

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE2 Three-Phase

Product code : 12423829

Frame	: 180L	Locked rotor time	: 19s (cold) 11s (hot)
Output	: 15 HP (11 kW)	Temperature rise	: 80 K
Poles	: 8	Duty cycle	: S1
Frequency	: 50 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 380 V	Altitude	: 1000 m.a.s.l.
Rated current	: 24.0 A	Protection degree	: IP55
L. R. Amperes	: 144 A	Cooling method	: IC411 - TEFC
LRC	: 6.0	Mounting	: B3L(E)
No load current	: 10.5 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 725 rpm	Noise level ²	: 52.0 dB(A)
Slip	: 3.33 %	Starting method	: Direct On Line
Rated torque	: 109 ft.lb	Approx. weight ³	: 392 lb
Locked rotor torque	: 210 %		
Breakdown torque	: 240 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 5.79 sq.ft.lb		
Design	: N		

Output	25%	50%	75%	100%	Foundation loads					
Efficiency (%)	88.2	87.3	88.4	87.5	87.1	88.5	Max. traction	: 1051 lb		
	87.3		87.5		88.5	88.5				
Power Factor	0.40	0.33	0.65	0.58	0.75	0.69	0.80	0.76	Max. compression	: 1442 lb
	0.34		0.59		0.70		0.77			

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

Losses (%)	P1 (0,9;1,0)	13.9	12.4	12.3
	P2 (0,5;1,0)	11.4	10.2	10.1
	P3 (0,25;1,0)	11.0	9.8	9.7
	P4 (0,9;0,5)	7.5	6.7	6.7
	P5 (0,5;0,5)	5.2	4.7	4.6
	P6 (0,5;0,25)	3.9	3.4	3.4
	P7 (0,25;0,25)	2.8	2.5	2.5

		<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				
Checked by				
Date	26/03/2024			
			Page	Revision
			1 / 1	