

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase

Product code :

16993742

Catalog # :

02218ET3E180LF3-W22

Frame : 180L
Output : 30 HP (22 kW)
Poles : 4
Frequency : 50 Hz
Rated voltage : 380 V
Rated current : 42.3 A
L. R. Amperes : 317 A
LRC : 7.5
No load current : 16.5 A
Rated speed : 1470 rpm
Slip : 2.00 %
Rated torque : 107 ft.lb
Locked rotor torque : 270 %
Breakdown torque : 300 %
Insulation class : F
Service factor : 1.25
Moment of inertia (J) : 5.39 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 : 61.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 439 lb

Output	25%		50%		75%		100%	
Efficiency (%)	89.9	89.5	90.2	90.2	93.1	92.8	93.0	93.2
	89.8		91.0		92.4		93.6	
Power Factor	0.45	0.38	0.70	0.62	0.80	0.74	0.85	0.81
	0.40		0.65		0.76		0.82	

Foundation loads
Max. traction : 1251 lb
Max. compression : 1690 lb

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

Losses (%)	P1 (0,9;1,0)	7.2	7.0	6.5
	P2 (0,5;1,0)	5.5	5.3	5.0
	P3 (0,25;1,0)	4.9	4.7	4.4
	P4 (0,9;0,5)	4.2	4.1	3.8
	P5 (0,5;0,5)	2.7	2.6	2.4
	P6 (0,5;0,25)	2.0	2.0	1.8
	P7 (0,25;0,25)	1.3	1.3	1.2

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