

# 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	Locked rotor time	: 32s (cold) 18s (hot)
Output	: 20 HP (15 kW)	Temperature rise	: 80 K
Poles	: 4	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 230/460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 48.2/24.1 A	Protection degree	: IP55
L. R. Amperes	: 313/157 A	Cooling method	: IC411 - TEFC
LRC	: 6.5x(Code G)	Mounting	: F-2
No load current	: 19.2/9.60 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 1770 rpm	Noise level <sup>2</sup>	: 64.0 dB(A)
Slip	: 1.67 %	Starting method	: Direct On Line
Rated torque	: 59.3 ft.lb	Approx. weight <sup>3</sup>	: 321 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		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	91.0	91.7	92.4	93.0	Max. traction	: 734 lb
Power Factor	0.43	0.68	0.79	0.84	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

		<u>Drive end</u>	<u>Non drive end</u>
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
Performed by				
Checked by			Page	Revision
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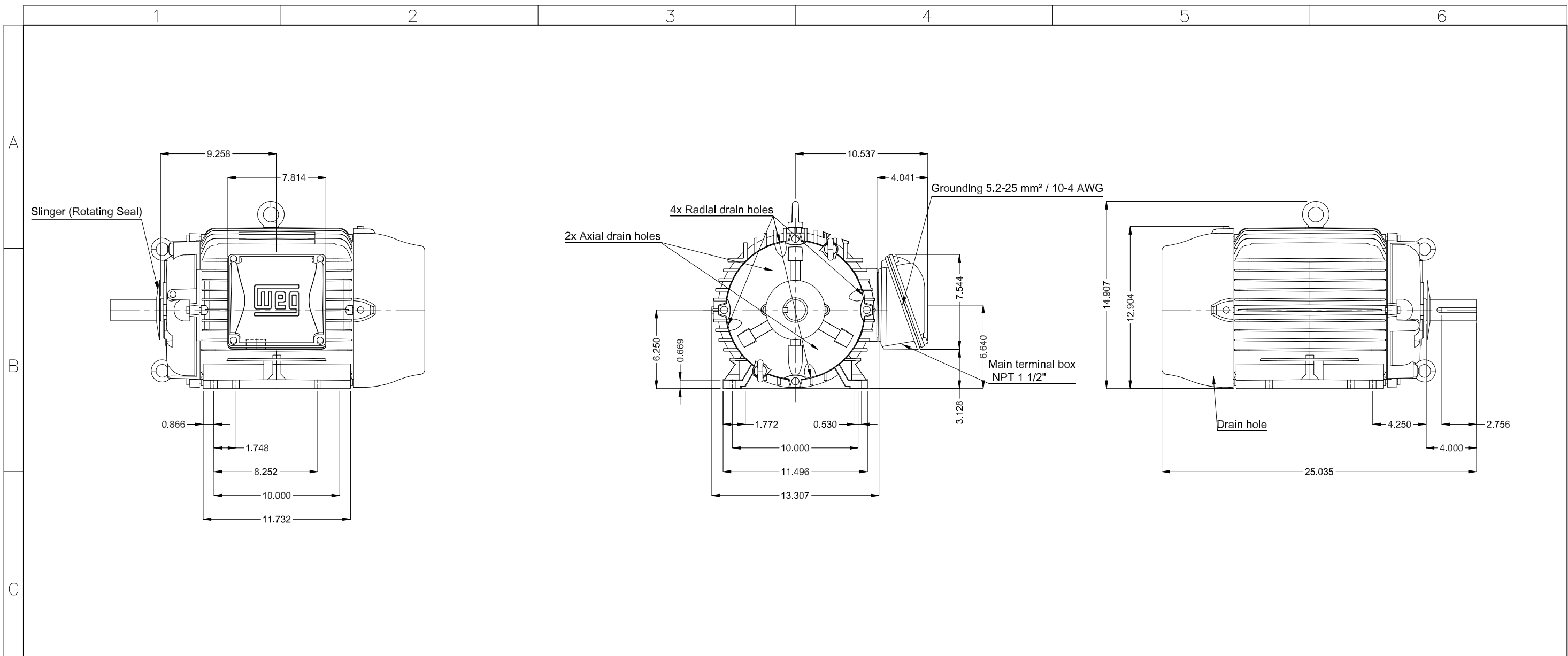


Customer : \_\_\_\_\_

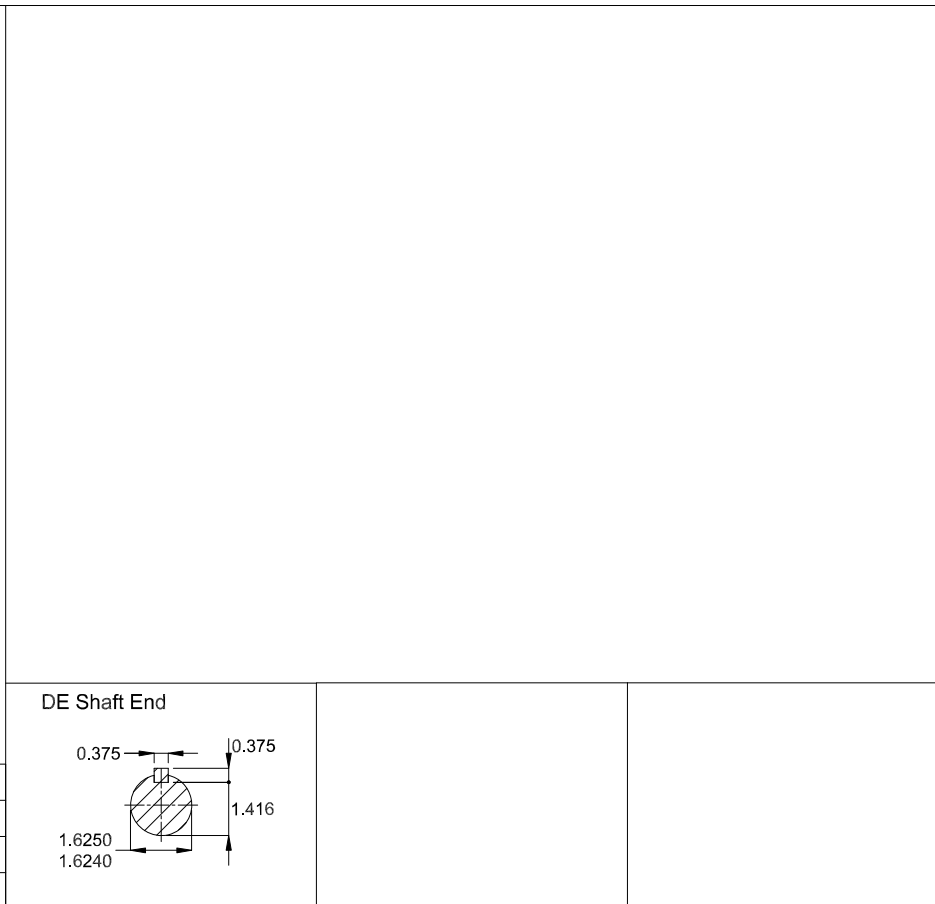
### Space heater information

Voltage: 110-127/200-240 V

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Checked by			Page	Revision
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Color RAL 5009
Painting plan 222E
Mounting NEMA F-2
Mounting B3L(E)



20 HP 04 Poles 60 Hz										A	
Scale 1 : 8											
HYBRISUSER										00	
ECM	LOC	SUMMARY OF MODIFICATIONS					EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER	THREE PH. MOTOR COOLING TOWER W22 NEMA PREM. EFF. FRAME 254/6T IP55 TEFC					PREVIEW				
CHECKED							WDD	00			
RELEASED							SHEET	1 / 1			
REL. DATE											

Dimensions in inches

A3



# W22 COOLING TOWER



## CC029A



*Inverter Duty Motor  
Severe Duty*

FOR SAFE AREA  
MOD.TE1BFOXON

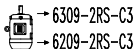
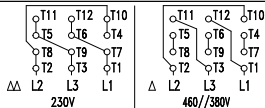


For 60Hz: Class I, Div 2, Gr. A, B, C, D, 1.15SF-T3  
Class I, Zone 2, IIC-T3  
Class II, Div 2, Gr. F, G-T4

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

MADE IN BRAZIL  
11972287

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 $\Delta T$ 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)				



MOBIL POLYREX EM

337 Lbs