

N° : 4945767

Date : 11 avr. 2018

Induction motor with options

4P LSES 160M 11kW IFT/IE3 B5 380D/400D/415D/690Y-460D 50-60Hz

IC416A ; Axial forced ventilation 230/400V 3ph 150W ;

Utilisation : Environment Current ; 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)	380D/400D/415D/690Y-460D
Number of speed		Rated Frequency (Hz)	50-60
Polarity	4P	Operation position	IM3001(IMB5)
Motor series	LSES	Index of protection	IP55
Frame size (mm)	160	Index of cooling	IC416A
Length code	M	Insulation class	F
HS rated power (kW)	11.000	Finish	-
LS rated power (kW)	-	Moment of inertia J (kg.m2)	0.0712000
Rated speed (min-1)	1466	Motor weight (kg)	93.0
Maximum mechanical speed (min-1)	6000		

Common definitions

Paint shade	RAL6000
Paint system	1a (1 polyurethane coat 20/30 microns)

Motor mechanical interface

Mounting flange	FF300	Shaft material type	Steel shaft
Drive end shaft type	IEC STANDARD shaft end	Nuance of shaft material	-
Diameter DE shaft (mm)	42k6	Second shaft extension	-
Length DE shaft (mm)	110	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	6309	NDE bearing	6210
Lubrication type	Life lubricated		

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	2xM25 + 1xM16 ; With plugs
Connection network orientation	up	Principal cable gland position	Right (1)
Connection network relative position	0		

N° : 4945767

Date : 11 avr. 2018

Induction motor with options - 4P LSES 160M 11kW IFT/IE3 B5 380D/400D/415D/690Y-460D 50-60Hz -

Motor options

Vibration level	A (35µm ; 2.2mm/s ; 3.5m/s²)	Cover	Metal cover
Balancing type	Half-key (H)	Drip proof cover option	-
Impregnation type	< 95% ; -16+40°C (T)	cooling type	Axial forced ventilation
Winding thermal protection	1xPTC (winding)	Forced ventilation characteristics	230/400V 3ph 150W
Space heater	-	Encoder type	-
Draining plugs position	6H	Encoder characteristics	-
Nameplate material	Aluminium nameplate	Screw material	Steel screw
Endshield thermal protection	-	Adaptation for vibration sensor	-
Reinforced winding insulation	-		

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	11.000	71,7	1462.00	21.10	0.86			91.40		
400	50	11.000	71,7	1466.00	20.50	0.85	0,81	0,72	91.60	92.59	92.79
415	50	11.000	71,7	1470.00	19.80	0.84			91.91		
460	60	11.000	59,2	1774.00	17.80	0.84			92.75		

Motor characteristics (on mains supply) 400 V 50 Hz

Starting torque (N.m)	161.33	Id / In	7.25
Average starting torque (N.m)		Id	148.63
Maximum torque (N.m)	218,69	Maximum current (A)	
Unload maximum starting frequency (d/h)	-	No-load current (A)	0.00
Rotor locked time (cold) (s)		Acoustic pressure level (dB(A))	59

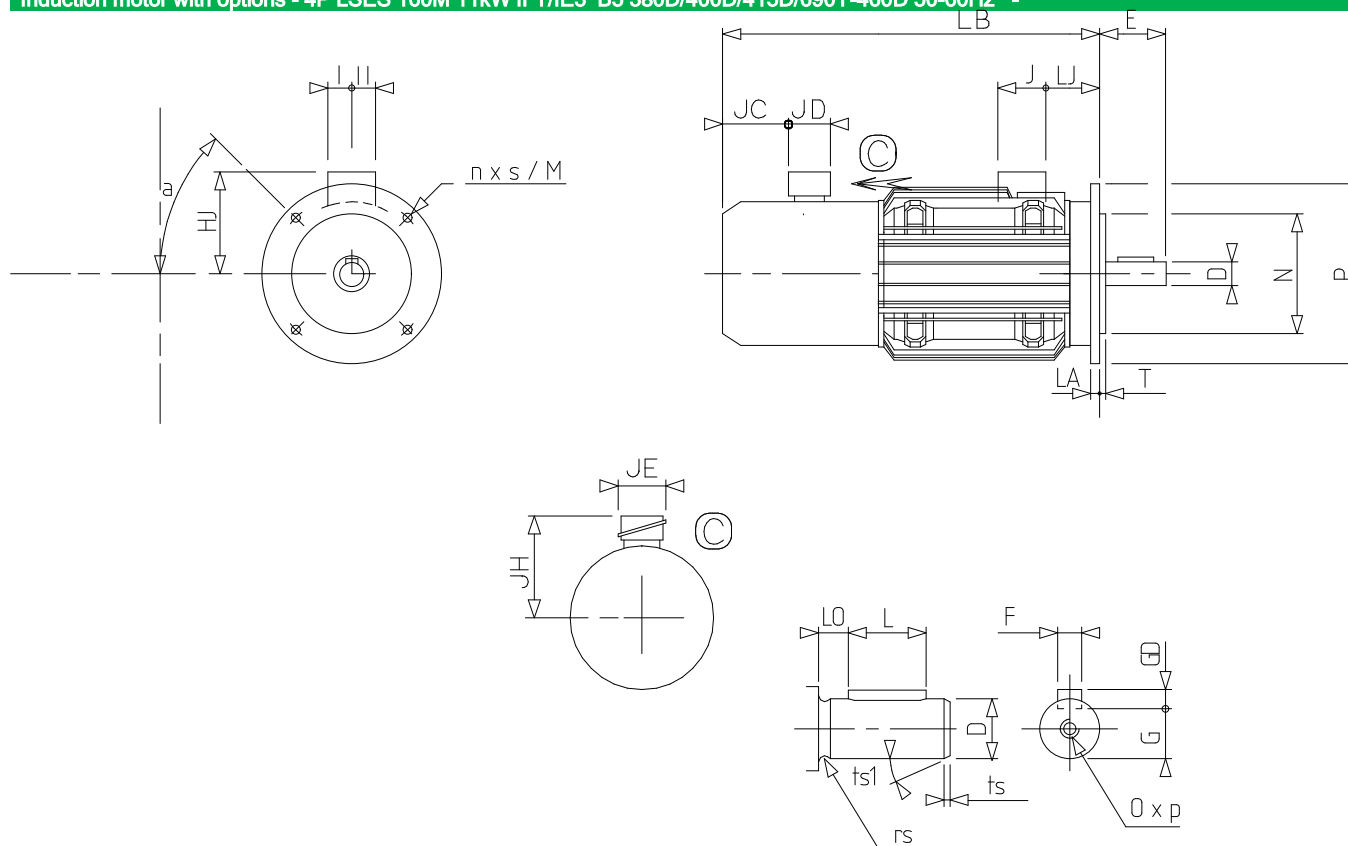
Motor characteristics (supplied via drives)

Main voltage (V)	Nominal frequency (Hz)	Pn (kW)	Nn (min-1)	In (A)	Cos Phi	Mn @ f/10 (N.m)	Mn @ f/5 (N.m)	Mn @ f/3 (N.m)	Mn @ f/2 (N.m)	Mn (N.m)	Mn @ fx1.7 (N.m)	Mn @ fx2 (N.m)
400 D	50	11	1466	21.6	0.85	71.70	71.70	71.70	71.70	71.700	41.21	0.00

N° : 4945767

Date : 11 avr. 2018

Induction motor with options - 4P LSES 160M 11kW IFT/IE3 B5 380D/400D/415D/690Y-460D 50-60Hz -



a	45
AC	312.00
AD1	45
D	42k6
E	110
F	12
G	37
GD	8
HJ	235.0
I	92
II	63
J	134
L	100
LA	15
LB	687.0
LJ	45.0
LO	6
M	300
N	250
n	4
O	M16
P	350
p	36
rs	0.8
S	18.5
T	5
ts	1
ts1	45