

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IE2 Three-Phase

Product code :

13220060

Catalog # :

E01536EP3Y160MF3-W22

Frame : 160M
Output : 15 kW (20 HP)
Poles : 2
Frequency : 50 Hz
Rated voltage : 380/660 V
Rated current : 28.5/16.4 A
L. R. Amperes : 200/115 A
LRC : 7.0
No load current : 8.60/4.95 A
Rated speed : 2940 rpm
Slip : 2.00 %
Rated torque : 36.0 ft.lb
Locked rotor torque : 240 %
Breakdown torque : 280 %
Insulation class : F
Service factor : 1.00
Moment of inertia (J) : 1.23 sq.ft.lb
Design : N

Locked rotor time : 14s (cold) 8s (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 : B3T
Rotation¹ : Both (CW and CCW)
Noise level² : 67.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 294 lb

Output	25%		50%		75%		100%	
Efficiency (%)	91.6	90.8	91.4	91.0	91.3	91.3	90.9	91.3
	90.3	89.4	90.6	90.2	91.2	91.0	91.4	91.7
Power Factor	0.52	0.47	0.76	0.71	0.84	0.81	0.88	0.86
	0.44	0.45	0.67	0.68	0.78	0.80	0.84	0.86

Foundation loads
Max. traction : 381 lb
Max. compression : 674 lb

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

Losses (%)	P1 (0,9;1,0)	10.0	9.5	9.4	9.0
	P2 (0,5;1,0)	8.9	8.5	8.4	8.1
	P3 (0,25;1,0)	7.9	7.6	7.5	7.2
	P4 (0,9;0,5)	4.4	4.2	4.2	4.0
	P5 (0,5;0,5)	3.1	2.9	2.9	2.8
	P6 (0,5;0,25)	1.8	1.7	1.7	1.6
	P7 (0,25;0,25)	1.3	1.2	1.2	1.2

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type :		6309 ZZ C3	6209 ZZ C3
Sealing :		V'Ring	V'Ring
Lubrication interval :		-	-
Lubricant amount :		-	-
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.

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Customer :

Thermal protection

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

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