

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line	: NEMA Premium Efficiency Three-Phase			
Product code :	14802519			
Catalog # :	00158ET3H145TC-S			
Frame : 143/5TC Output : 1.5 HP (1.1 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 575 V Rated current : 1.62 A L. R. Amperes : 13.3 A LRC : 8.2x(Code K) No load current : 0.867 A Rated speed : 1750 rpm Slip : 2.78 % Rated torque : 4.50 ft.lb Locked rotor torque : 270 % Breakdown torque : 300 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 0.1101 sq.ft.lb Design : B	Locked rotor time : 37s (cold) 21s (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 : 52.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 38.9 lb			
Output	25% 50% 75% 100%			
Efficiency (%)	85.2 85.5 86.5 86.5			
Power Factor	0.35 0.59 0.72 0.79			
Foundation loads				
Max. traction	: 98 lb			
Max. compression	: 137 lb			
Bearing type	: <u>Drive end</u> 6205 ZZ <u>Non drive end</u> 6203 ZZ			
Sealing	: V'Ring Without Bearing Seal			
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 NEMA MG-1.				
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	12/04/2022		1 / 6	

TORQUE AND CURRENT VS SPEED CURVE



Three Phase Induction Motor - Squirrel Cage

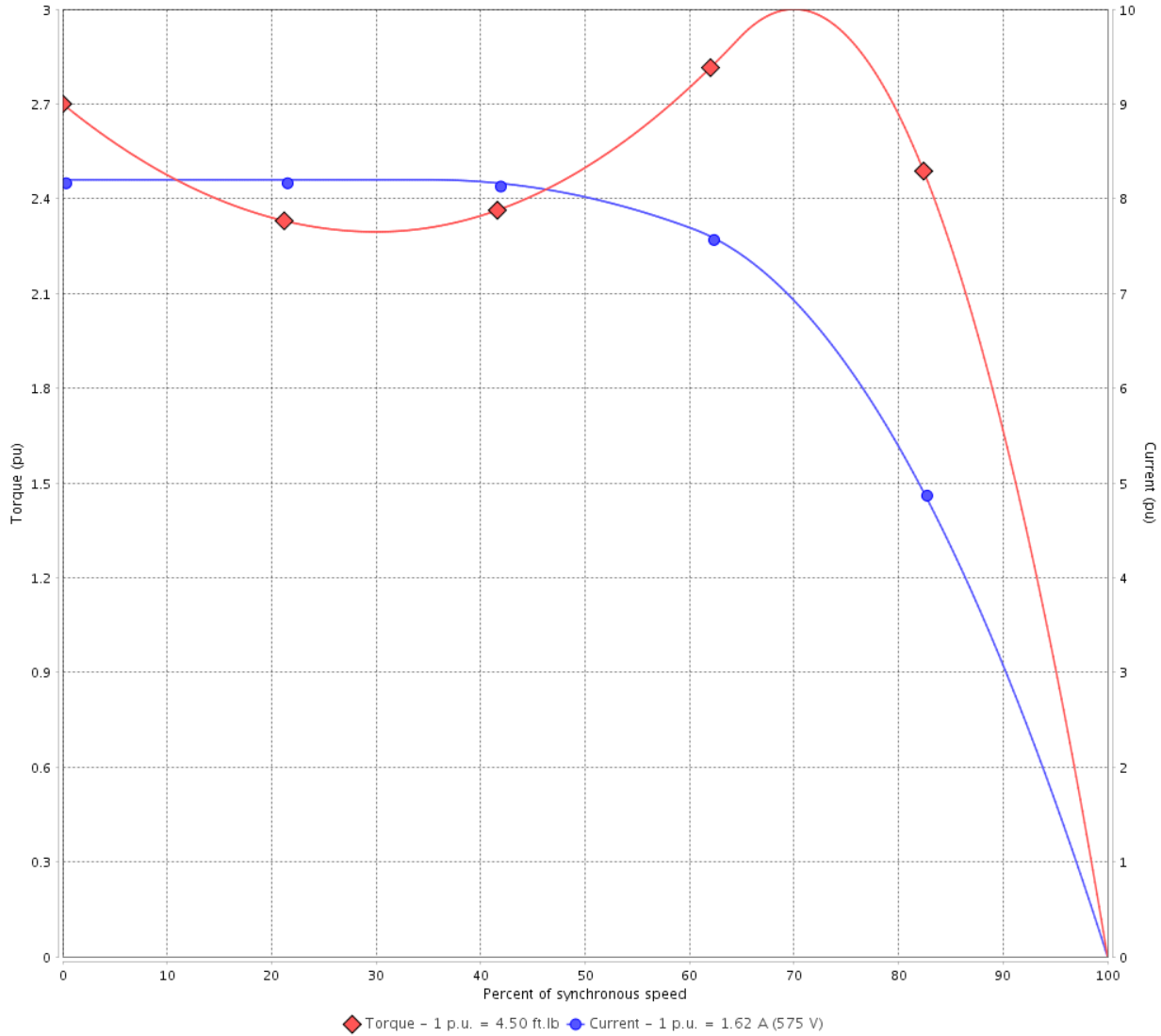
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14802519

Catalog # : 00158ET3H145TC-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 4P

Rated current	: 1.62 A	Moment of inertia (J)	: 0.1101 sq.ft.lb
LRC	: 8.2	Duty cycle	: Cont.(S1)
Rated torque	: 4.50 ft.lb	Insulation class	: F
Locked rotor torque	: 270 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1750 rpm	Design	: B

Locked rotor time : 37s (cold) 21s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 6	Revision
Checked by				
Date	12/04/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

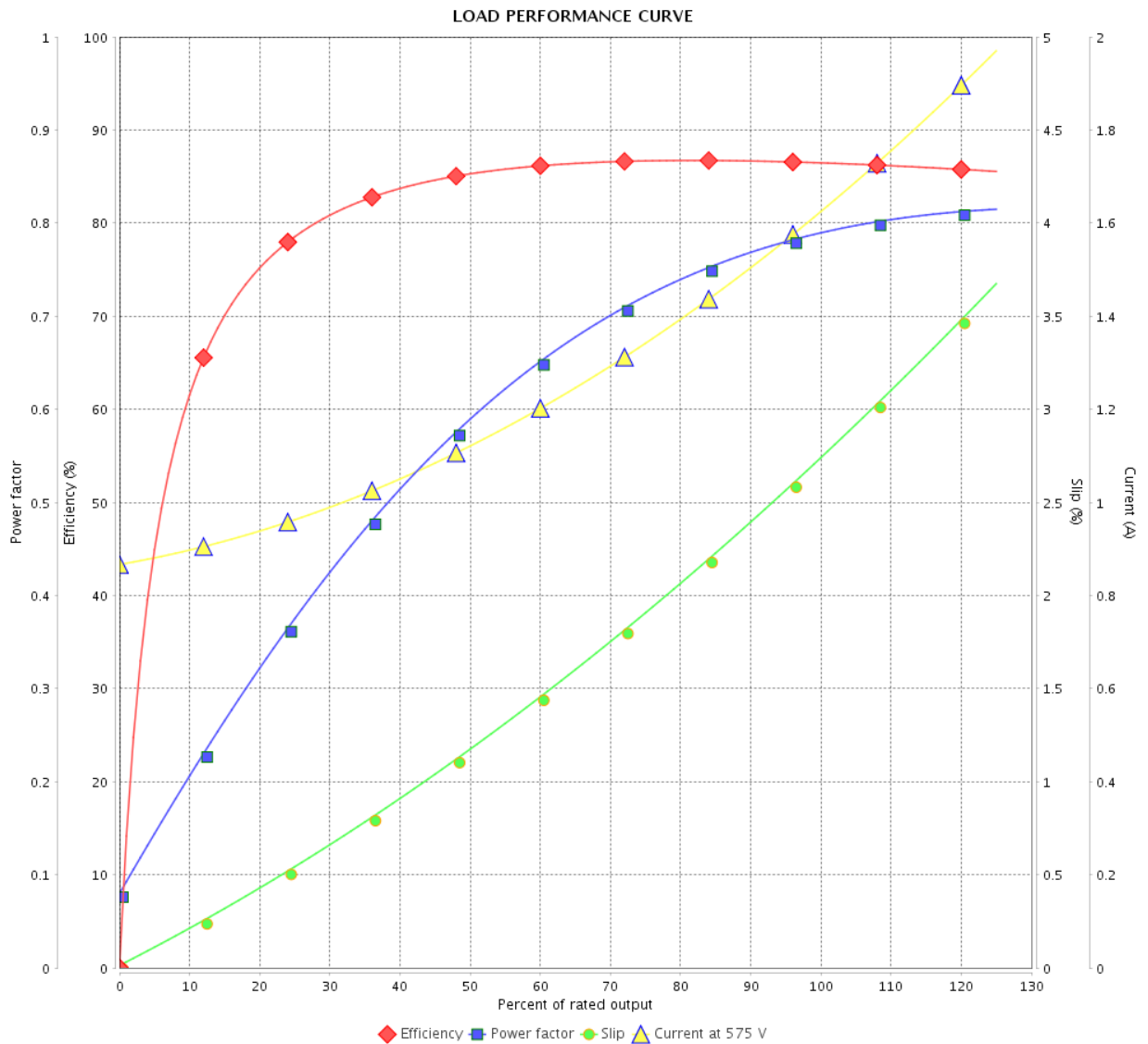


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14802519

Catalog # : 00158ET3H145TC-S



Performance : 575 V 60 Hz 4P

Rated current : 1.62 A
 LRC : 8.2
 Rated torque : 4.50 ft.lb
 Locked rotor torque : 270 %
 Breakdown torque : 300 %
 Rated speed : 1750 rpm

Moment of inertia (J) : 0.1101 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	12/04/2022			

THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase
 Product code : 14802519
 Catalog # : 00158ET3H145TC-S

Performance : 575 V 60 Hz 4P

Rated current : 1.62 A	Moment of inertia (J) : 0.1101 sq.ft.lb
LRC : 8.2	Duty cycle : Cont.(S1)
Rated torque : 4.50 ft.lb	Insulation class : F
Locked rotor torque : 270 %	Service factor : 1.15
Breakdown torque : 300 %	Temperature rise : 80 K
Rated speed : 1750 rpm	Design : B

Heating constant

Cooling constant

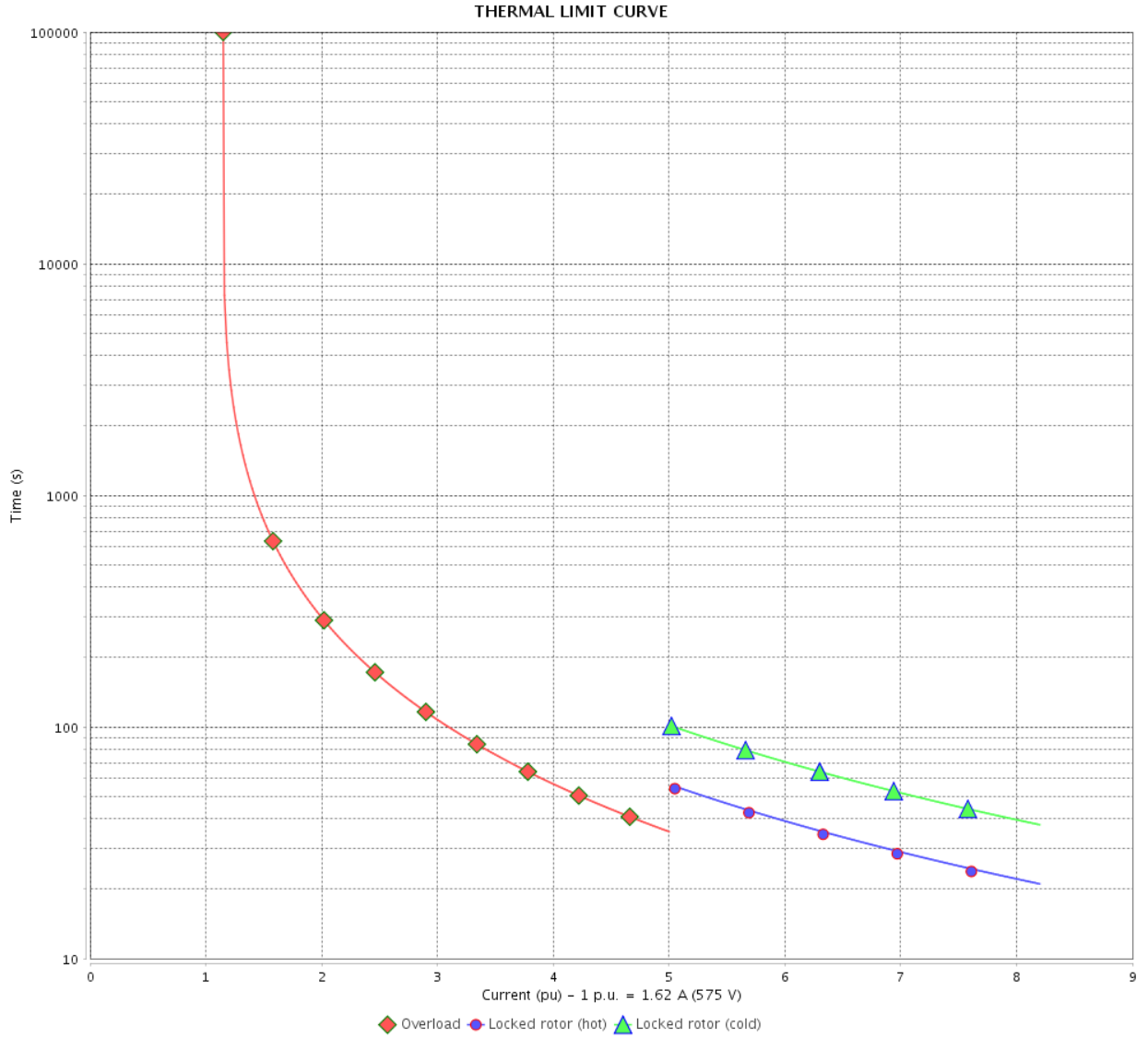
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 6	Revision
Checked by				
Date	12/04/2022			

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by				
Date				
			Page 5 / 6	Revision

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



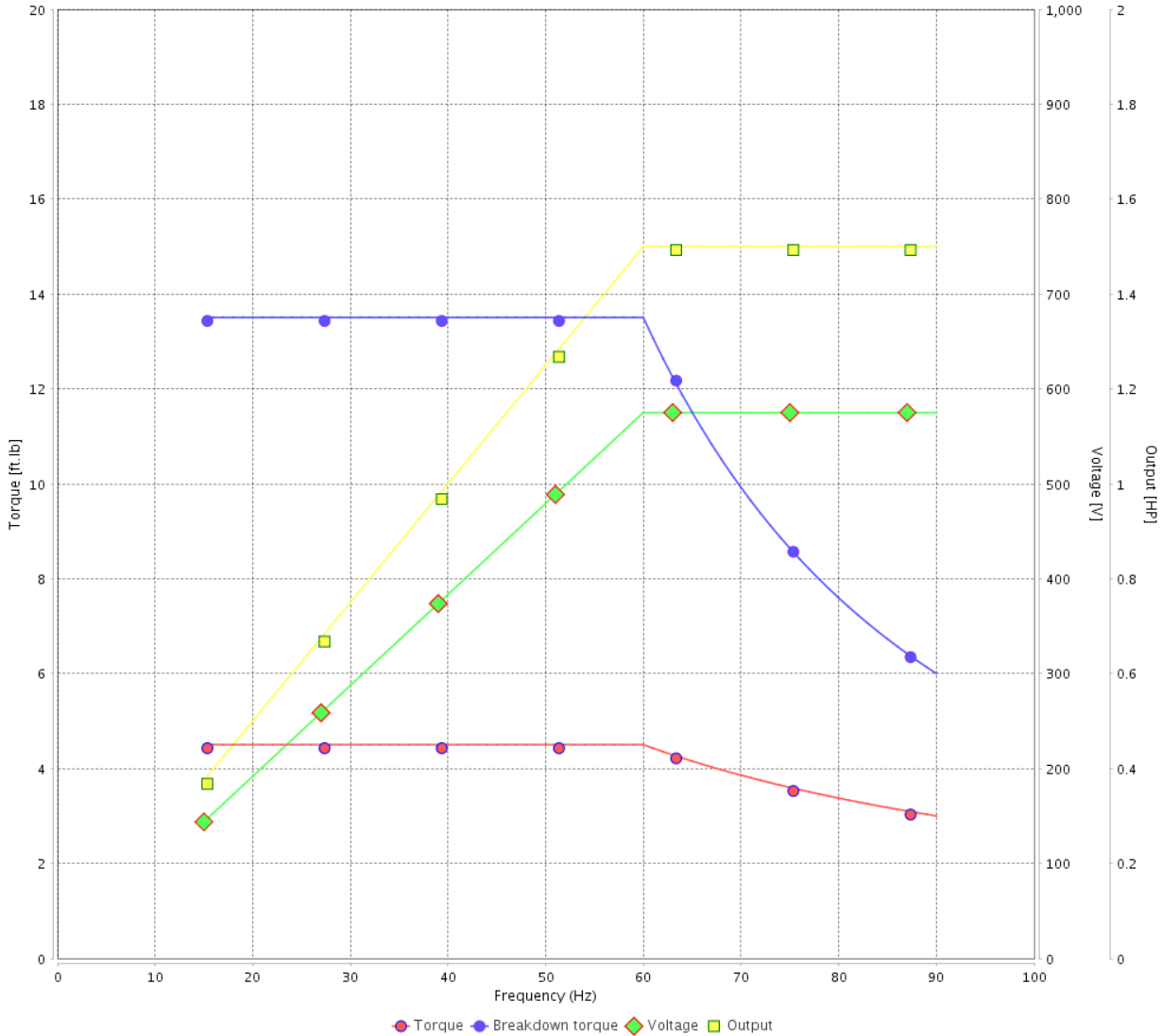
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14802519

Catalog # : 00158ET3H145TC-S

VFD OPERATION CURVE

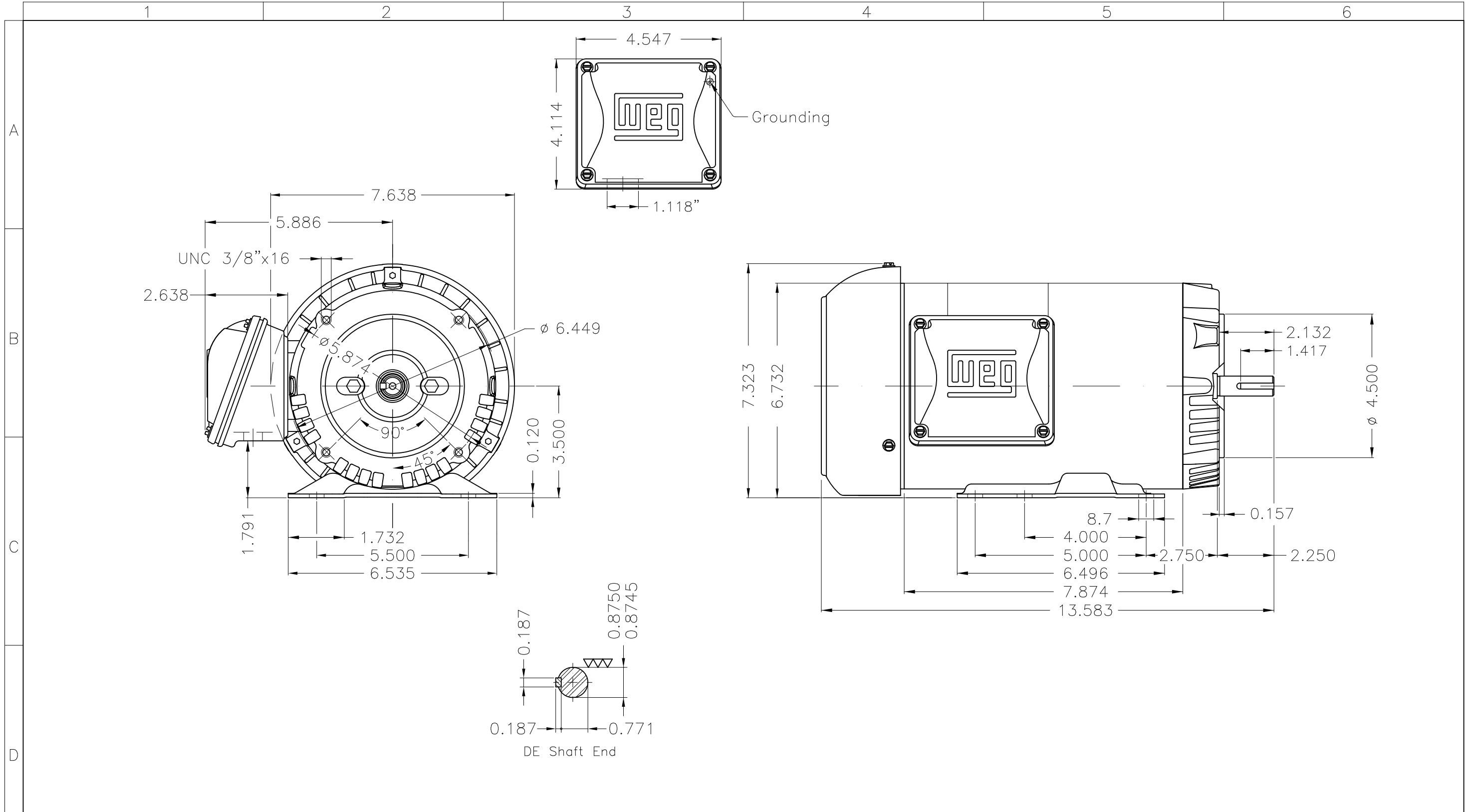


Performance : 575 V 60 Hz 4P

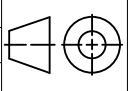
Rated current : 1.62 A
 LRC : 8.2
 Rated torque : 4.50 ft.lb
 Locked rotor torque : 270 %
 Breakdown torque : 300 %
 Rated speed : 1750 rpm

Moment of inertia (J) : 0.1101 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		6 / 6		
Date	12/04/2022			



Fan cover - steel plate
 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 143/5TC IP55 TEFC					
CHECKED							
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET		1 / 1	

1.5 HP 04 Poles 60 Hz

Dimensions in inches XME A3



WEG's property. Forbidden reproduction without previous authorization.



NEMA
Premium



MADE IN MEXICO

MAT: 14802519 CC029A

W01.TE0IC0X0N

MODEL 00158ET3H145TC-S

03FEB2022 B/N:

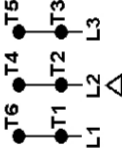
**For 60Hz: Class I, Zone 2, IIC
Class I, Div.2, Gr. A,B,C,D - T3
Div 2 Inverter Duty (SF1.00)**

CT 2:1/VT 1000:1

PH 3	Hz 60	HP 1.5
FR 143/5TC		KW 1.1
DUTY CONT.		V 575
ALT 1000 m.a.s.l.		A 1.62
INS CL F AT 80K	IP55	SFA 1.86
AMB 40°C	DES B	SF 1.15
ENCL TEFC	CODE K	PF 0.79
		RPM 1750
		NEMA NOM. EFF 86.5%

For safe area-Inverter duty motor For use on VPWM 1000:1 VT, 4:1 CT

DE 6205-ZZ	ODE 6203-ZZ	MOBIL POLYREX EM
------------	-------------	------------------



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.

