

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase

Product code :

16993578

Catalog # :

00509ET3E160MF3-W22

Frame	: 160M	Locked rotor time	: 50s (cold) 28s (hot)
Output	: 7.5 HP (5.5 kW)	Temperature rise	: 80 K
Poles	: 8	Duty cycle	: S1
Frequency	: 50 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 380 V	Altitude	: 1000 m.a.s.l.
Rated current	: 13.1 A	Protection degree	: IP55
L. R. Amperes	: 62.9 A	Cooling method	: IC411 - TEFC
LRC	: 4.8	Mounting	: B3T
No load current	: 7.40 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 725 rpm	Noise level ²	: 51.0 dB(A)
Slip	: 3.33 %	Starting method	: Direct On Line
Rated torque	: 54.3 ft.lb	Approx. weight ³	: 271 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		

Output	25%	50%	75%	100%	Foundation loads					
Efficiency (%)	85.7	83.7	86.0	85.0	86.5	86.0	86.5	87.2	Max. traction	: 512 lb
	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	Max. compression	: 783 lb
	0.27		0.49		0.62		0.70			

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			
			Page	Revision
			1 / 1	