

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22Xdb IE3 Three-Phase

Product code : 12431062

Area classification : ZONA 1, GRUPO IIB, T4 (135 °C)

Catalog # : E09018XT3YAX280SMF3W

Frame	: 280S/M	Locked rotor time	: 32s (cold) 18s (hot)
Output	: 90 kW (125 HP)	Temperature rise	: 80 K
Poles	: 4	Duty cycle	: S1
Frequency	: 50 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 380/660 V	Altitude	: 1000 m.a.s.l.
Rated current	: 169/97.3 A	Protection degree	: IP56
L. R. Amperes	: 1014/584 A	Cooling method	: IC411 - TEFC
LRC	: 6.0	Mounting	: B3T
No load current	: 53.0/30.5 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1485 rpm	Noise level ²	: 69.0 dB(A)
Slip	: 1.00 %	Starting method	: Direct On Line
Rated torque	: 427 ft.lb	Approx. weight ³	: 2120 lb
Locked rotor torque	: 190 %		
Breakdown torque	: 240 %		
Insulation class	: F		
Service factor	: 1.00		
Moment of inertia (J)	: 51.4 sq.ft.lb		
Design	: N		

Output	25%	50%	75%	100%	Foundation loads					
Efficiency (%)	95.3	94.8	95.2	94.9	95.4	95.4	95.2	95.4	Max. traction	: 1777 lb
	94.9	93.8	95.0	94.2	95.4	95.1	95.4	95.4		
Power Factor	0.51	0.48	0.76	0.73	0.83	0.81	0.85	0.84	Max. compression	: 3899 lb
	0.44	0.46	0.70	0.71	0.79	0.80	0.83	0.83		

Losses at normative operating points (speed;torque), in percentage of rated output power

Losses (%)	P1 (0,9;1,0)	4.8	4.6	4.6	4.6
	P2 (0,5;1,0)	3.9	3.7	3.7	3.7
	P3 (0,25;1,0)	3.6	3.5	3.5	3.5
	P4 (0,9;0,5)	2.3	2.2	2.2	2.2
	P5 (0,5;0,5)	1.5	1.4	1.4	1.4
	P6 (0,5;0,25)	0.9	0.9	0.9	0.9
	P7 (0,25;0,25)	0.6	0.6	0.6	0.6

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6316 C3	6316 C3
Sealing	:	Viton Oil Seal	Viton Oil Seal
Lubrication interval	:	13000 h	13000 h
Lubricant amount	:	34 g	34 g
Lubricant type	:	Mobil Polyrex EM	

Notes:

ATEX
 INERIS 16ATEX0036X
 CML 21UKEX1315X
 II 2G Ex db IIB T4 Gb
 EAC
 EAЭC RU C-BR.AA87.B.00379/20
 1Ex db IIB T4 Gb X
 ООО «НАННО ЦСВЭ»
 IECEX
 IECEX INE 16.0044X
 Ex db IIB T4 Gb

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Customer :

Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermistor - 2 wires	1 x Phase	150 °C

Space heater information

Voltage: 200 - 240 V

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