

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12438228

Catalog # : 00109ET3E182T-W22

Frame : 182/4T
Output : 1 HP (0.75 kW)
Poles : 8
Frequency : 60 Hz
Rated voltage : 230/460 V
Rated current : 4.62/2.31 A
L. R. Amperes : 29.1/14.6 A
LRC : 6.3x(Code N)
No load current : 4.00/2.00 A
Rated speed : 880 rpm
Slip : 2.22 %
Rated torque : 5.97 ft.lb
Locked rotor torque : 300 %
Breakdown torque : 350 %
Insulation class : F
Service factor : 1.25
Moment of inertia (J) : 0.3991 sq.ft.lb
Design : B

Locked rotor time : 39s (cold) 22s (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 : 50.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 93.4 lb

Output	50%	75%	100%
Efficiency (%)	72.5 74.7	77.0 75.5	78.5 75.5
	72.0 70.0	75.5 74.0	75.5 75.5
Power Factor	0.32 0.38	0.42 0.50	0.52 0.60
	0.35 0.33	0.46 0.43	0.56 0.53

Foundation loads
Max. traction : 114 lb
Max. compression : 207 lb

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

Losses (%)	P1 (0,9;1,0)	26.1	30.9	30.9	30.9
	P2 (0,5;1,0)	21.3	25.2	25.2	25.2
	P3 (0,25;1,0)	18.8	22.3	22.3	22.3
	P4 (0,9;0,5)	21.1	25.0	25.0	25.0
	P5 (0,5;0,5)	16.5	19.5	19.5	19.5
	P6 (0,5;0,25)	15.5	18.3	18.3	18.3
	P7 (0,25;0,25)	12.9	15.3	15.3	15.3

		<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		Page 1 / 1		
Checked by				
Date	26/03/2024			
			Revision	