

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11603072

Frame	: 182/4TC	Locked rotor time	: 55s (cold) 31s (hot)
Output	: 2 HP (1.5 kW)	Temperature rise	: 80 K
Poles	: 6	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	: 3.22 A	Protection degree	: IP56
L. R. Amperes	: 24.2 A	Cooling method	: IC411 - TEFC
LRC	: 7.5x(Code L)	Mounting	: F-1
No load current	: 1.90 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1170 rpm	Noise level ²	: 52.0 dB(A)
Slip	: 2.50 %	Starting method	: Direct On Line
Rated torque	: 8.98 ft.lb	Approx. weight ³	: 114 lb
Locked rotor torque	: 300 %		
Breakdown torque	: 350 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.6210 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads					
Efficiency (%)	85.4	84.8	86.5	85.5	87.5	86.0	88.5	86.5	Max. traction	: 179 lb
	84.8	84.2	85.5	85.0	86.5	86.5	87.0	87.0		
Power Factor	0.26	0.31	0.46	0.53	0.58	0.65	0.66	0.72	Max. compression	: 293 lb
	0.28	0.26	0.49	0.46	0.62	0.59	0.69	0.67		

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

Losses (%)	P1 (0,9;1,0)	12.3	12.3	12.3	12.3
	P2 (0,5;1,0)	9.8	9.8	9.8	9.8
	P3 (0,25;1,0)	9.2	9.2	9.2	9.2
	P4 (0,9;0,5)	7.4	7.4	7.4	7.4
	P5 (0,5;0,5)	5.0	5.0	5.0	5.0
	P6 (0,5;0,25)	3.9	3.9	3.9	3.9
	P7 (0,25;0,25)	2.9	2.9	2.9	2.9

		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	25/03/2024			
			Page	Revision
			1 / 1	