### **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



Customer Product line : NEMA Premium Efficiency Three-Product code: 14802520 Catalog #: 00158ET3H145T-S Frame : 143/5T Locked rotor time : 37s (cold) 21s (hot) Output : 1.5 HP (1.1 kW) Temperature rise : 80 K Poles Duty cycle : Cont.(S1) : -20°C to +40°C Frequency : 60 Hz Ambient temperature Rated voltage : 575 V : 1000 m.a.s.l. Altitude Rated current : 1.62 A Protection degree : IP55 L. R. Amperes : 13.3 A Cooling method : IC411 - TEFC LRC : 8.2x(Code K) Mounting : F-1 No load current : 0.867 A Rotation<sup>1</sup> : Both (CW and CCW) Rated speed : 1750 rpm Noise level<sup>2</sup> : 52.0 dB(A) Starting method Slip : 2.78 % : Direct On Line Rated torque : 4.50 ft.lb Approx. weight<sup>3</sup> : 38.6 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 25% 50% 75% 100% Output Foundation loads 85.5 86.5 86.5 : 98 lb Efficiency (%) 85.2 Max. traction : 137 lb Power Factor 0.59 0.72 0.79 0.35 Max. compression Drive end Non drive end Bearing type 6205 ZZ 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

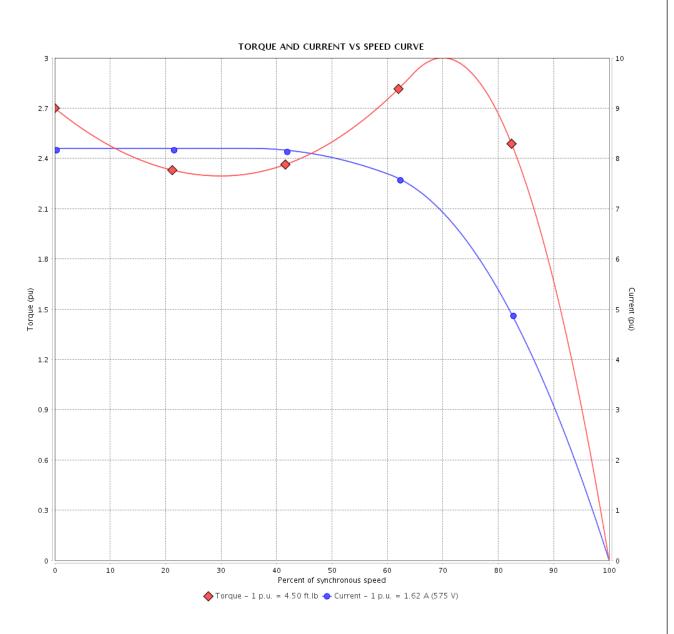
#### Three Phase Induction Motor - Squirrel Cage



Customer

Product line : NEMA Premium Efficiency Three-Product code: 14802520

Catalog #: 00158ET3H145T-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) : F Insulation class Rated torque : 4.50 ft.lb : 1.15 Locked rotor torque : 270 % Service factor 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					
Checked by				Page	Revision
Date	12/04/2022			2/6	

# LOAD PERFORMANCE CURVE

### Three Phase Induction Motor - Squirrel Cage



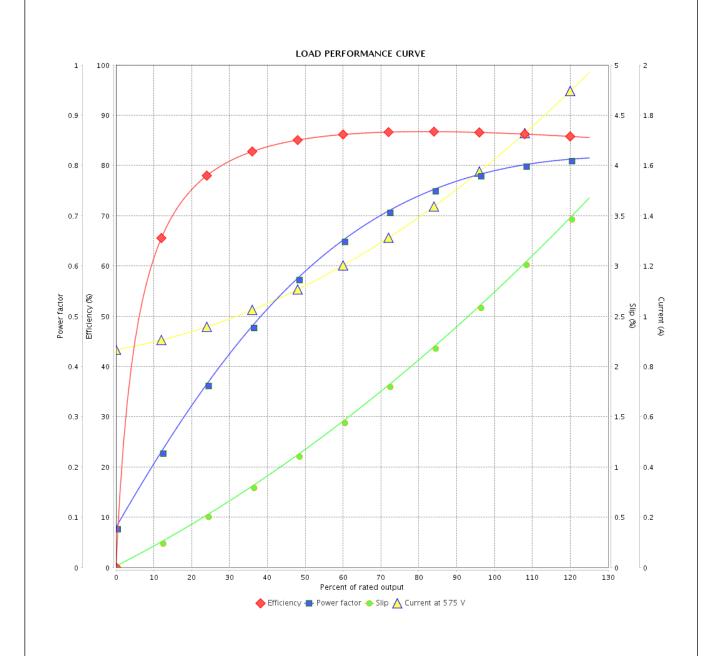
Customer

Product line : NEMA Premium Efficiency Three- Product code :

Phase

Product code: 14802520

Catalog #: 00158ET3H145T-S



Performance		: 575 V 60 Hz 4P						
Rated current		.62 A	A Moment of inertia (J)		: 0.1101 sq.ft.lb			
LRC	: 8	.2	Duty cycle	Duty cycle		: Cont.(S1)		
Rated torque	: 4	.50 ft.lb	Insulation	Insulation class				
Locked rotor tord	que : 2	70 %	Service fa	Service factor		: 1.15		
Breakdown torque		00 %	Temperati	Temperature rise		: 80 K		
Rated speed	: 1	750 rpm	Design		: B			
Rev.		Changes Summary		Performed	Checked	Date		
Performed by								
Checked by					Page	Revision		
Date	12/04/2022	1			3/6			

# THERMAL LIMIT CURVE

### Three Phase Induction Motor - Squirrel Cage



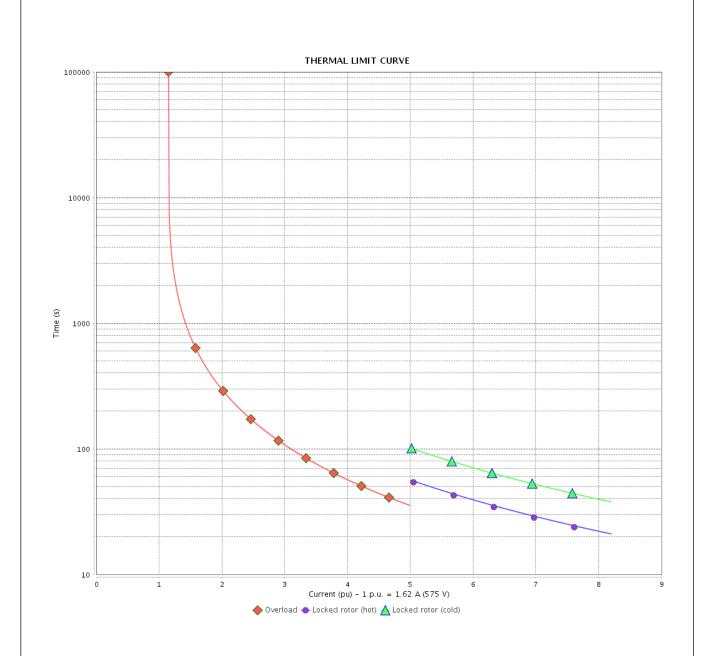
Customer		:				
Product line		: NEMA Premium Efficiency Phase		Product code : Catalog # :	14802520 00158ET3H1	45T-S
Performance		: 575 V 60 Hz 4P				
Rated current LRC		: 1.62 A : 8.2	Moment of Duty cycle	of inertia (J) e	: 0.1101 sq.ft.ll : Cont.(S1)	0
Rated torque		: 4.50 ft.lb	Insulation	class	: F	
Locked rotor tord Breakdown torqu		: 270 % : 300 %	Service fa Temperat		: 1.15 : 80 K	
Rated speed		: 1750 rpm	Design	· 	: B	
Heating constan						
Cooling constan	t	Changes Cumman		Dorform	Chaolaad	Data
Rev.		Changes Summary		Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	12/04/2022				4/6	

# THERMAL LIMIT CURVE

### Three Phase Induction Motor - Squirrel Cage



Customer



Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	12/04/2022			5/6	

### VFD OPERATION CURVE

### Three Phase Induction Motor - Squirrel Cage



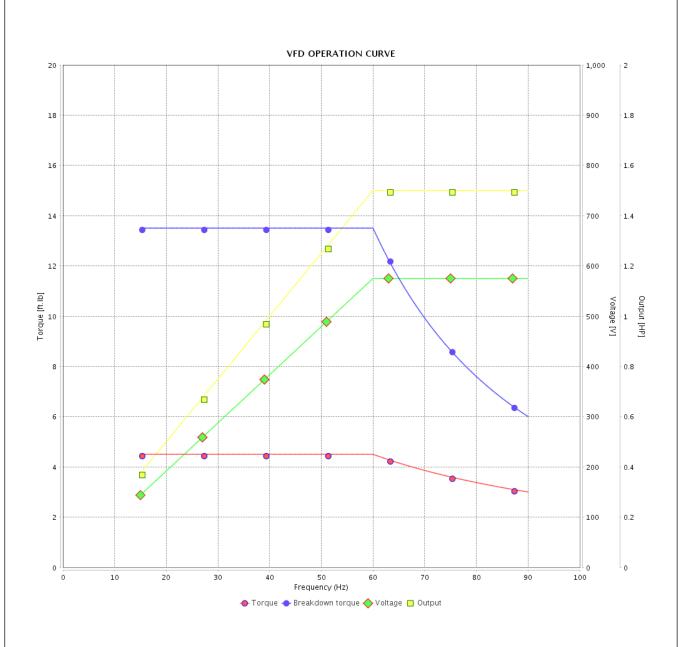
Customer :

Product line : NEMA Premium Efficiency Three- Product co

Phase

Product code: 14802520

Catalog #: 00158ET3H145T-S

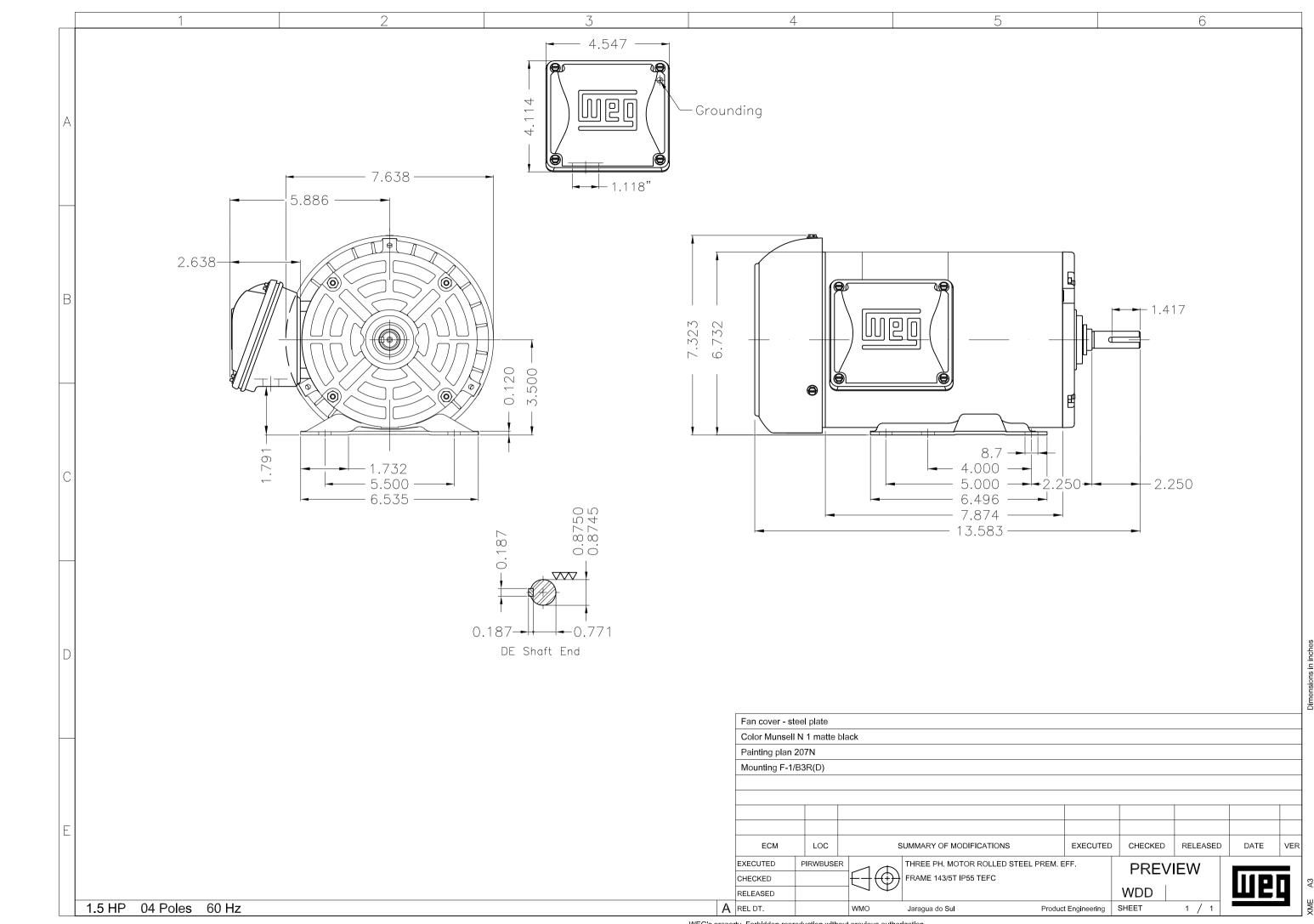


Performance	: 575 V 60 Hz 4P				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 1.62 A : 8.2 : 4.50 ft.lb : 270 % : 300 % : 1750 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.1101 sq.ft.lb : Cont.(S1) : F : 1.15 : 80 K : B	
Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision

6/6

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Date





MODEL 00158ET3H145T-S

:0MAR2022 143/51 CONT

N01.TE0IC0X0N

14802520

Hz 60 ÿ B

<u>₹</u>

(**UL)**US LISTED 3PT9 FOR SAFE AREA

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

86.5% 1.15 0.79 575 1.62 1.86 Ξ NOM EFF NEMA ZPM 3FA 냃 쌆

> P55 CODE SHO

1000 m.a.s.l

F AT 80K

NSC NCL WB

TEFC <del>0</del>

For safe area-inverter duty motor For use on VPWM 1000:1 VT, 4:1 CT MOBIL POLYREX EM

ODE 6203-2Z

8205-ZZ

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NTERCHANGE ANY TWO LINE WIRES TO REVERSE THE ROTATION WARNING: Motor must be grounded in accordance with local

T2-WHT r3-ORG r6-GRY 15-BLK T4-YEL

T1-BLU

choc électrique grave. Déconnectez l'alimentation avant l'entretien de la machine conformément aux codes électriques locaux et nationaux afin d'éviter tout AVERTISSEMENT: Le moteur doit être mis à la terre shocks. Disconnect power source before servicing unit. ind national electrical codes to prevent serious electrical