

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :						
Product line		: NEMA Premium Efficiency Three-Phase		Product code :	14407587	
				Catalog # :	03012XT3H326T	
Frame	: 326T		Locked rotor time	: 45s (cold) 25s (hot)		
Output	: 30 HP (22 kW)		Temperature rise	: 80 K		
Poles	: 6		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	: 29.4 A		Protection degree	: IP55		
L. R. Amperes	: 208 A		Cooling method	: IC411 - TEFC		
LRC	: 7.1x(Code H)		Mounting	: F-1		
No load current	: 13.6 A		Rotation ¹	: Both (CW and CCW)		
Rated speed	: 1180 rpm		Noise level ²	: 62.0 dB(A)		
Slip	: 1.67 %		Starting method	: Direct On Line		
Rated torque	: 134 ft.lb		Approx. weight ³	: 647 lb		
Locked rotor torque	: 240 %					
Breakdown torque	: 270 %					
Insulation class	: F					
Service factor	: 1.15					
Moment of inertia (J)	: 12.5 sq.ft.lb					
Design	: B					
Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	92.2	92.4	93.0	93.0	Max. traction : 1060 lb	
Power Factor	0.38	0.63	0.75	0.81	Max. compression : 1707 lb	
			<u>Drive end</u>		<u>Non drive end</u>	
Bearing type	:		6312 C3		6212 C3	
Sealing	:		Oil Seal		Lip Seal	
Lubrication interval	:		20000 h		20000 h	
Lubricant amount	:		21 g		13 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 / 7	

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer : _____

Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermostat - 2 wires	1 x Phase	155 °C

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	14/04/2022		2 / 7	

TORQUE AND CURRENT VS SPEED CURVE



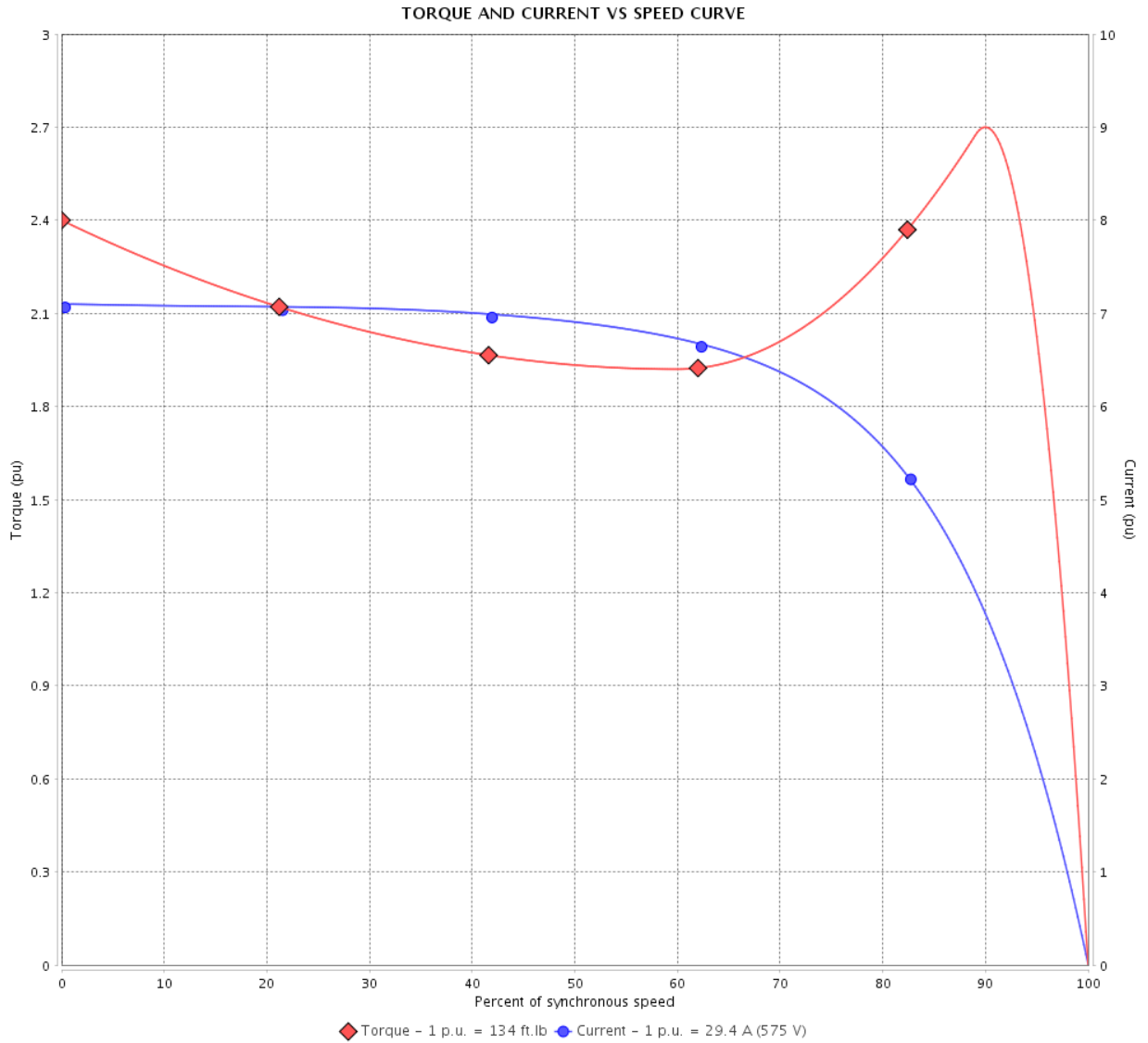
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14407587

Catalog # : 03012XT3H326T



Performance : 575 V 60 Hz 6P

Rated current	: 29.4 A	Moment of inertia (J)	: 12.5 sq.ft.lb
LRC	: 7.1	Duty cycle	: Cont.(S1)
Rated torque	: 134 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.15
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 1180 rpm	Design	: B

Locked rotor time : 45s (cold) 25s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 3 / 7	Revision
Checked by				
Date	14/04/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



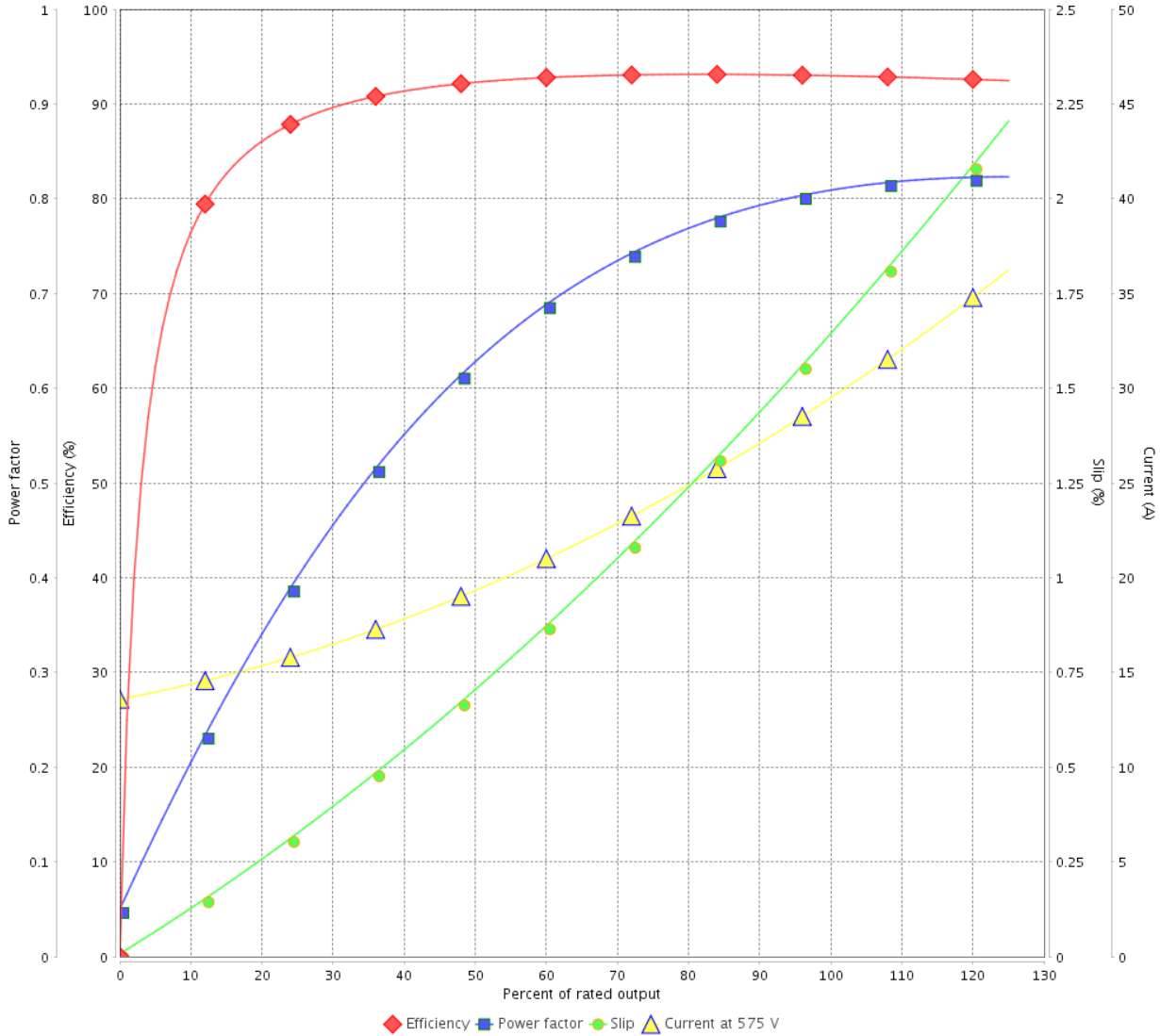
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14407587

Catalog # : 03012XT3H326T

LOAD PERFORMANCE CURVE



Performance : 575 V 60 Hz 6P

Rated current : 29.4 A
 LRC : 7.1
 Rated torque : 134 ft.lb
 Locked rotor torque : 240 %
 Breakdown torque : 270 %
 Rated speed : 1180 rpm

Moment of inertia (J) : 12.5 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 4 / 7	Revision
Checked by				
Date	14/04/2022			

THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase
 Product code : 14407587
 Catalog # : 03012XT3H326T

Performance : 575 V 60 Hz 6P

Rated current : 29.4 A	Moment of inertia (J) : 12.5 sq.ft.lb
LRC : 7.1	Duty cycle : Cont.(S1)
Rated torque : 134 ft.lb	Insulation class : F
Locked rotor torque : 240 %	Service factor : 1.15
Breakdown torque : 270 %	Temperature rise : 80 K
Rated speed : 1180 rpm	Design : B

Heating constant

Cooling constant

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 5 / 7	Revision
Checked by				
Date	14/04/2022			

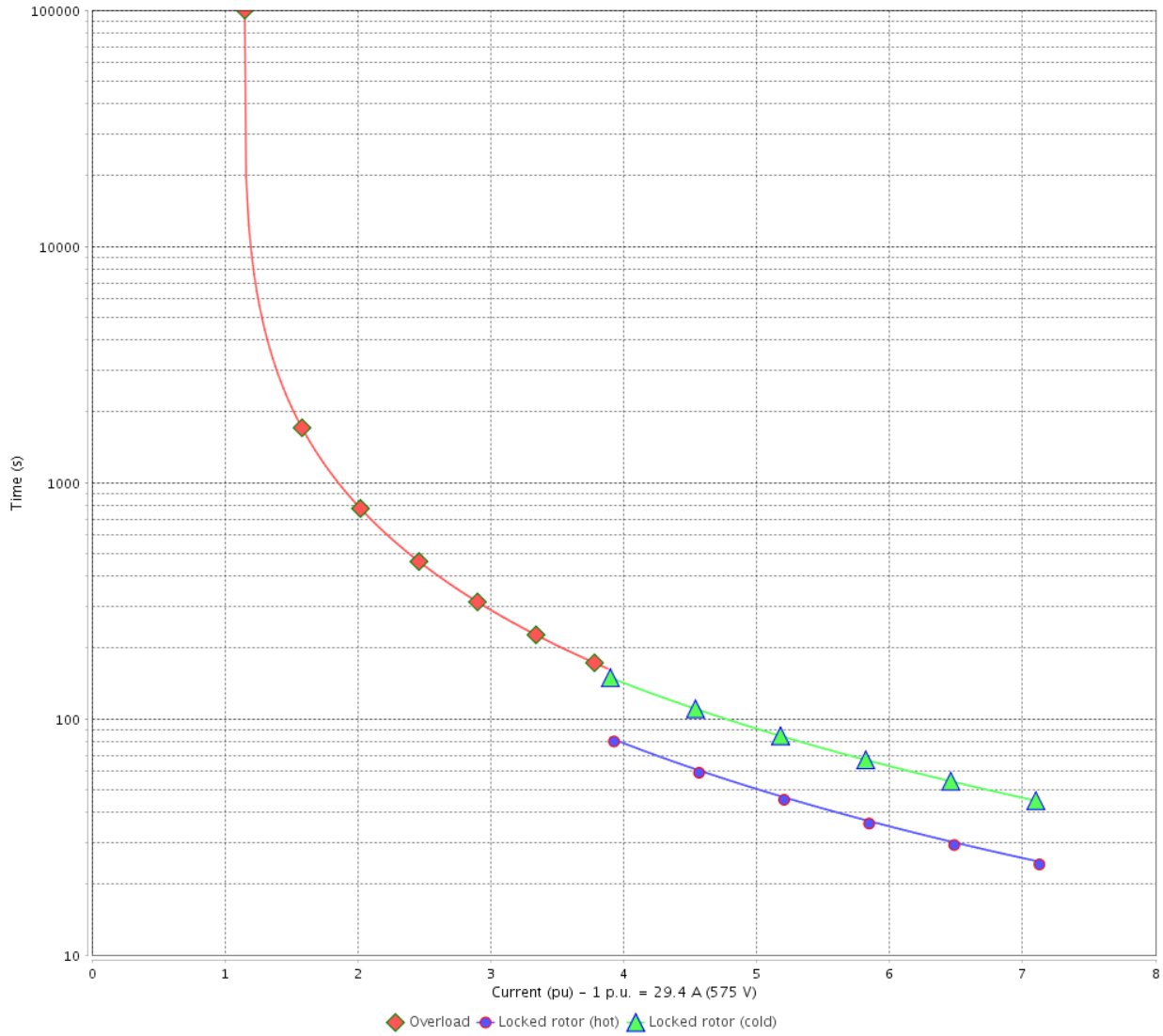
THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____

THERMAL LIMIT CURVE



Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 6 / 7	Revision
Checked by				
Date				

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

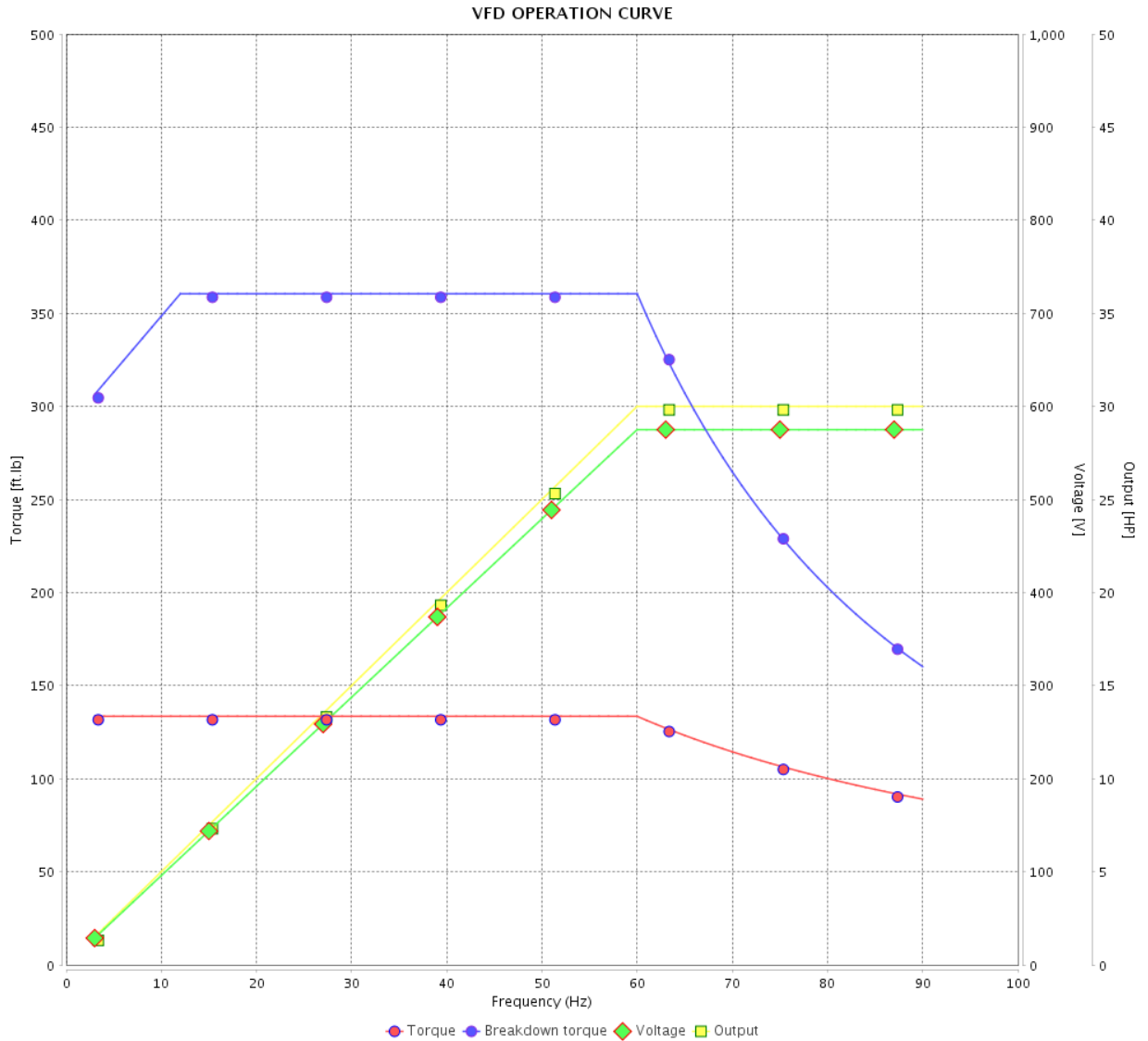


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14407587

Catalog # : 03012XT3H326T

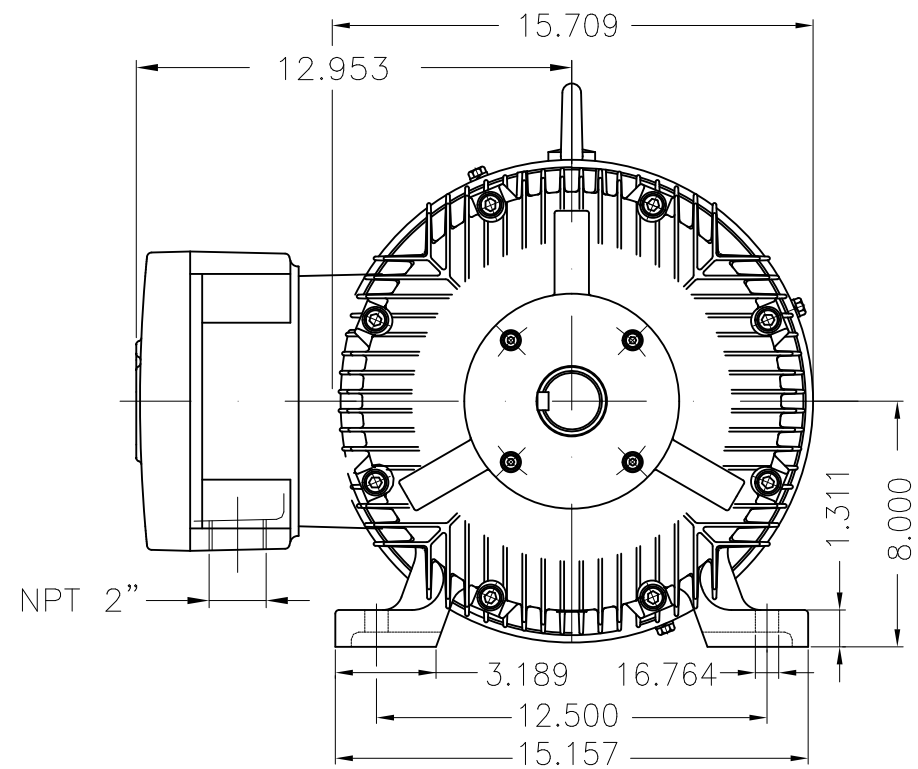


Performance : 575 V 60 Hz 6P

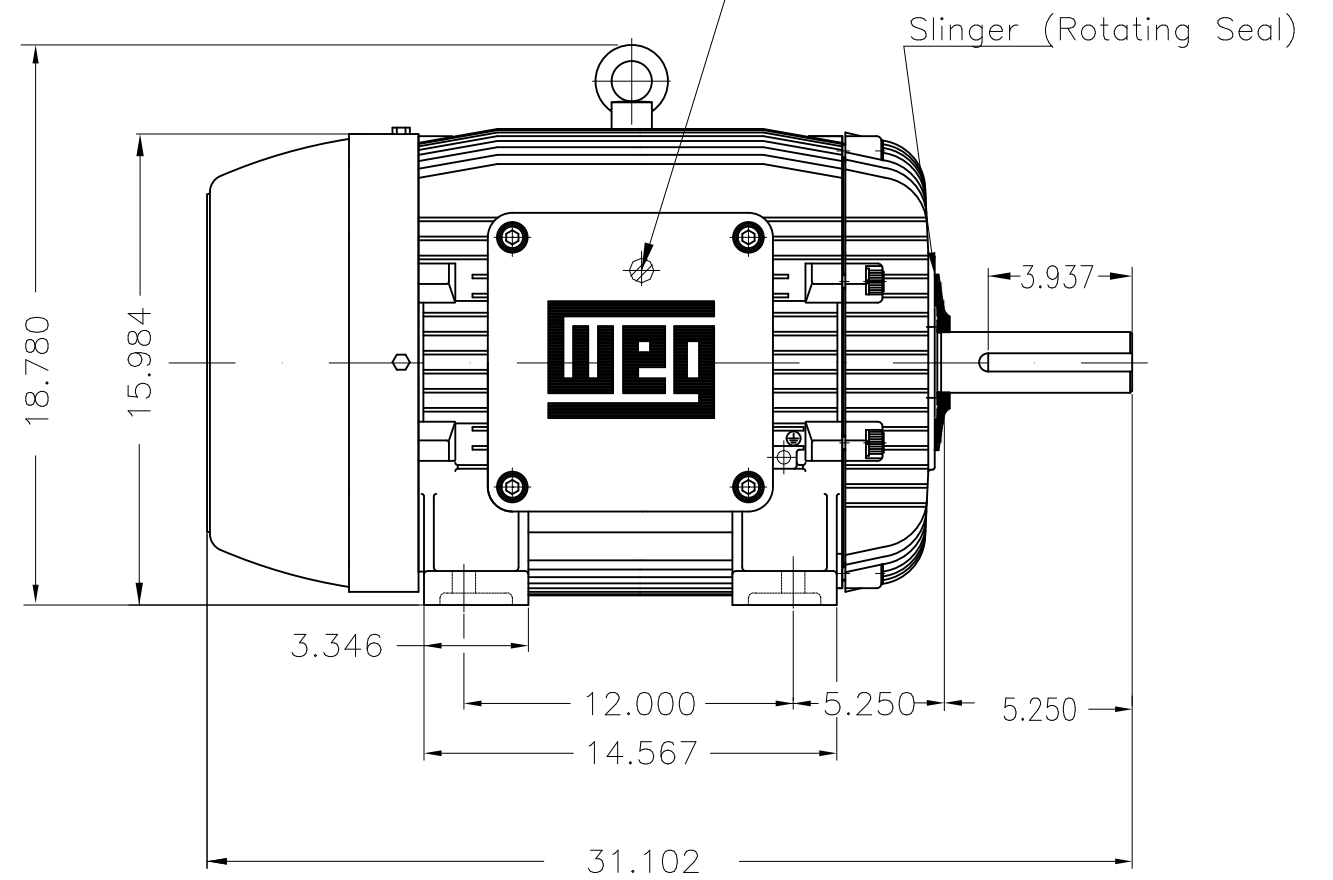
Rated current : 29.4 A
 LRC : 7.1
 Rated torque : 134 ft.lb
 Locked rotor torque : 240 %
 Breakdown torque : 270 %
 Rated speed : 1180 rpm

Moment of inertia (J) : 12.5 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 7 / 7
Checked by				
Date	14/04/2022			
				Revision



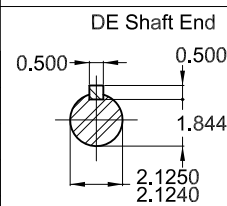
Grounding for leads 5.2–35 mm² / 10–2 AWG



30 HP 06 Poles 60 Hz

Dimensions in inches

- With grease fitting
- Color RAL 5009
- Painting plan 202P
- Mounting NEMA F-1
- Mounting B3R(D)



ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR EXPLOSION PROOF PREM. EFF. FRAME 326T IP55 TEFC					
CHECKED							
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET		1 / 1	

PREVIEW
WDD



MADE IN BRAZIL

**W21X NEMA**
Premium

14407587



LISTED

CC029A

Inverter Duty Motor
Severe Duty

HX030506NPW21X

PH 3 | FR 326T

HP(kW) 30(22)

HZ 60

IP55

V 575

A 29.4

RPM 1180

NEMA NOM EFF 93.0%

PF 0.81

SFA 33.8

DES B

INS CL F Δ T 80 K | SF 1.15

ENCL TEFC

DUTY CONT.

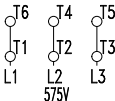
CODE H

ALT 1000

m.a.s.l.

AMB 40°C

AMB 55°C SF1.0



→ 6312-C3 MOBIL POLYREX EM

→ 6212-C3 21 g 20000 h

646 Lbs

TEMP CODE T3C
CSA/UL: Class I - Div. 1 - Groups C and D
CSA: Class II - Div. 1 - Groups F and G
CSA: Class I - Zone 1 - IIB

EXPLOSION PROOF MOTOR

FOR USE ON VPWM VFD 1000:1VT, 6:1CT, 1.0SF, T3C, AMB 40°C.