LS
totally enclosed three-phase asynchronous motors

General information

Efficiency class IE1

Totallyenclosedthree-phaseasynchronous motors, LS series, according to IEC 60034, 60038, 60072 powers 0.09 to 200 kW, frame sizes 56 to 315 mm.
• Single phase: 2, 4, 6 and 8 poles; 230/400V or 400V Δ, 50Hz.
• Two speed: 2/4, 4/6, 4/8, 6/8, 6/12 poles; centrifugal or general use; PAM, Dahlander or seperate coils; 400V Y or Δ, 50Hz.

The selection tables for motors in this catalogue allow for:
• Direct on line starting on the mains supplies 230V or 400V operating in:
- delta connection (Δ) at 230V,
- star connection (Y) at 400V.
• The star/delta start (Y/Δ) on mains supply 400V with:
- star connection (Y) during initial starting,
- delta connection (Δ) on 400V duty.

Finition
Assembled with protected screws.
RAL 6000 (green) finishing paint.
Protection of the flange and shaft end against atmospheric corrosion.
Individual anti-shock packaging.
Conception multipositions in B5/V1-B14/V18.

Mains supply
• Standard according to the IEC 60038:
- 230/400 V +10% -10% at 50Hz.
Standard construction suitable for the following power supplies:
- 220/380V +5% -5% at 50Hz,
- 230/400V +10% -10% at 50Hz,
- 240/415V +5% -5% at 50Hz,
- 265/460V +5% -5% t 60Hz.
Voltages for the powers equal or greater than 3kW:
- 380V Δ +5% -5% at 50Hz,
- 400V Δ +10% -10% at 50Hz,
- 415V Δ +5% -5% at 50Hz,
- 460V Δ +5% -5% at 60Hz.
Construction suitable for Y/Δ starting.

Description of the LS aluminium three-phase motors

Component	Materials	Remarks
Finned housing	Aluminium alloy	- with bolt-on or cast foot, or without foot - 4 or 6 mounting holes for the foot housings - lifting rings for frame size ≥ 132 M, option in 132 S and 112 - optional earth terminal
Stator	Insulated low carbon magnetic steel laminations Electrolytic copper	- the low carbon content guarantees long term stability of the characteristics - assembled laminated pack - semi-enclosed slots - insulation system class F
Rotor	Insulated low carbon magnetic steel laminations Aluminium (A5L)	- inclined slots - squirrel cage pressure die cast in aluminium (or alloy for special applications) - mounted on the shaft by heat shrinking - dynamically balanced rotor, 1/2 key
Shaft	Steel	- for frame size < 132: • shaft end fitted with screw and washer • closed keyway - for frame size ≥ 132: • tapped centre hole • open keyway
End shields	Aluminium alloy	- LS 56 - 63 - 71 front and rear - LS 80 - 90 rear
	Cast iron	- LS 80 - 90 front (optional for LS 80 and 90 rear) - LS 100 to 315 front and rear
Bearing and lubrication		- ball bearings - 2RS type lubricated for life from LS 56 to LS 71 included - ZZ types lubricated for life from LS 80 to LS 180 included - semi-protected or open types for frame size 200 - regreasable open types from 225 upwards - rear preloaded bearings
Labyrinth seals Lipseals	Technopolymer or steel Synthetic rubber	- lipseal or front jet deflector for all flange motors - lipseal, jet deflector or labyrinth seals for foot motor
Fan	Composite material or aluminium alloy	- 2 directions of rotation: straight blades
Fan cover	Composite material or steel sheet metal	- on request, fitted with a drip cover for operation in vertical position, shaft facing down
Terminal box	Composite material or aluminium alloy	- IP 55 - rotatable, mounted opposite position to the feet - fitted with a 6 steel stud standard terminal board (brass as an optional extra) - terminal box delivered fitted with cable glands (optionally without cable glands) - 1 earth terminal in all terminal boxes

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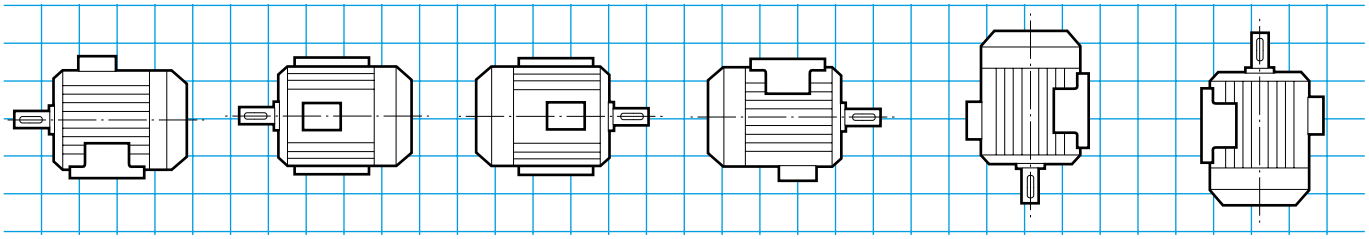
Mounting positions

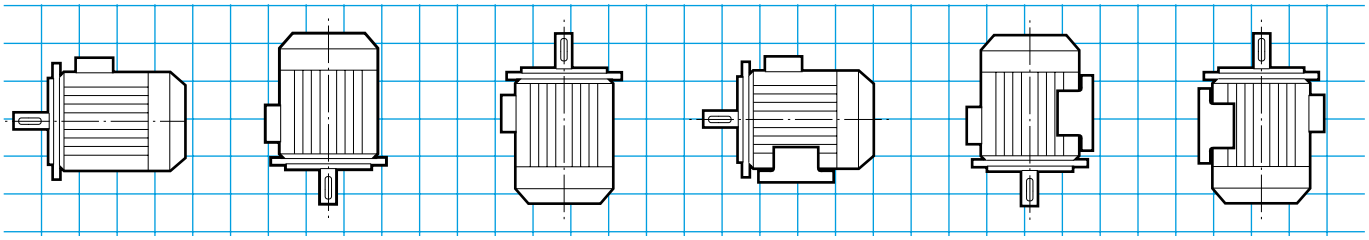
Foot mounted motors



IM 1001 (IM B3) **IM 1051** (IM B6) **IM 1061** (IM B7) **IM 1071** (IM B8) **IM 1011** (IM V5) **IM 1031** (IM V6)

(FF) flange with plain holes mounted motors

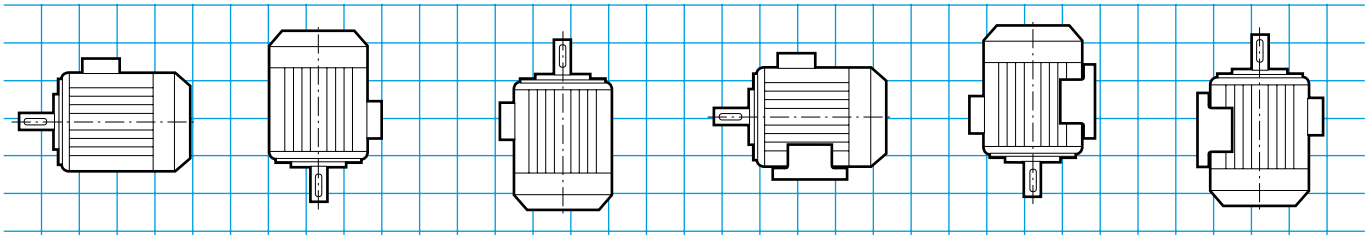
• Possible position IM 3001 (IM B5) up to 225 frame size inclusive



IM 3001 (IM B5) **IM 3011** (IM V1) **IM 3031** (IM V3) **IM 2001** (IM B35) **IM 2011** (IM V15) **IM 2031** (IM V36)

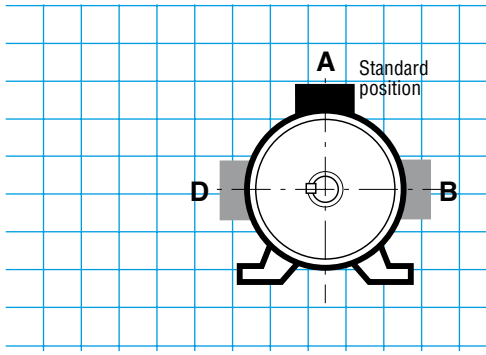
(FT) flange with tapped holes mounted motors

• Possible positions up to 132 frame size inclusive



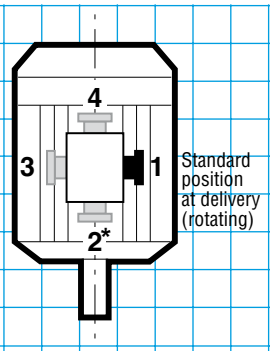
IM 3601 (IM B14) **IM 3611** (IM V18) **IM 3631** (IM V19) **IM 2101** (IM B34) **IM 2111** (IM V58) **IM 2131** (IM V69)

Terminal box positions in relation to the motor shaft end



A: standard

Cable gland positions in relation to the motor shaft end



1: standard

* Position 2 not recommended and not feasible on standard motor fitted with plain hole flange (FF)

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Adaptation possibilities

Leroy-Somer offers, for use with the LS totally enclosed three-phase asynchronous motors, many options which meet the needs of highly diverse applications. They are described below and in the chapters relating to gearboxes and to speed variation.
For other variants or any specific adaptation, consult the technical specialists at Leroy-Somer.

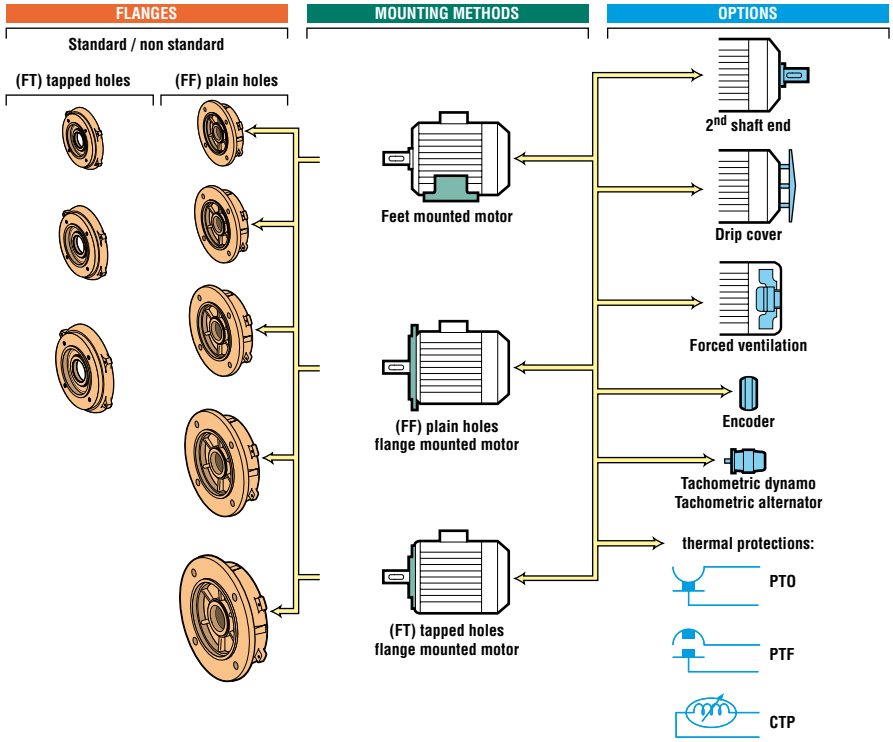
The LS three-phase motors may be associated to:

- gearboxes
- electronic variable speed drive[1]

The options:

- drip cover
- anti-blocking cover
- forced ventilation
- thermal protection
- aluminium terminal box
- brass cable glands
- cable glands of different dimensions
- switch
- cables output
- stainless steel plate
- second shaft end
- non standard flanges
- renforced sealing
- plug-in connector

1. Conforming to regulations for use as indicated by the standard IEC 34-17.



Designation / Codification

4P 1500 min^{-1}	LS	180	MT	18.5 kW	IM 1001 (IM B3)	400 V∆	50 Hz	IP 55
Speed polarity	Motor type	IEC 60072-1 frame size	Housing designation and builder index	Rated power	IEC 60034-7 mounting position	Power supply voltage	Power supply frequency	IEC 60034-5 protection

Codification example:
LS three-phase asynchronous motor, 1500 min^{-1}, 18.5 kW IM 1001 (IM B3), 400 V ∆

Designation	Code
4P LS 180 MT 18.5 kW IM 1001 (IM B3) 400 V ∆	EA4 18 302

Codification example:
Addition of a drip cover

Designation	Code
• drip cover	MATP 1024

The table above is an example.
It enables the creation of the designation for the required product.
The designation corresponds to a product code.
The product codes that are present in the selection grids can be used directly. They simplify the ordering process.
The codification table is incorporated in the price list with the designations list.

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Selection

IP 55 - 50 Hz - Class F - ΔT 80 K - 230 V Δ / 400 V Y and 400 V Δ - S1 - Class IE1

2 poles 3000 min-1

								IE1								
	Rated power	Rated speed	Rated torque	Rated current	Power factor			Efficiency* IEC 60034-2-1; 2007			Starting current/ Rated current	Starting torque/ Rated torque	Maximum torque/ Rated torque	Moment of inertia	Weight	Noise
	P_N	N_N	M_N	$I_{N\ (400V)}$	Cos Phi			η			Id / In	Md/Mn	M_M/Mn	J	IM B3	LP
Type	kW	min-1	N.m	A	4/4	3/4	2/4	4/4	3/4	2/4				kg.m2	kg	db(A)
LS 56 M	0.09	2860	0.3	0.44	0.55	0.45	0.4	54	45.2	37.1	5.0	5.3	5.4	0.00015	3.8	54
LS 56 M	0.12	2820	0.4	0.5	0.6	0.55	0.45	58.7	54	45.2	4.6	4.0	4.1	0.00015	3.8	54
LS 63 M	0.18	2790	0.6	0.52	0.75	0.65	0.55	67.4	66.9	59.3	5.0	3.3	2.9	0.00019	4.8	57
LS 63 M	0.25	2800	0.9	0.71	0.75	0.65	0.55	67.8	67.3	59.2	5.4	3.2	2.9	0.00025	6	57
LS 71 L	0.37	2800	1.3	0.98	0.8	0.7	0.6	68.4	67.6	63.9	5.2	3.3	3.9	0.00035	6.4	62
LS 71 L	0.55	2800	1.9	1.32	0.8	0.7	0.55	75.7	75.2	71.1	6.0	3.2	3.1	0.00045	7.3	62
LS 71 L	0.75	2780	2.6	1.7	0.85	0.75	0.65	74.6	75.8	73.1	6.0	3.3	2.9	0.0006	8.3	62
LS 80 L	0.75	2840	2.5	1.64	0.87	0.8	0.68	**75.7**	76.1	73.3	5.9	2.4	2.2	0.0007	8.2	61
LS 80 L	1.1	2837	3.7	2.4	0.84	0.77	0.65	**77.3**	78.3	76.4	5.8	2.7	2.4	0.0009	9.7	61
LS 80 L	1.5	2859	5.0	3.2	0.83	0.76	0.62	**79.3**	80	78.1	7.0	3.2	2.8	0.0011	11.3	61
LS 90 S	1.5	2870	5.0	3.4	0.81	0.72	0.58	**80**	79.5	75.9	8.0	3.9	4.0	0.0014	12	64
LS 90 L	1.8	2865	6.0	3.6	0.86	0.8	0.69	**81.9**	82.5	81.4	8.0	3.6	3.6	0.0017	14	64
LS 90 L	2.2	2862	7.3	4.3	0.88	0.83	0.73	**82**	83	82	7.7	3.7	3.3	0.0021	16	64
LS 100 L	3	2868	10.0	6.3	0.81	0.73	0.59	**82.5**	82.6	80.1	7.5	3.8	3.9	0.0022	20	66
LS 100 L	3.7	2850	12.5	8	0.85	0.76	0.62	**82.7**	82.2	77.2	8.6	3.1	3.1	0.0022	21	66
LS 112 M	4	2877	13.3	7.8	0.85	0.78	0.65	**85**	85.3	83.7	7.8	2.9	2.9	0.0029	24.4	66
LS 112 MG	5.5	2916	18.0	10.5	0.88	0.81	0.71	**86.1**	86.4	84.7	9.0	3.1	3.5	0.0076	33	66
LS 132 S	5.5	2916	18.0	10.5	0.88	0.81	0.71	**86.1**	86.4	84.7	9.0	3.1	3.5	0.0076	34.4	72
LS 132 S	7.5	2905	24.5	14.7	0.85	0.78	0.63	**86**	85.8	83.2	8.7	3.4	3.6	0.0088	39	72
LS 132 M	9	2910	29.5	17.3	0.85	0.8	0.71	**87.9**	88.5	87.5	8.6	2.5	3.5	0.016	49	72
LS 132 M	11	2944	35.7	20.7	0.86	0.81	0.69	**88.2**	88.3	86.7	7.5	2.7	3.4	0.018	54	72
LS 160 MP	11	2944	35.7	20.7	0.86	0.81	0.69	**88.2**	88.3	86.7	7.5	2.7	3.4	0.019	62	72
LS 160 MP	15	2935	48.8	28.4	0.85	0.79	0.71	**89.3**	89.7	88.6	8.1	3.0	3.5	0.023	72	72
LS 160 L	18.5	2934	60.2	33.7	0.87	0.83	0.75	**90.09**	90.6	90.0	8.0	3.0	3.3	0.044	88	72
LS 180 MT	22	2938	71.5	39.9	0.87	0.84	0.76	**90.6**	91.2	90.8	8.1	3.1	3.1	0.052	99	72
LS 200 LT	30	2946	97.2	52.1	0.9	0.87	0.82	**91.5**	92.1	91.7	8.6	2.7	3.4	0.089	154	73
LS 200 L	37	2950	120	65	0.89	0.87	0.82	**92.1**	92.6	92.3	7.4	2.6	3.0	0.12	180	73
LS 225 MT	45	2950	146	78	0.9	0.87	0.82	**92.5**	92.7	92.7	7.5	2.8	3.1	0.14	200	73
LS 250 MZ	55	2956	178	96	0.89	0.86	0.8	**92.9**	93.6	92.5	8.3	3.1	3.4	0.173	235	78
LS 280 SC	75	2968	241	129	0.9	0.87	0.82	**93.5**	93.6	93.1	8.5	2.6	3.4	0.39	330	79
LS 280 MC	90	2968	290	154	0.9	0.88	0.83	**93.8**	94.0	93.6	8.4	2.6	3.3	0.47	375	79
LS 315 SN	110	2964	354	184	0.92	0.9	0.86	**94**	94.2	93.9	8.6	2.7	3.4	0.55	445	80
LS 315 MP	132	2976	424	227	0.89	0.87	0.82	**94.4**	94.2	93.1	7.6	2.8	2.9	1.67	715	83
LS 315 MR	160	2976	513	271	0.9	0.88	0.84	**94.6**	94.6	93.7	7.6	2.9	3.1	1.97	820	83
LS 315 MR•	200	2982	640	350	0.87	0.86	0.82	**94.8**	94.3	92.9	9.3	3.8	3.9	1.97	845	83

• Temperature rise class F

* This standard replaces the IEC 60034-2; 1996.

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Selection

IP 55 - 50 Hz - Class F - ΔT 80 K - 230 V Δ / 400 V Y and 400 V Δ - S1 - Class IE1

4 poles 1500 min-1

								IE1								
	Rated power	Rated speed	Rated torque	Rated current	Power factor			Efficiency* IEC 60034-2-1; 2007			Starting current/ Rated current	Starting torque/ Rated torque	Maximum torque/ Rated torque	Moment of inertia	Weight	Noise
	P_N	N_N	M_N	$I_{N\ (400V)}$	Cos Phi			η			Id / In	Md/Mn	M_M/Mn	J	IM B3	LP
Type	kW	min-1	N.m	A	4/4	3/4	2/4	4/4	3/4	2/4				kg.m2	kg	db(A)
LS 56 M	0.06	1380	0.4	0.29	0.76	0.69	0.62	41.8	37.1	29.7	2.8	2.4	2.5	0.00025	4	47
LS 56 M	0.09	1400	0.6	0.39	0.6	0.52	0.42	55.2	49.6	42.8	3.2	2.8	2.8	0.00025	4	47
LS 63 M	0.12	1380	0.8	0.44	0.7	0.58	0.47	56.1	53.9	46.8	3.2	2.4	2.3	0.00035	4.8	49
LS 63 M	0.18	1390	1.2	0.64	0.65	0.55	0.44	61.6	58	51.3	3.7	2.6	2.6	0.00048	5	49
LS 71 M	0.25	1425	1.7	0.8	0.65	0.55	0.44	69.4	66.8	59.8	4.6	2.7	2.9	0.00068	6.4	49
LS 71 M	0.37	1420	2.5	1.06	0.7	0.59	0.47	72.1	71.7	66.4	4.9	2.4	2.8	0.00085	7.3	49
LS 71 L	0.55	1400	3.8	1.62	0.7	0.62	0.49	70.4	70	65.1	4.8	2.3	2.5	0.0011	8.3	49
LS 80 L	0.55	1410	3.7	1.42	0.76	0.68	0.55	73.2	69.1	62.1	4.5	2.0	2.3	0.0013	8.2	47
LS 80 L	0.75	1400	5.1	2.01	0.77	0.71	0.59	**72.1**	72.8	70.1	4.5	2.0	2.2	0.0018	9.3	47
LS 80 L	0.9	1425	6.0	2.44	0.73	0.67	0.54	**73.2**	72.9	70.3	5.8	3.0	3.0	0.0024	10.9	47
LS 90 S	1.1	1429	7.4	2.5	0.84	0.77	0.64	**76.7**	78.2	76.6	4.8	1.6	2.0	0.0026	11.5	48
LS 90 L	1.5	1428	10.0	3.4	0.82	0.74	0.6	**79.3**	79.9	77.5	5.3	1.8	2.3	0.0032	13.5	48
LS 90 L	1.8	1438	12.0	4	0.82	0.75	0.61	**79.4**	80	77.6	6	2.1	3.2	0.0037	15.2	48
LS 100 L	2.2	1436	14.6	4.8	0.81	0.73	0.59	**80.3**	81.2	79.3	5.9	2.1	2.5	0.0043	20	48
LS 100 L	3	1437	19.9	6.5	0.81	0.72	0.59	**82.8**	83.4	81.8	6	2.5	2.8	0.0055	22.5	48
LS 112 M**	4	1438	26.6	8.3	0.83	0.76	0.57	**81.7**	81.6	80.6	7.1	2.5	3.0	0.0067	24.9	49
LS 132 S	5.5	1447	36.7	11.1	0.83	0.79	0.67	**84.7**	85.6	84.6	6.3	2.4	2.8	0.014	36.5	49
LS 132 M	7.5	1451	49.4	15.2	0.82	0.74	0.61	**86.0**	86.2	84.4	7	2.4	2.9	0.019	54.7	62
LS 132 M	9	1455	59.1	18.1	0.82	0.74	0.62	**86.8**	87.2	86.4	6.9	2.2	3.1	0.023	59.9	62
LS 160 MP	11	1454	72.2	21	0.86	0.79	0.67	**87.7**	88.4	87.5	7.7	2.3	3.2	0.03	70	62
LS 160 LR	15	1453	98.6	28.8	0.84	0.78	0.69	**88.7**	89.3	88.3	7.5	2.9	3.6	0.036	86	62
LS 180 MT	18.5	1456	121	35.2	0.84	0.79	0.67	**89.9**	90.6	90.5	7.6	2.7	3.2	0.085	100	64
LS 180 LR	22	1456	144	41.7	0.84	0.79	0.68	**90.2**	91.0	90.8	7.9	3.0	3.3	0.096	112	64
LS 200 LT	30	1460	196	56.3	0.84	0.8	0.69	**90.8**	91.5	91.2	6.6	2.9	2.9	0.151	165	64
LS 225 ST	37	1468	241	69	0.84	0.8	0.7	**92.0**	92.7	92.7	6.3	2.7	2.6	0.24	205	64
LS 225 MR	45	1468	293	84	0.84	0.8	0.7	**92.5**	93.1	93.0	6.3	2.7	2.6	0.29	235	64
LS 250 ME	55	1478	355	102	0.84	0.8	0.71	**93.1**	93.3	92.7	7	2.7	2.8	0.63	320	66
LS 280 SC	75	1478	485	138	0.84	0.8	0.71	**93.5**	93.9	93.5	7.2	2.8	2.9	0.83	380	69
LS 280 MD	90	1478	581	165	0.84	0.8	0.71	**93.5**	93.8	93.5	7.6	3.0	3.0	1.03	450	69
LS 315 SN	110	1477	711	201	0.84	0.79	0.7	**94.1**	94.5	94.2	7.6	3.0	3.2	1.04	470	76
LS 315 MP	132	1484	849	238	0.85	0.82	0.74	**94.2**	94.4	93.8	7.6	2.9	3.0	2.79	750	70
LS 315 MR	160	1484	1030	287	0.85	0.82	0.74	**94.7**	94.7	93.9	7.7	2.9	3.0	3.27	845	70
LS 315 MR•	200	1486	1285	362	0.84	0.79	0.69	**94.9**	94.9	94.2	8.1	3.1	3.4	3.27	845	70

• Temperature rise class F
* This standard replaces the IEC 60034-2; 1996.
** These motors do not reach the level of efficiency IE1.

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Selection

IP 55 - 50 Hz - Class F - ΔT 80 K - 230 V Δ / 400 V Y and 400 V Δ - S1 - Class IE1

6 poles 1000 min-1

IE1

Type	Rated power P_N kW	Rated speed N_N min-1	Rated torque M_N N.m	Rated current $I_{N\ (400V)}$ A	Power factor Cos Phi 4/4	Power factor Cos Phi 3/4	Power factor Cos Phi 2/4	Efficiency* IEC 60034-2-1; 2007 η 4/4	Efficiency* IEC 60034-2-1; 2007 η 3/4	Efficiency* IEC 60034-2-1; 2007 η 2/4	Starting current/ Rated current Id / In	Starting torque/ Rated torque Md/Mn	Maximum torque/ Rated torque M_M/Mn	Moment of inertia J kg.m2	Weight IM B3 kg	Noise LP db(A)
LS 56 M	0.045	860	0.5	0.29	0.66	0.59	0.52	34	31.5	25.3	2	1.7	1.7	0.00025	4	54
LS 56 M	0.06	850	0.7	0.39	0.67	0.6	0.53	33.4	30.9	25	2	1.7	1.7	0.00025	4	54
LS 63 M	0.09	860	1.0	0.46	0.8	0.7	0.63	35	32	26	2.1	1.6	1.6	0.0006	5.5	48
LS 71 M	0.12	950	1.2	0.75	0.51	0.44	0.38	45.6	40.5	32	3	2.4	3.0	0.0007	6.5	52
LS 71 M	0.18	945	1.8	0.95	0.52	0.46	0.38	52.8	48.8	40.7	3.3	2.3	2.9	0.0011	7.6	52
LS 71 L	0.25	915	2.6	1.15	0.6	0.52	0.43	51.9	49.6	42.2	3.1	2.0	2.2	0.0013	7.9	52
LS 80 L	0.25	955	2.5	0.85	0.67	0.64	0.48	62.8	62.7	56	3.9	1.6	1.8	0.0024	8.4	41
LS 80 L	0.37	950	3.7	1.1	0.72	0.67	0.57	65.8	59.7	59	4.3	1.7	2.2	0.0032	9.7	41
LS 80 L	0.55	950	5.5	1.8	0.64	0.6	0.47	68	63	55	4.9	2.1	2.6	0.0042	11	41
LS 90 S	0.75	930	7.7	2.1	0.77	0.66	0.54	**70.5**	69.3	63.5	4.7	2.4	2.6	0.0039	13.5	51
LS 90 L**	1.1	915	11.5	3	0.76	0.67	0.55	**70.7**	70.0	66.2	4.5	2.4	2.5	0.0048	15.2	51
LS 100 L**	1.5	905	15.8	4.2	0.74	0.62	0.52	**70.8**	70.8	65.0	5.6	2.5	2.7	0.0058	20	50
LS 112 M**	2.2	905	23.2	5.8	0.76	0.66	0.53	**73.2**	73.3	68.1	6	2.8	2.7	0.0087	24.2	51
LS 132 M**	3	957	30.3	6.8	0.78	0.71	0.59	**78.2**	79.3	77.2	6	2.0	2.6	0.018	38.3	55
LS 132 M	4	961	39.7	9.3	0.75	0.66	0.56	**81.4**	82.3	80.9	5.9	2.5	2.9	0.034	53.3	55
LS 132 M**	5.5	960	54.7	13.3	0.71	0.65	0.52	**81.8**	82.7	80.8	5.5	2.5	2.8	0.039	59.4	55
LS 160 M	7.5	969	73.9	16.3	0.79	0.74	0.63	**86.1**	86.4	84.9	4.7	1.7	2.5	0.089	77	56
LS 160 L	11	968	109	23.4	0.78	0.71	0.64	**86.77**	87.2	85.9	4.6	1.8	2.6	0.105	85	56
LS 180 LR	15	968	148	31.9	0.78	0.71	0.61	**87.7**	88.0	87.0	5.4	1.8	2.6	0.139	110	60
LS 200 LT	18.5	970	182	37	0.81	0.76	0.65	**88.8**	89.2	88.3	6.4	2.4	2.8	0.236	160	62
LS 200 L	22	972	216	43.6	0.81	0.76	0.65	**89.4**	89.7	88.8	6	2.0	2.7	0.295	190	62
LS 225 MR	30	968	296	59.5	0.81	0.79	0.72	**90.4**	91.2	91.0	6	2.2	2.5	0.39	235	63
LS 250 ME	37	978	361	71.1	0.81	0.79	0.69	**91.5**	92.1	92.0	6.2	2.3	2.5	0.85	305	65
LS 280 SC	45	978	439	86.5	0.81	0.79	0.69	**91.6**	92.2	91.9	6.2	2.3	2.5	0.99	340	65
LS 280 MC	55	978	537	106	0.81	0.79	0.72	**92**	93.1	93.4	6	2.4	2.5	1.19	385	65
LS 315 SN	75	983	729	142	0.82	0.78	0.67	**92.8**	92.9	92.3	6.5	2.5	2.7	1.3	438	65
LS 315 MP	90	980	877	164	0.85	0.83	0.76	**92.9**	93.1	92.4	7.2	2.4	2.9	3.74	760	74
LS 315 MR	110	980	1072	200	0.85	0.83	0.76	**93.3**	93.6	93.0	7.2	2.4	2.9	4.36	850	74
LS 315 MR	132	986	1278	242	0.83	0.8	0.72	**94.2**	94.3	93.7	6.6	2.40	2.50	4.36	830	74

* This standard replaces the IEC 60034-2; 1996.
** These motors do not reach the level of efficiency IE1.

LS
totally enclosed three-phase asynchronous motors

Selection

IP 55 - 50 Hz - Class F - ΔT 80 K - 230 V Δ / 400 V Y and 400 V Δ - S1

8 poles 750 min-1

	Rated power	Rated speed	Rated torque	Rated current	Power factor			Efficiency IEC 60034-2-1; 2007			Starting current/ Rated current	Starting torque/ Rated torque	Maximum torque/ Rated torque	Moment of inertia	Weight	Noise
	P_N	N_N	M_N	$I_{N\ (400V)}$	Cos Phi			η			Id / In	Md/Mn	M_M/Mn	J	IM B3	LP
Type	kW	min-1	N.m	A	4/4	3/4	2/4	4/4	3/4	2/4				kg.m2	kg	db(A)
LS 71 L	0.09	690	1.3	0.5	0.55	0.45	0.4	42	40	34	2.8	1.3	1.5	0.0013	8	40
LS 71 L	0.12	650	1.8	0.9	0.55	0.45	0.4	42	40	34	2.1	1.3	1.4	0.0013	8	40
LS 80 L	0.18	705	2.4	0.79	0.63	0.54	0.45	50	46	41	2.9	1.5	1.9	0.0031	9.7	41
LS 80 L	0.25	700	3.4	0.98	0.68	0.6	0.51	52	50	43	2.8	1.7	1.9	0.0041	11.3	41
LS 90 L	0.37	685	5.2	1.2	0.72	0.63	0.52	60	60	54	3.8	1.7	1.8	0.0038	13.5	43
LS 90 S	0.37	685	5.2	1.2	0.72	0.63	0.52	60	60	54	3.8	1.7	1.8	0.0038	13.5	43
LS 90 L	0.55	670	7.8	1.7	0.72	0.61	0.52	61.5	60	57	3.5	1.7	1.7	0.0047	15.2	43
LS 100 L	0.75	670	10.7	2.4	0.71	0.58	0.47	61.5	59.5	53	3.5	1.8	2.2	0.0047	18	43
LS 100 L	1.1	670	15.7	3.7	0.68	0.6	0.49	61	60.5	56	3.7	2.0	2.2	0.0068	21.8	43
LS 112 MG	1.5	710	20.2	4.7	0.64	0.55	0.43	70.1	67.1	60.6	3.8	2.0	2.1	0.015	24	49
LS 132 SM	2.2	713	29.5	6.1	0.68	0.56	0.45	75.3	75.7	69.2	4	1.7	2.0	0.0253	45.6	54
LS 132 M	3	712	40.2	8	0.65	0.56	0.45	78.1	81.2	77.3	4.3	1.9	2.2	0.033	53.9	54
LS 160 M	4	718	53.2	11	0.63	0.55	0.43	81.6	81.7	79.6	3.9	1.7	2.3	0.068	84	66
LS 160 M	5.5	716	73.4	15.1	0.63	0.55	0.43	81.7	81.9	80.2	3.9	1.7	2.3	0.071	89	66
LS 160 L	7.5	714	100	20.6	0.63	0.55	0.43	81.8	82.4	81	3.9	1.9	2.3	0.09	101	66
LS 180 L	11	720	146	25.6	0.72	0.68	0.57	84.5	84.8	82.7	3.8	1.4	1.9	0.205	140	68
LS 200 L	15	725	198	32.9	0.75	0.7	0.57	86.3	86.5	84.9	4.4	1.6	2.1	0.27	185	65
LS 225 ST	18.5	725	244	42.4	0.72	0.66	0.54	86.1	86.3	84.8	4.2	1.6	2.1	0.33	210	65
LS 225 MR	22	725	290	51.9	0.7	0.63	0.51	86.1	85.9	83.8	4.4	1.9	2.3	0.4	240	65
LS 250 ME	30	732	391	60.7	0.78	0.74	0.62	90.2	90.9	89.7	5.8	1.6	2.4	0.86	312	65
LS 280 SC	37	731	483	73.8	0.79	0.73	0.63	90.4	90.8	90	5.6	1.6	2.4	0.92	334	65
LS 280 MC	45	730	589	88.5	0.8	0.76	0.64	90.5	91.4	90.1	5.4	1.6	2.3	1.13	378	65
LS 315 SP	55	738	712	105	0.81	0.78	0.71	92.1	92.1	91.1	5.4	1.8	2.4	3.1	660	74
LS 315 MR	75	738	971	143	0.81	0.78	0.71	92.5	92.7	92	5.4	1.8	2.4	4.38	815	74

LS
multi-speed closed three-phase asynchronous motors

Selection

2-4 Poles 3000-1500 min⁻¹

Use: centrifugal machines
1 winding (Dahlander) - PTO thermal protection -n/c
IP 55 - 50 Hz - Class F - ΔT 80 K - 400 V - S1

The motors are for use with quadratic resistive torque machines (centrifugal machines).
The high speed power (GV) is that of the standard motor having the same speed in the same frame size (from 80 to 315 included).
The motors connection is provided only for one power supply voltage (Dahlander connection) and it does not allow star delta starting.

Type		Rated power at 50 Hz P_N kW	Rated speed N_N min⁻¹	Rated current I_N (400 V) A	Power factor Cos φ 100%	Efficiency IEC 60034-2-1; 2007 η 100%	Starting torque / Rated torque I_D / I_N	Weight IM B3 kg
LS 71 M	GV[1]	0.37						8.3
	PV[2]	0.075						
LS 71 M	GV	0.55	2810	1.4	0.9	67	4.7	8.3
	PV	0.11	1420	0.4	0.7	71	4.6	
LS 80 L	GV	1.1	2810	2.5	0.87	70	5.2	10.9
	PV	0.25	1420	0.66	0.78	68	4.6	
LS 90 S	GV	1.5	2850	3.8	0.82	68.1	5.1	14
	PV	0.35	1440	0.9	0.77	73	5.7	
LS 90 L	GV	2.2	2840	4.8	0.9	72.2	5.8	15.2
	PV	0.6	1450	1.5	0.82	69	5.2	
LS 100 L	GV	3	2920	6.6	0.84	76.3	6.8	24.5
	PV	0.8	1450	1.7	0.82	81	5.8	
LS 112 MU	GV	4.5	2910	9.9	0.83	77.4	6.9	37
	PV	1.3	1460	3.1	0.75	78.1	6	
LS 132 SM	GV	6	2895	13.2	0.84	76.4	6.2	50
	PV	1.6	1440	3.7	0.79	77.1	5.5	
LS 132 M	GV	9	2920	18.6	0.85	80.5	7.3	60
	PV	2.5	1440	5.6	0.79	79.2	6.2	
LS 160 M	GV	13.5	2920	26	0.87	84.9	6.4	85
	PV	3.3	1465	6.3	0.85	87	6.4	
LS 160 L	GV	19	2925	35.3	0.89	86	7.3	100
	PV	4.5	1465	8.4	0.88	85.9	6.7	
LS 180 LU	GV	24	2935	44.5	0.89	86.2	7.5	165
	PV	8	1455	15.2	0.87	85.9	5	
LS 200 L	GV	31	2955	55.9	0.91	86.7	8	205
	PV	11	1465	20.2	0.89	87	5.2	
LS 200 LU	GV	40	2955	71	0.90	88.8	8	235
	PV	14	1465	25.1	0.88	90.1	5.2	
LS 225 MG	GV	50	2970	87	0.90	90.9	8.8	320
	PV	17	1476	30.9	0.85	90.8	5.5	
LS 250 ME	GV	59	2970	103	0.90	90.9	8.8	340
	PV	20	1476	36.4	0.85	90.9	5.5	
LS 250 ME	GV	70	2970	122	0.90	90.9	8.8	380
	PV	24	1476	43.7	0.85	90.9	5.5	
LS 280 MD	GV	85	2970	148	0.90	90.9	8.8	450
	PV	30	1476	54.6	0.85	90.9	5.5	
LS 315 MR	GV	100	2975	168	0.92	92.3	8.5	825
	PV	35	1485	60.9	0.88	93.1	5.5	

1. GV: High speed. 2. PV: Low speed.

4-6 Poles 1500-1000 min⁻¹

Use: centrifugal machines
1 winding (PAM)[1]
IP 55 - 50 Hz - Class F - ΔT 80 K - 400 V - S1

The motors are for use with quadratic resistive torque machines (centrifugal machines).
The high speed power (GV) is that of the standard motor having the same speed in the same frame size (from 80 to 315 included).
The motors connection is procvided only for one power supply voltage (Dahlander connection) and it does not allow star delta starting.

Type		Rated power at 50 Hz P_N kW	Rated speed N_N min⁻¹	Rated current I_N (400 V) A	Power factor Cos φ 100%	Efficiency IEC 60034-2-1; 2007 η 100%	Starting torque / Rated torque I_D / I_N	Weight IM B3 kg
LS 80 L	GV[2]	0.75	1400	1.8	0.87	65	3.8	10.9
	PV[3]	0.25	905	0.9	0.88	44	2.1	
LS 90 SL	GV	1.1	1420	2.6	0.79	75	6	14
	PV	0.37	940	2.2	0.64	55	3.3	
LS 90 L	GV	1.5	1425	3.6	0.8	76.1	6.1	15.2
	PV	0.55	940	1.5	0.63	55	3.3	
LS 100 L	GV	2.2	1400	4.8	0.86	75.2	6.8	24.5
	PV	0.75	940	2.3	0.75	61	4.2	
LS 100 L	GV	3	1410	6.7	0.84	75.3	6.6	24.5
	PV	1.1	940	3.2	0.76	63	4.4	
LS 112 MU	GV	4	1450	9	0.78	80.3	7	37
	PV	1.5	965	4.7	0.70	65.1	3.6	
LS 132 SM	GV	5.5	1460	11.7	0.82	82.4	6.4	55
	PV	1.8	970	7.4	0.70	68.2	4.4	
LS 132 M	GV	7.5	1445	15.5	0.84	84.4	7	60
	PV	2.5	975	6.2	0.62	67.3	4	

1. 2 separate windings, see page A2.9. 2. GV: High speed. 3. PV: Low speed.

LS
multi-speed closed three-phase asynchronous motors

Selection

Use: centrifugal machines
2 separate windings[1] - PTO thermal protection -n/c
IP 55 - 50 Hz - Class F - ΔT 80 K - 400 V - S1

The motors are for use with quadratic resistive torque machines (centrifugal machines).
The high speed power (GV) is that of the standard motor having the same speed in the same frame size (from 80 to 315 included).
The motors connection is provided only for one power supply voltage (Dahlander connection) and it does not allow star delta starting.

Type		Rated power at 50 Hz P_N kW	Rated speed N_N min^{-1}	Rated current I_N (400 V) A	Power factor Cos φ 100%	Efficiency IEC 60034-2-1; 2007 η 100%	Starting torque / Rated torque I_D / I_N	Weight IM B3 kg
LS 71 L	GV[2] PV[3]	0.25 0.09	1430 960	0.75 0.55	0.78 0.64	64 38	3.8 2.3	8.3
LS 80 L	GV PV	0.7 0.2	1435 945	2.1 1.05	0.73 0.72	65 38	4.5 2.5	10.9
LS 90 S	GV PV	0.85 0.25	1430 930	2.2 0.85	0.78 0.79	68.1 53	5.5 3.5	14
LS 90 L	GV PV	1.4 0.5	1425 925	3.5 1.4	0.79 0.80	71.1 59	6 3.6	15.2
LS 100 L	GV PV	2.4 0.75	1425 940	5.7 2.1	0.82 0.75	73.2 64	5.6 4.3	24.5
LS 112 MG	GV PV	3.4 1.1	1460 965	8.7 3.4	0.72 0.75	76.3 62	6.9 4	37
LS 132 SM	GV PV	4 1.2	1450 970	8.9 3.2	0.79 0.68	80.3 78	5.8 4.5	50
LS 132 M	GV PV	6.3 1.9	1445 970	13.2 5	0.82 0.71	82.4 73.1	5.9 5.2	60
LS 160 M	GV PV	9 3	1465 975	18.8 7.8	0.81 0.75	83.7 76.9	7 5.2	85
LS 160 M	GV PV	11 3.7	1465 975	22.6 9.3	0.82 0.76	84.2 77.1	7.4 5.5	85
LS 160 L	GV PV	13 4.3	1465 970	25.6 10.5	0.84 0.74	85.9 73.2	7.8 5.5	100
LS 160 LU	GV PV	15 5	1465 970	29.3 12.1	0.84 0.74	86.5 76.2	7.5 5.1	110
LS 180 L	GV PV	18.5 6.5	1460 980	34.1 14.8	0.88 0.78	87.6 79.4	5.5 5	135
LS 180 LU	GV PV	22 7.5	1470 980	41.5 16.6	0.86 0.80	87.7 79.9	6.8 4.8	165
LS 200 L	GV PV	25 8.5	1475 985	46.9 19.3	0.85 0.77	89.2 80.9	6.4 4.8	205
LS 200 LU	GV PV	30 9	1475 985	56.0 20.8	0.85 0.74	89.7 83	6 5.3	235
LS 225 SR	GV PV	34 11	1475 985	64 25.9	0.84 0.73	90.4 82.5	6.3 5.1	235
LS 250 ME	GV PV	42 14	1480 985	77.7 31.8	0.85 0.75	90.6 85.6	6.5 5.1	320
LS 250 MF	GV PV	52 19	1480 985	96 43.2	0.85 0.73	90.9 85.6	6.5 5.1	320
LS 280 SK	GV PV	75 28	1485 985	135 56.3	0.86 0.80	92.4 88.4	7.7 6.6	720
LS 280 MK	GV PV	90 33	1485 985	161 66.2	0.86 0.80	92.7 88.7	7.7 6.9	720
LS 315 SP	GV PV	110 37	1485 985	199 74	0.85 0.80	92.9 88.9	8 6.9	825
LS 315 MR	GV PV	132 44	1485 985	244 88	0.83 0.80	93.1 89	9.2 7.1	825

1. LS 80 to LS 132, 1 winding (PAM), see page A2.8.
2. GV: High speed.
3. PV: Low speed.

LS
multi-speed closed three-phase asynchronous motors

Selection

4-8 Poles 1500-750 min^{-1}

Use: centrifugal machines
1 winding (Dahlander) - Thermal protections with PTO -n/c or with PTF -n/o
IP 55 - 50 Hz - Class F - ΔT 80 K - 400 V - S1

The motors are for use with quadratic resistive torque machines (centrifugal machines).
The high speed power (GV) is that of the standard motor having the same speed in the same frame size (from 80 to 315 included).
The motors connection is provided only for one power supply voltage (Dahlander connection) and it does not allow star delta starting.

Type		Rated power at 50 Hz P_N kW	Rated speed N_N min^{-1}	Rated current I_N (400 V) A	Power factor Cos φ 100%	Efficiency IEC 60034-2-1; 2007 η 100%	Starting torque / Rated torque I_D / I_N	Weight IM B3 kg
LS 71 M	GV[1]	0.25	1430	0.8	0.7	63	3.5	8.3
	PV[2]	0.06	640	0.4	0.6	36	1.5	
LS 71 M	GV	0.37	1430	1.15	0.8	58	4	8.3
	PV	0.07	670	0.5	0.7	28	2.1	
LS 80 L	GV	0.55	1435	1.15	0.71	67	4.8	10.9
	PV	0.09	715	0.6	0.48	44	2.3	
LS 80 L	GV	0.75	1425	2.3	0.72	63	4.8	10.9
	PV	0.12	710	0.9	0.52	39	2.3	
LS 90 S	GV	1.1	1435	2.8	0.82	69.1	4.6	14
	PV	0.18	720	1	0.47	50	2.9	
LS 90 L	GV	1.5	1455	4	0.74	72	5.8	15.2
	PV	0.25	725	1.5	0.56	49	3.4	
LS 100 L	GV	2.2	1435	5.5	0.81	70	5.1	24.5
	PV	0.37	720	2.2	0.48	49	2.6	
LS 100 L	GV	3	1435	7.4	0.79	73	5.5	24.5
	PV	0.55	715	2.6	0.52	56	2.7	
LS 112 MU	GV	4	1455	8.9	0.84	80	7.8	37
	PV	0.75	730	3.2	0.51	64	4.3	
LS 132 SM	GV	5.5	1425	11	0.86	81.4	5.3	55
	PV	1.1	715	3.7	0.56	75.1	3.1	
LS 132 M	GV	7.5	1435	15.3	0.84	82.4	5.8	60
	PV	1.5	720	5	0.57	73.1	3.4	
LS 160 M	GV	9	1465	18.1	0.85	82.9	7.3	85
	PV	2.2	725	6.2	0.63	81.5	4.1	
LS 160 M	GV	11	1465	21.5	0.85	85.5	7.5	85
	PV	2.8	730	7.7	0.65	81.9	4.2	
LS 160 L	GV	13	1465	25.1	0.85	86.4	7.6	100
	PV	3.3	725	9.1	0.63	79.1	4.1	
LS 160 L	GV	15	1460	28.6	0.86	86.7	7.6	100
	PV	3.8	725	10.1	0.64	80.1	4.2	
LS 180 L	GV	18.5	1465	34.9	0.86	87.6	6.7	135
	PV	4.8	730	12.1	0.67	83.6	3.7	
LS 180 LU	GV	22	1460	40.9	0.87	87.9	6.0	165
	PV	5.3	730	13.2	0.68	83.9	3.6	
LS 200 LT	GV	24	1470	45.2	0.85	88.8	7.1	170
	PV	6	730	15.4	0.63	84.4	3.7	
LS 200 L	GV	30	1475	55.8	0.86	89	6.1	205
	PV	7	735	18.6	0.65	85	3.8	
LS 225 SR	GV	37	1475	69.2	0.85	89.6	6.8	235
	PV	8.5	735	21.8	0.64	88.3	4.0	
LS 225 MG	GV	45	1482	83.1	0.85	90.8	7	235
	PV	11	738	26.3	0.66	89.8	4	
LS 250 ME	GV	55	1484	100.8	0.85	91.6	7.7	320
	PV	14	738	33.1	0.66	91	4	
LS 250 MF	GV	65	1484	118.7	0.85	91.9	7.7	320
	PV	16	738	37.7	0.66	91.4	4	
LS 280 SD	GV	75	1484	136.9	0.85	91.9	7.7	430
	PV	19	738	45.5	0.65	91.5	3.9	
LS 280 MK	GV	90	1485	159	0.87	92.8	8.7	665
	PV	23	740	54.8	0.67	89.2	4.8	
LS 315 SP	GV	110	1485	195	0.87	92.8	8.6	825
	PV	29	740	69.0	0.65	89	4.6	
LS 315 MP	GV	132	1485	238	0.85	93.2	8.3	790
	PV	35	740	86	0.67	89.3	4.9	
LS 315 MR	GV	160	1485	288	0.85	93.3	8.3	825
	PV	42	740	103	0.65	89.2	5.0	

1. GV: High speed.
2. PV: Low speed.

LS
multi-speed closed three-phase asynchronous motors

Selection

6-12 poles 1000-500 min^{-1}

Use: centrifugal machines
1 winding (Dahlander) - PTO thermal protection -n/c
IP 55 - 50 Hz - Class F - ΔT 80 K - 400 V - S1

The motors are for use with quadratic resistive torque machines (centrifugal machines).
The high speed power (GV) is that of the standard motor having the same speed in the same frame size (from 80 to 315 included).
The motors connection is provided only for one power supply voltage (Dahlander connection) and it does not allow star delta starting.

Type		Rated power at 50 Hz P_N kW	Rated speed N_N min^{-1}	Rated current I_N (400 V) A	Power factor Cos φ 100%	Efficiency IEC 60034-2-1; 2007 η 100%	Starting torque / Rated torque I_D / I_N	Weight IM B3 kg
LS 90 L	GV[1]	0.75	910	2.1	0.82	62	3.8	15
	PV[2]	0.15	425	0.8	0.68	40	2.1	
LS 90 LU	GV	1.1	915	3.2	0.77	63	4.2	17
	PV	0.18	450	1.2	0.54	38	2.3	
LS 100 L	GV	1.5	915	4	0.79	66.1	4.5	24.5
	PV	0.25	450	1.5	0.55	42	2.4	
LS 112 MU	GV	2.2	950	5.6	0.79	69.2	4.5	37
	PV	0.37	465	2.1	0.52	48	2.1	
LS 132 SM	GV	3	955	8	0.70	75.3	4.5	55
	PV	0.55	475	3.8	0.43	56	2.4	
LS 132 M	GV	4	955	10.4	0.71	75.3	4.8	60
	PV	0.65	465	3.1	0.45	56	2.0	
LS 132 MU	GV	5.5	950	14.1	0.71	77.4	4.9	68
	PV	1	450	5.4	0.45	57	1.9	
LS 160 M	GV	7.5	975	17.5	0.77	78.9	5.0	85
	PV	1.3	485	8.0	0.45	69.9	2.9	
LS 160 LU	GV	11	975	26.2	0.73	81.4	5.5	110
	PV	1.8	485	5.5	0.51	64.8	2.4	
LS 180 LU	GV	15	975	33.4	0.76	84	6.0	165
	PV	2.5	485	10.4	0.46	73.4	2.8	
LS 200 L	GV	18.5	980	38.2	0.80	86	6.1	205
	PV	3	488	11.5	0.52	70.7	2.9	
LS 200 LU	GV	25	980	52.2	0.79	86.2	7.0	235
	PV	4.5	485	16.6	0.54	70.8	2.7	

1. GV: High speed.
2. PV: Low speed.

LS
multi-speed closed three-phase asynchronous motors

Selection

General table of the multi-speed motors
Use: centrifugal machines
IP 55 - 50 Hz - Class F - ΔT 80 K - 400 V - S1

Type	2/4 Poles Dahlander P_N kW	4/6 Poles PAM P_N kW	4/6 Poles 2 windings P_N kW	4/8 Poles Dahlander P_N kW	6/12 Poles Dahlander P_N kW
LS 71 M	0.37 / 0.075	-	-	0.25 / 0.06	-
LS 71 M	0.55 / 0.11	-	-	0.37 / 0.07	-
LS 80 L	-	-	-	0.55 / 0.09	-
LS 80 L	1.1 / 0.25	0.75 / 0.25	0.7 / 0.2	0.75 / 0.12	-
LS 90 S	1.5 / 0.35	-	0.85 / 0.25	1.1 / 0.18	-
LS 90 SL	-	1.1 / 0.37	-	-	-
LS 90 L	2.2 / 0.6	1.5 / 0.55	1.4 / 0.5	1.5 / 0.25	0.75 / 0.15
LS 90 LU	-	-	-	-	1.1 / 0.18
LS 100 L	-	2.2 / 0.75	2.4 / 0.75	2.2 / 0.37	1.5 / 0.25
LS 100 L	3 / 0.8	3 / 1.1	-	3 / 0.55	-
LS 112 MG	-	-	3.4 / 1.1	-	-
LS 112 MU	4.5 / 1.3	4 / 1.5	-	4 / 0.75	2.2 / 0.37
LS 132 SM	6 / 1.6	5.5 / 1.8	4 / 1.2	5.5 / 1.1	3 / 0.55
LS 132 M	9 / 2.5	7.5 / 2.5	6.3 / 1.9	7.5 / 1.5	4 / 0.65
LS 132 MU	-	-	-	-	5.5 / 1
LS 160 M	-	-	9 / 3	9 / 2.2	7.5 / 1.3
LS 160 M	13.5 / 3.3	-	11 / 3.7	11 / 2.8	-
LS 160 L	19 / 4.5	-	13 / 4.3	13 / 3.3	-
LS 160 L	-	-	-	15 / 3.8	-
LS 160 LU	-	-	15 / 5	-	11 / 1.8
LS 180 L	-	-	18.5 / 6.5	18.5 / 4.8	-
LS 180 LU	24 / 8	-	22 / 7.5	22 / 5.3	15 / 2.5
LS 200 LT	-	-	-	24 / 6	-
LS 200 L	31 / 11	-	25 / 8.5	30 / 7	18.5 / 3
LS 200 LU	40 / 14	-	30 / 9	-	25 / 4.5
LS 225 SR	-	-	34 / 11	37 / 8.5	-
LS 225 MG	50 / 17	-	-	45 / 11	-
LS 250 ME	59 / 20	-	42 / 14	55 / 14	-
LS 250 ME	70 / 24	-	-	-	-
LS 250 MF	-	-	52 / 19	65 / 16	-
LS 280 SD	-	-	-	75 / 19	-
LS 280 SK	-	-	75 / 28	-	-
LS 280 MD	85 / 30	-	-	-	-
LS 280 MK	-	-	90 / 33	90 / 23	-
LS 315 SP	-	-	110 / 37	110 / 29	-
LS 315 MP	-	-	-	132 / 35	-
LS 315 MR	100 / 35	-	132 / 44	160 / 42	-

The specific electrical characteristics available on request.

LS
multi-speed closed three-phase asynchronous motors

Selection

General table of the multi-speed motors
General use
IP 55 - 50 Hz - Class F - ΔT 80 K - 400 V - S1

Type	2/4 Poles Dahlander P_N kW	2/4 Poles 2 windings P_N kW	2/6 Poles 2 windings P_N kW	2/8 Poles 2 windings P_N kW	4/6 Poles 2 windings P_N kW	4/8 Poles Dahlander P_N kW
LS 71 M	-	-	-	0.18 / 0.045	0.12 / 0.09	-
LS 71 M	-	-	-	0.25 / 0.06	0.18 / 0.12	-
LS 71 M	0.37 / 0.25	-	-	0.37 / 0.09	-	0.25 / 0.12
LS 71 M	0.55 / 0.37	-	-	0.55 / 0.18	-	0.37 / 0.18
LS 71 L	-	0.37 / 0.09	0.25 / 0.08	-	-	-
LS 80 L	1.1 / 0.75	-	0.55 / 0.18	0.55 / 0.12	0.45 / 0.3	0.55 / 0.22
LS 90 S	1.5 / 1.1	0.75 / 0.37	0.75 / 0.25	0.75 / 0.18	0.7 / 0.45	0.75 / 0.4
LS 90 L	2.2 / 1.5	-	1.5 / 0.5	-	1.1 / 0.75	1.2 / 0.6
LS 90 LU	-	-	-	1.5 / 0.37	-	-
LS 100 L	3 / 2.6	2.2 / 1.1	2.2 / 0.75	2.2 / 0.55	1.8 / 1.2	1.7 / 0.9
LS 112 MG	4.5 / 3.7	3.3 / 1.7	-	3 / 0.75	2.8 / 1.8	2.8 / 1.5
LS 112 MU	5.5 / 4	-	3 / 1	-	3 / 2	3 / 1.8
LS 132 SM	6 / 4.5	3.7 / 1.85	4 / 1.3	4 / 1	4 / 2.8	5 / 2.85
LS 132 M	9 / 6.9	6 / 3	6.5 / 2.2	5.5 / 1.6	5.5 / 3.7	7.6 / 4
LS 160 M	13.5 / 10.3	-	-	-	5.9 / 3.9	8.1 / 4.5
LS 160 L	18.5 / 14	-	-	-	8.1 / 5.2	11 / 6
LS 180 LR	21 / 16	-	-	-	12 / 7.7	-
LS 180 L	-	-	-	-	14 / 9	14.5 / 9
LS 180 LU	25 / 19	-	-	-	-	16.5 / 11
LS 200 LT	-	-	-	-	-	18.5 / 12.5
LS 200 L	33 / 25	-	-	-	17 / 11.5	-
LS 200 L	-	-	-	-	21 / 14	22 / 15
LS 225 MR	37 / 26.5	-	-	-	24 / 16	-
LS 225 MG	44 / 33	-	-	-	28 / 18.5	28 / 19.5
LS 250 ME	52 / 40.5	-	-	-	33 / 22	-
LS 250 MF	-	-	-	-	39 / 22.5	40 / 26
LS 250 MF	-	-	-	-	45 / 30	50 / 33
LS 280 SC	62.5 / 51.5	-	-	-	-	-
LS 280 SD	-	-	-	-	-	55 / 37
LS 280 MD	81 / 66	-	-	-	-	-
LS 280 MK	-	-	-	-	55 / 40	66 / 45
LS 315 SP	-	-	-	-	62.5 / 42	80 / 50
LS 315 MR	95 / 78	-	-	-	78 / 51.5	95 / 60

The specific electrical characteristics available on request.

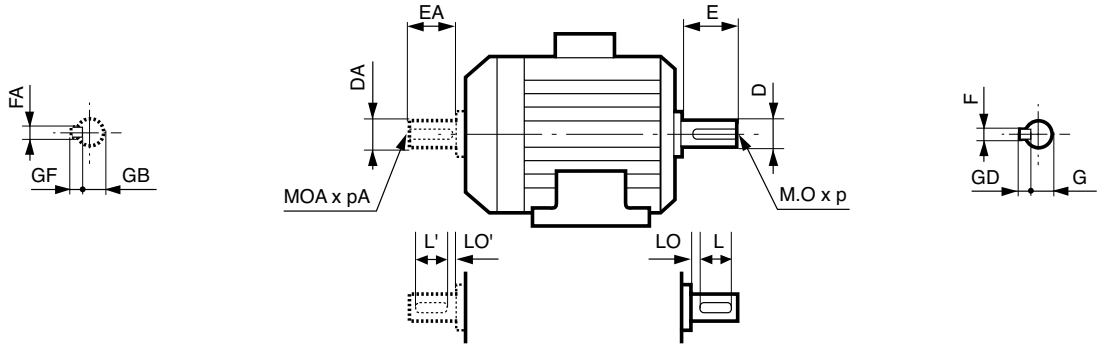
LS
totally enclosed three-phase asynchronous motors

Dimensions

LS totally enclosed three-phase asynchronous motors dimensions - IP 55
Cage rotor

Dimensions in millimetres

- shaft end



	Main shaft ends																	
	4, 6 and 8 poles									2 poles and 2/4 poles								
Type	F	GD	D	G	E	O	p	L	LO	F	GD	D	G	E	O	p	L	LO
LS 56 M	3	3	9j6	7	20	4	10	16	3	3	3	9j6	7	20	4	10	16	3
LS 63 M	4	4	11j6	8.5	23	4	10	18	3.5	4	4	11j6	8.5	23	4	10	18	3.5
LS 71 L	5	5	14j6	11	30	5	15	25	3.5	5	5	14j6	11	30	5	15	25	3.5
LS 80 L	6	6	19j6	15.5	40	6	16	30	6	6	6	19j6	15.5	40	6	16	30	6
LS 90 S/SL/L/LU	8	7	24j6	20	50	8	19	40	6	8	7	24j6	20	50	8	19	40	6
LS 100 L	8	7	28j6	24	60	10	22	50	6	8	7	28j6	24	60	10	22	50	6
LS112 M/MG/MU	8	7	28j6	24	60	10	22	50	6	8	7	28j6	24	60	10	22	50	6
LS 132 S/SM/M	10	8	38k6	33	80	12	28	63	10	10	8	38k6	33	80	12	28	63	10
LS 160 M/MP/L/LR/LU	12	8	42k6	37	110	16	36	100	6	12	8	42k6	37	110	16	36	100	6
LS 180 MT/L/LR/LU	14	9	48k6	42.5	110	16	36	98	12	14	9	48k6	42.5	110	16	36	98	12
LS 200 L/LT/LU	16	10	55m6	49	110	20	42	97	13	16	10	55m6	49	110	20	42	97	13
LS 225 SR/ST/MG/MR/MT	18	11	60m6	53	140	20	42	126	14	16	10	55m6	49	110	20	42	97	13
LS 250 ME/MF/MZ	18	11	65m6	58	140	20	42	126	14	18	11	60m6	53	140	20	42	126	14
LS 280 SC/SD/MC/MD	20	12	75m6	67.5	140	20	42	125	15	18	11	65m6	58	140	20	42	125	14
LS 280 SK/MK	20	12	75m6	67.5	140	20	42	125	15	18	11	65m6	58	140	20	42	126	14
LS 315 SP/SN/MP/MR	22	14	80m6	71	170	20	42	155	15	18	11	65m6	58	140	20	42	126	14

	Secondary shaft ends																	
	4, 6 and 8 poles									2 poles and 2/4 poles								
Type	FA	GF	DA	GB	EA	OA	pA	L'	LO'	FA	GF	DA	GB	EA	OA	pA	L'	LO'
LS 56 M	3	3	9j6	7	20	4	10	16	3	3	3	9j6	7	20	4	10	16	3
LS 63 M	4	4	11j6	8.5	23	4	10	18	3.5	4	4	11j6	8.5	23	4	10	18	3.5
LS 71 L	5	5	14j6	11	30	5	15	25	3.5	5	5	14j6	11	30	5	15	25	3.5
LS 80 L	5	5	14j6	11	30	5	15	25	3.5	5	5	14j6	11	30	5	15	25	3.5
LS 90 S/SL/L/LU	6	6	19j6	15.5	40	6	16	30	6	6	6	19j6	15.5	40	6	16	30	6
LS 100 L	8	7	24j6	20	50	8	19	40	6	8	7	24j6	20	50	8	19	40	6
LS112 M/MG/MU	8	7	24j6	20	50	8	19	40	6	8	7	24j6	20	50	8	19	40	6
LS 132 S/SM/M	8	7	28k6	24	60	10	22	50	6	8	7	28k6	24	60	10	22	50	6
LS 160 M/MP/L/LR/LU	12	8	38k6	37	80	16	36	100	6	12	8	38k6	37	80	16	36	100	6
LS 180 MT/L/LR/LU	14	9	48k6	42.5	110	16	36	98	12	14	9	48k6	42.5	110	16	36	98	12
LS 200 L/LT/LU	16	10	55m6	49	110	20	42	97	13	16	10	55m6	49	110	20	42	97	13
LS 225 SR/ST/MG/MR/MT	18	11	60m6	53	140	20	42	126	14	16	10	55m6	49	110	20	42	97	13
LS 250 ME/MF/MZ	18	11	60m6	53	140	20	42	126	14	18	11	60m6	53	140	20	42	126	14
LS 280 SC/SD/MC/MD	18	11	65m6	58	140	20	42	126	14	18	11	65m6	58	140	20	42	126	14
LS 280 SK/MK	20	12	75m6	67.5	140	20	42	125	15	18	11	65m6	58	140	20	42	126	14
LS 315 SP/SN/MP/MR	22	14	80m6	71	170	24	42	155	15	18	11	65m6	58	140	20	42	126	14

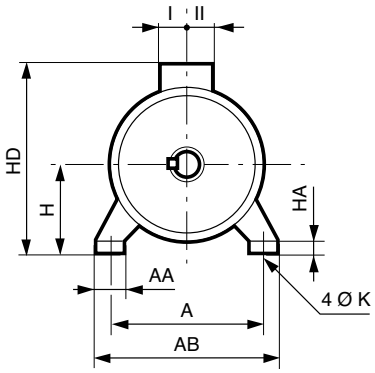
LS
totally enclosed three-phase asynchronous motors

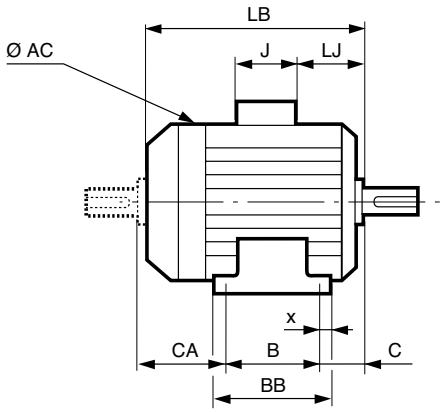
Dimensions

LS totally enclosed three-phase asynchronous motors dimensions - IP 55
Cage rotor

Dimensions in millimetres

- foot mounted





	Main dimensions																		
Type	A	AB	B	BB	C	x	AA	K	HA	H	AC	HD	LB	LB1*	LJ	J	I	II	CA
LS 56 M	90	104	71	87	36	8	24	6	7	56	110	140	156	134	16	86	43	43	51
LS 63 M	100	115	80	96	40	8	26	7	9	63	124	152	172	165	26	86	43	43	55
LS 71 L	112	126	90	106	45	8	24	7	9	71	140	170	193	166	21	86	43	43	61
LS 80 L	125	157	100	120	50	10	29	9	10	80	170	203	215	177	26	86	43	43	68
LS 80 LU	125	157	100	120	50	10	29	9	10	80	170	203	267	232	26	86	43	43	120
LS 90 S	140	172	100	120	56	10	37	10	11	90	190	223	218	177	26	86	43	43	68
LS 90 SL/L	140	172	125	162	56	28	37	10	11	90	190	223	245	204	26	86	43	43	68
LS 90 LU	140	172	125	162	56	28	37	10	11	90	190	223	265	230	26	86	43	43	88
LS 100 L	160	196	140	165	63	12	40	12	13	100	200	238	290	250	26	86	43	43	93
LS 112 M	190	220	140	165	70	12	45	12	14	112	200	250	290	250	26	86	43	43	86
LS 112 MG	190	220	140	165	70	12	52	12	14	112	235	260	315	265	36	86	43	43	110
LS 112 MU	190	220	140	165	70	12	52	12	14	112	235	260	334	288	36	86	43	43	130
LS 132 S	216	250	140	170	89	16	50	12	15	132	235	280	350	306	53	86	43	43	128
LS 132 SM/M	216	250	178	208	89	16	59	12	18	132	280	307	387	327	25	110	57	73	126
LS 132 MU	216	250	178	208	89	16	59	12	18	132	280	307	410	351	25	110	57	73	148
LS 160 MP	254	294	210	294	108	20	64	14.5	25	160	315	368	468	407	44	134	92	63	154
LS 160 M	254	294	210	294	108	20	60	14.5	25	160	316	395	495	435	44	134	92	63	182
LS 160 LR	254	294	254	294	108	20	64	14.5	25	160	315	368	495	440	44	134	92	63	138
LS 160 L	254	294	254	294	108	20	60	14.5	25	160	316	395	495	435	44	134	92	63	138
LS 160 LU	254	294	254	294	108	20	60	14.5	25	160	316	395	510	450	44	134	92	63	153
LS 180 MT	279	324	241	316	121	20	79	14.5	28	180	316	428	495	435	55	186	112	98	138
LS 180 LR	279	324	279	316	121	20	79	14.5	28	180	316	428	520	450	55	186	112	98	125
LS 180 L	279	339	279	329	121	25	86	14.5	25	180	350	435	552	481	64	186	112	98	159
LS 180 LU	279	339	279	329	121	25	86	14.5	25	180	350	435	593	508	64	186	112	98	199
LS 200 LT	318	378	305	365	133	30	108	18.5	30	200	350	455	599	514	70	186	112	98	167
LS 200 L	318	388	305	375	133	35	103	18.5	36	200	390	475	621	539	77	186	112	98	194
LS 200 LU	318	388	305	375	133	35	103	18.5	36	200	390	475	669	586	77	186	112	98	244
LS 225 ST	356	431	286	386	149	50	127	18.5	36	225	390	500	627	545	84	186	112	98	203
LS 225 SR	356	431	286	386	149	50	127	18.5	36	225	390	500	676	593	84	186	112	98	253
LS 225 MT	356	431	311	386	149	50	127	18.5	36	225	390	500	627	545	84	186	112	98	178
LS 225 MR	356	431	311	386	149	50	127	18.5	36	225	390	500	676	593	84	186	112	98	228
LS 225 MG	356	420	311	375	149	30	65	18.5	30	225	479	629	810	716	68	292	148	180	360
LS 250 MZ	406	470	349	449	168	70	150	24	47	250	390	550	676	593	68	217	103	145	171
LS 250 ME	406	470	349	420	168	35	90	24	36	250	479	655	810	716	68	292	148	180	303
LS 250 MF	406	470	349	420	168	35	90	24	36	250	479	655	870	776	68	292	148	180	363
LS 280 SC	457	520	368	478	190	35	90	24	35	280	479	685	810	716	68	292	148	180	262
LS 280 SD	457	520	368	478	190	35	90	24	35	280	479	685	870	776	68	292	148	180	322
LS 280 SK	457	533	368	495	190	40	85	24	35	280	586	746	921	819	99	292	148	180	379
LS 280 MC	457	520	419	478	190	35	90	24	35	280	479	685	810	716	68	292	148	180	211
LS 280 MD	457	520	419	478	190	35	90	24	35	280	479	685	870	776	68	292	148	180	271
LS 280 MK	457	533	419	495	190	40	85	24	35	280	586	746	921	819	99	292	148	180	328
LS 315 SN	508	594	406	537	216	40	140	28	50	315	475	720	870	776	68	292	148	180	248
LS 315 SP	508	594	406	537	216	40	114	28	70	315	586	781	947	845	125	292	148	180	341
LS 315 MP	508	594	457	537	216	40	114	28	70	315	586	781	947	845	125	292	148	180	290
LS 315 MR	508	594	457	537	216	40	114	28	70	315	586	781	1017	947	125	292	148	180	360

**LB1: motor not ventilated*

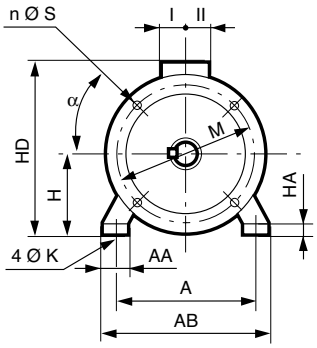
LS
totally enclosed three-phase asynchronous motors

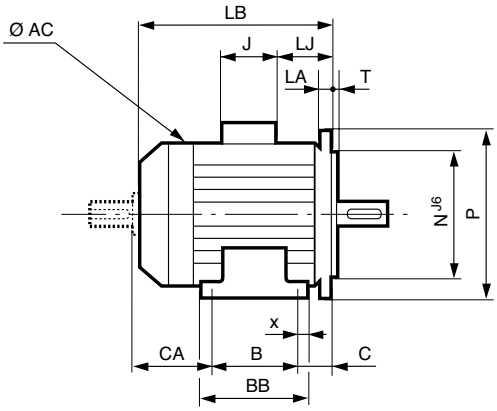
Dimensions

LS totally enclosed three-phase asynchronous motors dimensions - IP 55
Cage rotor

Dimensions in millimetres

- (FF) foot and plain hole flange mounted





	Main dimensions																			
Type	A	AB	B	BB	C	x	AA	K	HA	H	AC	HD	LB	LB1*	LJ	J	I	II	CA	Sym.
LS 56 M	90	104	71	87	36	8	24	6	7	56	110	140	156	134	16	86	43	43	51	FF 100
LS 63 M	100	115	80	96	40	8	26	7	9	63	124	152	172	165	26	86	43	43	55	FF 115
LS 71 L	112	126	90	106	45	8	24	7	9	71	140	170	193	166	21	86	43	43	61	FF 130
LS 80 L	125	157	100	120	50	10	29	9	10	80	170	203	215	177	26	86	43	43	68	FF 165
LS 80 LU	125	157	100	120	50	10	29	9	10	80	170	203	267	232	26	86	43	43	120	FF 165
LS 90 S	140	172	100	120	56	10	37	10	11	90	190	223	218	177	26	86	43	43	66	FF 165
LS 90 SL/L	140	172	125	162	56	28	37	10	11	90	190	223	245	204	26	86	43	43	68	FF 165
LS 90 LU	140	172	125	162	56	28	37	10	11	90	190	223	265	230	26	86	43	43	88	FF 165
LS 100 L	160	196	140	165	63	12	40	12	13	100	200	238	290	250	26	86	43	43	93	FF 215
LS 112 M	190	220	140	165	70	12	45	12	14	112	200	250	290	250	26	86	43	43	86	FF 215
LS 112 MG	190	220	140	165	70	12	52	12	14	112	235	260	315	265	36	86	43	43	110	FF 215
LS 112 MU	190	220	140	165	70	12	52	12	14	112	235	260	334	288	36	86	43	43	130	FF 215
LS 132 S	216	250	140	170	89	16	50	12	15	132	235	280	350	306	53	86	43	43	128	FF 265
LS 132 SM/M	216	250	178	208	89	16	59	12	18	132	280	307	387	327	25	110	57	73	126	FF 265
LS 132 MU	216	250	178	208	89	16	59	12	18	132	280	307	410	351	25	110	57	73	148	FF 265
LS 160 MP	254	294	210	294	108	20	64	14.5	25	160	315	368	468	407	44	134	92	63	154	FF 300
LS 160 M	254	294	210	294	108	20	60	14.5	25	160	316	395	495	435	44	134	92	63	182	FF 300
LS 160 LR	254	294	254	294	108	20	64	14.5	25	160	315	368	495	440	44	134	92	63	138	FF 300
LS 160 L	254	294	254	294	108	20	60	14.5	25	160	316	395	495	435	44	134	92	63	138	FF 300
LS 160 LU	254	294	254	294	108	20	60	14.5	25	160	316	395	510	450	44	134	92	63	153	FF 300
LS 180 MT	279	324	241	316	121	20	79	14.5	28	180	316	428	495	435	55	186	112	98	138	FF 300
LS 180 LR	279	324	279	316	121	20	79	14.5	28	180	316	428	520	450	55	186	112	98	125	FF 300
LS 180 L	279	339	279	329	121	25	86	14.5	25	180	350	435	552	481	64	186	112	98	159	FF 300
LS 180 LU	279	339	279	329	121	25	86	14.5	25	180	350	435	593	508	64	186	112	98	199	FF 300
LS 200 LT	318	378	305	365	133	30	108	18.5	30	200	350	455	599	514	70	186	112	98	167	FF 350
LS 200 L	318	388	305	375	133	35	103	18.5	36	200	390	475	621	539	77	186	112	98	194	FF 350
LS 200 LU	318	388	305	375	133	35	103	18.5	36	200	390	475	669	586	77	186	112	98	244	FF 350
LS 225 ST	356	431	286	386	149	50	127	18.5	36	225	390	500	627	545	84	186	112	98	203	FF 400
LS 225 SR	356	431	286	386	149	50	127	18.5	36	225	390	500	676	593	84	186	112	98	253	FF 400
LS 225 MT	356	431	311	386	149	50	127	18.5	36	225	390	500	627	545	84	186	112	98	178	FF 400
LS 225 MR	356	431	311	386	149	50	127	18.5	36	225	390	500	676	593	84	186	112	98	228	FF 400
LS 225 MG	356	420	311	375	149	30	65	18.5	30	225	479	629	810	716	68	292	148	180	360	FF 400
LS 250 MZ	406	470	349	449	168	70	150	24	47	250	390	550	676	593	68	217	103	145	171	FF 500
LS 250 ME	406	470	349	420	168	35	90	24	36	250	479	655	810	716	68	292	148	180	303	FF 500
LS 250 MF	406	470	349	420	168	35	90	24	36	250	479	655	870	776	68	292	148	180	363	FF 500
LS 280 SC	457	520	368	478	190	35	90	24	35	280	479	685	810	716	68	292	148	180	262	FF 500
LS 280 SD	457	520	368	478	190	35	90	24	35	280	479	685	870	776	68	292	148	180	322	FF 500
LS 280 SK	457	533	368	495	190	40	85	24	35	280	586	746	921	819	99	292	148	180	379	FF 500
LS 280 MC	457	520	419	478	190	35	90	24	35	280	479	685	810	716	68	292	148	180	211	FF 500
LS 280 MD	457	520	419	478	190	35	90	24	35	280	479	685	870	776	68	292	148	180	271	FF 500
LS 280 MK	457	533	419	495	190	40	85	24	35	280	586	746	921	819	99	292	148	180	328	FF 500
LS 315 SN	508	594	406	537	216	40	140	28	50	315	475	720	870	776	68	292	148	180	248	FF 600
LS 315 SP	508	594	406	537	216	40	114	28	70	315	586	781	947	845	125	292	148	180	341	FF 600
LS 315 MP	508	594	457	537	216	40	114	28	70	315	586	781	947	845	125	292	148	180	290	FF 600
LS 315 MR	508	594	457	537	216	40	114	28	70	315	586	781	1017	947	125	292	148	180	360	FF 600

**LB1: motor not ventilated*

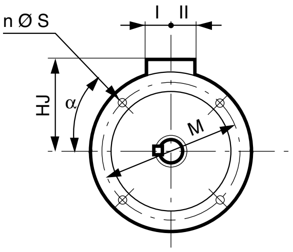
LS
totally enclosed three-phase asynchronous motors

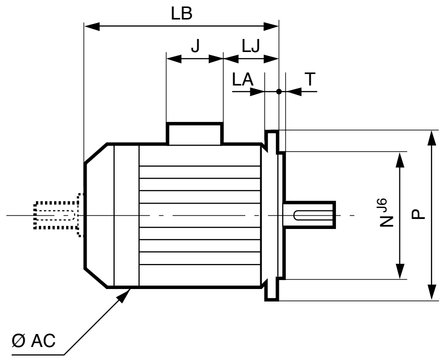
Dimensions

LS totally enclosed three-phase asynchronous motors dimensions - IP 55
Cage rotor

Dimensions in millimetres

- (FF) plain hole flange mounted





IEC symbol	Flange dimensions							
	M	N	P	T	n	α°	S	LA
FF 100	100	80	120	2.5	4	45	7	5
FF 115	115	95	140	3	4	45	10	10
FF 130	130	110	160	3.5	4	45	10	10
FF 165	165	130	200	3.5	4	45	12	10
FF 165	165	130	200	3.5	4	45	12	10
FF 165	165	130	200	3.5	4	45	12	10
FF 165	165	130	200	3.5	4	45	12	10
FF 165	165	130	200	3.5	4	45	12	10
FF 215	215	180	250	4	4	45	14.5	12
FF 215	215	180	250	4	4	45	14.5	11
FF 215	215	180	250	4	4	45	14.5	11
FF 215	215	180	250	4	4	45	14.5	11
FF 265	265	230	300	4	4	45	14.5	12
FF 265	265	230	300	4	4	45	14.5	12
FF 265	265	230	300	4	4	45	14.5	12
FF 300	300	250	350	5	4	45	18.5	14
FF 300	300	250	350	5	4	45	18.5	14
FF 300	300	250	350	5	4	45	18.5	14
FF 300	300	250	350	5	4	45	18.5	14
FF 300	300	250	350	5	4	45	18.5	14
FF 300	300	250	350	5	4	45	18.5	14
FF 300	300	250	350	5	4	45	18.5	14
FF 300	300	250	350	5	4	45	18.5	14
FF 300	300	250	350	5	4	45	18.5	14
FF 350	350	300	400	5	4	45	18.5	15
FF 350	350	300	400	5	4	45	18.5	15
FF 350	350	300	400	5	4	45	18.5	15
FF 400	400	350	450	5	8	22.5	18.5	16
FF 400	400	350	450	5	8	22.5	18.5	16
FF 400	400	350	450	5	8	22.5	18.5	16
FF 400	400	350	450	5	8	22.5	18.5	16
FF 400	400	350	450	5	8	22.5	18.5	16
FF 500	500	450	550	5	8	22.5	18.5	18
FF 500	500	450	550	5	8	22.5	18.5	18
FF 500	500	450	550	5	8	22.5	18.5	18
FF 500	500	450	550	5	8	22.5	18.5	18
FF 500	500	450	550	5	8	22.5	18.5	18
FF 500	500	450	550	5	8	22.5	18.5	18
FF 500	500	450	550	5	8	22.5	18.5	18
FF 500	500	450	550	5	8	22.5	18.5	18
FF 500	500	450	550	5	8	22.5	18.5	18
FF 600	600	550	660	6	8	22.5	24	22
FF 600	600	550	660	6	8	22.5	24	22
FF 600	600	550	660	6	8	22.5	24	22
FF 600	600	550	660	6	8	22.5	24	22

Type	Main dimensions							
	AC	LB	LB1*	HJ	LJ	J	I	II
LS 56 M	110	156	134	84	16	86	43	43
LS 63 M	124	172	165	89	26	86	43	43
LS 71 L	140	193	166	99	21	86	43	43
LS 80 L	170	215	177	123	26	86	43	43
LS 80 LU	170	267	232	123	26	86	43	43
LS 90 S	190	218	177	133	26	86	43	43
LS 90 SL/L	190	245	204	133	26	86	43	43
LS 90 LU	190	265	230	133	26	86	43	43
LS 100 L	200	290	250	138	26	86	43	43
LS 112 M	200	290	250	138	26	86	43	43
LS 112 MG	235	315	265	148	36	86	43	43
LS 112 MU	235	334	288	148	36	86	43	43
LS 132 S	235	350	306	148	53	86	43	43
LS 132 SM/M	280	387	327	175	25	110	57	73
LS 132 MU	280	410	351	175	25	110	57	73
LS 160 MP	315	468	407	208	44	134	92	63
LS 160 M	316	495	435	235	44	134	92	63
LS 160 LR	315	495	440	208	44	134	92	63
LS 160 L	316	495	435	235	44	134	92	63
LS 160 LU	316	510	450	235	44	134	92	63
LS 180 MT	316	495	435	248	55	186	112	98
LS 180 LR	316	520	450	248	55	186	112	98
LS 180 L	350	552	481	255	64	186	112	98
LS 180 LU	350	593	508	255	64	186	112	98
LS 200 LT	350	599	514	255	70	186	112	98
LS 200 L	390	621	539	275	77	186	112	98
LS 200 LU	390	669	586	275	77	186	112	98
LS 225 ST	390	627	545	275	84	186	112	98
LS 225 SR	390	676	593	275	84	186	112	98
LS 225 MT	390	627	545	275	84	186	112	98
LS 225 MR	390	676	593	275	84	186	112	98
LS 225 MG	479	810	716	405	68	292	148	180
LS 250 MZ	390	676	593	300	68	217	103	145
LS 250 ME	479	810	716	405	68	292	148	180
LS 250 MF	479	870	776	405	68	292	148	180
LS 280 SC	479	810	716	405	68	292	148	180
LS 280 SD	479	870	776	405	68	292	148	180
LS 280 SK	586	921	819	466	99	292	148	180
LS 280 MC	479	810	716	405	68	292	148	180
LS 280 MD	479	870	776	405	68	292	148	180
LS 280 MK	586	921	819	466	99	292	148	180
LS 315 SN	475	870	776	405	68	292	148	180
LS 315 SP	586	947	845	466	125	292	148	180
LS 315 MP	586	947	845	466	125	292	148	180
LS 315 MR	586	1017	947	466	125	292	148	180

**LB1: motor not ventilated*

For IM 3001 use, for frame size ≥ 250 mm, consult us.

Shaft end dimensions identical to those of the foot mounted motors.

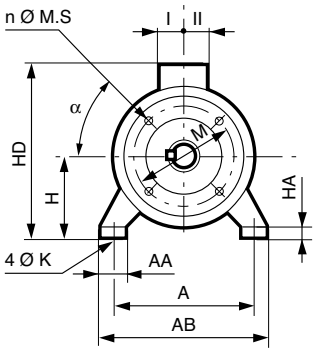
LS
totally enclosed three-phase asynchronous motors

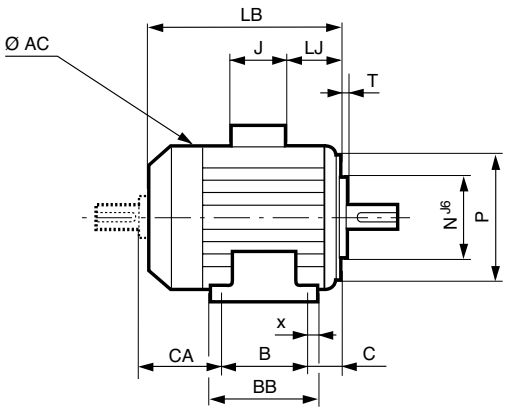
Dimensions

LS totally enclosed three-phase asynchronous motors dimensions - IP 55
Cage rotor

Dimensions in millimetres

- (FT) foot and tapped hole flange mounted





	Main dimensions																			
Type	A	AB	B	BB	C	x	AA	K	HA	H	AC	HD	LB	LB1*	LJ	J	I	II	CA	Sym.
LS 56 M	90	104	71	87	36	8	24	6	7	56	110	140	156	134	16	86	43	43	51	FT 65
LS 63 M	100	115	80	96	40	8	26	7	9	63	124	152	172	165	26	86	43	43	55	FT 75
LS 71 L	112	126	90	106	45	8	24	7	9	71	140	170	193	166	21	86	43	43	61	FT 85
LS 80 L	125	157	100	120	50	10	29	9	10	80	170	203	215	177	26	86	43	43	68	FT 100
LS 80 LU	125	157	100	120	50	10	29	9	10	80	170	203	267	232	26	86	43	43	120	FT 100
LS 90 S	140	172	100	120	56	10	37	10	11	90	190	223	218	177	26	86	43	43	66	FT 115
LS 90 SL/L	140	172	125	162	56	28	37	10	11	90	190	223	245	204	26	86	43	43	68	FT 115
LS 90 LU	140	172	125	162	56	28	37	10	11	90	190	223	265	230	26	86	43	43	88	FT 115
LS 100 L	160	196	140	165	63	12	40	12	13	100	200	238	290	250	26	86	43	43	93	FT 130
LS 112 M	190	220	140	165	70	12	45	12	14	112	200	250	290	250	26	86	43	43	86	FT 130
LS 112 MG	190	220	140	165	70	12	52	12	14	112	235	260	315	265	36	86	43	43	110	FT 130
LS 112 MU	190	220	140	165	70	12	52	12	14	112	235	260	334	288	36	86	43	43	130	FT 130
LS 132 S	216	250	140	170	89	16	50	12	15	132	235	280	350	306	53	86	43	43	128	FT 215
LS 132 SM/M	216	250	178	208	89	16	59	12	18	132	280	307	387	327	25	110	57	73	126	FT 215
LS 132 MU	216	250	178	208	89	16	59	12	18	132	280	307	410	351	25	110	57	73	148	FT 215
LS 160 MP	254	294	210	294	108	20	64	14.5	25	160	315	368	468	407	44	134	92	63	154	FT 215
LS 160 LR	254	294	254	294	108	20	64	14.5	28	160	315	368	495	440	44	134	92	63	138	FT 215

**LB1: motor not ventilated*

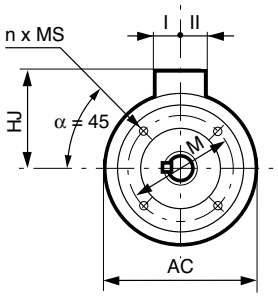
LS
totally enclosed three-phase asynchronous motors

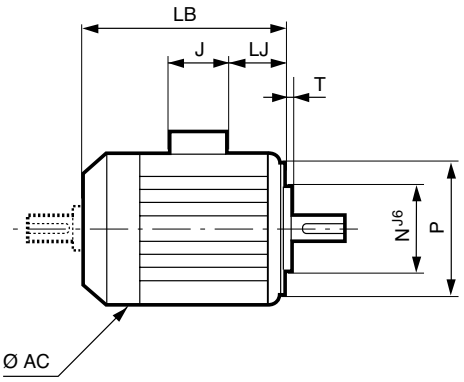
Dimensions

LS totally enclosed three-phase asynchronous motors dimensions - IP 55
Cage rotor

Dimensions in millimetres

- (FT) tapped hole flange mounted





IEC symbol	Flange dimensions					
	M	N	P	T	n	MS
FT 65	65	50	80	2.5	4	M5
FT 75	75	60	90	2.5	4	M5
FT 85	85	70	105	2.5	4	M6
FT 100	100	80	120	3	4	M6
FT 100	100	80	120	3	4	M6
FT 115	115	95	140	3	4	M8
FT 115	115	95	140	3	4	M8
FT 115	115	95	140	3	4	M8
FT 130	130	110	160	3.5	4	M8
FT 130	130	110	160	3.5	4	M8
FT 130	130	110	160	3.5	4	M8
FT 130	130	110	160	3.5	4	M8
FT 215	215	180	250	4	4	M12
FT 215	215	180	250	4	4	M12
FT 215	215	180	250	4	4	M12
FT 215	215	180	250	4	4	M12
FT 215	215	180	250	4	4	M12

Type	Main dimensions						
	AC	LB	LB1*	LJ	J	I	II
LS 56 M	110	156	134	16	86	43	43
LS 63 M	124	172	165	26	86	43	43
LS 71 L	140	193	166	21	86	43	43
LS 80 L	170	215	177	26	86	43	43
LS 80 LU	170	267	232	26	86	43	43
LS 90 S	190	218	177	26	86	43	43
LS 90 SL/L	190	245	204	26	86	43	43
LS 90 LU	190	265	230	26	86	43	43
LS 100 L	200	290	250	26	86	43	43
LS 112 M	200	290	250	26	86	43	43
LS 112 MG	235	315	265	36	86	43	43
LS 112 MU	235	334	288	36	86	43	43
LS 132 S	235	350	306	53	86	43	43
LS 132 SM/M	280	387	327	25	110	57	73
LS 132 MU	280	410	351	25	110	57	73
LSP 160 MP	315	468	407	44	134	92	63
LS 160 LR	315	495	440	44	134	92	63

**LB1: motor not ventilated*

Shaft end dimensions identical to those of the foot mounted motors.