501-1EA23-5AA4	192,300	●	▲
30	40	200L	1LE7501-2AA43-5AA4	290,600	●	▲
37	50	200L	1LE7501-2AA53-5AA4	338,500	●	▲
45	60	225M	1LE7501-2BA23-5AA4	435,400	●	▲

4 - Pole 1500 rev/min						
Output		Frame Size	Ordering Code (MLFB)	Unit LP in ₹	●	▲
kW	HP					
240VΔ / 415VY 50Hz*						
0.18	0.25	71	1LE7601-OCB22-3AA4	16,400	●	▲
0.25	0.35	71	1LE7501-OCB22-3AA4	16,400	●	▲
0.37	0.5	71	1LE7501-OCB32-3AA4	16,900	●	▲
0.55	0.75	80	1LE7501-ODB22-3AA4	20,000	●	▲
0.75	1	80	1LE7501-ODB32-3AA4	21,400	●	▲
1.1	1.5	90S	1LE7501-OEB02-3AA4	25,100	●	▲
1.5	2	90L	1LE7501-OEB42-3AA4	28,700	●	▲
415VΔ 50Hz						
2.2	3	100L	1LE7501-1AB43-5AA4	34,100	●	▲
3.7	5	112M	1LE7501-1BB23-5AA4	45,000	●	▲
5.5	7.5	132S	1LE7501-1CB03-5AA4	59,900	●	▲
7.5	10	132M	1LE7501-1CB23-5AA4	69,700	●	▲
11	15	160M	1LE7501-1DB23-5AA4	122,800	●	▲
15	20	160L	1LE7501-1DB43-5AA4	142,900	●	▲
18.5	25	180M	1LE7501-1EB23-5AA4	185,300	●	▲
22	30	180L	1LE7501-1EB43-5AA4	199,300	●	▲
30	40	200L	1LE7501-2AB53-5AA4	281,700	●	▲
37	50	225S	1LE7501-2BB03-5AA4	345,400	●	▲
45	60	225M	1LE7501-2BB23-5AA4	407,900	●	▲

6 - Pole 1000 rev/min						
Output		Frame Size	Ordering Code (MLFB)	Unit LP in ₹	●	▲
kW	HP					
240VΔ / 415VY 50Hz*						
0.18	0.25	71	1LE7501-OCC22-3AA4	19,200	●	▲
0.25	0.35	71	1LE7501-OCC32-3AA4	19,500	●	▲
0.37	0.5	80	1LE7501-ODC22-3AA4	21,200	●	▲
0.55	0.75	80	1LE7501-ODC32-3AA4	21,600	●	▲
0.75	1	90S	1LE7501-OEC02-3AA4	26,300	●	▲
1.1	1.5	90L	1LE7501-OEC42-3AA4	29,200	●	▲
1.5	2	100L	1LE7501-1AC42-3AA4	36,800	●	▲
415VΔ 50Hz						
2.2	3	112M	1LE7501-1BC23-5AA4	43,900	●	▲
3.7	5	132S	1LE7501-1CC13-5AA4	65,800	●	▲
5.5	7.5	132M	1LE7501-1CC33-5AA4	74,400	●	▲
7.5	10	160M	1LE7501-1DC23-5AA4	118,400	●	▲
11	15	160L	1LE7501-1DC43-5AA4	143,100	●	▲
15	20	180L	1LE7501-1EC43-5AA4	186,900	●	▲
18.5	25	200L	1LE7501-2AC43-5AA4	252,400	●	▲
22	30	200L	1LE7501-2AC53-5AA4	274,100	●	▲
30	40	225M	1LE7501-2BC23-5AA4	407,600	●	▲

+ As industry standard ratings ≤1.5kW are star connected and ratings >1.5kW are delta connected.

Click on following symbols provided against respective ordering code for downloading data sheets and general arrangement drawing (GAD).

● Datasheet

▲ GAD

# CE mark will be stamped on the nameplate only if the motor conforms to the requirements of CE regulation EC640/2009 of the European Union.

# SIMOTICS-Cast iron series 1LE7 - IE2



Degree of Protection IP55, Insulation Class 'F', Ambient 50°C, Cast Iron housing, Method of Cooling - IC411, 415V ± 10%, 50Hz ± 5%, combined 10%, IMB3 (foot mounted) version as per IS:12615 / IEC:60034-1

2 - Pole 3000 rev/min						
Output		Frame Size	Ordering Code (MLFB)	Unit LP in ₹	●	▲
kW	HP					
55	75	250M	1LE7501-2CA23-5AA4	615,300	●	▲
75	100	280S	1LE7501-2DA03-5AA4	815,400	●	▲
90	120	280M	1LE7501-2DA23-5AA4	928,200	●	▲
110	150	315S	1LE7501-3AA03-5AA4	1,116,800	●	▲
132	180	315M	1LE7501-3AA23-5AA4	1,370,000	●	▲
160	215	315L	1LE7501-3AA43-5AA4	1,503,800	●	▲
200	270	315L	1LE7501-3AA63-5AA4	1,759,900	●	▲

4 - Pole 1500 rev/min						
Output		Frame Size	Ordering Code (MLFB)	Unit LP in ₹	●	▲
kW	HP					
55	75	250M	1LE7501-2CB23-5AA4	583,400	●	▲
75	100	280S	1LE7501-2DB03-5AA4	760,700	●	▲
90	120	280M	1LE7501-2DB23-5AA4	867,200	●	▲
110	150	315S	1LE7501-3AB03-5AA4	1,002,200	●	▲
132	180	315M	1LE7501-3AB23-5AA4	1,177,300	●	▲
160	215	315L	1LE7501-3AB43-5AA4	1,380,500	●	▲
200	270	315L	1LE7501-3AB63-5AA4	1,675,900	●	▲

6 - Pole 1000 rev/min						
Output		Frame Size	Ordering Code (MLFB)	Unit LP in ₹	●	▲
kW	HP					
37	50	250M	1LE7501-2CC23-5AA4	574,800	●	▲
45	60	280S	1LE7501-2DC03-5AA4	720,700	●	▲
55	75	280M	1LE7501-2DC23-5AA4	819,300	●	▲
75	100	315S	1LE7501-3AC03-5AA4	938,800	●	▲
90	120	315M	1LE7501-3AC23-5AA4	1,178,200	●	▲
110	150	315L	1LE7501-3AC43-5AA4	1,314,000	●	▲
132	180	315L	1LE7501-3AC63-5AA4	1,537,200	●	▲

Click on following symbols provided against respective ordering code for downloading data sheets and general arrangement drawing (GAD).

- Datasheet
- ▲ GAD

# CE mark will be stamped on the nameplate only if the motor conforms to the requirements of CE regulation EC640/2009 of the European Union.

# SIMOTICS-Cast iron series 1LE7 - IE3



Degree of Protection IP55, Insulation Class 'F', Ambient 50°C, Cast Iron housing, Method of Cooling - IC411, 415V ± 10%, 50Hz ± 5%, combined 10%, IMB3 (foot mounted) version as per IS:12615 / IEC:60034-1

2 - Pole 3000 rev/min						
Output		Frame Size	Ordering Code (MLFB)	Unit LP in ₹	●	▲
kW	HP					
240VΔ / 415VY 50Hz*						
0.25	0.35	71	1LE7603-OCA22-3AA4	19,100	●	▲
0.37	0.5	71	1LE7503-OCA22-3AA4	19,100	●	▲
0.55	0.75	71	1LE7503-OCA32-3AA4	21,500	●	▲
0.75	1	80	1LE7503-ODA22-3AA4	23,400	●	▲
1.1	1.5	80	1LE7503-ODA32-3AA4	26,200	●	▲
1.5	2	90S	1LE7503-OEA02-3AA4	29,100	●	▲
415VΔ 50Hz						
2.2	3	90L	1LE7503-OEA43-5AA4	37,000	●	▲
3.7	5	100L	1LE7503-1AA53-5AA4	53,500	●	▲
5.5	7.5	132S	1LE7503-1CA03-5AA4	73,500	●	▲
7.5	10	132S	1LE7503-1CA13-5AA4	80,400	●	▲
11	15	160M	1LE7503-1DA23-5AA4	144,200	●	▲
15	20	160M	1LE7503-1DA33-5AA4	165,900	●	▲
18.5	25	160L	1LE7503-1DA43-5AA4	205,000	●	▲
22	30	180M	1LE7503-1EA23-5AA4	216,400	●	▲
30	40	200L	1LE7503-2AA43-5AA4	324,300	●	▲
37	50	200L	1LE7503-2AA53-5AA4	388,300	●	▲
45	60	225M	1LE7503-2BA23-5AA4	499,600	●	▲

4 - Pole 1500 rev/min						
Output		Frame Size	Ordering Code (MLFB)	Unit LP in ₹	●	▲
kW	HP					
240VΔ / 415VY 50Hz*						
0.18	0.25	71	1LE7603-OCB22-3AA4	19,500	●	▲
0.25	0.35	71	1LE7503-OCB22-3AA4	19,500	●	▲
0.37	0.5	71	1LE7503-OCB32-3AA4	20,400	●	▲
0.55	0.75	80	1LE7503-ODB22-3AA4	24,000	●	▲
0.75	1	80	1LE7503-ODB32-3AA4	25,400	●	▲
1.1	1.5	90S	1LE7503-OEB02-3AA4	28,800	●	▲
1.5	2	90L	1LE7503-OEB42-3AA4	32,800	●	▲
415VΔ 50Hz						
2.2	3	100L	1LE7503-1AB43-5AA4	39,100	●	▲
3.7	5	112M	1LE7503-1BB23-5AA4	53,300	●	▲
5.5	7.5	132S	1LE7503-1CB03-5AA4	71,500	●	▲
7.5	10	132M	1LE7503-1CB23-5AA4	80,100	●	▲
11	15	160M	1LE7503-1DB23-5AA4	144,200	●	▲
15	20	160L	1LE7503-1DB43-5AA4	170,900	●	▲
18.5	25	180M	1LE7503-1EB23-5AA4	215,700	●	▲
22	30	180L	1LE7503-1EB43-5AA4	228,600	●	▲
30	40	200L	1LE7503-2AB53-5AA4	311,500	●	▲
37	50	225S	1LE7503-2BB03-5AA4	396,200	●	▲
45	60	225M	1LE7503-2BB23-5AA4	468,100	●	▲

6 - Pole 1000 rev/min						
Output		Frame Size	Ordering Code (MLFB)	Unit LP in ₹	●	▲
kW	HP					
240VΔ/415VY 50Hz*						
0.18	0.25	71	1LE7503-OCC22-3AA4	22,100	●	▲
0.25	0.35	71	1LE7503-OCC32-3AA4	22,500	●	▲
0.37	0.5	80	1LE7503-ODC22-3AA4	24,300	●	▲
0.55	0.75	80	1LE7503-ODC32-3AA4	25,800	●	▲
0.75	1	90S	1LE7503-OEC02-3AA4	29,900	●	▲
1.1	1.5	90L	1LE7503-OEC42-3AA4	37,200	●	▲
1.5	2	100L	1LE7503-1AC42-3AA4	44,200	●	▲
415VΔ 50Hz						
2.2	3	112M	1LE7503-1BC23-5AA4	49,900	●	▲
3.7	5	132S	1LE7503-1CC13-5AA4	75,500	●	▲
5.5	7.5	132M	1LE7503-1CC33-5AA4	85,600	●	▲
7.5	10	160M	1LE7503-1DC23-5AA4	134,000	●	▲
11	15	160L	1LE7503-1DC43-5AA4	159,700	●	▲
15	20	180L	1LE7503-1EC43-5AA4	208,400	●	▲
18.5	25	200L	1LE7503-2AC43-5AA4	289,300	●	▲
22	30	200L	1LE7503-2AC53-5AA4	305,900	●	▲
30	40	225M	1LE7503-2BC23-5AA4	454,900	●	▲

+ As industry standard ratings ≤1.5kW are star connected and ratings >1.5kW are delta connected.

Click on following symbols provided against respective ordering code for downloading data sheets and general arrangement drawing (GAD).

● Datasheet

▲ GAD

# CE mark will be stamped on the nameplate only if the motor conforms to the requirements of CE regulation EC640/2009 of the European Union.

# SIMOTICS-Cast iron series 1LE7 - IE3



Degree of Protection IP55, Insulation Class 'F', Ambient 50°C, Cast Iron housing, Method of Cooling - IC411, 415V ± 10%, 50Hz ± 5%, combined 10%, IMB3 (foot mounted) version as per IS:12615 / IEC:60034-1

2 - Pole 3000 rev/min						
Output		Frame Size	Ordering Code (MLFB)	Unit LP in ₹	●	▲
kW	HP					
55	75	250M	1LE7503-2CA23-5AA4	673,400	●	▲
75	100	280S	1LE7503-2DA03-5AA4	892,700	●	▲
90	120	280M	1LE7503-2DA23-5AA4	1,034,100	●	▲
110	150	315S	1LE7503-3AA03-5AA4	1,222,000	●	▲
132	180	315M	1LE7503-3AA23-5AA4	1,499,000	●	▲
160	215	315L	1LE7503-3AA43-5AA4	1,645,500	●	▲
200*	270	315L	1LE7503-3AA63-5AA4	1,925,500	●	▲

4 - Pole 1500 rev/min						
Output		Frame Size	Ordering Code (MLFB)	Unit LP in ₹	●	▲
kW	HP					
55	75	250M	1LE7503-2CB23-5AA4	638,300	●	▲
75	100	280S	1LE7503-2DB03-5AA4	832,900	●	▲
90	120	280M	1LE7503-2DB23-5AA4	966,100	●	▲
110	150	315S	1LE7503-3AB03-5AA4	1,096,400	●	▲
132	180	315M	1LE7503-3AB23-5AA4	1,291,200	●	▲
160	215	315L	1LE7503-3AB43-5AA4	1,510,500	●	▲
200	270	315L	1LE7503-3AB63-5AA4	1,833,700	●	▲

6 - Pole 1000 rev/min						
Output		Frame Size	Ordering Code (MLFB)	Unit LP in ₹	●	▲
kW	HP					
37	50	250M	1LE7503-2CC23-5AA4	628,700	●	▲
45	60	280S	1LE7503-2DC03-5AA4	788,500	●	▲
55	75	280M	1LE7503-2DC23-5AA4	896,400	●	▲
75	100	315S	1LE7503-3AC03-5AA4	1,027,300	●	▲
90	120	315M	1LE7503-3AC23-5AA4	1,289,200	●	▲
110	150	315L	1LE7503-3AC43-5AA4	1,437,800	●	▲
132	180	315L	1LE7503-3AC63-5AA4	1,681,700	●	▲

8 - Pole 750 rev/min						
Output		Frame Size	Ordering Code (MLFB)	Unit LP in ₹	●	▲
kW	HP					
30	40	250M	1LE7503-2CD23-5AA4	669,700	●	▲
37	50	280S	1LE7503-2DD03-5AA4	853,100	●	▲
45	60	280M	1LE7503-2DD23-5AA4	989,800	●	▲
55	75	315S	1LE7503-3AD03-5AA4	1,097,400	●	▲
75	100	315M	1LE7503-3AD23-5AA4	1,367,600	●	▲
90	120	315L	1LE7503-3AD43-5AA4	1,544,300	●	▲
110	150	315L	1LE7503-3AD53-5AA4	1,633,400	●	▲

\* Temp rise limited to 75K by resistance method.

Click on following symbols provided against respective ordering code for downloading data sheets and general arrangement drawing (GAD).

● Datasheet

















▲ GAD

Contact nearest sales office for requirement of IE4 efficiency class motors.





# Selection & Ordering codes

MLFB Position	Voltage code		Construction code	Winding Protection code	Terminal Box code	Incremental LP in INR													
	12th & 13th	Short code				14th	15th	16th	71	80	90	100	112	132	160	180	200	225	250
1LE7503 - □□□	■ -		□ - □ ■ □ □	□ - □ □ ■ □	□ - □ □ □ ■														
<b>Voltage</b>																			
50Hz, 415VΔ <sup>#</sup>	3-5					□	□	□	□	□	□	□	□	□	□	□	□	□	□
50Hz, 240VΔ/415VY <sup>#</sup>	2-3					□	□	□	□	□	□	□	□	□	□	□	□	□	□
50Hz, 380VY	2-1					1,000	1,200	1,400	1,700	2,100	3,500	4,700	6,500	9,300	14,000	29,000	38,500	52,000	
50Hz, 400VY	2-2					1,000	1,200	1,400	1,700	2,100	3,500	4,700	6,500	9,300	14,000	29,000	38,500	52,000	
50Hz, 380VΔ	3-3					1,000	1,200	1,400	1,700	2,100	3,500	4,700	6,500	9,300	14,000	29,000	38,500	52,000	
50Hz, 400VΔ	3-4					1,000	1,200	1,400	1,700	2,100	3,500	4,700	6,500	9,300	14,000	29,000	38,500	52,000	
50Hz, 500VΔ <sup>es</sup>	4-0					On Enquiry										29,000	38,500	52,000	
50Hz, Any Non std voltage mentioned in Table 10.1 (upto 480V)	9-0	M1Y				1,000	1,200	1,400	1,700	2,100	3,500	4,700	6,500	9,300	14,000	29,000	38,500	52,000	
60Hz, Any Non std voltage mentioned in Table 10.2 (upto 480V)	9-0	Refer Table 10.2				1,000	1,200	1,400	1,700	2,100	3,500	4,700	6,500	9,300	14,000	29,000	38,500	52,000	
50Hz, 690VΔ <sup>es</sup>	4-7					On Enquiry										29,000	38,500	52,000	
50Hz, 690VY <sup>es</sup>	9-0	M1Y				On Enquiry										29,000	38,500	52,000	
Voltage other than above	9-0	M1Y				Contact sales office													
Customized winding	9-0	M1Y				1,000	1,200	1,400	1,700	2,100	3,500	4,700	6,500	9,300	14,000	29,000	38,500	52,000	
<b>Type of Construction</b>																			
	IMB3	A				□	□	□	□	□	□	□	□	□	□	□	□	□	□
	IMV5	C				○	○	○	○	○	○	○	○	○	○	○	○	○	○
	IMV6	D				○	○	○	○	○	○	○	○	○	○	○	○	○	○
	IMV1	G				800	900	1,100	1,400	1,800	2,400	6,500	9,300	15,000	21,500	33,500	44,500	78,500	
	IMV3 <sup>^</sup>	H				800	900	1,100	1,400	1,800	2,400	6,500	9,300	15,000	21,500	33,500	44,500	78,500	
	IMB5 <sup>^</sup>	F				800	900	1,100	1,400	1,800	2,400	6,500	9,300	15,000	21,500	33,500	44,500	78,500	
	IMB14	K				1,000	1,200	1,400	1,800	2,100	3,500	Not Available							
	IMV18	M				800	900	1,100	1,400	1,800	2,400	Not Available							
	IMV19	L				800	900	1,100	1,400	1,800	2,400	Not Available							
	IMB35	J				800	900	1,100	1,400	1,800	2,400	6,500	9,300	15,000	21,500	33,500	44,500	78,500	
	IMB34	N				1,000	1,200	1,400	1,800	2,100	3,500	Not Available							
	IMV36 <sup>1</sup>	Y				800	900	1,100	1,400	1,800	2,400	6,500	9,300	15,000	21,500	33,500	44,500	78,500	
	IMB6	T				○	○	○	○	○	○	○	○	○	○	○	○	○	○
	IMB7	U				○	○	○	○	○	○	○	○	○	○	○	○	○	○
	IMB8	V				○	○	○	○	○	○	○	○	○	○	○	○	○	○
	IMV15	W				800	900	1,100	1,400	1,800	2,400	6,500	9,300	15,000	21,500	33,500	44,500	78,500	

□ Standard Version  
○ Without additional charges.

**Note:**

# As industry standard ratings ≤1.5kW are star connected and ratings >1.5kW are delta connected.

@ Voltage code 9-0 in position 12-13 requires additional order code M1Y along with plain text mentioning voltage & frequency.

\$ Suitable for Grid operation only

<sup>1</sup> IMV35 shall be provided when used with B59  
<sup>2</sup> Can not be offered when MLFB-15th digit is "A"  
<sup>^</sup> Except frame 315L

**Extra Price Calculations**

**Accessories/Non std. features are in incremental LP. Add incremental LP to base price of motor & then offer discount.**

MLFB Position	Voltage code		Construction code	Winding Protection code	Terminal Box code	Incremental LP in INR													
	12th & 13th	Short code				14th	15th	16th	71	80	90	100	112	132	160	180	200	225	250
1LE7503 - □□□	■ -		□ - □ ■ □ □	□ - □ □ ■ □	□ - □ □ □ ■														
<b>Winding Protection</b>				MLFB: 15 <sup>th</sup>	Z Code if any														
Without protection				A															
3x PTC thermistors for tripping (Class F)				B															
6x PTC thermistors for tripping (Class F)				B	Q11														
6x PTC thermistors - 3x for alarm and 3x for tripping (Class F)				C															
3x PTC thermistors for tripping (Class B)				B	Q90														
6x PTC thermistors for tripping (Class B)				B	Q11+Q90														
6x PTC thermistors - 3x for alarm and 3x for tripping (Class B)				C	Q90														
3x PT100 resistance thermometers in stator winding - 2 wire				H															
6x PT100 resistance thermometers in stator winding - 2 wire				J															
Embedded temperature sensor- PT1000				K															
2x Embedded temperature sensor- PT1000				L															
3x PT100 resistance thermometers in stator winding - 3 wire				Z	Q1B														
6x PT100 resistance thermometers in stator winding - 3 wire				Z	Q2B														
12x PT100 resistance thermometers in stator winding - 3 wire				Z	Q2B+Q66														
3x Bi-metallic sensors for trip operation (Thermostats)				Z	Q3A														
6x Bi-metallic sensors (3x for alarm, 3x for tripping) (Thermostats)				Z	Q9A														
3x Bi-metallic sensors for trip operation (Thermostats) - additional					Q31 <sup>2</sup>														
6x Bi-metallic sensors for alarm and trip operation (Thermostats) - additional					Q32 <sup>2</sup>														
3x PT100 resistance thermometers in stator winding - 3 wire (additional)					Q65 <sup>2</sup>														
6x PT100 resistance thermometers in stator winding - 3 wire (additional) - [ In addition to Q2B ]					Q66 <sup>2</sup>														
<b>Terminal Box Position</b>																			
Terminal Box on TOP						4													
Mains Terminal box on RHS as viewed from DE						5													
Mains Terminal box on LHS as viewed from DE						6													

- Standard Version
- Without additional charges.

**Note:**

- # As industry standard ratings ≤1.5kW are star connected and ratings >1.5kW are delta connected.
- @ Voltage code 9-0 in position 12-13 requires additional order code M1Y along with plain text mentioning voltage & frequency.
- \$ Suitable for Grid operation only.

- <sup>1</sup> IMV35 shall be provided when used with B59
- <sup>2</sup> Can not be offered when MLFB-15th digit is "A"
- <sup>^</sup> Except frame 315L

**Extra Price Calculations**

**Accessories/Non std. features are in incremental LP. Add incremental LP to base price of motor & then offer discount.**

**Voltage Code (Specified in MLFB Positions 12 & 13)**

Position 12 & 13	Connection		Short Code
	Δ	Y	
90	220VΔ	-	M1Y
90	230VΔ	-	M1Y
90	240VΔ	-	M1Y
90	360VΔ	-	M1Y
90	440VΔ	-	M1Y
90	460VΔ	-	M1Y
90	480VΔ	-	M1Y
90	525VΔ	-	M1Y
90	-	660VY	M1Y
90	-	690VY	M1Y
90	Any other voltage		M1Y

Position 12 & 13	Standard 50Hz Power		Short Code
	Δ	Y	
90	220VΔ	380VY	M2A
90	380VΔ	660VY	M2B
90		440VY	M2C
90	440VΔ		M2D
90		460VY	M2E
90	460VΔ		M2F
90		575VY	M2G
90	575VΔ		M2H
90	400VΔ	690VY	M2J
90		480Y	M2K
90	480VΔ		M2L
90	230VΔ	400Y	M2M
90	Any other voltage apart from those listed above.		M1Y

**Notes:**

- Short codes are mandatory when 12 and 13 in MLFB is 9 and 0 respectively.
- M1Y requires Hz, V and kW to be specified in plain text.
- 60Hz mandates that a "-Z", Z = B59 to be specified.

- For 1LE77 motors only 2-3 or 3-5 is possible. For 60Hz please enquire.
- For 1LE75 and 1LE76 all above voltagees are possible for frames 71-225.
- For frames 250-315, not all above voltages may be possible. Please enquire with nearest office.

# Price Add-ons for 1LE7

Options (Non-standard features / Accessories) - Simotics																		
Sr. No.	Description	Z-Code	Remarks	Note	Incremental LP in INR													
					71	80	90	100	112	132	160	180	200	225	250	280	315	
					0C	0D	0E	1A	1B	1C	1D	1E	2A	2B	2C	2D	3A	
1	2x PT100 screw-in resistance thermometers (2 wire) for rolling-contact bearings [Simplex 2 wire type]	Q72			Not Applicable							29,000	29,000	29,000	29,000	58,000	58,000	58,000
2	2x PT100 screw-in resistance thermometers (3 wire) for rolling-contact bearings [Simplex 3 wire type]	Q67			Not Applicable							29,000	29,000	29,000	29,000	58,000	58,000	58,000
3	2x PT100 double screw-in resistance thermometers (3 wire) for rolling-contact bearings	Q68			Not Applicable							29,000	29,000	29,000	29,000	58,000	58,000	58,000
<b>Connection and Connection Box</b>																		
4	External Grounding (Earthing) Terminal on motor feet	H04			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5	Second external grounding (earthing) terminal on motor feet	H70			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6	Rotation of the mains terminal box through 90°, entry from DE	R10			0	0	0	0	0	0	0	0	0	0	0	0	0	
7	Rotation of the mains terminal box through 90°, entry from NDE	R11			0	0	0	0	0	0	0	0	0	0	0	0	0	
8	Rotation of mains terminal box through 180°	R12			0	0	0	0	0	0	0	0	0	0	0	0	0	
9	6x flying leads, 0.5 m long	R22			5,000	5,000	5,000	5,000	5,000	5,000	10,000	10,000	Not Available		Not Available			
10	6x flying leads, 1.5 m long	R23			7,500	7,500	7,500	7,500	7,500	7,500	15,000	15,000	15,000	15,000	40,000	50,000	95,000	
11	6x flying leads, 3 m long	R24			10,000	10,000	10,000	10,000	10,000	10,000	20,000	20,000	20,000	20,000	50,000	60,000	125,000	
12	Reducer	R30			Not Available			5,000	5,000	5,000	14,000	14,000	14,000	14,000	17,500	17,500	17,500	
13	Removable cable entry plate	R52			Not Available						12,000	12,000	12,000	17,500	17,500	17,500		
14	Undrilled removable entry plate	R53			Not Available						12,000	12,000	12,000	17,500	17,500	17,500		
15	Next larger mains terminal box	R50			2,600	2,600	2,600	4,000	4,000	4,000	9,400 <sup>#</sup>	11,000	11,000	11,000	24,000	26,500	38,000	
16	Cable end box extension	R59	Possible only in combination with R52/ R53 for FS upto 280; R50 / R52 / R53 in FS 315		Not Available							10,600	13,500	13,500	16,500	23,000	23,000	
17	1x Cast-iron auxiliary terminal box (Small)	R62			Not Available						8,000	8,000	8,000	8,000	10,000	10,000	10,000	
18	1x Cast-iron auxiliary terminal box (Large)	R63			Not Available							12,000 <sup>#</sup>		12,000 <sup>#</sup>	15,000	15,000	15,000	
19	2x Cast-iron auxiliary terminal box (Small)	R67			Not Available						16,000 <sup>#</sup>	16,000 <sup>#</sup>	16,000	16,000	20,000	20,000	20,000	
20	2x Cast-iron auxiliary terminal box (Large)	R68			Not Available							30,000			30,000	30,000		
21	Mains Terminal box - Cast Iron (where AI is a standard)	R64			2,100	2,100	2,100	3,000	3,000	3,000	4,000	4,000	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
22	Non-standard threaded through hole (NPT or G thread)	Y61			On Enquiry													
<b>Winding &amp; Insulation</b>																		
23	Ambient temperature 55°C (F utilised to B limits)	N07	Only with 1LE76/1LE77		0	0	0	0	0	0	0	0	0	0	0	0	0	
24	Temperature class 155 (F), utilized acc. to 155 (F), with service factor (SF) <sup>*</sup>	N01			0	0	0	0	0	0	0	0	0	0	0	0	0	
25	Temperature class 155 (F), utilized acc. to 155 (F), with increased output	N02			0	0	0	0	0	0	0	0	0	0	0	0	0	
26	Temperature class 155 (F), utilized acc. to 155 (F), with increased ambient temperature	N03			0	0	0	0	0	0	0	0	0	0	0	0	0	
27	Temperature class 180 (H) at rated output and max. CT 60 °C	N11			On Enquiry													
28	Temperature class 180 (H) at rated output	N10			3,000	4,000	4,500	5,500	7,500	9,000	15,000	22,600	30,000	40,000	58,000	75,500	121,500	
<b>Environmental protection</b>																		
29	Anti-corrosive treatment for winding overhang	N22			3,600	3,600	4,800	4,800	4,800	4,800	5,800	5,800	7,000	9,500	17,500	23,500	37,500	

## Notes:

- 1 Not available for IC416 cooling.
- # Only when configurable in DT-C.
- \* Prior quotation from works necessary.
- Standard Version.
- 0 Without additional charges.
- \$ Suitable for Grid operation only.

- + FS 71-225: Inverter suitable winding >480V :- 6th position in MLFB should be with digit "9" (1LE759)
- FS 250-315: Inverter suitable winding >500V :- 6th position in MLFB should be with digit "9" (1LE759)

### Extra Price Calculations

**Accessories/Non std. features are in incremental LP. Add incremental LP to base price of motor & then offer discount.**

# Price Add-ons for 1LE7

## Options (Non-standard features / Accessories) - Simotics

Sr. No.	Description	Z-Code	Remarks	Note	Incremental LP in INR																	
					71	80	90	100	112	132	160	180	200	225	250	280	315					
30	Increased air humidity / temperature (30g to 60g of water /m³ of air)	N30			On Enquiry											5,000	6,500	7,500				
31	Increased air humidity / temperature (60g to 100g of water /m³ of air)	N31			On Enquiry											7,500	10,000	12,500				
32	Sea worthy packaging	B12			16,000	16,000	16,000	20,000	20,000	20,000	32,400	37,400	41,500	46,500	55,000	77,000	121,000					
<b>Motors for Converter Fed Operation</b>																						
33	Inverter suitable winding		For FS 71-225 (Inverter output voltage ≤480V) For FS 250-315 (Inverter output voltage ≤500V)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
34	Inverter suitable winding		For FS 71-225 (Inverter output voltage >480 and ≤690V)+ For FS 250-315 (Inverter output voltage >500 and ≤690V)+		On Enquiry											104,000	104,000	104,000				
35	Insulated Bearing at NDE	L53			Not Available											134,500	134,500	134,500	134,500			
36	Mounting of Separately Driven Fan	F70			Not Available											65,800	70,800	85,500	98,000	118,500	127,000	167,500
37	Separately driven fan with non-standard voltage and/or frequency	Y81	To be ordered alongwith F70		Not Available											5,000	5,000	5,000	5,000	7,000	7,000	7,000
<b>Heating &amp; Ventilation</b>																						
38	Fan cover for textile industry (Clean Flow Fan Cowl includes Canopy)	F75			NA	3,500	3,500	6,000	6,000	7,000	7,000	Not Available										
39	Metal external fan (Metal Fan [no AL])	F76	1		5,000	5,000	5,000	10,000	10,000	10,000	17,400	17,400	23,100	23,100	29,000	38,500	61,000					
40	Without external fan and without fan cover	F90	1		3,000	3,000	3,000	3,000	3,000	3,000	6,600	6,600	8,800	8,800	11,000	15,500	24,500					
41	Fan cover with Canopy	H00			3,700	4,000	4,200	4,500	4,800	5,300	7,000	7,000	9,200	9,200	12,000	16,500	26,000					
42	Anti-condensation heaters for 230 V	Q02			NA	NA	4,500	4,500	4,500	4,500	7,000	7,000	9,200	9,200	12,000	12,000	12,000					
43	Anti-condensation heaters for 115 V	Q03			NA	NA	4,500	4,500	4,500	4,500	7,000	7,000	9,200	9,200	12,000	12,000	12,000					
44	Anti-condensation heaters for 240 V	Q07			NA	NA	4,500	4,500	4,500	4,500	5,800	5,800	8,000	8,000	8,500	8,500	8,500					
45	Anti-condensation heaters for 120 V	Q08			NA	NA	4,500	4,500	4,500	4,500	5,800	5,800	8,000	8,000	8,500	8,500	8,500					
<b>Colour &amp; Paint Finish</b>																						
<b>Paint Shades (If no paint shade is selected, then RAL 7030 is the standard)</b>																						
46	Standard Paint Shade - RAL 7030				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
47	Standard RAL paint shades other than RAL7030	Y53	Specify RAL shade code in plain text		1,400	1,600	1,900	2,500	3,000	4,900	8,100	8,100	14,000	14,000	23,500	30,500	46,500					
48	Special RAL paint shades or shades as per IS:5	Y56	Specify RAL/IS shade code in plain text		1,400	1,600	1,900	2,500	3,000	4,900	8,100	8,100	14,000	14,000	23,500	30,500	46,500					
<b>Notes:</b>																						
1. Y53 or Y56 (only one at a time) can be combined with any of the paint finishes indicated in 43 to 47. Below. Just add the appropriate price from 41 or 42.																						
2. Some paint shades both from Y53 or Y56 are only possible with S07. Please consult sales offices for the same.																						
<b>Paint Finish (If no paint finish is selected, Acrylic based paint finish is standard)</b>																						
49	Acrylic paint finish		60µ standard		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
50	Epoxy based Paint - Standard paint thickness	S07+Y57 (90)	DFT 90µ		2,000	2,000	2,000	3,000	3,000	5,500	9,300	9,300	17,500	17,500	35,000	46,500	75,500					
51	Epoxy based Paint - Special paint thickness DFT 120µ	S07+Y57 (120)	DFT 120µ [Y57 (120)]		3,000	3,000	3,000	4,500	4,500	8,250	14,000	14,000	26,250	26,250	52,500	69,750	113,250					
52	Epoxy based Paint - Special paint thickness DFT 180µ	S07+Y57 (180)	DFT 180µ [Y57 (180)]		4,000	4,000	4,000	6,000	6,000	11,000	18,600	18,600	35,000	35,000	70,000	93,000	151,000					
53	Special finish for use onshore sea air resistant	S03+S06+Y57+H07	• 180µ [Y57(180)] • 240µ [Y57(240)]		On Enquiry																	

### Notes:

- 1 Not available for IC416 cooling.
- # Only when configurable in DT-C.
- \* Prior quotation from works necessary.
- Standard Version.
- Without additional charges.
- \$ Suitable for Grid operation only.

- + FS 71-225: Inverter suitable winding >480V :- 6th position in MLFB should be with digit "9" (1LE759)
- FS 250-315: Inverter suitable winding >500V :- 6th position in MLFB should be with digit "9" (1LE759)

### Extra Price Calculations

**Accessories/Non std. features are in incremental LP. Add incremental LP to base price of motor & then offer discount.**

# Price Add-ons for 1LE7

Options (Non-standard features / Accessories) - Simotics																	
Sr. No.	Description	Z-Code	Remarks	Note	Incremental LP in INR												
					71	80	90	100	112	132	160	180	200	225	250	280	315
54	Special paint thickness for offshore use	S04+ S06+ Y57+ H07	295µ [Y57(295)]		On Enquiry												
<b>Notes:</b> 1. Paint thickness needs to be specified by means of plain text irrespective of whether it is standard or special. 2. S06 - Final Coat Polyurethane is mandatory with S03 or S04. S06 is not possible to be ordered separately. 3. H07 - Non-rusting external hardware is mandatory with S03 or S04. H07 can be separately order even without S03 or S04. The separate price for H07 is available against the option at another location.																	
55	Motor supplied unpainted - only with (Red-oxide) Primer	S01			O	O	O	O	O	O	O	O	O	O	O	O	
<b>Encoders</b>																	
56	Kubler Sendix 5020 HTL Rotary Pulse encoder-10	G11			70,000	70,000	70,000	On Enquiry			NA	NA	NA	NA	NA	NA	NA
57	Kubler Sendix 5020 TTL Rotary Pulse encoder-10	G12			70,000	70,000	70,000	On Enquiry			NA	NA	NA	NA	NA	NA	NA
58	LL 861 900 220 rotary pulse encoder	G04	without encoder termination cable		Not Available			133,000	133,000	133,000	150,000	150,000	169,000	169,000	196,000	196,000	196,000
59	HOG 9 DN 1024 I rotary pulse encoder	G05		Not Available			127,000	127,000	127,000	144,000	144,000	163,000	163,000	189,000	189,000	189,000	
60	HOG 10 D 1024 I rotary pulse encoder	G06		Not Available			133,000	133,000	133,000	150,000	150,000	169,000	169,000	196,000	196,000	196,000	
61	Baumer Thalheim make ITD 40 A4 Y126 1024 encoder	G17		Not Available			80,000	80,000	80,000	95,000	95,000	100,000	100,000	105,000	105,000	105,000	
62	HOG 86 TP6 DN 1024 I encoder	G19		Not Available			108,500	108,500	108,500	123,500	123,500	128,500	128,500	133,500	133,500	133,500	
63	Prepared for mounting Baumer Thalheim make ITD 40 A4 Y126 1024 - encoder	G44			Not Available			15,000	15,000	15,000	30,000	30,000	35,000	35,000	40,000	40,000	40,000
64	Prepared for mounting cylindrical shaft encoder - 16dia x 52	G45			Not Available			15,000	15,000	15,000	30,000	30,000	35,000	35,000	40,000	40,000	40,000
65	Prepared for any make Cylindrical Hollow Shaft Encoder	Y71			On Enquiry												
66	Mounting of rotary pulse encoder HOG 10 DN 1024 I + FSL, (speed .... rpm), connection box protection against moisture	Y74			Not Available						On Enquiry						
67	Mounting of rotary pulse encoder HOG 10 DN 1024 I + FSL, (speed .... rpm), connection box protection against dust	Y76			Not Available						On Enquiry						
68	Mounting of rotary pulse encoder HOG 10 DN 1024 I + E SL 93, (speed .... rpm), connection box protection against moisture	Y79			Not Available						On Enquiry						
<b>Brake motors</b>																	
69	Mounting of brake	F07			9,240	12,420	13,420	16,960	17,380	20,900	26,000	28,000	30,000	32,000	NA	NA	NA
70	Brake supply voltage 24 V DC	F10			13,640	19,800	22,660	26,950	28,050	49,500	68,600	85,000	99,000	113,000	NA	NA	NA
71	Brake supply voltage 230 V AC, 50/60 Hz	F11			17,270	22,990	26,070	30,250	31,680	52,800	72,000	89,000	102,500	116,000	NA	NA	NA
72	Brake supply voltage 400 V AC, 50/60 Hz	F12			19,910	26,290	29,700	34,320	35,750	58,960	80,000	99,000	113,500	124,500	NA	NA	NA
73	Brake supply voltage 240 V AC, 50/60 Hz	F13			18,810	24,860	28,160	32,560	33,990	56,210	76,000	94,600	108,500	120,500	NA	NA	NA
74	Brake supply voltage 415 V AC, 50/60 Hz	F14			18,150	23,980	27,170	31,350	32,560	53,790	73,000	83,000	103,500	120,500	NA	NA	NA
75	Mechanical manual brake release with lever (cannot be locked)	F50			O	O	O	O	O	O	O	O	O	O	NA	NA	NA
<b>Mechanical Design &amp; Degrees of Protection</b>																	
76	Vibration proof version	H02			On Enquiry										5,000	5,000	5,000
77	Condensation drainage holes - sealed with a plug	H03			1,800	1,800	1,800	□	□	□	□	□	□	□	□	□	□
78	Stainless steel fasteners (external)	H07			1,900	1,900	1,900	2,100	2,100	3,000	3,000	3,000	3,000	7,500	9,000	11,500	
79	Mains Terminal box on NDE	H08			Not Available										On Enquiry		
80	IP65 degree of protection	H20			2,100	2,500	3,200	4,000	5,000	7,500	15,000	20,000	28,000	39,000	50,000	65,000	80,000
81	IP56 degree of protection (non-heavy-sea)	H22			2,100	2,500	3,200	4,000	5,000	7,500	15,000	20,000	28,000	39,000	50,000	65,000	80,000

## Notes:

- 1 Not available for IC416 cooling.
- # Only when configurable in DT-C.
- \* Prior quotation from works necessary.
- Standard Version.
- O Without additional charges.
- \$ Suitable for Grid operation only.

- + FS 71-225: Inverter suitable winding >480V :- 6th position in MLFB should be with digit "9" (1LE759)
- FS 250-315: Inverter suitable winding >500V :- 6th position in MLFB should be with digit "9" (1LE759)

### Extra Price Calculations

**Accessories/Non std. features are in incremental LP. Add incremental LP to base price of motor & then offer discount.**

# Price Add-ons for 1LE7

Options (Non-standard features / Accessories) - Simotics																	
Sr. No.	Description	Z-Code	Remarks	Note	Incremental LP in INR												
					71	80	90	100	112	132	160	180	200	225	250	280	315
<b>Bearing &amp; Lubrication</b>																	
82	Measuring nipple for SPM shock pulse measurement for bearing inspection	Q01			Not Available			5,000	5,000	5,000	5,500	5,500	6,000	8,000	11,500	16,500	25,500
83	Locating bearing, DE	L20			On Enquiry												
84	Bearing design for increased cantilever forces	L22	NU (Cylindrical Roller) Brgs		Not Available					9,250	12,000	18,000	24,000	29,000	38,500	61,000	
85	Regreasing device	L23			Not Available			On Enquiry			□	□	□	□	□	□	
86	Bearings reinforced at both ends for DE and NDE, bearing size 63	L25	Only where 62 series is a standard		1,000	1,200	1,400	1,800	2,100	3,400	□	□	□	□	□	□	
87	C4 clearance bearing at DE & NDE	L31			Not Available					On Enquiry	8,000	15,000	20,000	30,000	35,000	40,000	
88	SKF bearing at DE & NDE	L32			200	400	500	800	1,000	2,300	2,800	3,600	4,500	5,000	On Enquiry		
89	Double Sealed (ZZ) bearings (permanently lubricated)- only for ball bearings at DE & NDE)	L33			□	□	□	□	□	□	12,600	15,000	17,500	20,000	25,000	30,000	35,000
<b>Balance &amp; Vibration Quality</b>																	
90	Vibration Severity Level A				□	□	□	□	□	□	□	□	□	□	□	□	
91	Vibration Severity Level B	L00			3,300	3,300	3,300	8,300	8,300	8,300	12,000	12,000	20,000	20,000	32,000	32,000	32,000
92	Balancing without key	L01			1,100	1,100	1,100	2,800	2,800	2,800	9,000	9,000	18,000	18,000	28,000	39,000	62,000
93	Full key balancing	L02			1,100	1,100	1,100	2,800	2,800	2,800	9,000	9,000	18,000	18,000	28,000	39,000	62,000
<b>Shaft &amp; Rotor</b>																	
94	Standard Double Shaft Extension (SDSE)	L05		1	2,800	2,800	2,800	3,600	3,600	3,600	7,200	9,600	13,400	16,400	18,000	24,000	39,000
95	Shaft material - Stainless steel	L06			3,700	5,800	8,500	11,000	13,800	17,600	On Enquiry			On Enquiry			
96	Non-standard cylindrical shaft extension - DE	Y58		*	4,000	4,000	4,000	5,200	5,200	5,200	12,200	16,400	21,800	27,200	30,500	40,000	64,000
97	Non-standard cylindrical shaft extension - NDE	Y59		*1	4,000	4,000	4,000	5,200	5,200	5,200	12,200	16,400	21,800	27,200	30,500	40,000	64,000
98	Special shaft steel: ___	Y60			On Enquiry												
99	Tapered shaft extension DE	Y62			On Enquiry												
100	Tapered shaft extension NDE	Y63		*1	On Enquiry												
101	Oil Tight shaft	H23	Only for Flange motors and gear box assembly		2,400	2,400	2,400	3,400	3,400	3,400	6,400	8,800	11,600	17,400	On Enquiry		
<b>Rating Plate &amp; Extra Rating Plate</b>																	
102	Stainless steel nameplate				□	□	□	□	□	□	□	□	□	□	□	□	
103	Direction indicating arrow - Clockwise	L10			500	500	500	700	700	700	1,000	1,000	1,200	1,200	2,000	3,000	4,000
104	Direction indicating arrow - Counter-clockwise	L11			500	500	500	700	700	700	1,000	1,000	1,200	1,200	2,000	3,000	4,000
105	Extra rating plate with deviating rating plate data	Y80			500	500	500	700	700	700	1,000	1,000	1,200	1,200	2,000	3,000	4,000
106	Extra rating plate with identification code - Auxilliary nameplate	Y82			500	500	500	700	700	700	1,000	1,000	1,200	1,200	2,000	3,000	4,000
107	Nameplate in accordance with IEC	B59	2		500	500	500	700	700	700	1,000	1,000	1,200	1,200	2,000	3,000	4,000
108	Additional information on rating plate and on package label (max. of 20 characters)	Y84			500	500	500	700	700	700	1,000	1,000	1,200	1,200	2,000	3,000	4,000
109	Second rating plate, supplied loose	M10			500	500	500	700	700	700	1,000	1,000	1,200	1,200	2,000	3,000	4,000
<b>Testing Charges</b>																	
110	Witnessing of Routine Test as per IS15999	B65			12,100	12,100	12,100	12,100	12,100	12,100	24,200	24,200	24,500	24,500	50,000	60,000	75,000
111	Visual Inspection (Includes Dimension Measurement and paint shade and thickness)	B66			2,400	2,400	2,400	2,400	2,400	2,400	6,200	6,200	6,500	6,500	12,000	12,000	12,000
112	Type test as per IS 15999	B83			32,700	32,700	32,700	32,700	32,700	32,700	54,600	54,600	73,000	73,000	103,000	110,000	125,000
113	Noise measurement without spectrum analysis with acceptance	B70			On Enquiry												
114	Noise measurement with spectrum analysis with acceptance	B72			On Enquiry												

## Notes:

- 1 Not available for IC416 cooling.
- # Only when configurable in DT-C.
- \* Prior quotation from works necessary.
- Standard Version.
- O Without additional charges.
- \$ Suitable for Grid operation only.

- + FS 71-225: Inverter suitable winding >480V :- 6th position in MLFB should be with digit "9" (1LE759)
- FS 250-315: Inverter suitable winding >500V :- 6th position in MLFB should be with digit "9" (1LE759)

### Extra Price Calculations

Accessories/Non std. features are in incremental LP.  
Add incremental LP to base price of motor & then offer discount.



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With IE4 low voltage motors from Siemens, you are clearly investing to boost your competitiveness. The IE4 Motors offer highest efficiency in Induction Motor Technology.

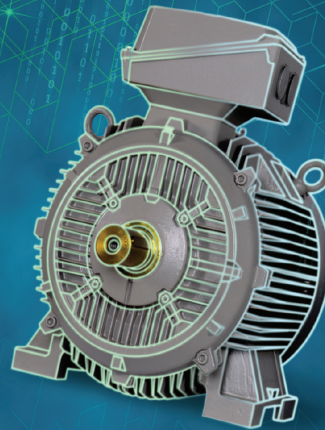
- IE4 motors have up to 22% lower losses than IE3 motors.
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- Customized offerings are made for 415V, 50Hz, 3phase supply systems of India.
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# Answering your needs of Energy Efficient Motors.

With our technologically advanced in-house test facility for the complete range of IE motors

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Based on IEC 60034-30-1, the Indian standard IS 12615 for energy efficient IE2 / IE3 / IE4 motors refers to related standard IS 15999 (Part 2 / Sec 1) & IEC 60034-2-1 : 'Rotating electrical machines; Part 2-1 for determining losses and efficiency from tests (excluding machines for traction vehicles)'. This calls for technically advanced test set up for testing the motors.

With our in-house state of the art test facility, the complete range of IE2 / IE3 and IE4 motors can be tested and the declared efficiency values can be met.



State-of-the-art test facility for acceptance testing by customers



First company to have in-house facility for testing complete range of IE motors



Efficiency determination as per IEC 60034-2-1 IS 15999 (Part 2 / Sec 1)



Wi-Fi enabled special working area for customers

# CHAMPION Series Motors - 355 Frame size



CHAMPION Series. Degree of Prot. IP55, Ins Class 'F'. Ambient 50°C, Method of Cooling - IC411, 415V ±10%, 50Hz ± 5%, combined ±10%. Prices for IMB3 (foot mounted) versions. Ref. Standard: IS:12615 / IEC:60034-1

## IE2 efficiency class - 1SE0..N

2 - Pole 3000 rev/min				
Output		Frame Size	Ordering Code (MLFB)	Unit LP in ₹
kW	HP			
415VΔ 50Hz				
250	335	355L	1SE0 356-2NC80	2,143,900
315	425	355L	1SE0 357-2NC80@	2,334,600

4 - Pole 1500 rev/min				
Output		Frame Size	Ordering Code (MLFB)	Unit LP in ₹
kW	HP			
415VΔ 50Hz				
250	335	355L	1SE0 356-4NB80	2,070,700
315	425	355L	1SE0 357-4NB80	2,375,500

6 - Pole 1000 rev/min				
Output		Frame Size	Ordering Code (MLFB)	Unit LP in ₹
kW	HP			
415VΔ 50Hz				
160	215	355L	1SE0 356-6NB80	1,828,100
200	270	355L	1SE0 357-6NC80	2,090,000
250	335	355L	1SE0 358-6NB80	2,150,200

## IE3 efficiency class - 1LA2..N (for 2, 4 & 6pole) and 1SE0..Y (for 8pole)

2 - Pole 3000 rev/min				
Output		Frame Size	Ordering Code (MLFB)	Unit LP in ₹
kW	HP			
415VΔ 50Hz				
250	335	355L	1LA2 356-2NC80	2,397,200
315	425	355L	1LA2 357-2NC80@	2,610,000

4 - Pole 1500 rev/min				
Output		Frame Size	Ordering Code (MLFB)	Unit LP in ₹
kW	HP			
415VΔ 50Hz				
250	335	355L	1LA2 356-4NB80	2,272,900
315	425	355L	1LA2 357-4NB80	2,607,500

6 - Pole 1000 rev/min				
Output		Frame Size	Ordering Code (MLFB)	Unit LP in ₹
kW	HP			
415VΔ 50Hz				
160	215	355L	1LA2 356-6NB80	2,006,900
200	270	355L	1LA2 357-6NC80	2,294,100
250	335	355L	1LA2 358-6NB80	2,403,900

8 - Pole 750 rev/min				
Output		Frame Size	Ordering Code (MLFB)	Unit LP in ₹
kW	HP			
415VΔ 50Hz				
132	180	355L	1SE0 356-8YB80	1,915,900
160	215	355L	1SE0 357-8YB80	2,167,400
200	270	355L	1SE0 358-8YB80@	2,385,100

1PQ0 Series - SEPARATELY COOLED. "Converter duty motors for constant torque applications". Degree of Prot. IP55, Ins Class 'F'. Ambient 50°C, 415V, 50Hz, Class F rise through VFD operation, Cooling- IC 416. IE2 efficiency class

2 - Pole 3000 rev/min				
Output		Frame Size	Ordering Code (MLFB)	Unit LP in ₹
kW	HP			
415VΔ 50Hz				
250	335	355L	1PQ0 356-2YC80	2,591,400
315	425	355L	1PQ0 357-2YC80	2,859,200

4 - Pole 1500 rev/min				
Output		Frame Size	Ordering Code (MLFB)	Unit LP in ₹
kW	HP			
415VΔ 50Hz				
250	335	355L	1PQ0 356-4YB80	2,316,000
315	425	355L	1PQ0 357-4YB80	2,726,100

6 - Pole 1000 rev/min				
Output		Frame Size	Ordering Code (MLFB)	Unit LP in ₹
kW	HP			
415VΔ 50Hz				
160	215	355L	1PQ0 356-6YB80	2,194,900
200	270	355L	1PQ0 357-6YC80	2,410,000
250	335	355L	1PQ0 358-6YB80	2,597,500

8 - Pole 750 rev/min				
Output		Frame Size	Ordering Code (MLFB)	Unit LP in ₹
kW	HP			
415VΔ 50Hz				
132	180	355L	1PQ0 356-8YB80	2,313,000
160	215	355L	1PQ0 357-8YB80	2,553,000
200	270	355L	1PQ0 358-8YB80	2,669,400

@ Temp. rise limited to 80K by resistance method

# CE mark will be stamped on the nameplate only if the motor conforms to the requirements of CE regulation EC640/2009 of the European Union

For 1PQ0, LP is inclusive of the blower and inverter grade insulation scheme.

Insulated bearings are mandatory for 1PQ0 motors in frames 280 and above when operated in constant torque modes.

Please refer to Price Add-ons for Accessories & prices of insulated bearings. The insulated bearings are NOT included in above mentioned list price.

### Last digit of order code to change based on construction type

Construction	IMB3	V1	IMB14	IMV1 with Canopy	IMB35	IMB34	IMB14
Frame 355	0	8	-	4	6	-	-

The Siemens logo is displayed in a bold, teal, sans-serif font. It is positioned in the upper right corner of the page, set against a white rectangular background. The background of the entire page is a photograph of a large industrial motor, likely a generator or turbine, with a prominent circular opening showing internal components. The motor is painted in shades of grey and brown, and is situated in an industrial setting with concrete structures and yellow safety railings visible in the background.

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### N-Compact Motors

- Range 250kW - 1250kW (TEFC Enclosure –IC411/IC416)
- Low noise and vibration level
- High power to weight ratio
- Dual cooling circuit for uniform heat dissipation

For more information call us on 1800 209 1800

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# 1LA8 N-compact Motors - IE3



1LA8 N compact Motors. Degree of Prot. IP55, Ins Class 'F'. 415V ±10%, 50Hz ± 5%, combined ±10%, Cooling - IC411, Prices for IMB3 (foot mounted) versions. Amb. 45°C. Ref. Standard: IS:12615 / IEC:60034-1

2 - Pole 3000 rev/min			
Output kW	Frame Size	Ordering Code (MLFB)	Unit LP in ₹
415VΔ 50Hz			
355	355	1LA8 354-2AC70	3,268,300
400	355	1LA8 356-2AC70	3,434,200
500	355	1LA8 357-2AC70	3,604,200
560	400	1LA8 403-2AC70	On Enquiry
630	400	1LA8 405-2AC70	On Enquiry
710*	400	1LA8 407-2AC00	On Enquiry
1LA8 2P motors in frames 355 & 400 will have unidirectional fan for CW rotation as viewed from DE. For CCW direction please explicitly specify in the order.			

4 - Pole 1500 rev/min			
Output kW	Frame Size	Ordering Code (MLFB)	Unit LP in ₹
415VΔ 50Hz			
355	355	1LA8 353-4AB70	2,734,300
400	355	1LA8 356-4AB70	3,154,200
500	355	1LA8 357-4AB70	3,475,900
560	400	1LA8 404-4YB70	On Enquiry
630	400	1LA8 406-4AB70	On Enquiry
710*	400	1LA8 407-4AB00	On Enquiry
800*	450	1LA8 452-4AC00	On Enquiry
900*	450	1LA8 454-4AC00	On Enquiry
1000*	450	1LA8 456-4AC00	On Enquiry
1125*	500	1LA8 460-4AD00	On Enquiry
1250*	500	1LA8 462-4AD00	On Enquiry

6 - Pole 1000 rev/min			
Output kW	Frame Size	Ordering Code (MLFB)	Unit LP in ₹
415VΔ 50Hz			
315	355	1LA8 356-6YB70	3,062,100
400	355	1LA8 357-6AB70	3,242,400
450	400	1LA8 402-6AD70	On Enquiry
500	400	1LA8 404-6AD70	On Enquiry
560	400	1LA8 406-6AD70	On Enquiry
630	450	1LA8 452-6AD70	On Enquiry
710*	450	1LA8 454-6AD00	On Enquiry
800*	450	1LA8 456-6AD00	On Enquiry
900*	500	1LA8 460-6AD00	On Enquiry
1000*	500	1LA8 462-6AD00	On Enquiry

8 - Pole 750 rev/min			
Output kW	Frame Size	Ordering Code (MLFB)	Unit LP in ₹
415VΔ 50Hz			
250	355	1LA8 355-8YB70	2,929,600
315	355	1LA8 357-8AB70	3,386,300
355	400	1LA8 402-8AD70	On Enquiry
400	400	1LA8 404-8AD70	On Enquiry
450	400	1LA8 406-8AD70	On Enquiry
500	450	1LA8 452-8AD70	On Enquiry
560	450	1LA8 454-8AD70	On Enquiry
630	450	1LA8 456-8AD70	On Enquiry
710*	500	1LA8 460-8AD00	On Enquiry
790*	500	1LA8 462-8AD00	On Enquiry

## Order No. Suffixes

Frame (shaft height)	Last but one place : Figure denoting supply#				Last place : Figure denoting construction			
	400VΔ, 50Hz / 690V Y, 50Hz	415VΔ, 50Hz	500VΔ, 50Hz	690VΔ, 50Hz	IMB3	IMV1 without canopy	IMV1 with canopy	IMB35
355	6	7	5	0	0	8	4	6
400/450/500						-	-	-

Contact nearest sales office for requirement of IE4 efficiency class motors.

Note: Applicable Standards - 1) ≤ 1000 kW - IS 12615/IEC 60034-1  
2) >1000kW - IEC 60034-1

IE efficiency class is applicable for ratings upto 1000kW.

\*Available with 690VD as grid supplied standard voltage. For any other voltages please contact your nearest sales office.

For 1LA8 operation with VFD, insulated bearing at NDE is mandatory and the price has to be considered extra as per extras for accessories and pricing.

# CE mark will be stamped on the nameplate only if the motor conforms to the requirements of CE regulation EC640/2009 of the European Union.

# 1PQ8



## N Compact Motors IE2 for Converter (VFD) Duty Applications

1PQ8 Series - Separately Cooled. Degree of Prot. IP55, Ins Class 'F'. 415V, 50Hz  
Cooling IC 416. Prices for IMB3 (foot mounted) versions. Amb. 45°C. Ref. Standard: IS:12615 / IEC:60034-1

2 - Pole 3000 rev/min			
Output kW	Frame Size	Ordering Code (MLFB)	Unit LP in ₹
415VΔ 50Hz			
355	355	1PQ8 354-2PC70	3,796,900
400	355	1PQ8 356-2PC70	3,963,000
500	355	1PQ8 357-2PC70	4,110,100
560	400	1PQ8 403-2PC70	On Enquiry
630	400	1PQ8 405-2PC70	On Enquiry
675*	400	1PQ8 407-2PC00	On Enquiry

4 - Pole 1500 rev/min			
Output kW	Frame Size	Ordering Code (MLFB)	Unit LP in ₹
415VΔ 50Hz			
355	355	1PQ8 353-4PB70	3,050,600
400	355	1PQ8 356-4PB70	3,484,500
500	355	1PQ8 357-4PB70	3,792,000
560	400	1PQ8 404-4PB70	On Enquiry
630	400	1PQ8 406-4PB70	On Enquiry
670*	400	1PQ8 407-4PB00	On Enquiry
760*	450	1PQ8 452-4PC00	On Enquiry
850*	450	1PQ8 454-4PC00	On Enquiry
950*	450	1PQ8 456-4PC00	On Enquiry
1060*	500	1PQ8 460-4PC00	On Enquiry
1180*	500	1PQ8 462-4PC00	On Enquiry

6 - Pole 1000 rev/min			
Output kW	Frame Size	Ordering Code (MLFB)	Unit LP in ₹
415VΔ 50Hz			
315	355	1PQ8 356-6PB70	3,231,200
400	355	1PQ8 357-6PB70	3,375,300
450	400	1PQ8 402-6PD70	On Enquiry
500	400	1PQ8 404-6PD70	On Enquiry
560	400	1PQ8 406-6PD70	On Enquiry
630	450	1PQ8 452-6PD70	On Enquiry
670*	450	1PQ8 454-6PD00	On Enquiry
760*	450	1PQ8 456-6PD00	On Enquiry
850*	500	1PQ8 460-6PD00	On Enquiry
950*	500	1PQ8 462-6PD00	On Enquiry

8 - Pole 750 rev/min			
Output kW	Frame Size	Ordering Code (MLFB)	Unit LP in ₹
415VΔ 50Hz			
250	355	1PQ8 355-8PB70	3,245,600
315	355	1PQ8 357-8PB70	3,702,400
355	400	1PQ8 402-8PD70	On Enquiry
400	400	1PQ8 404-8PD70	On Enquiry
450	400	1PQ8 406-8PD70	On Enquiry
500	450	1PQ8 452-8PD70	On Enquiry
560	450	1PQ8 454-8PD70	On Enquiry
630	450	1PQ8 456-8PD70	On Enquiry
670*	500	1PQ8 460-8PD00	On Enquiry
750*	500	1PQ8 462-8PD00	On Enquiry

### Order No. Suffixes

Frame (shaft height)	Last but one place : Figure denoting supply#				Last place : Figure denoting construction			
	400VΔ, 50Hz / 690V Y, 50Hz	415VΔ, 50Hz	500VΔ, 50Hz	690VΔ, 50Hz	IMB3	IMV1 without canopy	IMV1 with canopy	IMB35
355	6	7	5	0	0	8	4	6
400/450/500						-	-	-

Contact nearest sales office for requirement of IE3 efficiency class motors.

Note: Applicable Standards - 1) ≤ 1000 kW - IS 12615/IEC 60034-1  
2) >1000kW - IEC 60034-1

IE efficiency class is applicable for ratings upto 1000kW.

The List price is inclusive of Insulated Bearing at NDE, the blower arrangement, 3x PTC thermistors for Alarm, 3x PTC thermistors for Trip, ACH and inverter grade insulation scheme.

\*Available with 690VD as grid supplied standard voltage. For any other voltages please contact your nearest sales office.

# CE mark will be stamped on the nameplate only if the motor conforms to the requirements of CE regulation EC640/2009 of the European Union.



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## A benchmark for performance

Intermittent (S3/S4) duty motors - For Crane duty applications

- High reliability and uptime
- Low maintenance cost
- Range: 71-355 frames

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# Price Add-ons

Non-standard features / Accessories - For 1SE0, 1LA2, 1PQ0 & 1LA8 [1PQ8]								
Sr. No.	Description	Z-Code	Remarks	Note	Frames 355	Frames 1LA8/1PQ8	Extra as % of LP or absolute [whichever is lesser] +	
							%	₹
<b>Non-standard Winding</b>								
1	Non-standard output	L1Y	Give details in plain text	*	✓	✓	Nil	Nil
2	Non-standard voltage 220-500V and/ or Frequency (Grid Supply)		Give details in plain text	#	✓	✓	5%	-
3	Class 'H'				✓	✓	7.5%	
4	Anticlockwise direction	K98	Viewed from drive end		✓	✓	Nil	Nil
5	Direction indicating Arrow	N08			✓	✓	Nil	Nil
<b>Winding Protection</b>								
6	3 PTC - Trip	A11	Class B	@	✓	✓	-	2,400
7	3 + 3 PTC. 3 for Alarm, 3 for Trip	A12	Class B	@	✓	✓	-	4,800
8	6 PTC - Trip	A13	Class B	@,7	✓	✓	-	4,800
9	3 PTC - Trip	A14	Class F	@,7	✓	✓	-	2,400
10	3 + 3 PTC. 3 for Alarm, 3 for Trip	A15	Class F	@,7	✓	✓	-	4,800
11	6 PTC - Trip	A16	Class F	@,7	✓	✓	-	4,800
12	RTDs - 3 Nos. PT 100 Simplex	A60		@	✓	✓	-	8,700
	RTDs - 6 Nos. PT 100 Simplex	A61			✓		-	17,300
13	Epoxy gel coat on winding overhang	C46	Class B rise		✓	-	2%	-
<b>Non-standard Constructions</b>								
14	Construction IMB35				✓	✓	5%	-
15	Construction IM V1 - without canopy		For 1LA8/ 1PQ8 possible only up to 400 Frame		✓	✓	5%	-
16	Construction IM V1 - with canopy			1	✓	-	7%	-
<b>Terminal Box</b>								
17	T. Box on RHS with adaptor piece	K09	For 1LA2, 1SE0 & 1PQ0		✓	-	-	Nil
18	T. Box on LHS with adaptor piece	K10	For 1LA2, 1SE0 & 1PQ0		✓	-	-	Nil
19	T. Box on RHS without adaptor piece	K09	For 1LA8 / 1PQ8 only	3	-	✓	-	Nil
20	T. Box on LHS without adaptor piece	K10	For 1LA8 / 1PQ8 only	3	-	✓	-	Nil
21	Reducers				✓	-	-	3,500
22	Fixing of Cable Glands		To be supplied by Sales after approval from Factory		✓	-	-	On Enquiry
23	Flying Leads	K58	Lead length of 3m (approx.)		✓	On Enquiry	5%	-
24	T. box turned 90 deg.	K84	Cable entry from NDE		✓	✓	Nil	Nil
25	T. box turned 180 deg.	K85			✓	✓	Nil	Nil
26	Larger T. Box (one size)	N07			✓	✓		On Enquiry
<b>Shaft extensions and related modifications</b>								
27	Standard Double Shaft Extension	K16		1	✓	-	5%	-
28	Non-std. cylindrical Extension	Y55		*	✓	✓	5%	-
29	Non-std. double Shaft Extension	Y56		*,1	✓	✓	10%	-
30	Tapered shaft extension				✓	✓		On Enquiry
31	Labyrinth seal	K17			✓	✓	-	2,800
<b>Bearings</b>								
32	NU bearing at DE				✓	-	5%	14,000
33	BTDs - 2 Nos. Simplex	A72			✓	✓	-	8,100
34	Provision of threading for fixing Shock Pulse Monitoring [SPM] Probe for vibration measurement				✓	✓	3%	-
<b>Painting</b>								
35	Epoxy base paint	K26	Shade 631 as per IS:5		✓	✓	5%	-
36	Epoxy base paint-other shade	K27			✓	✓	10%	-
37	Normal paint other shade	Y53			✓	✓	5%	-
38	Only Red-oxide coating	K24			✓	✓	-	No price reduction

## Notes:

- Not available for 1PQ series motors
  - Certificate shall be provided on additional costs. Please contact sales office for cost.
  - Subsequent change of location from LHS to RHS not possible in 1LA8, 1PQ8. Please contact Sales office.
  - Not for 1LA8/1PQ8 Motors
  - For 355L frame 1SE0/1LA2 in 4-8P and 1LA8 motors, Sheet Metal fan will be given instead of CI when plastic fan is not acceptable.
  - Inverter grade insulation is included in list prices for 1PQ series of motors and 1LA8 series of motors.
  - Prices of ACH, 3x PTCs for Alarm and 3x PTCs for Trip are included in the list price for 1LA8 and 1PQ8 Motors
- \* Prior quotation from works necessary  
 @ Auxiliary Terminal will be provided in auxiliary terminal box for 1X87 322 and above  
 # Prior quotation from works necessary for frequency other than 50Hz  
 ! Please contact sales office  
 + **Extra Price Calculations**  
 a) **Wherever percentage is mentioned, add to LP and then offer discount.**  
 b) **Where absolute values are mentioned, same to be directly added to the nett price (No discounts applicable on absolute values).**

# Price Add-ons

## Non-standard features / Accessories - For 1SE0, 1LA2, 1PQ0 & 1LA8 [1PQ8]

Sr. No.	Description	Z-Code	Remarks	Note	Frames 355	Frames 1LA8/1PQ8	Extra as % of LP or absolute [whichever is lesser] +	
							%	₹
<b>NS Fan and Fan Cowl</b>								
39	Metallic Fan (for 1SE0/1LA2 series 355 frame 2P motors - CI Fan is standard) all other motors have plastic fan by default	K35	Where Plastic Fan is Std.	1	✓	-	-	5,000
				5	-	✓	-	8,100
40	Fan-cowl with canopy	N19			✓	✓	5%	-
41	Clean Flow Fan Cowl (without screen & with canopy)				✓	-	5%	-
<b>Ingress Protection</b>								
42	Type of Protection IP 56	K52		*,2	10%	10%		15,000
	Type of Protection IP 65	K50		*,2	15%	On Enquiry		25,000
<b>Other Miscellaneous Features</b>								
43	S3/S4 Duty Motors		Contact Sales for more details		✓	✓	-	Nil
44	Anti-condensation heaters 220 - 240V, 1Ph	K45	For Frames 355	@, 7	✓	-	-	3,500
45	Vibration Severity Grade R	K01	As per [IS:12075]	*	-	-	-	On Enquiry
46	Increased Flange accuracy	K04	As per [IS:2223]	*	-	-	-	On Enquiry
47	Auxiliary data plate	N09	Specify punching details		✓	✓	-	Nil
	Auxiliary data plate	Y82	Specify punching details				5%	-
48	Wooden Packing		Frames 355		✓	-		10,000
			For 1LA8/1PQ8 355		-	✓		17,500
			For 1LA8/1PQ8 400		-	✓		20,000
			For 1LA8/1PQ8 450 and above		-	✓		25,000
49	Sea Worthy Packing		Frames 355		✓	-		30,000
			For 1LA8/1PQ8 355		-	✓		40,000
			For 1LA8/1PQ8 400		-	✓		50,000
			For 1LA8/1PQ8 450 and above		-	✓		60,000
<b>Converter Fed Motors</b>								
49	Inverter grade winding treatment (Voltages ≤ 500V) VPI = Vacuum Pressure Impregnation	VPI	For frame 355 and 1LA8	6	✓	✓	Nil	-
	Inverter grade winding for Voltages >500V		For frame 355 and 1LA8		✓	✓	-	On Enquiry
50	Insulated Bearing at NDE	L27	1LA2/1PQ0/1SE0 Frames 355		✓	-	-	42,500
			1LA8 Frames 355 [355 Frame 4-8P]		✓	✓	-	48,500
			1LA8 Frame 355,400 - 2Pole		✓	-	-	74,500
			1LA8 Frames 400 and above		✓	-	-	60,000
51	Mounting arrangement for encoder [encoder not in Siemens' scope of supply]	G56	Specific models of Baumer, Leine & Linde, and mutually agreed models during enquiry stage.	*	✓	✓	5%	
52	Encoder Mounted on motors. Encoder will be supplied by Siemens in makes as indicated in the remarks column		Specific models of Baumer, Leine & Linde, and mutually agreed models during enquiry stage.	*	✓	✓		On Enquiry
<b>Testing Charges</b>								
53	Witnessing of Routine Test as per IS 12615 / IEC 60034-1 (IS:15999 wherever applicable)		Frames 355		✓	✓	-	22,500
			Frames 400 - 500		-	✓		35,000
54	Type test as per IS 12615 / IEC 60034-1 (IS:15999 wherever applicable)		Frames 355	4	✓	✓	-	40,000
			For 1LA8/1PQ8 355 - 400		-	✓		58,000
			For 1LA8/1PQ8 450 - 500	*	-	✓	-	Check for testing procedure and price

### Notes:

- 1 Not available for 1PQ series motors
  - 2 Certificate shall be provided on additional costs. Please contact sales office for cost.
  - 3 Subsequent change of location from LHS to RHS not possible in 1LA8, 1PQ8. Please contact Sales office.
  - 4 Not for 1LA8/1PQ8 Motors
  - 5 For 355L frame 1SE0/1LA2 in 4-8P and 1LA8 motors, Sheet Metal fan will be given instead of CI when plastic fan is not acceptable.
  - 6 Inverter grade insulation is included in list prices for 1PQ series of motors and 1LA8 series of motors.
  - 7 Prices of ACH, 3x PTCs for Alarm and 3x PTCs for Trip are included in the list price for 1LA8 and 1PQ8 Motors
- \* Prior quotation from works necessary
  - @ Auxiliary Terminal will be provided in auxiliary terminal box for 1X87 322 and above
  - # Prior quotation from works necessary for frequency other than 50Hz
  - ! Please contact sales office
  - + **Extra Price Calculations**
    - a) **Wherever percentage is mentioned, add to LP and then offer discount.**
    - b) **Where absolute values are mentioned, same to be directly added to the nett price (No discounts applicable on absolute values).**





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Indigenous endurance.**

**SIMOTICS 1LE7 Motors**

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## Access, Enquire and Track. Introducing the SimoQ Mobile App SIMOTICS 1LE7 motors on the go

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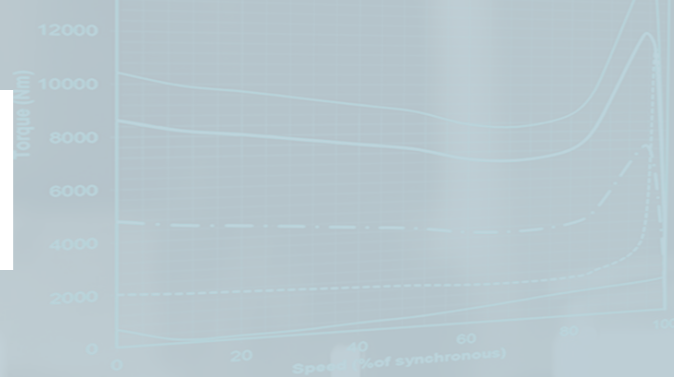
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## SIMOTICS-1LE7

Design & Efficiency Variant					
6 <sup>th</sup>	7 <sup>th</sup>	← Position in the MLFB	IEC (Efficiency Class)		
			50Hz	60Hz P50	60Hz P60
0	1	Single speed - IE2 50Hz	IE2	IE2 or IE1	IE2 or IE1
0	3	Single speed - IE3 50Hz	IE3	IE3 or IE2	IE3 or IE2
9	1	Single speed - IE2 50Hz Premium Insulation scheme	IE2	IE2 or IE1	IE2 or IE1
9	3	Single speed - IE3 50Hz Premium Insulation scheme	IE3	IE3 or IE2	IE3 or IE2

**Note:** Some motors with 9 in 6<sup>th</sup> position may have a lower efficiency class than depicted by 7<sup>th</sup> position.

Main Series (Low Voltage Motors - Totally Enclosed - Surface Cooled)					
1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	← Position in the MLFB	
1	L	E	7	Self ventilated by a shaft mounted fan	
				TEFC (IC411)	
				(+Z = F70) Force-ventilated by machine mounted separately driven fan	
				TEBC (IC416) earlier 1PQ	

**Note:**  
Motors with a "0" in position no. 6 of the MLFB are provided with a standard insulation scheme which make them even suitable for converter fed operation as below:  
  
 $U_N \leq 460V$  for frames 71 to 225  
 $U_N \leq 500V$  for frames 250 to 315

Material of Housing & Design	
5 <sup>th</sup>	← Position in the MLFB
5	Cast Iron - standard output
6	Cast Iron - reduced output - adapted winding
7	Cast Iron - reduced output - heavy starting duty

**Note:** For 7, only 415V, 50Hz designs are possible. For other voltages please send enquiry.

**The 16 digit MLFB Structure for Kalwa Make IEC Motors**  
The New 16 digit MLFB Structure for IEC Cage Induction Motors made in Kalwa has been explained here. This chart has been deliberately kept simple for better and easier understanding of the MLFB concept and therefore not all cases may be covered to avoid complicating matters by giving exhaustive information. Only the certain typical values of each digit have been considered as this chart is only to facilitate easy understanding of the new 16 digit structure of the MLFB. For further details and related codes please refer appropriate reference material.  
  
**Important: It should be noted that all of the represented MLFB combinations may not be realisable. This chart has been devised to serve as a guide to assist in understanding the MLFB of an existing motor and should not be used to build a new MLFB at user end.**  
  
**Reference Document Basis:** 6ZB5731-0AD30-0AA0 - Structuring of the 16 digit order number for standard motors 1LE, 1MB and 1PC of SAG. There are certain modification w.r.t. Indian market requirement.

Example	
1	1LE7503-2CB23-5JB5-Z, Q90+R50
	1LE New Generation Low Voltage Standard Motor
	7 IEC motor made in India
	5 Cast Iron Housing - Standard output
	0 Single Speed Motor
	3 Efficiency class IE3 as per IS:12615-2011
	2C Shaft Height 250
	B 4Pole
	2 Frame length M, 55kW
	3-5 415VΔ, 50Hz
	J IMB35
	B 3x PTCs for trip
	5 T. Box on RHS as viewed from DE
	Option Z Q90 (Class B PTCs) + R50 (One size larger T. Box)

**Important:**  
For motors in frames 71 - 225 when required for a voltage  $U_N > 460V$ , an enquiry with the works is necessary.

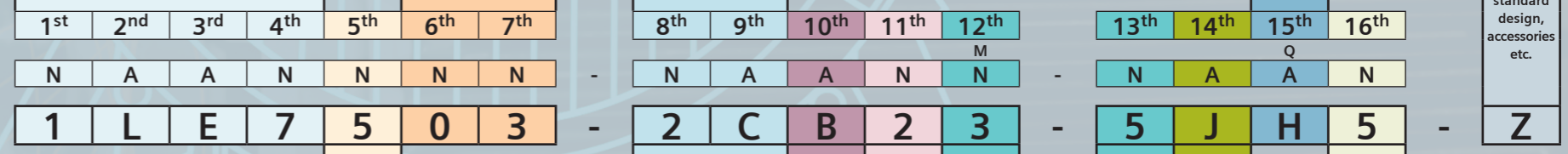
Shaft Height (Position 8 & 9)					
8 <sup>th</sup> \ 9 <sup>th</sup>	A	B	C	D	E
0	56	63	71	80	90
1	100	112	132	160	180
2	200	225	250	280	-
3	315	-	-	-	-

Motor Protection	
15 <sup>th</sup>	← Position in the MLFB
A	Without winding protection
B	3x PTC thermistors for tripping (Class F)
C	6x PTC thermistors - 3x for alarm and 3x for tripping (Class F)
H	3x PT100 resistance thermometers in stator winding - 2 wire
J	6x PT100 resistance thermometers in stator winding - 2 wire
K	1x Temperature sensor - PT1000
L	2x Temperature sensor - PT1000
Z	Q1B 3x PT100 resistance thermometers in stator winding - 3 wire from sensor
Z	Q2B 6x PT100 resistance thermometers in stator winding - 3 wire from sensor
Z	Q3A 3x Bi-metallic sensors for trip operation (Thermostats)
Z	Q9A 6x Bi-metallic sensors (3x for alarm, 3x for tripping) (Thermostats)
<b>Addition to Position 15 (Value of Position 15 = B)</b>	
B	-Z = Q11 Additional 3x PTC thermistors for tripping
<b>Addition to Position 15 (Value of Position 15 = B or C with or without Q11)</b>	
B or C	-Z = Q90 Class B PTC thermistors (Alarm 130°C, Trip 140°C)

**Only few cases shown as examples. For further options, please consult nearest Sales office.**

Code for Special Non-standard design, accessories etc.

Position in the MLFB  
Code suffixes  
Type of digit in the position  
**MLFB**



No. of Poles	
10 <sup>th</sup>	← Position in MLFB
A	2
B	4
C	6
D	8

Single Speed

Voltage Code					
Only some generally required codes shown. For details consult BD.					
Position 12 & 13	Frequency 50Hz		Position 12 & 13	Frequency 60Hz	
	Δ	Y		Standard 50Hz Power	Δ
18	200VΔ	(347VY)	90	230VΔ	400VY
20		360VY			
21	220VΔ	380VY	90	253VΔ	440VY
22	230VΔ	400VY	90	265VΔ	460VY
23	240VΔ	415VY	90	276VΔ	480VY
27	(289VΔ)	500VY	90	332VΔ	575VY
32	360VΔ				
33	380VΔ	660VY	90	440VΔ	757VY
34	400VΔ	690VY	90	460VΔ	-
35	415VΔ	(720VY)	90	480VΔ	-
36	440VΔ				
37	460VΔ				
38	480VΔ				
40	500VΔ	(866VY)	90	575VΔ	-
41	525VΔ				
43	(575VΔ)	1000VY	90	661VΔ	-
46	660VΔ	-	90	-	-
47	690VΔ	-	90	-	-
90	..with M1Y - for any other voltage other than those covered above.				

Blue letters in light blue background are the ones being considered currently to be offered with "defined" Voltage codes.  
Brown letters in light yellow background will be presently offered with 9-0 and M1Y.  
**Notes:** For MLFB:5 = 7, only 2-3 or 3-5 is possible  
Not all voltage codes may be possible for MLFB:5 = 5 or 6

Terminal Box Position	
16 <sup>th</sup>	← Position in the MLFB
4	Terminal box on TOP
5	Terminal box on RHS
6	Terminal box on LHS
7	Terminal box at bottom (only for horizontal constructions without feet)

Construction Code	
14 <sup>th</sup>	← Position in the MLFB
A	IM B3, IM B6, IM B7, IM B8, IM V5, IM V6, (stamped IM B3)
B	
C	IM V5 / IM 1011 (for frames up to 315L only)
D	IM V6 / IM 1031 (for frames up to 315L only)
E	
F	IM B5 / IM 3001, IM V1, IM V3, (stamped IM B5) flange (upto 315M only)
G	IM V1 / IM 3011 flange
H	IM V3 / IM 3031 flange (for frames up to 315M only)
J	IM B35 / IM 2001 flange
K	IM B14 / IM 3601, IM V19 / IM 3631, IM V18 / IM 3611 (stamped IMB14); standard flange (frames up to 132M only)
L	IM V19 / IM 3631 standard flange (for frames up to 132M only)
M	IM V18 / IM 3611 standard flange (for frames up to 132M only)
N	IM B34 / IM 2101 standard flange (for frames up to 132M only)
T	IM B6 / IM 1051 (for frames up to 315L only)
U	IM B7 / IM 1061 (for frames up to 315L only)
V	IM B8 / IM 1071 (for frames up to 315L only)
W	IMV15
Y	IMV36 (IMV35 when used with B59) (frames up to 315L only)



