

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase

Product code :

11717642

Catalog # :

01118ET3Y160MFF-W22

Frame : 160M
Output : 15 HP (11 kW)
Poles : 4
Frequency : 50 Hz
Rated voltage : 380 V
Rated current : 21.5 A
L. R. Amperes : 161 A
LRC : 7.5
No load current : 9.00 A
Rated speed : 1470 rpm
Slip : 2.00 %
Rated torque : 53.6 ft.lb
Locked rotor torque : 220 %
Breakdown torque : 250 %
Insulation class : F
Service factor : 1.25
Moment of inertia (J) : 2.38 sq.ft.lb
Design : N

Locked rotor time : 25s (cold) 14s (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 : 320 lb

Output	50%	75%	100%
Efficiency (%)	91.0 90.4	91.4 91.4	91.4 91.4
	89.5	91.7	92.4
Power Factor	0.69 0.62	0.79 0.74	0.85 0.81
	0.63	0.75	0.82

Foundation loads
Max. traction : 540 lb
Max. compression : 860 lb

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

Losses (%)	P1 (0,9;1,0)	9.0	9.0	7.9
	P2 (0,5;1,0)	7.3	7.3	6.4
	P3 (0,25;1,0)	6.9	6.9	6.0
	P4 (0,9;0,5)	5.2	5.2	4.6
	P5 (0,5;0,5)	3.5	3.5	3.1
	P6 (0,5;0,25)	2.6	2.6	2.3
	P7 (0,25;0,25)	1.9	1.9	1.6

	<u>Drive end</u>	<u>Non drive end</u>
Bearing type :	6309 C3	6209 C3
Sealing :	V'Ring	V'Ring
Lubrication interval :	20000 h	20000 h
Lubricant amount :	13 g	9 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		