

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Multimounting IE3 Three-Phase

Product code : 14052064
Catalog # : 00418ET3YAL112MFF-W2

Frame	: 112M	Locked rotor time	: 27s (cold) 15s (hot)
Output	: 5.5 HP (4 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	: 8.47 A	Protection degree	: IP55
L. R. Amperes	: 59.3 A	Cooling method	: IC411 - TEFC
LRC	: 7.0	Mounting	: B35L(E)
No load current	: 4.15 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1445 rpm	Noise level ²	: 56.0 dB(A)
Slip	: 3.67 %	Starting method	: Direct On Line
Rated torque	: 20.0 ft.lb	Approx. weight ³	: 93.6 lb
Locked rotor torque	: 200 %		
Breakdown torque	: 270 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.4312 sq.ft.lb		
Design	: N		

Output	25%	50%	75%	100%	Foundation loads					
Efficiency (%)	89.4	87.6	89.3	88.2	89.0	88.9	88.6	89.3	Max. traction	: 322 lb
	87.2		87.5		89.5		89.5			
Power Factor	0.39	0.32	0.65	0.57	0.76	0.70	0.81	0.77	Max. compression	: 416 lb
	0.33		0.58		0.70		0.77			

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

Losses (%)	P1 (0,9;1,0)	12.3	11.4	11.2
	P2 (0,5;1,0)	10.3	9.6	9.4
	P3 (0,25;1,0)	10.0	9.3	9.2
	P4 (0,9;0,5)	6.9	6.4	6.3
	P5 (0,5;0,5)	5.0	4.6	4.5
	P6 (0,5;0,25)	3.8	3.5	3.4
	P7 (0,25;0,25)	2.8	2.6	2.6

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6207 ZZ	6206 ZZ
Sealing	:	V'Ring	V'Ring
Lubrication interval	:	-	-
Lubricant amount	:	-	-
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	