

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof IE2 Three-Phase

Product code :

13444073

Catalog # :

E05518XP3YAX250SMF3

Frame : 250S/M
Output : 55 kW (75 HP)
Poles : 4
Frequency : 50 Hz
Rated voltage : 380/660 V
Rated current : 101/58.2 A
L. R. Amperes : 626/361 A
LRC : 6.2
No load current : 25.0/14.4 A
Rated speed : 1475 rpm
Slip : 1.67 %
Rated torque : 263 ft.lb
Locked rotor torque : 210 %
Breakdown torque : 220 %
Insulation class : F
Service factor : 1.00
Moment of inertia (J) : 25.0 sq.ft.lb
Design : N

Locked rotor time : 41s (cold) 23s (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 : 70.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 1194 lb

Output	25%		50%		75%		100%	
Efficiency (%)	93.0	93.2	93.2	93.4	93.7	94.0	93.7	94.0
	92.4		92.7		94.0		94.1	
Power Factor	0.58	0.51	0.80	0.75	0.86	0.85	0.88	0.87
	0.51		0.74		0.84		0.88	

Foundation loads
Max. traction : 1228 lb
Max. compression : 2422 lb

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

Losses (%)	P1 (0,9;1,0)	6.5	6.2	6.1
	P2 (0,5;1,0)	5.5	5.2	5.1
	P3 (0,25;1,0)	5.0	4.7	4.6
	P4 (0,9;0,5)	2.7	2.5	2.5
	P5 (0,5;0,5)	1.8	1.7	1.7
	P6 (0,5;0,25)	1.0	0.9	0.9
	P7 (0,25;0,25)	0.6	0.6	0.6

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6314 C3	6314 C3
Sealing	:	Lip Seal	Lip Seal
Lubrication interval	:	11638 h	11638 h
Lubricant amount	:	27 g	27 g
Lubricant type	:	Mobil Polyrex EM	

Notes:

This revision replaces and cancel the previous one, which must be eliminated.

- (1) Looking the motor from the shaft end.
- (2) Measured at 1m and with tolerance of +3dB(A).
- (3) Approximate weight subject to changes after manufacturing process.
- (4) At 100% of full load.

These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in IEC 60034-1.

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Customer :

Thermal protection

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

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