

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase

Product code : 11380831

Frame	: 447/9TS	Locked rotor time	: 36s (cold) 20s (hot)
Output	: 250 HP (185 kW)	Temperature rise	: 80 K
Poles	: 2	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 270 A	Protection degree	: IP55
L. R. Amperes	: 1755 A	Cooling method	: IC411 - TEFC
LRC	: 6.5x(Code F)	Mounting	: F-1
No load current	: 50.0 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 3565 rpm	Starting method	: Direct On Line
Slip	: 0.97 %	Approx. weight ³	: 2471 lb
Rated torque	: 368 ft.lb		
Locked rotor torque	: 190 %		
Breakdown torque	: 210 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 51.4 sq.ft.lb		
Design	: B		

Output	25%		50%		75%		100%		Foundation loads	
Efficiency (%)	94.3	94.7	94.5	94.8	95.4	95.4	95.4	95.4	Max. traction	: 1399 lb
	94.7	94.7	94.8	94.8	95.6	95.7	95.6	95.7		
Power Factor	0.65	0.62	0.85	0.85	0.88	0.88	0.90	0.90	Max. compression	: 3870 lb
	0.59	0.57	0.83	0.82	0.87	0.87	0.90	0.89		

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

Losses (%)	P1 (0,9;1,0)	4.9	4.9	4.7	4.6
	P2 (0,5;1,0)	3.8	3.8	3.6	3.6
	P3 (0,25;1,0)	3.4	3.4	3.2	3.1
	P4 (0,9;0,5)	2.5	2.5	2.3	2.3
	P5 (0,5;0,5)	1.5	1.5	1.5	1.4
	P6 (0,5;0,25)	1.0	1.0	1.0	0.9
	P7 (0,25;0,25)	0.5	0.5	0.5	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		Page 1 / 1		
Checked by				
Date	28/03/2024			
			Revision	