

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase

Product code : 12823188

Frame	: 213TC	Locked rotor time	: 23s (cold) 13s (hot)
Output	: 7.5 HP (5.5 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	: 18.6/9.29 A	Protection degree	: IP55
L. R. Amperes	: 121/60.4 A	Cooling method	: IC411 - TEFC
LRC	: 6.5x(Code H)	Mounting	: W-6
No load current	: 8.00/4.00 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1765 rpm	Noise level ²	: 58.0 dB(A)
Slip	: 1.94 %	Starting method	: Direct On Line
Rated torque	: 22.3 ft.lb	Approx. weight ³	: 145 lb
Locked rotor torque	: 210 %		
Breakdown torque	: 260 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.9800 sq.ft.lb		
Design	: B		

Output	25%		50%		75%		100%		Foundation loads	
Efficiency (%)	88.3	88.3	88.5	88.5	89.5	87.5	89.5	87.5	Max. traction	: 293 lb
	89.2	87.3	88.5	87.5	88.5	87.5	87.5	87.5		
Power Factor	0.41	0.48	0.66	0.73	0.77	0.82	0.83	0.86	Max. compression	: 437 lb
	0.43	0.40	0.69	0.65	0.80	0.77	0.85	0.83		

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

Losses (%)	P1 (0,9;1,0)	11.4	13.9	13.9	13.9
	P2 (0,5;1,0)	9.9	12.0	12.0	12.0
	P3 (0,25;1,0)	9.6	11.6	11.6	11.6
	P4 (0,9;0,5)	5.7	7.0	7.0	7.0
	P5 (0,5;0,5)	4.0	4.9	4.9	4.9
	P6 (0,5;0,25)	2.8	3.4	3.4	3.4
	P7 (0,25;0,25)	2.0	2.4	2.4	2.4

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6308 ZZ	6207 ZZ
Sealing	:	V'Ring	V'Ring
Lubrication interval	:	-	-
Lubricant amount	:	-	-
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	29/03/2024			
			Revision	