

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line	: NEMA Premium Efficiency Three-Phase			
Product code :	13248866			
Catalog # :	02018OT3V256TC-SG			
Frame : 254/6TC Output : 20 HP (15 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 200/400 V Rated current : 57.5/28.8 A L. R. Amperes : 362/181 A LRC : 6.3x(Code G) No load current : 26.3/13.1 A Rated speed : 1770 rpm Slip : 1.67 % Rated torque : 59.3 ft.lb Locked rotor torque : 240 % Breakdown torque : 290 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 2.23 sq.ft.lb Design : B	Locked rotor time : 27s (cold) 15s (hot) Temperature rise : 80 K Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Cooling method : IC01 - ODP Mounting : F-1 Rotation ¹ : Both (CW and CCW) Noise level ² : 64.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 228 lb			
Output	25% 50% 75% 100%			
Efficiency (%)	91.7 92.4 92.4 93.0			
Power Factor	0.38 0.63 0.74 0.81			
Foundation loads				
Max. traction : 711 lb				
Max. compression : 939 lb				
Bearing type	: <u>Drive end</u> 6309 Z C3 <u>Non drive end</u> 6208 Z C3			
Sealing	: Without Bearing Seal Without Bearing Seal			
Lubrication interval	: 20000 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.				
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	14/04/2022		1 / 6	

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



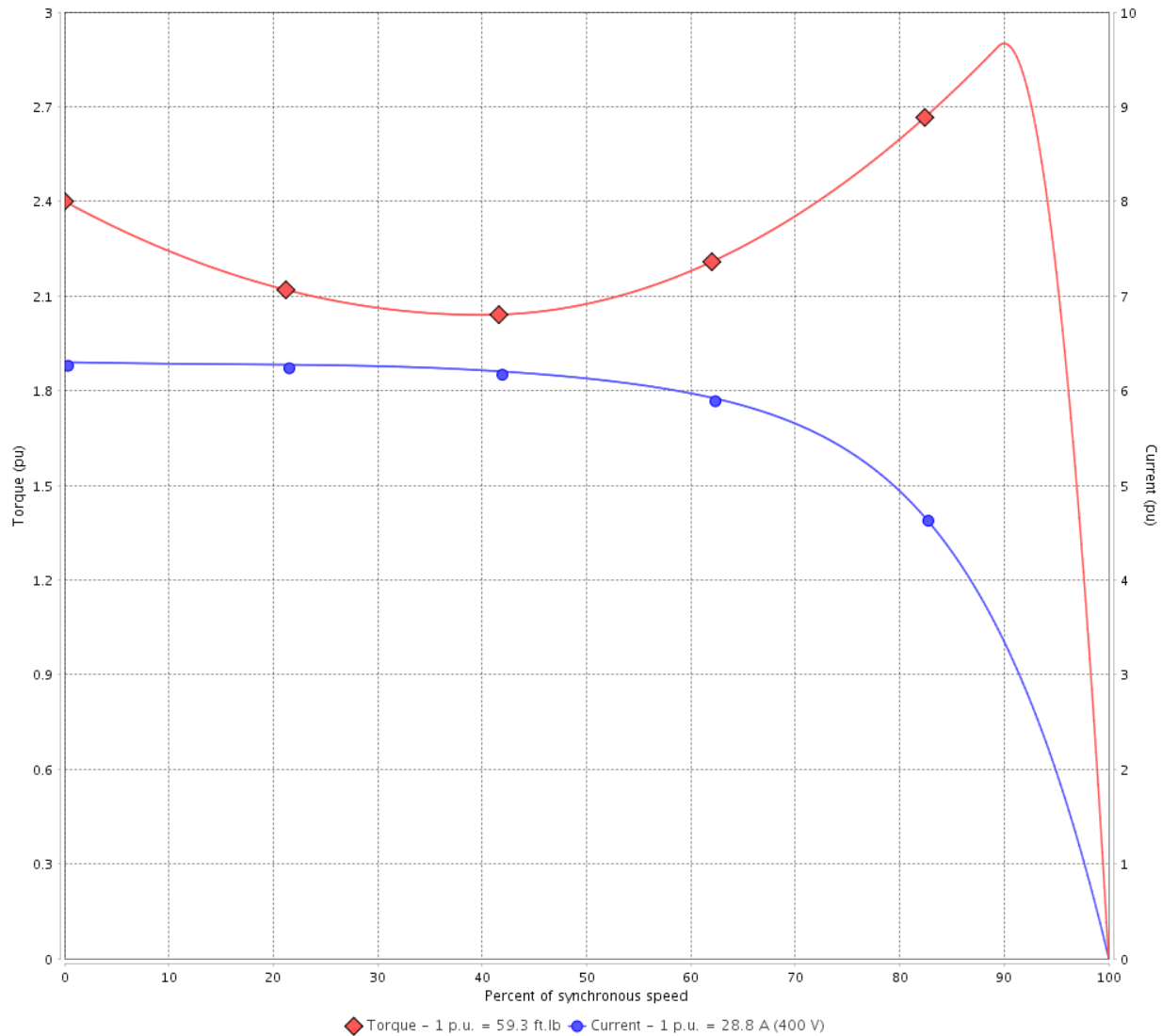
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 13248866

Catalog # : 02018OT3V256TC-SG

TORQUE AND CURRENT VS SPEED CURVE



Performance : 200/400 V 60 Hz 4P

Rated current	: 57.5/28.8 A	Moment of inertia (J)	: 2.23 sq.ft.lb
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 59.3 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.15
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 1770 rpm	Design	: B

Locked rotor time : 27s (cold) 15s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 6	Revision
Checked by				
Date	14/04/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

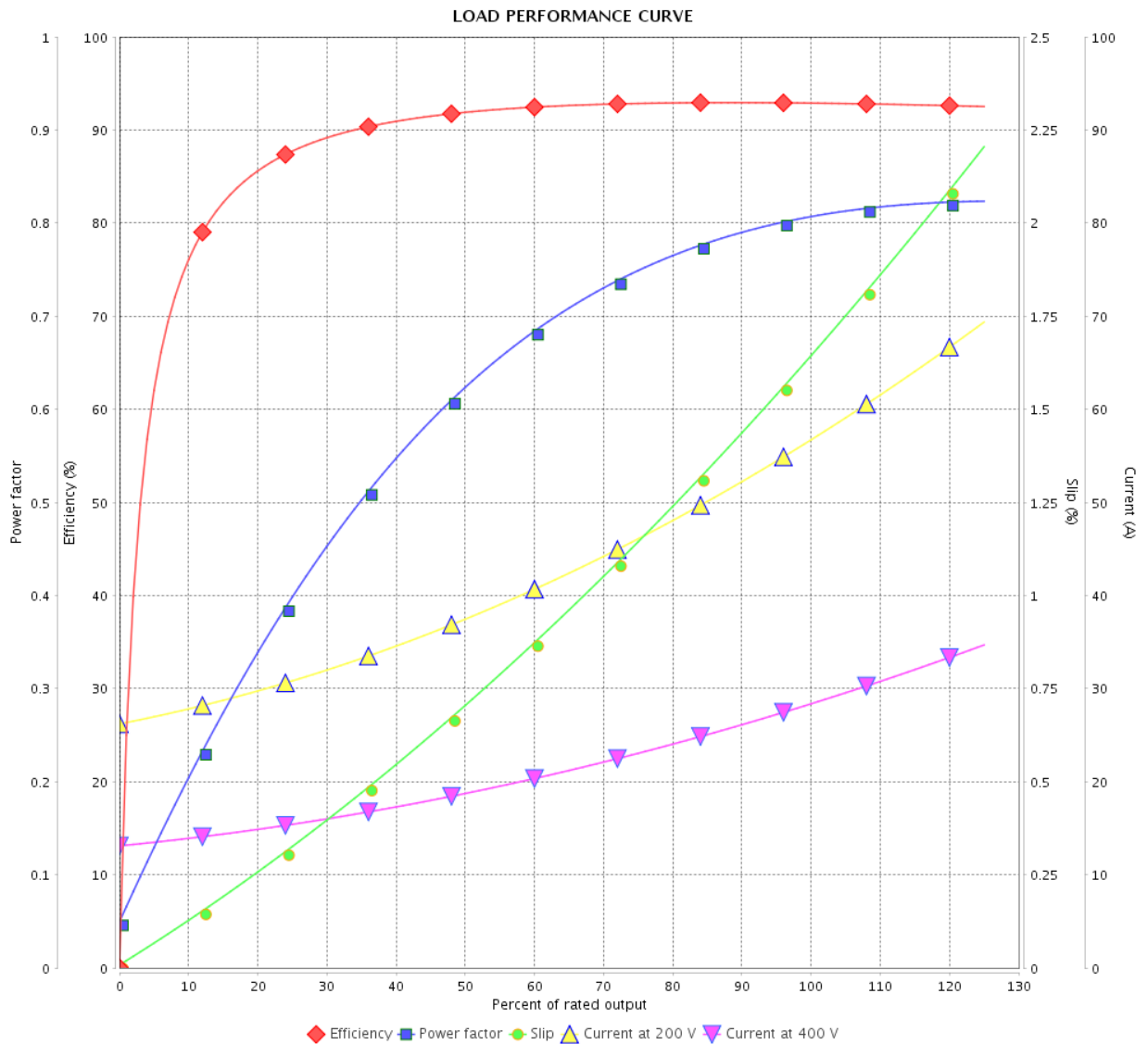


Customer : _____

Product line : NEMA Premium Efficiency Three-Phase

Product code : 13248866

Catalog # : 02018OT3V256TC-SG



Performance : 200/400 V 60 Hz 4P

Rated current : 57.5/28.8 A
 LRC : 6.3
 Rated torque : 59.3 ft.lb
 Locked rotor torque : 240 %
 Breakdown torque : 290 %
 Rated speed : 1770 rpm

Moment of inertia (J) : 2.23 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		3 / 6		
Date		14/04/2022		

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase
Product code : 13248866
Catalog # : 02018OT3V256TC-SG

Performance : 200/400 V 60 Hz 4P

Rated current	: 57.5/28.8 A	Moment of inertia (J)	: 2.23 sq.ft.lb
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 59.3 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.15
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 1770 rpm	Design	: B

Heating constant

Cooling constant

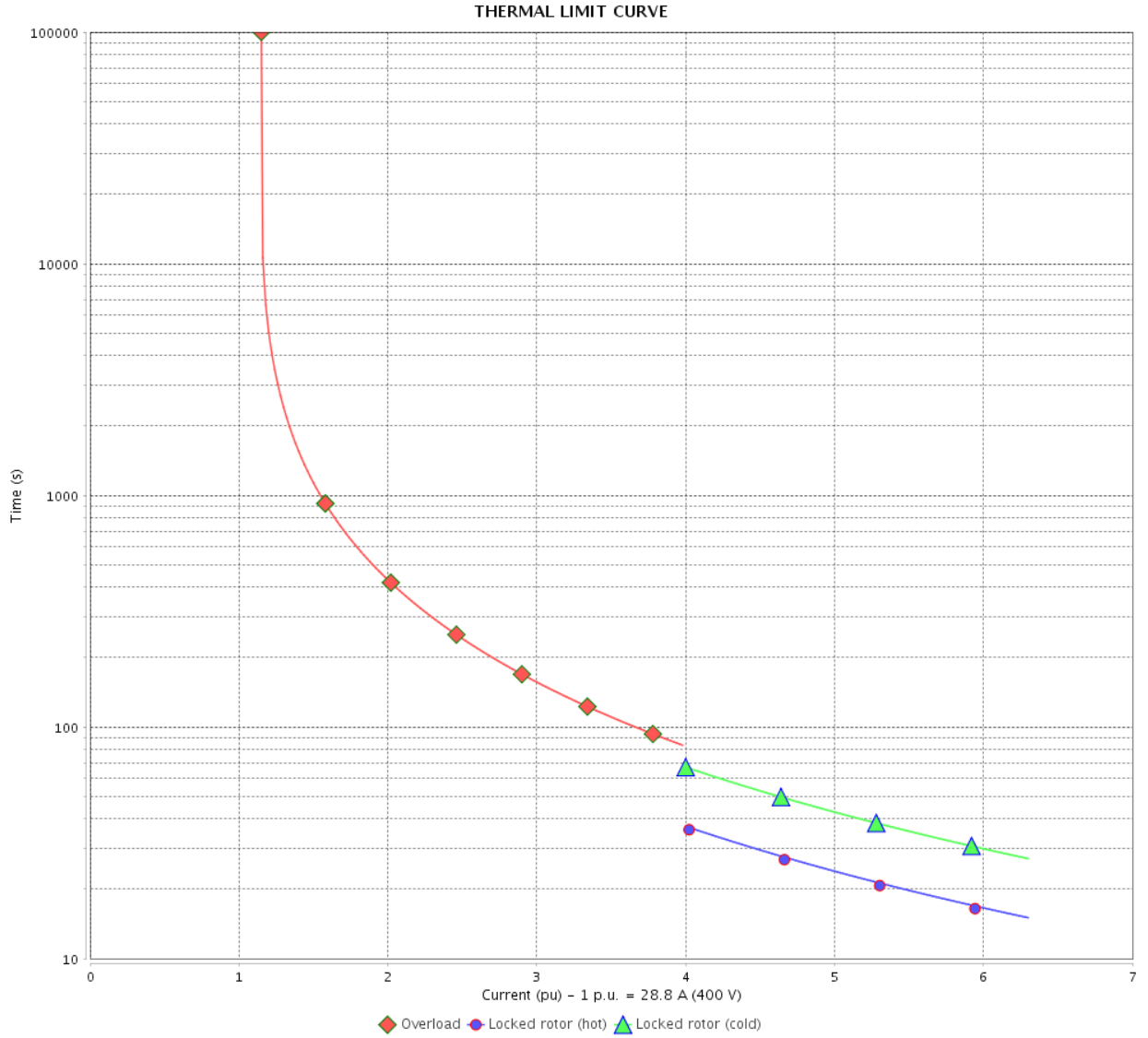
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	14/04/2022		4 / 6	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by				
Date				

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



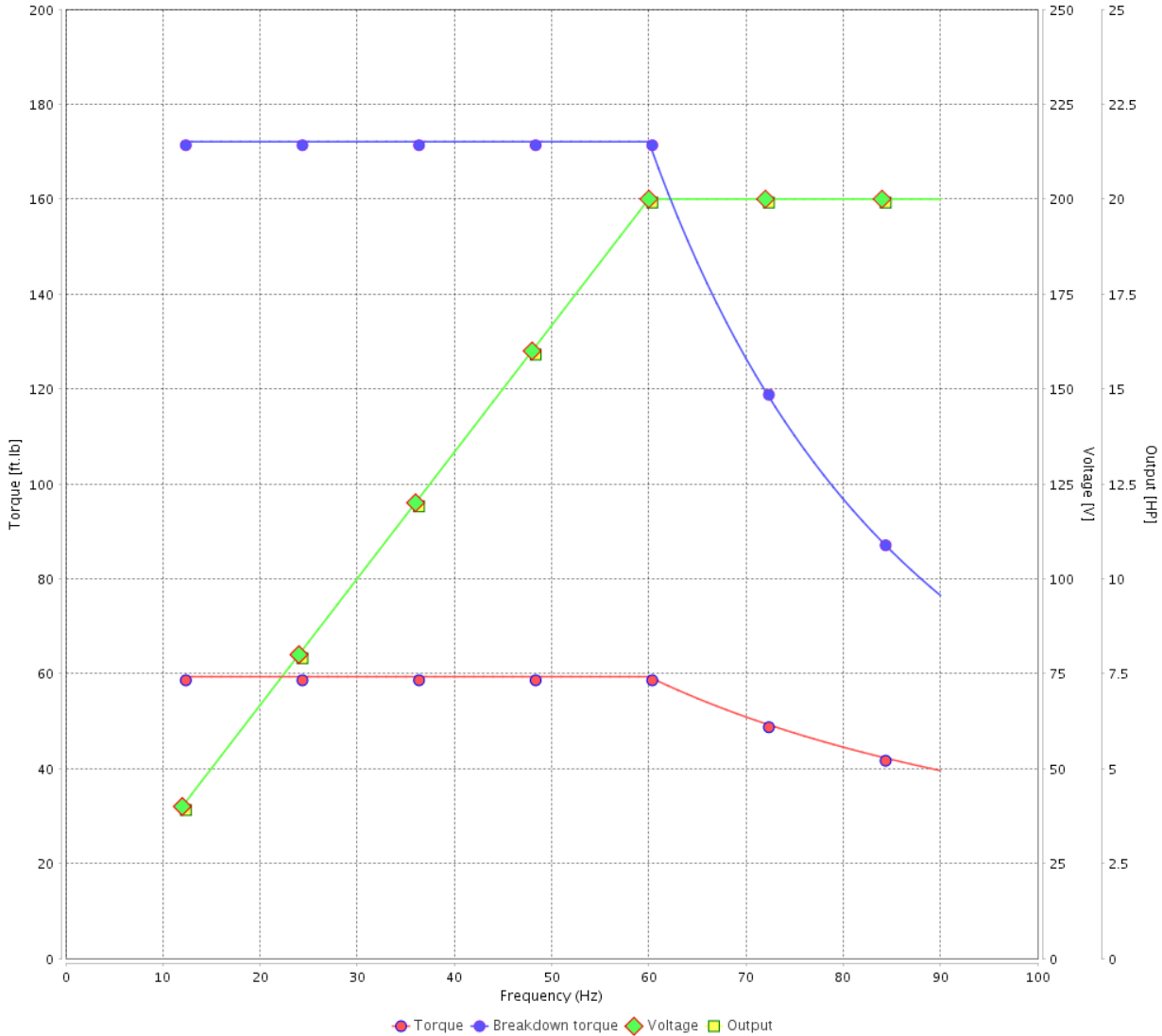
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 13248866

Catalog # : 02018OT3V256TC-SG

VFD OPERATION CURVE

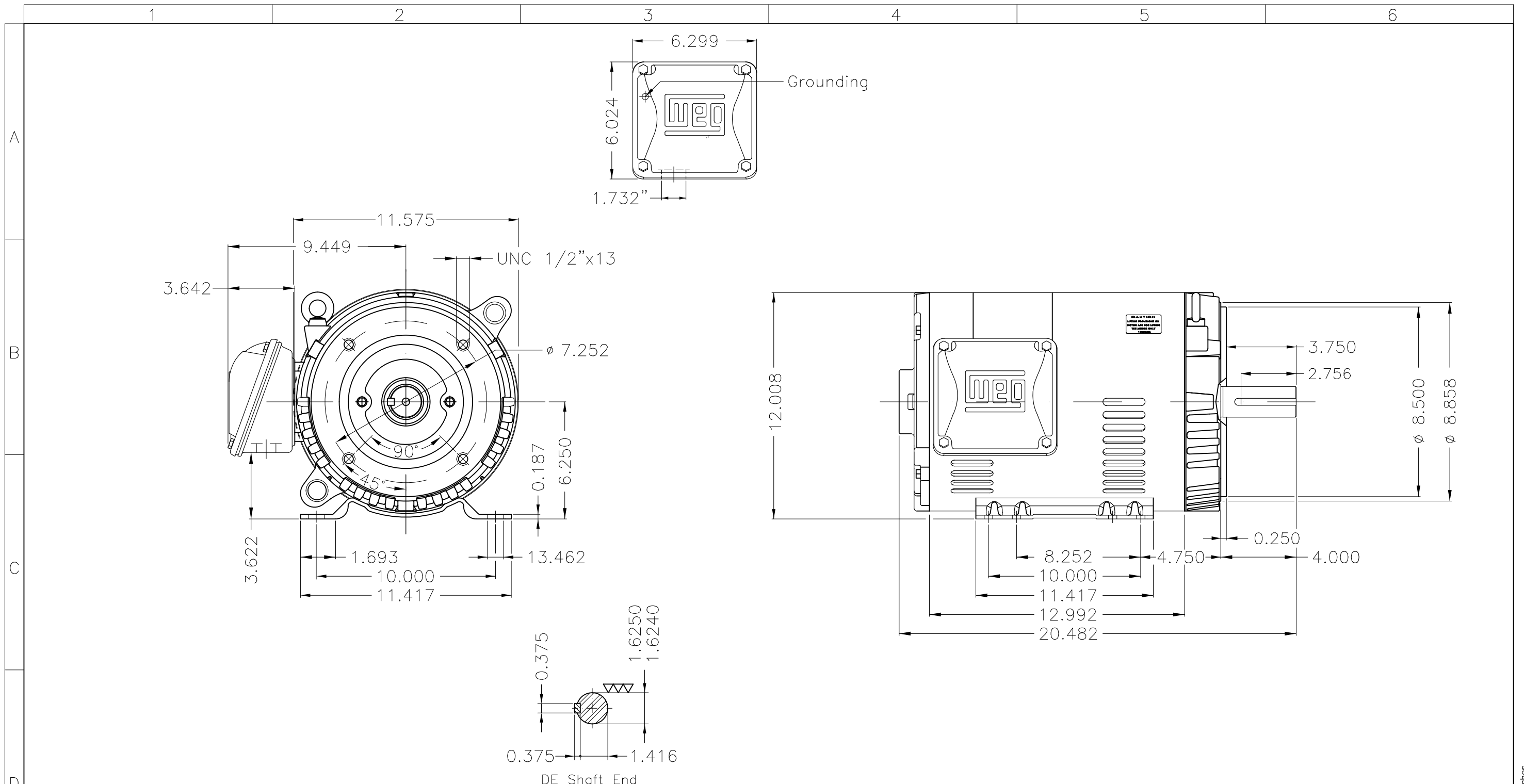


Performance : 200/400 V 60 Hz 4P

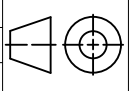
Rated current : 57.5/28.8 A
 LRC : 6.3
 Rated torque : 59.3 ft.lb
 Locked rotor torque : 240 %
 Breakdown torque : 290 %
 Rated speed : 1770 rpm

Moment of inertia (J) : 2.23 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 6 / 6	Revision
Checked by				
Date	14/04/2022			



Internal AEGIS ground ring on the DE
 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. FRAME 254/6TC IP21 ODP					
CHECKED							
RELEASED							
REL DT.		WMO Jaragua do Sul	Product Engineering	SHEET	1 / 1		

20 HP 04 Poles 60 Hz

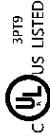
Dimensions in inches XME A3



PREVIEW
WDD



NEMA
Premium



MADE IN MEXICO

MAT: 13248866 CC029A

W01.T00IC0X0N

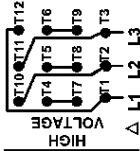
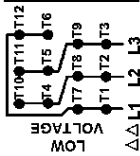
MODEL 020180T3V256TC-SG

10NOV2021 S/N:

PH 3	Hz 60	HP 20
FR 254/6TC		KW 15
DUTY CONT.		V 200/400
ALT 1000 m.a.s.l.		A 57.5/28.8
INS CL F AT 80K		SFA 66.1/33.1
AMB 40°C	DES B	SF 1.15
ENCL ODP	CODE G	PF 0.81
		RPM 1770
		NEMA
		NOM. EFF 93.0%

Inverter duty motor For use on VPWM 1000:1 VT, 5:1 CT

DE 6309-Z-C3	ODE 6208-Z-C3	MOBIL POLYREX EM	20000h
---------------------	----------------------	-------------------------	---------------



T1-BLU T2-WHT
 T3-ORG T4-YEL
 T5-BLK T6-GRY
 T7-PNK T8-RED
 T9-BRK RED
 T10-CURRY
 T11-GRN T12-VLT

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.

