

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase

Product code : 12822574

Frame	: 286TSC	Locked rotor time	: 25s (cold) 14s (hot)
Output	: 30 HP (22 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	: 67.4/33.7 A	Protection degree	: IP55
L. R. Amperes	: 438/219 A	Cooling method	: IC411 - TEFC
LRC	: 6.5x(Code G)	Mounting	: W-6
No load current	: 16.0/8.00 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 3540 rpm	Noise level <sup>2</sup>	: 72.0 dB(A)
Slip	: 1.67 %	Starting method	: Direct On Line
Rated torque	: 44.5 ft.lb	Approx. weight <sup>3</sup>	: 378 lb
Locked rotor torque	: 200 %		
Breakdown torque	: 240 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 2.83 sq.ft.lb		
Design	: B		

Output	25%		50%		75%		100%		Foundation loads	
Efficiency (%)	90.9	86.0	91.0	85.5	91.0	87.5	91.0	86.5	Max. traction	: 302 lb
	87.0	88.0	86.5	87.5	88.5	89.5	87.5	88.5		
Power Factor	0.60	0.66	0.82	0.85	0.88	0.87	0.90	0.88	Max. compression	: 680 lb
	0.63	0.61	0.84	0.82	0.86	0.86	0.87	0.87		

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

Losses (%)	P1 (0,9;1,0)	9.5	15.0	13.7	12.5
	P2 (0,5;1,0)	7.9	12.5	11.5	10.4
	P3 (0,25;1,0)	7.4	11.6	10.6	9.7
	P4 (0,9;0,5)	4.3	6.7	6.1	5.6
	P5 (0,5;0,5)	2.7	4.3	3.9	3.5
	P6 (0,5;0,25)	1.5	2.4	2.2	2.0
	P7 (0,25;0,25)	1.0	1.5	1.4	1.3

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6311 C3	6211 C3
Sealing	:	V'Ring	V'Ring
Lubrication interval	:	7000 h	8000 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 1 / 1		
Checked by				
Date	28/03/2024			
			Revision	