

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IE2 Three-Phase

Product code :

14420127

Catalog # :

E02218EP3Y180LF3-W22

Frame : 180L
Output : 22 kW (30 HP)
Poles : 4
Frequency : 50 Hz
Rated voltage : 380/660 V
Rated current : 44.5/25.6 A
L. R. Amperes : 325/187 A
LRC : 7.3
No load current : 20.0/11.5 A
Rated speed : 1478 rpm
Slip : 1.47 %
Rated torque : 105 ft.lb
Locked rotor torque : 290 %
Breakdown torque : 330 %
Insulation class : F
Service factor : 1.00
Moment of inertia (J) : 4.76 sq.ft.lb
Design : N

Locked rotor time : 12s (cold) 7s (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 : 461 lb

Output	25%		50%		75%		100%	
Efficiency (%)	90.8	90.3	91.0	90.5	91.6	91.6	91.6	91.6
	88.8	89.7	89.5	90.3	91.0	92.0	91.6	92.4
Power Factor	0.39	0.35	0.64	0.60	0.76	0.72	0.82	0.80
	0.32	0.33	0.55	0.56	0.68	0.69	0.76	0.77

Foundation loads
Max. traction : 1403 lb
Max. compression : 1864 lb

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

Losses (%)	P1 (0,9;1,0)	8.6	8.2	8.0	8.0
	P2 (0,5;1,0)	7.6	7.2	7.1	7.1
	P3 (0,25;1,0)	7.2	6.8	6.7	6.7
	P4 (0,9;0,5)	4.1	3.8	3.8	3.8
	P5 (0,5;0,5)	2.9	2.8	2.7	2.7
	P6 (0,5;0,25)	1.9	1.8	1.8	1.8
	P7 (0,25;0,25)	1.4	1.3	1.3	1.3

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6311 ZZ C3	6211 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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