

N° :

Date : 21 août 2022

Induction motor

6P LSES 100LG 1.5kW IFT/IE3 B5 230D/380Y/400Y/415Y 50Hz -

Utilisation : Environment Common ; Ambiance Non corrosive ; Finition - ; Zone Non specific ; General applications ; Ambient temperature -16 +40 °C ; Maximum altitude 1000 m.

Motor characteristics : Aluminium alloy housing ; Cast iron DE endshield ; Cast iron NDE endshield.



Motor definition

Protection type	-	Application	General applications
Generation code	IFT	Main voltage (V)	400
Efficiency class	IE3	Connection	DY
Number of network phases	3	Motor winding (V)	230D/380Y/400Y/415Y
Number of speed		Rated Frequency (Hz)	50
Polarity	6P	Operation position	IM3001(IMB5)
Motor series	LSES	Index of protection	IP55
Frame size (mm)	100	Index of cooling	IC411
Length code	LG	Insulation class	F
HS rated power (kW)	1.500	Finish	-
	-	Moment of inertia J (kg.m2)	0.0152300
Synchron speed (min-1)	1000	Motor weight (kg)	30.0
Maximum mechanical speed (min-1)	9900	Ambient temperature range (°C)	-16 +40
		Regulation label	-

Common definitions

Paint shade	RAL6000
Paint system	C3L (1 x acrylic polyurethane finish (50µm +/- 20%))

Motor mechanical interface

Mounting flange	FF215	Shaft material type	Steel shaft
Drive end shaft type	IEC STANDARD shaft end	Nuance of shaft material	-
Diameter DE shaft (mm)	28j6	Second shaft extension	-
Length DE shaft (mm)	60	Diameter NDE shaft (mm)	-
DE bearing mounting	Locked	Second shaft end length (mm)	-
DE bearing type	DE ball bearing	NDE bearing type	NDE ball bearing
DE bearing	6206	NDE bearing	6205
Greasing type	Greased for life		

Motor electrical interface

Connection network type	Terminal box	Cable type	-
Connection network material	Composite materials	Cable gland material	Cable gland not supplied, holes tapped with polyamide plugs
Connection network position	A	Main cable gland type	1xM20 ; With plugs
Connection network orientation	up	Principal cable gland position	Right (1)
Connection network relative position	0		

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Motor options

Vibration level	A	Cover	Plastic cover
Balancing type	Half-key (H)	Drip proof cover option	-
Impregnation type	< 95% ; (T)	cooling type	-
Winding thermal protection	-	Forced ventilation characteristics	-
Space heater	-	Encoder type	-
Draining plugs position	6H	Encoder characteristic	-
Nameplate material	Aluminium nameplate	Screw material	Steel screw
End-shield thermal protection	-	Adaptation for vibration sensor	-
Reinforced insulation system	-		

Motor characteristics (on mains supply)

Main voltage (V)	Nominal frequency (Hz)	Rated speed (min-1)	Pn (kW)	Mn (N.m)	In (A)	I0 (A)	Mmax (N.m)	Maximum current (A)	Md (N.m)	Id (A)	Cos Phi à 4/4	Cos Phi à 3/4	Cos Phi à 2/4	η 4/4 (%)	η 3/4 (%)	η 2/4 (%)	LpA (dB(A))
230	50	966	1.50	14.8	6.2		41.4		34.8	35.3	0.72	0.63	0.5	83.8	84.4	82.9	43
380	50	962	1.50	14.9	3.8		35.0		27.6	18.8	0.73	0.65	0.53	82.8	84	83.1	43
400	50	966	1.50	14.8	3.6		41.4		34.8	20.3	0.72	0.63	0.5	83.8	84.4	82.9	43
415	50	970	1.50	14.8	3.6		42.2		33.3	20.4	0.68	0.59	0.46	83.7	83.9	81.8	43

Motor characteristics (supplied via drives)

Main voltage (V)	fn (Hz)	Pn (kW)	Nn (min-1)	In (A)	Cos Phi	Mn (10% Nn) (N.m)	Mn (20% Nn) (N.m)	Mn (33% Nn) (N.m)	Mn (50% Nn) (N.m)	Mn (N.m)	Mn (173% Nn) (N.m)	Mn (200% Nn) (N.m)
400 Y	50	1.5	966	3.6	0.72	0.0	14.8	14.8	14.8	14.8	8.5	0.0
400 D	87	2.61	1673	6.6	0.72	0.0	14.8	14.8	14.8	14.8	0.0	0.0

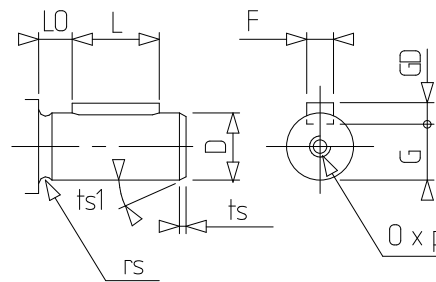
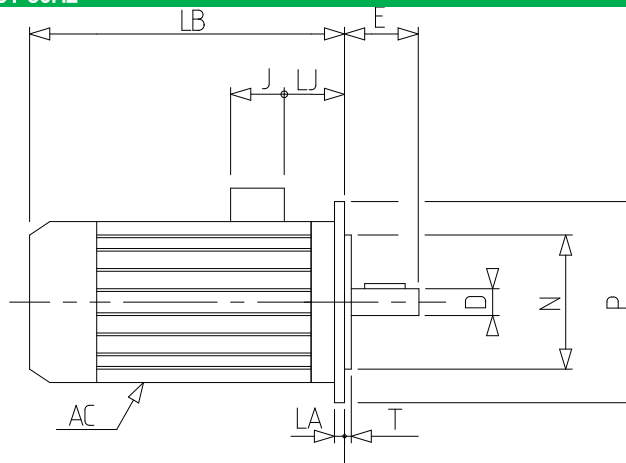
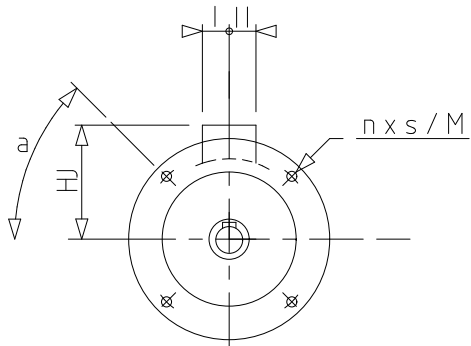
Motor losses at variable speed and torque (EU 2019/1781), in percentage of rated output power

90% Nn & 100% Cn (%)	50% Nn & 100% Cn (%)	25% Nn & 100% Cn (%)	90% Nn & 50% Cn (%)	50% Nn & 50% Cn (%)	50% Nn & 25% Cn (%)	25% Nn & 25% Cn (%)
17.88	14.07	10.65	7.42	5.94	3.49	2.61

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a	45
AC	235.00
D	28j6
E	60
F	8
G	24
GD	7
HJ	147.0
I	43
II	43
J	86
L	50
LA	13
LB	315.0
LJ	35.5
LO	6
M	215
N	180
n	4
O	M10
P	250
p	22
rs	0.5
S	14.5
T	4
ts	2
ts1	20