

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium
Efficiency Three-Phase

Product code : 11507579

Catalog # : 03009XT3E364T

Frame : 364/5T
Output : 30 HP (22 kW)
Poles : 8
Frequency : 60 Hz
Rated voltage : 230/460 V
Rated current : 77.1/38.6 A
L. R. Amperes : 440/220 A
LRC : 5.7x(Code G)
No load current : 35.0/17.5 A
Rated speed : 885 rpm
Slip : 1.67 %
Rated torque : 178 ft.lb
Locked rotor torque : 210 %
Breakdown torque : 220 %
Insulation class : F
Service factor : 1.15
Moment of inertia (J) : 23.5 sq.ft.lb
Design : B

Locked rotor time : 25s (cold) 14s (hot)
Temperature rise : 80 K
Duty cycle : Cont.(S1)
Ambient temperature : -20°C to +40°C
Altitude : 1000 m.a.s.l.
Protection degree : IP55
Cooling method : IC411 - TEFC
Mounting : F-1
Rotation¹ : Both (CW and CCW)
Noise level² : 62.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 936 lb

Output	50%	75%	100%
Efficiency (%)	92.4 92.4	93.0 92.4	93.0 91.7
	92.4 82.4	92.4 92.4	91.7 92.4
Power Factor	0.64 0.70	0.73 0.77	0.77 0.79
	0.66 0.63	0.75 0.72	0.78 0.77

Foundation loads
Max. traction : 1157 lb
Max. compression : 2075 lb

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

Losses (%)	P1 (0,9;1,0)	7.2	8.6	8.6	7.8
	P2 (0,5;1,0)	5.8	7.0	7.0	6.4
	P3 (0,25;1,0)	5.5	6.6	6.6	6.0
	P4 (0,9;0,5)	3.7	4.5	4.5	4.1
	P5 (0,5;0,5)	2.5	3.0	3.0	2.7
	P6 (0,5;0,25)	1.8	2.1	2.1	1.9
	P7 (0,25;0,25)	1.2	1.5	1.5	1.4

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6314 C3	6314 C3
Sealing	:	Oil Seal	Lip Seal
Lubrication interval	:	17353 h	17353 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 NEMA MG-1.

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Customer :

Thermal protection

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

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