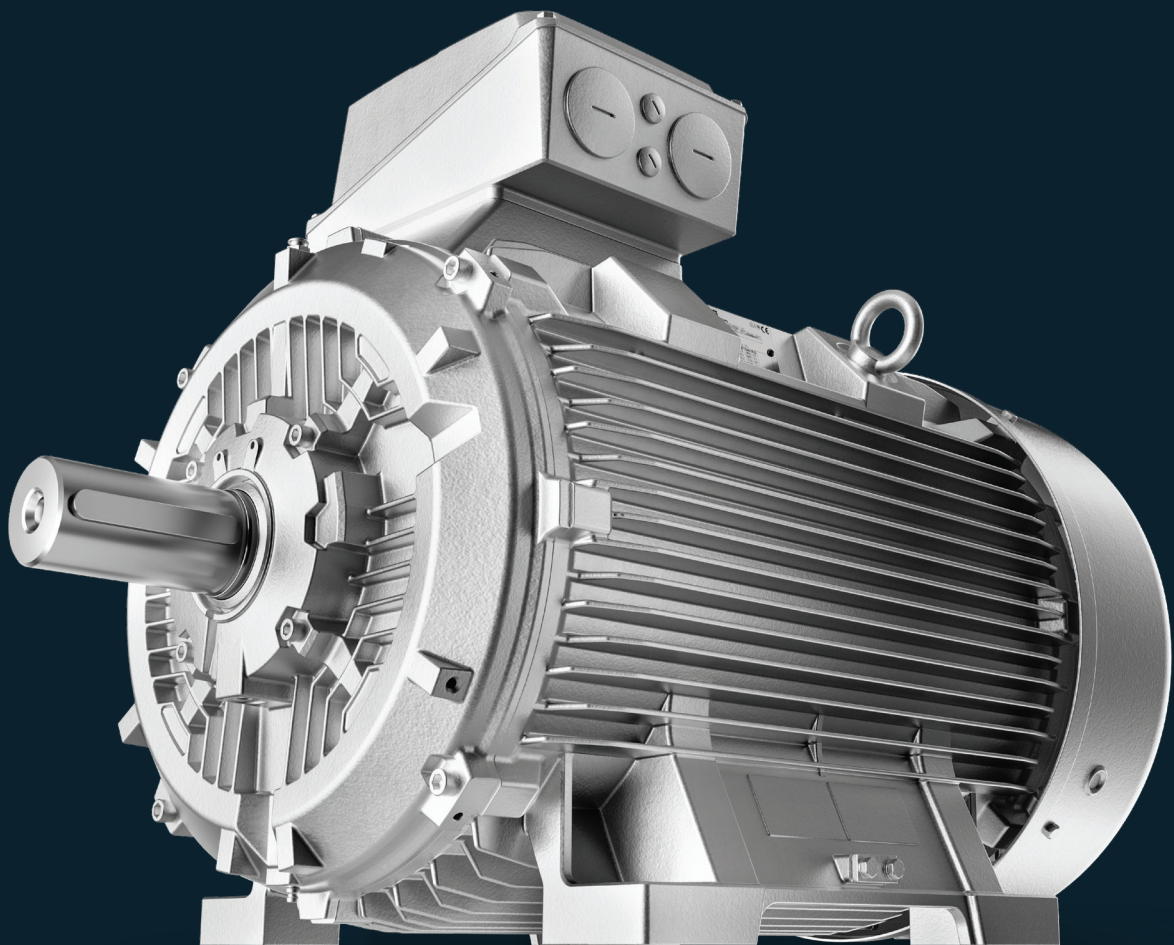


INNOMOTICS

Innomotics Severe Duty 1LE7

Innovation in Motion

IE4 & IE3 Efficiency
Class Motors



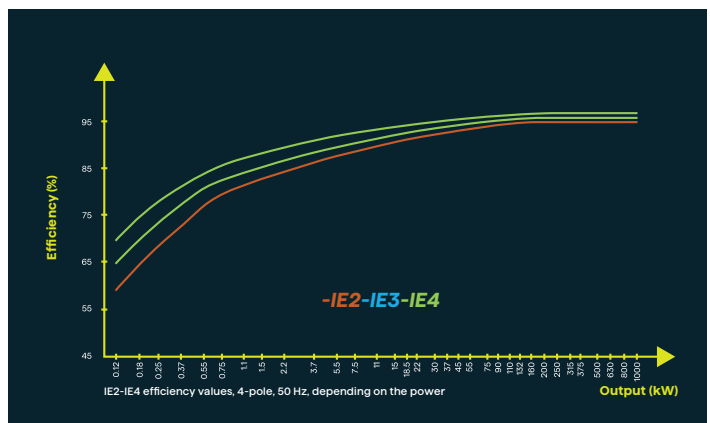
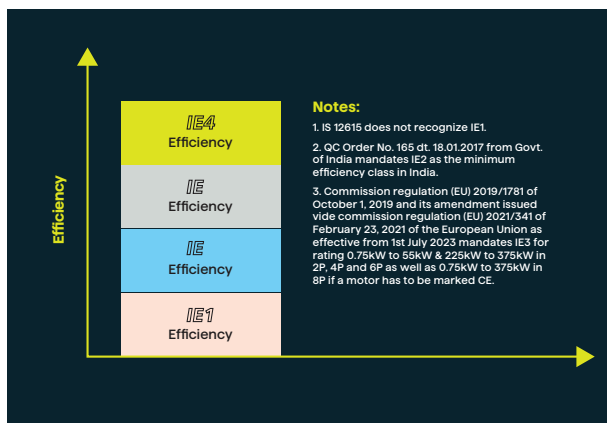
The values of efficiency for motors to classify as IE3 or IE4 in accordance with the IS:12615-2018 are as under:

kW	Frame size	2 Pole		Frame size	4 Pole		Frame size	6 Pole		Frame size	8 Pole	
		Efficiency %			Efficiency %			Efficiency %			Efficiency %	
		IE3	IE4		IE3	IE4		IE3	IE4		IE2	IE3
0.12	56	60.8	66.5	63	64.8	69.8	63	57.7	64.9	71	50.7	62.3
0.18	63	65.9	70.8	63	69.9	74.7	71	63.9	70.1	80	58.7	67.2
0.25	63	69.7	74.3	71	73.5	77.9	71	68.6	74.1	80	64.1	70.8
0.37	71	73.8	78.1	71	77.3	81.1	80	73.5	78	90S	69.3	74.3
0.55	71	77.8	81.5	80	80.8	83.9	80	77.2	80.9	90L	73.0	77.0
0.75	80	80.7	83.5	80	82.5	85.7	90S	78.9	82.7	100L	75.0	78.4
1.1	80	82.7	85.2	90S	84.1	87.2	90L	81.0	84.5	100L	77.7	80.8
1.5	90S	84.2	86.5	90L	85.3	88.2	100L	82.5	85.9	112M	79.7	82.6
2.2	90L	85.9	88	100L	86.7	89.5	112M	84.3	87.4	132S	81.9	84.5
3.7	100L	87.8	89.7	112M	88.4	90.9	132S	86.5	89.3	160M	84.5	86.8
5.5	132S	89.2	90.9	132S	89.6	91.9	132M	88.0	90.5	160M	86.2	88.3
7.5	132S	90.1	91.7	132M	90.4	92.6	160M	89.1	91.3	160L	87.3	89.3
11	160M	91.2	92.6	160M	91.4	93.3	160L	90.3	92.3	180L	88.6	90.4
15	160M	91.9	93.3	160L	92.1	93.9	180L	91.2	92.9	200L	89.6	91.2
18.5	160L	92.4	93.7	180M	92.6	94.2	200L	91.7	93.4	225S	90.1	91.7
22	180M	92.7	94.0	180L	93.0	94.5	200L	92.2	93.7	225M	90.6	92.1
30	200L	93.3	94.5	200L	93.6	94.9	225M	92.9	94.2	250M	91.3	92.7
37	200L	93.7	94.8	225S	93.9	95.2	250M	93.3	94.5	280S	91.8	93.1
45	225M	94.0	95.0	225M	94.2	95.4	280S	93.7	94.8	280M	92.2	93.4
55	250M	94.3	95.3	250M	94.6	95.7	280M	94.1	95.1	315S	92.5	93.7
75	280S	94.7	95.6	280S	95.0	96.0	315S	94.6	95.4	315M	93.1	94.2
90	280M	95.0	95.8	280M	95.2	96.1	315M	94.9	95.6	315L#	93.4	94.4
110	315S	95.2	96.0	315S	95.4	96.3	315M#	95.1	95.8	315L#	93.7	94.7
132	315M#	95.4	96.2	315M#	95.6	96.4	315L#	95.4	96.0	315L#	94.0	94.9
160	315L#	95.6	96.3	315L#	95.8	96.6		95.6	96.2		94.3	95.1
200		95.8	96.5		96.0	96.7		95.8	96.6		94.6	95.4
250	As per	95.8	96.5	As per	96.0	96.7	As per	95.8	96.6	As per	94.6	95.4
315	manufacturer	95.8	96.5	manufacturer	96.0	96.7	manufacturer	95.8	96.6	manufacturer	94.6	95.4
355	catalogue	95.8	96.5	catalogue	96.0	96.7	catalogue	95.8	96.6	catalogue	94.6	95.4
375		95.8	96.5		96.0	96.7		95.8	96.6		94.6	95.4
400		95.8	96.5		96.0	96.7		95.8	96.6		94.6	95.4
450		95.8	96.5		96.0	96.7		95.8	96.6		94.6	95.4
500		95.8	96.5		96.0	96.7		95.8	96.6		94.6	95.4
560		95.8	96.5		96.0	96.7		95.8	96.6		94.6	95.4
630		95.8	96.5		96.0	96.7		95.8	96.6		94.6	95.4
710		95.8	96.5		96.0	96.7		95.8	96.6		94.6	95.4
800		95.8	96.5		96.0	96.7		95.8	96.6		94.6	95.4
900		95.8	96.5		96.0	96.7		95.8	96.6		94.6	95.4
1000		95.8	96.5		96.0	96.7		95.8	96.6		94.6	95.4

Notes:

- 1. IS:1231 defines Frame Size to output co-relation only up to Frame Size 315M.
- 2. EN 50347:2001 specifies 132kW for 315M in 2P and 4P.
- # These frames are indicated as "preferred" in IS:12615-2018.

The efficiency classes are as under



Innomotics

Low Voltage Motors –

The most comprehensive range of motors

Innomotics severe duty motors sets the pace when it comes to innovative motor technology. Today, millions of Innomotics severe duty motors are efficiently powering machines and equipment in industrial facilities around the world in all sectors, applications and power classes.

Innomotics severe duty energy-efficient low-voltage motors with high dynamic performance have proven themselves in use, and are attractive as a result of their quality, efficiency and future readiness.

Innomotics Severe Duty 1LE7 stands for:

- Optimum solutions in all sectors, regions and power classes
- Innovative motor technology with the highest quality and reliability
- Highest dynamic performance, precision and efficiency, with an optimum degree of compactness
- Integration of the motors in the drive train to create an overall system
- The global network of skill sets and round the clock service worldwide
- More than 50 years of motor manufacturing in India

Innomotics severe duty 1LE7 series of motors

State-of-the-art development and production processes in conjunction with systematic function tests ensure a long service life for our severe duty 1LE7 series of motors. Inverter suitable winding and a highly ribbed structure for better cooling enables high degree of ruggedness for use in adverse conditions. Time for installation, commissioning and motor replacement is lesser, as a result of the diagonally split, metallic terminal box and dual mounting holes (wherever applicable).

With frame to output relation in line with IS 1231, the replacement of existing IE2/IE3 motors is a hassle-free affair.

Salient features:

Frame	Cast Iron
Efficiency class	IE3 & IE4
Applicable standards	Efficiency classification according to IS 12615: 2018 / IEC 60034-30-1
Degree of protection	IP55 (IP56/IP65 options are available)
Voltages	415V (additional voltages available. Refer Innomotics product Configurator for more details)
Frequency	50Hz
Type of construction	IMB3 (Refer Innomotics product configurator for other construction variants)
Cooling method	IC411 Totally Enclosed Fan Cooled [TEFC]
Temperature class	155°C (F) utilized to 130°C (B)
Insulation system	VFD Suitable insulation scheme for voltage up to 480V as a standard, up to frame size 225M. VFD Suitable insulation scheme for voltage up to 500V as a standard in frames 250 - 315
Impulse Voltage Insulation Class (IVIC) for U_N 415V	C (Severe) As per Std. IS/IEC 60034: Part 18: Sec 41

Additional information:

- Diagonally split terminal box as a standard
- Terminal box can be rotated through 360° in steps of 90°
- Terminal box mounting on RHS/LHS with L-shaped adaptor box enables easy interchangeability on site (applicable for frames 160 to 315)
- Increased cantilever force bearings at DE as an option

Ordering codes for Innomotics severe duty 1LE7-IE4 series of motors


Output	Pole	Frame size	Ordering Code (MLFB)*				Output	Pole	Frame size	Ordering Code (MLFB)*				Output	Pole	Frame size	Ordering Code (MLFB)*						
kW				12-13	14	15	16	kW				12-13	14	15	16	kW				12-13	14	15	16
																0.18	6	71	1LE7504-0CC2	2-3	A	A	4
								0.25	4	71	1LE7504-0CB2	2-3	A	A	4	0.25	6	71	1LE7504-0CC3	2-3	A	A	4
0.37	2	71	1LE7504-OCA2	2-3	A	A	4	0.37	4	71	1LE7504-0CB3	2-3	A	A	4	0.37	6	80	1LE7504-0DC2	2-3	A	A	4
0.55	2	71	1LE7504-OCA3	2-3	A	A	4	0.55	4	80	1LE7504-0CB2	2-3	A	A	4	0.55	6	80	1LE7504-0DC3	2-3	A	A	4
0.75	2	80	1LE7504-ODA2	2-3	A	A	4	0.75	4	80	1LE7504-0CB3	2-3	A	A	4	0.75	6	90S	1LE7504-0EC0	2-3	A	A	4
1.1	2	80	1LE7504-ODA3	2-3	A	A	4	1.1	4	90S	1LE7504-0EB0	2-3	A	A	4	1.1	6	100L	1LE7504-1AC4	2-3	A	A	4
1.5	2	90S	1LE7504-OEA0	2-3	A	A	4	1.5	4	90L	1LE7504-0EB4	2-3	A	A	4	1.5	6	100L	1LE7504-1AC4	2-3	A	A	4
2.2	2	90L	1LE7504-OEA4	3-5	A	A	4	2.2	4	100L	1LE7504-1AB4	3-5	A	A	4	2.2	6	112M	1LE7504-1BC2	3-5	A	A	4
3.7	2	100L	1LE7504-1AA5	3-5	A	A	4	3.7	4	112M	1LE7504-1BB2	3-5	A	A	4	3.7	6	132S	1LE7504-1CC1	3-5	A	A	4
5.5	2	132S	1LE7504-1CA0	3-5	A	A	4	5.5	4	132S	1LE7504-1CB0	3-5	A	A	4	5.5	6	132M	1LE7504-1CC3	3-5	A	A	4
7.5	2	132S	1LE7504-1CA1	3-5	A	A	4	7.5	4	132M	1LE7504-1CB2	3-5	A	A	4	7.5	6	160M	1LE7504-1DC2	3-5	A	A	4
11	2	160M	1LE7504-1DA2	3-5	A	A	4	11	4	160M	1LE7504-1DB2	3-5	A	A	4	11	6	160L	1LE7504-1DC4	3-5	A	A	4
15	2	160M	1LE7504-1DA3	3-5	A	A	4	15	4	160L	1LE7504-1DB4	3-5	A	A	4	15	6	180L	1LE7504-1EC4	3-5	A	A	4
18.5	2	160L	1LE7504-1DA4	3-5	A	A	4	18.5	4	180M	1LE7504-1EB2	3-5	A	A	4	18.5	6	200L	1LE7504-2AC4	3-5	A	A	4
22	2	180M	1LE7504-1EA2	3-5	A	A	4	22	4	180L	1LE7504-1EB4	3-5	A	A	4	22	6	200L	1LE7504-2AC5	3-5	A	A	4
30	2	200L	1LE7504-2AA4	3-5	A	A	4	30	4	200L	1LE7504-2AB5	3-5	A	A	4	30	6	225M	1LE7504-2BC2	3-5	A	A	4
37	2	200L	1LE7504-2AA5	3-5	A	A	4	37	4	225S	1LE7504-2BB0	3-5	A	A	4	37	6	250M	1LE7504-2CC2	3-5	A	A	4
45	2	225M	1LE7504-2BA2	3-5	A	A	4	45	4	225M	1LE7504-2BB2	3-5	A	A	4	45	6	280S	1LE7504-2DC0	3-5	A	A	4
55	2	250M	1LE7504-2CA2	3-5	A	A	4	55	4	250M	1LE7504-2CB2	3-5	A	A	4	55	6	280M	1LE7504-2DC2	3-5	A	A	4
75	2	280S	1LE7504-2DA0	3-5	A	A	4	75	4	280S	1LE7504-2DB0	3-5	A	A	4	75	6	315S	1LE7504-3AC0	3-5	A	A	4
90	2	280M	1LE7504-2DA2	3-5	A	A	4	90	4	280M	1LE7504-2DB2	3-5	A	A	4	90	6	315M	1LE7504-3AC2	3-5	A	A	4
110	2	315S	1LE7504-3AA0	3-5	A	A	4	110	4	315S	1LE7504-3AB0	3-5	A	A	4	110	6	315L	1LE7504-3AC4	3-5	A	A	4
132	2	315M	1LE7504-3AA2	3-5	A	A	4	132	4	315M	1LE7504-3AB2	3-5	A	A	4	132	6	315L	1LE7504-3AC6	3-5	A	A	4
160	2	315L	1LE7504-3AA4	3-5	A	A	4	160	4	315L	1LE7504-3AB4	3-5	A	A	4								
200	2	315L	1LE7504-3AA6	3-5	A	A	4	200	4	315L	1LE7504-3AB6	3-5	A	A	4								

*Refer page 5 & 6 for details

Notes:

Si/Pn ratio will be higher than as required as per IEC 60034-12 for the NE design and therefore NE will not be indicated on the nameplate.

@ FS315/2P suitable for DOL operation at 50Hz, Please contact nearest sales office for VFD operation.

 Motors conforming to Commission Regulation (EU) 2019/1781 of October 1, 2019 and its amendment under the regulation (EU) 2021/341 of February 23, 2021 of the European Union as effective from 1st July 2023. Please contact nearest sales office for motors requiring CE Marking.

Ordering codes for Innomotics severe duty 1LE7-IE3 series of motors

Output	Pole	Frame size	Ordering Code (MLFB)*				Output	Pole	Frame size	Ordering Code (MLFB)*				Output	Pole	Frame size	Ordering Code (MLFB)*				Output	Pole	Frame size	Ordering Code (MLFB)*															
kW				12-13	14	15	16	kW				12-13	14	15	16	kW				12-13	14	15	16	kW				12-13	14	15	16	kW				12-13	14	15	16
																0.12	8	71	1LE7503-0CD3	2-3	A	A	4																
								0.25	4	71	1LE7503-0CB2	2-3	A	A	4	0.25	6	71	1LE7503-0CC3	2-3	A	A	4	0.25	8	80	1LE7503-0DD2	2-3	A	A	4	0.25	8	80	1LE7503-0DD3	2-3	A	A	4
0.37	2	71	1LE7503-OCA2	2-3	A	A	4	0.37	4	71	1LE7503-0CB3	2-3	A	A	4	0.37	6	80	1LE7503-0DC2	2-3	A	A	4	0.37	8	90S	1LE7503-0ED0	2-3	A	A	4	0.37	8	90S	1LE7503-0ED4	2-3	A	A	4
0.55	2	71	1LE7503-OCA3	2-3	A	A	4	0.55	4	80	1LE7503-0DB2	2-3	A	A	4	0.55	6	80	1LE7503-0DC3	2-3	A	A	4	0.55	8	90L	1LE7503-0ED4	2-3	A	A	4	0.55	8	90L	1LE7503-0ED4	2-3	A	A	4
0.75	2	80	1LE7503-ODA2	2-3	A	A	4	0.75	4	80	1LE7503-0DB3	2-3	A	A	4	0.75	6	90S	1LE7503-0EC0	2-3	A	A	4	0.75	8	100L	1LE7503-1AD4	2-3	A	A	4	0.75	8	100L	1LE7503-1AD5	2-3	A	A	4
1.1	2	80	1LE7503-ODA3	2-3	A	A	4	1.1	4	90S	1LE7503-0EB0	2-3	A	A	4	1.1	6	90L	1LE7503-0EC4	2-3	A	A	4	1.1	8	100L	1LE7503-1AD5	2-3	A	A	4	1.1	8	100L	1LE7503-1AD5	2-3	A	A	4
1.5	2	90S	1LE7503-OEA0	2-3	A	A	4	1.5	4	90L	1LE7503-0EB4	2-3	A	A	4	1.5	6	100L	1LE7503-1AC4	2-3	A	A	4	1.5	8	112M	1LE7503-1BD2	2-3	A	A	4	1.5	8	112M	1LE7503-1BD2	2-3	A	A	4
2.2	2	90L	1LE7503-OEA4	3-5	A	A	4	2.2	4	100L	1LE7503-1AB4	3-5	A	A	4	2.2	6	112M	1LE7503-1BC2	3-5	A	A	4	2.2	8	132S	1LE7503-1CD0	3-5	A	A	4	2.2	8	132S	1LE7503-1CD0	3-5	A	A	4
3.7	2	100L	1LE7503-1AA5	3-5	A	A	4	3.7	4	112M	1LE7503-1BB2	3-5	A	A	4	3.7	6	132S	1LE7503-1CC1	3-5	A	A	4	3.7	8	160M	1LE7503-1DD2	3-5	A	A	4	3.7	8	160M	1LE7503-1DD2	3-5	A	A	4
5.5	2	132S	1LE7503-1CA0	3-5	A	A	4	5.5	4	132S	1LE7503-1CB0	3-5	A	A	4	5.5	6	132M	1LE7503-1CC3	3-5	A	A	4	5.5	8	160M	1LE7503-1DD3	3-5	A	A	4	5.5	8	160M	1LE7503-1DD3	3-5	A	A	4
7.5	2	132S	1LE7503-1CA1	3-5	A	A	4	7.5	4	132M	1LE7503-1CB2	3-5	A	A	4	7.5	6	160M	1LE7503-1DC2	3-5	A	A	4	7.5	8	160L	1LE7503-1DD4	3-5	A	A	4	7.5	8	160L	1LE7503-1DD4	3-5	A	A	4
11	2	160M	1LE7503-1DA2	3-5	A	A	4	11	4	160M	1LE7503-1DB2	3-5	A	A	4	11	6	160L	1LE7503-1DC4	3-5	A	A	4	11	8	180L	1LE7503-1ED4	3-5	A	A	4	11	8	180L	1LE7503-1ED4	3-5	A	A	4
15	2	160M	1LE7503-1DA3	3-5	A	A	4	15	4	160L	1LE7503-1DB4	3-5	A	A	4	15	6	180L	1LE7503-1EC4	3-5	A	A	4	15	8	200L	1LE7503-2AD5	3-5	A	A	4	15	8	200L	1LE7503-2AD5	3-5	A	A	4
18.5	2	160L	1LE7503-1DA4	3-5	A	A	4	18.5	4	180M	1LE7503-1EB2	3-5	A	A	4	18.5	6	200L	1LE7503-2AC4	3-5	A	A	4	18.5	8	225S	1LE7503-2BD0	3-5	A	A	4	18.5	8	225S	1LE7503-2BD0	3-5	A	A	4
22	2	180M	1LE7503-1EA2	3-5	A	A	4	22	4	180L	1LE7503-1EB4	3-5	A	A	4	22	6	200L	1LE7503-2AC5	3-5	A	A	4	22	8	225M	1LE7503-2BD2	3-5	A	A	4	22	8	225M	1LE7503-2BD2	3-5	A	A	4
30	2	200L	1LE7503-2AA4	3-5	A	A	4	30	4	200L	1LE7503-2AB5	3-5	A	A	4	30	6	225M	1LE7503-2BC2	3-5	A	A	4																
37	2	200L	1LE7503-2AA5	3-5	A	A	4	37	4	225S	1LE7503-2BB0	3-5	A	A	4																								
45	2	225M	1LE7503-2BA2	3-5	A	A	4	45	4	225M	1LE7503-2																												

Ordering codes for Innomotics severe duty 1LE7-IE3 series of motors

Output	Pole	Frame size	Ordering Code (MLFB)*				Output	Pole	Frame size	Ordering Code (MLFB)*				
kW			12	13	14	15	kW			12	13	14	15	16
55	2	250M	1	2	3	4	55	4	250M	1	2	3	4	4
75	2	280S	1	2	3	4	75	4	280S	1	2	3	4	4
90	2	280M	1	2	3	4	90	4	280M	1	2	3	4	4
110	2	315S	1	2	3	4	110	4	315S	1	2	3	4	4
132	2	315M	1	2	3	4	132	4	315M	1	2	3	4	4
160	2	315L	1	2	3	4	160	4	315L	1	2	3	4	4
200	2	315L	1	2	3	4	200	4	315L	1	2	3	4	4

Output	Pole	Frame size	Ordering Code (MLFB)*				Output	Pole	Frame size	Ordering Code (MLFB)*				
kW			12	13	14	15	kW			12	13	14	15	16
37	6	250M	1	2	3	4	30	8	250M	1	2	3	4	4
45	6	280S	1	2	3	4	37	8	280S	1	2	3	4	4
55	6	280M	1	2	3	4	45	8	280M	1	2	3	4	4
75	6	315S	1	2	3	4	55	8	315S	1	2	3	4	4
90	6	315M	1	2	3	4	75	8	315M	1	2	3	4	4
110	6	315L	1	2	3	4	90	8	315L	1	2	3	4	4
132	6	315L	1	2	3	4	110	8	315L	1	2	3	4	4

Notes:

Si/Pn ratio will be higher than as required as per IEC 60034-12 for the NE design and therefore NE will not be indicated on the nameplate.

@ FS315/2P suitable for DOL operation at 50Hz, Please contact nearest sales office for VFD operation.

CE Motors conforming to Commission Regulation (EU) 2019/1781 of October 1, 2019 and its amendment under the regulation (EU) 2021/341 of February 23, 2021 of the European Union as effective from 1st July 2023. Ratings 75 - 200kW (both inclusive) in 2P, 4P & 6P are not covered as per regulation.

Please contact nearest sales office for CE marked 8P motors.

Innomotics severe duty 1LE7

Voltage code (Specified in MLFB positions 12 & 13)

Frequency 50Hz						Frequency 60Hz				
Position 12 & 13	Connection		Position 12 & 13	Connection		Short Code	Position 12 & 13	Standard 50Hz Power		Short Code
	Δ	Y		Δ	Y			Δ	Y	
18	200VΔ	-	90	220VΔ	-	M1Y	90	220VΔ	380VY	M2A
20	-	360VY	90	230VΔ	-	M1Y	90	380VΔ	660VY	M2B
21	-	380VY	90	240VΔ	-	M1Y	90	-	440VY	M2C
22	-	400VY	90	360VΔ	-	M1Y	90	440VΔ	-	M2D
23	-	415VY	90	440VΔ	-	M1Y	90	-	460VY	M2E
27	-	500VY	90	460VΔ	-	M1Y	90	460VΔ	-	M2F
33	380VΔ	-	90	480VΔ	-	M1Y	90	-	575VY	M2G
34	400VΔ	-	90	525VΔ	-	M1Y	90	575VΔ	-	M2H
35	415VΔ	-	90	-	660VY	M1Y	90	400VΔ	690VY	M2J
40	500VΔ	-	90	-	690VY	M1Y	90	-	480VY	M2K
43	(575VΔ)	-	-	-	-	-	90	480VΔ	-	M2L
46	660VΔ	-	-	-	-	-	90	230VΔ	400VY	M2M
47	690VΔ	-	-	-	-	-	-	Any other voltage apart		-
90	Any other voltage		-	-	-	M1Y	90	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 60Hz please enquire. • For 1LE75 and 1LE76 all above voltages are possible for frames 71 - 225. • For frames 250-315, please enquire with nearest sales office as not all above voltages may be possible.

Construction code (specified in MLFB position 14)

14 th	← 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
D	IM V6 / IM 1031
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 upto 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 (for frames upto 132M only)
L	IM V19 / IM 3631 standard flange (for frames upto 132M only)
M	IM V18 / IM 3611 standard flange (for frames upto 132M only)
N	IM B34 / IM 2101 standard flange (for frames upto 132M only)
O	
T	IM B6 / IM 1051
U	IM B7 / IM 1061
V	IM B8 / IM 1071
W	IMV15
Y	IMV36 (IMV35 when used with B59)

Motor protection (specified in MLFB position 15)

15 th	← 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)
	Addition to Position 15 (Value of Position 15 = B)
B	-Z = Q11 Additional 3x PTC thermistors for tripping
	Addition to Position 15 (Value of Position 15 = B or C with or without Q11)
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.

Terminal box position (specified in MLFB position 16)

16 th	← Position in the MLFB
4	Terminal box on TOP
5	Terminal box on RHS (as viewed from DE)
6	Terminal box on LHS (as viewed from DE)
7	Terminal box at bottom (only for horizontal constructions without feet)

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