

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase

Product code :

13034285

Catalog # :

07509ET3Y315S/M-W22

Frame : 315S/M
Output : 100 HP (75 kW)
Poles : 8
Frequency : 50 Hz
Rated voltage : 380 V
Rated current : 150 A
L. R. Amperes : 900 A
LRC : 6.0
No load current : 57.8 A
Rated speed : 740 rpm
Slip : 1.33 %
Rated torque : 710 ft.lb
Locked rotor torque : 160 %
Breakdown torque : 160 %
Insulation class : F
Service factor : 1.25
Moment of inertia (J) : 95.7 sq.ft.lb
Design : N

Locked rotor time : 72s (cold) 40s (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 : 62.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 2518 lb

Output	25%		50%		75%		100%	
Efficiency (%)	93.7	93.7	93.9	93.9	94.0	94.0	94.1	94.1
	93.7		93.9		94.0		94.1	
Power Factor	0.43	0.37	0.69	0.62	0.77	0.73	0.81	0.79
	0.37		0.62		0.73		0.78	

Foundation loads
Max. traction : 2422 lb
Max. compression : 4939 lb

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

Losses (%)	P1 (0,9;1,0)	6.0	6.0	6.0
	P2 (0,5;1,0)	4.3	4.3	4.3
	P3 (0,25;1,0)	3.6	3.6	3.6
	P4 (0,9;0,5)	3.4	3.4	3.4
	P5 (0,5;0,5)	2.1	2.1	2.1
	P6 (0,5;0,25)	1.6	1.6	1.6
	P7 (0,25;0,25)	1.0	1.0	1.0

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6319 C3	6316 C3
Sealing	:	WSeal	WSeal
Lubrication interval	:	17000 h	20000 h
Lubricant amount	:	45 g	34 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	