

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase

Product code : 12823174

Frame	: 184TC	Locked rotor time	: 23s (cold) 13s (hot)
Output	: 5 HP (3.7 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	: 13.6/6.80 A	Protection degree	: IP55
L. R. Amperes	: 95.2/47.6 A	Cooling method	: IC411 - TEFC
LRC	: 7.0x(Code J)	Mounting	: W-6
No load current	: 7.50/3.75 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 1750 rpm	Noise level <sup>2</sup>	: 56.0 dB(A)
Slip	: 2.78 %	Starting method	: Direct On Line
Rated torque	: 15.0 ft.lb	Approx. weight <sup>3</sup>	: 99.1 lb
Locked rotor torque	: 190 %		
Breakdown torque	: 260 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.3683 sq.ft.lb		
Design	: B		

Output	25%		50%		75%		100%		Foundation loads	
Efficiency (%)	86.2	85.1	86.5	85.5	87.5	86.5	87.5	86.5	Max. traction	: 241 lb
	85.2	86.2	85.5	86.5	86.5	86.5	86.5	86.5		
Power Factor	0.34	0.42	0.60	0.70	0.72	0.81	0.78	0.85	Max. compression	: 340 lb
	0.39	0.36	0.67	0.63	0.78	0.76	0.84	0.82		

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

Losses (%)	P1 (0,9;1,0)	13.8	15.1	15.1	15.1
	P2 (0,5;1,0)	12.6	13.8	13.8	13.8
	P3 (0,25;1,0)	12.9	14.1	14.1	14.1
	P4 (0,9;0,5)	7.2	7.9	7.9	7.9
	P5 (0,5;0,5)	5.6	6.1	6.1	6.1
	P6 (0,5;0,25)	4.1	4.5	4.5	4.5
	P7 (0,25;0,25)	3.3	3.6	3.6	3.6

		<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 1 / 1 Revision		
Checked by				
Date	29/03/2024			