

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase

Product code :

12822577

Catalog # :

00318EP3ER182TC-W22

Frame : 182TC
Output : 3 HP (2.2 kW)
Poles : 4
Frequency : 60 Hz
Rated voltage : 230/460 V
Rated current : 8.10/4.05 A
L. R. Amperes : 64.0/32.0 A
LRC : 7.9x(Code K)
No load current : 4.40/2.20 A
Rated speed : 1760 rpm
Slip : 2.22 %
Rated torque : 8.95 ft.lb
Locked rotor torque : 220 %
Breakdown torque : 280 %
Insulation class : F
Service factor : 1.25
Moment of inertia (J) : 0.2636 sq.ft.lb
Design : B

Locked rotor time : 32s (cold) 18s (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 : W-6
Rotation¹ : Both (CW and CCW)
Noise level² : 56.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 88.5 lb

Output	25%		50%		75%		100%	
Efficiency (%)	86.3	84.4	86.5	84.0	87.5	86.5	87.5	85.5
	83.6	84.8	84.0	85.5	86.5	86.0	86.5	86.5
Power Factor	0.35	0.41	0.61	0.67	0.72	0.77	0.78	0.81
	0.38	0.34	0.64	0.60	0.74	0.72	0.78	0.77

Foundation loads
Max. traction : 149 lb
Max. compression : 238 lb

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

Losses (%)	P1 (0,9;1,0)	13.7	16.2	14.9	14.9
	P2 (0,5;1,0)	11.3	13.4	12.4	12.4
	P3 (0,25;1,0)	10.6	12.5	11.5	11.5
	P4 (0,9;0,5)	7.7	9.2	8.5	8.5
	P5 (0,5;0,5)	5.3	6.3	5.8	5.8
	P6 (0,5;0,25)	4.1	4.8	4.4	4.4
	P7 (0,25;0,25)	3.0	3.6	3.3	3.3

		<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				
Checked by				
Date	28/03/2024			
			Page	Revision
			1 / 1	