

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14212598

Catalog # : 00152XT3E182TC

Frame : 182/4TC
Output : 1.5 HP (1.1 kW)
Poles : 6
Frequency : 60 Hz
Rated voltage : 230/460 V
Rated current : 4.64/2.32 A
L. R. Amperes : 30.6/15.3 A
LRC : 6.6x(Code K)
No load current : 2.80/1.40 A
Rated speed : 1165 rpm
Slip : 2.92 %
Rated torque : 6.76 ft.lb
Locked rotor torque : 260 %
Breakdown torque : 330 %
Insulation class : F
Service factor : 1.15
Moment of inertia (J) : 0.4212 sq.ft.lb
Design : B

Locked rotor time : 63s (cold) 35s (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 : 52.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 128 lb

Output	25%		50%		75%		100%	
Efficiency (%)	83.3	86.0	84.5	85.5	86.5	86.5	87.5	85.5
	84.1	82.8	84.5	84.0	86.5	85.5	86.5	86.5
Power Factor	0.27	0.30	0.47	0.52	0.59	0.63	0.68	0.73
	0.28	0.26	0.48	0.45	0.60	0.57	0.70	0.67

Foundation loads
Max. traction : 87 lb
Max. compression : 215 lb

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

Losses (%)	P1 (0,9;1,0)	13.4	15.9	14.7	14.7
	P2 (0,5;1,0)	10.7	12.7	11.7	11.7
	P3 (0,25;1,0)	10.0	11.9	11.0	11.0
	P4 (0,9;0,5)	8.2	9.7	9.0	9.0
	P5 (0,5;0,5)	5.5	6.6	6.0	6.0
	P6 (0,5;0,25)	4.4	5.2	4.8	4.8
	P7 (0,25;0,25)	3.2	3.8	3.5	3.5

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6307 2RS	6206 2RS
Sealing	:	Oil Seal	Lip Seal
Lubrication interval	:	-	-
Lubricant amount	:	-	-
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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