

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase

Product code :

16993669

Catalog # :

01109ET3E180LF3-W22

Frame : 180L
Output : 15 HP (11 kW)
Poles : 8
Frequency : 50 Hz
Rated voltage : 380 V
Rated current : 24.2 A
L. R. Amperes : 157 A
LRC : 6.5
No load current : 10.1 A
Rated speed : 720 rpm
Slip : 4.00 %
Rated torque : 109 ft.lb
Locked rotor torque : 200 %
Breakdown torque : 240 %
Insulation class : F
Service factor : 1.25
Moment of inertia (J) : 6.75 sq.ft.lb
Design : N

Locked rotor time : 21s (cold) 12s (hot)
Temperature rise : 80 K
Duty cycle : S1
Ambient temperature : -20°C to +40°C
Altitude : 1000 m.a.s.l.
Protection degree : IP55
Cooling method : IC411 - TEFC
Mounting : B3T
Rotation¹ : Both (CW and CCW)
Noise level² : 52.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 417 lb

Output	25%		50%		75%		100%	
Efficiency (%)	89.9	88.2	90.0	89.0	90.0	89.9	89.8	90.5
	88.3		88.5		89.5		89.5	
Power Factor	0.37	0.31	0.59	0.52	0.71	0.65	0.77	0.74
	0.34		0.59		0.71		0.79	

Foundation loads
Max. traction : 1121 lb
Max. compression : 1538 lb

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

Losses (%)	P1 (0,9;1,0)	10.8	10.0	11.2
	P2 (0,5;1,0)	9.0	8.3	9.3
	P3 (0,25;1,0)	8.7	8.1	9.0
	P4 (0,9;0,5)	5.9	5.4	6.1
	P5 (0,5;0,5)	4.1	3.8	4.3
	P6 (0,5;0,25)	3.1	2.8	3.2
	P7 (0,25;0,25)	2.2	2.1	2.3

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6311 C3	6211 C3
Sealing	:	V'Ring	V'Ring
Lubrication interval	:	20000 h	20000 h
Lubricant amount	:	18 g	11 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		Page 1 / 1		
Checked by				
Date	26/03/2024			
		Revision		