

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase

Product code :

11616109

Catalog # :

00509ET3Y160M-W22

Frame : 160M
Output : 7.5 HP (5.5 kW)
Poles : 8
Frequency : 50 Hz
Rated voltage : 380 V
Rated current : 13.1 A
L. R. Amperes : 62.9 A
LRC : 4.8
No load current : 7.40 A
Rated speed : 725 rpm
Slip : 3.33 %
Rated torque : 54.3 ft.lb
Locked rotor torque : 180 %
Breakdown torque : 210 %
Insulation class : F
Service factor : 1.25
Moment of inertia (J) : 2.90 sq.ft.lb
Design : N

Locked rotor time : 50s (cold) 28s (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 : B3L(E)
Rotation¹ : Both (CW and CCW)
Noise level² : 51.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 287 lb

Output	25%		50%		75%		100%	
Efficiency (%)	85.7	83.7	86.0	85.0	86.5	86.0	86.5	87.2
	84.4		85.5		86.5		87.5	
Power Factor	0.32	0.27	0.56	0.49	0.68	0.62	0.74	0.70
	0.27		0.49		0.62		0.70	

Foundation loads
Max. traction : 435 lb
Max. compression : 722 lb

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

Losses (%)	P1 (0,9;1,0)	15.0	14.2	13.8
	P2 (0,5;1,0)	13.0	12.2	11.9
	P3 (0,25;1,0)	12.9	12.1	11.8
	P4 (0,9;0,5)	8.8	8.3	8.1
	P5 (0,5;0,5)	6.6	6.3	6.1
	P6 (0,5;0,25)	5.3	5.0	4.8
	P7 (0,25;0,25)	4.1	3.9	3.8

		<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			

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Revision