

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IE2 Three-Phase

Product code : 14427588
Catalog # : E11036EP3Y315SMF3-W2

Frame	: 315S/M	Locked rotor time	: 43s (cold) 24s (hot)
Output	: 110 kW (150 HP)	Temperature rise	: 80 K
Poles	: 2	Duty cycle	: S1
Frequency	: 50 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 380/660 V	Altitude	: 1000 m.a.s.l.
Rated current	: 201/116 A	Protection degree	: IP55
L. R. Amperes	: 1266/729 A	Cooling method	: IC411 - TEFC
LRC	: 6.3	Mounting	: B3T
No load current	: 50.0/28.8 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 2973 rpm	Noise level ²	: 77.0 dB(A)
Slip	: 0.90 %	Starting method	: Direct On Line
Rated torque	: 261 ft.lb	Approx. weight ³	: 2205 lb
Locked rotor torque	: 160 %		
Breakdown torque	: 240 %		
Insulation class	: F		
Service factor	: 1.00		
Moment of inertia (J)	: 39.6 sq.ft.lb		
Design	: N		

Output	25%		50%		75%		100%		Foundation loads	
Efficiency (%)	93.9	93.4	94.0	93.5	94.3	94.3	94.3	94.3	Max. traction	: 456 lb
	93.4	91.8	93.5	92.4	94.3	94.0	94.3	94.5		
Power Factor	0.58	0.54	0.81	0.77	0.87	0.85	0.88	0.87	Max. compression	: 2661 lb
	0.50	0.52	0.74	0.76	0.83	0.84	0.86	0.87		

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

Losses (%)	P1 (0,9;1,0)	5.1	5.0	5.0	5.4
	P2 (0,5;1,0)	3.5	3.4	3.4	3.7
	P3 (0,25;1,0)	2.9	2.9	2.9	3.1
	P4 (0,9;0,5)	3.1	3.0	3.0	3.3
	P5 (0,5;0,5)	1.6	1.5	1.5	1.7
	P6 (0,5;0,25)	1.1	1.1	1.1	1.2
	P7 (0,25;0,25)	0.6	0.6	0.6	0.6

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6314 C3	6314 C3
Sealing	:	WSeal	WSeal
Lubrication interval	:	5000 h	5000 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 IEC 60034-1.

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by				
Date	26/03/2024			
			Page	Revision
			1 / 2	

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Customer :

Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermistor - 2 wires	1 x Phase	155 °C

Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page 2 / 2Revision	
Checked by					
Date	26/03/2024				