

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE4 Three-Phase

Product code : 17300658
Catalog # : 13218EG3Y315S/M-W22

Frame	: 315S/M	Locked rotor time	: 61s (cold) 34s (hot)
Output	: 175 HP (132 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	: 245 A	Protection degree	: IP55
L. R. Amperes	: 1715 A	Cooling method	: IC411 - TEFC
LRC	: 7.0	Mounting	: B3L(E)
No load current	: 86.0 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1487 rpm	Noise level ²	: 71.0 dB(A)
Slip	: 0.87 %	Starting method	: Direct On Line
Rated torque	: 618 ft.lb	Approx. weight ³	: 2161 lb
Locked rotor torque	: 240 %		
Breakdown torque	: 260 %		
Insulation class	: F		
Service factor	: 1.00		
Moment of inertia (J)	: 76.1 sq.ft.lb		
Design	: NE		

Output	25%	50%	75%	100%	Foundation loads				
Efficiency (%)	0.000	95.7	95.4	96.2	96.1	96.4	96.4	Max. traction : 2863 lb	
	0.000	95.1	95.4	95.9	96.2	96.4	96.5		
	0.000								
	0.000								
Power Factor	0.00	0.00	0.72	0.68	0.81	0.78	0.85	0.83	Max. compression : 5024 lb
	0.00	0.00	0.64	0.66	0.76	0.77	0.81	0.82	

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

Losses (%)	P1 (0,9;1,0)	3.9	3.9	3.9	3.8
	P2 (0,5;1,0)	3.0	3.0	3.0	2.9
	P3 (0,25;1,0)	2.6	2.6	2.6	2.5
	P4 (0,9;0,5)	2.2	2.2	2.2	2.1
	P5 (0,5;0,5)	1.4	1.4	1.4	1.4
	P6 (0,5;0,25)	1.0	1.0	1.0	1.0
	P7 (0,25;0,25)	0.6	0.6	0.6	0.6

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6319 C3	6316 C3
Sealing	:	WSeal	WSeal
Lubrication interval	:	8000 h	10000 h
Lubricant amount	:	45 g	34 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		Page 1 / 1		
Checked by				
Date	26/03/2024			
			Revision	