

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :				
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	14484731	
		Catalog # :	00136OT3E143T-S	
Frame	: 143/5T	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	: 25.8 lb	
Design	: B	Moment of inertia (J)	: 0.0643 sq.ft.lb	
Output [HP]	1	1	1	
Poles	2	2	2	
Frequency [Hz]	60	50	50	
Rated voltage [V]	230/460	190/380	220/415	
Rated current [A]	2.76/1.38	3.18/1.59	2.91/1.54	
L. R. Amperes [A]	22.9/11.5	21.0/10.5	20.9/11.1	
LRC [A]	8.3x(Code L)	6.6x(Code H)	7.2x(Code J)	
No load current [A]	1.28/0.640	1.39/0.696	1.51/0.798	
Rated speed [RPM]	3510	2890	2905	
Slip [%]	2.50	3.67	3.17	
Rated torque [ft.lb]	1.50	1.82	1.81	
Locked rotor torque [%]	210	180	200	
Breakdown torque [%]	330	260	290	
Service factor		1.15	1.15	
Temperature rise	80 K	80 K	80 K	
Locked rotor time	39s (cold) 22s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)	
Noise level ²	62.0 dB(A)	60.0 dB(A)	60.0 dB(A)	
Efficiency (%)	25%	72.4	79.0	77.2
	50%	74.0	79.1	77.7
	75%	78.5	81.1	80.7
	100%	80.0	80.7	80.8
Power Factor	25%	0.41	0.45	0.40
	50%	0.66	0.73	0.68
	75%	0.78	0.84	0.80
	100%	0.85	0.89	0.87
Bearing type	: <u>Drive end</u> 6205 ZZ <u>Non drive end</u> 6203 ZZ	Foundation loads		
Sealing	: Without Without Bearing Seal Bearing Seal	Max. traction	: 32 lb	
		Max. compression	: 58 lb	
Lubrication interval	: - -			
Lubricant amount	: - -			
Lubricant type	: Mobil Polyrex EM			
Notes USABLE @208V 3.05A SF 1.00 SFA 3.05A				
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.		
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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



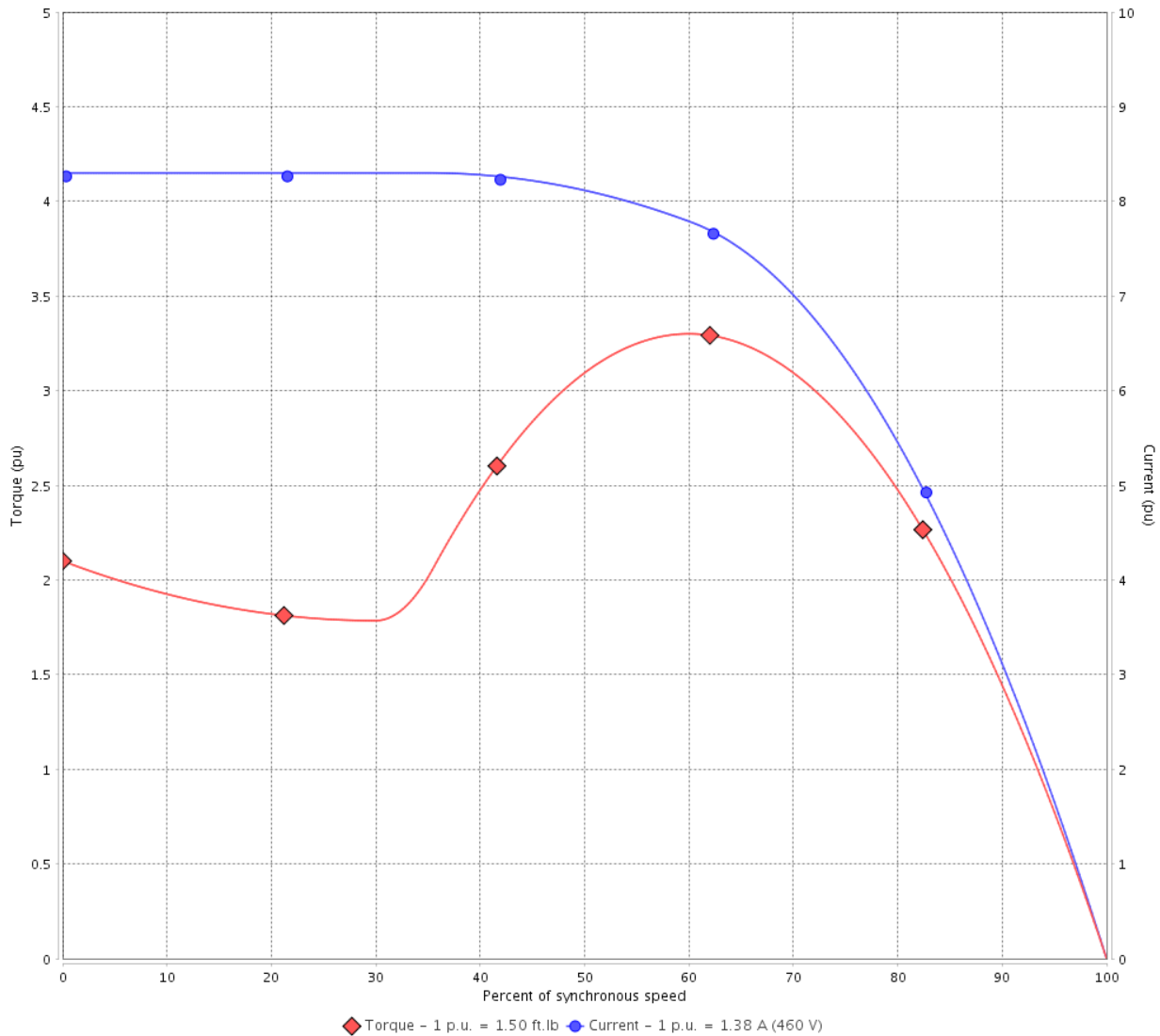
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14484731

Catalog # : 00136OT3E143T-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 2P

Rated current	: 2.76/1.38 A	Moment of inertia (J)	: 0.0643 sq.ft.lb
LRC	: 8.3	Duty cycle	: Cont.(S1)
Rated torque	: 1.50 ft.lb	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	:
Breakdown torque	: 330 %	Temperature rise	: 80 K
Rated speed	: 3510 rpm	Design	: B

Locked rotor time : 39s (cold) 22s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



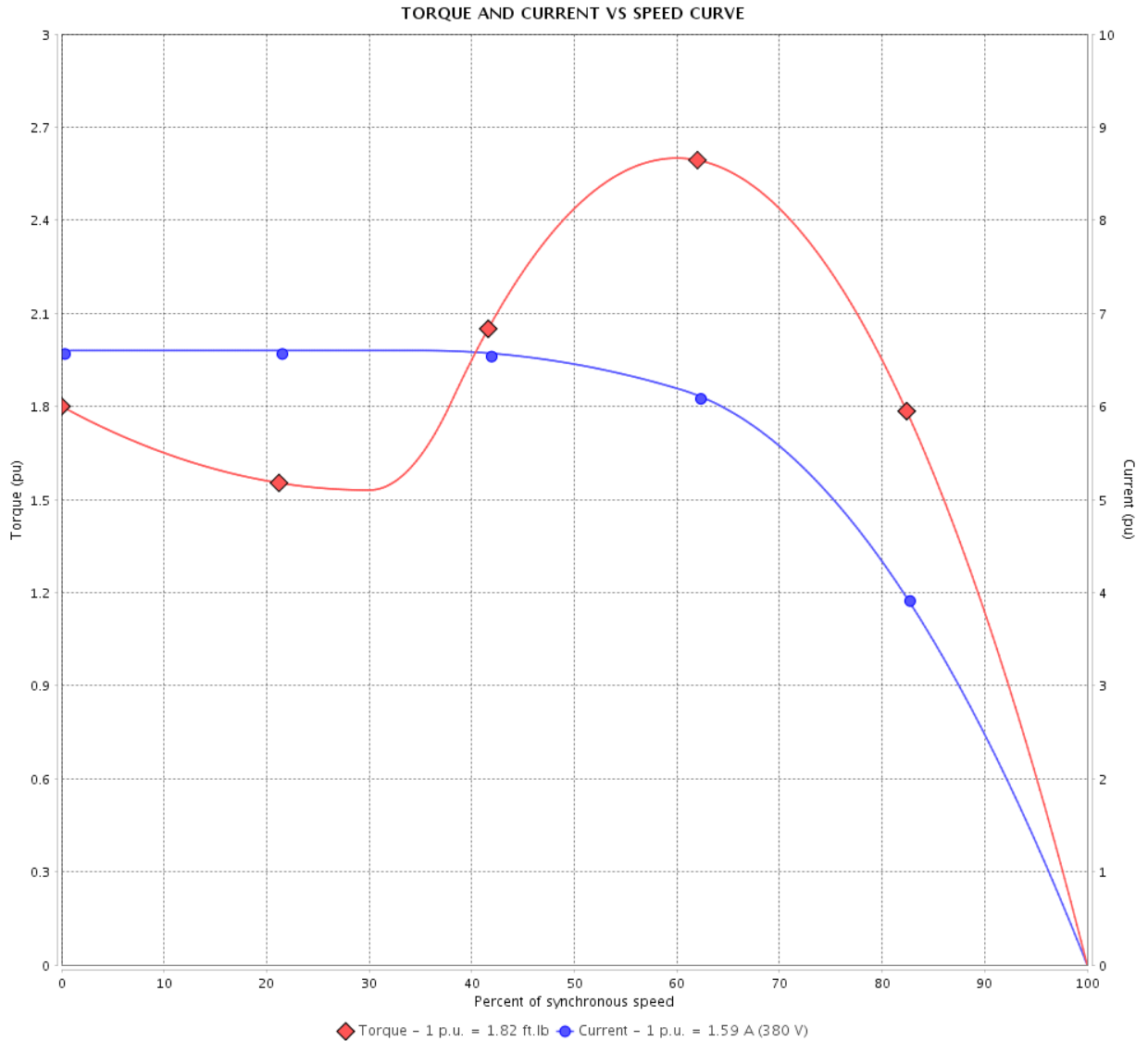
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14484731

Catalog # : 00136OT3E143T-S



Performance : 190/380 V 50 Hz 2P

Rated current : 3.18/1.59 A
 LRC : 6.6
 Rated torque : 1.82 ft.lb
 Locked rotor torque : 180 %
 Breakdown torque : 260 %
 Rated speed : 2890 rpm

Moment of inertia (J) : 0.0643 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)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



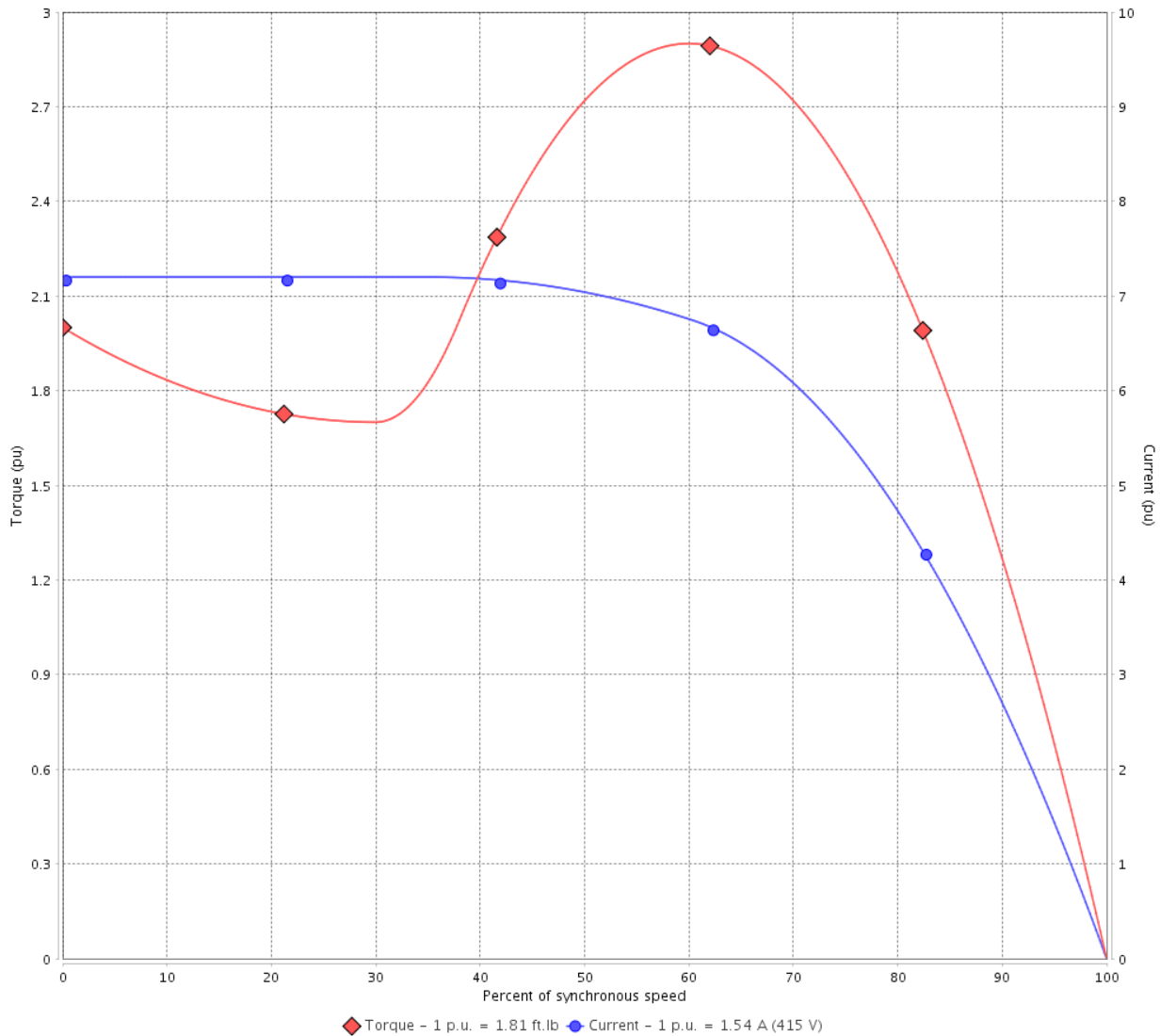
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14484731

Catalog # : 001360T3E143T-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 2P

Rated current	: 2.91/1.54 A	Moment of inertia (J)	: 0.0643 sq.ft.lb
LRC	: 7.2	Duty cycle	: Cont.(S1)
Rated torque	: 1.81 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.15
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 2905 rpm	Design	: B

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

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

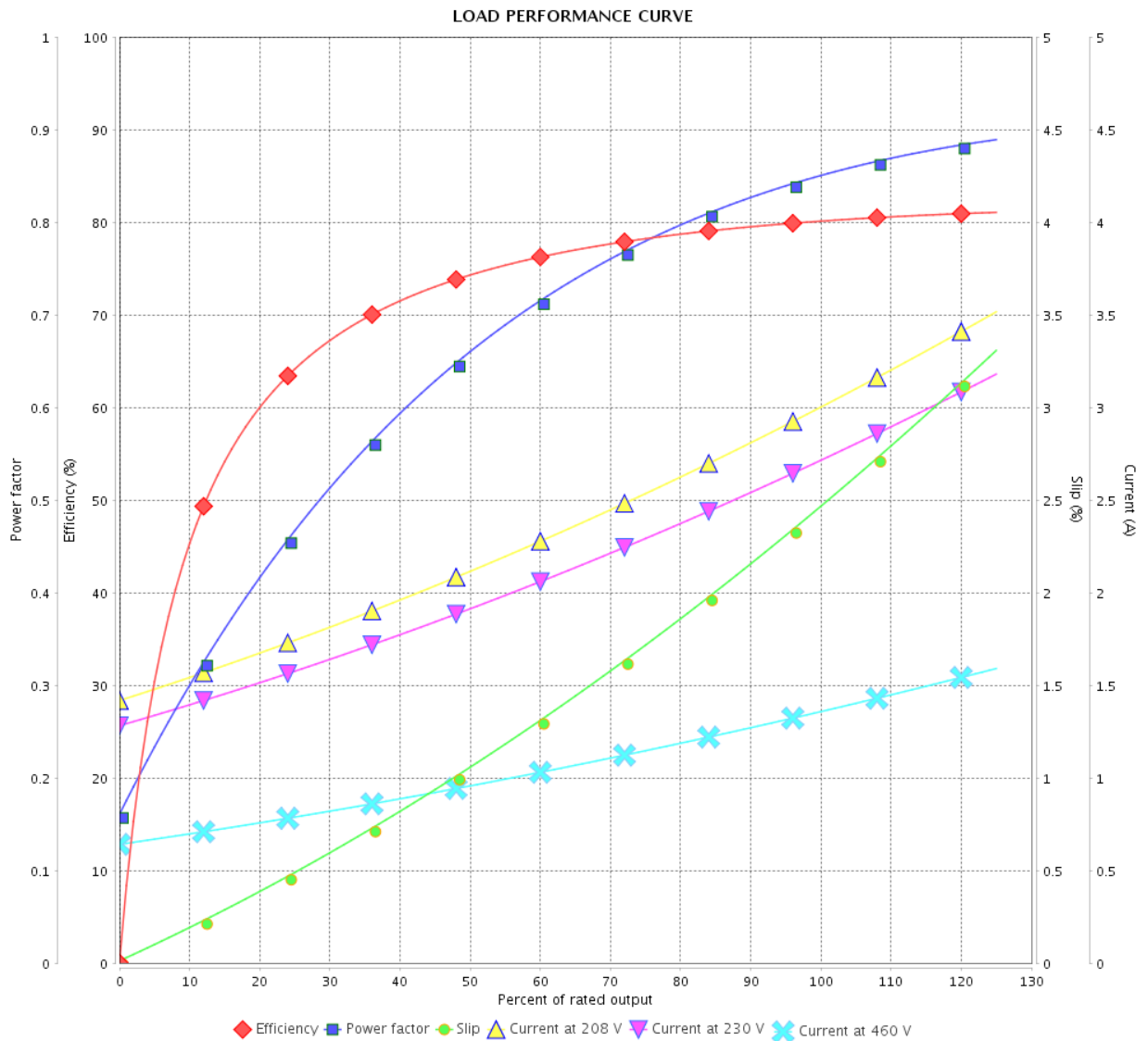


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Product code : 14484731

Catalog # : 00136OT3E143T-S



Performance : 230/460 V 60 Hz 2P

Rated current : 2.76/1.38 A
 LRC : 8.3
 Rated torque : 1.50 ft.lb
 Locked rotor torque : 210 %
 Breakdown torque : 330 %
 Rated speed : 3510 rpm

Moment of inertia (J) : 0.0643 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : B

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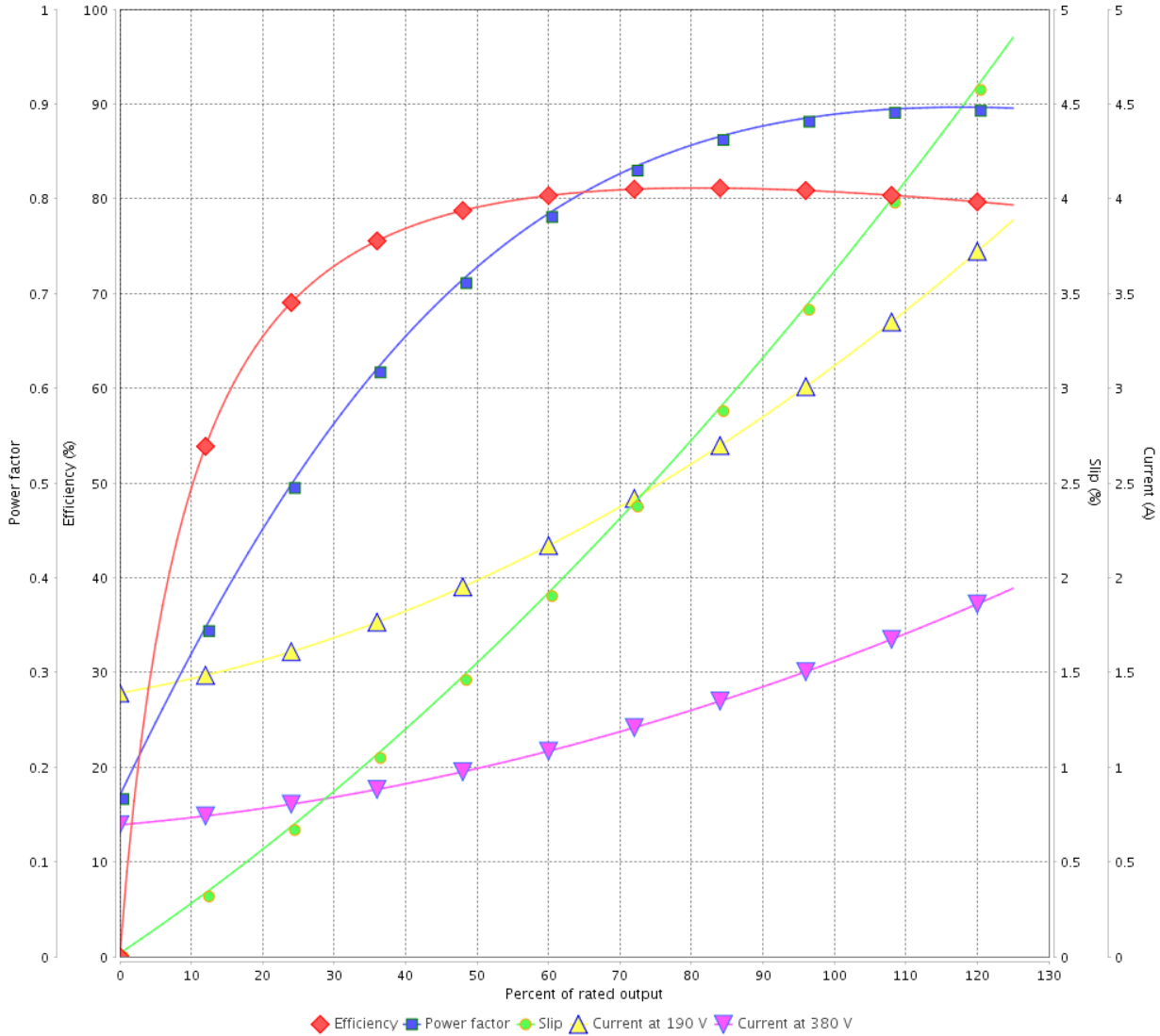
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LOAD PERFORMANCE CURVE



Performance : 190/380 V 50 Hz 2P

Rated current : 3.18/1.59 A
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 Locked rotor torque : 180 %
 Breakdown torque : 260 %
 Rated speed : 2890 rpm

Moment of inertia (J) : 0.0643 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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Three Phase Induction Motor - Squirrel Cage

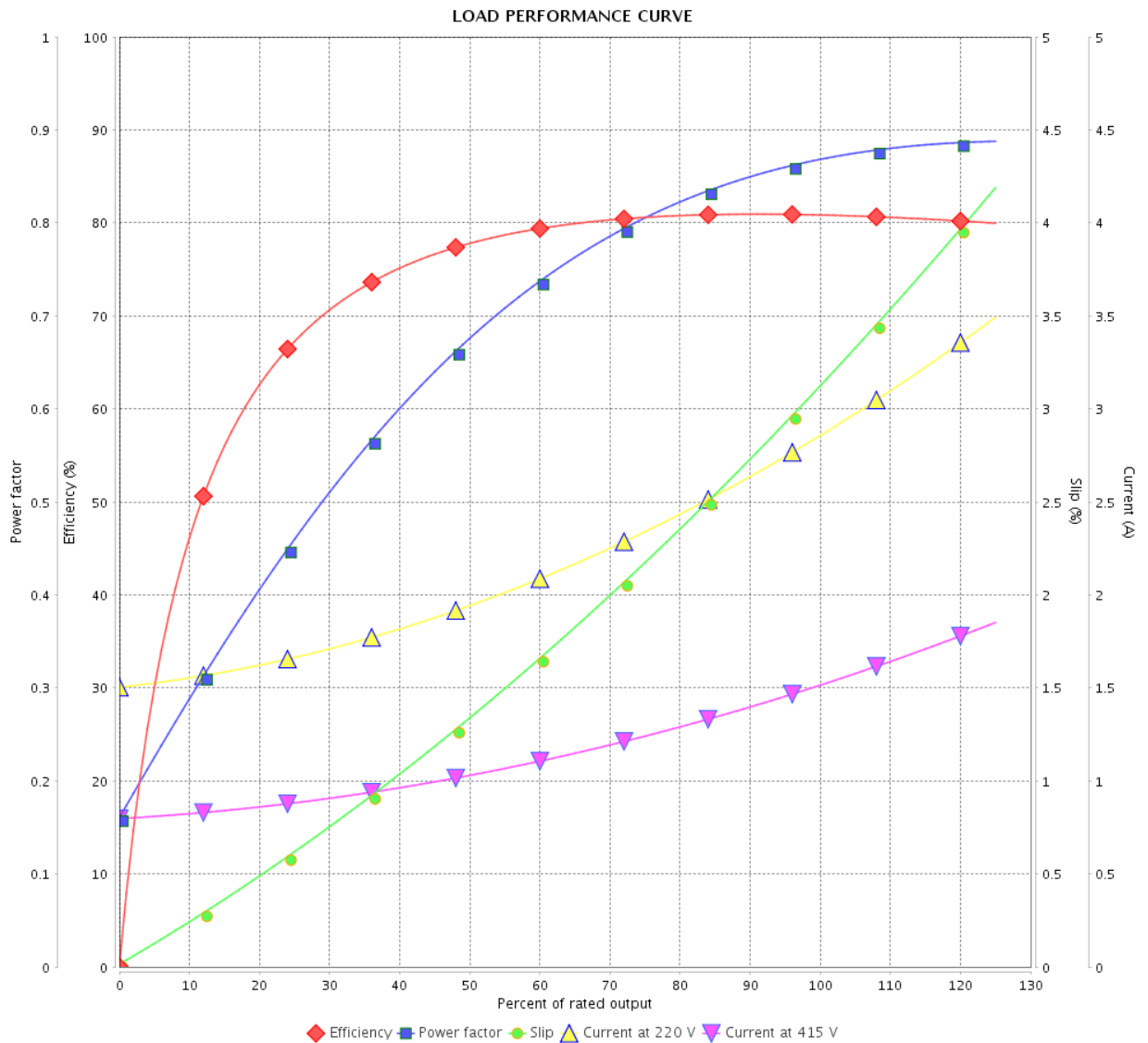


Customer : _____

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14484731

Catalog # : 00136OT3E143T-S



Performance : 220/415 V 50 Hz 2P

Rated current : 2.91/1.54 A
 LRC : 7.2
 Rated torque : 1.81 ft.lb
 Locked rotor torque : 200 %
 Breakdown torque : 290 %
 Rated speed : 2905 rpm

Moment of inertia (J) : 0.0643 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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THERMAL LIMIT CURVE



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LRC : 8.3	Duty cycle : Cont.(S1)
Rated torque : 1.50 ft.lb	Insulation class : F
Locked rotor torque : 210 %	Service factor :
Breakdown torque : 330 %	Temperature rise : 80 K
Rated speed : 3510 rpm	Design : B

Heating constant

Cooling constant

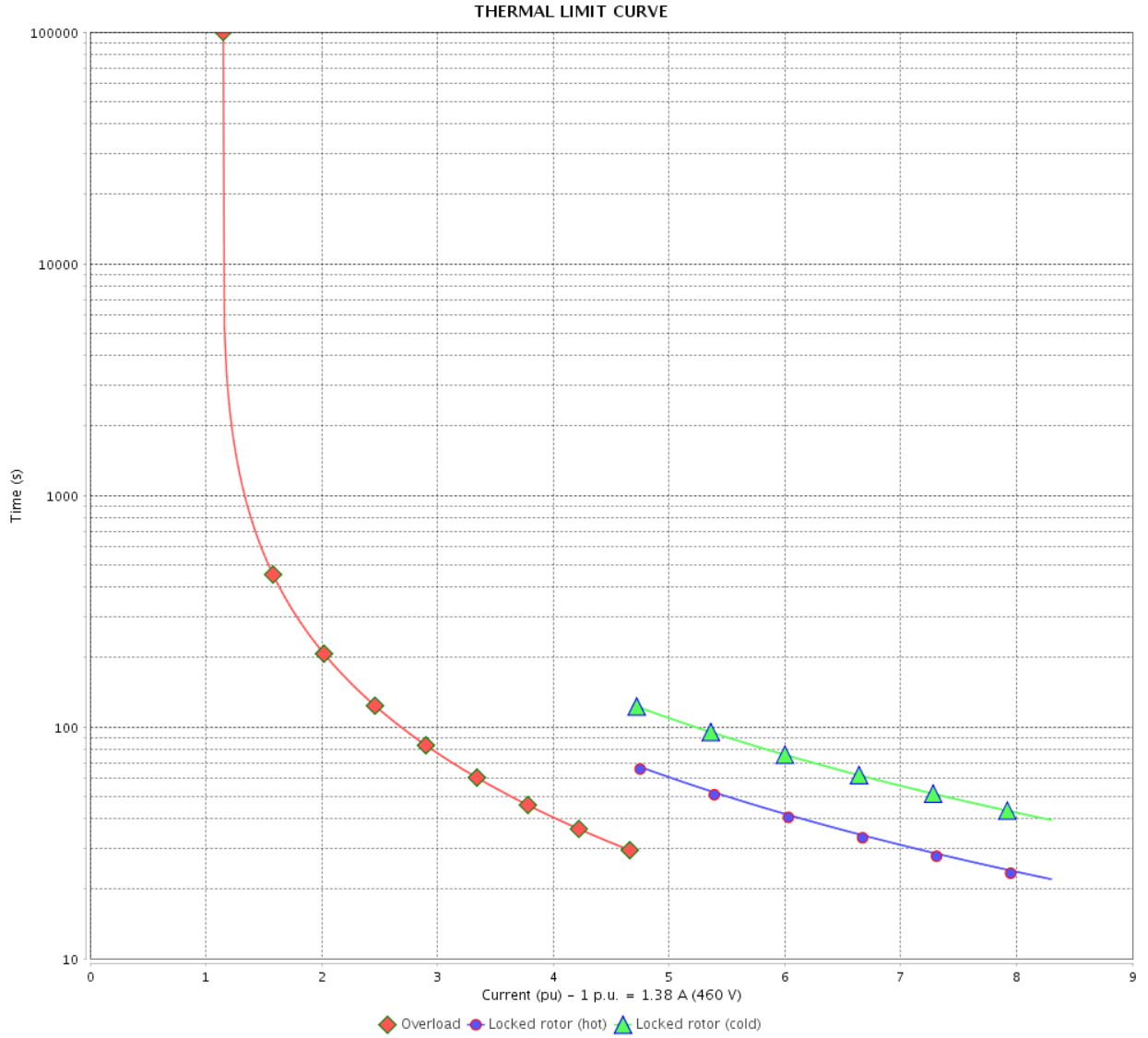
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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LRC : 6.6	Duty cycle : Cont.(S1)
Rated torque : 1.82 ft.lb	Insulation class : F
Locked rotor torque : 180 %	Service factor : 1.15
Breakdown torque : 260 %	Temperature rise : 80 K
Rated speed : 2890 rpm	Design : B

Heating constant

Cooling constant

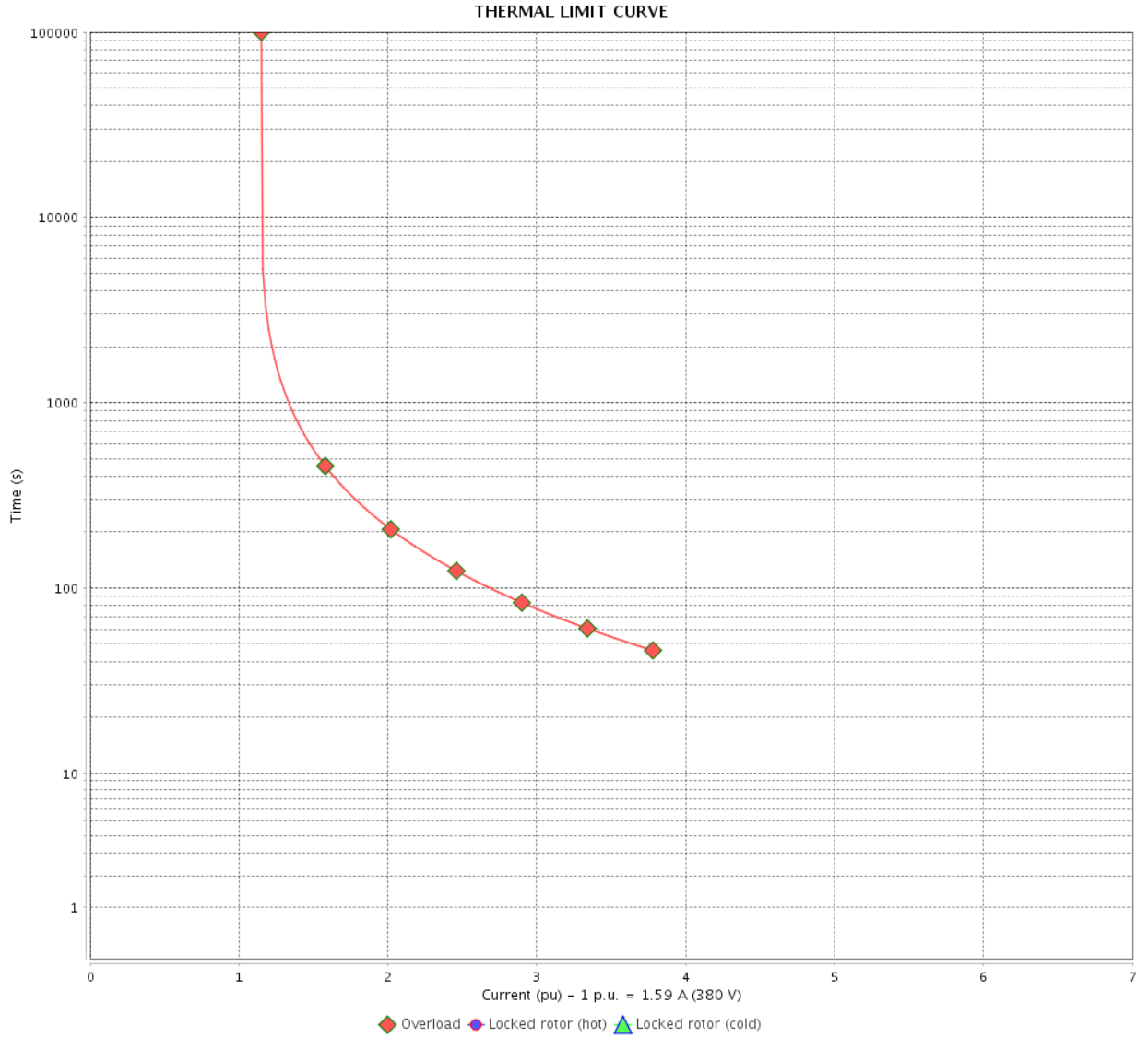
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Three Phase Induction Motor - Squirrel Cage



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Catalog # : 00136OT3E143T-S

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Rated current : 2.91/1.54 A	Moment of inertia (J) : 0.0643 sq.ft.lb
LRC : 7.2	Duty cycle : Cont.(S1)
Rated torque : 1.81 ft.lb	Insulation class : F
Locked rotor torque : 200 %	Service factor : 1.15
Breakdown torque : 290 %	Temperature rise : 80 K
Rated speed : 2905 rpm	Design : B

Heating constant

Cooling constant

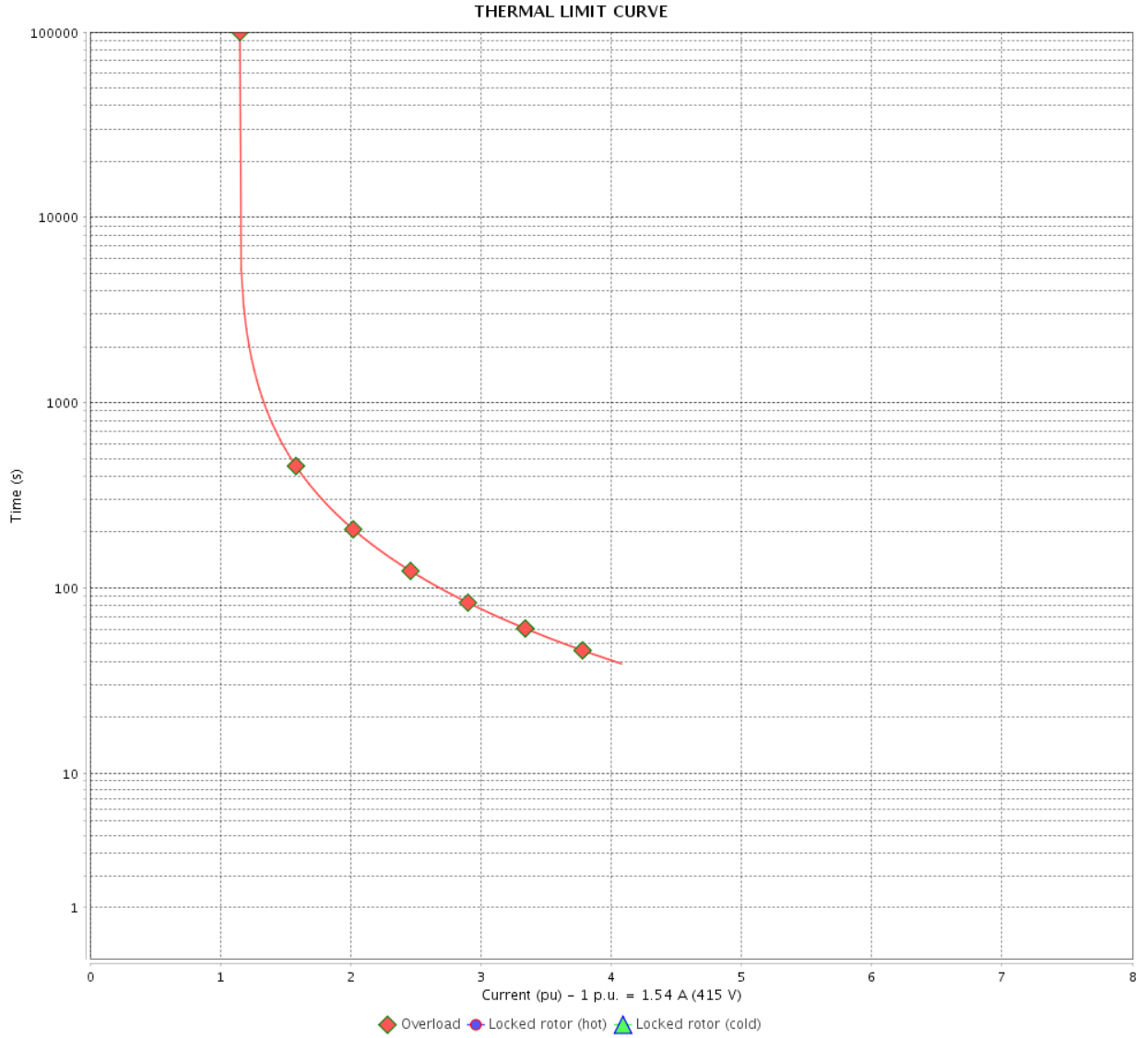
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THERMAL LIMIT CURVE

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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

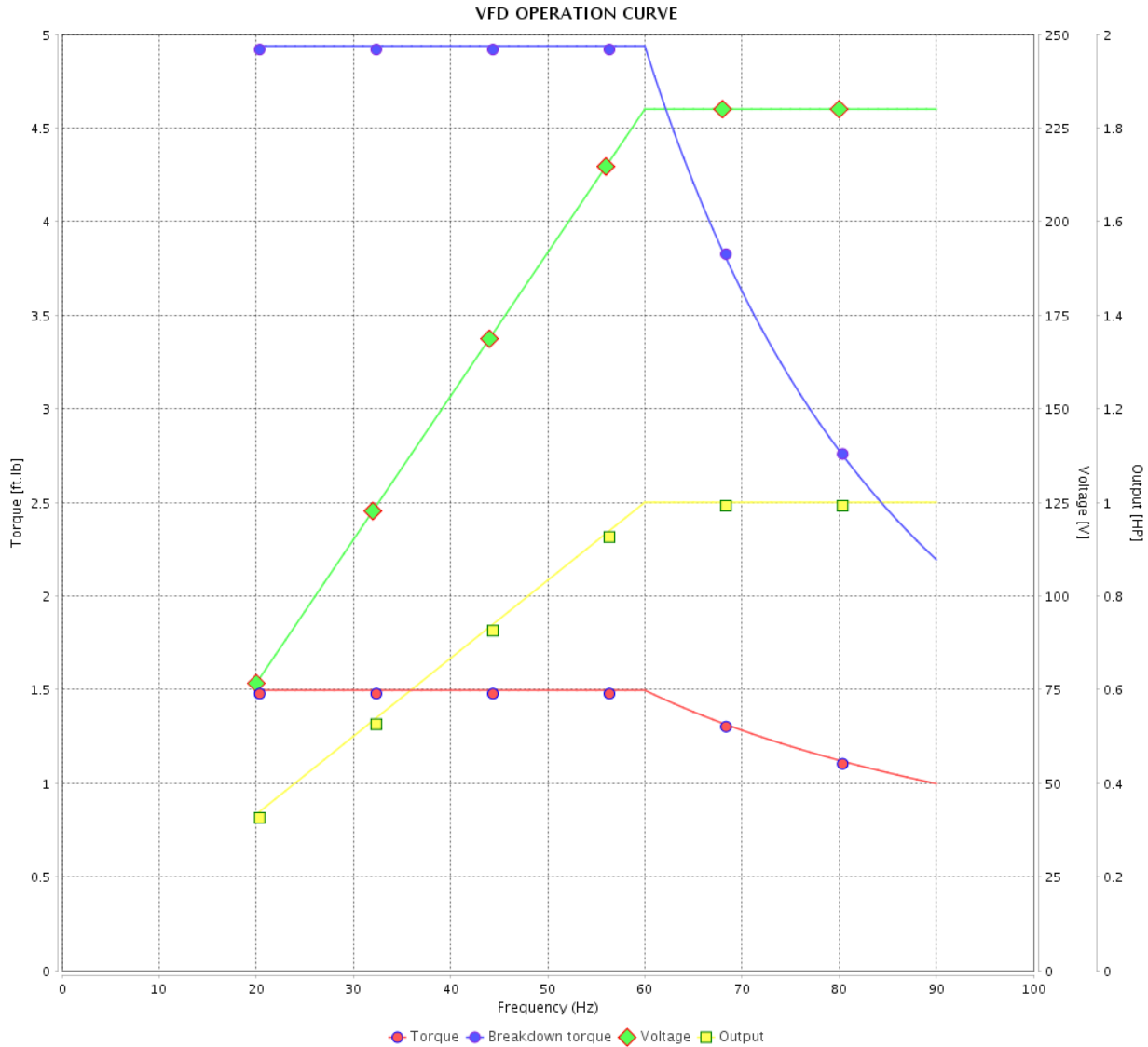


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 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : B

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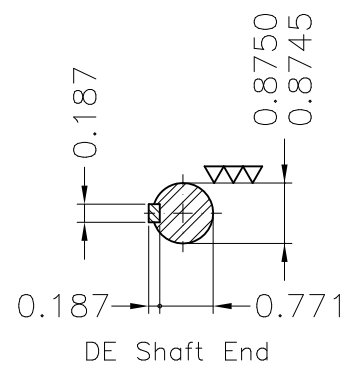
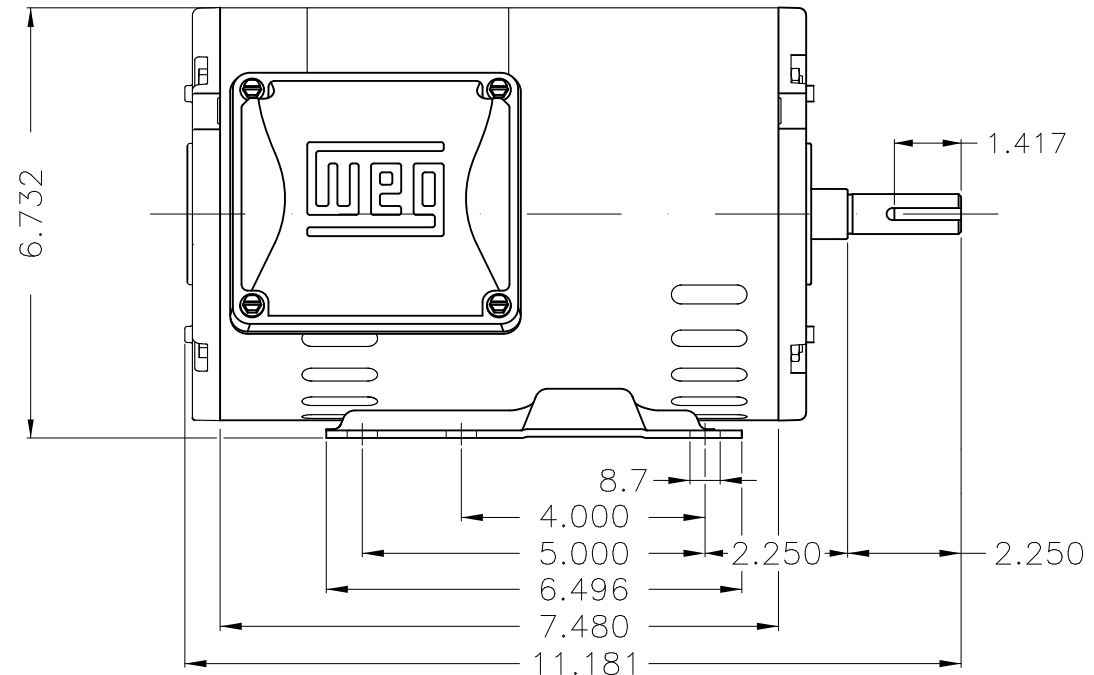
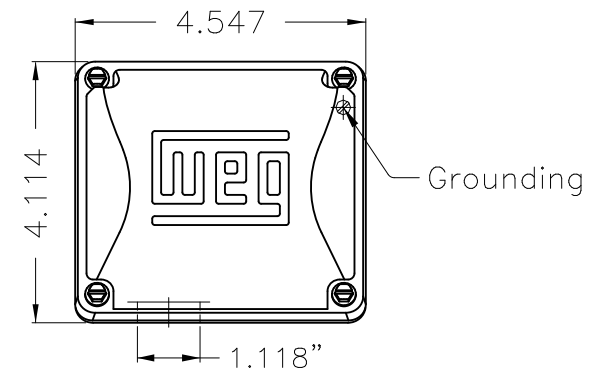
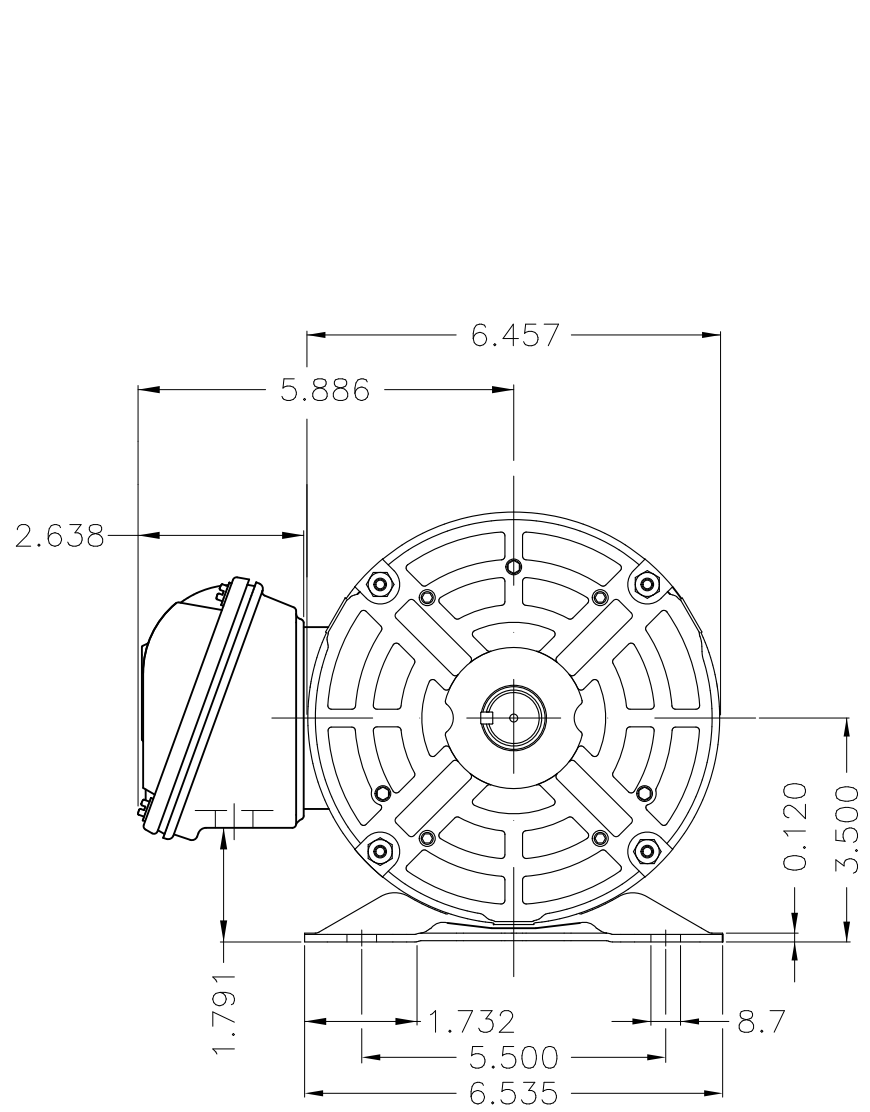
A

B

C

D

E

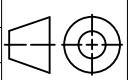


Dimensions in inches

Color Munsell N 1 matte black

Painting plan 207N

Mounting F-1/B3R(D)

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	 THREE PH. MOTOR ROLLED STEEL PREM. EFF. FRAME 143/5T IP21 ODP					
CHECKED							
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET		1 / 1	

PREVIEW
WDD



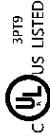
1 HP 02 Poles 60 Hz

A

XME A3



NEMA
Premium



MADE IN MEXICO

MAT: 14484731 CC029A
W01.T00IC0X0N
MODEL 001360T3E143T-S
22ABR2021 B/N:

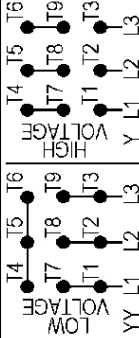


PH 3	Hz 60	HP 1.0
FR 143/5T		KW 0.75
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 2.76/1.38
INS CL F AT 80K		SFA 3.17/1.59
AMB 40°C	DES B	SF 1.15
ENCL ODP	CODE L	PF 0.85
USABLE @ 208V 3.05A		RPM 3510
SF1.00		NEMA NOM. EFF 80.0%

ALTERNATE RATING: 1.0HP 50Hz 190-220/380-415V SF1.15
3.18-2.91/1.59-1.54A 2890RPM EFF 80.7% (IE3) IEC 60034-1

Inverter duty motor For 80Hz use on VPWM 1000:1 VT, 3:1 CT

DE 6205-ZZ	ODE 6203-ZZ	MOBIL POLYREX EM
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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.

