DATA SHEET

Three Phase Induction Motor - Squirrel Cage

Customer	:

Product line	: NEMA Premium Efficiency Three-Phase	Product code :	12717786
		Catalog # :	00509ET3H254T-W22

Frame	: 254/6T	Locked rotor time	: 79s (cold) 44s (hot)
Output	: 5 HP (3.7 kW)	Temperature rise	: 80 K
Poles	: 8	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 575 V	Altitude	: 1000 m.a.s.l.
Rated current	: 6.06 A	Protection degree	: IP55
L. R. Amperes	: 32.1 A	Cooling method	: IC411 - TEFC
LRC	: 5.3x(Code H)	Mounting	: F-1
No load current	: 3.60 A	Rotation[1]	: Both (CW and CCW)
Rated speed	: 882 rpm	Noise level[2]	: 54.0 dB(A)
Slip	: 2.00 %	Starting method	: Direct On Line
Rated torque	: 29.8 ft.lb	Approx. weight[3]	: 270 lb
Locked rotor torque	: 220 %		
Breakdown torque	: 250 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 3.41 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%
Efficiency (%)	85.2	85.5	87.5	87.5
Power Factor	0.28	0.49	0.62	0.70

Foundation loads	
Max. traction	: 222 lb
Max. compression	: 492 lb

		Drive end	Non drive end
Bearing type	:	6309 C3	6209 C3
Sealing	:	V'Ring	V'Ring
Lubrication interval	:	20000 h	20000 h
Lubricant amount	:	13 g	9 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	13/04/2022		1 / 6	

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

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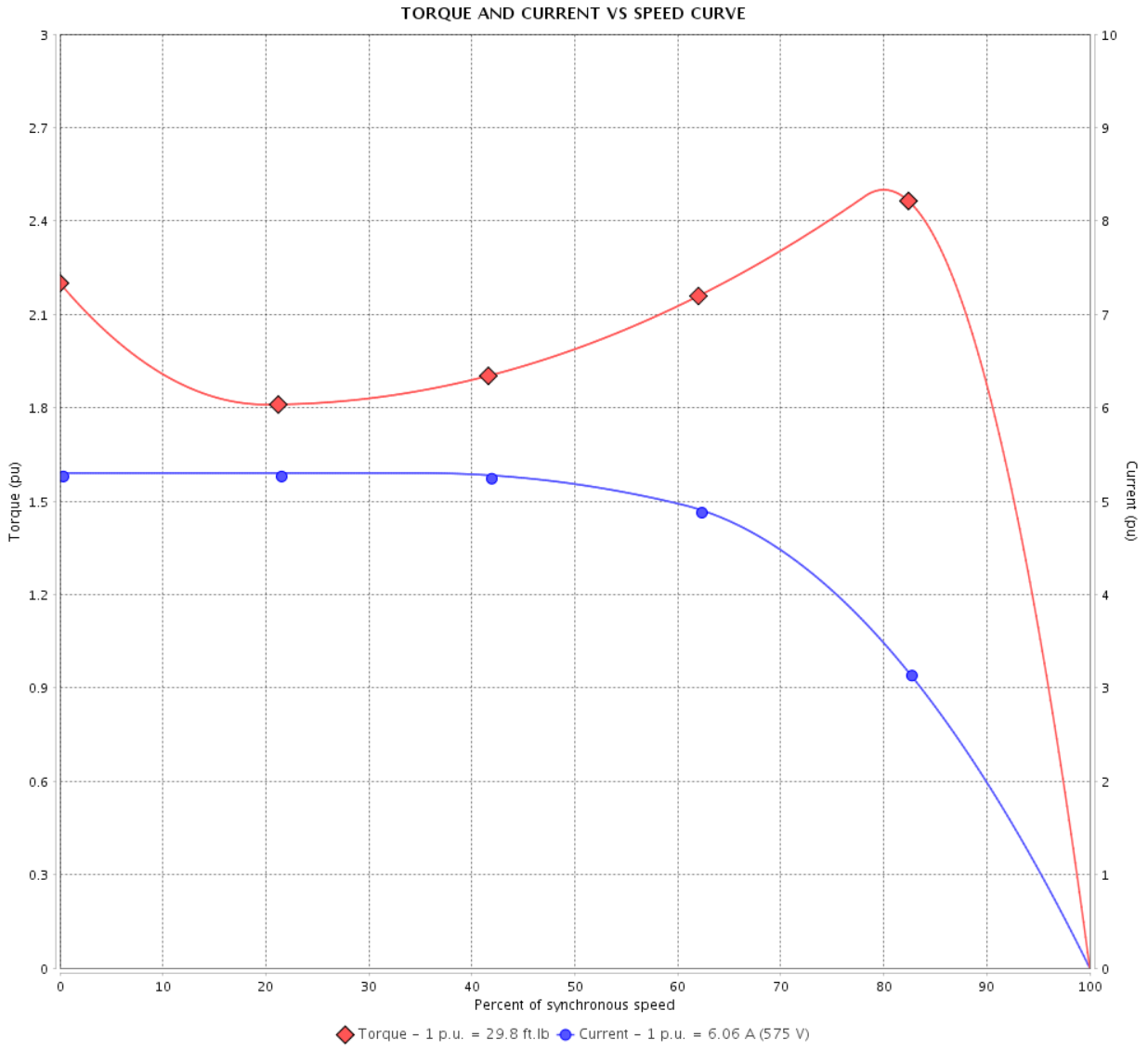
		Catalog # :	00509ET3H254T-W22



Performance	: 575 V 60 Hz 8P

Rated current	: 6.06 A	Moment of inertia (J)	: 3.41 sq.ft.lb
LRC	: 5.3	Duty cycle	: Cont.(S1)
Rated torque	: 29.8 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.25
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 882 rpm	Design	: B

Locked rotor time	: 79s (cold) 44s (hot)

Rev.	Changes Summary	Performed	Checked	Date

Performed by				
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Date	13/04/2022		2 / 6	

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

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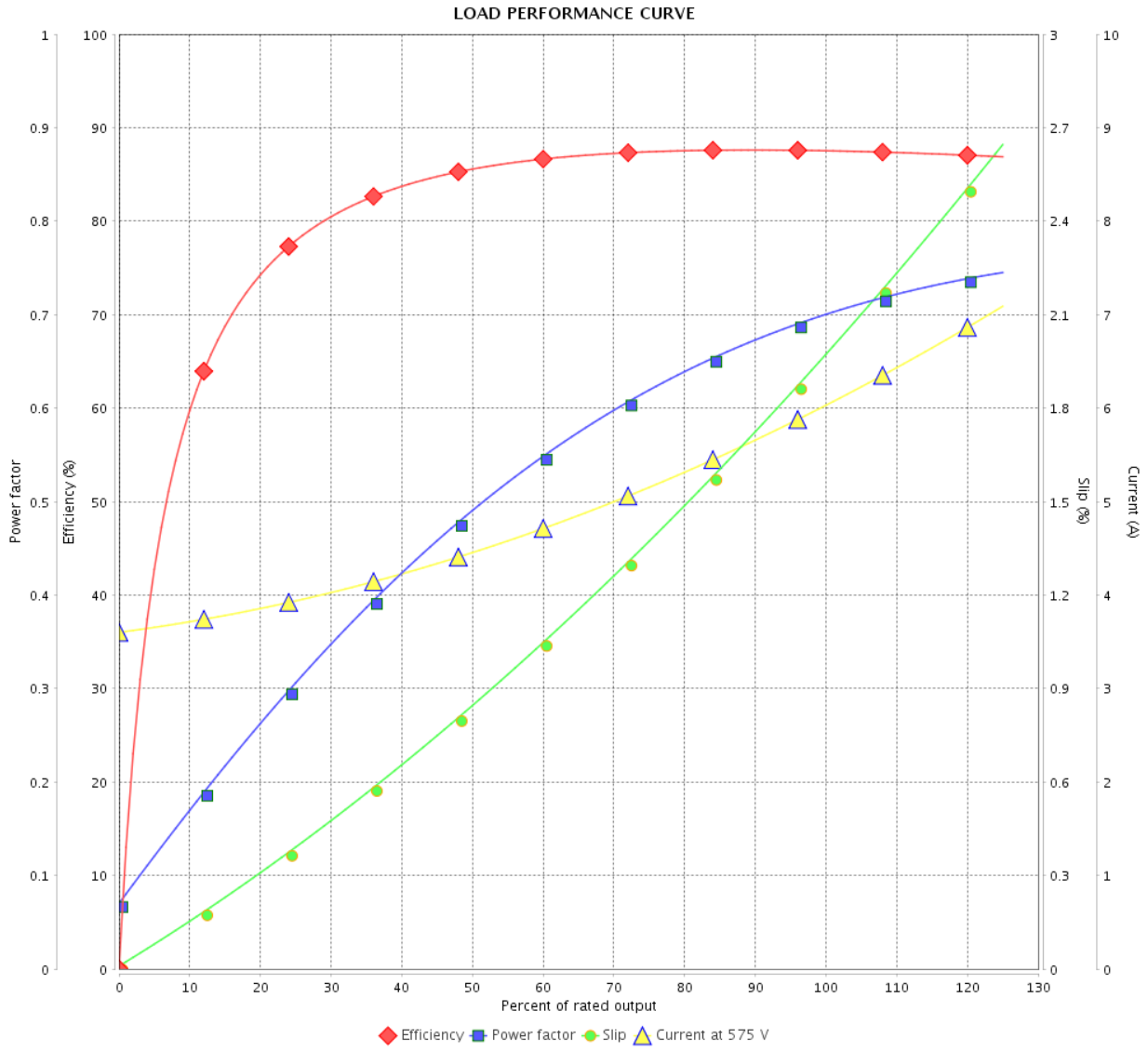
		Catalog # :	00509ET3H254T-W22



Performance	: 575 V 60 Hz 8P		
Rated current	: 6.06 A	Moment of inertia (J)	: 3.41 sq.ft.lb
LRC	: 5.3	Duty cycle	: Cont.(S1)
Rated torque	: 29.8 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.25
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 882 rpm	Design	: B

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Performed by				
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Date	13/04/2022		3 / 6	

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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage

Customer	:		
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	12717786
		Catalog # :	00509ET3H254T-W22

Performance	: 575 V 60 Hz 8P		
Rated current	: 6.06 A	Moment of inertia (J)	: 3.41 sq.ft.lb
LRC	: 5.3	Duty cycle	: Cont.(S1)
Rated torque	: 29.8 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.25
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 882 rpm	Design	: B
Heating constant			
Cooling constant			

Rev.	Changes Summary	Performed	Checked	Date

Performed by				
Checked by			Page	Revision
Date	13/04/2022		4 / 6	

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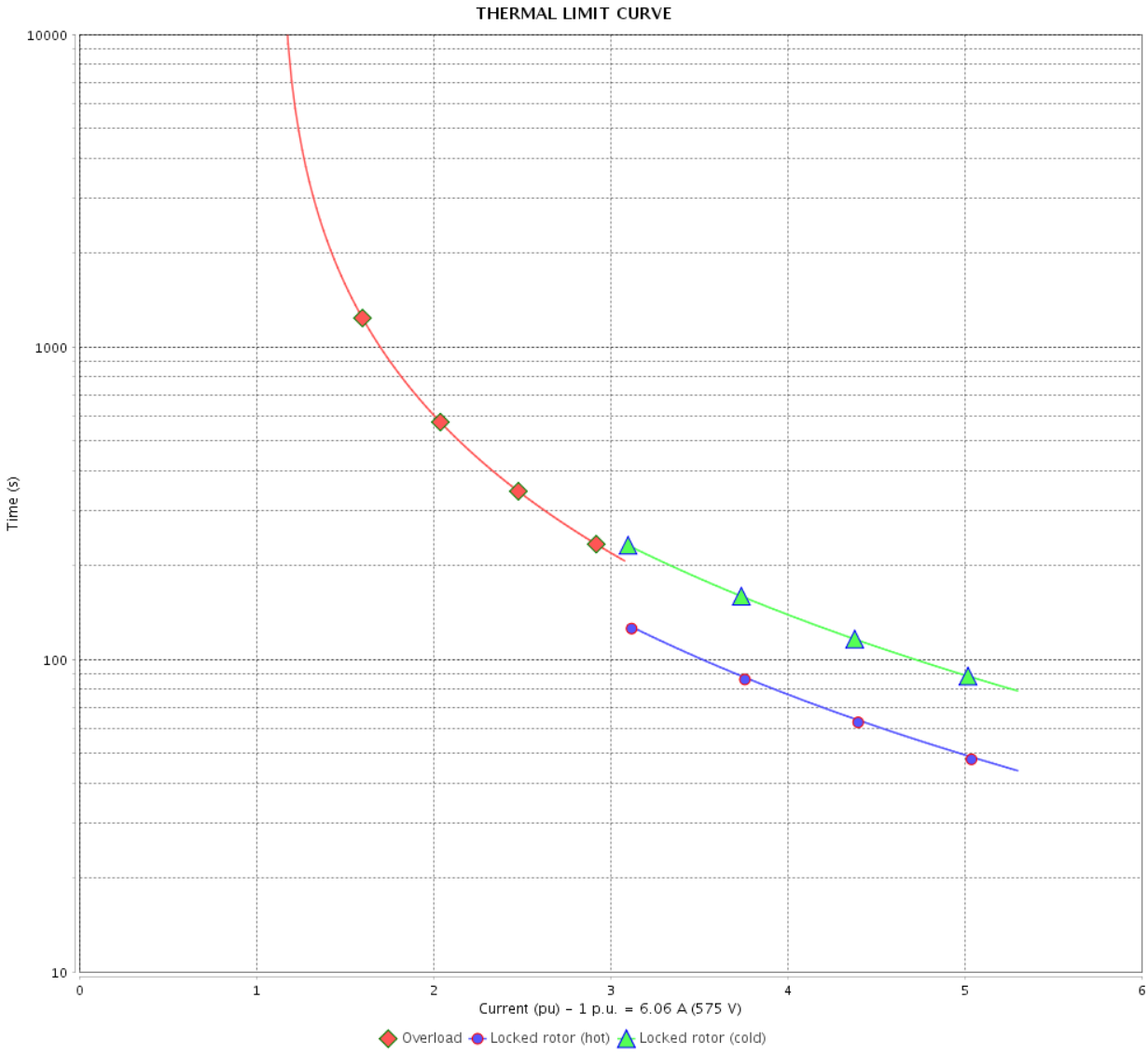
THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage

Customer :



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Performed by				
Checked by			Page	Revision
Date	13/04/2022		5 / 6	

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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

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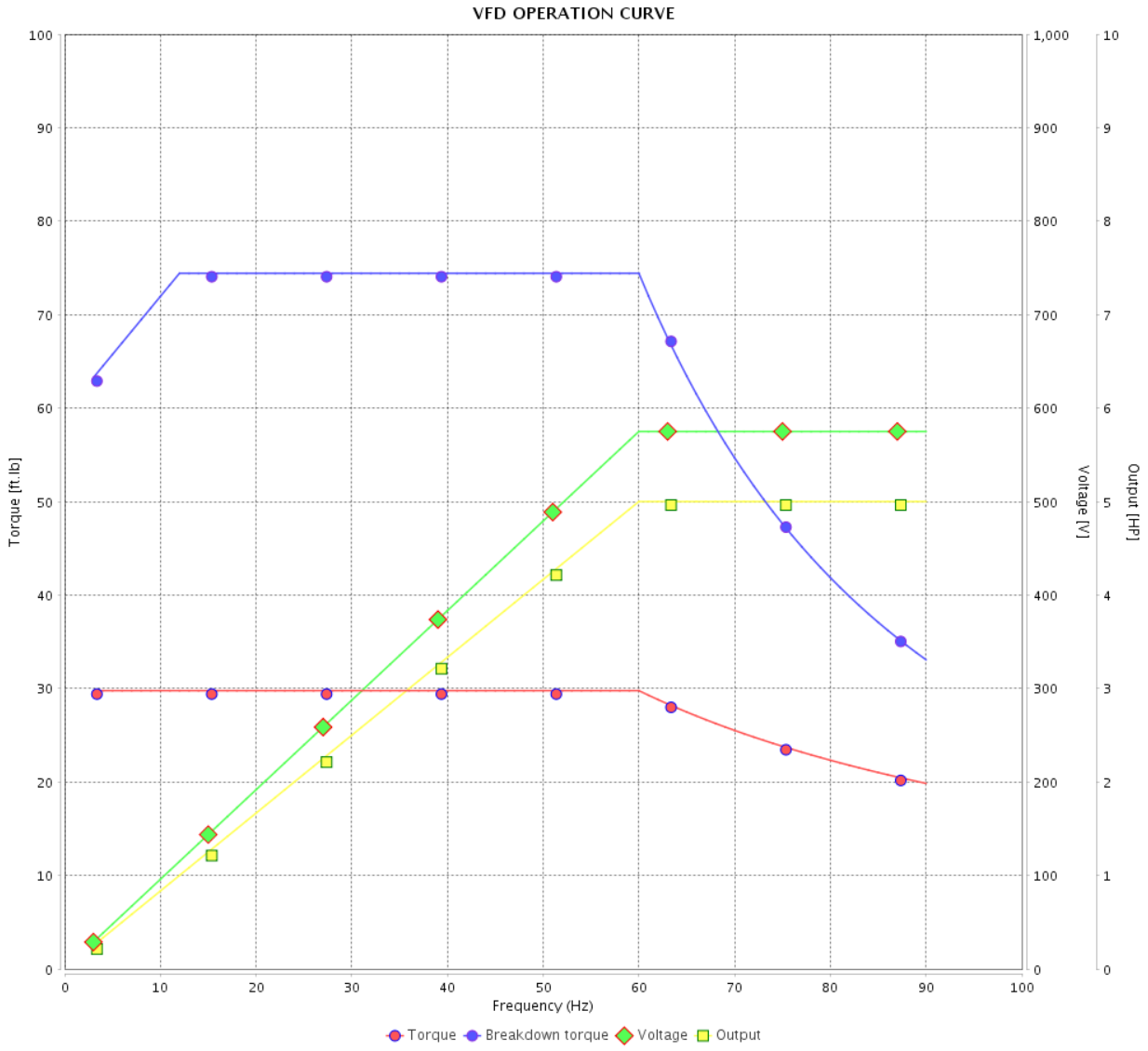
		Catalog # :	00509ET3H254T-W22



Performance	: 575 V 60 Hz 8P		
Rated current	: 6.06 A	Moment of inertia (J)	: 3.41 sq.ft.lb
LRC	: 5.3	Duty cycle	: Cont.(S1)
Rated torque	: 29.8 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.25
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 882 rpm	Design	: B

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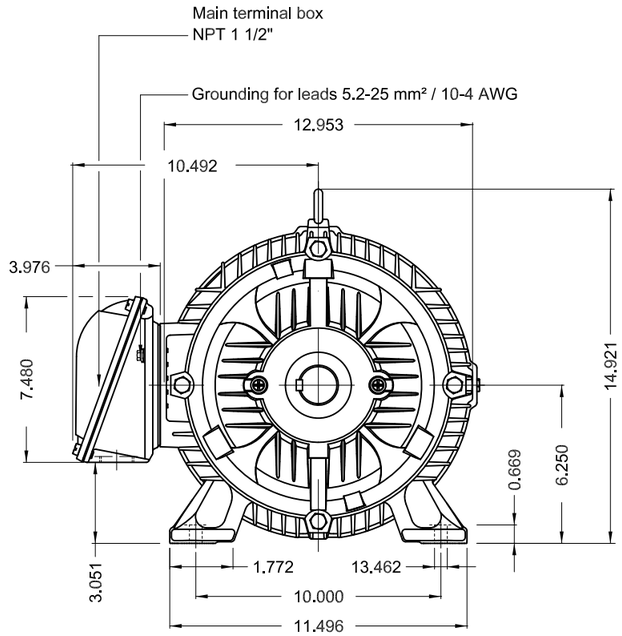

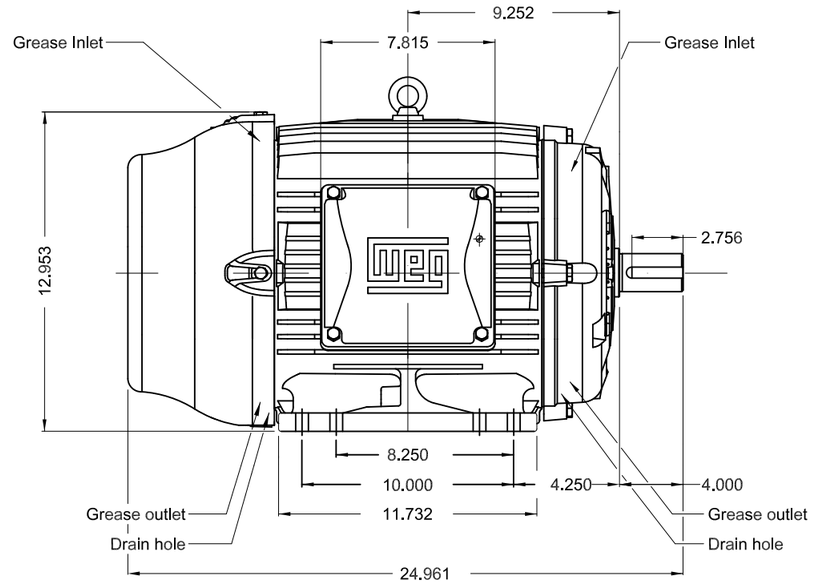

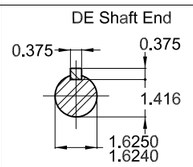

Color RAL 5009
Painting plan 203A
Mounting NEMA F-1
Mounting B3R(D)

5 HP 08 Poles 60 Hz | A

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER

EXECUTED	PIRWBUSER	THREE PH. MOTOR W22 PREM. EFF.	PREVIEW
CHECKED		FRAME 254/6T IP55 TEFC	WDD
RELEASED			
REL DT.		WMO Jaragua do Sul Product Engineering	SHEET 1 / 1

Dimensions in inches
XME A3

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NEMA Premium W22

3PT9 LISTED C US

FOR SAFE AREA
Mod.TE1BF0XON
CC029A

C US Energy Verified

Class I, Div 2, Gr A, B, C and D – T3
Class I, Zone 2, IIC – T3
Class II, Div 2, Gr F and G – T4
For use on PWM: Gr. A, B, C, D and F,
VT 1000:1, CT 20:1, 1.00SF – T3A

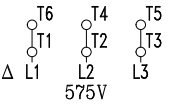
MODEL 00509ET3H254T-W22

MADE IN BRAZIL
12717786

Inverter Duty Motor
Severe Duty

PH3 60Hz Fr. 254/6T 1000m.a.s.l. IP55 TEFC 271lb

V 575	A 6.06	
HP 5.0	kW 3.7	
SF 1.25	SFA 7.57	
RPM 882	PF 0.70	
AMB 40°C	INS cl. F DT80K	NEMA NOM EFF 87.5%
DUTY CONT.	DES B Code H	



MOBIL POLYREX EM (20000h)