

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :				
Product line	: JP Pump NEMA Premium Efficiency Three-Phase	Product code :	14327804	
		Catalog # :	00318OT3E182JP-SG	
Frame	: 182/4JP	Cooling method	: IC01 - ODP	
Insulation class	: F	Mounting	: F-1	
Duty cycle	: Cont.(S1)	Rotation ¹	: Both (CW and CCW)	
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line	
Altitude	: 1000 m.a.s.l.	Approx. weight ²	: 65.9 lb	
Design	: B	Moment of inertia (J)	: 0.3092 sq.ft.lb	
Output [HP]	3	3	3	
Poles	4	4	4	
Frequency [Hz]	60	50	50	
Rated voltage [V]	230/460	190/380	220/415	
Rated current [A]	7.72/3.86	9.08/4.54	8.41/4.46	
L. R. Amperes [A]	64.8/32.4	58.1/29.1	59.7/31.7	
LRC [A]	8.4x(Code K)	6.4x(Code H)	7.1x(Code J)	
No load current [A]	4.14/2.07	4.08/2.04	4.20/2.22	
Rated speed [RPM]	1765	1460	1465	
Slip [%]	1.94	2.67	2.33	
Rated torque [ft.lb]	8.93	10.8	10.8	
Locked rotor torque [%]	220	150	170	
Breakdown torque [%]	330	240	280	
Service factor	1.15	1.15	1.15	
Temperature rise	80 K	80 K	80 K	
Locked rotor time	27s (cold) 15s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)	
Noise level ²	55.0 dB(A)	53.0 dB(A)	53.0 dB(A)	
Efficiency (%)	25%	86.4	88.0	
	50%	87.5	87.3	
	75%	88.5	87.9	
	100%	89.5	86.9	
Power Factor	25%	0.35	0.37	
	50%	0.60	0.63	
	75%	0.73	0.76	
	100%	0.80	0.82	
Bearing type	: <u>Drive end</u> 6207 ZZ <u>Non drive end</u> 6205 ZZ	Foundation loads		
Sealing	: Without Without Bearing Seal Bearing Seal	Max. traction	: 159 lb	
		Max. compression	: 225 lb	
Lubrication interval	: - -			
Lubricant amount	: - -			
Lubricant type	: Mobil Polyrex EM			
Notes USABLE @208V 8.54A SF 1.00 SFA 8.54A				
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 / 16	

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



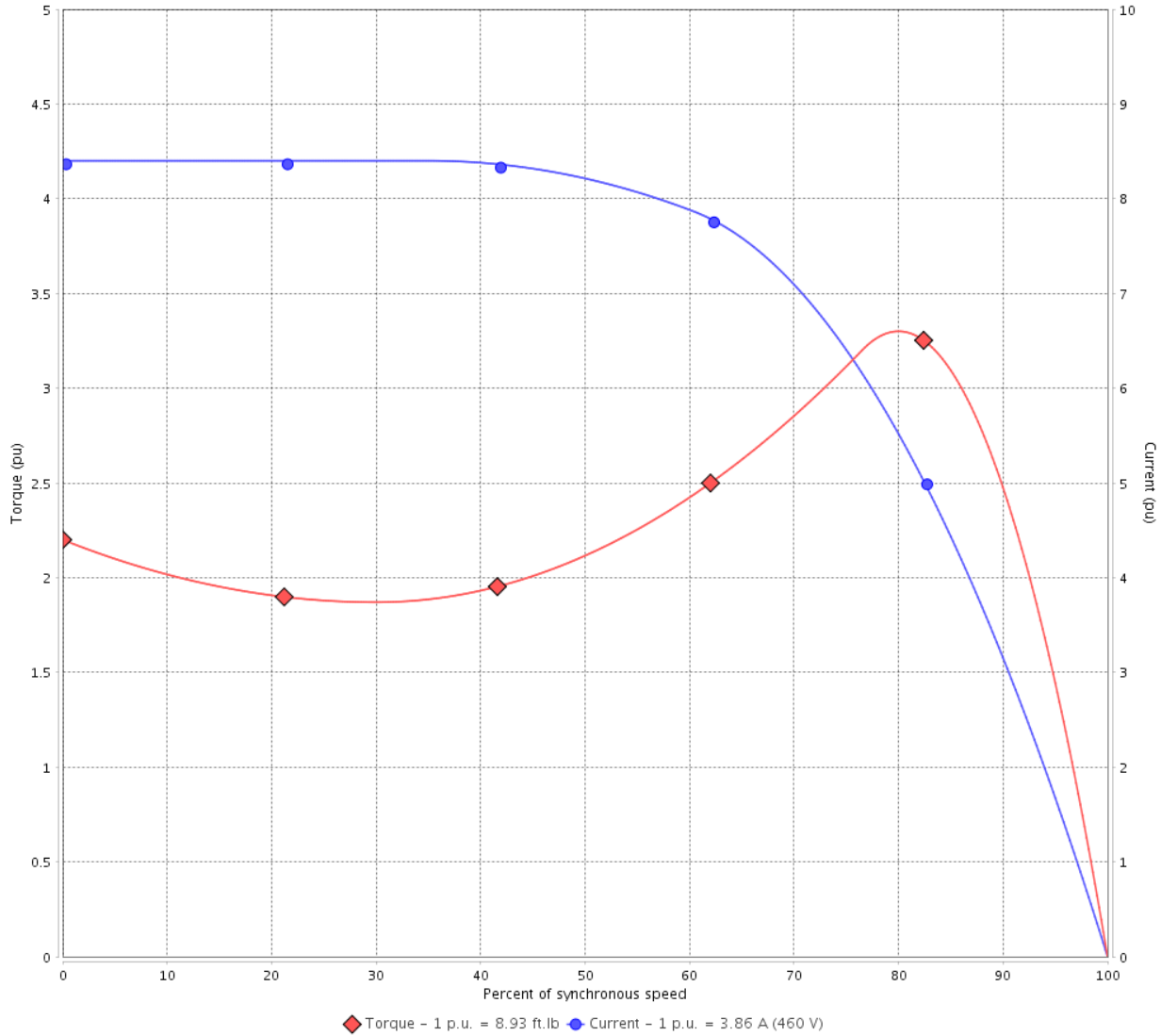
Customer :

Product line : JP Pump NEMA Premium Efficiency Three-Phase

Product code : 14327804

Catalog # : 003180T3E182JP-SG

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 4P

Rated current : 7.72/3.86 A
 LRC : 8.4
 Rated torque : 8.93 ft.lb
 Locked rotor torque : 220 %
 Breakdown torque : 330 %
 Rated speed : 1765 rpm

Moment of inertia (J) : 0.3092 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 16	Revision
Checked by				
Date	13/04/2022			

TORQUE AND CURRENT VS SPEED CURVE



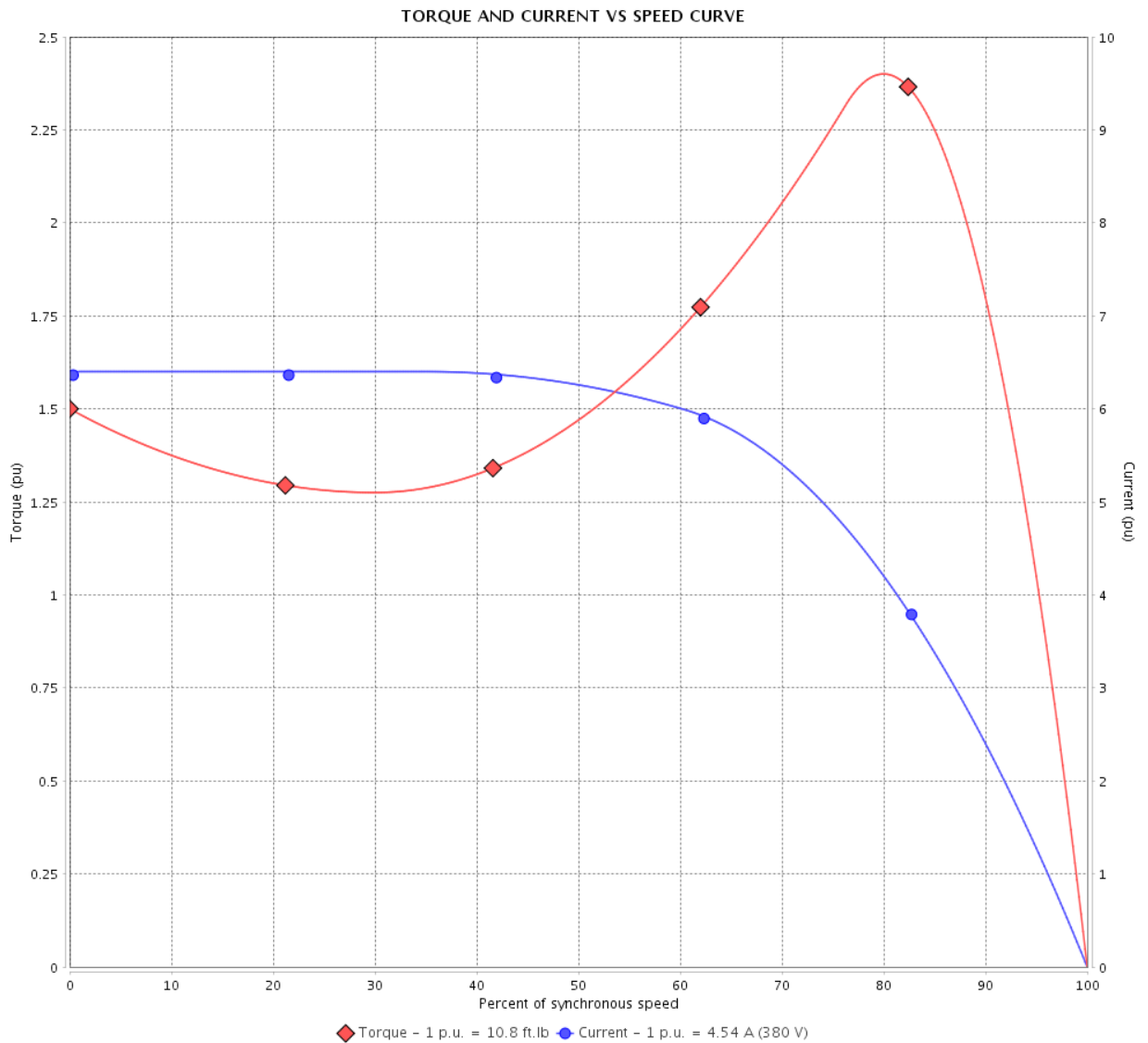
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : JP Pump NEMA Premium Efficiency Three-Phase

Product code : 14327804

Catalog # : 00318OT3E182JP-SG



Performance : 190/380 V 50 Hz 4P

Rated current : 9.08/4.54 A
 LRC : 6.4
 Rated torque : 10.8 ft.lb
 Locked rotor torque : 150 %
 Breakdown torque : 240 %
 Rated speed : 1460 rpm

Moment of inertia (J) : 0.3092 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 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	13/04/2022			

TORQUE AND CURRENT VS SPEED CURVE



Three Phase Induction Motor - Squirrel Cage

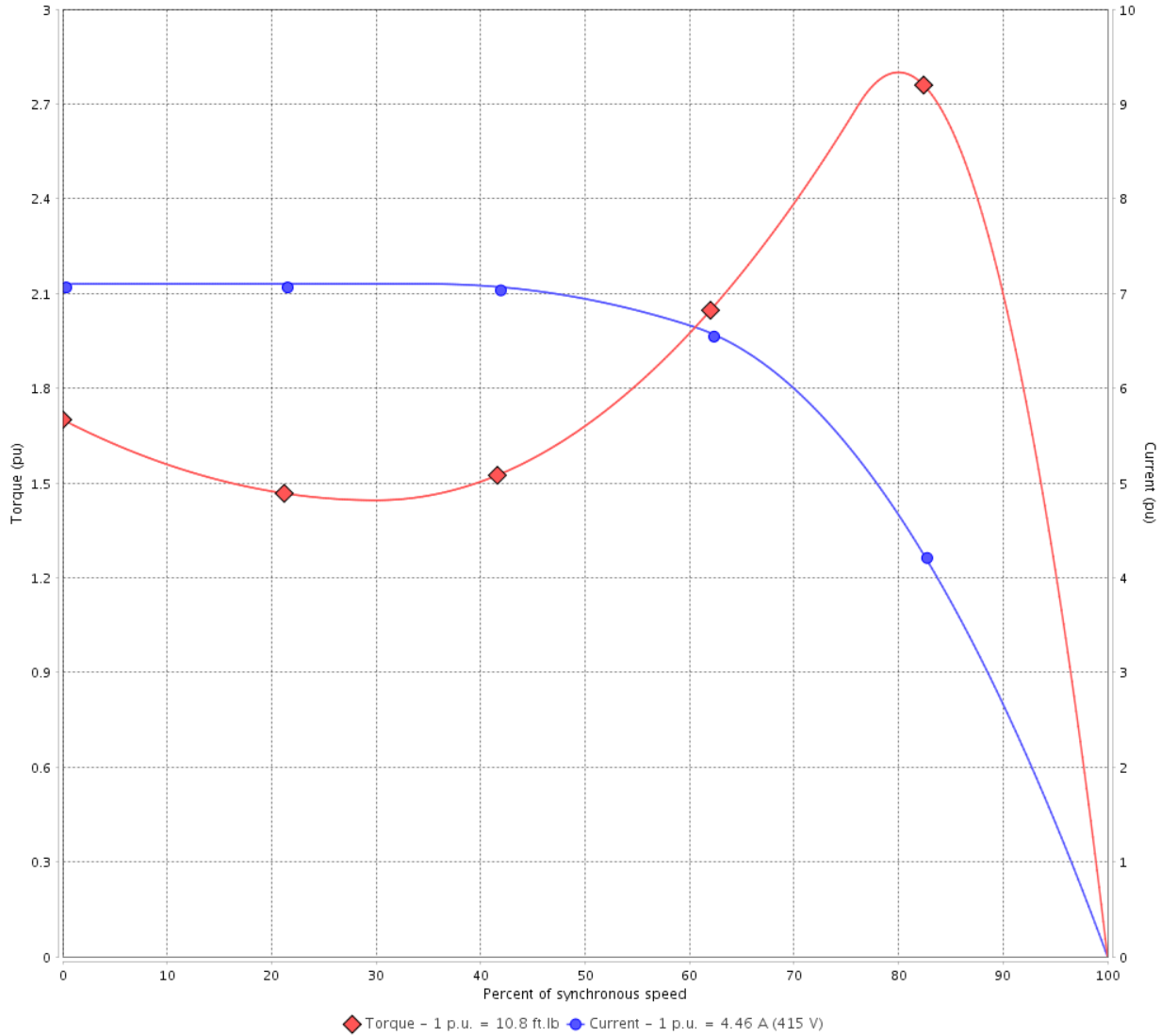
Customer :

Product line : JP Pump NEMA Premium
Efficiency Three-Phase

Product code : 14327804

Catalog # : 003180T3E182JP-SG

TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 4P

Rated current : 8.41/4.46 A
LRC : 7.1
Rated torque : 10.8 ft.lb
Locked rotor torque : 170 %
Breakdown torque : 280 %
Rated speed : 1465 rpm

Moment of inertia (J) : 0.3092 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 16	Revision
Checked by				
Date	13/04/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

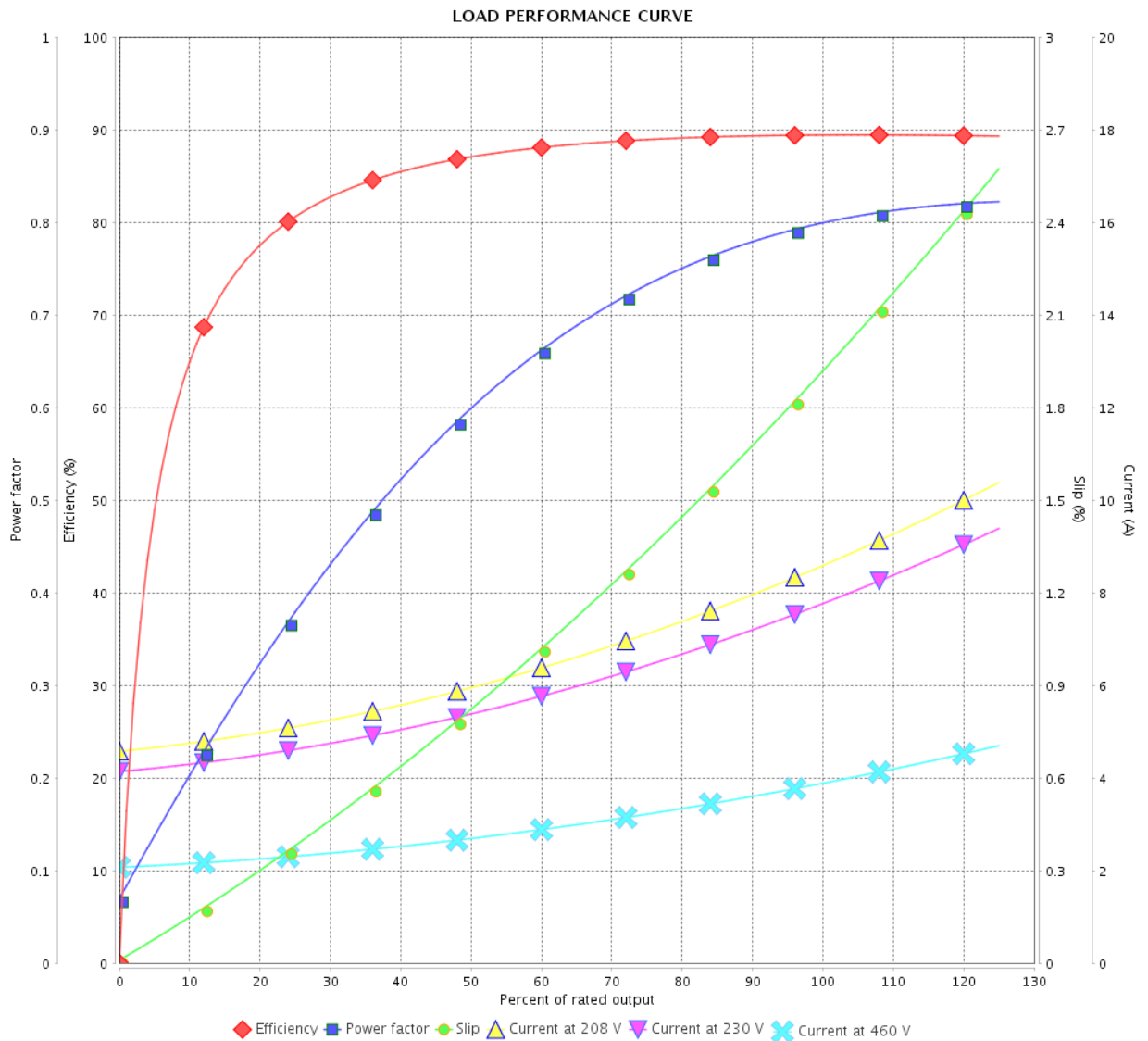


Customer :

Product line : JP Pump NEMA Premium Efficiency Three-Phase

Product code : 14327804

Catalog # : 003180T3E182JP-SG



Performance : 230/460 V 60 Hz 4P

Rated current : 7.72/3.86 A
 LRC : 8.4
 Rated torque : 8.93 ft.lb
 Locked rotor torque : 220 %
 Breakdown torque : 330 %
 Rated speed : 1765 rpm

Moment of inertia (J) : 0.3092 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		5 / 16		
Date		13/04/2022		

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



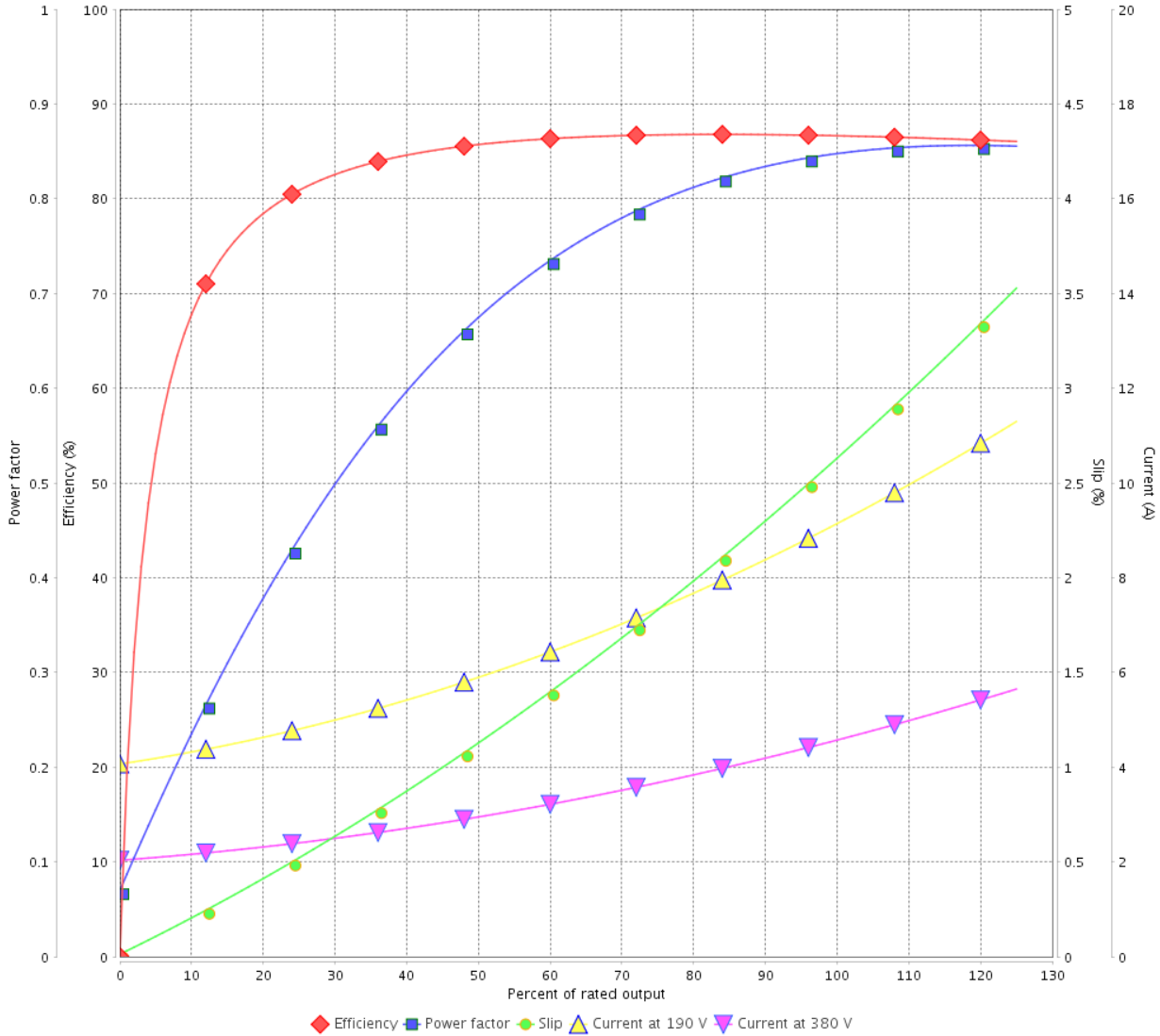
Customer :

Product line : JP Pump NEMA Premium
Efficiency Three-Phase

Product code : 14327804

Catalog # : 003180T3E182JP-SG

LOAD PERFORMANCE CURVE



Performance : 190/380 V 50 Hz 4P

Rated current : 9.08/4.54 A
LRC : 6.4
Rated torque : 10.8 ft.lb
Locked rotor torque : 150 %
Breakdown torque : 240 %
Rated speed : 1460 rpm

Moment of inertia (J) : 0.3092 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			6 / 16	
Date	13/04/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

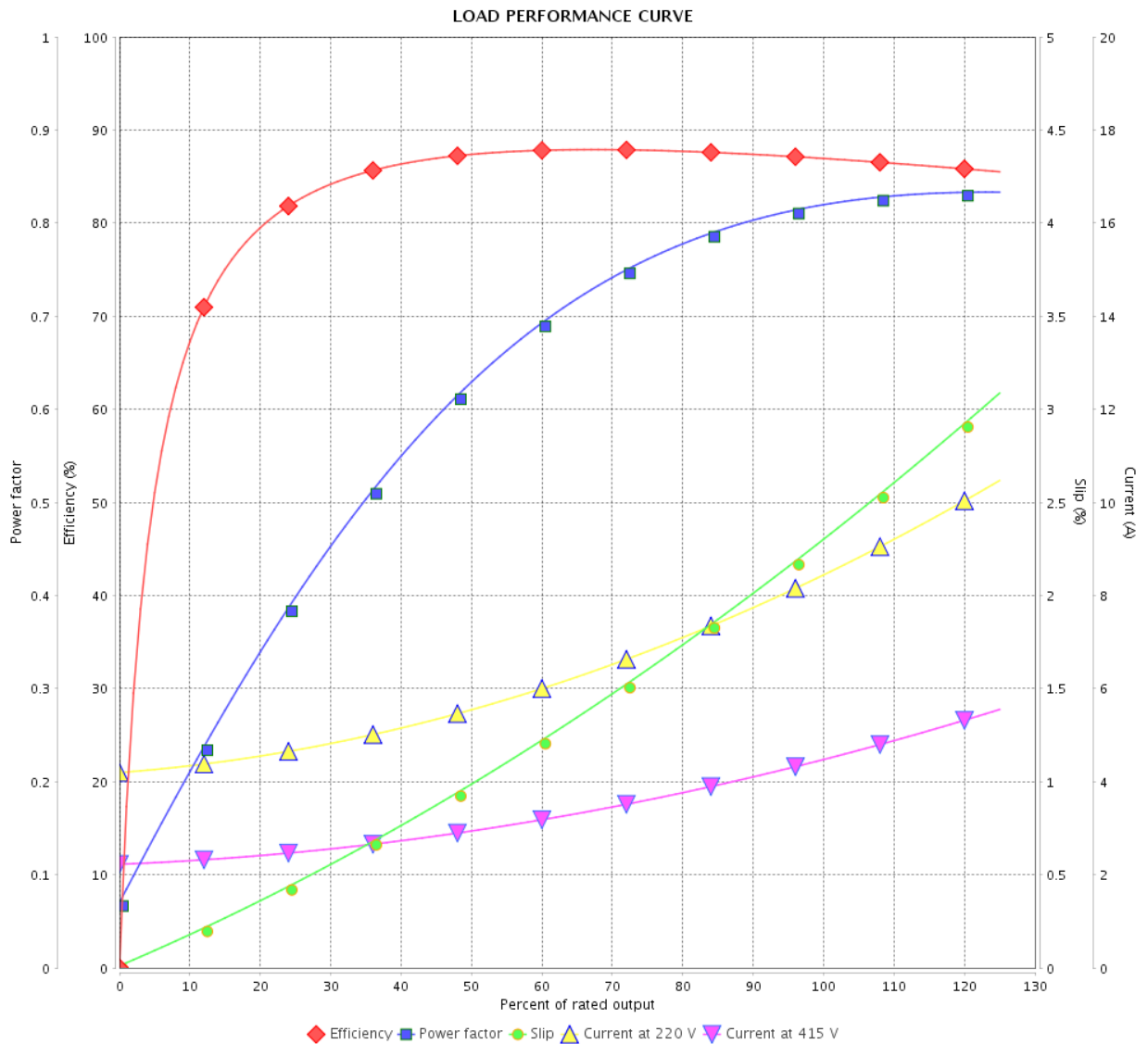


Customer :

Product line : JP Pump NEMA Premium
Efficiency Three-Phase

Product code : 14327804

Catalog # : 003180T3E182JP-SG



Performance : 220/415 V 50 Hz 4P

Rated current : 8.41/4.46 A
 LRC : 7.1
 Rated torque : 10.8 ft.lb
 Locked rotor torque : 170 %
 Breakdown torque : 280 %
 Rated speed : 1465 rpm

Moment of inertia (J) : 0.3092 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			7 / 16	
Date	13/04/2022			

THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : JP Pump NEMA Premium
Efficiency Three-Phase

Product code : 14327804

Catalog # : 00318OT3E182JP-SG

Performance : 230/460 V 60 Hz 4P

Rated current : 7.72/3.86 A
LRC : 8.4
Rated torque : 8.93 ft.lb
Locked rotor torque : 220 %
Breakdown torque : 330 %
Rated speed : 1765 rpm

Moment of inertia (J) : 0.3092 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

Heating constant

Cooling constant

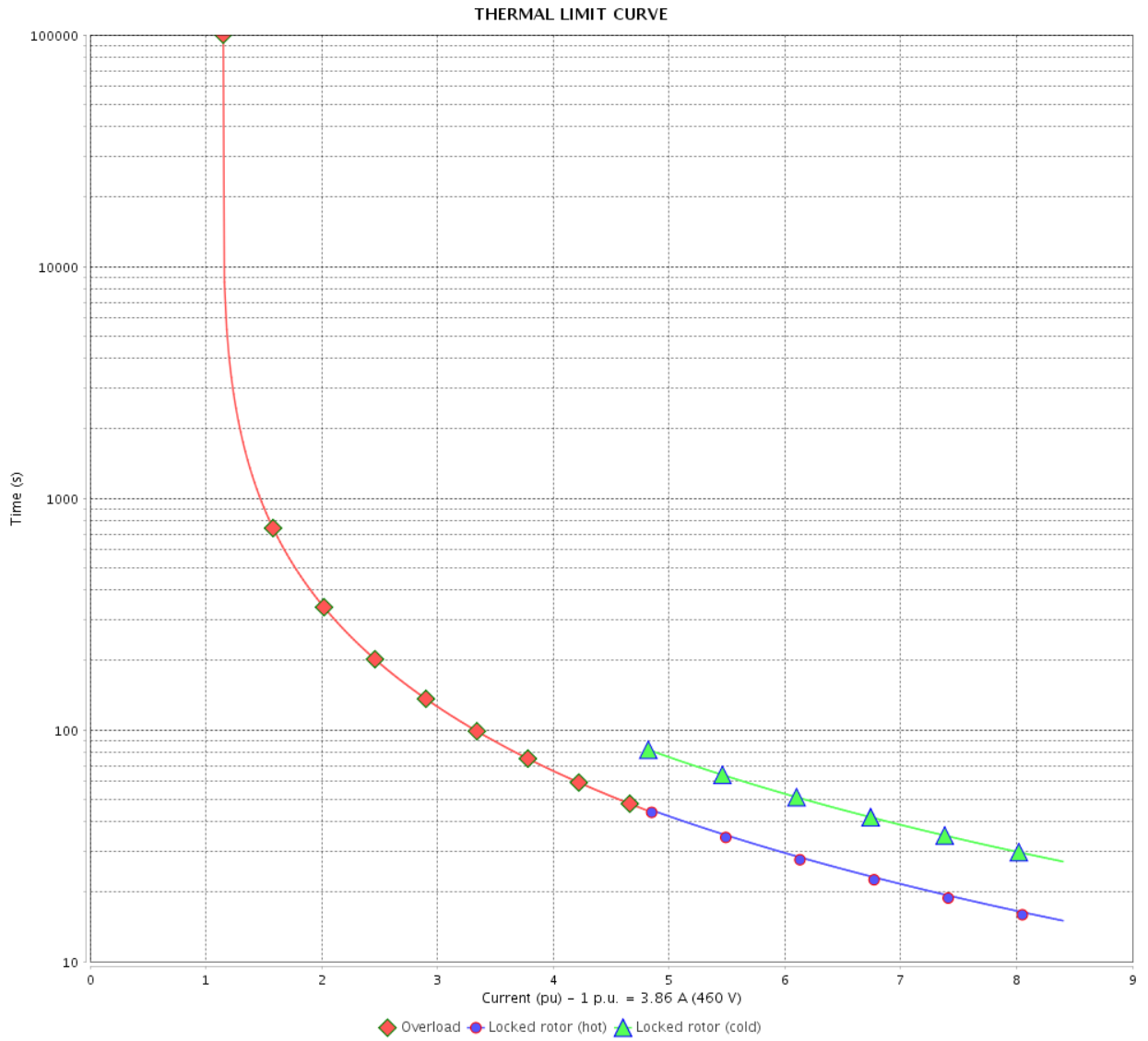
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	13/04/2022		8 / 16	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : JP Pump NEMA Premium
Efficiency Three-Phase

Product code : 14327804

Catalog # : 00318OT3E182JP-SG

Performance : 190/380 V 50 Hz 4P

Rated current : 9.08/4.54 A
LRC : 6.4
Rated torque : 10.8 ft.lb
Locked rotor torque : 150 %
Breakdown torque : 240 %
Rated speed : 1460 rpm

Moment of inertia (J) : 0.3092 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

Heating constant

Cooling constant

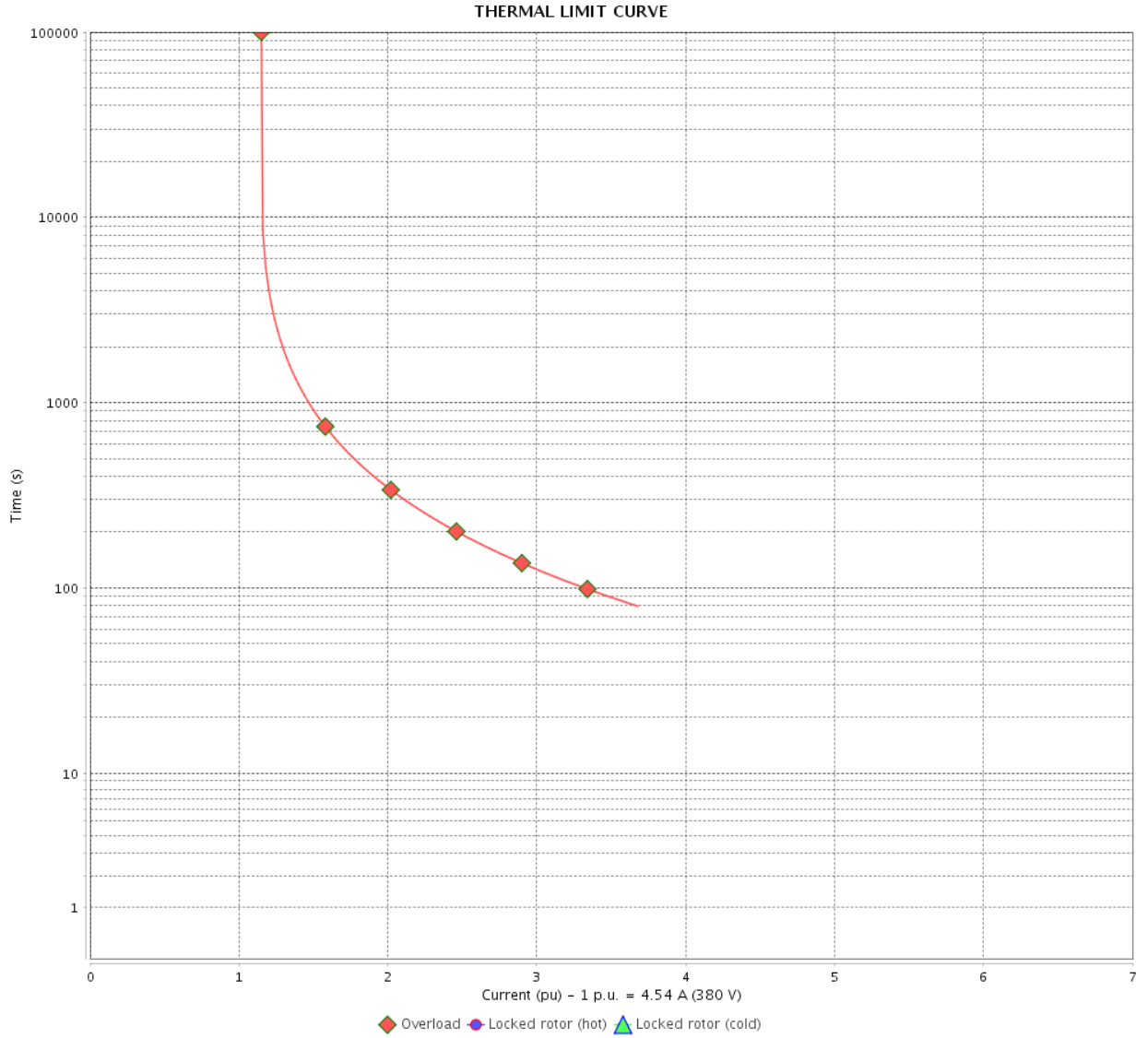
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	13/04/2022		10 / 16	

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		13/04/2022		

THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : JP Pump NEMA Premium
Efficiency Three-Phase

Product code : 14327804

Catalog # : 00318OT3E182JP-SG

Performance : 220/415 V 50 Hz 4P

Rated current : 8.41/4.46 A
LRC : 7.1
Rated torque : 10.8 ft.lb
Locked rotor torque : 170 %
Breakdown torque : 280 %
Rated speed : 1465 rpm

Moment of inertia (J) : 0.3092 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

Heating constant

Cooling constant

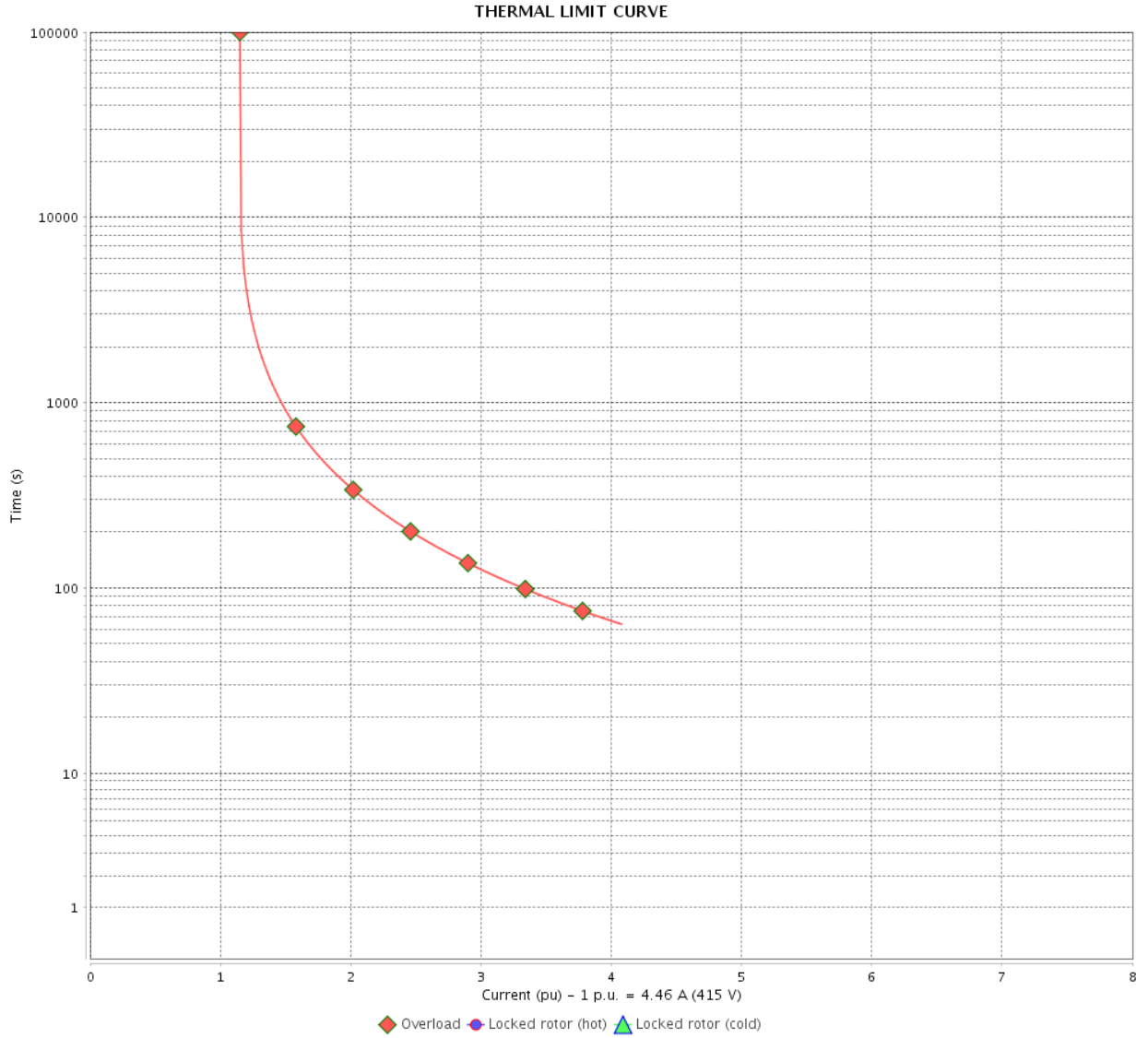
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	13/04/2022		12 / 16	

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		13/04/2022		

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

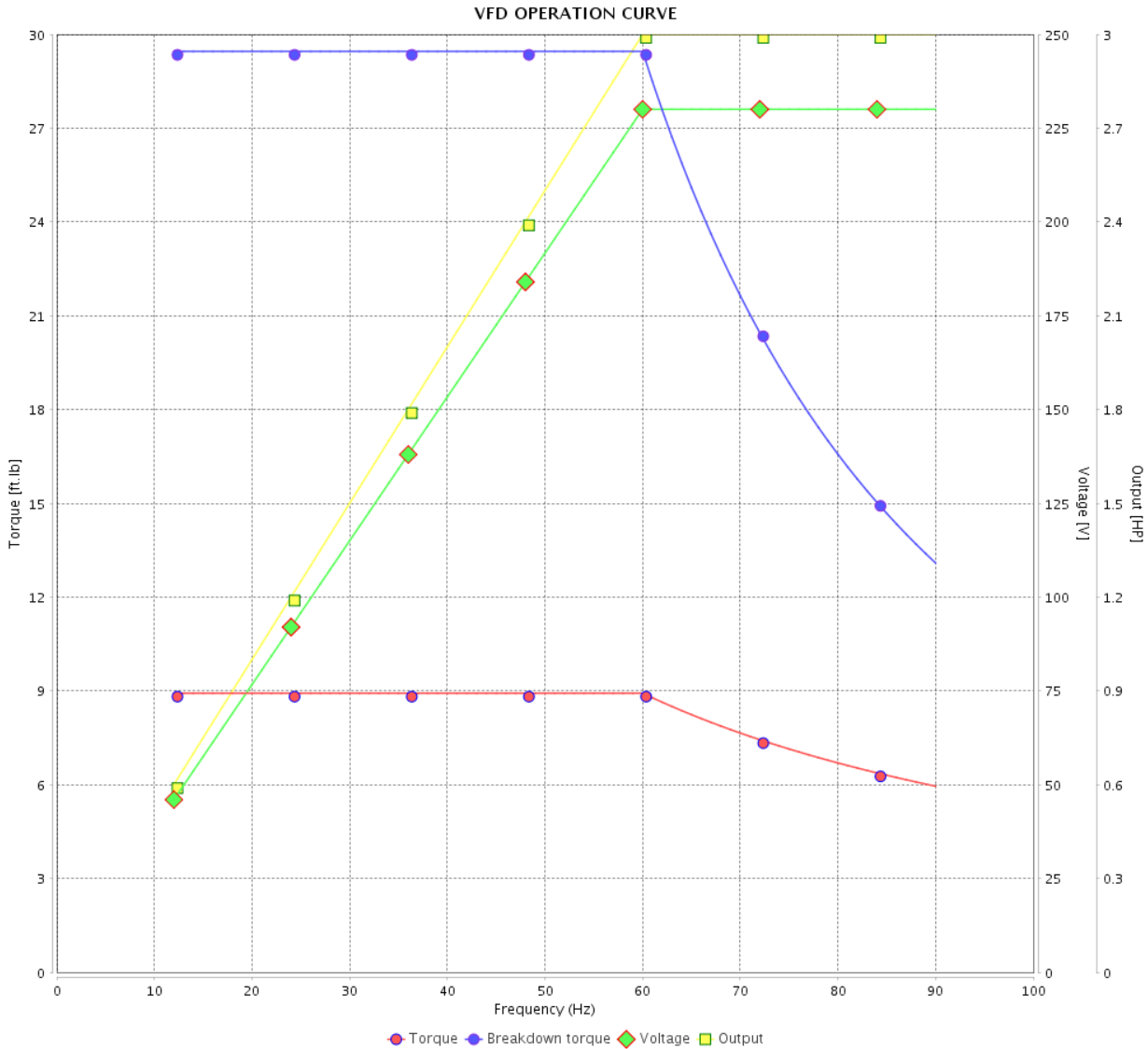


Customer :

Product line : JP Pump NEMA Premium Efficiency Three-Phase

Product code : 14327804

Catalog # : 00318OT3E182JP-SG



Performance : 230/460 V 60 Hz 4P

Rated current : 7.72/3.86 A
 LRC : 8.4
 Rated torque : 8.93 ft.lb
 Locked rotor torque : 220 %
 Breakdown torque : 330 %
 Rated speed : 1765 rpm

Moment of inertia (J) : 0.3092 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				

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

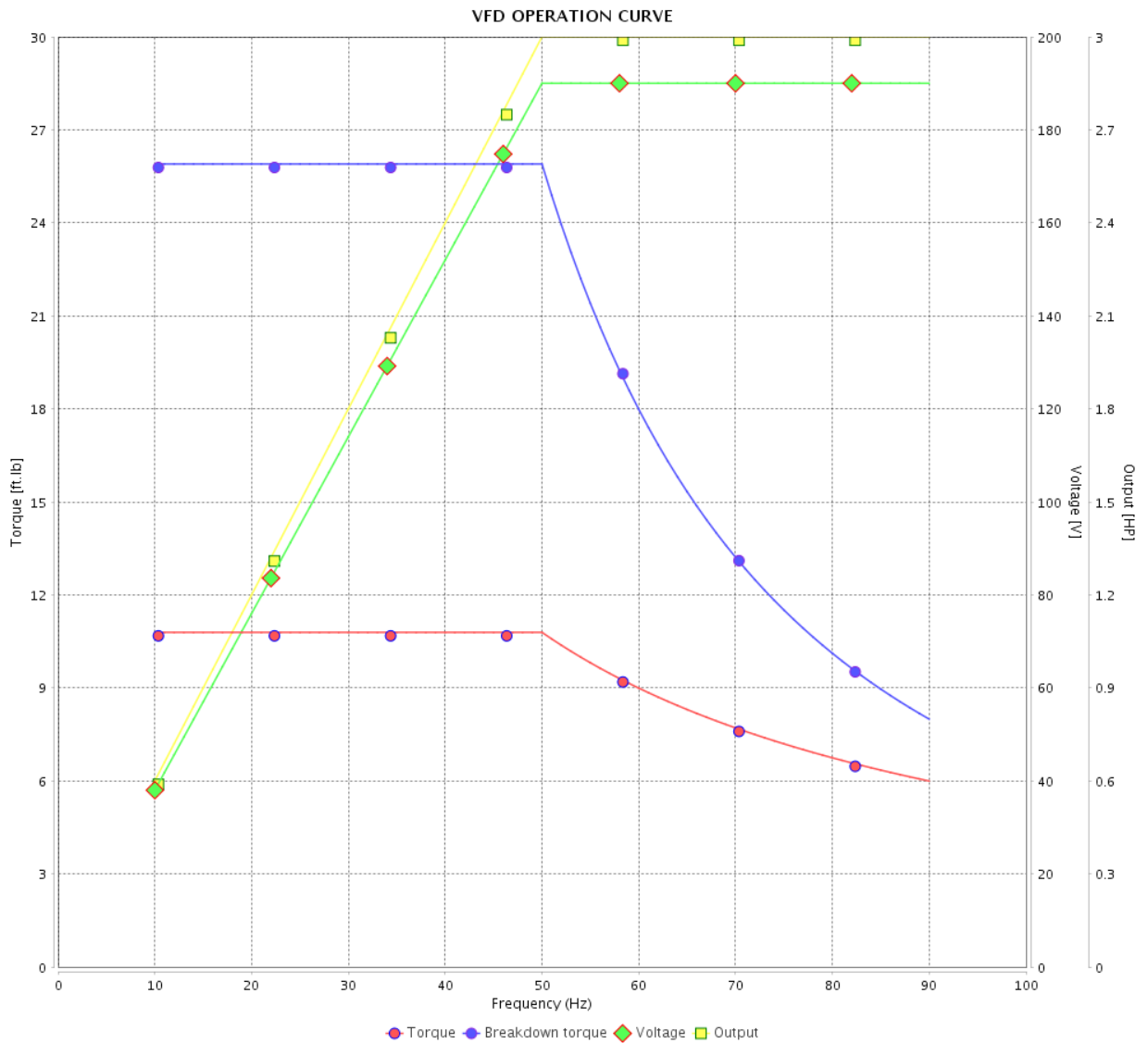


Customer :

Product line : JP Pump NEMA Premium Efficiency Three-Phase

Product code : 14327804

Catalog # : 00318OT3E182JP-SG



Performance : 190/380 V 50 Hz 4P

Rated current : 9.08/4.54 A
 LRC : 6.4
 Rated torque : 10.8 ft.lb
 Locked rotor torque : 150 %
 Breakdown torque : 240 %
 Rated speed : 1460 rpm

Moment of inertia (J) : 0.3092 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				

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

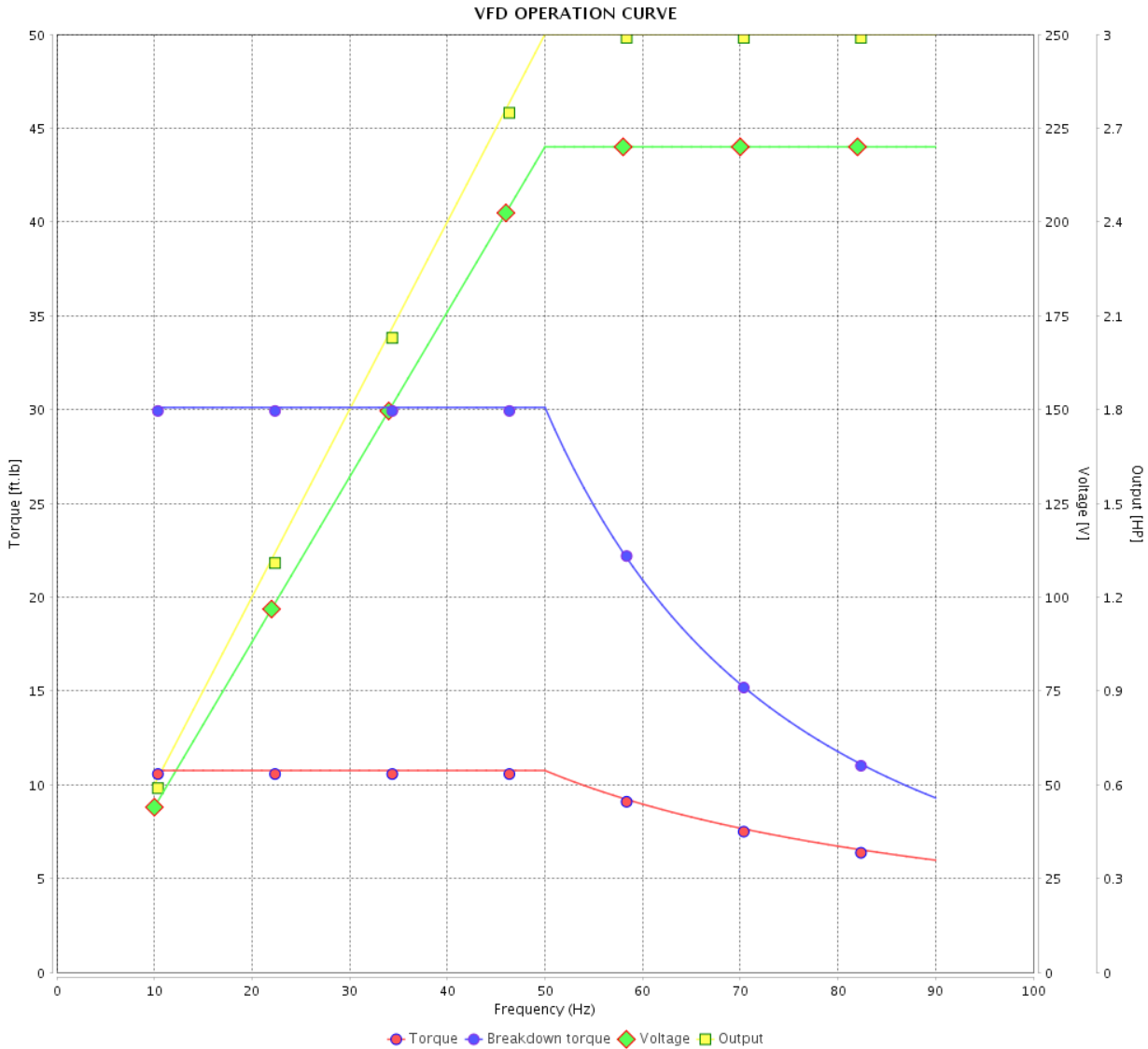


Customer :

Product line : JP Pump NEMA Premium Efficiency Three-Phase

Product code : 14327804

Catalog # : 00318OT3E182JP-SG



Performance : 220/415 V 50 Hz 4P

Rated current : 8.41/4.46 A
 LRC : 7.1
 Rated torque : 10.8 ft.lb
 Locked rotor torque : 170 %
 Breakdown torque : 280 %
 Rated speed : 1465 rpm

Moment of inertia (J) : 0.3092 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 16 / 16	Revision
Checked by				
Date	13/04/2022			

1 2 3 4 5 6

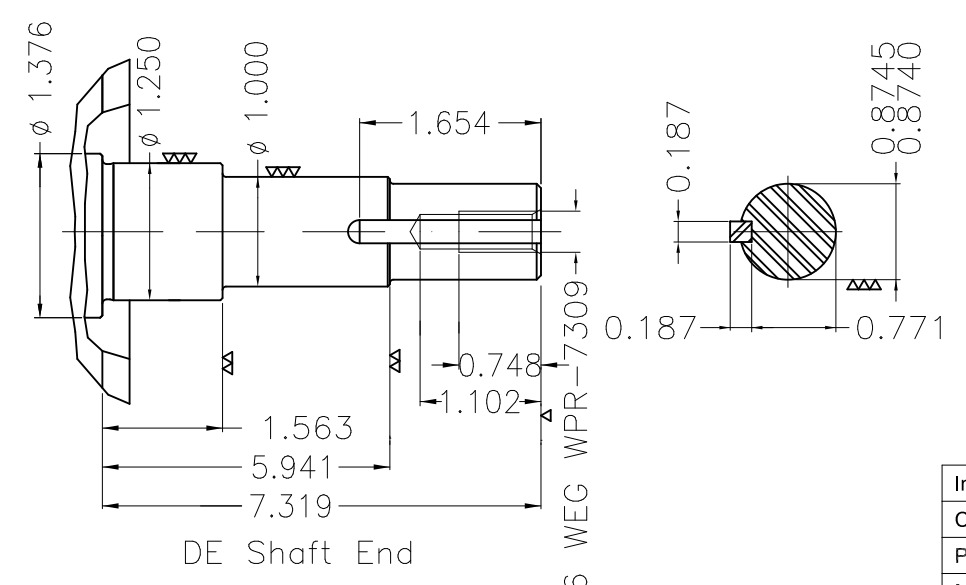
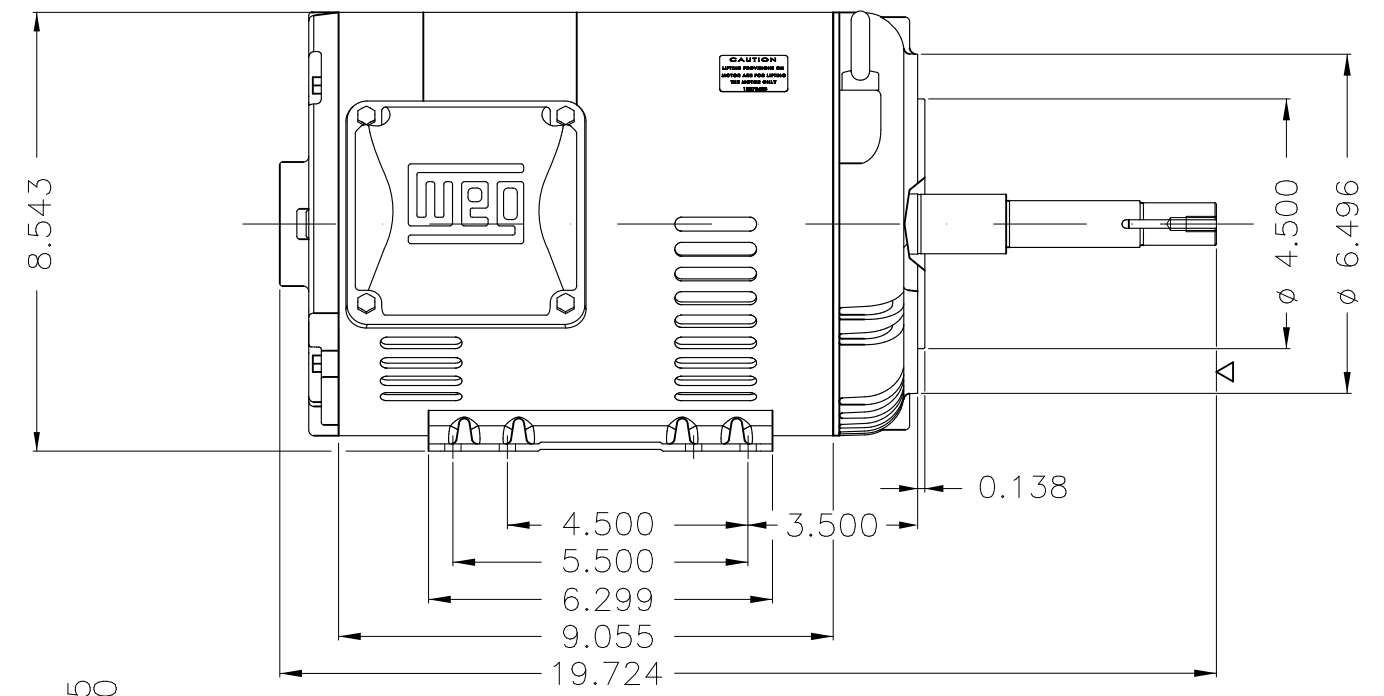
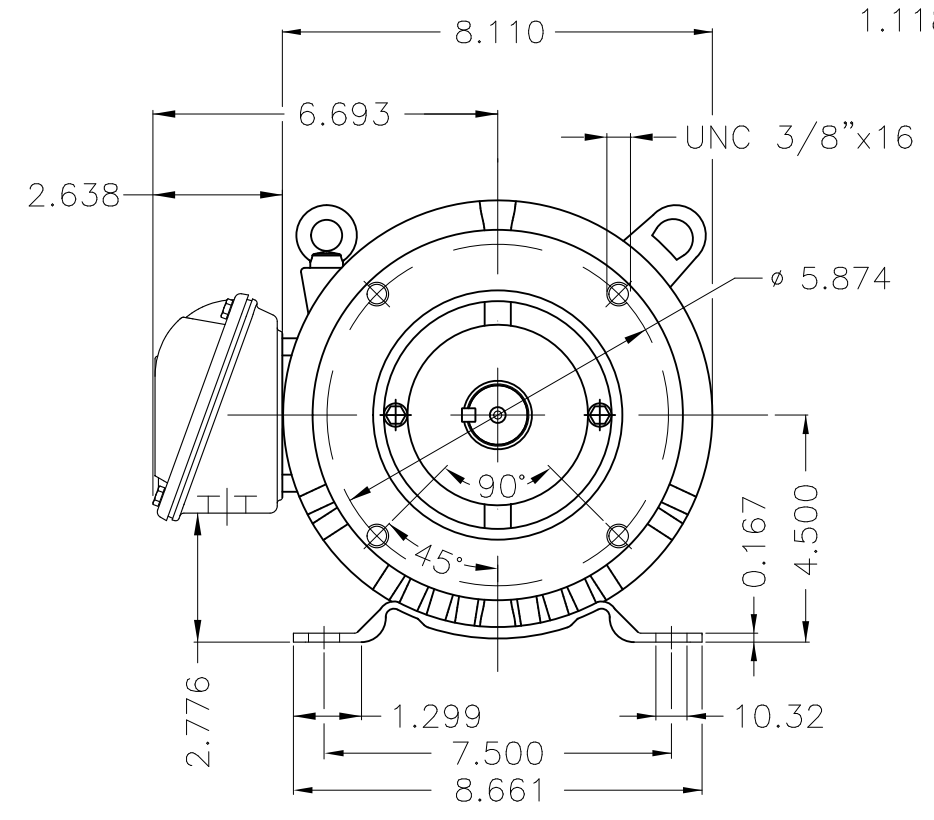
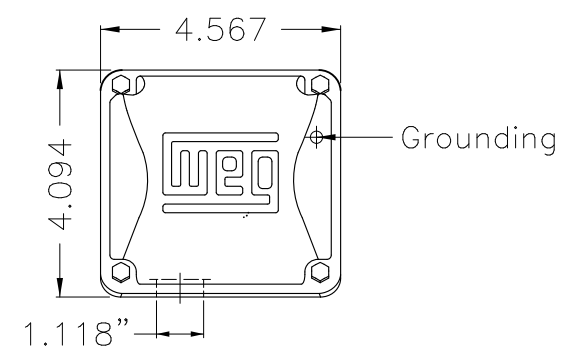
A

B

C

D

E



EUNC 3/8"-16 WEG WPR-7309

- Internal AEGIS ground ring on the DE
- 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	PIRWUSER	THREE PH. MOTOR ROLLED STEEL CLOSE COUPLED PUMP JP 3/4 DE PRELIM					
CHECKED		FRAME 182/4JP IP21 ODP					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	WDD	SHEET	1 / 1	

3 HP 04 Poles 60 Hz

