

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase

Product code : 13034280
Catalog # : 01509ET3Y200L-W22

Frame	: 200L	Locked rotor time	: 61s (cold) 34s (hot)
Output	: 20 HP (15 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	: 33.0 A	Protection degree	: IP55
L. R. Amperes	: 162 A	Cooling method	: IC411 - TEFC
LRC	: 4.9	Mounting	: B3L(E)
No load current	: 14.7 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 730 rpm	Noise level ²	: 56.0 dB(A)
Slip	: 2.67 %	Starting method	: Direct On Line
Rated torque	: 144 ft.lb	Approx. weight ³	: 549 lb
Locked rotor torque	: 170 %		
Breakdown torque	: 190 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 10.8 sq.ft.lb		
Design	: N		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	90.5 89.4	91.0 90.8	91.0 91.5	Max. traction	: 817 lb
	89.5	91.0	91.0		
Power Factor	0.60 0.53	0.71 0.65	0.76 0.72	Max. compression	: 1366 lb
	0.55	0.67	0.74		

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

Losses (%)	P1 (0,9;1,0)	9.5	9.0	9.5
	P2 (0,5;1,0)	7.8	7.3	7.8
	P3 (0,25;1,0)	7.3	6.8	7.3
	P4 (0,9;0,5)	5.3	5.0	5.3
	P5 (0,5;0,5)	3.7	3.5	3.7
	P6 (0,5;0,25)	2.8	2.7	2.8
	P7 (0,25;0,25)	2.0	1.9	2.0

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6312 C3	6212 C3
Sealing	:	V'Ring	V'Ring
Lubrication interval	:	20000 h	20000 h
Lubricant amount	:	21 g	13 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 1 / 1	Revision