

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11679203

Catalog # : 50036ET3G586/7S-W22

Frame	: 586/7TS	Locked rotor time	: 70s (cold) 39s (hot)
Output	: 500 HP (370 kW)	Temperature rise	: 80 K
Poles	: 2	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 530 A	Protection degree	: IP55
L. R. Amperes	: 4505 A	Cooling method	: IC411 - TEFC
LRC	: 8.5x(Code J)	Mounting	: F-1
No load current	: 100 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 3580 rpm	Noise level ²	: 84.0 dB(A)
Slip	: 0.56 %	Starting method	: Direct On Line
Rated torque	: 733 ft.lb	Approx. weight ³	: 4334 lb
Locked rotor torque	: 220 %		
Breakdown torque	: 240 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 143 sq.ft.lb		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	95.8 95.8	96.2 95.8	96.2 95.8	Max. traction	: 2134 lb
	95.8 95.8	96.2 96.2	95.8 96.2		
Power Factor	0.88 0.89	0.90 0.90	0.91 0.91	Max. compression	: 6468 lb
	0.88 0.87	0.90 0.89	0.91 0.90		

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

Losses (%)	P1 (0,9;1,0)	4.0	4.0	4.0	4.0
	P2 (0,5;1,0)	2.8	2.8	2.8	2.8
	P3 (0,25;1,0)	2.2	2.2	2.2	2.2
	P4 (0,9;0,5)	2.3	2.3	2.3	2.3
	P5 (0,5;0,5)	1.3	1.3	1.3	1.3
	P6 (0,5;0,25)	0.9	0.9	0.9	0.9
	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	:	Taconite Labyrinth	Taconite Labyrinth
Lubrication interval	:	4000 h	4000 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 :

Space heater information

Voltage: 200 - 240 V

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