

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase

Product code :

16993586

Catalog # :

01118ET3E160MF3-W22

Frame	: 160M	Locked rotor time	: 25s (cold) 14s (hot)
Output	: 15 HP (11 kW)	Temperature rise	: 80 K
Poles	: 4	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	: 21.5 A	Protection degree	: IP55
L. R. Amperes	: 161 A	Cooling method	: IC411 - TEFC
LRC	: 7.5	Mounting	: B3T
No load current	: 9.00 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1470 rpm	Noise level ²	: 61.0 dB(A)
Slip	: 2.00 %	Starting method	: Direct On Line
Rated torque	: 53.6 ft.lb	Approx. weight ³	: 271 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		

Output	25%		50%		75%		100%		Foundation loads	
Efficiency (%)	90.8	90.2	91.0	90.4	91.4	91.4	91.4	91.4	Max. traction	: 658 lb
	88.6		89.5		91.7		92.4			
Power Factor	0.43	0.37	0.69	0.62	0.79	0.74	0.85	0.81	Max. compression	: 929 lb
	0.38		0.63		0.75		0.82			

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				
Checked by				
Date	26/03/2024			
			Page	Revision
			1 / 1	