

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer : V.J. PAMENSKY CANADA INC.

Product line : W22 - Nema Premium Efficiency (Centro 3100)

Frame	: 143/5TCZ	Locked rotor time	: 13 s (hot) 23 s (cold)
Output	: 1.5 HP (1.1 kW)	Temperature rise ⁴	: 105 K
Poles	: 4	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20 °C to +40 °C
Rated voltage	: 575 V	Altitude	: 1000 m.a.s.l
Rated current	: 1.68 A	Degree of protection	: IP55
L. R. Amperes	: 14.1 A	Cooling method	: IC410 - TENV
LRC (p.u.)	: 8.4 Code L	Mounting	: F-1
No load current	: 0.960 A	Direct of rotation ¹	: Both
Rated speed	: 1750 rpm	Starting method	: VFD
Slip	: 2.78 %	Approx. weight ³	: 22.0 kg
Rated torque	: 0.622 kgfm	Design	: B
Locked rotor torque	: 290 %		
Pull up torque	: 290 %		
Breakdown torque	: 350 %		
Insulation class	: H		
Service factor	: 1.00		
Moment of inertia (J)	: 0.0040 kgm ²		

Output	Start	50%	75%	100%	Load type	: Parabolic torque
Efficiency (%)	-	82.5	85.5	86.5	Load torque	: 0.610 kgfm
Power factor	0.67	0.54	0.67	0.76	Load inertia (J=GD ² /4)	: 0.006 kgm ²

Operation limits with inverter
 6 Hz up to 60 Hz (Variable torque): 0.610 kgfm
 Maximum peak voltage phase-to-phase <= 2400 V
 dV/dt <= 7800 V/μs
 Rise time >= 0,1 μs

Bearing type	Drive end	Non drive end	Foundation loads	
Lubrication interval	6205-ZZ	6205-ZZ	Maximum traction	: 51 kgf
Lubricant amount	-	-	Maximum compression	: 73 kgf
Lubricant type	MOBIL POLYREX EM			

Notes:

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

P1 (0,9;1,0)	P2 (0,5;1,0)	P3 (0,25;1,0)	P4 (0,9;0,5)	P5 (0,5;0,5)	P6 (0,5;0,25)	P7 (0,25;0,25)
15.1	13.1	12.6	8.3	6.2	4.8	3.6

Standards	Specification	: MG1 - Part 10	Vibration	: MG1 - Part 7
	Tests	: MG1 - Part 12	Tolerance	: MG1 - Part 12
	Noise	: MG1 - Part 9		

This revision replaces and cancels the previous one, which must be eliminated.

- (1) When viewed from the drive end.
- (2) Measured at 1m and with tolerance of +3dB(A).
- (3) Approximate weight subject to changes after manufacturing process.
- (4) At the rated point.

These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG 1-12.

Rev.	Summary of changes	Performed	Checked	Date
Performed by	mauricioct			864150/2024
Checked by	ialejandra			Page Revision
Date	19/12/2024			1/2 0

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