

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase

Product code : 12823176

Frame	: 184TC	Locked rotor time	: 48s (cold) 27s (hot)
Output	: 5 HP (3.7 kW)	Temperature rise	: 80 K
Poles	: 2	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	: 11.8/5.90 A	Protection degree	: IP55
L. R. Amperes	: 86.1/43.1 A	Cooling method	: IC411 - TEFC
LRC	: 7.3x(Code H)	Mounting	: W-6
No load current	: 4.20/2.10 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 3490 rpm	Noise level ²	: 70.0 dB(A)
Slip	: 3.06 %	Starting method	: Direct On Line
Rated torque	: 7.52 ft.lb	Approx. weight ³	: 95.8 lb
Locked rotor torque	: 200 %		
Breakdown torque	: 300 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.1906 sq.ft.lb		
Design	: B		

Output	25%		50%		75%		100%		Foundation loads	
Efficiency (%)	85.1	87.1	85.5	86.5	87.5	86.5	87.5	85.5	Max. traction	: 115 lb
	87.0	87.0	86.5	86.5	87.5	87.5	86.5	86.5		
Power Factor	0.51	0.57	0.78	0.82	0.86	0.89	0.89	0.91	Max. compression	: 210 lb
	0.54	0.51	0.80	0.78	0.87	0.86	0.90	0.89		

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

Losses (%)	P1 (0,9;1,0)	13.5	16.0	14.7	14.7
	P2 (0,5;1,0)	10.8	12.8	11.8	11.8
	P3 (0,25;1,0)	10.2	12.1	11.2	11.2
	P4 (0,9;0,5)	7.0	8.3	7.6	7.6
	P5 (0,5;0,5)	4.1	4.8	4.4	4.4
	P6 (0,5;0,25)	2.6	3.1	2.8	2.8
	P7 (0,25;0,25)	1.6	1.9	1.7	1.7

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6207 ZZ	6206 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 Revision 1 / 1		
Checked by				
Date	29/03/2024			