

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase

Product code :

12143617

Catalog # :

03718ET3Y225S/MFF-W2

Frame	: 225S/M	Locked rotor time	: 16s (cold) 9s (hot)
Output	: 50 HP (37 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	: 69.6 A	Protection degree	: IP55
L. R. Amperes	: 543 A	Cooling method	: IC411 - TEFC
LRC	: 7.8	Mounting	: B35L(E)
No load current	: 25.2 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1480 rpm	Noise level ²	: 63.0 dB(A)
Slip	: 1.33 %	Starting method	: Direct On Line
Rated torque	: 177 ft.lb	Approx. weight ³	: 915 lb
Locked rotor torque	: 240 %		
Breakdown torque	: 270 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 20.9 sq.ft.lb		
Design	: N		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	93.7 93.5	93.9 94.1	93.9 94.1	Max. traction	: 1355 lb
	93.0	94.1	94.5		
Power Factor	0.74 0.69	0.83 0.79	0.86 0.84	Max. compression	: 2270 lb
	0.68	0.79	0.84		

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

Losses (%)	P1 (0,9;1,0)	5.7	5.3	5.5
	P2 (0,5;1,0)	4.1	3.8	4.0
	P3 (0,25;1,0)	3.5	3.3	3.4
	P4 (0,9;0,5)	3.4	3.2	3.3
	P5 (0,5;0,5)	2.0	1.9	1.9
	P6 (0,5;0,25)	1.5	1.4	1.4
	P7 (0,25;0,25)	0.9	0.8	0.9

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6314 C3	6314 C3
Sealing	:	WSeal	WSeal
Lubrication interval	:	12000 h	12000 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	Revision
			1 / 1	