

N° :

Date : 21 avr. 2020

Induction motor + options

2P LSES 112MG 4kW IFT/IE3 B3 230D/380Y/400Y/415Y-460Y 50-60Hz -

IP65 ; Connection network material Aluminium alloy ;

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-460Y
Number of speed	-	Rated Frequency (Hz)	50-60
Polarity	2P	Operation position	IM1001(IMB3)
Motor series	LSES	Index of protection	IP65
Frame size (mm)	112	Index of cooling	IC411
Length code	MG	Insulation class	F
HS rated power (kW)	4.000	Finish	-
	-	Moment of inertia J (kg.m2)	0.0094100
Rated speed (min-1)	2920	Motor weight (kg)	32.7
Maximum mechanical speed (min-1)	9900		

Common definitions

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

Motor mechanical interface

Mounting flange	-	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	Located	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	Aluminium alloy	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 (25µm ; 1.6mm/s ; 2.5m/s ²)	Cover	Plastic cover
Balancing type	Half-key (H)	Drip proof cover option	-
Impregnation type	< 95% ; -16+40°C (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)	Rated Frequency (Hz)	HS rated power (kW)	Rated torque (N.m)	Rated speed (min ⁻¹)	Rated current (A)	Power factor at 4/4 of the load	Power factor at 3/4 of the load	Power factor at 2/4 of the load	Efficiency at 4/4 (IEC 60 034-2-1) of the load (%)	Efficiency at 3/4 (IEC 60 034-2-1) of the load (%)	Efficiency at 2/4 (IEC 60 034-2-1) of the load (%)
380	50	4.000	13,1	2905.00	7.60	0.91			88.10		
400	50	4.000	13,1	2920	7.2	0,9	0,86	0,78	89.00	90.10	90.10
415	50	4.000	13,1	2930.00	6.95	0.89			89.70		
460	60	4	10,81	3535.00	6.25	0.89			90.00		

Motor characteristics (on mains supply) 400 V 50 Hz

Starting torque (N.m)	26.2	Id / In	7.1
Average starting torque (N.m)		Id (A)	51.10
Maximum torque (N.m)	37.99	Maximum current (A)	
Unload maximum starting frequency (d/h)	-	No-load current (A)	0.00
Motor locked time (cold) (s)		Acoustic pressure level (dB(A))	71

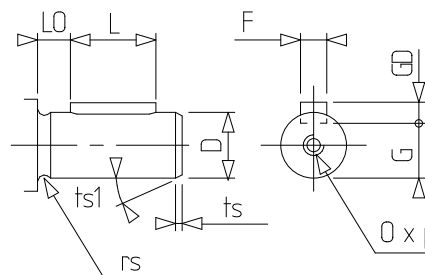
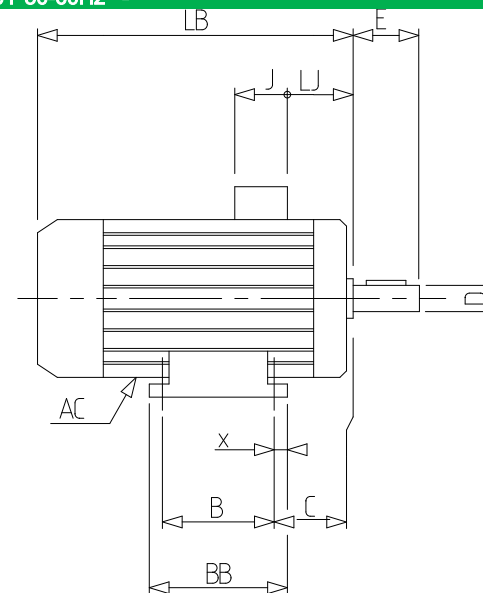
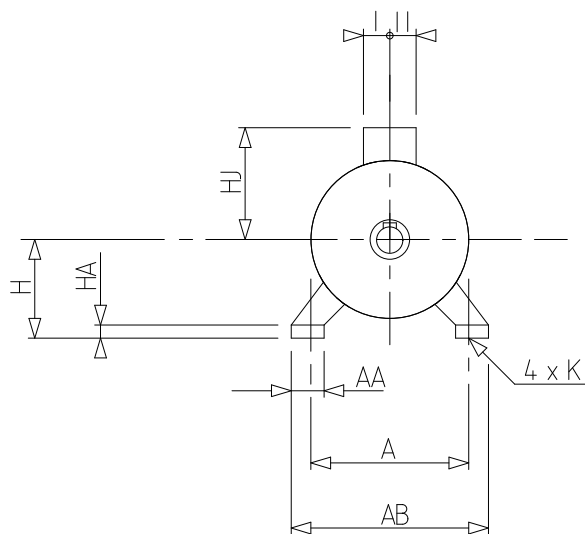
Motor characteristics (supplied via drives)

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	4	2920	7.9	0.89	0.0	11.1	13.1	13.1	13.1	7.5	0.0
400 D	87	6.96	5058	13.8	0.89	0.0	11.1	13.1	13.1	13.1	0.0	0.0

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A	190
AA	52
AB	219
AC	231.00
AD1	45
B	140
BB	168
C	60.0
D	28j6
E	60
F	8
G	24
GD	7
H	112
HA	13.5
HJ	153.0
I	53
II	53
J	90
K	12
L	50
LB	305.0
LJ	23.5
LO	6
O	M10
p	22
rs	0.5
ts	2
ts1	20
x	14