

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase

Product code : 11567403
Catalog # : 13218ET3Y315S/M-W22

Frame	: 315S/M	Locked rotor time	: 106s (cold) 59s (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	: 239 A	Protection degree	: IP55
L. R. Amperes	: 1864 A	Cooling method	: IC411 - TEFC
LRC	: 7.8	Mounting	: B3L(E)
No load current	: 65.0 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1489 rpm	Noise level ²	: 71.0 dB(A)
Slip	: 0.73 %	Starting method	: Direct On Line
Rated torque	: 617 ft.lb	Approx. weight ³	: 2628 lb
Locked rotor torque	: 229 %		
Breakdown torque	: 229 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 69.7 sq.ft.lb		
Design	: N		

Output	25%		50%		75%		100%		Foundation loads	
Efficiency (%)	94.6	94.8	95.0	95.3	96.0	95.9	96.3	96.4	Max. traction	: 2377 lb
	93.3		94.1		95.4		96.2			
Power Factor	0.55	0.48	0.78	0.72	0.85	0.81	0.87	0.85	Max. compression	: 5005 lb
	0.48		0.72		0.81		0.85			

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

Losses (%)	P1 (0,9;1,0)	4.0	3.8	4.1
	P2 (0,5;1,0)	2.6	2.5	2.7
	P3 (0,25;1,0)	1.9	1.9	2.0
	P4 (0,9;0,5)	2.7	2.6	2.7
	P5 (0,5;0,5)	1.5	1.4	1.5
	P6 (0,5;0,25)	1.2	1.2	1.3
	P7 (0,25;0,25)	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				
Checked by				
Date	26/03/2024			
			Page	Revision
			1 / 1	