

N° :

Date : 23 févr. 2018

### Induction motor

4P LSES 225SR 37kW IFT/IE3 B5 230D/380Y/400Y/415Y-460Y 50-60Hz -

**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

		Application	General applications
Protection type	-	Main voltage (V)	400
Generation code	IFT	Connection	DY
Efficiency class	IE3	Motor winding (V)	230D/380Y/400Y/415Y-460Y
Number of network phases	3	Rated Frequency (Hz)	50-60
Number of speed		Operation position	IM3001(IMB5)
Polarity	4P	Index of protection	IP55
Motor serie	LSES	Index of cooling	IC411
Frame size (mm)	225	Insulation class	F
Lenght code	SR	Finish	-
HS rated power (kW)	37.000	Moment of inertia J (kg.m <sup>2</sup> )	0.2897000
LS rated power (kW)	-	Motor weight (kg)	236.0
Rated speed (min-1)	1480		
Maximum mechanical speed (min-1)	4320		

### Common definitions

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

### Motor mechanical interface

Mounting flange	FF400	Shaft material type	Steel shaft
Drive end shaft type	IEC STANDARD shaft end	Nuance of shaft material	-
Diameter DE shaft (mm)	60m6	Second shaft extension	-
Length DE shaft (mm)	140	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	6313	NDE bearing	6312
Code Type de graissage	Vie		

### 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	2xM50 + 1xM16 ; 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 (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	-
Winding thermal protection	1xPTC (winding)	Forced ventilation characteristics	-
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	37.000	239	1476.00	71.70	0.83			93.90		
400	50	37.000	239	1480	69.8	0.81	0.76	0.65	94.20	94.52	94.14
415	50	37.000	239	1482.00	69.50	0.79			94.30		
460	60	-	-	1782.00	61.20	0.80			94.50		

### Motor characteristics (on mains supply) 400 V 50 Hz

Starting torque (N.m)	776.75	Id / In	8.0
Average starting torque (N.m)		Id	558.40
Maximum torque (N.m)	752.85	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))	63

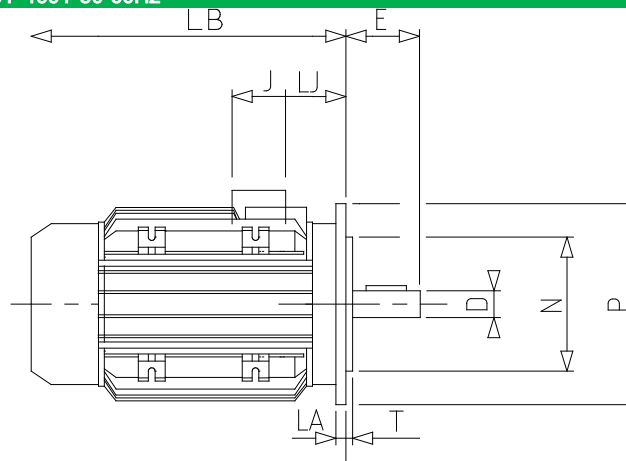
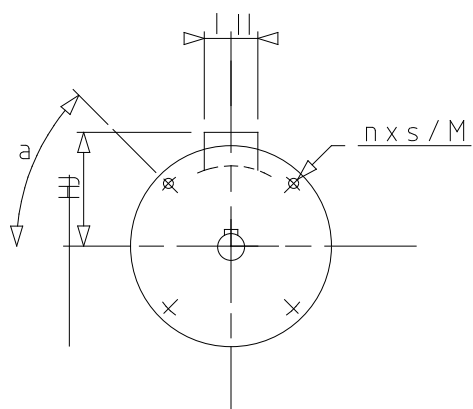
### Motor characteristics (supplied via drives)

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 Y	50	37	1480	72.97	0.81	0.00	203.15	227.05	239.00	239.000	137.36	0.00
400 D	87	64.38	2584	126.97	0.81	0.00	203.15	227.05	239.00	239.000	0.00	0.00

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a	22.5
AC	390.00
D	60m6
E	140
F	18
G	53
GD	11
HJ	310.0
I	119
II	141
J	231
L	126
LA	16
LB	676.0
LJ	61.0
LO	14
M	400
N	350
n	8
O	M20
P	450
p	42
rs	0.8
S	18.5
T	5
ts	1
ts1	45

