

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line	: NEMA Premium Efficiency Three-Phase			
Product code :	12845574			
Catalog # :	02036ET3H256TC-S			
Frame : 254/6TC Output : 20 HP (15 kW) Poles : 2 Frequency : 60 Hz Rated voltage : 575 V Rated current : 18.2 A L. R. Amperes : 120 A LRC : 6.6x(Code G) No load current : 5.50 A Rated speed : 3515 rpm Slip : 2.36 % Rated torque : 29.9 ft.lb Locked rotor torque : 200 % Breakdown torque : 290 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 1.22 sq.ft.lb Design : B	Locked rotor time : 21s (cold) 12s (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-1 Rotation ¹ : Both (CW and CCW) Noise level ² : 75.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 234 lb			
Output	25% 50% 75% 100%			
Efficiency (%)	89.7 90.0 91.0 91.0			
Power Factor	0.55 0.81 0.88 0.91			
Foundation loads				
Max. traction : 298 lb				
Max. compression : 533 lb				
Bearing type	: <u>Drive end</u> 6309 Z C3 <u>Non drive end</u> 6208 Z C3			
Sealing	: V'Ring Without Bearing Seal			
Lubrication interval	: 15797 h 20000 h			
Lubricant amount	: 13 g 8 g			
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 NEMA MG-1.				
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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



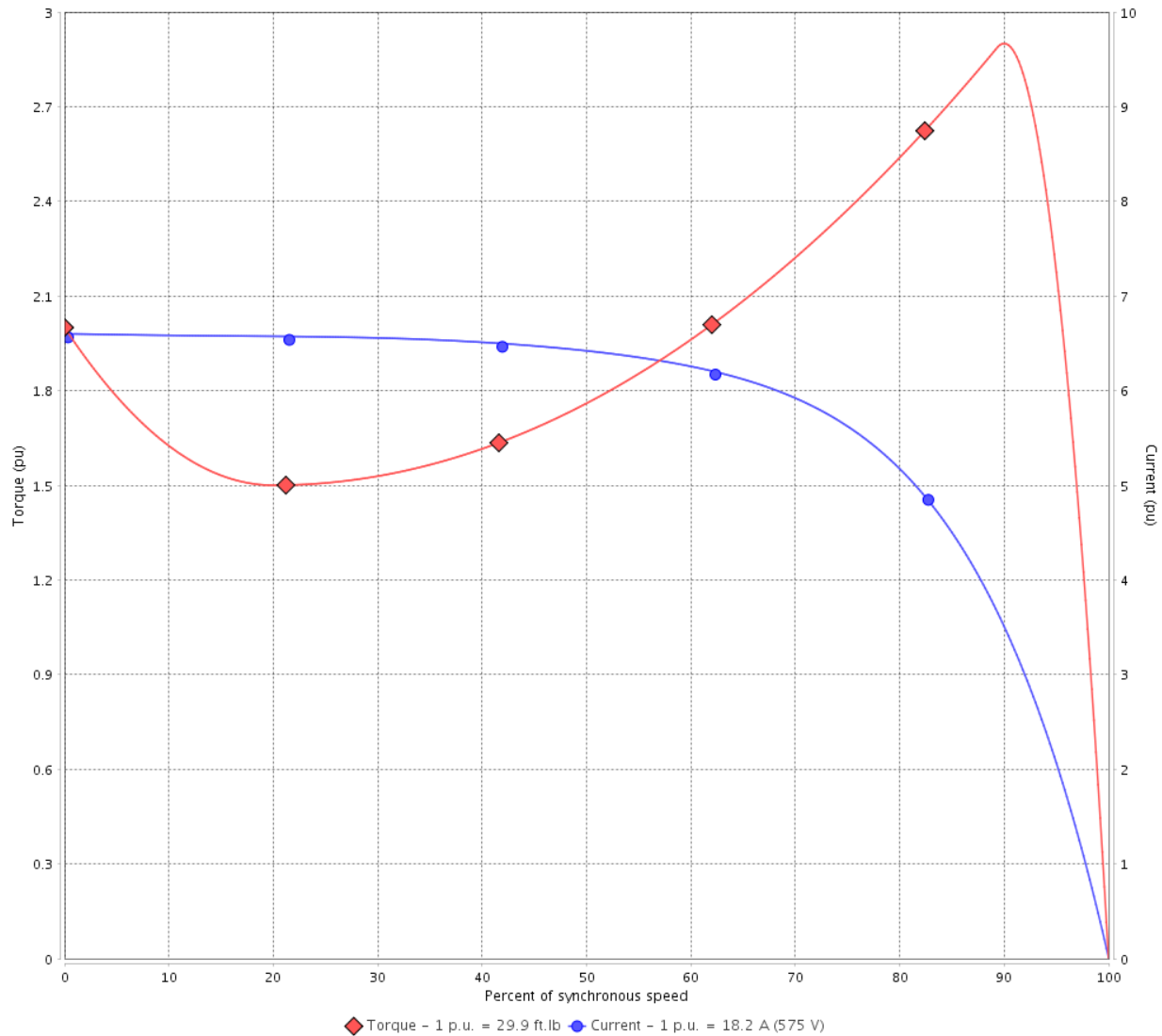
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Catalog # : 02036ET3H256TC-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 2P

Rated current	: 18.2 A	Moment of inertia (J)	: 1.22 sq.ft.lb
LRC	: 6.6	Duty cycle	: Cont.(S1)
Rated torque	: 29.9 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.15
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 3515 rpm	Design	: B

Locked rotor time : 21s (cold) 12s (hot)

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LOAD PERFORMANCE CURVE

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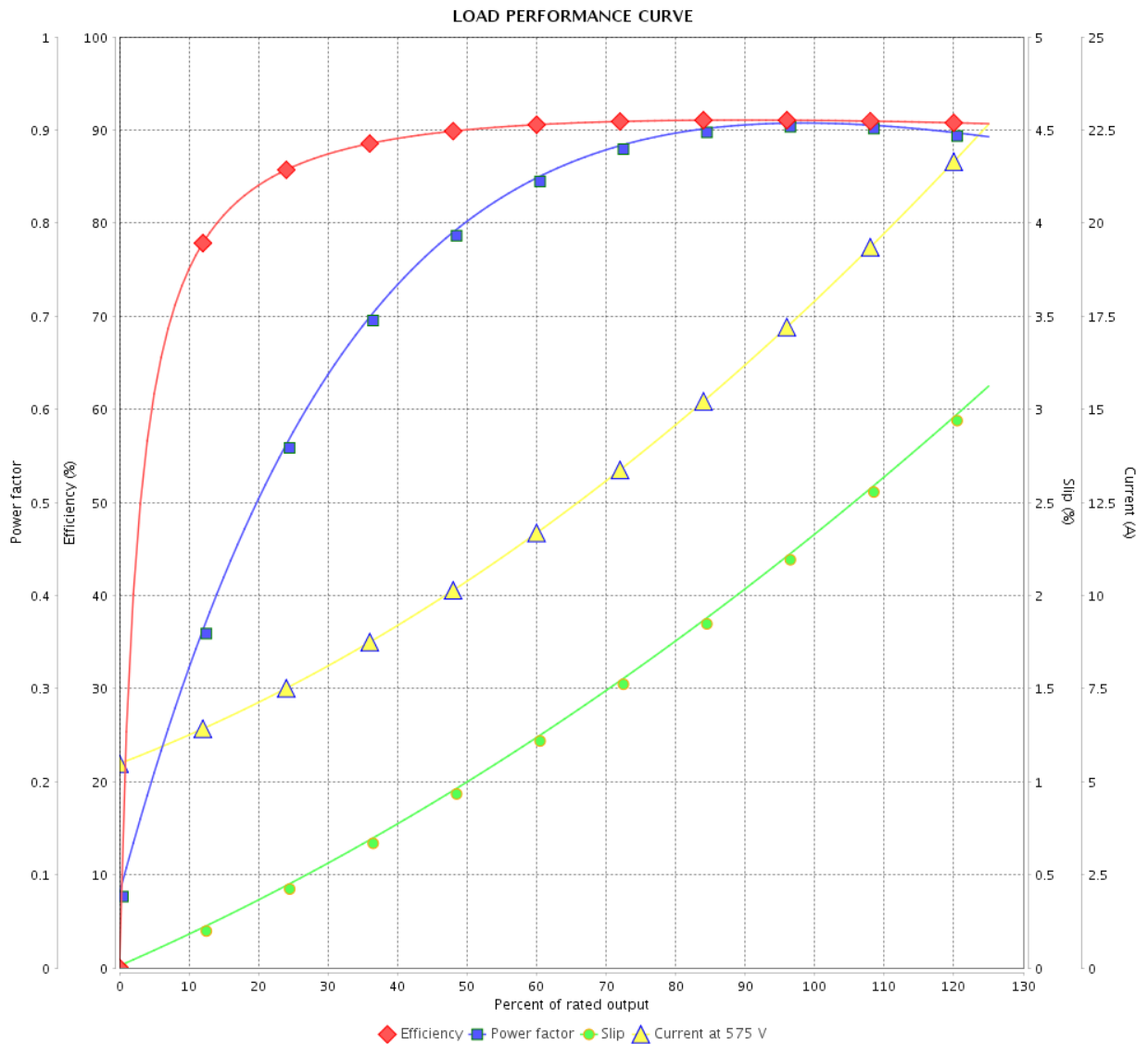


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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

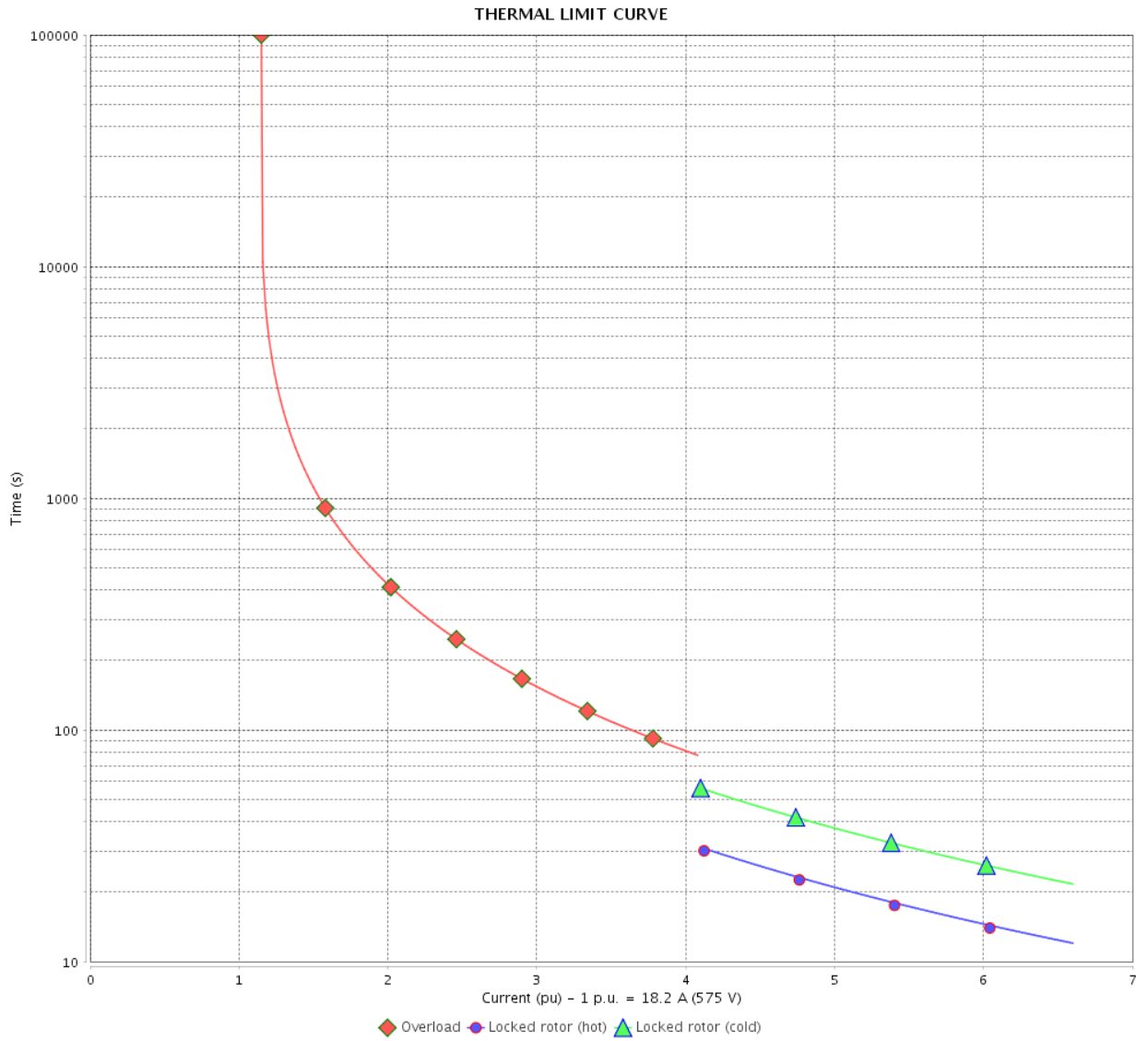
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



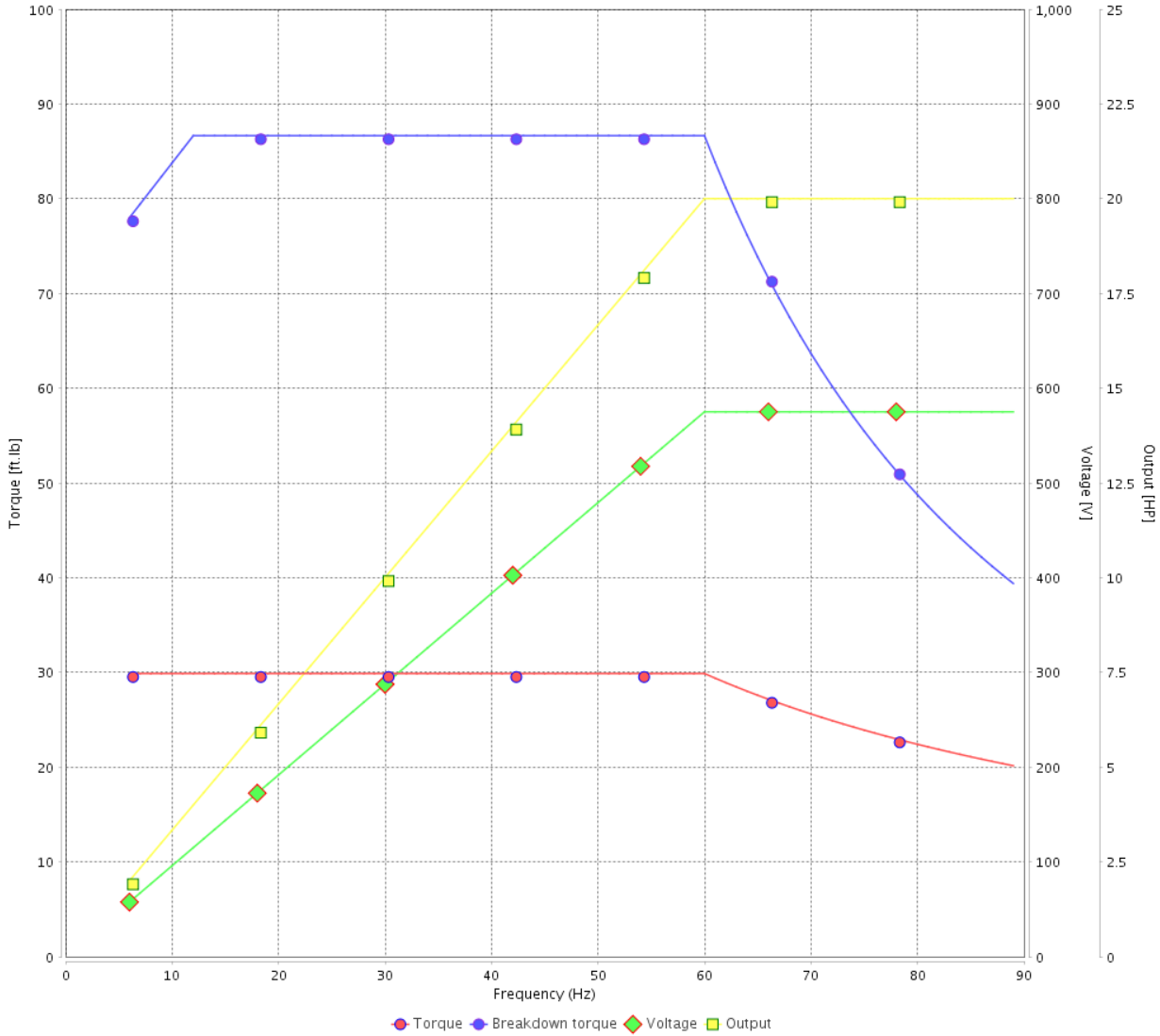
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VFD OPERATION CURVE

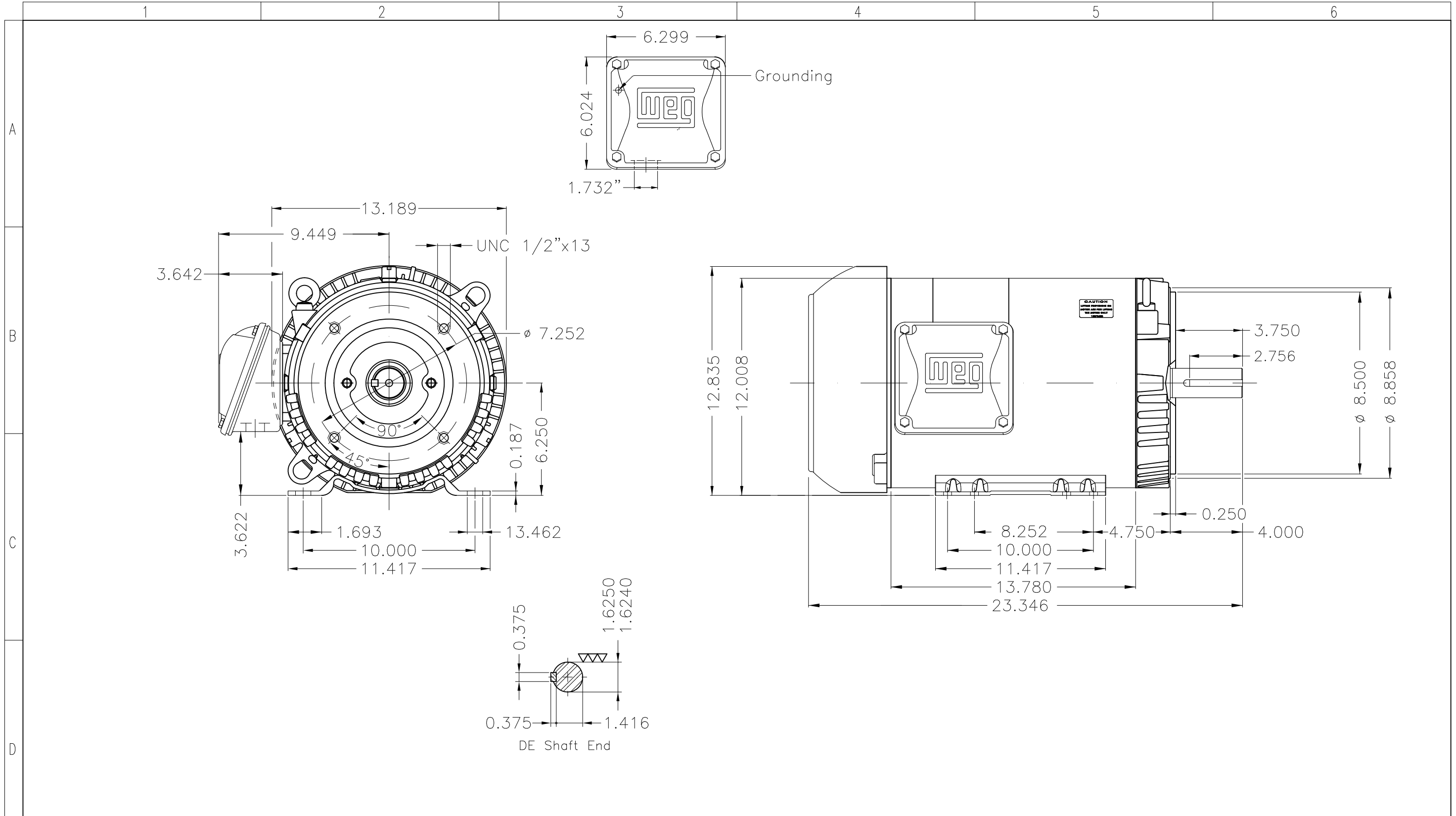



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Color Munsell N 1 matte black									
Painting plan 207N									
Mounting F-1/B34R(D)									
ECM	LOC	SUMMARY OF MODIFICATIONS			EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR ROLLED STEEL PREM. EFF.			PREVIEW	WDD	SHEET	1 / 1	
CHECKED		FRAME 254/6TC IP55 TEFC							
RELEASED									
REL DT.		WMO	Jaragua do Sul	Product Engineering					

20 HP 02 Poles 60 Hz

A



NEMA
Premium



MADE IN MEXICO

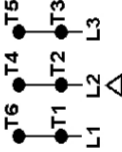
MAT: 12845574 CC029A
W01.TE0IC0X0N
CT020502NPW01
07DEC2021 S/N:

For 60Hz: Class I, Zone 2, IIC
Class I, Div.2, Gr. A,B,C,D - T3
Div 2 Inverter Duty (SF1.00)
CT 2:1/VT 1000:1

PH 3	Hz 60	HP 20
FR 254/6TC		KW 15
DUTY CONT.		V 575
ALT 1000 m.a.s.l.		A 18.2
INS CL F AT 80K	IP55	SFA 20.9
AMB 40°C	DES B	SF 1.15
ENCL TEFC	CODE G	PF 0.91
		RPM 3515
		NEMA NOM. EFF 91.0%

For safe area-inverter duty motor For use on VPWM 1000:1 VT, 10:1 CT

DE 6309-Z-C3	ODE 6208-Z-C3	MOBIL POLYREX EM	15797h
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T1-BLU
T2-WHT
T3-ORG
T4-YEL
T5-BLK
T6-GRY

INTERCHANGE ANY TWO LINE WIRES TO REVERSE THE ROTATION



WARNING: Motor must be grounded in accordance with local and national electrical codes to prevent serious electrical shocks. Disconnect power source before servicing unit.



AVERTISSEMENT: Le moteur doit être mis à la terre

conformément aux codes électriques locaux et nationaux afin d'éviter tout choc électrique grave. Déconnectez l'alimentation avant l'entretien de la machine.

