

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase

Product code :

13035066

Catalog # :

02218ET3Y180LFF-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 : B35L(E)
Rotation¹ : Both (CW and CCW)
Noise level² : 61.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 455 lb

Output	50%	75%	100%
Efficiency (%)	90.2 90.2	93.1 92.8	93.0 93.2
	91.0	92.4	93.6
Power Factor	0.70 0.62	0.80 0.74	0.85 0.81
	0.65	0.76	0.82

Foundation loads
Max. traction : 1243 lb
Max. compression : 1698 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		Page 1 / 1		
Checked by				
Date	26/03/2024			
		Revision		