

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 16832334

Catalog # : 00318ET3E182TC-W22G

Frame : 182/4TC
Output : 3 HP (2.2 kW)
Poles : 4
Frequency : 60 Hz
Rated voltage : 230/460 V
Rated current : 7.82/3.91 A
L. R. Amperes : 63.3/31.7 A
LRC : 8.1x(Code K)
No load current : 4.00/2.00 A
Rated speed : 1760 rpm
Slip : 2.22 %
Rated torque : 8.95 ft.lb
Locked rotor torque : 220 %
Breakdown torque : 330 %
Insulation class : F
Service factor : 1.25
Moment of inertia (J) : 0.3401 sq.ft.lb
Design : B

Locked rotor time : 41s (cold) 23s (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 : 56.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 92.1 lb

Output	25%		50%		75%		100%	
Efficiency (%)	86.4	87.2	87.5	87.5	88.5	87.5	89.5	87.5
	87.3	87.3	87.5	87.8	87.5	87.5	87.5	87.5
Power Factor	0.36	0.43	0.61	0.68	0.71	0.77	0.79	0.80
	0.39	0.36	0.64	0.61	0.75	0.73	0.80	0.79

Foundation loads
Max. traction : 175 lb
Max. compression : 267 lb

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

Losses (%)	P1 (0,9;1,0)	11.0	13.4	13.4	13.4
	P2 (0,5;1,0)	8.9	10.8	10.8	10.8
	P3 (0,25;1,0)	8.8	10.7	10.7	10.7
	P4 (0,9;0,5)	6.1	7.4	7.4	7.4
	P5 (0,5;0,5)	4.0	4.9	4.9	4.9
	P6 (0,5;0,25)	3.0	3.6	3.6	3.6
	P7 (0,25;0,25)	2.1	2.6	2.6	2.6

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6207 ZZ	6206 ZZ
Sealing	:	V'Ring	V'Ring
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.

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

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Revision