

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	Max. traction : 1399 lb	
	94.7	94.7	94.8	94.8	Max. compression : 3870 lb	
Power Factor	0.65	0.62	0.85	0.85		
	0.59	0.57	0.83	0.82		
	0.87	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

Bearings	Drive end		Non drive end	
	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	28/03/2024				Page	Revision
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