

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase

Product code :

13035065

Catalog # :

01518ET3Y160LFF-W22

Frame : 160L
Output : 20 HP (15 kW)
Poles : 4
Frequency : 50 Hz
Rated voltage : 380 V
Rated current : 29.4 A
L. R. Amperes : 206 A
LRC : 7.0
No load current : 11.0 A
Rated speed : 1465 rpm
Slip : 2.33 %
Rated torque : 71.7 ft.lb
Locked rotor torque : 229 %
Breakdown torque : 250 %
Insulation class : F
Service factor : 1.25
Moment of inertia (J) : 2.88 sq.ft.lb
Design : N

Locked rotor time : 32s (cold) 18s (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 : 346 lb

Output	50%	75%	100%
Efficiency (%)	92.0 91.4	92.4 92.4	92.4 92.4
	91.0	91.7	93.0
Power Factor	0.69 0.62	0.79 0.74	0.84 0.80
	0.62	0.74	0.81

Foundation loads
Max. traction : 762 lb
Max. compression : 1108 lb

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

Losses (%)	P1 (0,9;1,0)	7.8	7.8	7.2
	P2 (0,5;1,0)	6.0	6.0	5.5
	P3 (0,25;1,0)	5.4	5.4	4.9
	P4 (0,9;0,5)	4.6	4.6	4.2
	P5 (0,5;0,5)	2.9	2.9	2.7
	P6 (0,5;0,25)	2.2	2.2	2.0
	P7 (0,25;0,25)	1.4	1.4	1.3

		<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				
Checked by				
Date	26/03/2024			
			Page	Revision
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