

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :		
Product line	: NEMA Premium Efficiency Three-Phase	
Product code :	14827713	
Catalog # :	00136ET3E143T-S	
Frame	: 143/5T	
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	: 26.4 lb	
Moment of inertia (J)	: 0.0643 sq.ft.lb	
Output [HP]	1	
Poles	2	
Frequency [Hz]	60	
Rated voltage [V]	230/460	
Rated current [A]	2.88/1.44	
L. R. Amperes [A]	22.5/11.2	
LRC [A]	7.8x(Code K)	
No load current [A]	1.40/0.700	
Rated speed [RPM]	3510	
Slip [%]	2.50	
Rated torque [ft.lb]	1.50	
Locked rotor torque [%]	200	
Breakdown torque [%]	300	
Service factor	1.15	
Temperature rise	80 K	
Locked rotor time	39s (cold) 22s (hot)	
Noise level ²	68.0 dB(A)	
Efficiency (%)	25%	70.4
	50%	72.0
	75%	77.0
	100%	78.5
Power Factor	25%	0.40
	50%	0.65
	75%	0.76
	100%	0.83
Bearing type	: <u>Drive end</u> 6205 ZZ <u>Non drive end</u> 6203 ZZ	
Sealing	: V'Ring Without Bearing Seal	
Lubrication interval	: - -	
Lubricant amount	: - -	
Lubricant type	: Mobil Polyrex EM	
Foundation loads	Max. traction : 32 lb	
	Max. compression : 58 lb	
Notes USABLE @208V 3.19A SF 1.00 SFA 3.19A		
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	
11/04/2022		
Page	Revision	
1 / 16		

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

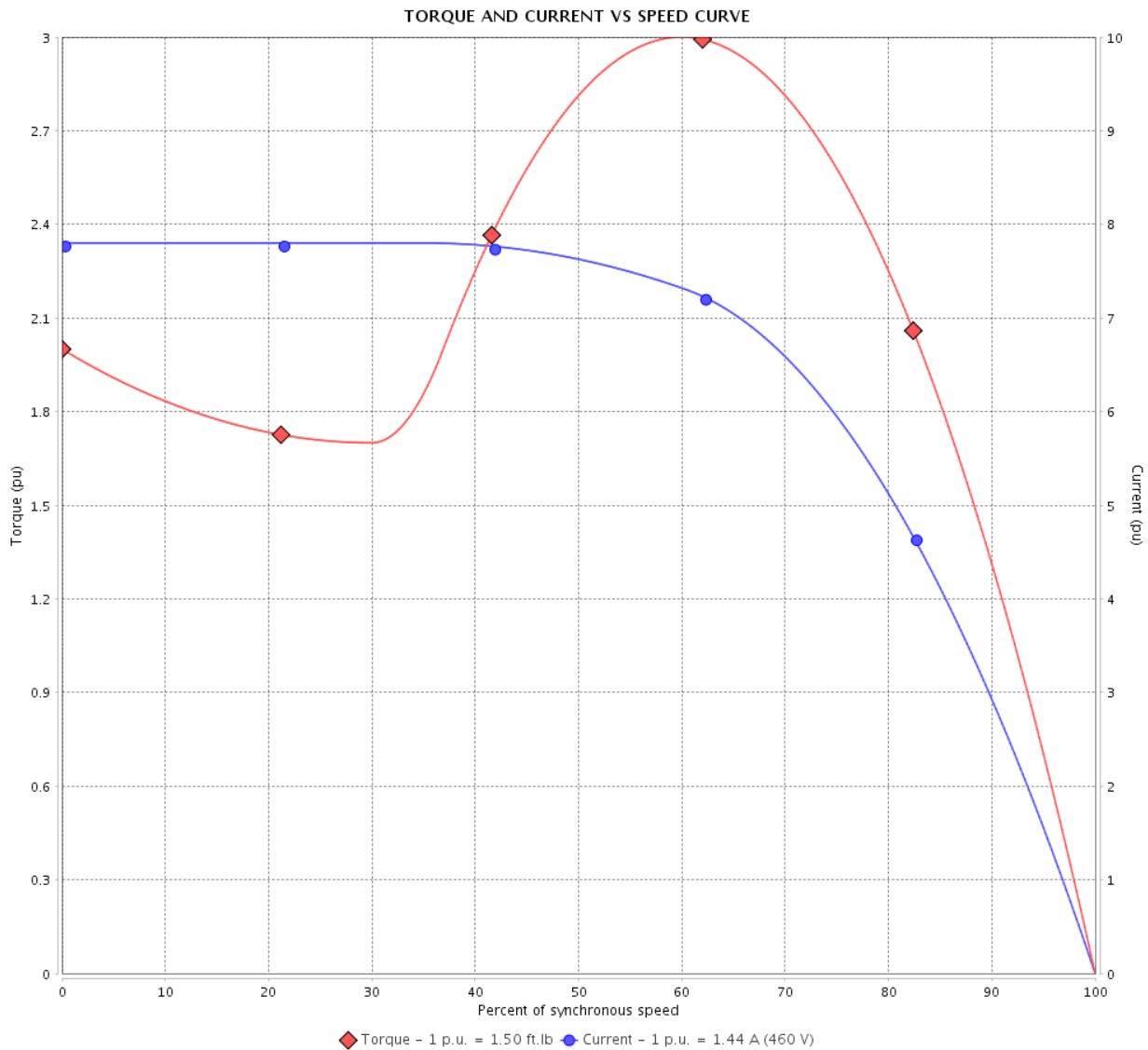


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14827713

Catalog # : 00136ET3E143T-S



Performance : 230/460 V 60 Hz 2P

Rated current	: 2.88/1.44 A	Moment of inertia (J)	: 0.0643 sq.ft.lb
LRC	: 7.8	Duty cycle	: Cont.(S1)
Rated torque	: 1.50 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	:
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 3510 rpm	Design	: B

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 16	Revision
Checked by				
Date	11/04/2022			

TORQUE AND CURRENT VS SPEED CURVE



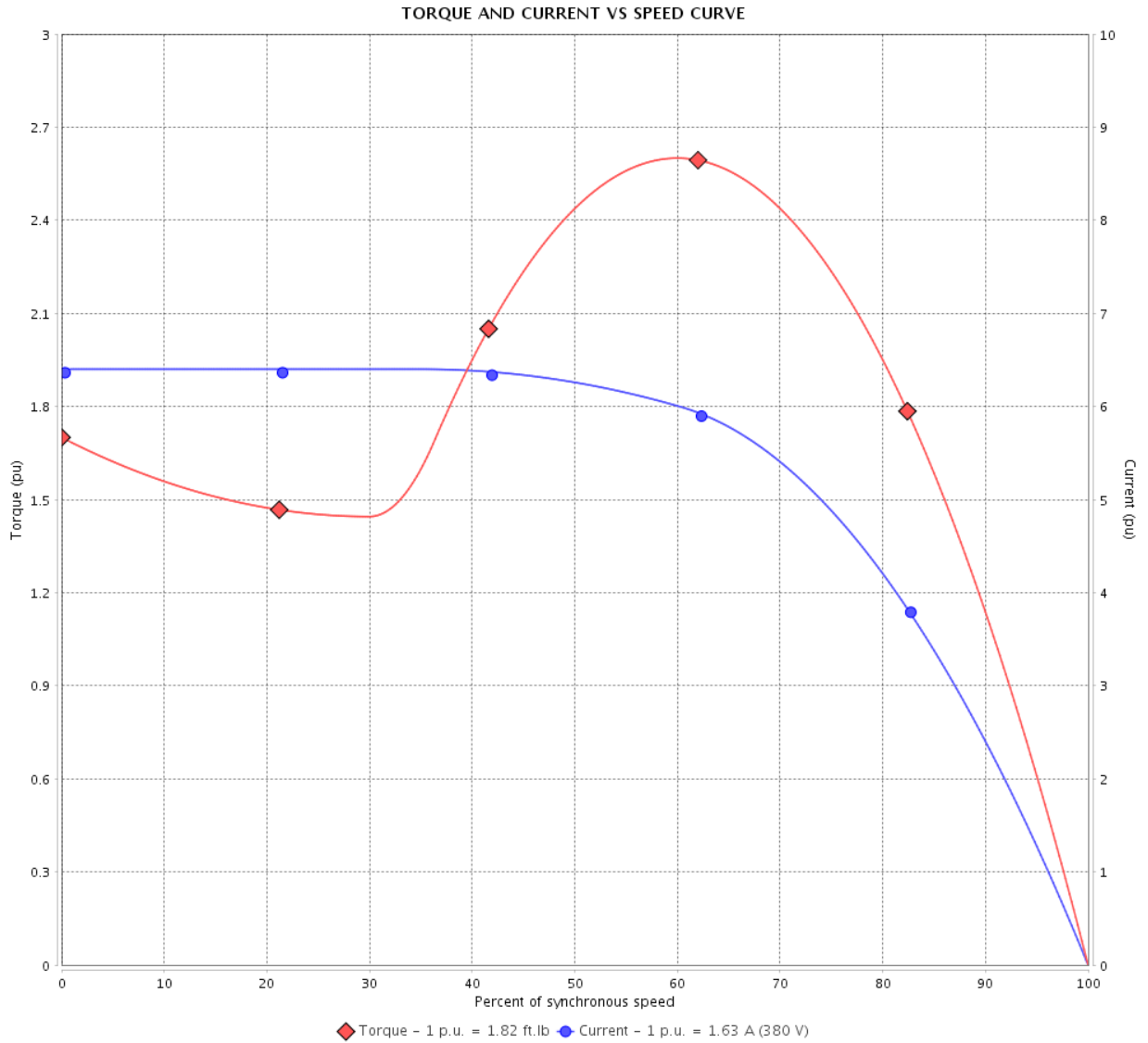
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14827713

Catalog # : 00136ET3E143T-S



Performance : 190/380 V 50 Hz 2P

Rated current : 3.26/1.63 A
 LRC : 6.4
 Rated torque : 1.82 ft.lb
 Locked rotor torque : 170 %
 Breakdown torque : 260 %
 Rated speed : 2885 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)

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		3 / 16		
Date	11/04/2022			

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



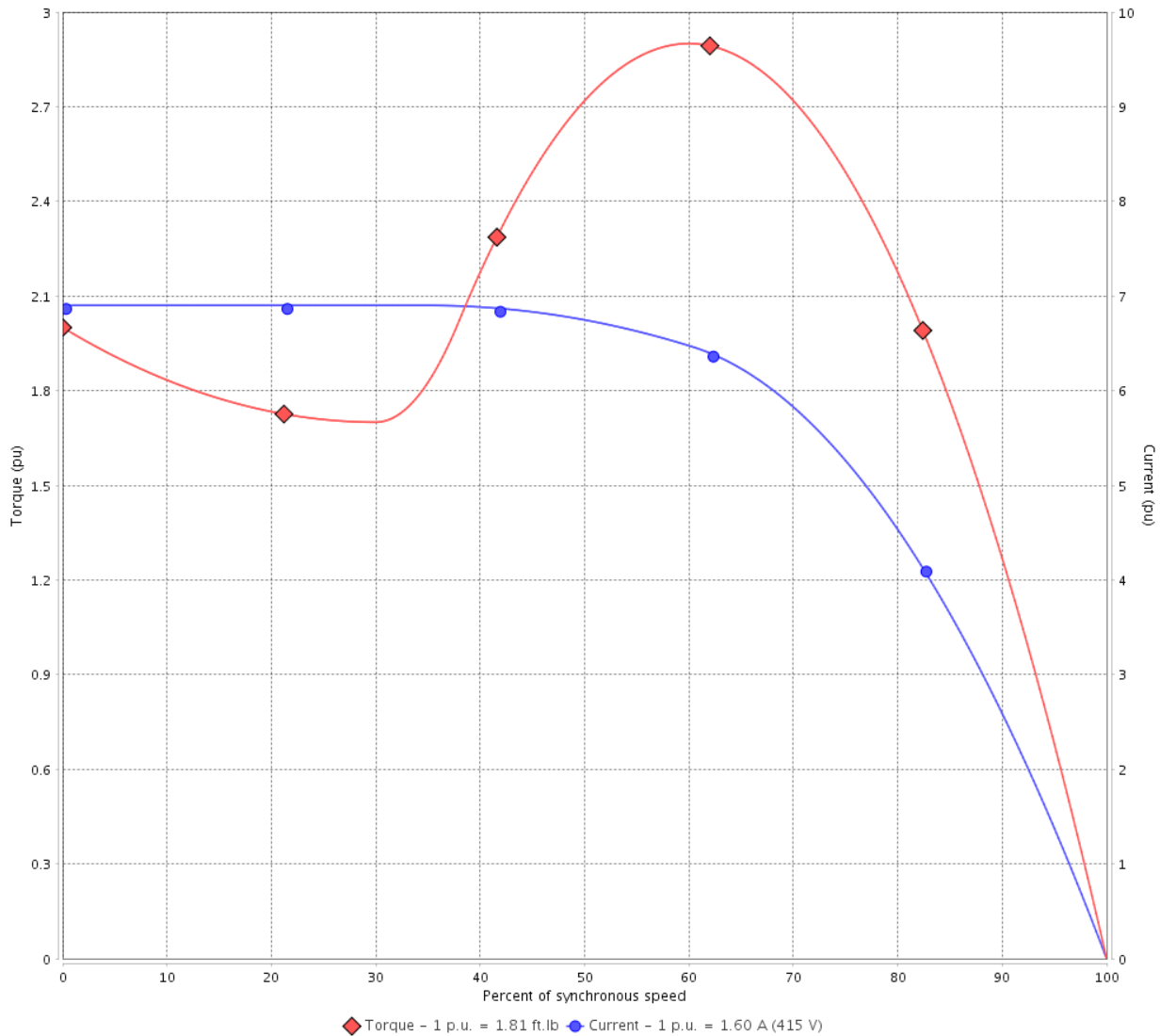
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Product line : NEMA Premium Efficiency Three-Phase

Product code : 14827713

Catalog # : 00136ET3E143T-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 2P

Rated current	: 3.02/1.60 A	Moment of inertia (J)	: 0.0643 sq.ft.lb
LRC	: 6.9	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	: 2900 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	11/04/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

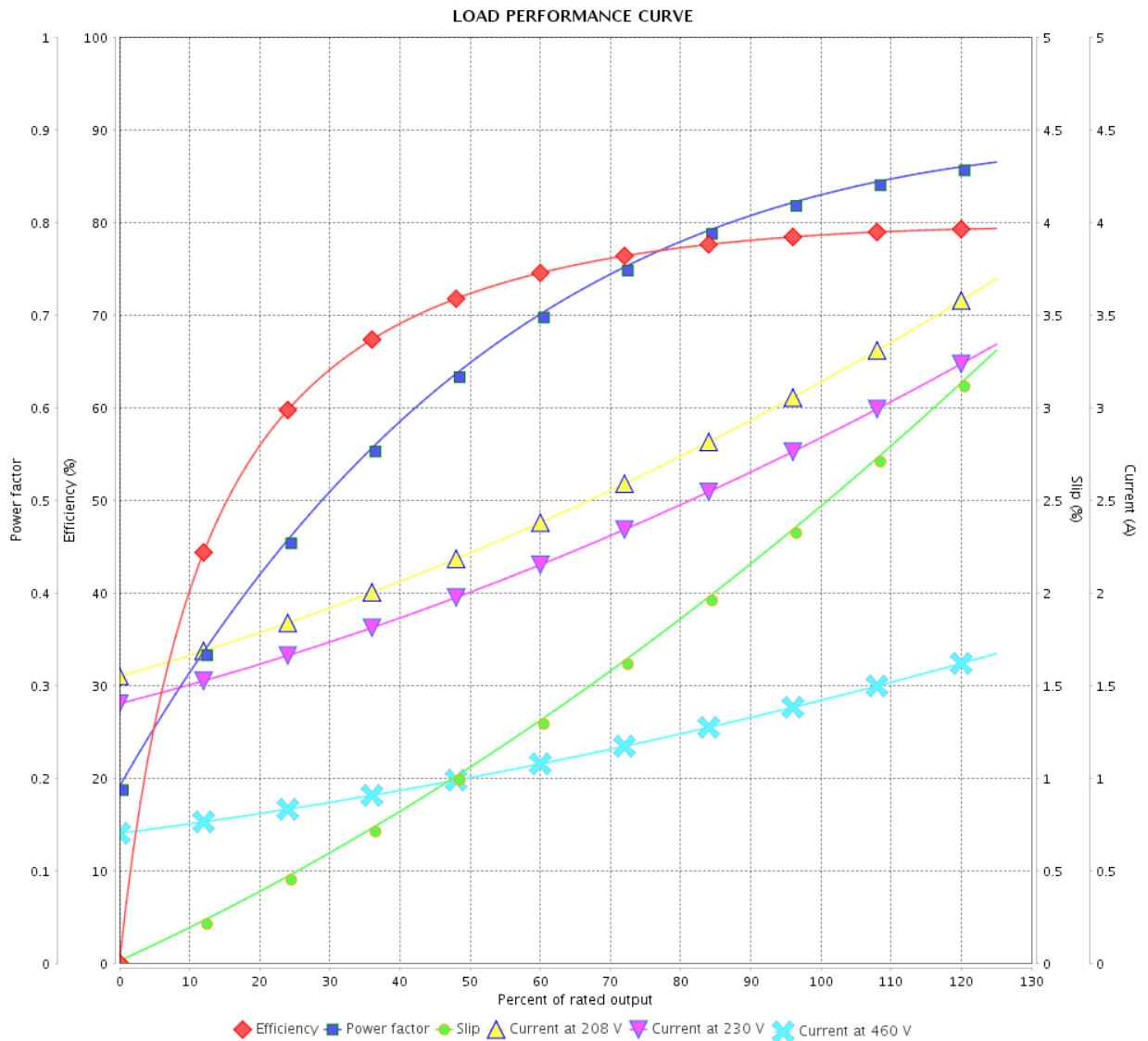


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Performance : 230/460 V 60 Hz 2P

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 Breakdown torque : 300 %
 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

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by			5 / 16	
Date	11/04/2022			

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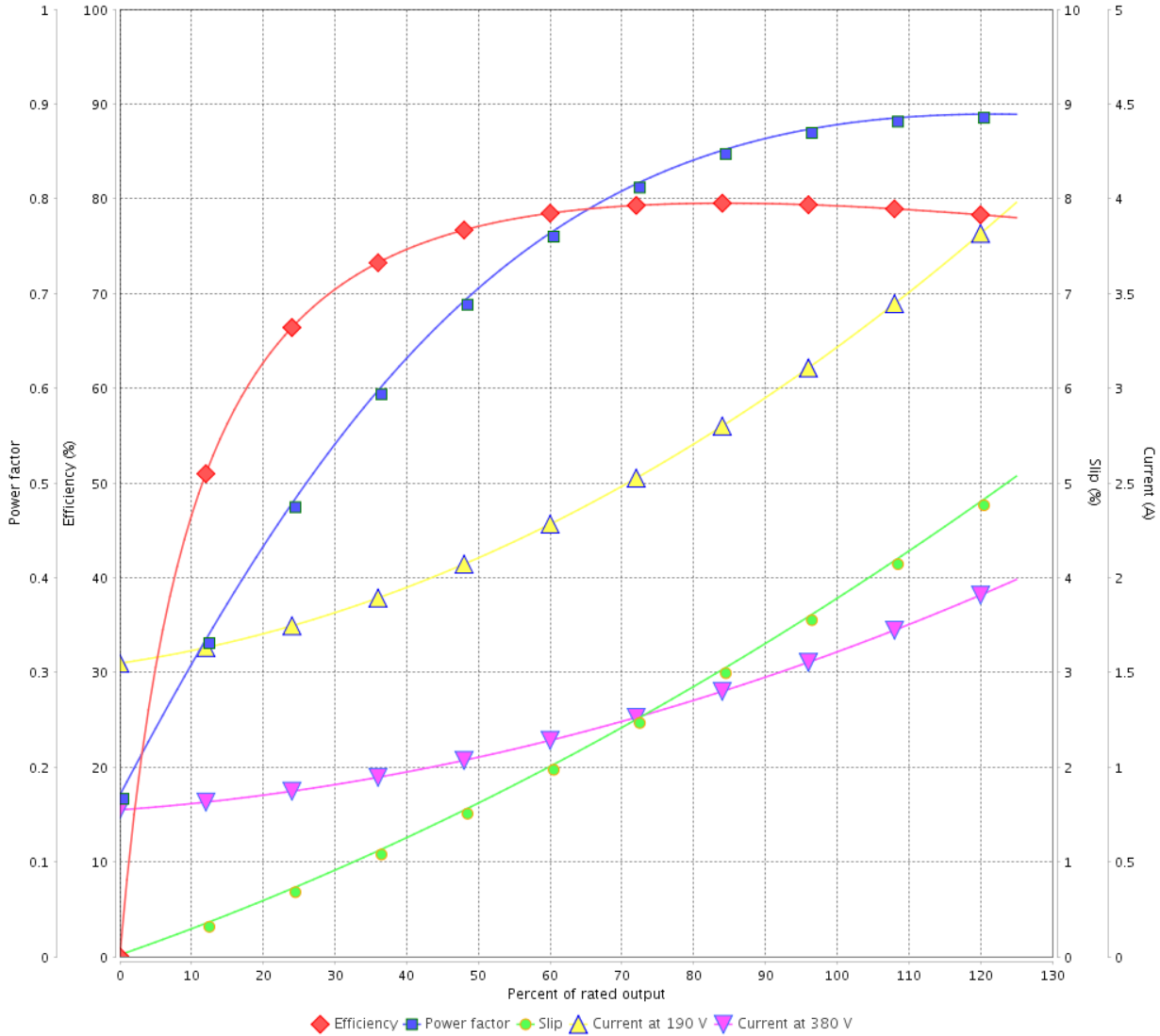
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Performance : 190/380 V 50 Hz 2P

Rated current : 3.26/1.63 A
 LRC : 6.4
 Rated torque : 1.82 ft.lb
 Locked rotor torque : 170 %
 Breakdown torque : 260 %
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 Service factor : 1.15
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Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by			6 / 16	
Date	11/04/2022			

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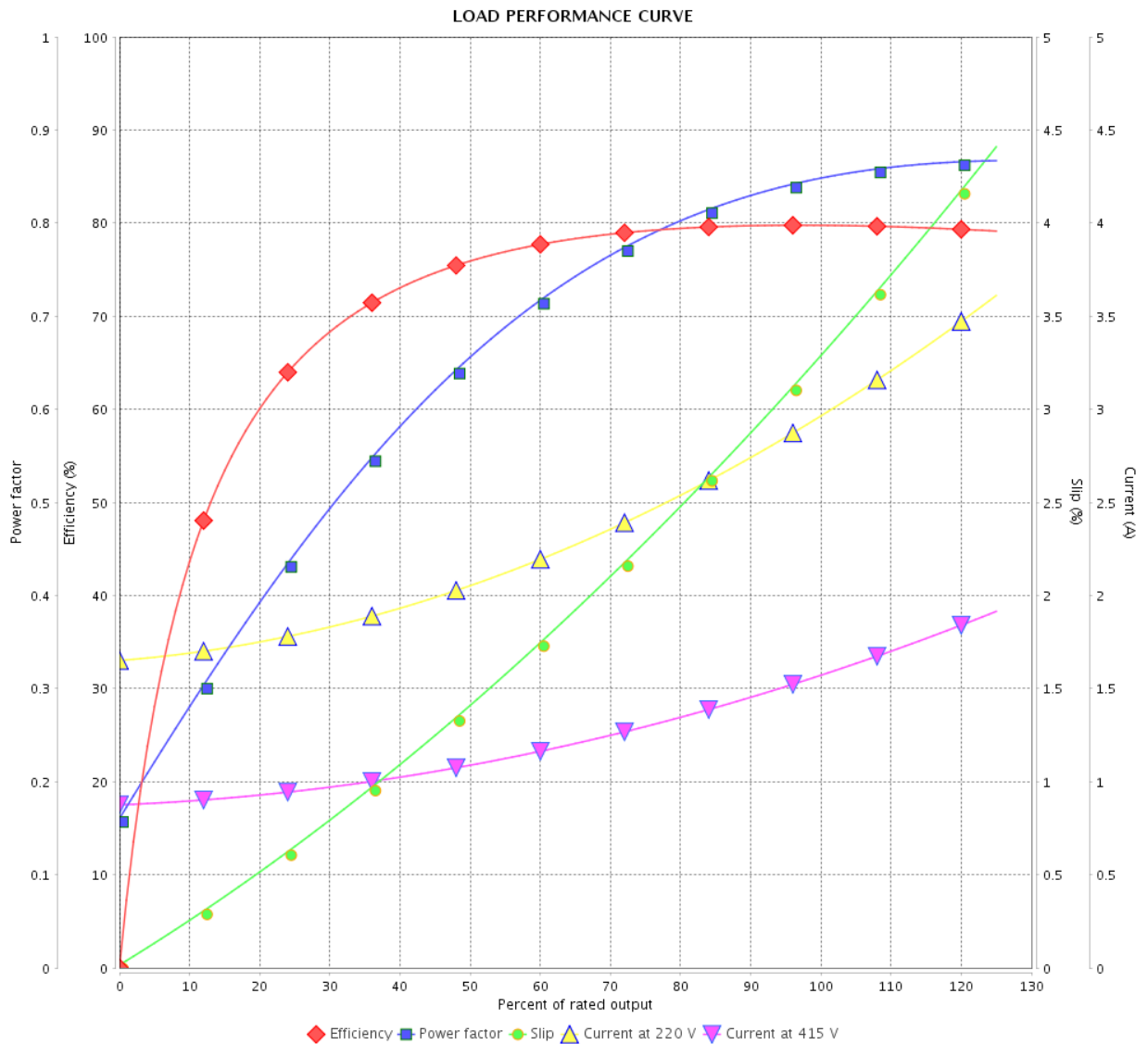


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Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		7 / 16		
Date		11/04/2022		

THERMAL LIMIT CURVE



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Locked rotor torque : 200 %	Service factor :
Breakdown torque : 300 %	Temperature rise : 80 K
Rated speed : 3510 rpm	Design : B

Heating constant

Cooling constant

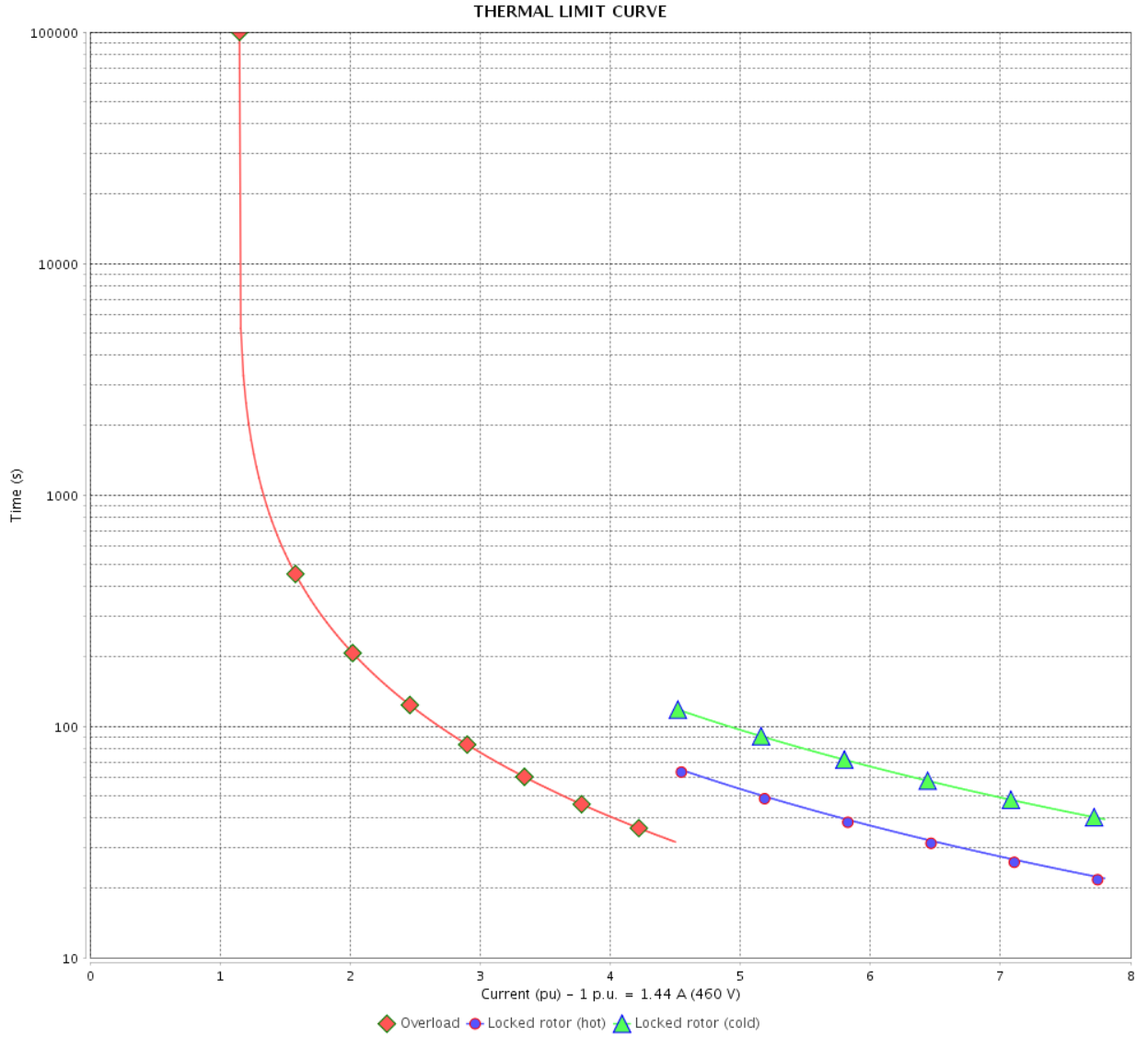
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date	11/04/2022			

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Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 9 / 16		Revision
Checked by				
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Rated torque : 1.82 ft.lb	Insulation class : F
Locked rotor torque : 170 %	Service factor : 1.15
Breakdown torque : 260 %	Temperature rise : 80 K
Rated speed : 2885 rpm	Design : B

Heating constant

Cooling constant

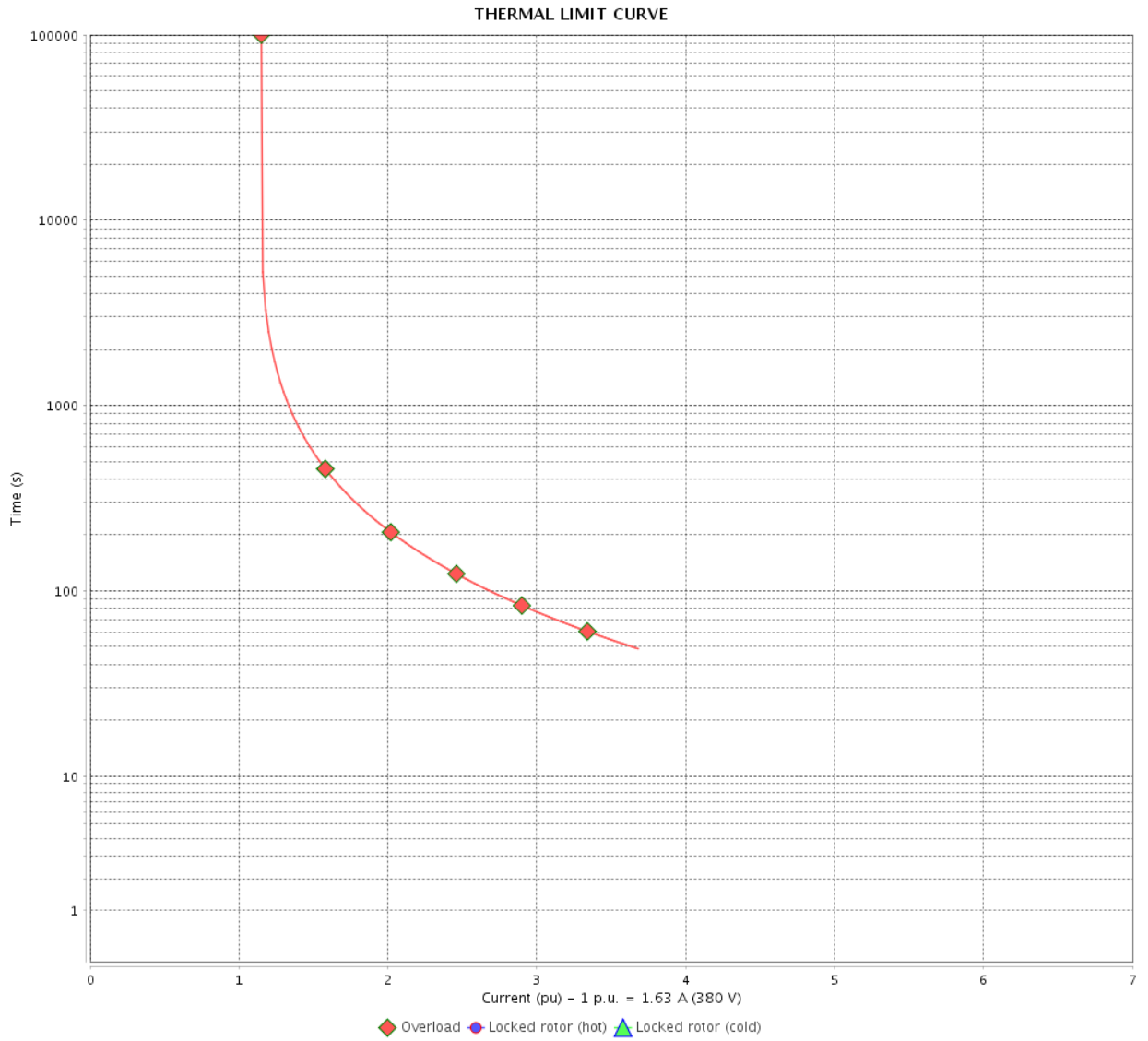
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	11/04/2022		10 / 16	

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

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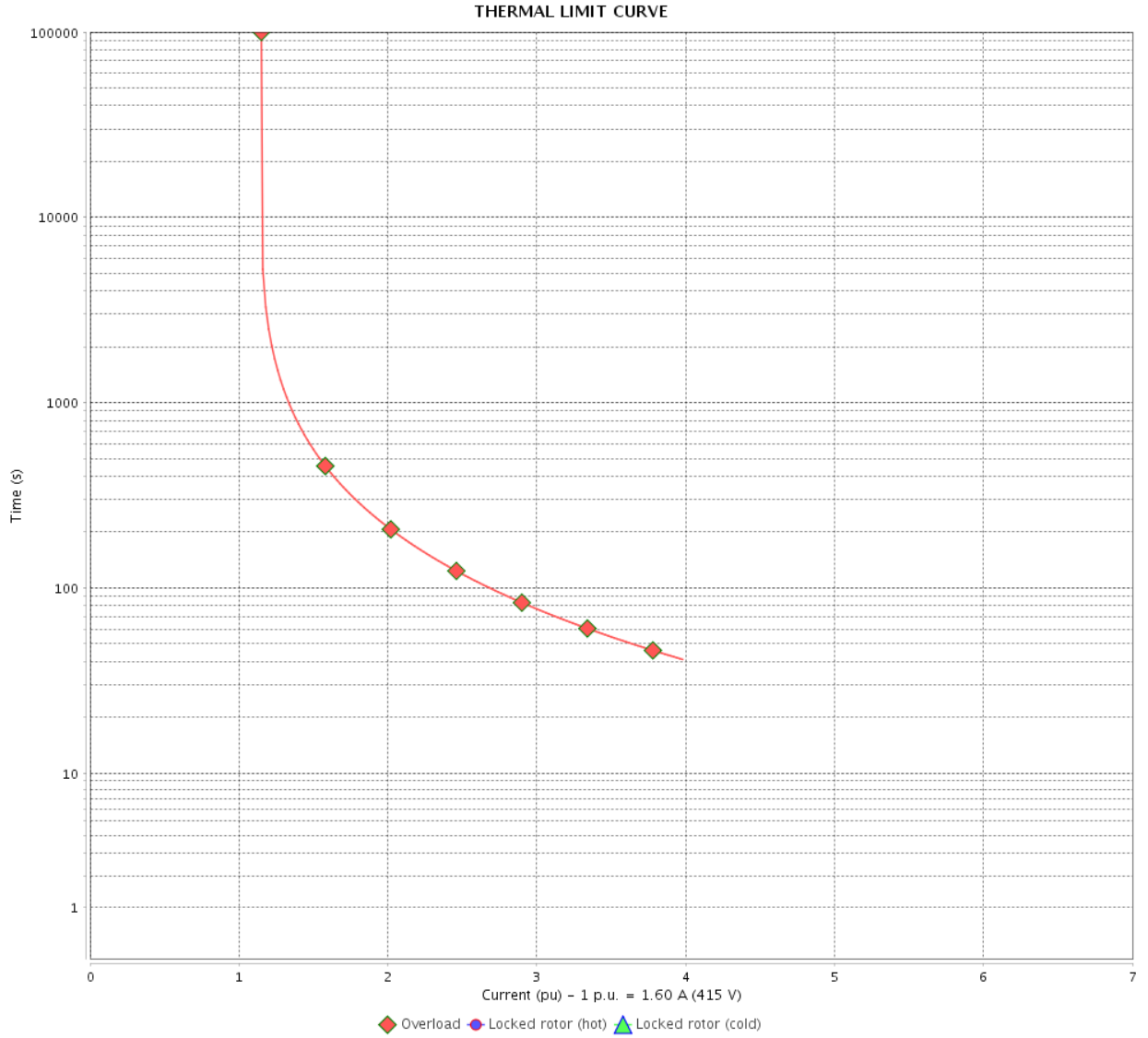
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 12 / 16	Revision
Checked by				
Date	11/04/2022			

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Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		13 / 16		
Date		11/04/2022		

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



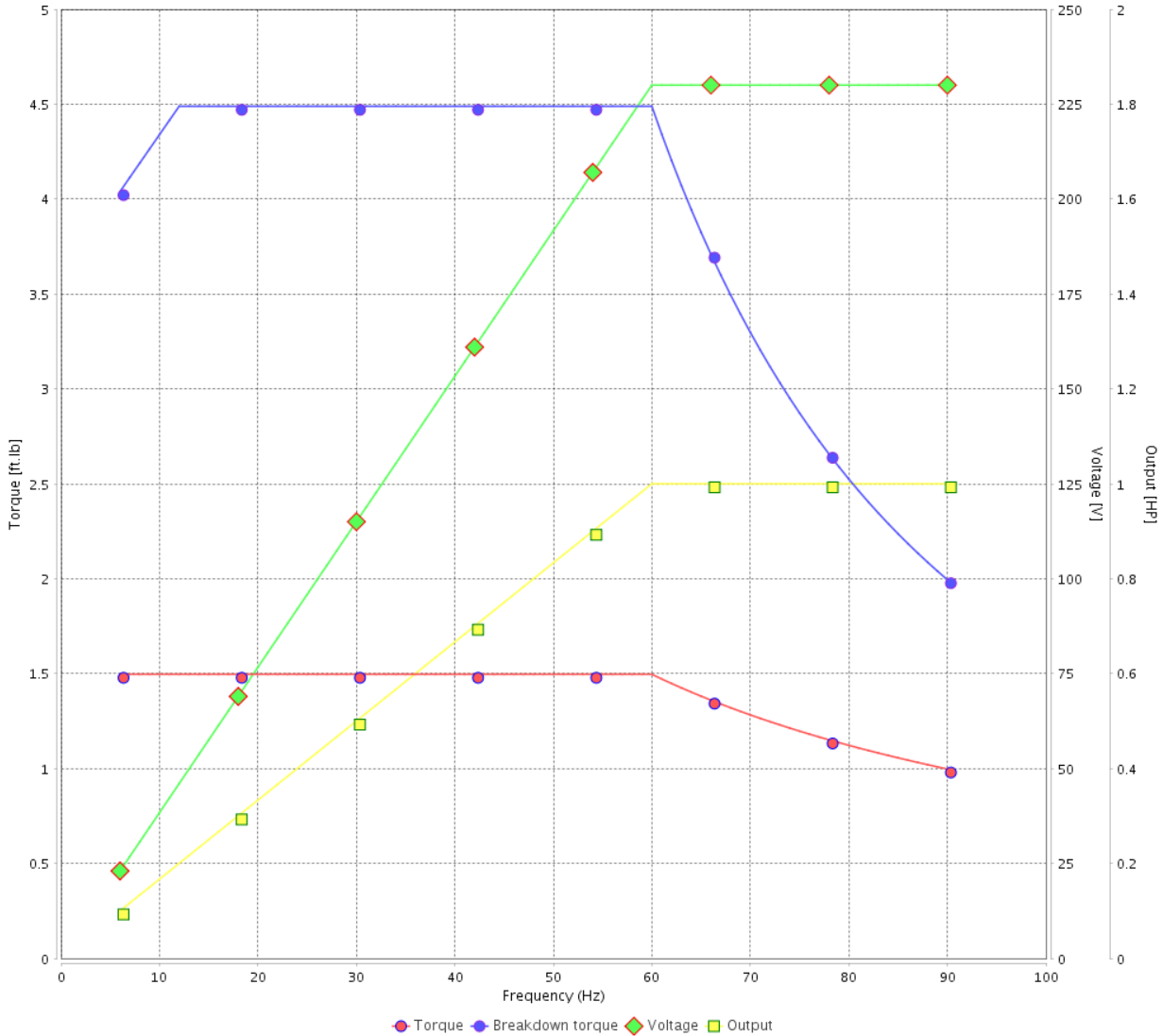
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 Insulation class : F
 Service factor :
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Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 14 / 16	Revision
Checked by				
Date	11/04/2022			

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Three Phase Induction Motor - Squirrel Cage

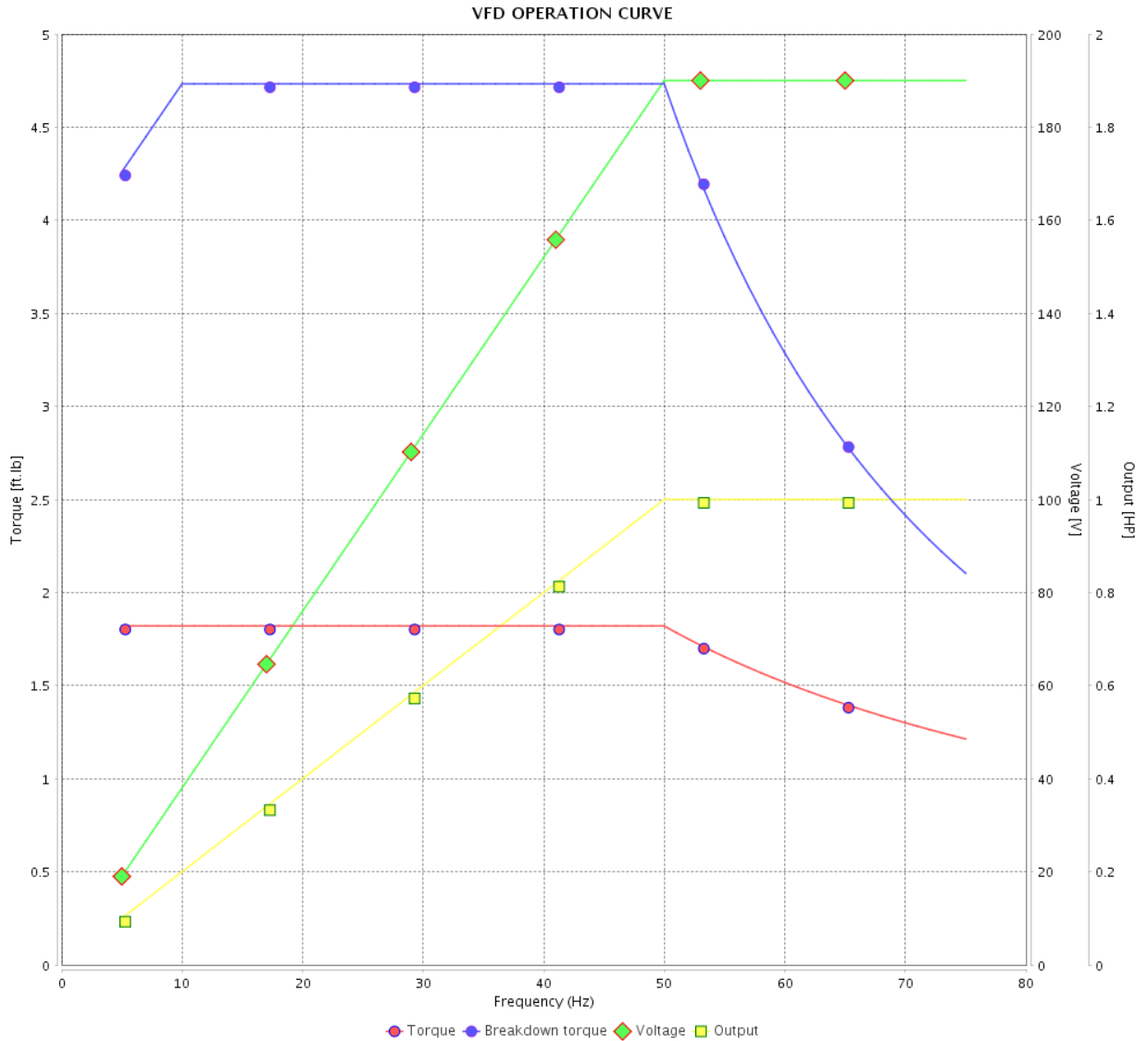


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Performed by			Page 15 / 16	Revision
Checked by				
Date	11/04/2022			

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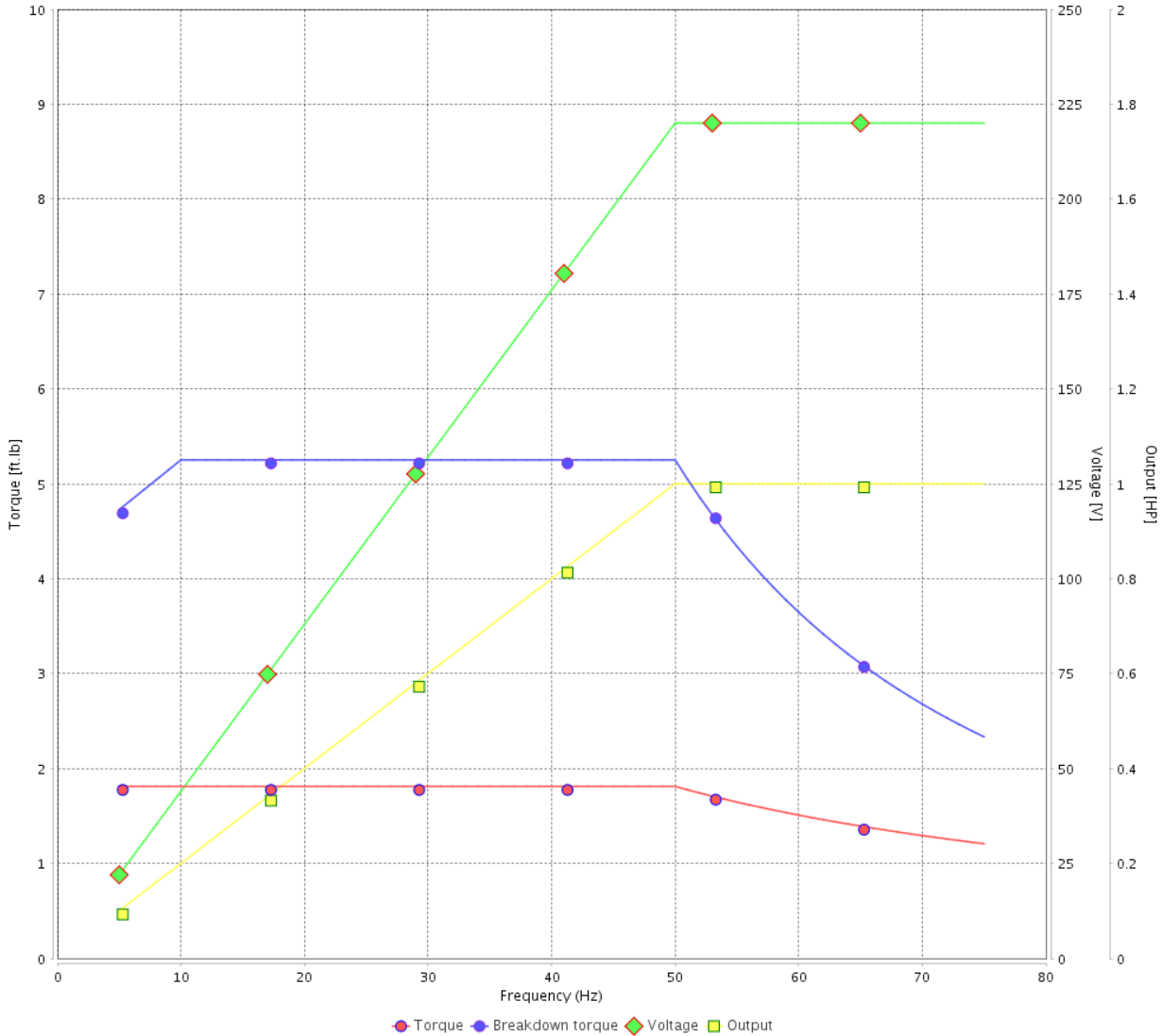
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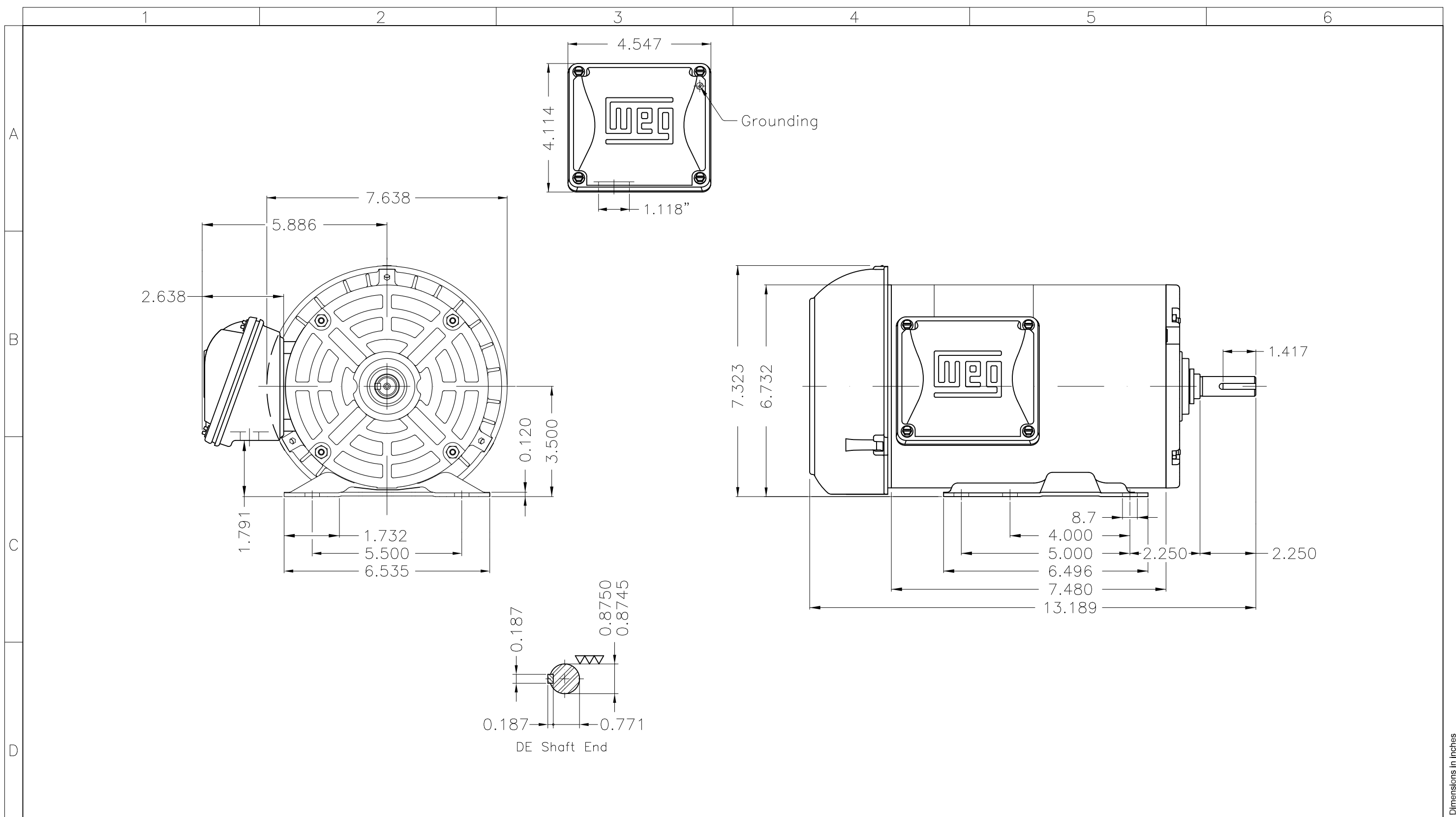


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Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				



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.			PREVIEW	WDD	SHEET	1 / 1	
CHECKED		FRAME 143/5T IP55 TEFC							
RELEASED									
REL DT.	WMO	Jaragua do Sul	Product Engineering						

1 HP 02 Poles 60 Hz

Dimensions in inches XME A3



NEMA
Premium



3PT9

US LISTED
FOR SAFE AREA



Energy Verified

MADE IN MEXICO

MAT: 14827713 CC029A
W01.TE0IC0X0N
MODEL 00136ET3E143T-S
02MAR2022 B/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 1.0
FR 143/5T		KW 0.75
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 2.88/1.44
INS CL F AT 80K	IP55	SFA 3.31/1.66
AMB 40°C	DES B	SF 1.15
ENCL TEFC	CODE K	PF 0.83
USABLE @ 208V 3.19A		RPM 3510
SF1.00		NEMA NOM. EFF 78.5%

ALTERNATE RATING: 1.0HP 50Hz 190-220/380-415V SF1.15
3.26-2.98/1.63-1.58A 2885RPM EFF 79.2% (IE2) IEC 60034-1

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

DE 6205-ZZ ODE 6203-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.

