

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :				
Product line	: JP Pump NEMA Premium Efficiency Three-Phase	Product code :	14329721	
		Catalog # :	01536ET3E254JP-SG	
Frame	: 254/6JP	Cooling method	: IC411 - TEFC	
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	: 175 lb	
Protection degree	: IP55	Moment of inertia (J)	: 0.8718 sq.ft.lb	
Design	: B			
Output [HP]	15	12.5	12.5	
Poles	2	2	2	
Frequency [Hz]	60	50	50	
Rated voltage [V]	230/460	190/380	220/415	
Rated current [A]	34.8/17.4	35.4/17.7	32.3/17.1	
L. R. Amperes [A]	237/118	244/122	245/130	
LRC [A]	6.8x(Code G)	6.9x(Code H)	7.6x(Code J)	
No load current [A]	13.0/6.50	13.6/6.80	13.9/7.39	
Rated speed [RPM]	3525	2920	2930	
Slip [%]	2.08	2.67	2.33	
Rated torque [ft.lb]	22.3	22.5	22.4	
Locked rotor torque [%]	200	190	210	
Breakdown torque [%]	300	290	330	
Service factor	1.15	1.00	1.00	
Temperature rise	80 K	105 K	105 K	
Locked rotor time	25s (cold) 14s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)	
Noise level ²	75.0 dB(A)	72.0 dB(A)	72.0 dB(A)	
Efficiency (%)	25%	89.2	90.7	90.1
	50%	89.5	90.2	90.0
	75%	91.0	90.6	90.7
	100%	91.0	89.8	90.3
Power Factor	25%	0.47	0.47	0.43
	50%	0.73	0.74	0.70
	75%	0.83	0.84	0.81
	100%	0.87	0.88	0.86
Bearing type	: <u>Drive end</u> 6309 Z C3 <u>Non drive end</u> 6208 Z C3	Foundation loads		
Sealing	: V'Ring Without Bearing Seal	Max. traction	: 267 lb	
Lubrication interval	: 15797 h 20000 h	Max. compression	: 442 lb	
Lubricant amount	: 13 g 8 g			
Lubricant type	: Mobil Polyrex EM			
Notes USABLE @208V 38.5A SF 1.00 SFA 38.5A				
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



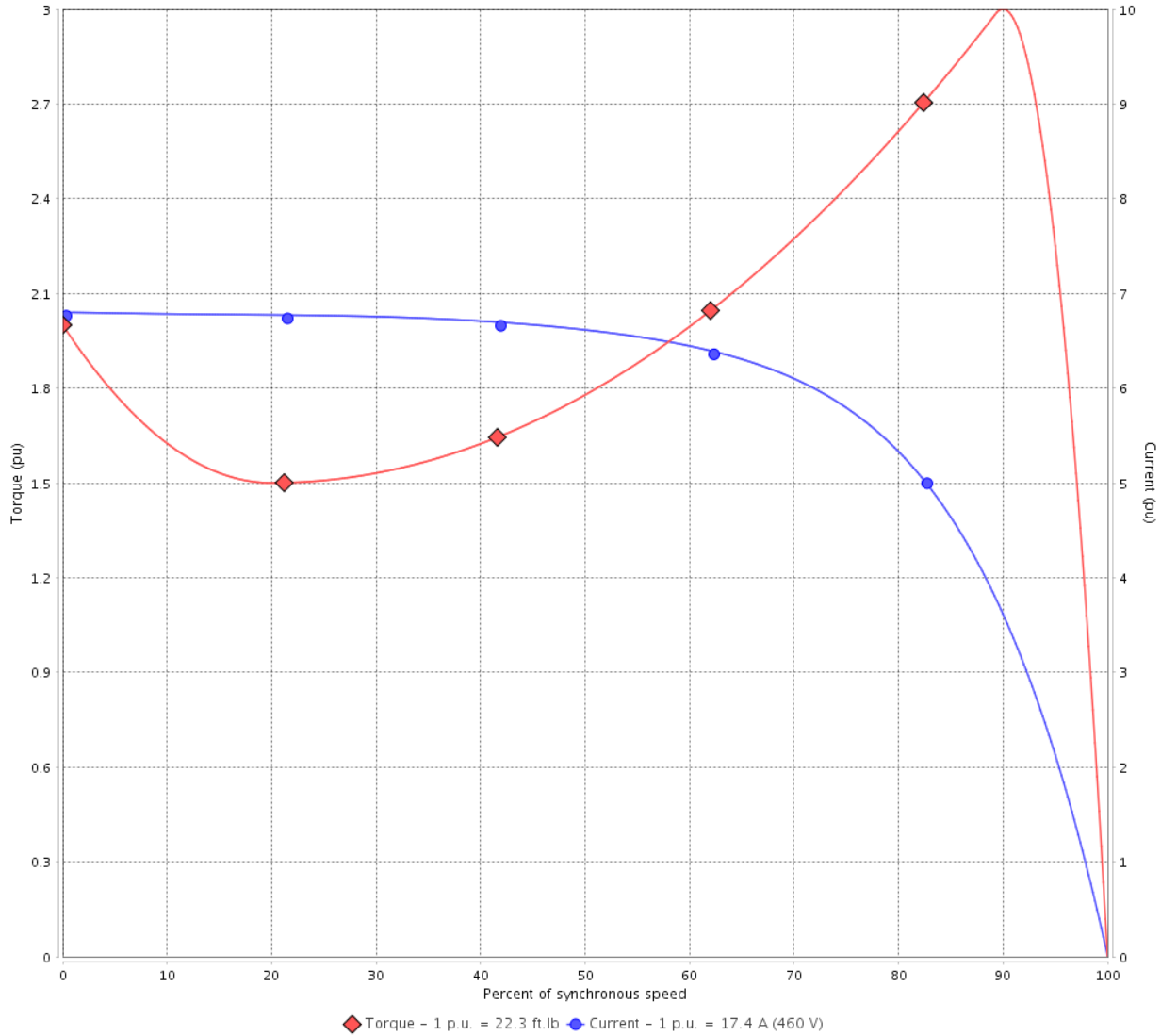
Customer :

Product line : JP Pump NEMA Premium
Efficiency Three-Phase

Product code : 14329721

Catalog # : 01536ET3E254JP-SG

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 2P

Rated current	: 34.8/17.4 A	Moment of inertia (J)	: 0.8718 sq.ft.lb
LRC	: 6.8	Duty cycle	: Cont.(S1)
Rated torque	: 22.3 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 3525 rpm	Design	: B

Locked rotor time : 25s (cold) 14s (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



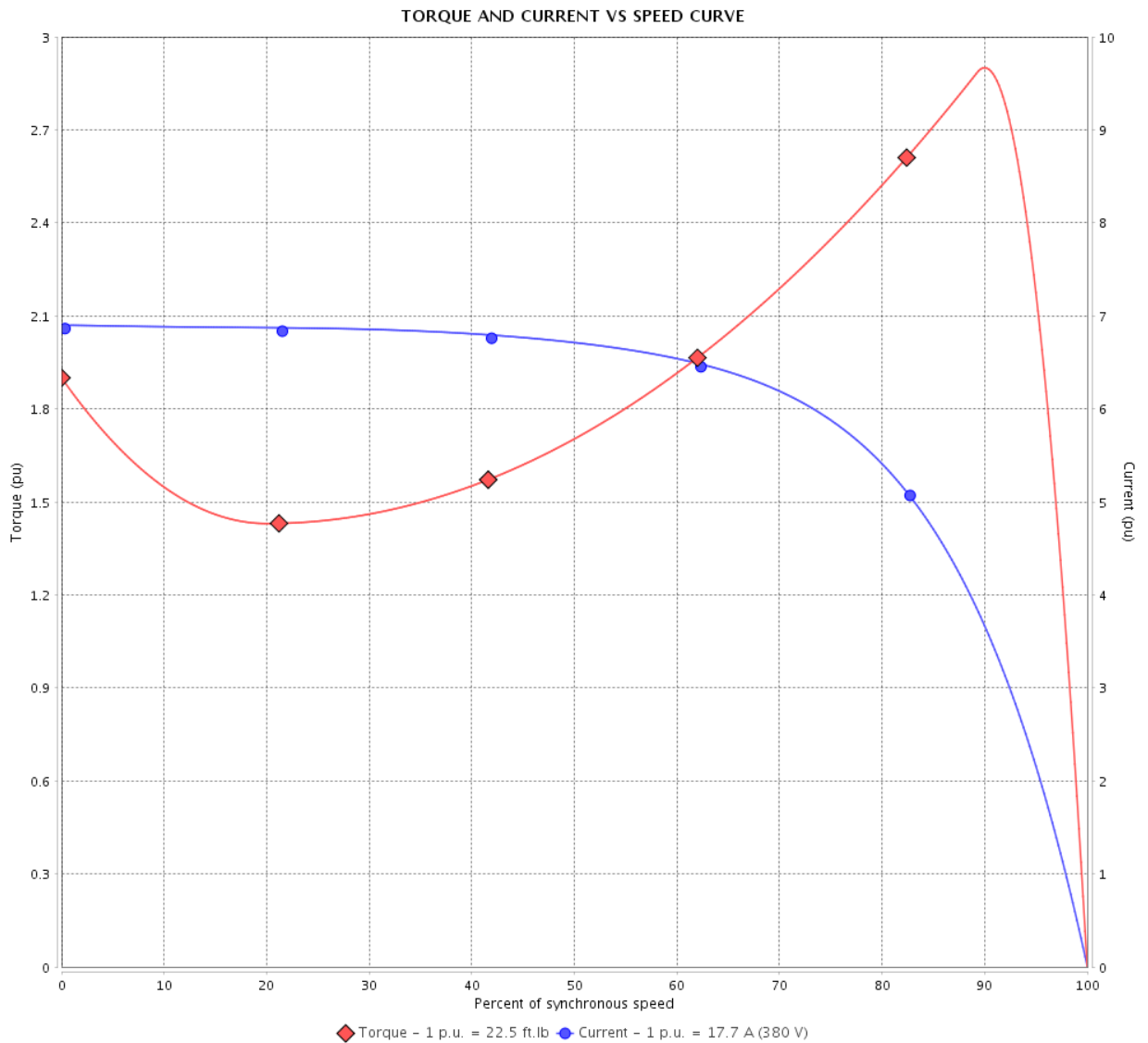
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : JP Pump NEMA Premium Efficiency Three-Phase

Product code : 14329721

Catalog # : 01536ET3E254JP-SG



Performance : 190/380 V 50 Hz 2P

Rated current : 35.4/17.7 A
 LRC : 6.9
 Rated torque : 22.5 ft.lb
 Locked rotor torque : 190 %
 Breakdown torque : 290 %
 Rated speed : 2920 rpm

Moment of inertia (J) : 0.8718 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	13/04/2022			

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



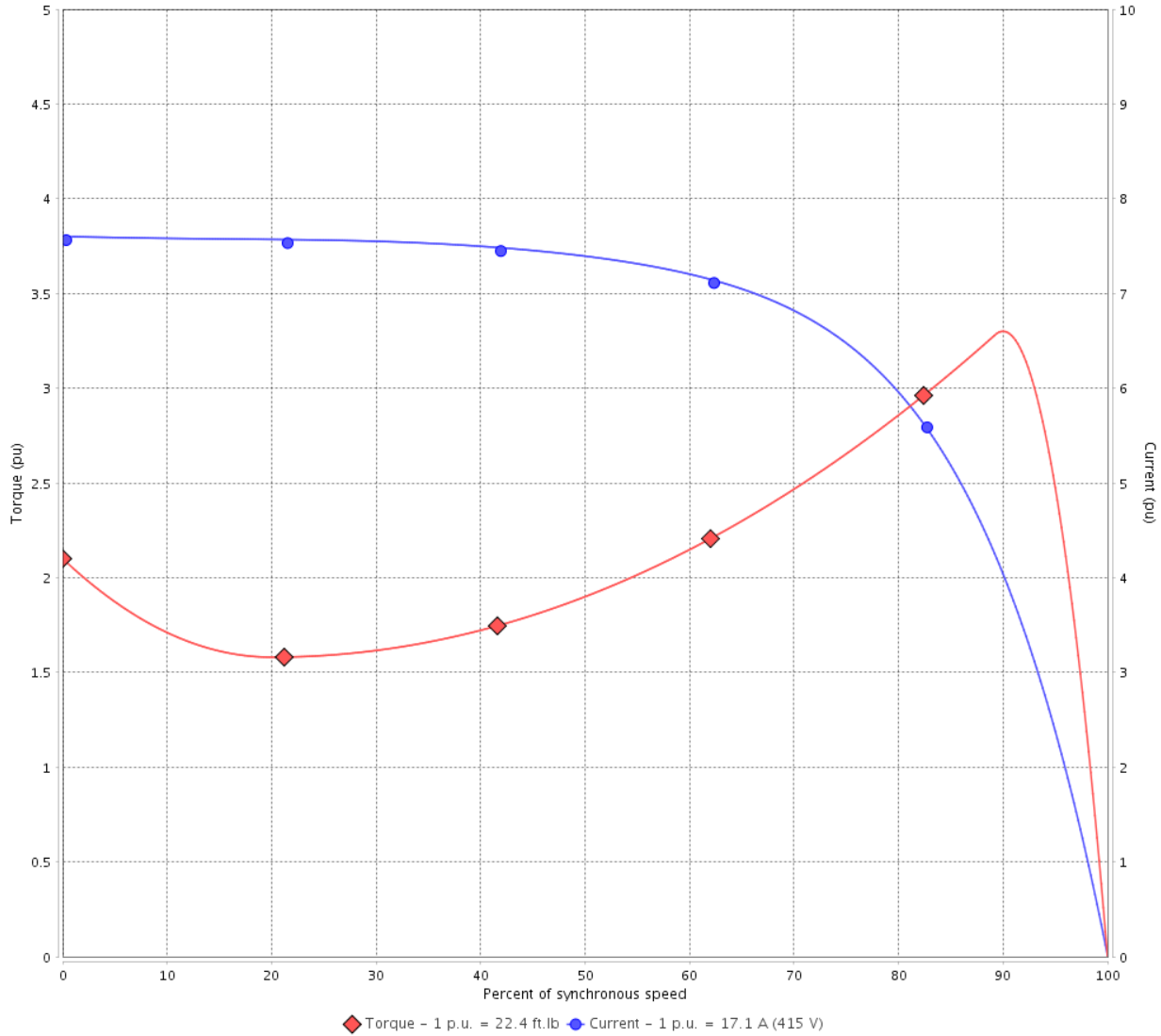
Customer :

Product line : JP Pump NEMA Premium Efficiency Three-Phase

Product code : 14329721

Catalog # : 01536ET3E254JP-SG

TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 2P

Rated current	: 32.3/17.1 A	Moment of inertia (J)	: 0.8718 sq.ft.lb
LRC	: 7.6	Duty cycle	: Cont.(S1)
Rated torque	: 22.4 ft.lb	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.00
Breakdown torque	: 330 %	Temperature rise	: 105 K
Rated speed	: 2930 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	13/04/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

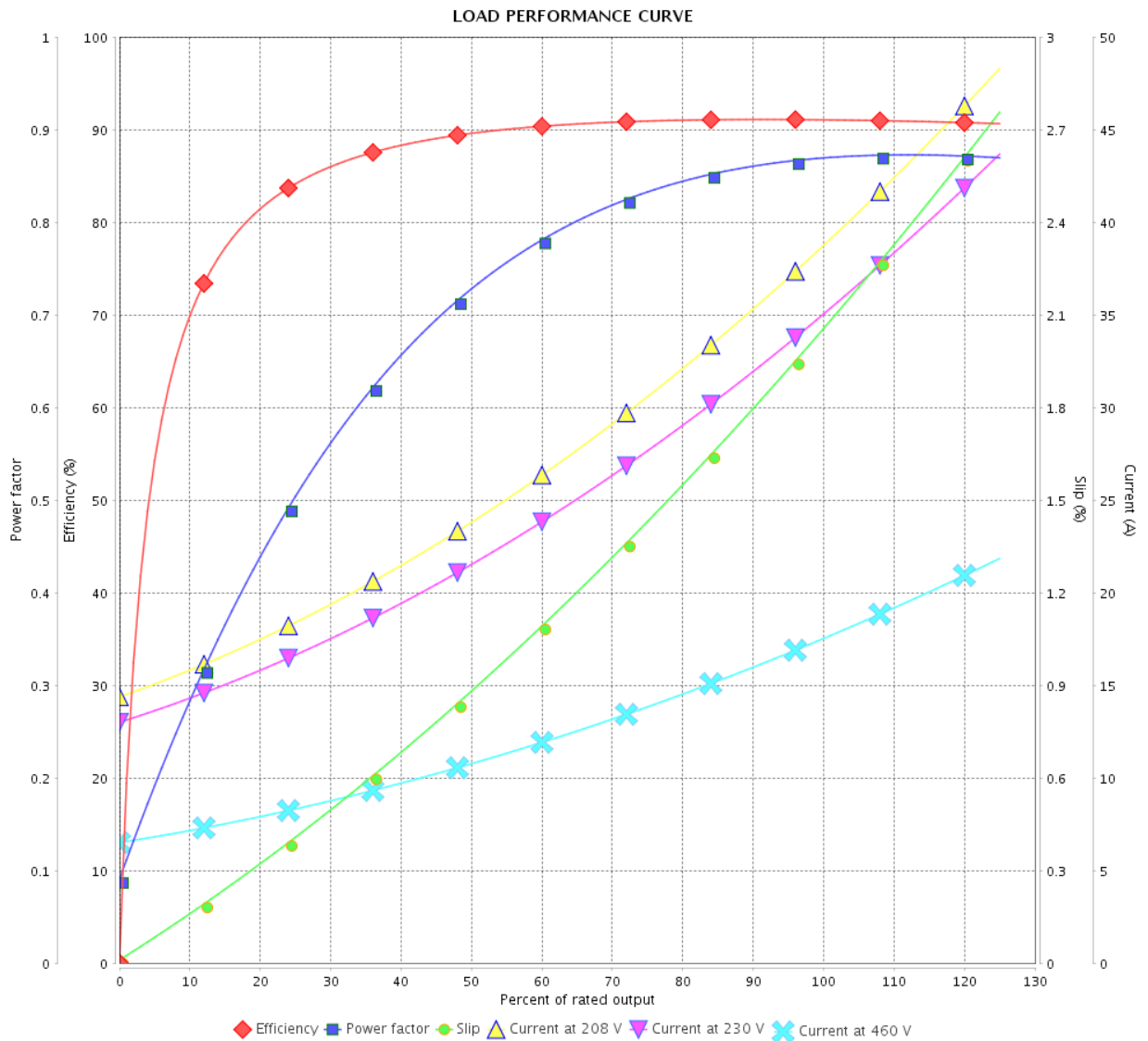


Customer :

Product line : JP Pump NEMA Premium Efficiency Three-Phase

Product code : 14329721

Catalog # : 01536ET3E254JP-SG



Performance : 230/460 V 60 Hz 2P

Rated current : 34.8/17.4 A
 LRC : 6.8
 Rated torque : 22.3 ft.lb
 Locked rotor torque : 200 %
 Breakdown torque : 300 %
 Rated speed : 3525 rpm

Moment of inertia (J) : 0.8718 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



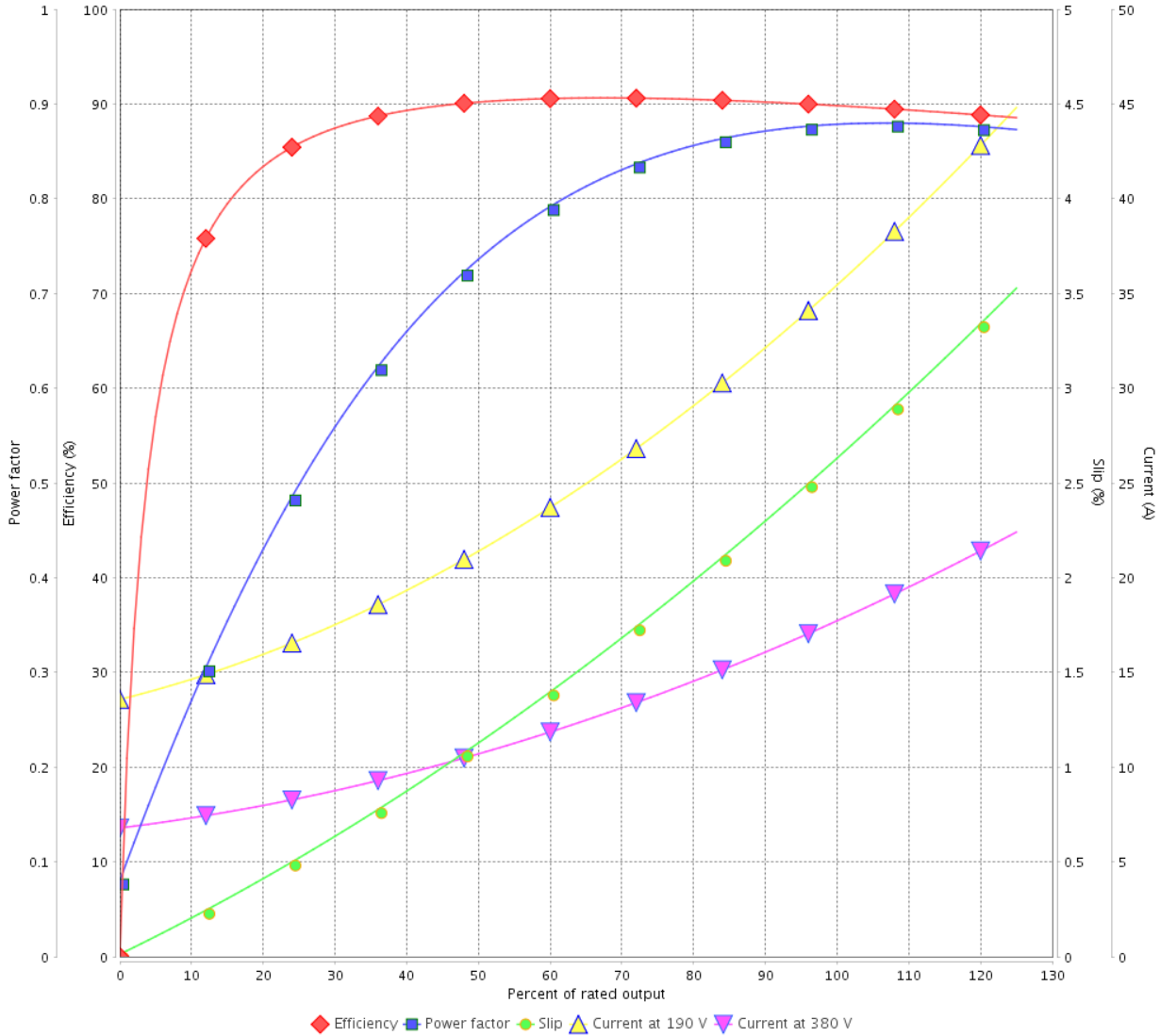
Customer :

Product line : JP Pump NEMA Premium
Efficiency Three-Phase

Product code : 14329721

Catalog # : 01536ET3E254JP-SG

LOAD PERFORMANCE CURVE



Performance : 190/380 V 50 Hz 2P

Rated current : 35.4/17.7 A
 LRC : 6.9
 Rated torque : 22.5 ft.lb
 Locked rotor torque : 190 %
 Breakdown torque : 290 %
 Rated speed : 2920 rpm

Moment of inertia (J) : 0.8718 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

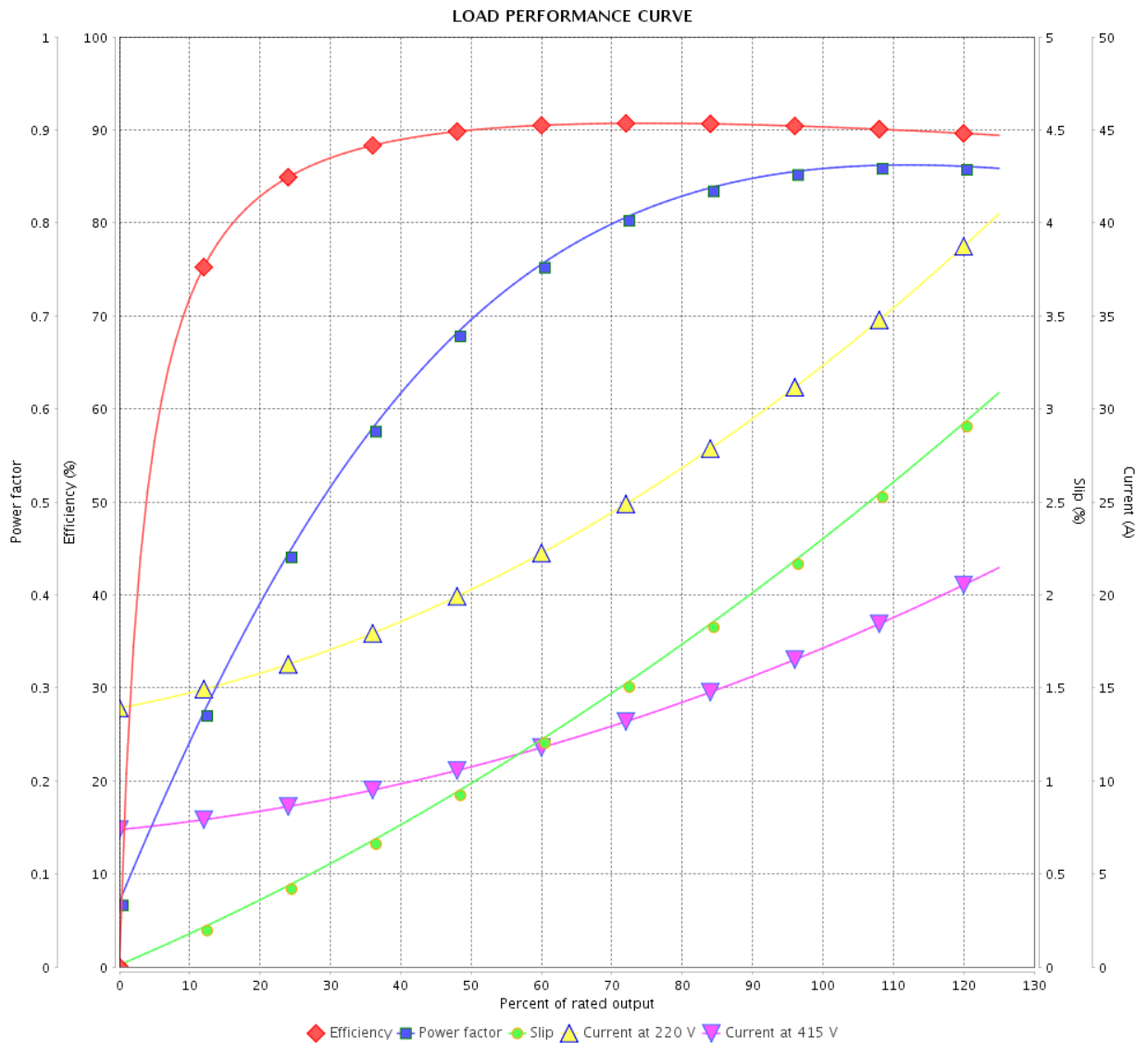


Customer :

Product line : JP Pump NEMA Premium
Efficiency Three-Phase

Product code : 14329721

Catalog # : 01536ET3E254JP-SG



Performance : 220/415 V 50 Hz 2P

Rated current : 32.3/17.1 A
 LRC : 7.6
 Rated torque : 22.4 ft.lb
 Locked rotor torque : 210 %
 Breakdown torque : 330 %
 Rated speed : 2930 rpm

Moment of inertia (J) : 0.8718 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			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 : 14329721

Catalog # : 01536ET3E254JP-SG

Performance : 230/460 V 60 Hz 2P

Rated current : 34.8/17.4 A
LRC : 6.8
Rated torque : 22.3 ft.lb
Locked rotor torque : 200 %
Breakdown torque : 300 %
Rated speed : 3525 rpm

Moment of inertia (J) : 0.8718 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

Heating constant

Cooling constant

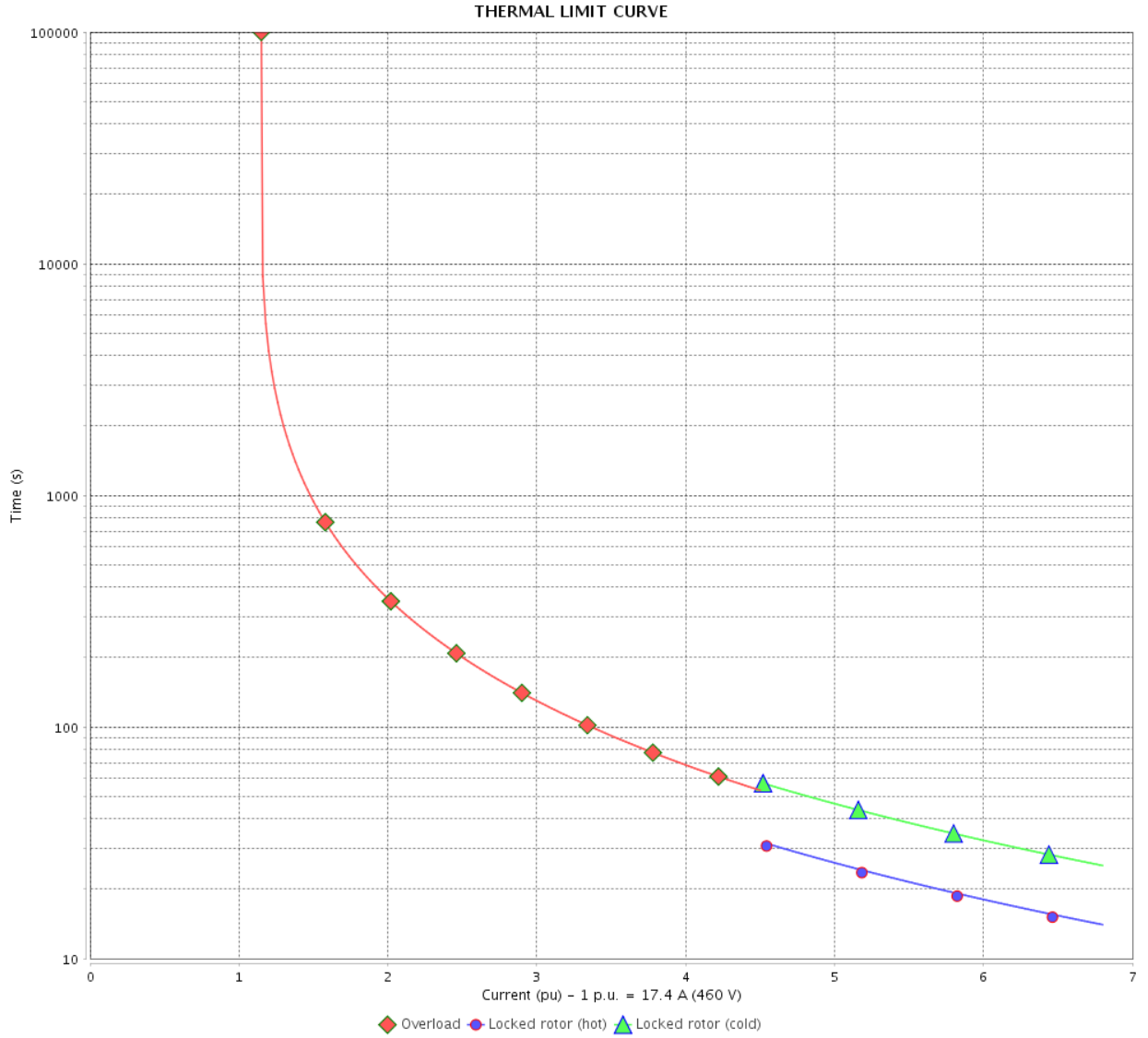
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	13/04/2022		8 / 16	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		9 / 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 : 14329721

Catalog # : 01536ET3E254JP-SG

Performance : 190/380 V 50 Hz 2P

Rated current : 35.4/17.7 A
LRC : 6.9
Rated torque : 22.5 ft.lb
Locked rotor torque : 190 %
Breakdown torque : 290 %
Rated speed : 2920 rpm

Moment of inertia (J) : 0.8718 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

Heating constant

Cooling constant

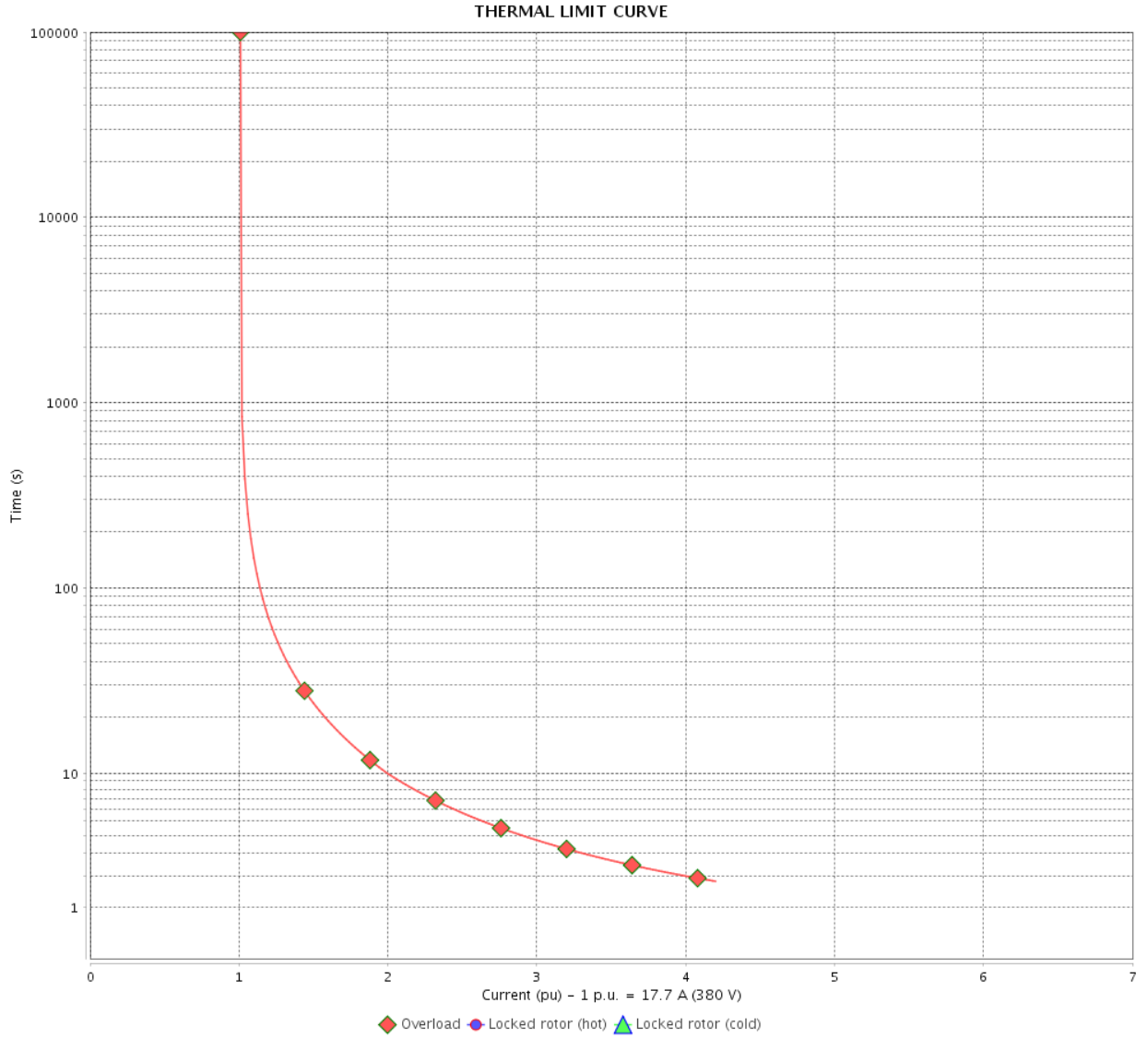
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	13/04/2022		10 / 16	

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 : 14329721

Catalog # : 01536ET3E254JP-SG

Performance : 220/415 V 50 Hz 2P

Rated current : 32.3/17.1 A
LRC : 7.6
Rated torque : 22.4 ft.lb
Locked rotor torque : 210 %
Breakdown torque : 330 %
Rated speed : 2930 rpm

Moment of inertia (J) : 0.8718 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

Heating constant

Cooling constant

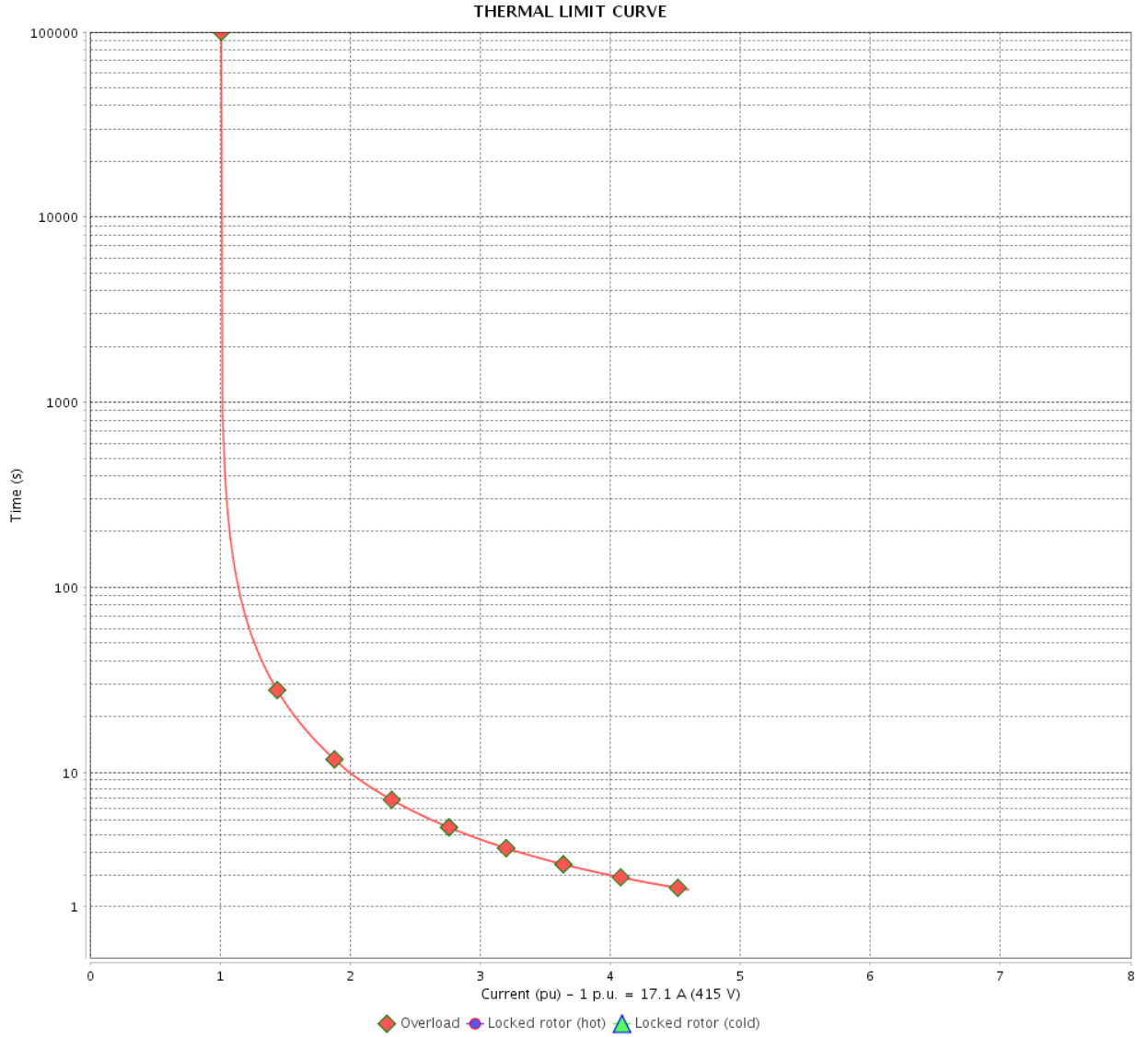
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	13/04/2022		12 / 16	

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



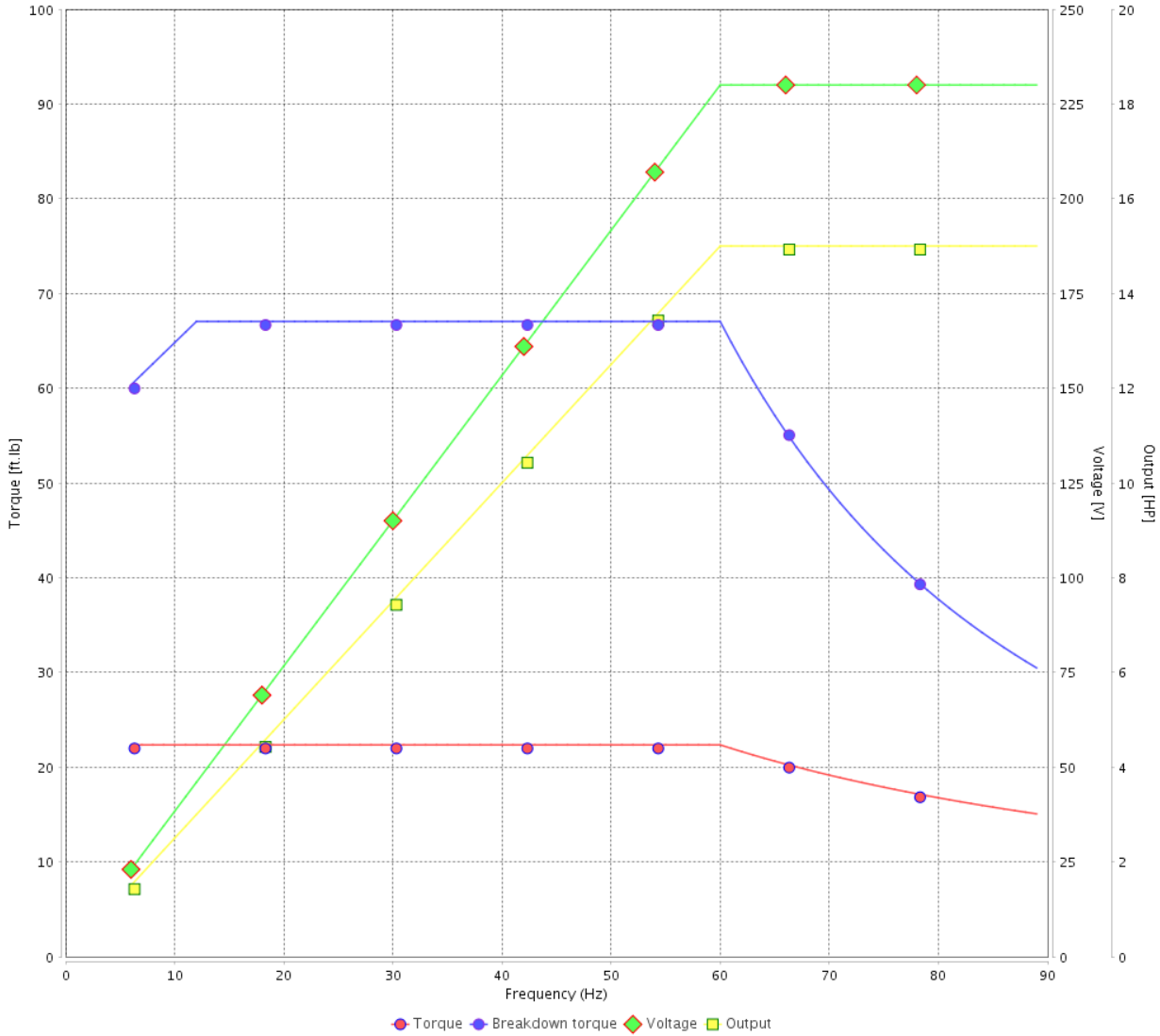
Customer :

Product line : JP Pump NEMA Premium Efficiency Three-Phase

Product code : 14329721

Catalog # : 01536ET3E254JP-SG

VFD OPERATION CURVE



Performance : 230/460 V 60 Hz 2P

Rated current : 34.8/17.4 A
 LRC : 6.8
 Rated torque : 22.3 ft.lb
 Locked rotor torque : 200 %
 Breakdown torque : 300 %
 Rated speed : 3525 rpm

Moment of inertia (J) : 0.8718 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	13/04/2022			

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

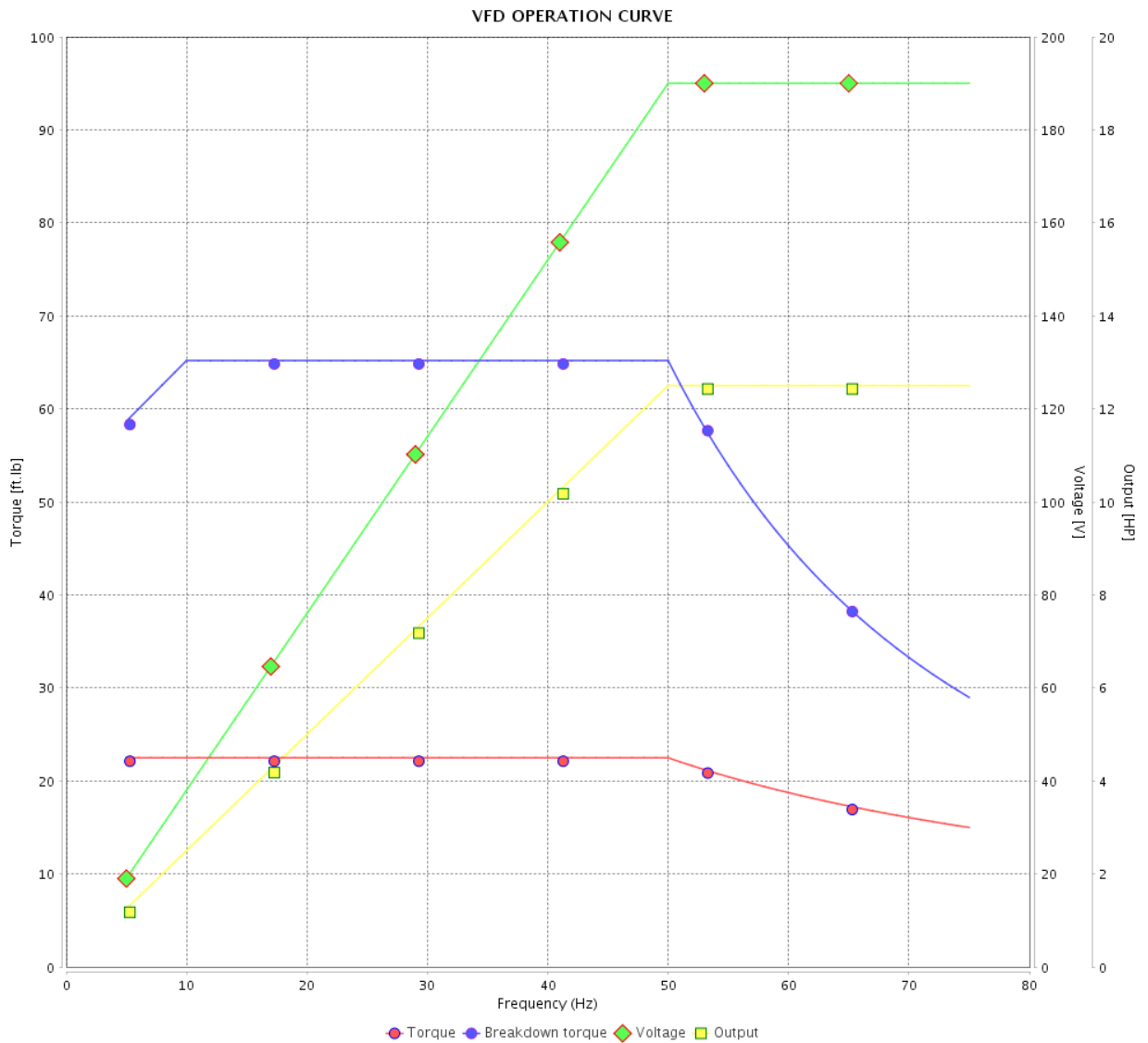


Customer :

Product line : JP Pump NEMA Premium Efficiency Three-Phase

Product code : 14329721

Catalog # : 01536ET3E254JP-SG



Performance : 190/380 V 50 Hz 2P

Rated current : 35.4/17.7 A
 LRC : 6.9
 Rated torque : 22.5 ft.lb
 Locked rotor torque : 190 %
 Breakdown torque : 290 %
 Rated speed : 2920 rpm

Moment of inertia (J) : 0.8718 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 15 / 16	Revision
Checked by				
Date	13/04/2022			

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



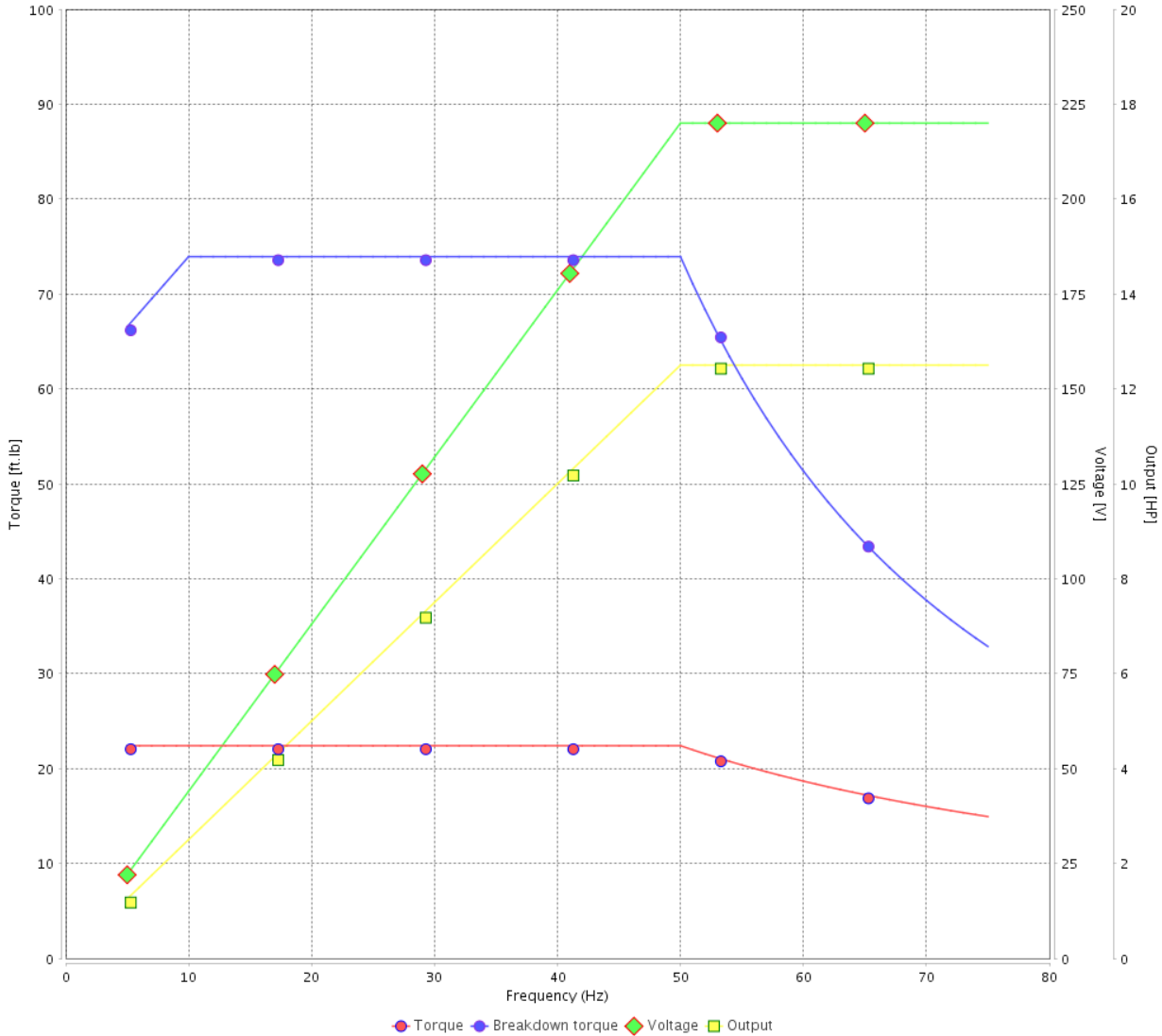
Customer :

Product line : JP Pump NEMA Premium Efficiency Three-Phase

Product code : 14329721

Catalog # : 01536ET3E254JP-SG

VFD OPERATION CURVE



Performance : 220/415 V 50 Hz 2P

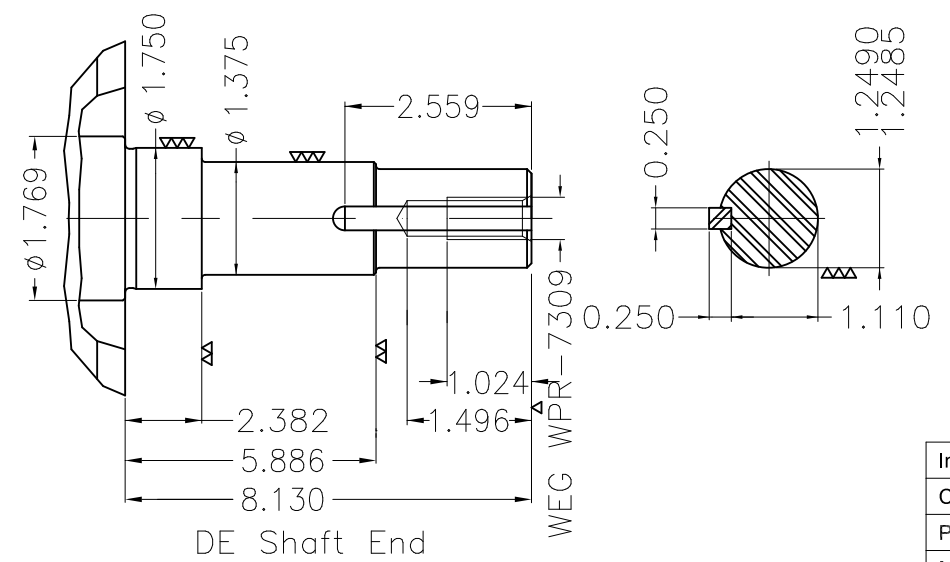
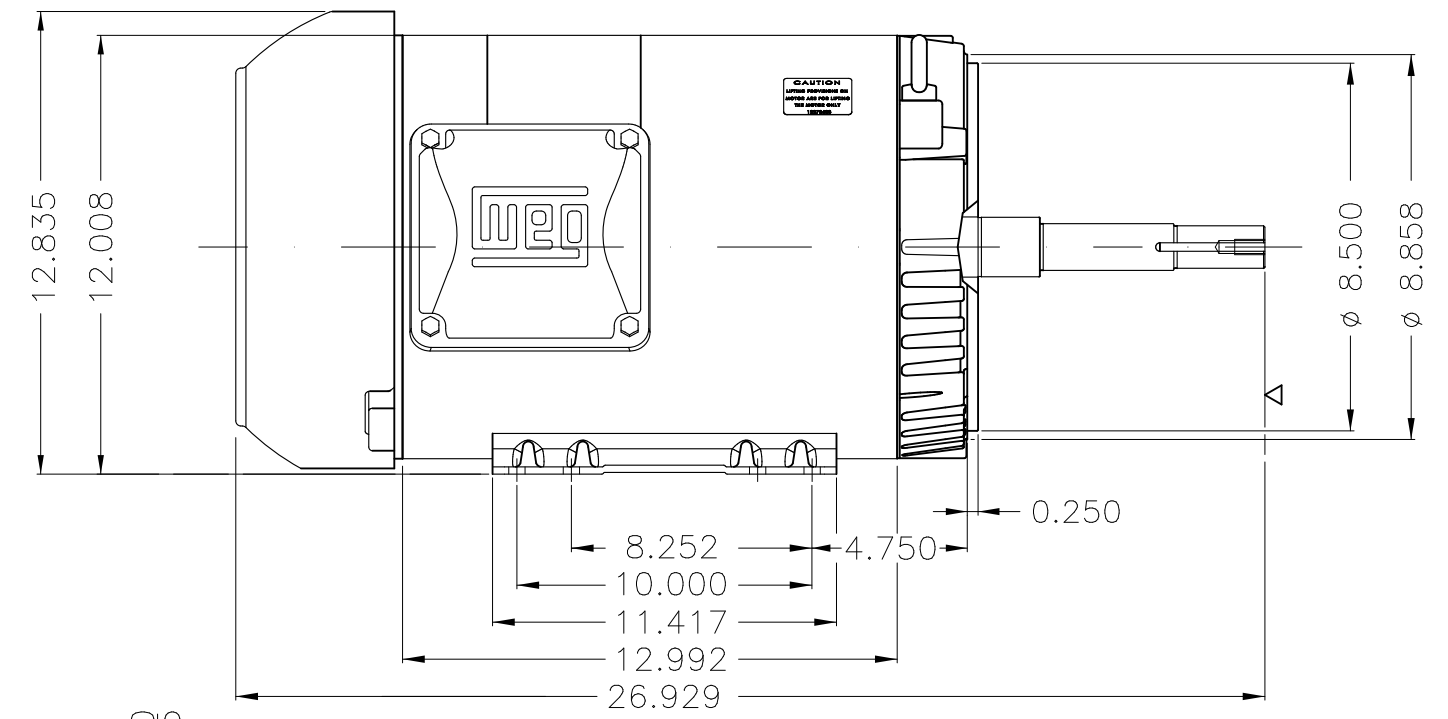
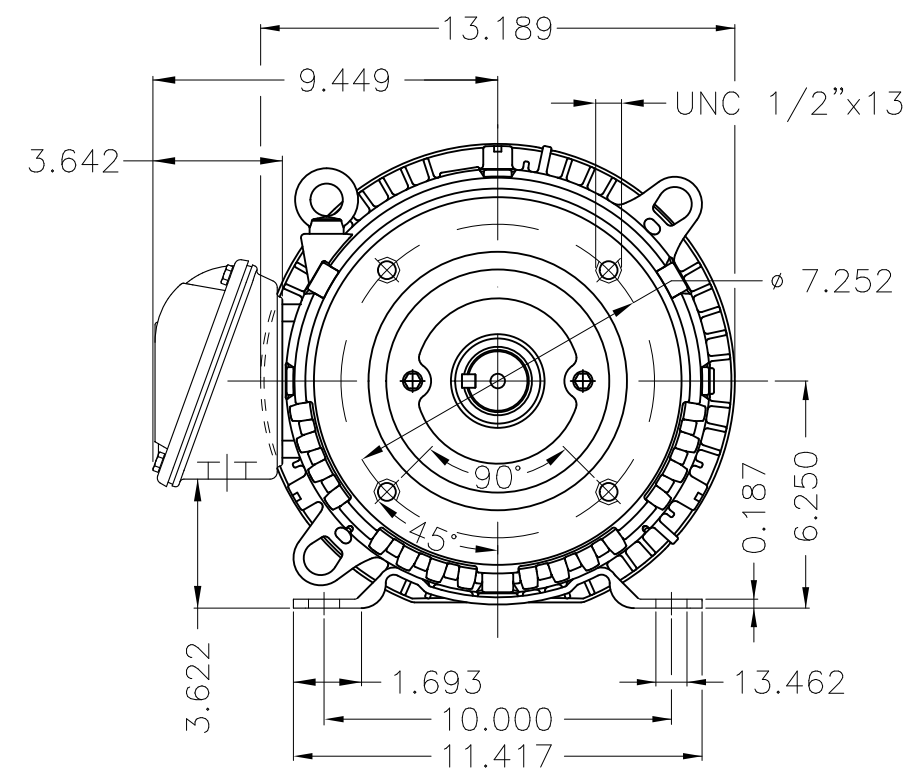
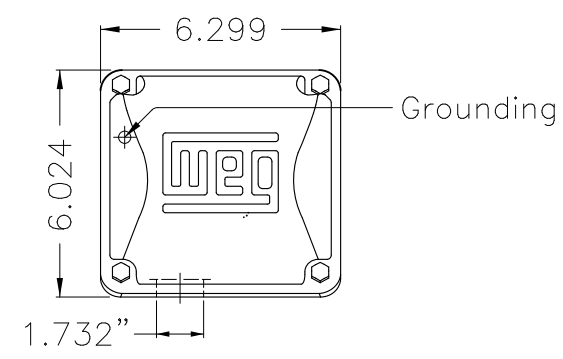
Rated current : 32.3/17.1 A
 LRC : 7.6
 Rated torque : 22.4 ft.lb
 Locked rotor torque : 210 %
 Breakdown torque : 330 %
 Rated speed : 2930 rpm

Moment of inertia (J) : 0.8718 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 16 / 16	Revision
Checked by				
Date	13/04/2022			

1 2 3 4 5 6

A
B
C
D
E



EUNC 1/2"-13 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	PIRBUSER	THREE PH. MOTOR ROLLED STEEL CLOSE COUPLED PUMP JP 50 DE PREM LFA					
CHECKED		FRAME 254/6JP IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	WDD	SHEET	1 / 1	

15 HP 02 Poles 60 Hz

Dimensions in inches XME A3