

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase

Product code : 11711384
Catalog # : 07536ET3Y280S/M-W22

Frame	: 280S/M	Locked rotor time	: 57s (cold) 32s (hot)
Output	: 100 HP (75 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	: 134 A	Protection degree	: IP55
L. R. Amperes	: 993 A	Cooling method	: IC411 - TEFC
LRC	: 7.4	Mounting	: B3L(E)
No load current	: 27.5 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 2970 rpm	Noise level ²	: 77.0 dB(A)
Slip	: 1.00 %	Starting method	: Direct On Line
Rated torque	: 177 ft.lb	Approx. weight ³	: 1632 lb
Locked rotor torque	: 200 %		
Breakdown torque	: 240 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 28.6 sq.ft.lb		
Design	: N		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	94.3 94.0	95.2 95.3	95.4 95.7	Max. traction	: 358 lb
	92.4	94.1	94.5		
Power Factor	0.84 0.80	0.88 0.86	0.89 0.87	Max. compression	: 1989 lb
	0.80	0.87	0.88		

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

Losses (%)	P1 (0,9;1,0)	4.3	4.0	5.2
	P2 (0,5;1,0)	2.4	2.2	2.9
	P3 (0,25;1,0)	1.8	1.7	2.2
	P4 (0,9;0,5)	3.1	2.8	3.7
	P5 (0,5;0,5)	1.3	1.2	1.5
	P6 (0,5;0,25)	1.0	0.9	1.2
	P7 (0,25;0,25)	0.4	0.4	0.5

		<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