

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14407459

Catalog # : 01512XT3E284T

Frame	: 284T	Locked rotor time	: 45s (cold) 25s (hot)
Output	: 15 HP (11 kW)	Temperature rise	: 80 K
Poles	: 6	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 230/460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 35.0/17.5 A	Protection degree	: IP55
L. R. Amperes	: 252/126 A	Cooling method	: IC411 - TEFC
LRC	: 7.2x(Code H)	Mounting	: F-1
No load current	: 12.0/6.00 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1177 rpm	Noise level ²	: 59.0 dB(A)
Slip	: 1.92 %	Starting method	: Direct On Line
Rated torque	: 66.9 ft.lb	Approx. weight ³	: 468 lb
Locked rotor torque	: 250 %		
Breakdown torque	: 260 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 7.07 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads					
Efficiency (%)	90.8	89.8	91.0	89.5	91.7	90.2	91.7	89.5	Max. traction	: 577 lb
	89.3	89.9	89.5	89.5	90.2	91.0	90.2	90.2		
Power Factor	0.49	0.53	0.74	0.77	0.82	0.84	0.86	0.87	Max. compression	: 1043 lb
	0.50	0.48	0.75	0.73	0.83	0.82	0.86	0.86		

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

Losses (%)	P1 (0,9;1,0)	8.8	11.4	10.5	10.5
	P2 (0,5;1,0)	7.2	9.3	8.6	8.6
	P3 (0,25;1,0)	6.4	8.4	7.7	7.7
	P4 (0,9;0,5)	4.2	5.4	5.0	5.0
	P5 (0,5;0,5)	2.7	3.6	3.3	3.3
	P6 (0,5;0,25)	1.7	2.3	2.1	2.1
	P7 (0,25;0,25)	1.1	1.5	1.4	1.4

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6311 C3	6211 C3
Sealing	:	Oil Seal	Lip Seal
Lubrication interval	:	20000 h	20000 h
Lubricant amount	:	18 g	11 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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