

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22Xec IE3 Three-Phase

Product code : 12861071

Catalog # : E00156ET3WAX90SF3-W2

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

Frame : 90S
Output : 1.5 kW (2 HP)
Poles : 2
Frequency : 50 Hz
Rated voltage : 220/380 V
Rated current : 5.56/3.22 A
L. R. Amperes : 36.2/20.9 A
LRC : 6.5
No load current : 2.42/1.40 A
Rated speed : 2870 rpm
Slip : 4.33 %
Rated torque : 3.68 ft.lb
Locked rotor torque : 220 %
Breakdown torque : 270 %
Insulation class : F
Service factor : 1.00
Moment of inertia (J) : 0.0470 sq.ft.lb
Design : N

Locked rotor time : 18s (cold) 10s (hot)
Temperature rise : 80 K
Duty cycle : S1
Ambient temperature : -20°C to +40°C
Altitude : 1000 m.a.s.l.
Protection degree : IP55
Cooling method : IC411 - TEFC
Mounting : B3T
Rotation¹ : Both (CW and CCW)
Noise level² : 62.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 46.7 lb

Output	25%		50%		75%		100%	
Efficiency (%)	81.0	81.0	82.0	82.0	83.5	83.5	84.2	84.2
	80.5	79.4	81.5	81.0	83.5	84.0	84.2	85.5
Power Factor	0.42	0.37	0.67	0.62	0.78	0.74	0.84	0.81
	0.33	0.36	0.57	0.61	0.70	0.73	0.78	0.80

Foundation loads
Max. traction : 85 lb
Max. compression : 130 lb

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

Losses (%)	P1 (0,9;1,0)	18.7	18.7	18.7	16.9
	P2 (0,5;1,0)	17.4	17.4	17.4	15.7
	P3 (0,25;1,0)	16.2	16.2	16.2	14.6
	P4 (0,9;0,5)	8.8	8.8	8.8	7.9
	P5 (0,5;0,5)	6.2	6.2	6.2	5.6
	P6 (0,5;0,25)	4.1	4.1	4.1	3.7
	P7 (0,25;0,25)	2.9	2.9	2.9	2.7

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

Notes:

ATEX
Baseefa 10ATEX0192X
II 3G Ex ec IIC T3 Gc
II 3D Ex tc IIIB T125°C Dc
EAC
TC RU C-BR.AA87.B.00977/22
2Ex ec IIC T3 Gc X
Ex tc IIIB T125°C Dc X
ООО «НАИО ЛСБЭ»
IECEX
IECEX BAS 10.0099X

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Ex ec IIC T3 Gc
Ex tc IIIB T125°C Dc

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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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