

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :		
Product line	: NEMA Premium Efficiency Three-Phase	
Product code :	12700712	
Catalog # :	05018ET3E326T-W22G	
Frame	: 324/6T	
Insulation class	: F	
Duty cycle	: Cont.(S1)	
Ambient temperature	: -20°C to +40°C	
Altitude	: 1000 m.a.s.l.	
Protection degree	: IP55	
Design	: B	
Cooling method	: IC411 - TEFC	
Mounting	: F-1	
Rotation <sup>1</sup>	: Both (CW and CCW)	
Starting method	: Direct On Line	
Approx. weight <sup>2</sup>	: 600 lb	
Moment of inertia (J)		
Output [HP]	50	
Poles	4	
Frequency [Hz]	60	
Rated voltage [V]	208-230/460	
Rated current [A]	131-118/59.2	
L. R. Amperes [A]	812-732/367	
LRC [A]	6.2x(Code G)	
No load current [A]	40.5-47.0/23.5	
Rated speed [RPM]	1775	
Slip [%]	1.39	
Rated torque [ft.lb]	148	
Locked rotor torque [%]	229	
Breakdown torque [%]	270	
Service factor	1.25	
Temperature rise	80 K	
Locked rotor time	27s (cold) 15s (hot)	
Noise level <sup>2</sup>	66.0 dB(A)	
Efficiency (%)	25%	0.000
	50%	93.0
	75%	94.1
	100%	94.5
Power Factor	25%	0.00
	50%	0.66
	75%	0.77
	100%	0.83
Bearing type	: <u>Drive end</u> 6312 C3 <u>Non drive end</u> 6212 C3	
Sealing	: V'Ring V'Ring	
Lubrication interval	: 20000 h 20000 h	
Lubricant amount	: 21 g 13 g	
Lubricant type	: Mobil Polyrex EM	
Foundation loads	Max. traction : 1150 lb	
	Max. compression : 1749 lb	
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 by	Performed	
Checked by	Checked	
Date	Date	
12/04/2022		
Page	Revision	
1 / 11		

# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



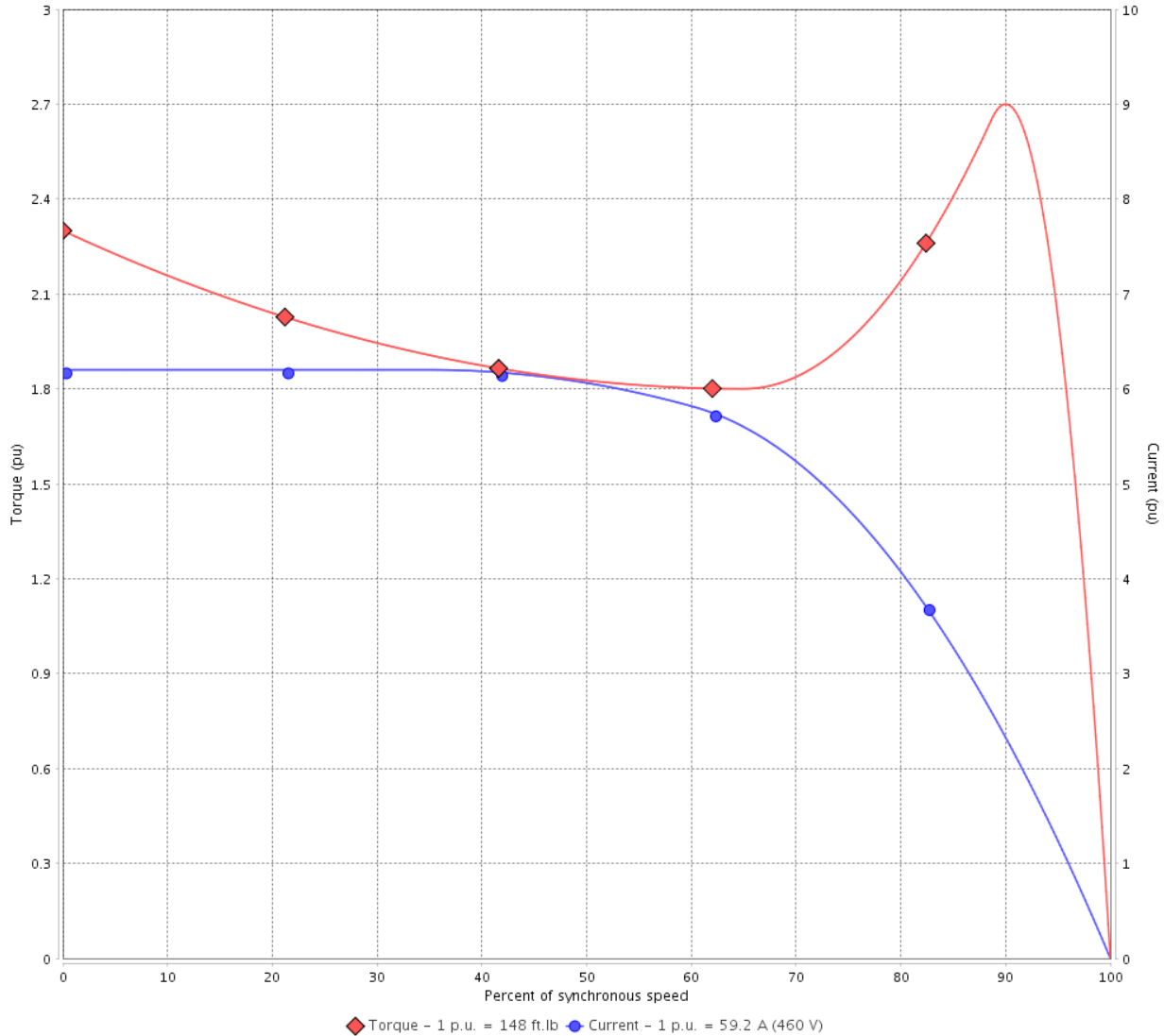
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12700712

Catalog # : 05018ET3E326T-W22G

TORQUE AND CURRENT VS SPEED CURVE



Performance : 208-230/460 V 60 Hz 4P

Rated current	: 131-118/59.2 A	Moment of inertia (J)	
LRC	: 6.2	Duty cycle	: Cont.(S1)
Rated torque	: 148 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.25
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 1775 rpm	Design	: B

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 11	Revision
Checked by				
Date	12/04/2022			

# TORQUE AND CURRENT VS SPEED CURVE



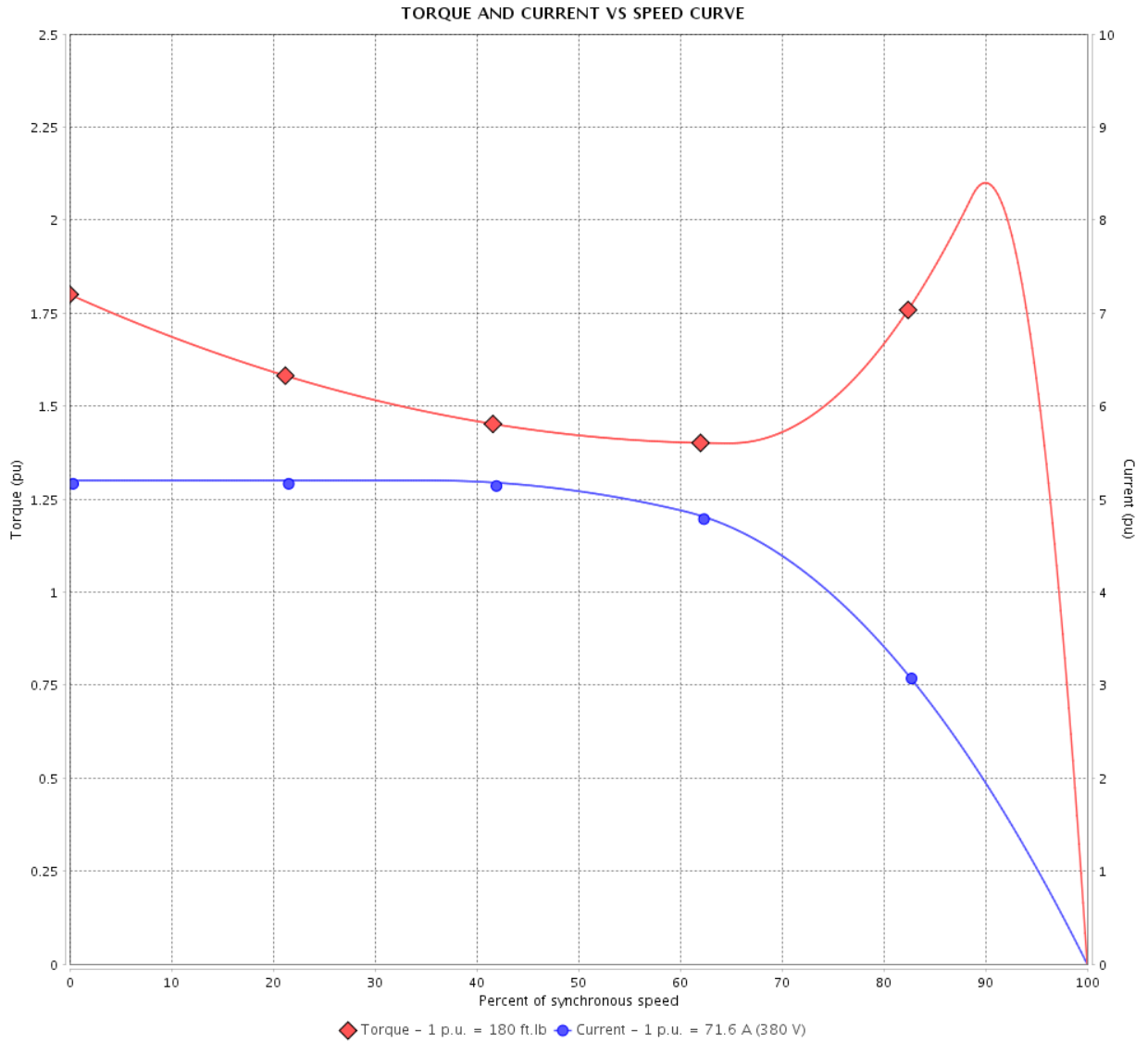
## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12700712

Catalog # : 05018ET3E326T-W22G



Performance : 380 V 50 Hz 4P

Rated current	: 71.6 A	Moment of inertia (J)	
LRC	: 5.2	Duty cycle	: Cont.(S1)
Rated torque	: 180 ft.lb	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.00
Breakdown torque	: 210 %	Temperature rise	: 80 K
Rated speed	: 1460 rpm	Design	: B

Locked rotor time : 19s (cold) 11s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 3 / 11	Revision
Checked by				
Date	12/04/2022			

# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

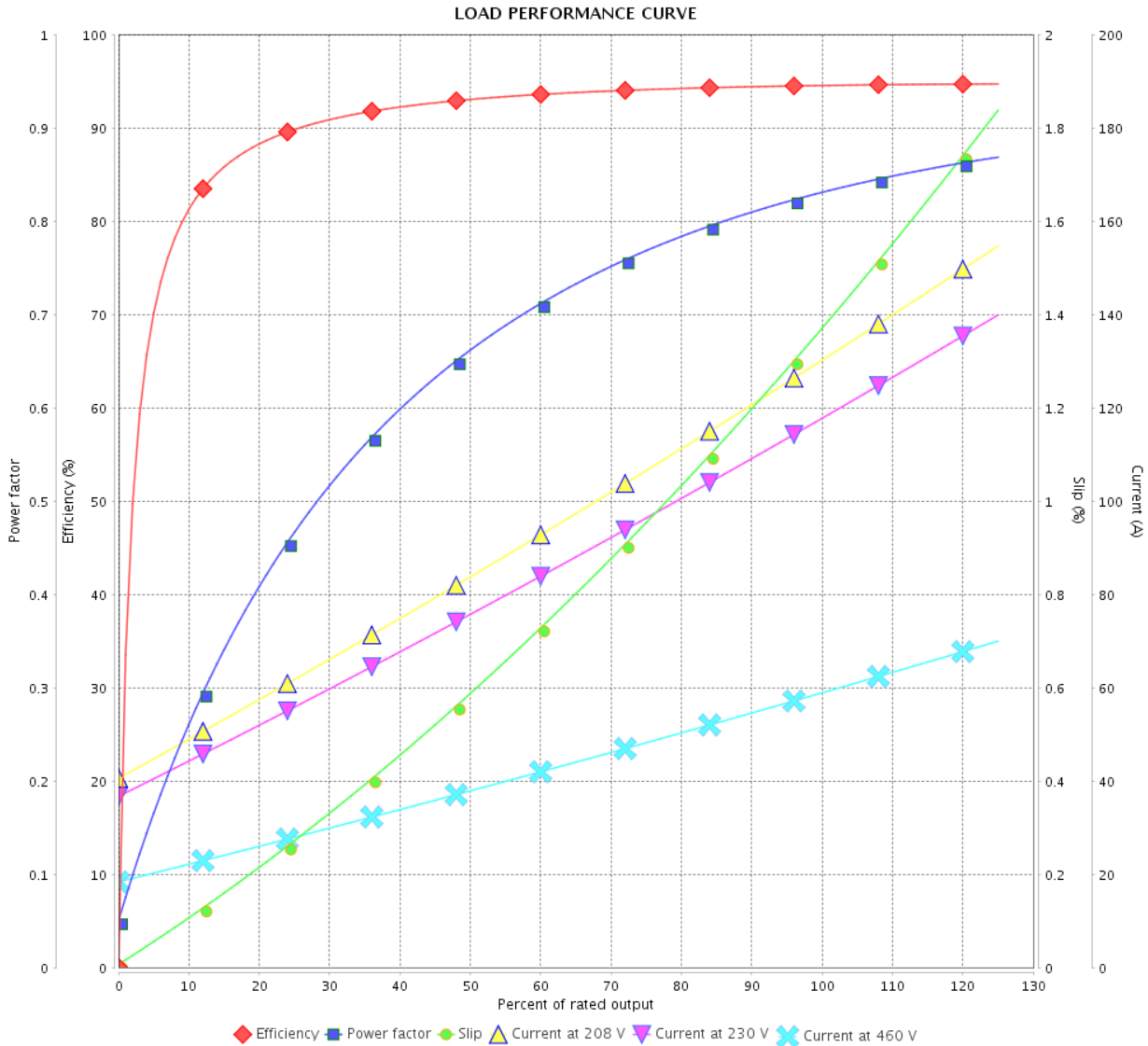


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12700712

Catalog # : 05018ET3E326T-W22G



Performance : 208-230/460 V 60 Hz 4P

Rated current : 131-118/59.2 A  
 LRC : 6.2  
 Rated torque : 148 ft.lb  
 Locked rotor torque : 229 %  
 Breakdown torque : 270 %  
 Rated speed : 1775 rpm

Moment of inertia (J)  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 11	Revision
Checked by				
Date	12/04/2022			

# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

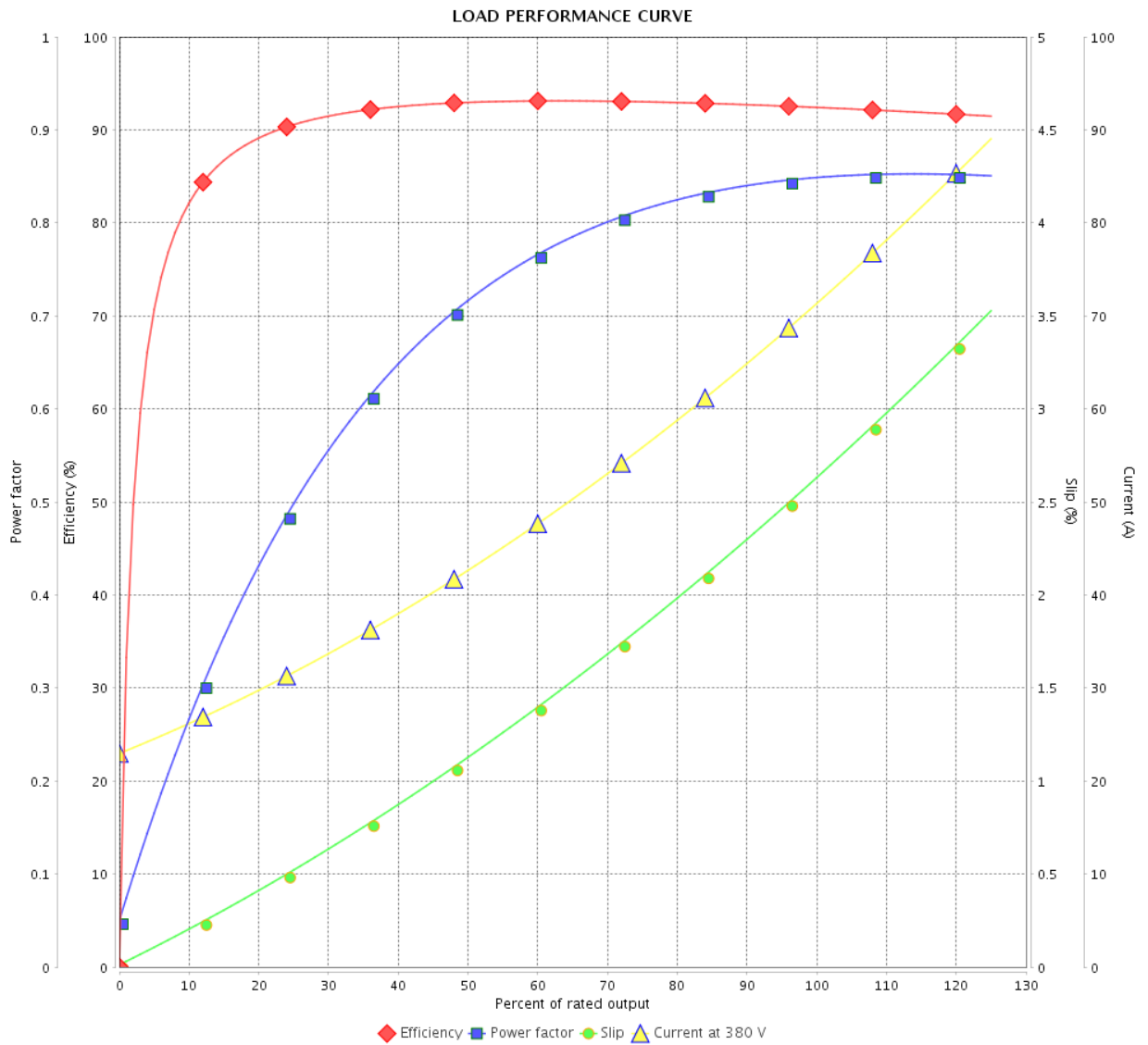


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12700712

Catalog # : 05018ET3E326T-W22G



Performance : 380 V 50 Hz 4P

Rated current : 71.6 A  
 LRC : 5.2  
 Rated torque : 180 ft.lb  
 Locked rotor torque : 180 %  
 Breakdown torque : 210 %  
 Rated speed : 1460 rpm

Moment of inertia (J)  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by			5 / 11	
Date	12/04/2022			

# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase  
 Product code : 12700712  
 Catalog # : 05018ET3E326T-W22G

Performance : 208-230/460 V 60 Hz 4P

Rated current : 131-118/59.2 A	Moment of inertia (J)
LRC : 6.2	Duty cycle : Cont.(S1)
Rated torque : 148 ft.lb	Insulation class : F
Locked rotor torque : 229 %	Service factor : 1.25
Breakdown torque : 270 %	Temperature rise : 80 K
Rated speed : 1775 rpm	Design : B

Heating constant

Cooling constant

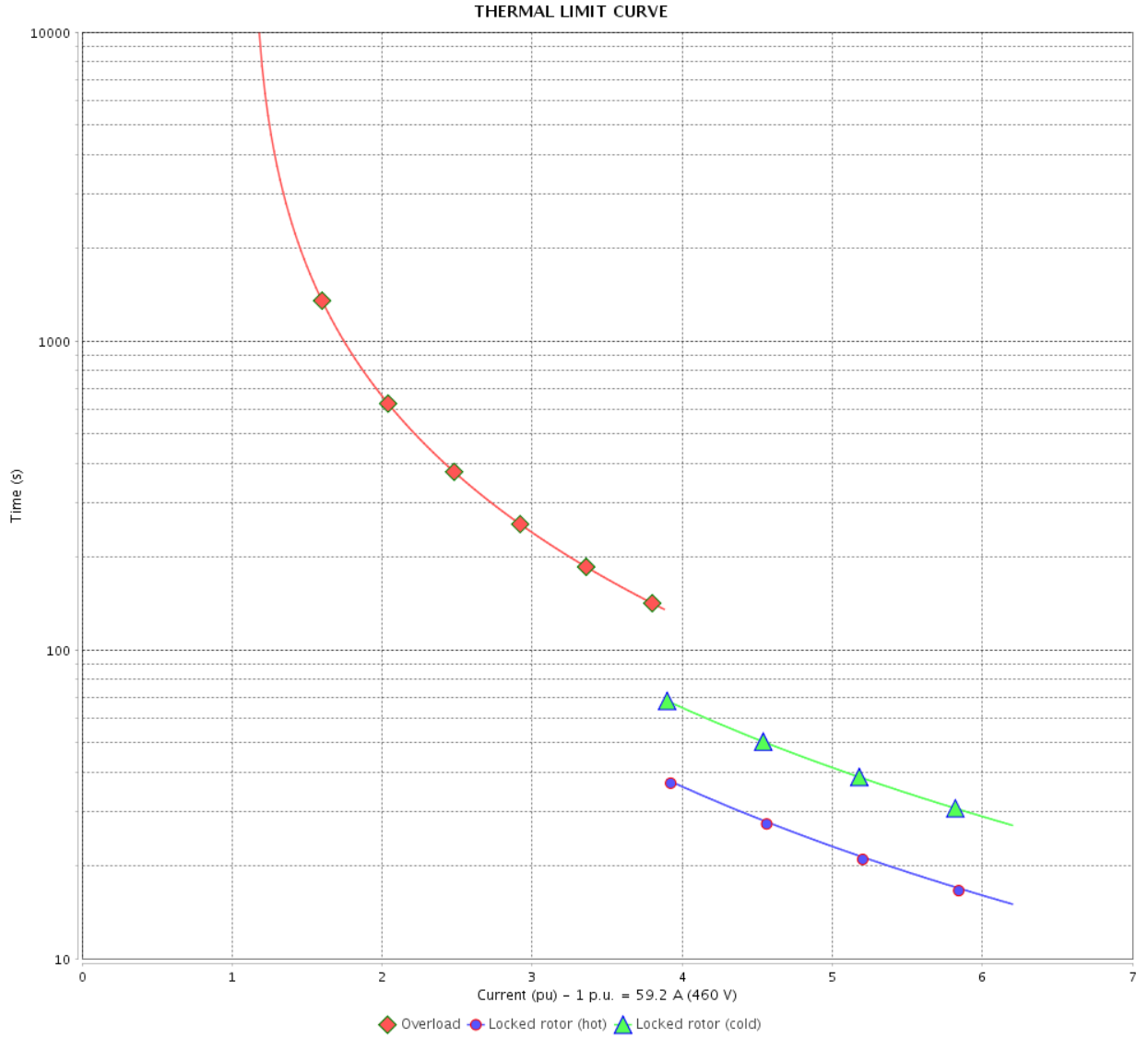
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 6 / 11	Revision
Checked by				
Date	12/04/2022			

# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_



Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		7 / 11		
Date		12/04/2022		

# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase  
Product code : 12700712  
Catalog # : 05018ET3E326T-W22G

Performance : 380 V 50 Hz 4P

Rated current	: 71.6 A	Moment of inertia (J)	
LRC	: 5.2	Duty cycle	: Cont.(S1)
Rated torque	: 180 ft.lb	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.00
Breakdown torque	: 210 %	Temperature rise	: 80 K
Rated speed	: 1460 rpm	Design	: B

Heating constant

Cooling constant

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	12/04/2022		8 / 11	

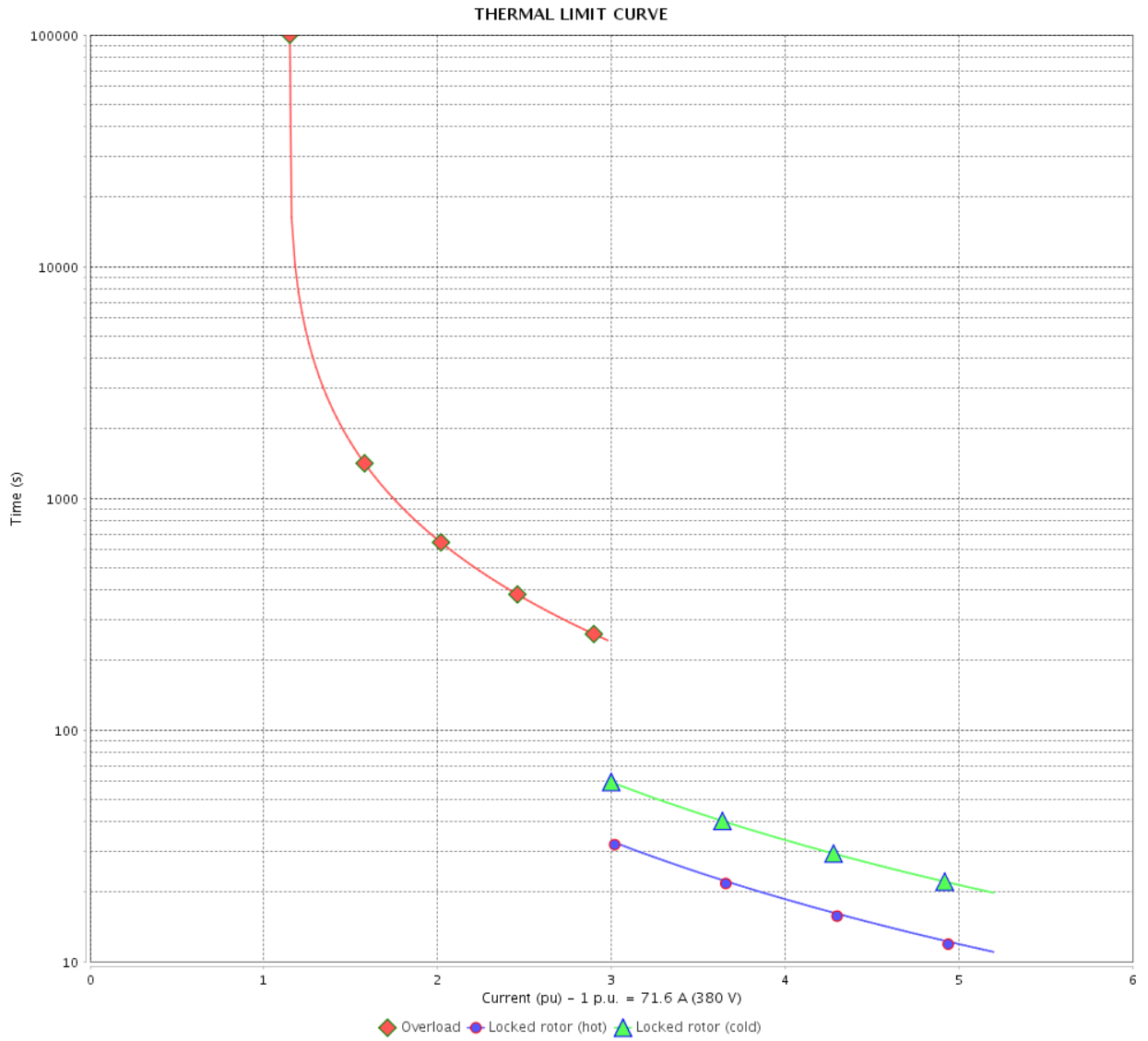


# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_



Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		9 / 11		
Date		12/04/2022		

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



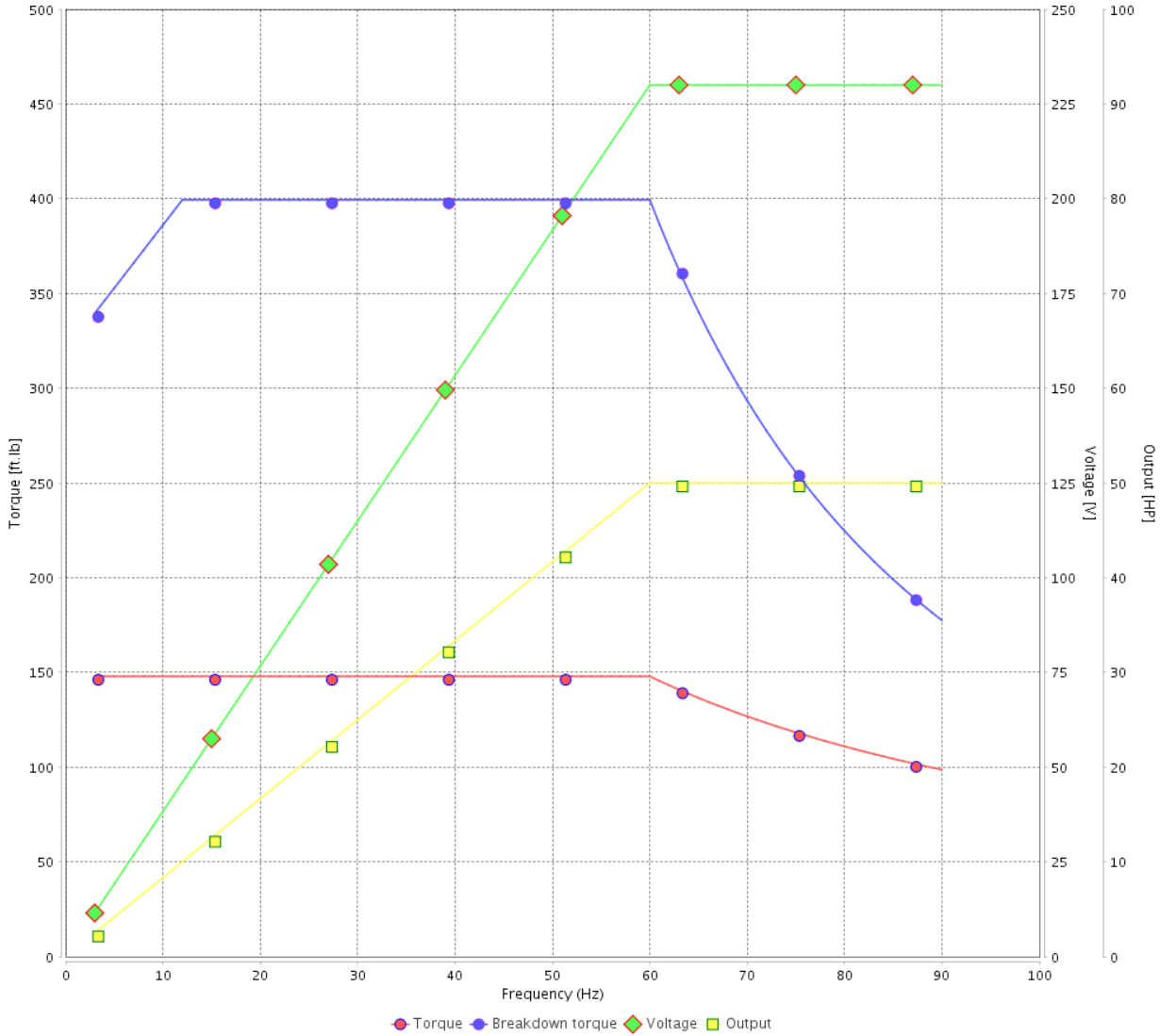
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12700712

Catalog # : 05018ET3E326T-W22G

VFD OPERATION CURVE



Performance : 208-230/460 V 60 Hz 4P

Rated current : 131-118/59.2 A  
 LRC : 6.2  
 Rated torque : 148 ft.lb  
 Locked rotor torque : 229 %  
 Breakdown torque : 270 %  
 Rated speed : 1775 rpm

Moment of inertia (J)  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 10 / 11	Revision
Checked by				
Date	12/04/2022			

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

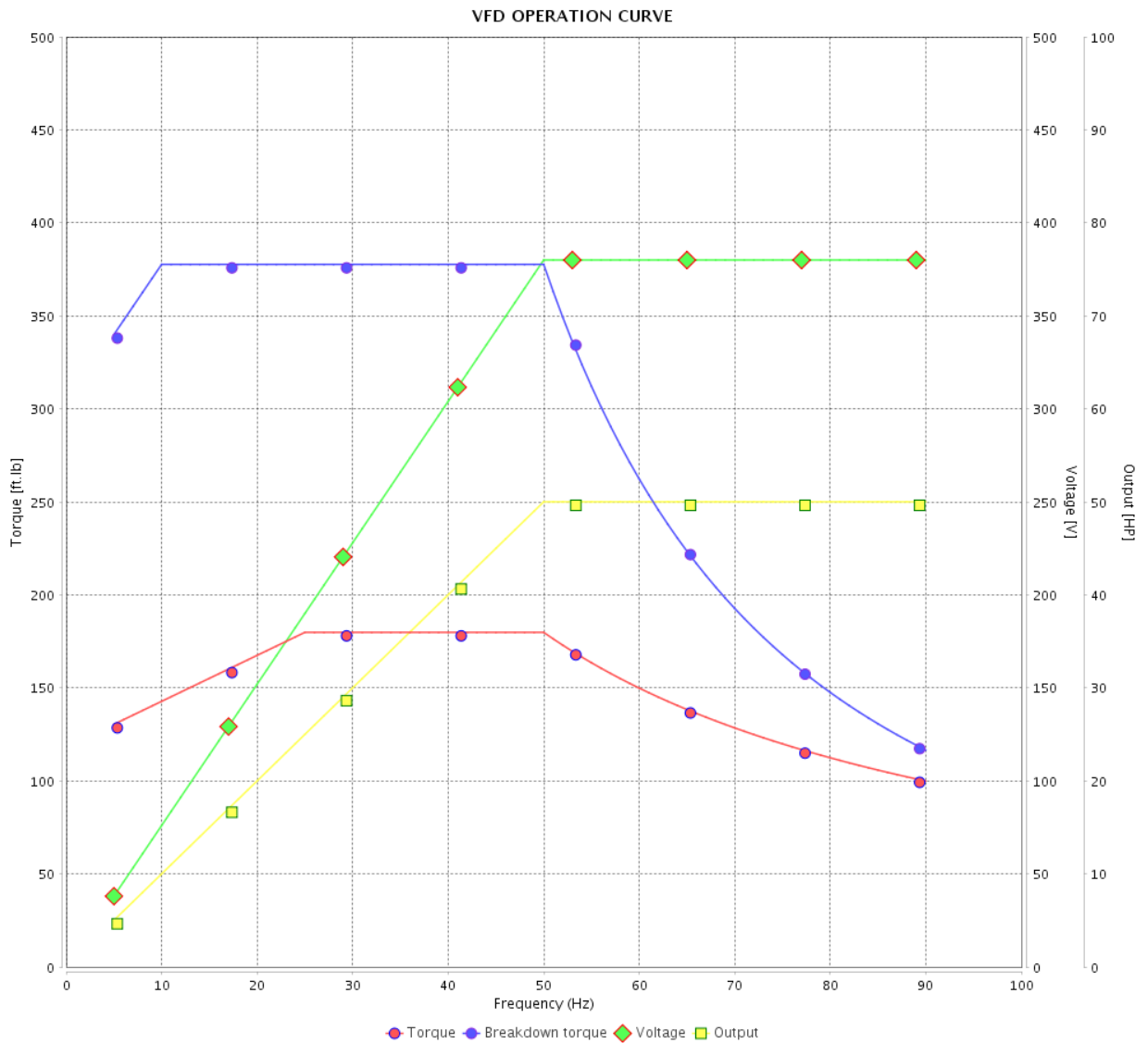


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12700712

Catalog # : 05018ET3E326T-W22G



Performance : 380 V 50 Hz 4P

Rated current : 71.6 A  
 LRC : 5.2  
 Rated torque : 180 ft.lb  
 Locked rotor torque : 180 %  
 Breakdown torque : 210 %  
 Rated speed : 1460 rpm

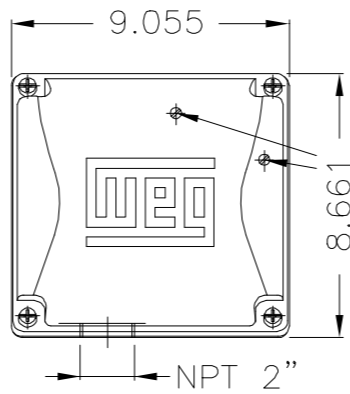
Moment of inertia (J)  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by				Page 11 / 11
Checked by				
Date	12/04/2022			

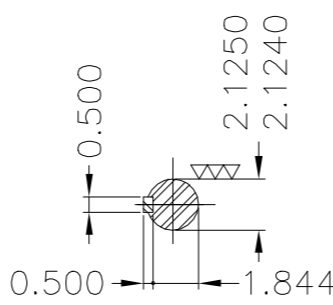
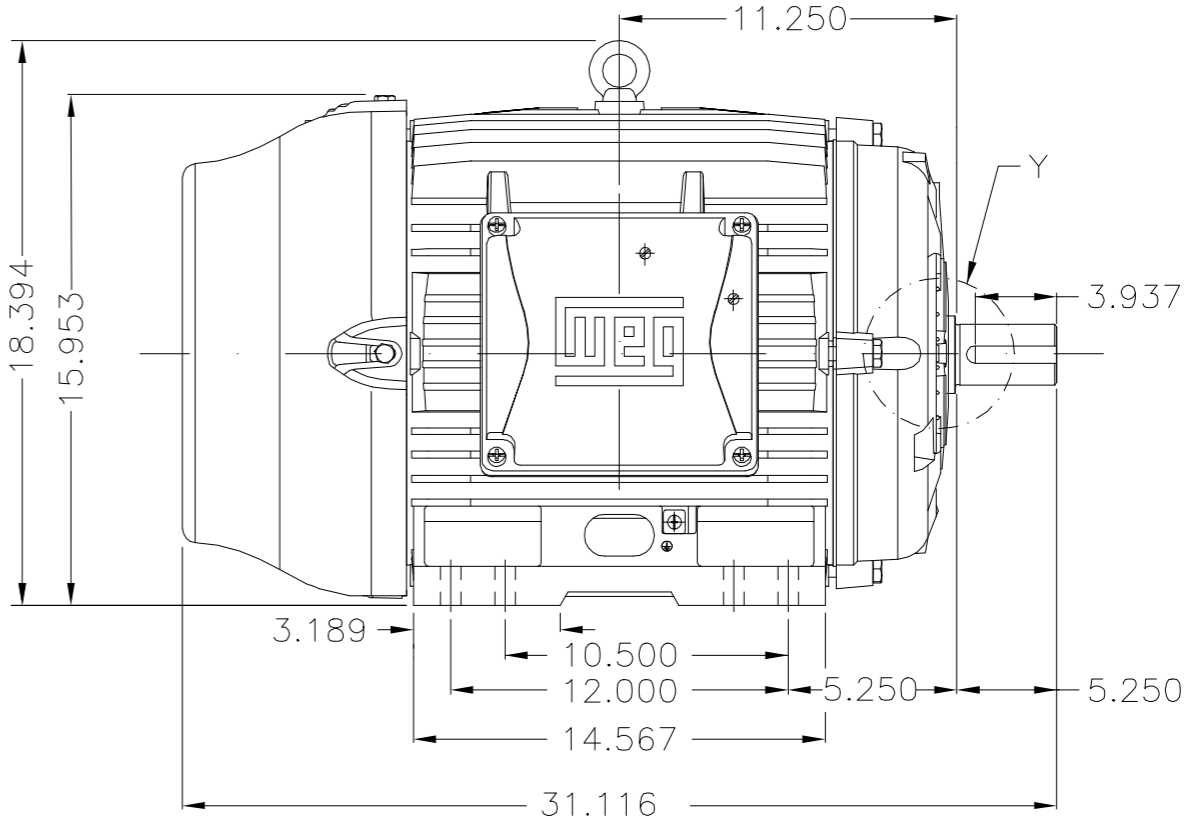
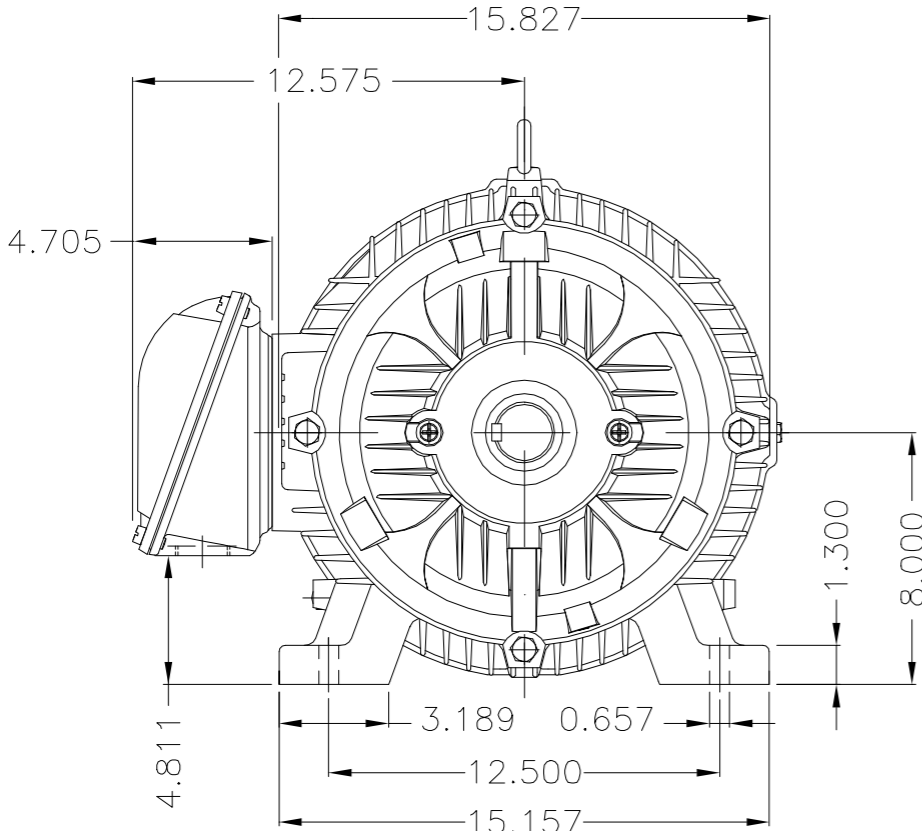
EIXO/SHAFT	
PADRÃO/STANDARD	X
OPCIONAL/OPTIONAL	
ESPECIAL/SPECIAL	

Dimensões em polegadas  
Dimensions in inches

THIS IS AN UPDATED REVISION, THE PREVIOUS ONE MUST BE DISREGARDED.

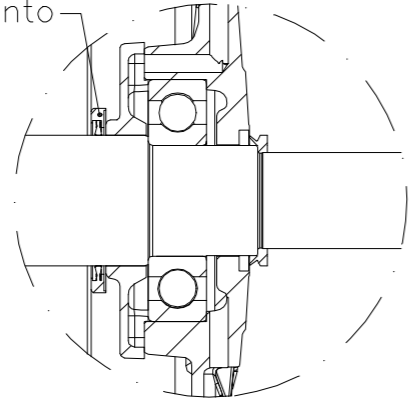


Main terminal box



DE Shaft End

Anel de aterramento



Detail Y

Kit porta escova de aterramento AEGIS interno na tampa dianteira /  
Brush holder Kit AEGIS internal D.E.  
Plano de pintura 203A / Painting plan 203A  
Forma construtiva NEMA F-1 / Mounting NEMA F-1  
Forma construtiva B3D / Mounting B3R(D)

**WEG ELECTRIC CORP.**

OV: 3061371
PC: CHI000017232

500000943098	ALTERADO PARA NORMAL	JOSEMEDEIROS	DWAGNER	25.09.2014	02			
500000861825	CARIMBO LOTE PILOTO	PATRICKL	WILLIANR	27.02.2014	01			
ECM	LOC	SUMMARY OF MODIFICATIONS		EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PATRICKL	THREE PHASE W22 MOTOR - NEMA PREMIUM EFF						
CHECKED		FRAME 324/6T IP55						
RELEASED	ALCHINI							
REL DT	10.02.2014	WMO	JARAGUA DO SUL	ENGENHARIA DE PRODUTO	10002700213		000   02	
					SHEET 1 / 1			

50 HP 04 Poles 60Hz



UNCONTROLLED COPY RELEASED ZME A3



Mod.TE1BFOXON  
CC029A

MODEL 05018ET3E326T-W22G

Inverter Duty Motor  
Severe Duty

60Hz: For use on PWM: VT 1000:1,  
CT 20:1, 1.00SF

MADE IN BRAZIL  
12700712

PH3 60Hz Fr. 324/6T 1000m.a.s.l. IP55 TEFC 598lb

V 230/460

A 118/59.2

HP 50

kW 37

SF 1.25

SFA 148/74.0

RPM 1775

PF 0.83

AMB 40°C

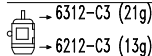
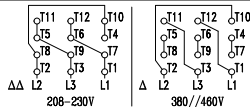
INS cl. F DT80K NEMA NOM EFF 94.5%

DUTY CONT.

DES B Code G

USABLE @208V 131A SF 1.15 SFA 151

50HP 37kW 50Hz 380V 71.6A 1460RPM SF 1.00 EFF 92.4% (IE1)



MOBIL POLYREX EM (20000h)

