

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Super Premium Efficiency Three-Phase Product code : 11715827

Frame	: 404/5T	Locked rotor time	: 30s (cold) 17s (hot)
Output	: 100 HP (75 kW)	Temperature rise	: 80 K
Poles	: 4	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 230/460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 232/116 A	Protection degree	: IP55
L. R. Amperes	: 2297/1148 A	Cooling method	: IC411 - TEFC
LRC	: 9.9x(Code L)	Mounting	: F-1
No load current	: 94.0/47.0 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1785 rpm	Noise level ²	: 68.0 dB(A)
Slip	: 0.83 %	Starting method	: Direct On Line
Rated torque	: 294 ft.lb	Approx. weight ³	: 1219 lb
Locked rotor torque	: 330 %		
Breakdown torque	: 350 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 28.7 sq.ft.lb		
Design	: A		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	95.0 94.6	95.8 95.0	96.2 95.0	Max. traction	: 2894 lb
	94.6 94.6	95.0 95.4	95.0 95.4		
Power Factor	0.70 0.75	0.80 0.83	0.84 0.86	Max. compression	: 4112 lb
	0.72 0.68	0.81 0.78	0.85 0.84		

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

Losses (%)	P1 (0,9;1,0)	3.8	5.1	5.1	4.7
	P2 (0,5;1,0)	2.9	3.9	3.9	3.6
	P3 (0,25;1,0)	2.6	3.4	3.4	3.1
	P4 (0,9;0,5)	2.1	2.9	2.9	2.6
	P5 (0,5;0,5)	1.4	1.8	1.8	1.7
	P6 (0,5;0,25)	1.0	1.3	1.3	1.2
	P7 (0,25;0,25)	0.6	0.8	0.8	0.8

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6316 C3	6314 C3
Sealing	:	WSeal	WSeal
Lubrication interval	:	10000 h	12000 h
Lubricant amount	:	34 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		Page Revision 1 / 1		
Checked by				
Date	29/03/2024			