

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase

Product code : 11661305
Catalog # : 13236ET3Y315S/M-W22

Frame	: 315S/M	Locked rotor time	: 113s (cold) 63s (hot)
Output	: 175 HP (132 kW)	Temperature rise	: 80 K
Poles	: 2	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	: 232 A	Protection degree	: IP55
L. R. Amperes	: 1624 A	Cooling method	: IC411 - TEFC
LRC	: 7.0	Mounting	: B3L(E)
No load current	: 48.0 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 2977 rpm	Noise level ²	: 77.0 dB(A)
Slip	: 0.77 %	Starting method	: Direct On Line
Rated torque	: 309 ft.lb	Approx. weight ³	: 2497 lb
Locked rotor torque	: 190 %		
Breakdown torque	: 250 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 60.7 sq.ft.lb		
Design	: N		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	95.3 95.1	95.8 95.9	96.1 96.4	Max. traction	: 721 lb
	93.6	94.5	95.4		
Power Factor	0.85 0.81	0.89 0.88	0.90 0.90	Max. compression	: 3218 lb
	0.82	0.88	0.90		

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

Losses (%)	P1 (0,9;1,0)	3.9	3.6	4.6
	P2 (0,5;1,0)	2.3	2.2	2.8
	P3 (0,25;1,0)	1.7	1.6	2.1
	P4 (0,9;0,5)	2.7	2.5	3.3
	P5 (0,5;0,5)	1.3	1.2	1.6
	P6 (0,5;0,25)	1.1	1.0	1.3
	P7 (0,25;0,25)	0.5	0.4	0.6

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6314 C3	6314 C3
Sealing	:	WSeal	WSeal
Lubrication interval	:	4000 h	4000 h
Lubricant amount	:	27 g	27 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 1 / 1	Revision