

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22Xec IE3 Three-Phase

Product code : 12861146

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

Catalog # : E09036ET3YAX280SMF3W

Frame : 280S/M
Output : 90 kW (125 HP)
Poles : 2
Frequency : 50 Hz
Rated voltage : 380/660 V
Rated current : 162/93.3 A
L. R. Amperes : 1085/625 A
LRC : 6.7
No load current : 41.0/23.6 A
Rated speed : 2973 rpm
Slip : 0.90 %
Rated torque : 213 ft.lb
Locked rotor torque : 190 %
Breakdown torque : 260 %
Insulation class : F
Service factor : 1.00
Moment of inertia (J) : 26.5 sq.ft.lb
Design : N

Locked rotor time : 48s (cold) 27s (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 : 77.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 1539 lb

Output	50%	75%	100%
Efficiency (%)	93.8 93.8	94.5 94.5	95.0 95.0
	93.0 92.5	94.5 94.0	95.0 95.0
Power Factor	0.82 0.79	0.87 0.85	0.89 0.88
	0.75 0.77	0.84 0.85	0.87 0.87

Foundation loads
Max. traction : 742 lb
Max. compression : 2282 lb

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

Losses (%)	P1 (0,9;1,0)	4.9	4.9	4.9	4.9
	P2 (0,5;1,0)	3.5	3.5	3.5	3.5
	P3 (0,25;1,0)	3.1	3.1	3.1	3.1
	P4 (0,9;0,5)	2.7	2.7	2.7	2.7
	P5 (0,5;0,5)	1.5	1.5	1.5	1.5
	P6 (0,5;0,25)	1.0	1.0	1.0	1.0
	P7 (0,25;0,25)	0.5	0.5	0.5	0.5

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6314 C3	6314 C3
Sealing	:	WSeal	WSeal
Lubrication interval	:	5000 h	5000 h
Lubricant amount	:	27 g	27 g
Lubricant type	:	Mobil Polyrex EM	

Notes:

ATEX
Baseefa 10ATEX0192X
BAS21UKEX0284X
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
OOO «НАННО ЦСБЭ»
IECEX
IECEX BAS 10.0099X

Rev.	Changes Summary	Performed	Checked	Date
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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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