

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22Xec IE2 Three-Phase

Product code : 12220241
Catalog # : E00158EP3WAX90LF3-W2

Area classification : ZONA 2/22, GRUPO IIC/IIIB, T3(200 °C)/T125 °C

Frame	: 90L	Locked rotor time	: 18s (cold) 10s (hot)
Output	: 1.5 kW (2 HP)	Temperature rise	: 80 K
Poles	: 4	Duty cycle	: S1
Frequency	: 50 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 220/380 V	Altitude	: 1000 m.a.s.l.
Rated current	: 5.73/3.32 A	Protection degree	: IP55
L. R. Amperes	: 37.3/21.6 A	Cooling method	: IC411 - TEFC
LRC	: 6.5	Mounting	: B3T
No load current	: 2.94/1.70 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1435 rpm	Noise level ²	: 49.0 dB(A)
Slip	: 4.33 %	Starting method	: Direct On Line
Rated torque	: 7.37 ft.lb	Approx. weight ³	: 50.9 lb
Locked rotor torque	: 240 %		
Breakdown torque	: 250 %		
Insulation class	: F		
Service factor	: 1.00		
Moment of inertia (J)	: 0.1296 sq.ft.lb		
Design	: N		

Output	25%	50%	75%	100%	Foundation loads					
Efficiency (%)	82.8	81.1	82.8	81.5	83.2	83.0	82.8	83.0	Max. traction	: 153 lb
	79.1	81.1	80.1	81.5	82.3	84.0	83.1	84.0		
Power Factor	0.37	0.33	0.63	0.57	0.77	0.71	0.83	0.80	Max. compression	: 204 lb
	0.31	0.32	0.53	0.55	0.68	0.69	0.78	0.78		

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

Losses (%)	P1 (0,9;1,0)	21.1	20.8	20.6	19.3
	P2 (0,5;1,0)	20.4	20.2	20.0	18.7
	P3 (0,25;1,0)	19.0	18.7	18.6	17.4
	P4 (0,9;0,5)	9.6	9.5	9.4	8.8
	P5 (0,5;0,5)	7.5	7.4	7.4	6.9
	P6 (0,5;0,25)	5.2	5.1	5.1	4.7
	P7 (0,25;0,25)	4.0	3.9	3.9	3.6

		Drive end	Non drive end
Bearing type	:	6205 ZZ	6204 ZZ
Sealing	:	V'Ring	V'Ring
Lubrication interval	:	-	-
Lubricant amount	:	-	-
Lubricant type	:	Mobil Polyrex EM	

Notes:

EAC
TC RU C-BR.AA87.B.00977/22
2Ex ec IIC T3 Gc X
Ex tc IIIB T125°C Dc X
OOO «НАИО ЛЦБЭ»
IECEX
IECEX BAS 10.0099X
Ex ec IIC T3 Gc
Ex tc IIIB T125°C Dc

Rev.	Changes Summary	Performed	Checked	Date
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Customer :

Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermistor - 2 wires	1 x Phase	140 °C
2	Winding	Thermistor - 2 wires	1 x Phase	155 °C

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