



N° :

Date : 8 août 2017

### Induction motor

2P FLSES 132SM 5,5kW IFT/IE3 230D/380Y/400Y/415Y-460Y 50-60Hz B3 -

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

**Motor characteristics :** Cast iron housing ; Cast iron DE endshield ; Cast iron NDE endshield.



### Motor definition

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	IM1001(IMB3)
Polarity	2P	Index of protection	IP55
Motor serie	FLSES	Index of cooling	IC411
Frame size (mm)	132	Insulation class	F
Length code	SM	Finish	-
HS rated power (kW)	5.500	Moment of inertia J (kg.m <sup>2</sup> )	0.0097400
LS rated power (kW)	-	Motor weight (kg)	69.3
Rated speed (min-1)	2935		
Maximum mechanical speed (min-1)	6700		

### Common definitions

Paint shade	RAL6000
Paint system	Ila (1 epoxy base coat 30/40 microns + 1 polyurethane finish coat 20/30 microns)

### 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)	38k6	Second shaft extension	-
Length DE shaft (mm)	80	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	6308	NDE bearing	6207
Code Type de graissage	Vie		

### Motor electrical interface

Connection network type	Terminal box	Cable type	-
Connection network material	Cast iron	Cable gland material	Cable gland not supplied, holes tapped with polyamide plugs
Connection network position	A	Main cable gland type	2xM25 ; 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 <sup>2</sup> )	Cover	Metal 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 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	5.500	17,9	2925.00	10.60	0.88			89.20		
400	50	5.500	17,9	2935	10.2	0.87	0.83	0.74	89.60	90.37	90.03
415	50	5.500	17,9	2940.00	9.85	0.86			90.11		
460	60	-	-	3545.00	8.90	0.86			90.80		

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

Starting torque (N.m)	35.8	Id / In	6.45
Average starting torque (N.m)		Id	65.79
Maximum torque (N.m)	50,12	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))	67

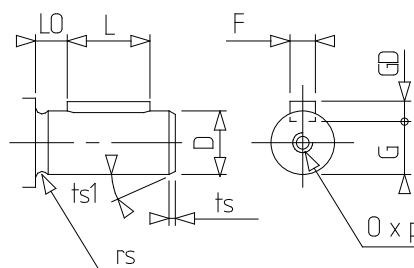
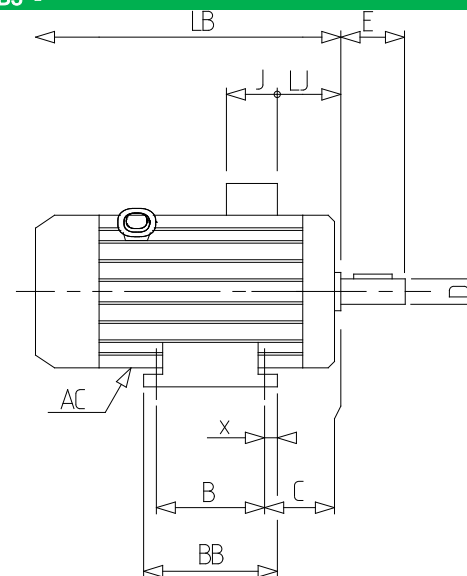
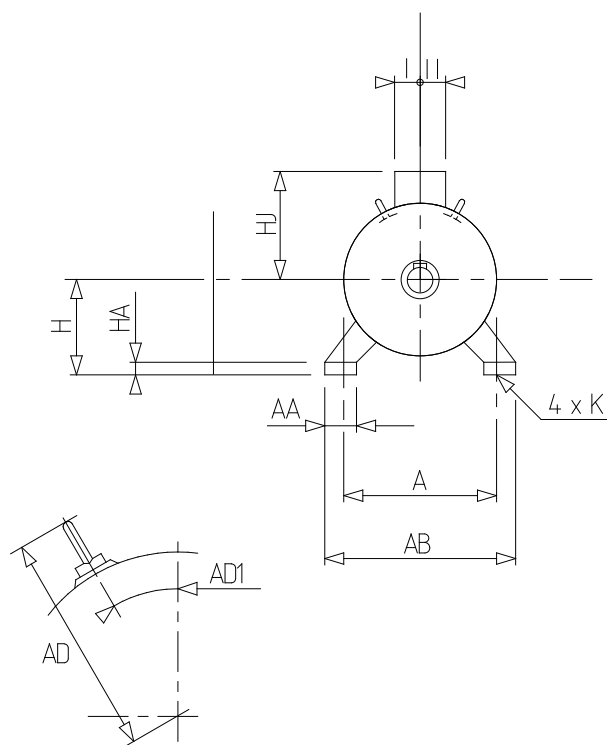
**Motor characteristics (supplied via drives)**

Main voltage (V)	Nominal frequency (Hz)	Temperature rise	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	80K	5.5	2935	10.2	0.87	0.00	15.22	17.90	17.90	17.900	10.29	0.00
400 D	87	80K	9.57	5084	20.19	0.87	0.00	15.22	17.90	17.90	17.900	0.00	0.00

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A	216
AA	63
AB	255
AC	270.00
AD1	37,5
B	140
BB	240
C	89.0
D	38k6
E	80
F	10
G	33
GD	8
H	132
HA	16
HJ	203.0
I	68
II	68
J	136
K	12
L	63
LB	385.0
LJ	22.0
LO	10
O	M12
p	28
rs	0.5
ts	2
ts1	20
x	50