

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11724427

Frame	: 182/4T	Locked rotor time	: 30s (cold) 17s (hot)
Output	: 1.5 HP (1.1 kW)	Temperature rise	: 80 K
Poles	: 8	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 2.84 A	Protection degree	: IP56
L. R. Amperes	: 16.8 A	Cooling method	: IC411 - TEFC
LRC	: 5.9x(Code K)	Mounting	: F-1
No load current	: 2.10 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 860 rpm	Noise level <sup>2</sup>	: 50.0 dB(A)
Slip	: 4.44 %	Starting method	: Direct On Line
Rated torque	: 9.16 ft.lb	Approx. weight <sup>3</sup>	: 104 lb
Locked rotor torque	: 229 %		
Breakdown torque	: 290 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.5766 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads					
Efficiency (%)	75.2	72.7	76.0	74.0	78.0	76.0	78.5	77.0	Max. traction	: 139 lb
	73.3	72.3	74.5	73.5	76.0	76.0	76.9	76.9		
Power Factor	0.23	0.29	0.43	0.51	0.54	0.62	0.62	0.70	Max. compression	: 243 lb
	0.25	0.23	0.47	0.44	0.58	0.55	0.66	0.64		

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

Losses (%)	P1 (0,9;1,0)	25.9	28.3	28.4	28.4
	P2 (0,5;1,0)	20.5	22.4	22.5	22.5
	P3 (0,25;1,0)	18.6	20.3	20.4	20.4
	P4 (0,9;0,5)	18.4	20.1	20.2	20.2
	P5 (0,5;0,5)	13.2	14.4	14.4	14.4
	P6 (0,5;0,25)	11.6	12.7	12.8	12.8
	P7 (0,25;0,25)	8.8	9.6	9.7	9.7

		Drive end	Non drive end
Bearing type	:	6207 2RS C3	6206 2RS C3
Sealing	:	Inpro/Seal	Inpro/Seal
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				
Checked by				
Date	29/03/2024			
			Page	Revision
			1 / 1	