

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IE2 Three-Phase

Product code :

14420211

Catalog # :

E02236EP3Y180MF3-W22

Frame : 180M  
Output : 22 kW (30 HP)  
Poles : 2  
Frequency : 50 Hz  
Rated voltage : 380/660 V  
Rated current : 41.4/23.8 A  
L. R. Amperes : 302/174 A  
LRC : 7.3  
No load current : 12.5/7.20 A  
Rated speed : 2950 rpm  
Slip : 1.67 %  
Rated torque : 52.6 ft.lb  
Locked rotor torque : 260 %  
Breakdown torque : 270 %  
Insulation class : F  
Service factor : 1.00  
Moment of inertia (J) : 2.31 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  
Rotation<sup>1</sup> : Both (CW and CCW)  
Noise level<sup>2</sup> : 67.0 dB(A)  
Starting method : Direct On Line  
Approx. weight<sup>3</sup> : 372 lb

Output	25%		50%		75%		100%	
Efficiency (%)	92.4	91.9	92.2	91.9	92.2	92.4	91.8	92.2
	91.3	90.8	91.5	91.0	92.4	92.4	92.4	92.4
Power Factor	0.53	0.49	0.78	0.74	0.85	0.83	0.88	0.87
	0.45	0.47	0.71	0.72	0.80	0.82	0.85	0.86

Foundation loads  
Max. traction : 480 lb  
Max. compression : 851 lb

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

Losses (%)	P1 (0,9;1,0)	8.6	8.2	7.9	7.9
	P2 (0,5;1,0)	7.3	6.9	6.7	6.7
	P3 (0,25;1,0)	6.8	6.4	6.3	6.3
	P4 (0,9;0,5)	4.0	3.8	3.7	3.7
	P5 (0,5;0,5)	2.7	2.5	2.5	2.5
	P6 (0,5;0,25)	1.7	1.6	1.5	1.5
	P7 (0,25;0,25)	1.1	1.1	1.0	1.0

		<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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