

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IE2 Three-Phase

Product code :

12831990

Catalog # :

E01518EP3Y160LF3-W22

Frame : 160L
Output : 15 kW (20 HP)
Poles : 4
Frequency : 50 Hz
Rated voltage : 380/660 V
Rated current : 29.6/17.0 A
L. R. Amperes : 178/102 A
LRC : 6.0
No load current : 12.6/7.25 A
Rated speed : 1470 rpm
Slip : 2.00 %
Rated torque : 71.9 ft.lb
Locked rotor torque : 200 %
Breakdown torque : 250 %
Insulation class : F
Service factor : 1.00
Moment of inertia (J) : 2.98 sq.ft.lb
Design : N

Locked rotor time : 18s (cold) 10s (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 : 61.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 332 lb

Output	25%		50%		75%		100%	
Efficiency (%)	90.9	90.4	90.8	90.5	90.9	90.8	90.6	90.7
	89.7	89.4	90.0	90.2	90.7	91.0	90.8	91.7
Power Factor	0.43	0.39	0.70	0.66	0.79	0.76	0.85	0.83
	0.36	0.37	0.63	0.62	0.73	0.75	0.81	0.81

Foundation loads
Max. traction : 748 lb
Max. compression : 1080 lb

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

Losses (%)	P1 (0,9;1,0)	10.5	10.3	10.2	9.1
	P2 (0,5;1,0)	9.7	9.6	9.5	8.5
	P3 (0,25;1,0)	8.9	8.8	8.7	7.8
	P4 (0,9;0,5)	4.7	4.6	4.6	4.1
	P5 (0,5;0,5)	3.5	3.5	3.5	3.1
	P6 (0,5;0,25)	2.3	2.2	2.2	2.0
	P7 (0,25;0,25)	1.7	1.7	1.7	1.5

		<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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