

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase

Product code : 11856940

Frame	: 284/6T	Locked rotor time	: 23s (cold) 13s (hot)
Output	: 15 HP (11 kW)	Temperature rise	: 80 K
Poles	: 8	Duty cycle	: Cont.(S1)
Frequency	: 50 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 380 V	Altitude	: 1000 m.a.s.l.
Rated current	: 23.9 A	Protection degree	: IP55
L. R. Amperes	: 110 A	Cooling method	: IC411 - TEFC
LRC	: 4.6x(Code E)	Mounting	: F-1
No load current	: 7.70 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 720 rpm	Noise level <sup>2</sup>	: 52.0 dB(A)
Slip	: 4.00 %	Starting method	: Direct On Line
Rated torque	: 109 ft.lb	Approx. weight <sup>3</sup>	: 402 lb
Locked rotor torque	: 160 %		
Breakdown torque	: 180 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 8.18 sq.ft.lb		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	85.5 87.5	87.5 88.5	86.5 88.5	Max. traction	: 658 lb
Power Factor	0.71 0.65	0.79 0.75	0.81 0.80	Max. compression	: 1060 lb

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

Losses (%)	P1 (0,9;1,0)	14.9	12.4
	P2 (0,5;1,0)	11.8	9.8
	P3 (0,25;1,0)	10.2	8.5
	P4 (0,9;0,5)	7.5	6.3
	P5 (0,5;0,5)	4.8	4.0
	P6 (0,5;0,25)	3.3	2.8
	P7 (0,25;0,25)	2.1	1.7

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6311 C3	6211 C3
Sealing	:	V'Ring	V'Ring
Lubrication interval	:	20000 h	20000 h
Lubricant amount	:	18 g	11 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 Revision 1 / 1		
Checked by				
Date	28/03/2024			