

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase

Product code :

12111791

Catalog # :

03712ET3Y250S/M-W22

Frame : 250S/M
Output : 50 HP (37 kW)
Poles : 6
Frequency : 50 Hz
Rated voltage : 380 V
Rated current : 69.7 A
L. R. Amperes : 516 A
LRC : 7.4
No load current : 21.0 A
Rated speed : 982 rpm
Slip : 1.80 %
Rated torque : 267 ft.lb
Locked rotor torque : 190 %
Breakdown torque : 229 %
Insulation class : F
Service factor : 1.25
Moment of inertia (J) : 33.8 sq.ft.lb
Design : N

Locked rotor time : 30s (cold) 17s (hot)
Temperature rise : 80 K
Duty cycle : S1
Ambient temperature : -20°C to +40°C
Altitude : 1000 m.a.s.l.
Protection degree : IP55
Cooling method : IC411 - TEFC
Mounting : B3L(E)
Rotation¹ : Both (CW and CCW)
Noise level² : 64.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 1138 lb

Output	50%	75%	100%
Efficiency (%)	93.8 93.8	94.0 94.4	93.8 94.2
	93.6	94.1	94.1
Power Factor	0.74 0.69	0.82 0.79	0.86 0.84
	0.69	0.79	0.84

Foundation loads
Max. traction : 1290 lb
Max. compression : 2428 lb

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

Losses (%)	P1 (0,9;1,0)	6.3	5.9	6.0
	P2 (0,5;1,0)	4.8	4.5	4.6
	P3 (0,25;1,0)	4.3	4.1	4.1
	P4 (0,9;0,5)	3.2	3.0	3.0
	P5 (0,5;0,5)	2.0	1.9	1.9
	P6 (0,5;0,25)	1.4	1.3	1.3
	P7 (0,25;0,25)	0.9	0.8	0.8

	<u>Drive end</u>	<u>Non drive end</u>
Bearing type :	6314 C3	6314 C3
Sealing :	WSeal	WSeal
Lubrication interval :	17000 h	17000 h
Lubricant amount :	27 g	27 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		Page 1 / 1		
Checked by				
Date	26/03/2024			
		Revision		