

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Cooling Tower NEMA
Premium Efficiency Three-Phase

Product code : 11972287

Catalog # : 02018ET3ECT256T-W22

Frame : 254/6T
Output : 20 HP (15 kW)
Poles : 4
Frequency : 60 Hz
Rated voltage : 230/460 V
Rated current : 48.2/24.1 A
L. R. Amperes : 313/157 A
LRC : 6.5x(Code G)
No load current : 19.2/9.60 A
Rated speed : 1770 rpm
Slip : 1.67 %
Rated torque : 59.3 ft.lb
Locked rotor torque : 240 %
Breakdown torque : 260 %
Insulation class : F
Service factor : 1.25
Moment of inertia (J) : 3.10 sq.ft.lb
Design : B

Locked rotor time : 32s (cold) 18s (hot)
Temperature rise : 80 K
Duty cycle : Cont.(S1)
Ambient temperature : -20°C to +40°C
Altitude : 1000 m.a.s.l.
Protection degree : IP55
Cooling method : IC411 - TEFC
Mounting : F-2
Rotation¹ : Both (CW and CCW)
Noise level² : 64.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 321 lb

Output	25%	50%	75%	100%
Efficiency (%)	91.0	91.7	92.4	93.0
Power Factor	0.43	0.68	0.79	0.84

Foundation loads

Max. traction : 734 lb
Max. compression : 1054 lb

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

P1 (0,9;1,0)	P2 (0,5;1,0)	P3 (0,25;1,0)	P4 (0,9;0,5)	P5 (0,5;0,5)	P6 (0,5;0,25)	P7 (0,25;0,25)
7.5	6.5	6.0	3.5	2.5	1.6	1.2

	Drive end	Non drive end
Bearing type :	6309 2RS C3	6209 2RS C3
Sealing :	V'Ring	V'Ring
Lubrication interval :	-	-
Lubricant amount :	-	-
Lubricant type :	Mobil Polyrex EM	

Notes

USABLE @208V 53.3A SF 1.15 SFA 61.3A

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 NEMA MG-1.

Rev.	Changes Summary	Performed	Checked	Date
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Date	11/03/2025			

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Customer :

Space heater information

Voltage: 110-127/200-240 V

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MADE IN BRAZIL
11972287



W22 COOLING TOWER

CC029A

*Inverter Duty Motor
Severe Duty*



FOR SAFE AREA
MOD.TE1BFOXON



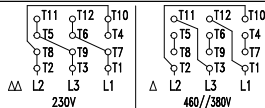
For 60Hz: Class I, Div 2, Gr. A, B, C, D, 1.15SF-T3

Class I, Zone 2, IIC-T3

Class II, Div 2, Gr. F, G-T4

For 60Hz use on PWM, Gr. A, B, C, D and F,
VT 1000:1, CT 20:1, 1.0SF, T3

PH 3	FR 254/6T	HP(kW) 20.0(15.0)	Hz 60
V 230/460	A 48.2/24.1	IP55	
NEMA NOM EFF	93.0 %	RPM 1770	
ENCL TEFC	DUTY CONT.	INS. CL. F ΔT 80 K	
PF 0.84	DES B	CODE G	AMB. 40°C
SF 1.25	SFA 60.3/30.1	ALT 1000 m.a.s.l.	
20HP 15kW 50Hz 380V 29.4A 1455RPM SF1.00 EFF 90.2% (IE1)			



→ 6309-2RS-C3
→ 6209-2RS-C3

MOBIL POLYREX EM

337 Lbs