

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :		
Product line	: JM Pump NEMA Premium Efficiency Three-Phase	
Product code :	13440213	
Catalog # :	01036ET3E215JM-S	
Frame	: 213/5JM	
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 ¹	: Both (CW and CCW)	
Starting method	: Direct On Line	
Approx. weight ²	: 171 lb	
Moment of inertia (J)	: 0.7188 sq.ft.lb	
Output [HP]	10	
Poles	2	
Frequency [Hz]	60	
Rated voltage [V]	230/460	
Rated current [A]	23.0/11.5	
L. R. Amperes [A]	173/86.2	
LRC [A]	7.5x(Code H)	
No load current [A]	7.53/3.77	
Rated speed [RPM]	3530	
Slip [%]	1.94	
Rated torque [ft.lb]	14.9	
Locked rotor torque [%]	260	
Breakdown torque [%]	300	
Service factor	1.15	
Temperature rise	80 K	
Locked rotor time	21s (cold) 12s (hot)	
Noise level ²	70.0 dB(A)	
Efficiency (%)	25%	89.3
	50%	89.5
	75%	90.2
	100%	90.2
Power Factor	25%	0.53
	50%	0.80
	75%	0.88
	100%	0.91
Bearing type	: <u>Drive end</u> 6209 ZZ <u>Non drive end</u> 6206 ZZ	
Sealing	: V'Ring Without Bearing Seal	
Lubrication interval	: - -	
Lubricant amount	: - -	
Lubricant type	: Mobil Polyrex EM	
Foundation loads	Max. traction : 179 lb	
	Max. compression : 350 lb	
Notes USABLE @208V 25.4A SF 1.00 SFA 25.4A		
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	14/04/2022	
Page	1 / 16	
Revision		

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



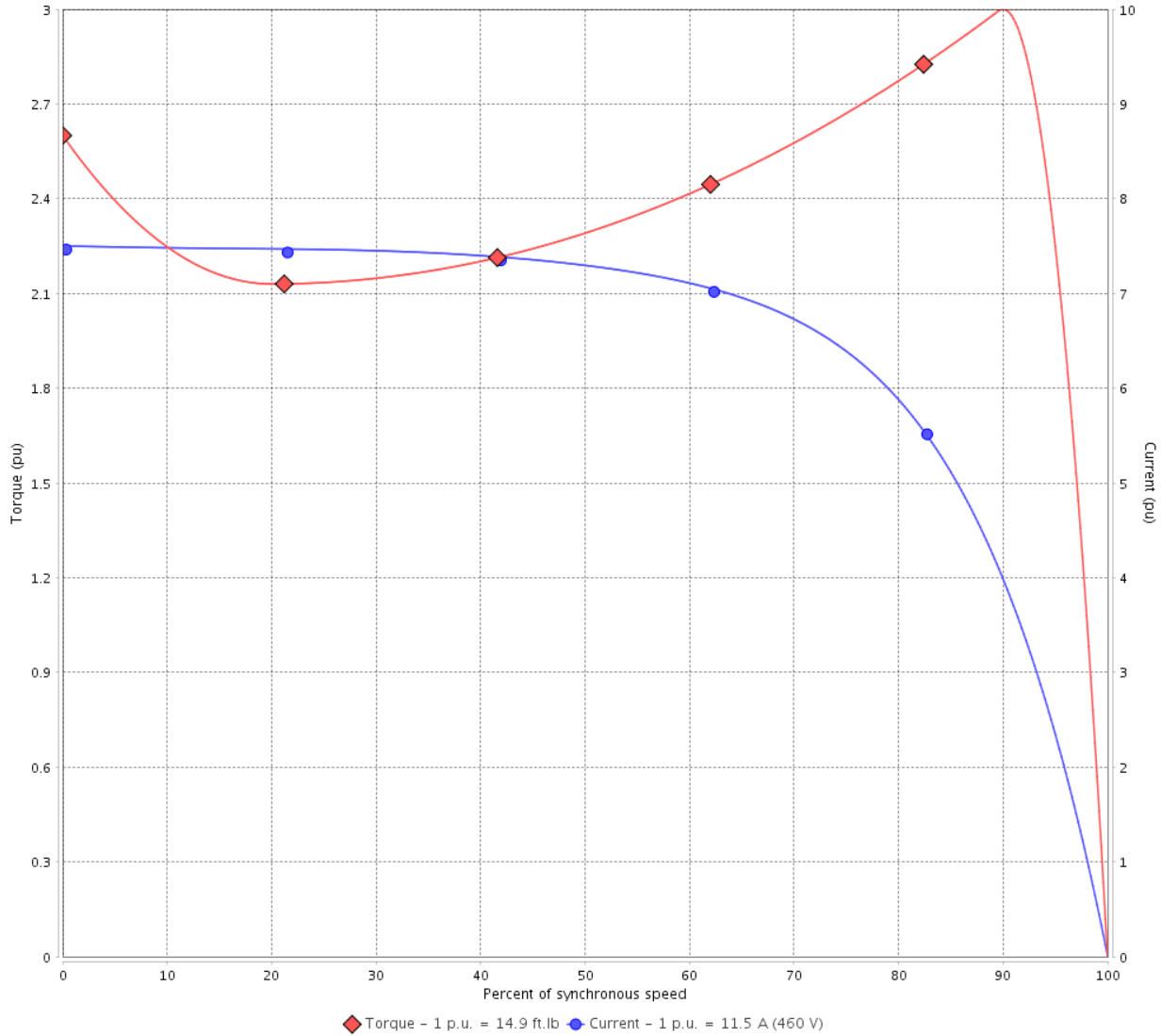
Customer :

Product line : JM Pump NEMA Premium
Efficiency Three-Phase

Product code : 13440213

Catalog # : 01036ET3E215JM-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 2P

Rated current : 23.0/11.5 A
LRC : 7.5
Rated torque : 14.9 ft.lb
Locked rotor torque : 260 %
Breakdown torque : 300 %
Rated speed : 3530 rpm

Moment of inertia (J) : 0.7188 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

Locked rotor time : 21s (cold) 12s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 16	Revision
Checked by				
Date	14/04/2022			

TORQUE AND CURRENT VS SPEED CURVE



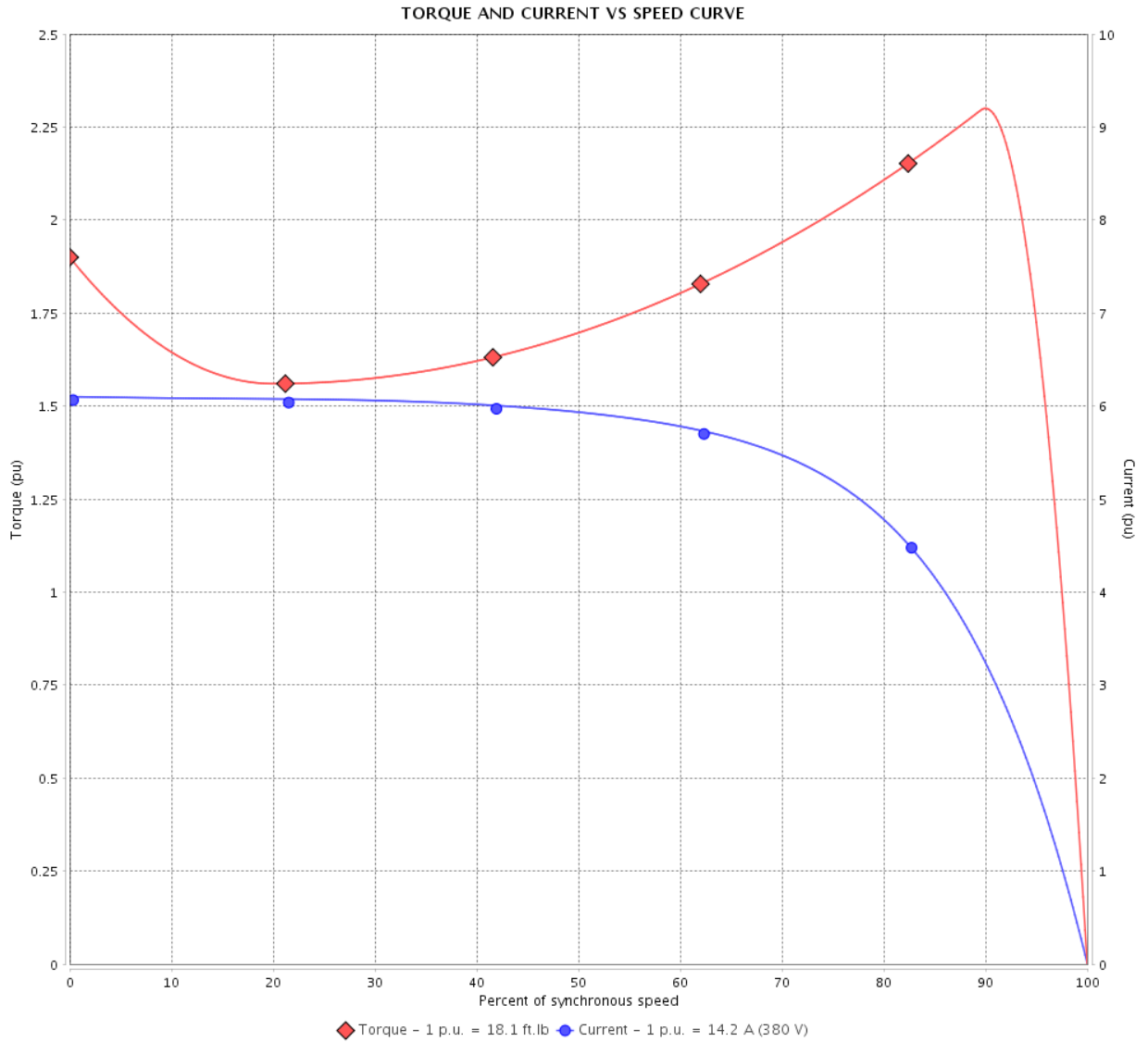
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : JM Pump NEMA Premium Efficiency Three-Phase

Product code : 13440213

Catalog # : 01036ET3E215JM-S



Performance : 190/380 V 50 Hz 2P

Rated current : 28.4/14.2 A
 LRC : 6.1
 Rated torque : 18.1 ft.lb
 Locked rotor torque : 190 %
 Breakdown torque : 229 %
 Rated speed : 2900 rpm

Moment of inertia (J) : 0.7188 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

Locked rotor time : 0s (cold) 0s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 3 / 16	Revision
Checked by				
Date	14/04/2022			

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



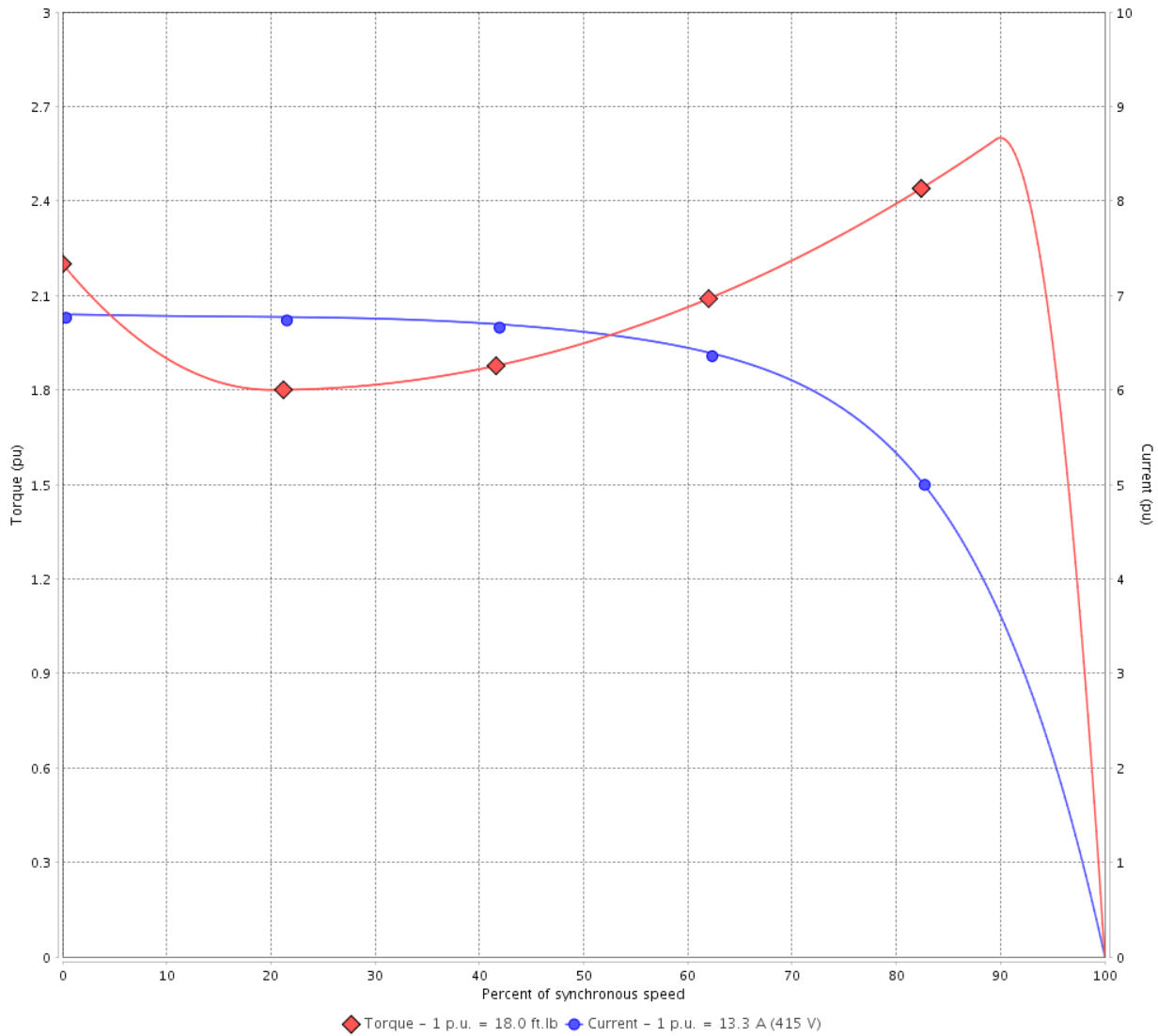
Customer :

Product line : JM Pump NEMA Premium
Efficiency Three-Phase

Product code : 13440213

Catalog # : 01036ET3E215JM-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 2P

Rated current	: 25.1/13.3 A	Moment of inertia (J)	: 0.7188 sq.ft.lb
LRC	: 6.8	Duty cycle	: Cont.(S1)
Rated torque	: 18.0 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 260 %	Temperature rise	: 105 K
Rated speed	: 2910 rpm	Design	: B

Locked rotor time : 0s (cold) 0s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 16	Revision
Checked by				
Date	14/04/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

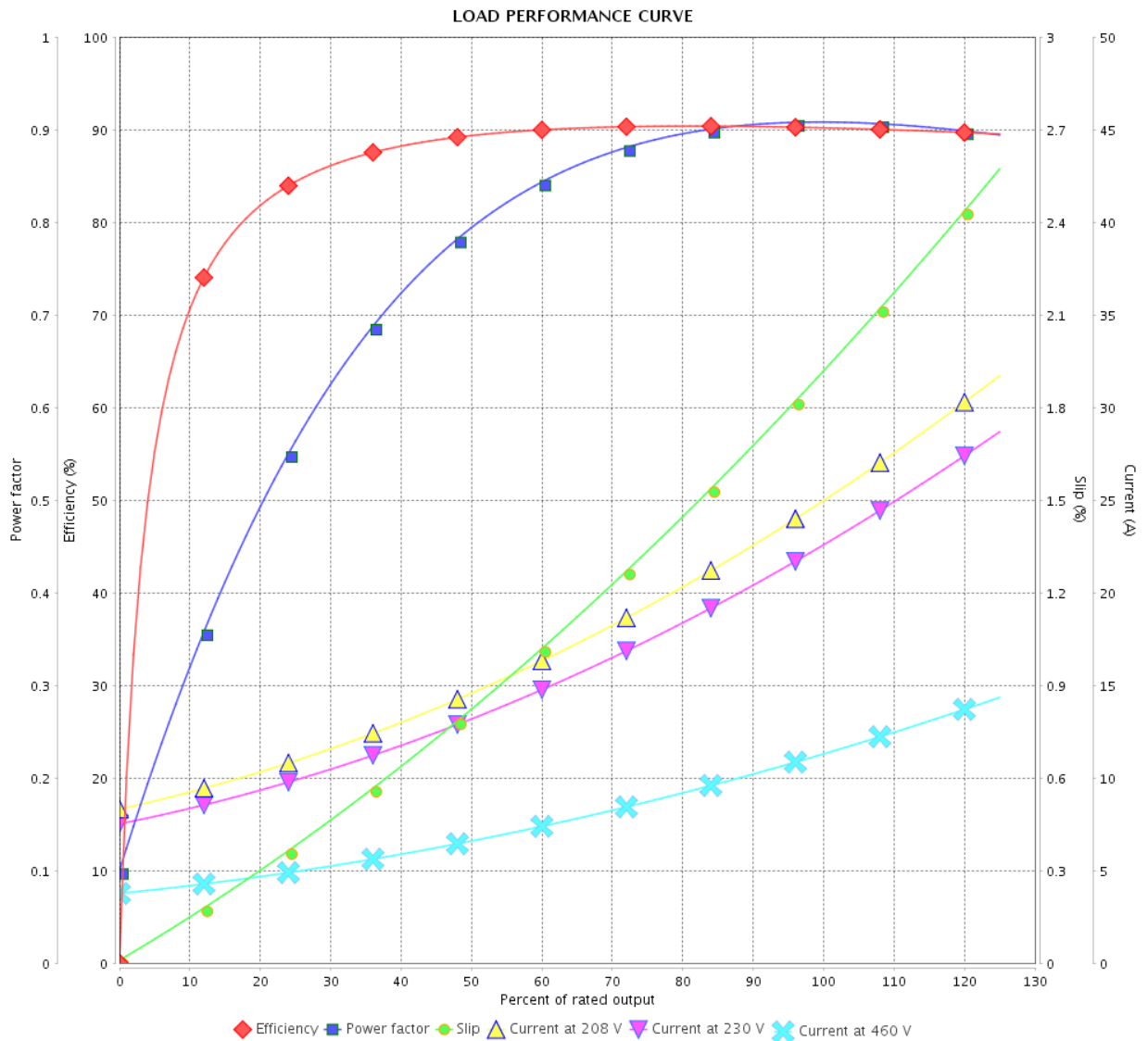


Customer :

Product line : JM Pump NEMA Premium
Efficiency Three-Phase

Product code : 13440213

Catalog # : 01036ET3E215JM-S



Performance : 230/460 V 60 Hz 2P

Rated current : 23.0/11.5 A
 LRC : 7.5
 Rated torque : 14.9 ft.lb
 Locked rotor torque : 260 %
 Breakdown torque : 300 %
 Rated speed : 3530 rpm

Moment of inertia (J) : 0.7188 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				
Date				

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



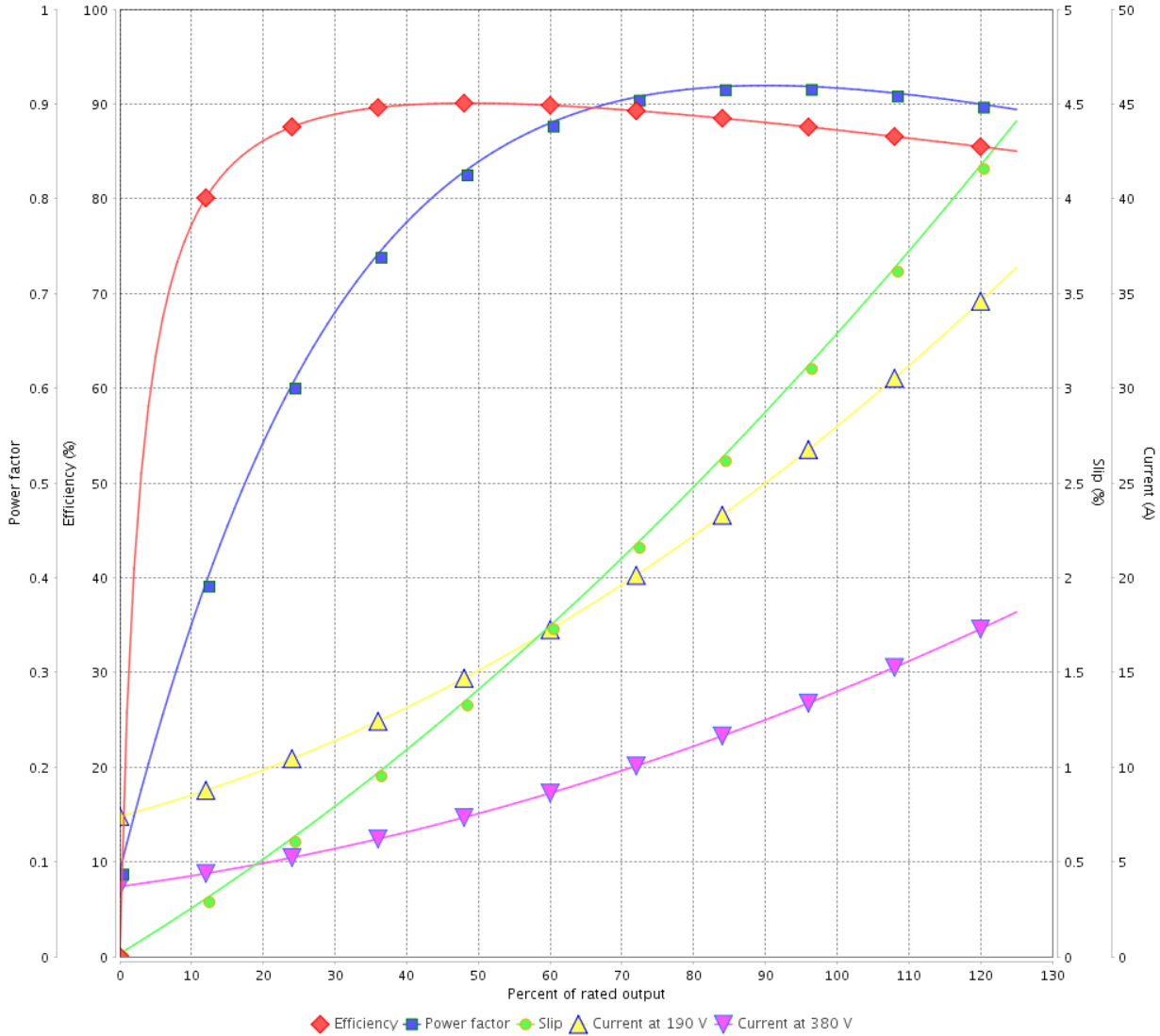
Customer :

Product line : JM Pump NEMA Premium
Efficiency Three-Phase

Product code : 13440213

Catalog # : 01036ET3E215JM-S

LOAD PERFORMANCE CURVE



Performance : 190/380 V 50 Hz 2P

Rated current : 28.4/14.2 A
 LRC : 6.1
 Rated torque : 18.1 ft.lb
 Locked rotor torque : 190 %
 Breakdown torque : 229 %
 Rated speed : 2900 rpm

Moment of inertia (J) : 0.7188 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

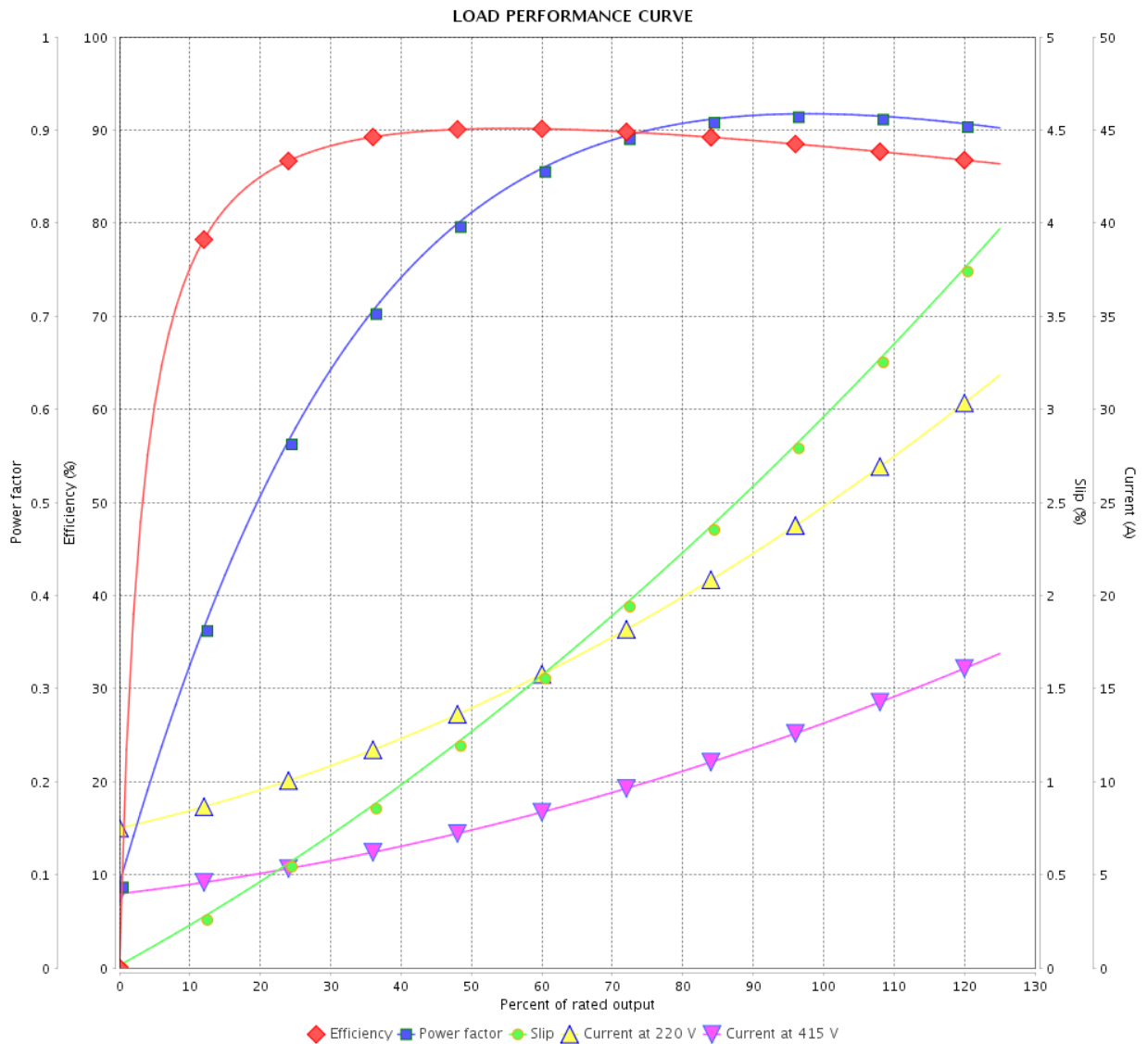


Customer :

Product line : JM Pump NEMA Premium Efficiency Three-Phase

Product code : 13440213

Catalog # : 01036ET3E215JM-S



Performance : 220/415 V 50 Hz 2P

Rated current : 25.1/13.3 A
 LRC : 6.8
 Rated torque : 18.0 ft.lb
 Locked rotor torque : 220 %
 Breakdown torque : 260 %
 Rated speed : 2910 rpm

Moment of inertia (J) : 0.7188 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				

THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : JM Pump NEMA Premium
Efficiency Three-Phase

Product code : 13440213

Catalog # : 01036ET3E215JM-S

Performance : 230/460 V 60 Hz 2P

Rated current : 23.0/11.5 A
LRC : 7.5
Rated torque : 14.9 ft.lb
Locked rotor torque : 260 %
Breakdown torque : 300 %
Rated speed : 3530 rpm

Moment of inertia (J) : 0.7188 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

Heating constant

Cooling constant

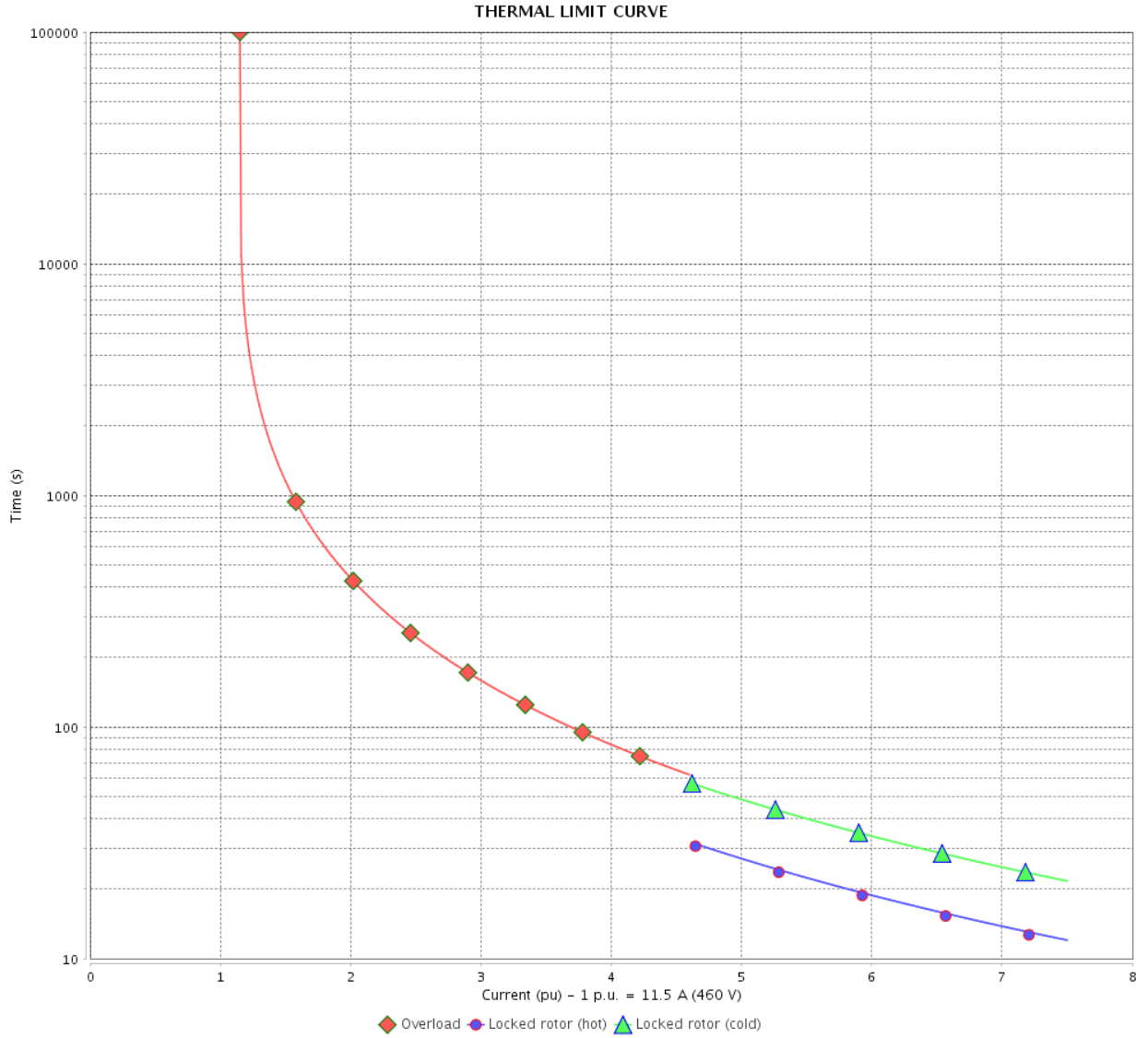
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	14/04/2022		8 / 16	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		9 / 16		
Date		14/04/2022		

THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : JM Pump NEMA Premium
Efficiency Three-Phase

Product code : 13440213

Catalog # : 01036ET3E215JM-S

Performance : 190/380 V 50 Hz 2P

Rated current : 28.4/14.2 A
LRC : 6.1
Rated torque : 18.1 ft.lb
Locked rotor torque : 190 %
Breakdown torque : 229 %
Rated speed : 2900 rpm

Moment of inertia (J) : 0.7188 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

Heating constant

Cooling constant

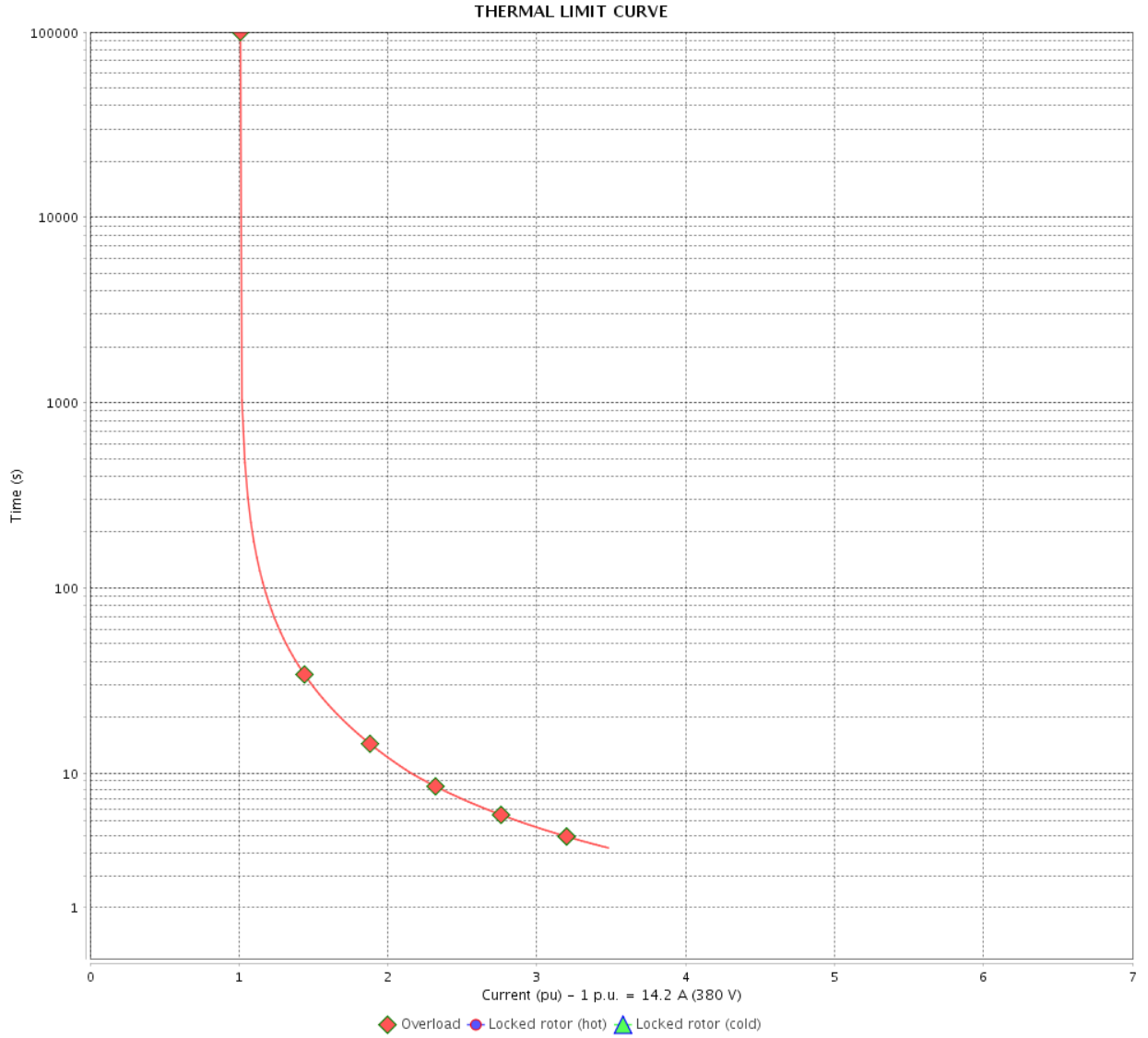
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	14/04/2022		10 / 16	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		11 / 16		
Date		14/04/2022		

THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : JM Pump NEMA Premium
Efficiency Three-Phase

Product code : 13440213

Catalog # : 01036ET3E215JM-S

Performance : 220/415 V 50 Hz 2P

Rated current : 25.1/13.3 A
LRC : 6.8
Rated torque : 18.0 ft.lb
Locked rotor torque : 220 %
Breakdown torque : 260 %
Rated speed : 2910 rpm

Moment of inertia (J) : 0.7188 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

Heating constant

Cooling constant

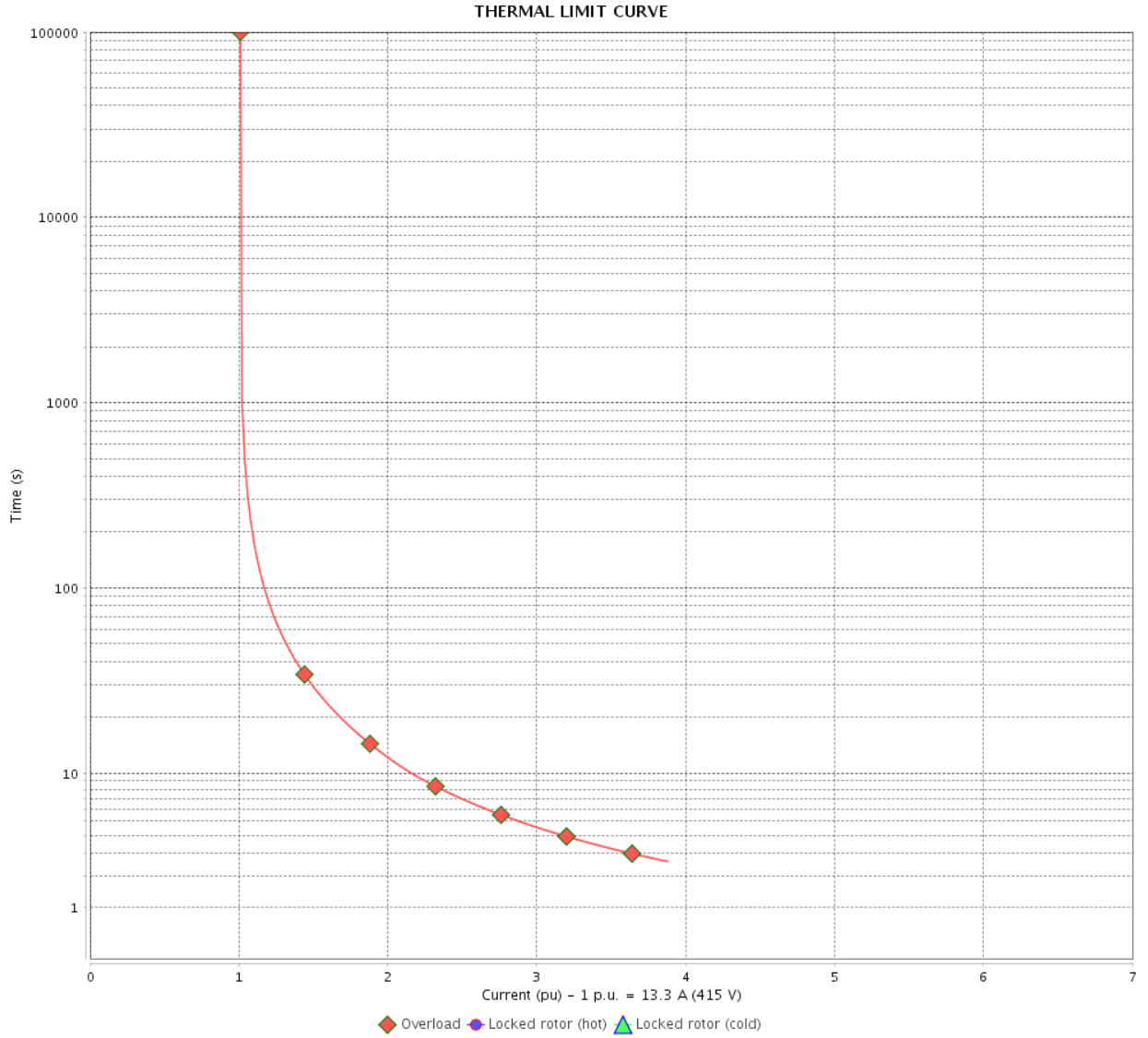
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	14/04/2022		12 / 16	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		13 / 16		
Date		14/04/2022		

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



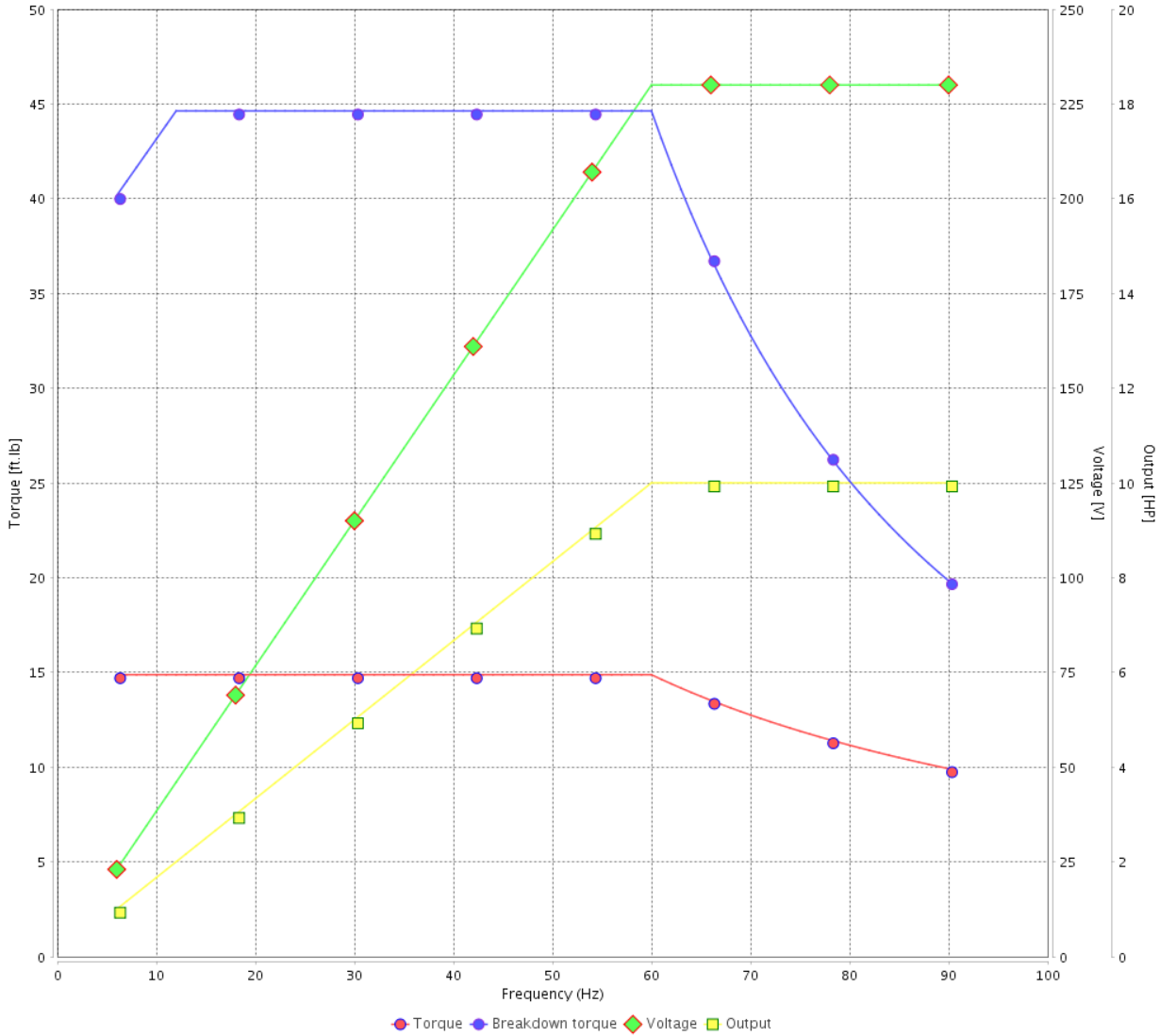
Customer :

Product line : JM Pump NEMA Premium Efficiency Three-Phase

Product code : 13440213

Catalog # : 01036ET3E215JM-S

VFD OPERATION CURVE



Performance : 230/460 V 60 Hz 2P

Rated current : 23.0/11.5 A
 LRC : 7.5
 Rated torque : 14.9 ft.lb
 Locked rotor torque : 260 %
 Breakdown torque : 300 %
 Rated speed : 3530 rpm

Moment of inertia (J) : 0.7188 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 14 / 16	Revision
Checked by				
Date	14/04/2022			

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

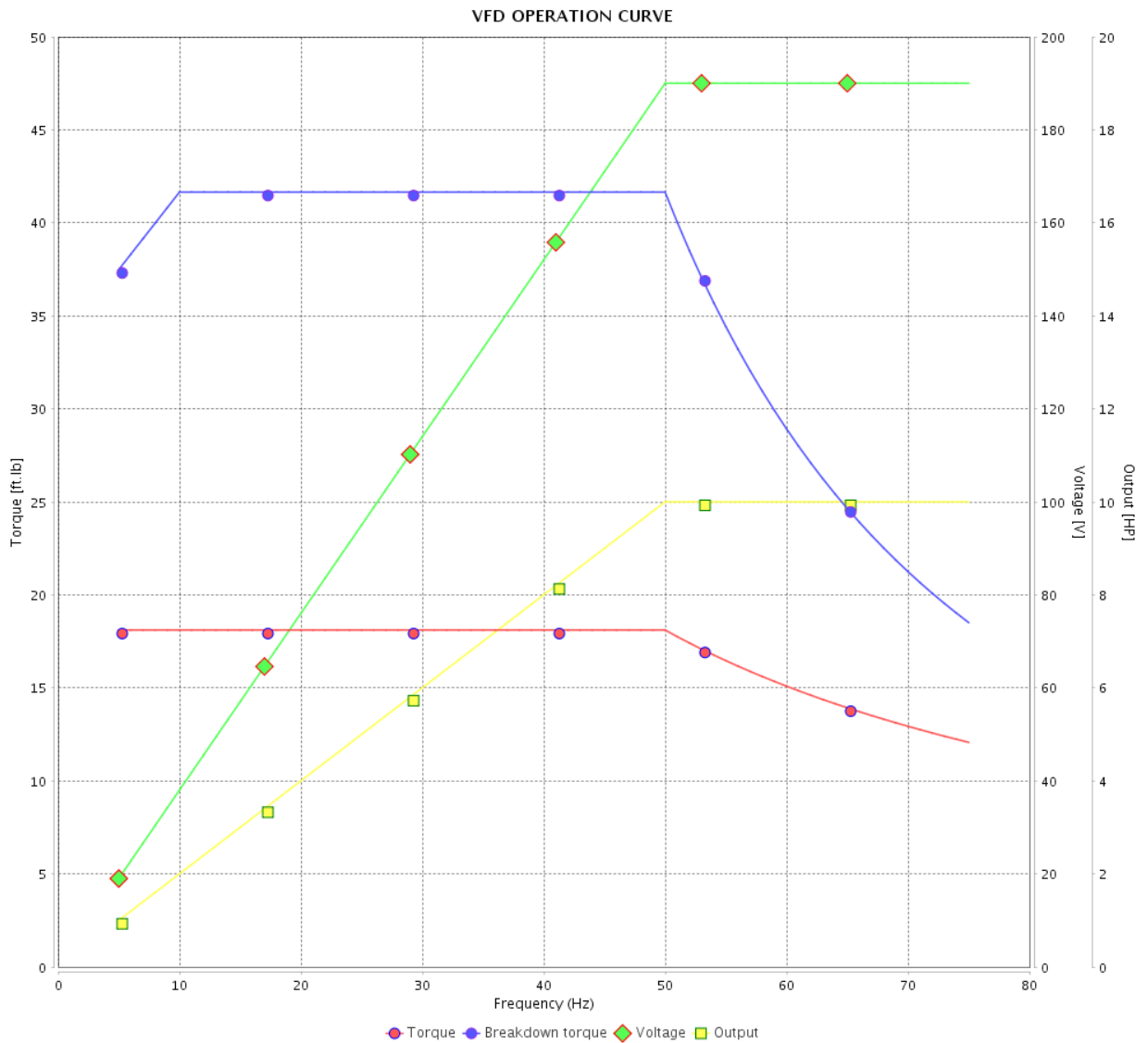


Customer :

Product line : JM Pump NEMA Premium Efficiency Three-Phase

Product code : 13440213

Catalog # : 01036ET3E215JM-S



Performance : 190/380 V 50 Hz 2P

Rated current : 28.4/14.2 A
 LRC : 6.1
 Rated torque : 18.1 ft.lb
 Locked rotor torque : 190 %
 Breakdown torque : 229 %
 Rated speed : 2900 rpm

Moment of inertia (J) : 0.7188 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

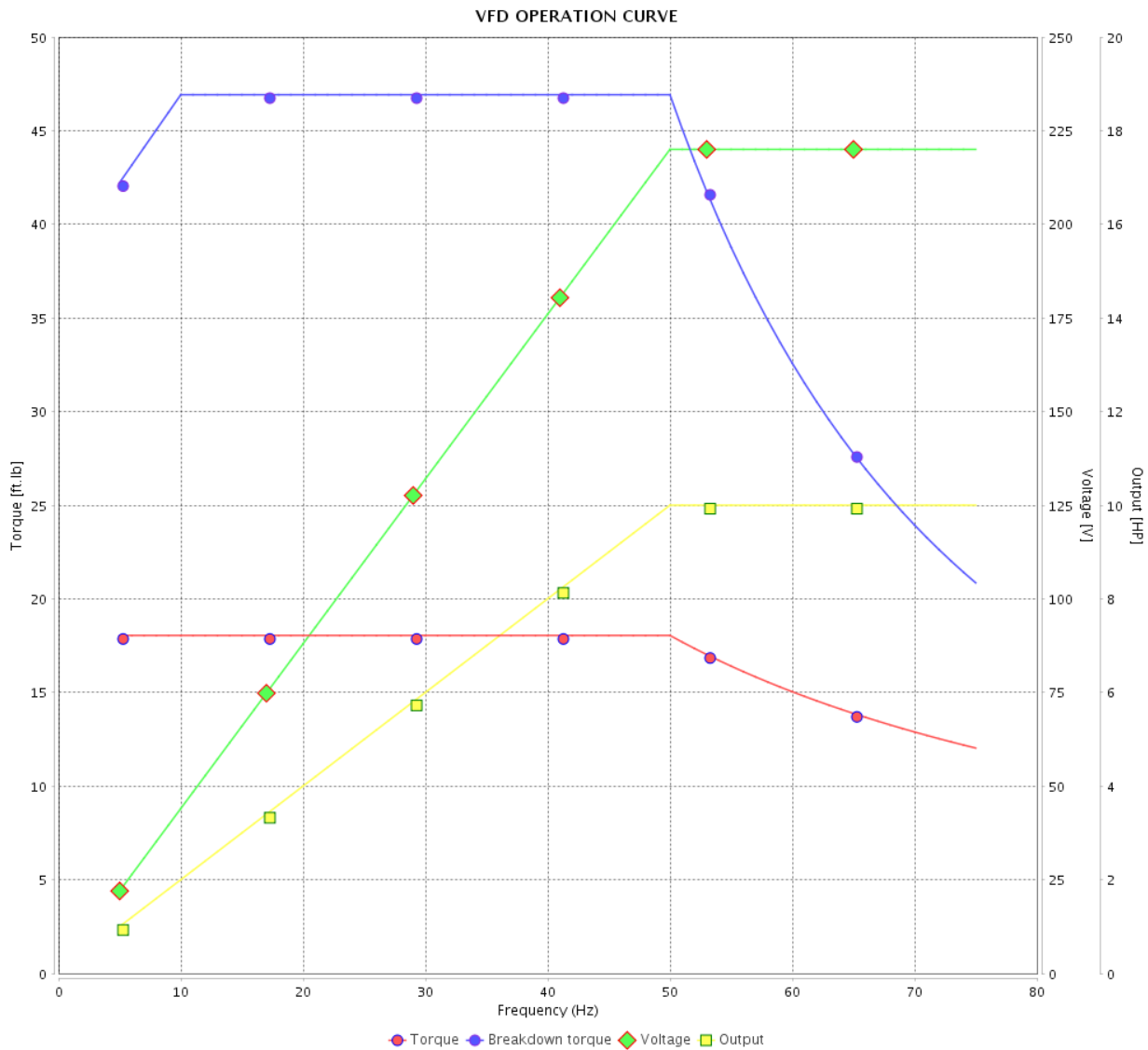


Customer :

Product line : JM Pump NEMA Premium Efficiency Three-Phase

Product code : 13440213

Catalog # : 01036ET3E215JM-S



Performance : 220/415 V 50 Hz 2P

Rated current : 25.1/13.3 A
 LRC : 6.8
 Rated torque : 18.0 ft.lb
 Locked rotor torque : 220 %
 Breakdown torque : 260 %
 Rated speed : 2910 rpm

Moment of inertia (J) : 0.7188 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				

1 2 3 4 5 6

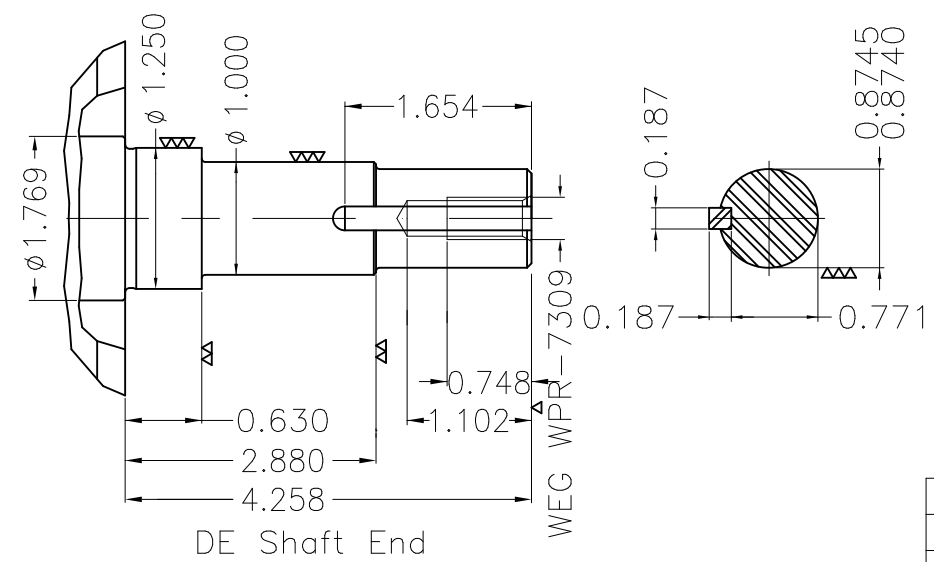
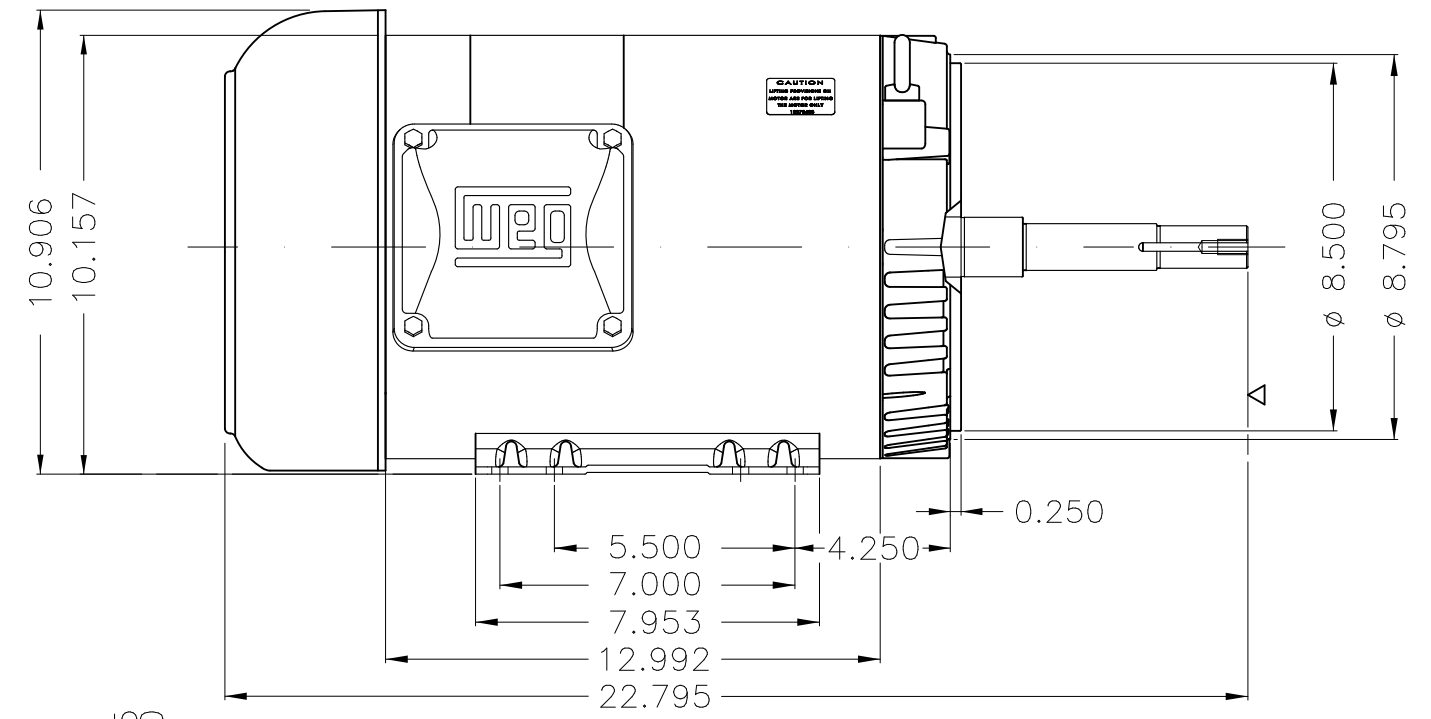
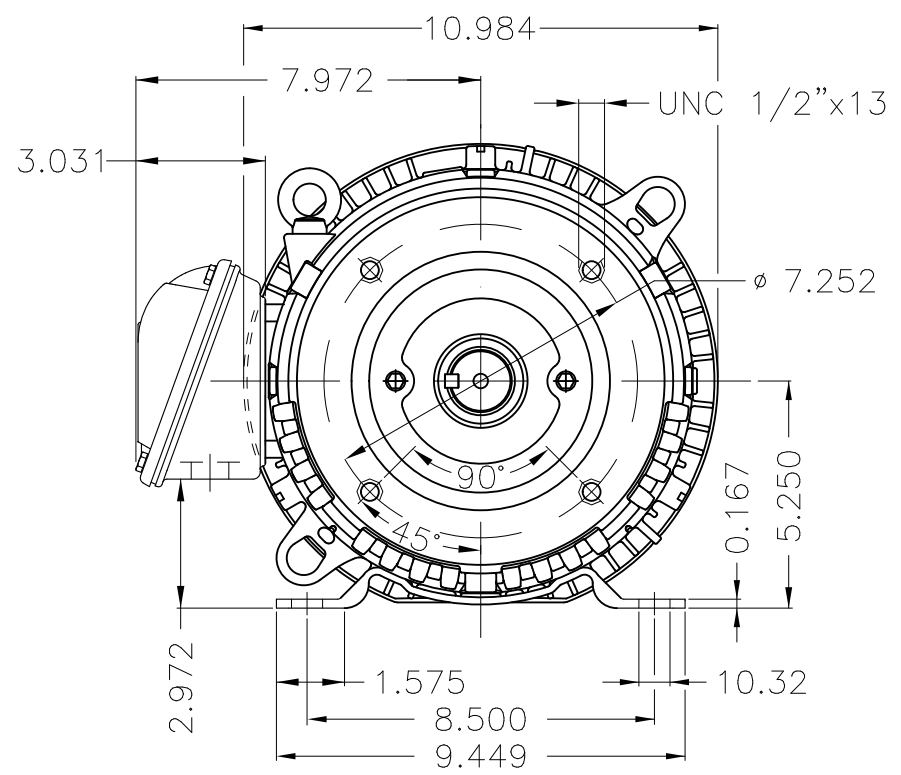
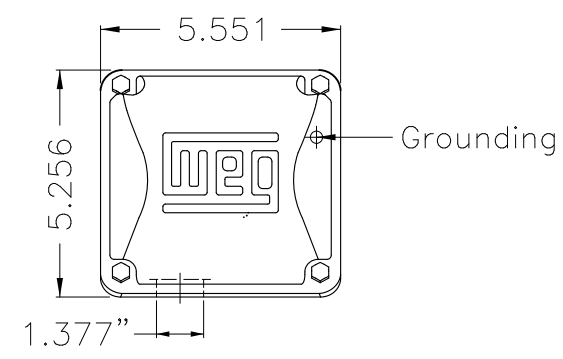
A

B

C

D

E



EUNC 3/8" - 16 WEG WPR-7309

DE Shaft End

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 CLOSE COUPLED PUMP JN TYPE PSEF 177							
CHECKED		FRAME 213/5JM IP55 TEFC							
RELEASED									
REL DT.		WMO	Jaragua do Sul	Product Engineering					

PREVIEW

WDD



10 HP 02 Poles 60 Hz



NEMA
Premium



MADE IN MEXICO

MAT: 13440213 CC029A

W01.TE0IC0X0N

MODEL 01036ET3E215JM-S

22APR2022 S/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 10
FR 213/5JM		KW 7.5
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 23.0/11.5
INS CL F AT 80K	IP55	SFA 26.4/13.2
AMB 40°C	DES B	SF 1.15
ENCL TEFC	CODE H	PF 0.91
USABLE @ 208V 25.4A		RPM 3530
SF1.00		NEMA NOM. EFF 90.2%

ALTERNATE RATING: 10HP 50Hz 190-220/380-415V SF1.00
28.4-24.3/14.2-12.9A 2900RPM EFF 87.2% (IE1) IEC 60034-1

For safe area-Inverter duty motor For 60Hz use on VPWM 1000:1 VT, 10:1 CT

DE 6209-ZZ	ODE 6206-ZZ	MOBIL POLYREX EM
-------------------	--------------------	-------------------------



T1-BLU T2-WHT
T3-ORG T4-YEL
T5-BLK T6-GRY
T7-PNK T8-RED
T9-BRK RED

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.

