

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 14335121

Catalog # : 45012ET3GRB586/7-W22

Frame : 586/7T
Output : 450 HP (330 kW)
Poles : 6
Frequency : 60 Hz
Rated voltage : 460 V
Rated current : 532 A
L. R. Amperes : 3245 A
LRC : 6.1x(Code G)
No load current : 220 A
Rated speed : 1193 rpm
Slip : 0.58 %
Rated torque : 1980 ft.lb
Locked rotor torque : 200 %
Breakdown torque : 210 %
Insulation class : F
Service factor : 1.15
Moment of inertia (J) : 368 sq.ft.lb

Locked rotor time : 45s (cold) 25s (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 : 77.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 4385 lb

Output	25%		50%		75%		100%	
Efficiency (%)	95.7	96.1	95.8	95.8	96.2	96.2	96.2	95.8
	96.1	95.7	95.8	95.8	96.2	96.2	95.8	96.2
Power Factor	0.42	0.45	0.67	0.70	0.77	0.79	0.81	0.82
	0.41	0.39	0.67	0.64	0.77	0.75	0.81	0.80

Foundation loads
Max. traction : 7958 lb
Max. compression : 12343 lb

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

Losses (%)	P1 (0,9;1,0)	4.6	4.6	4.6	4.6
	P2 (0,5;1,0)	3.4	3.4	3.4	3.4
	P3 (0,25;1,0)	2.7	2.7	2.7	2.7
	P4 (0,9;0,5)	2.9	2.9	2.9	2.9
	P5 (0,5;0,5)	1.9	1.9	1.9	1.9
	P6 (0,5;0,25)	1.5	1.5	1.5	1.5
	P7 (0,25;0,25)	0.9	0.9	0.9	0.9

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	NU-322 C3	6319 C3
Sealing	:	Taconite Labyrinth	Taconite Labyrinth
Lubrication interval	:	7000 h	13000 h
Lubricant amount	:	60 g	45 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.

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by				
Date	28/03/2024			

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Revision

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Customer :

Space heater information

Voltage: 200 - 240 V

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