

DATA SHEET

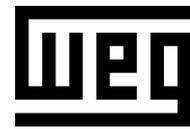
Three Phase Induction Motor - Squirrel Cage



Customer :		
Product line	: Rolled Steel NEMA Premium Efficiency Three-Phase	
Product code :	12628876	
Catalog # :	002180T3E145T-S	
Frame	: 143/5T	
Insulation class	: F	
Duty cycle	: Cont.(S1)	
Ambient temperature	: -20°C to +40°C	
Altitude	: 1000 m.a.s.l.	
Design	: B	
Cooling method	: IC01 - ODP	
Mounting	: F-1	
Rotation ¹	: Both (CW and CCW)	
Starting method	: Direct On Line	
Approx. weight ²	: 18.2 kg	
Moment of inertia (J)	: 0.0049 kgm ²	
Output [HP]	2	
Poles	4	
Frequency [Hz]	60	
Rated voltage [V]	230/460	
Rated current [A]	5.38/2.69	
L. R. Amperes [A]	41.4/20.7	
LRC [A]	7.7x(Code K)	
No load current [A]	2.75/1.38	
Rated speed [RPM]	1740	
Slip [%]	3.33	
Rated torque [kgfm]	0.834	
Locked rotor torque [%]	260	
Breakdown torque [%]	320	
Service factor	1.00	
Temperature rise	80 K	
Locked rotor time	30s (cold) 17s (hot)	
Noise level ²	52.0 dB(A)	
Efficiency (%)	25%	85.2
	50%	85.5
	75%	86.5
	100%	86.5
Power Factor	25%	0.36
	50%	0.61
	75%	0.74
	100%	0.81
Bearing type	: <u>Drive end</u> 6205 ZZ <u>Non drive end</u> 6203 ZZ	
Sealing	: Without Without	
	: Bearing Seal Bearing Seal	
Lubrication interval	: - -	
Lubricant amount	: - -	
Lubricant type	: Mobil Polyrex EM	
Foundation loads		
Max. traction	: 66 kgf	
Max. compression	: 85 kgf	
Notes USABLE @208V 5.95A SF 1.00 SFA 5.95A		
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	22/03/2021	
Page	1 / 16	
Revision		

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

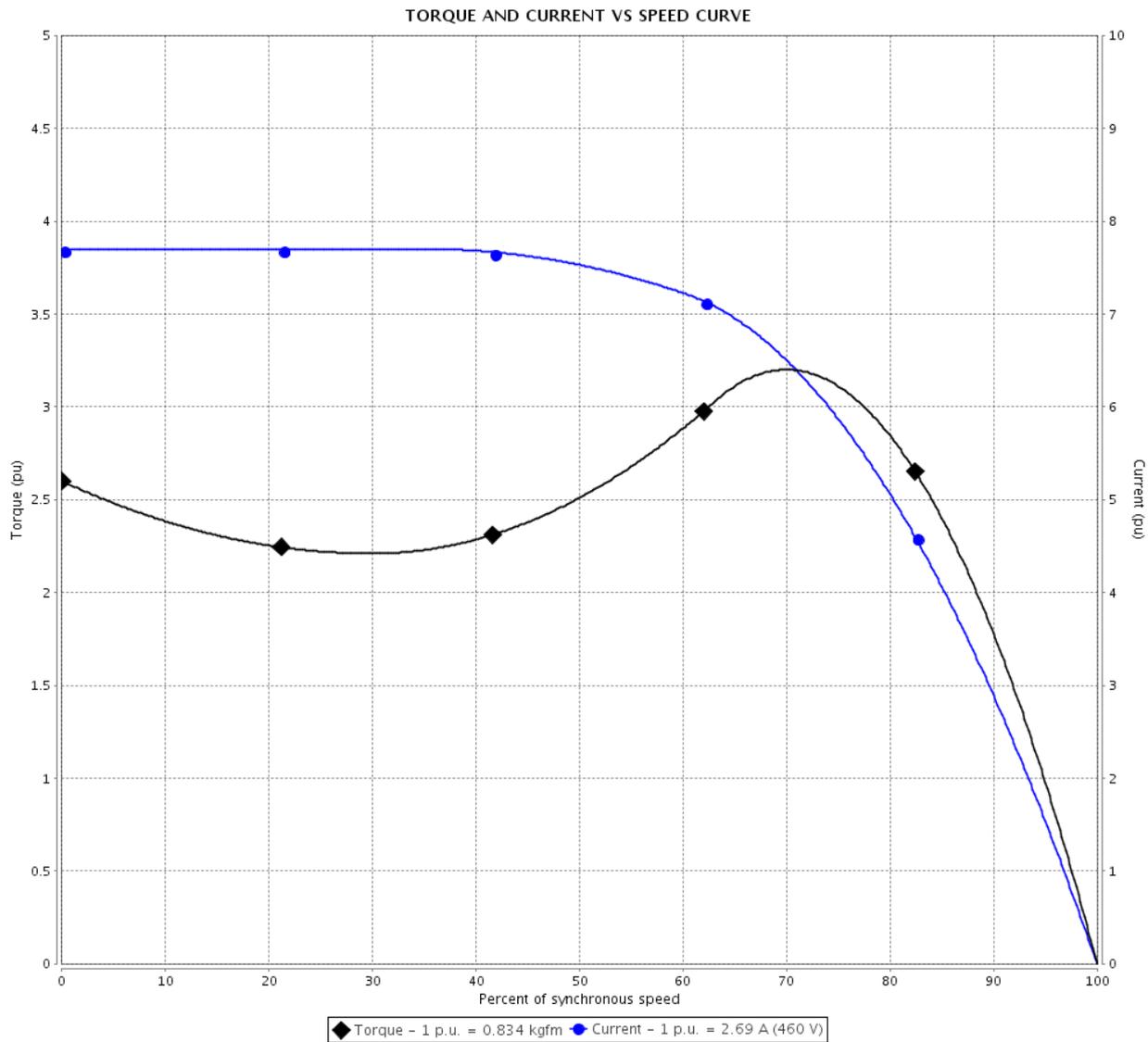


Customer :

Product line : Rolled Steel NEMA Premium Efficiency Three-Phase

Product code : 12628876

Catalog # : 00218OT3E145T-S



Performance : 230/460 V 60 Hz 4P

Rated current : 5.38/2.69 A
 LRC : 7.7
 Rated torque : 0.834 kgfm
 Locked rotor torque : 260 %
 Breakdown torque : 320 %
 Rated speed : 1740 rpm

Moment of inertia (J) : 0.0049 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : B

Locked rotor time : 30s (cold) 17s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 16	Revision
Checked by				
Date	22/03/2021			

TORQUE AND CURRENT VS SPEED CURVE



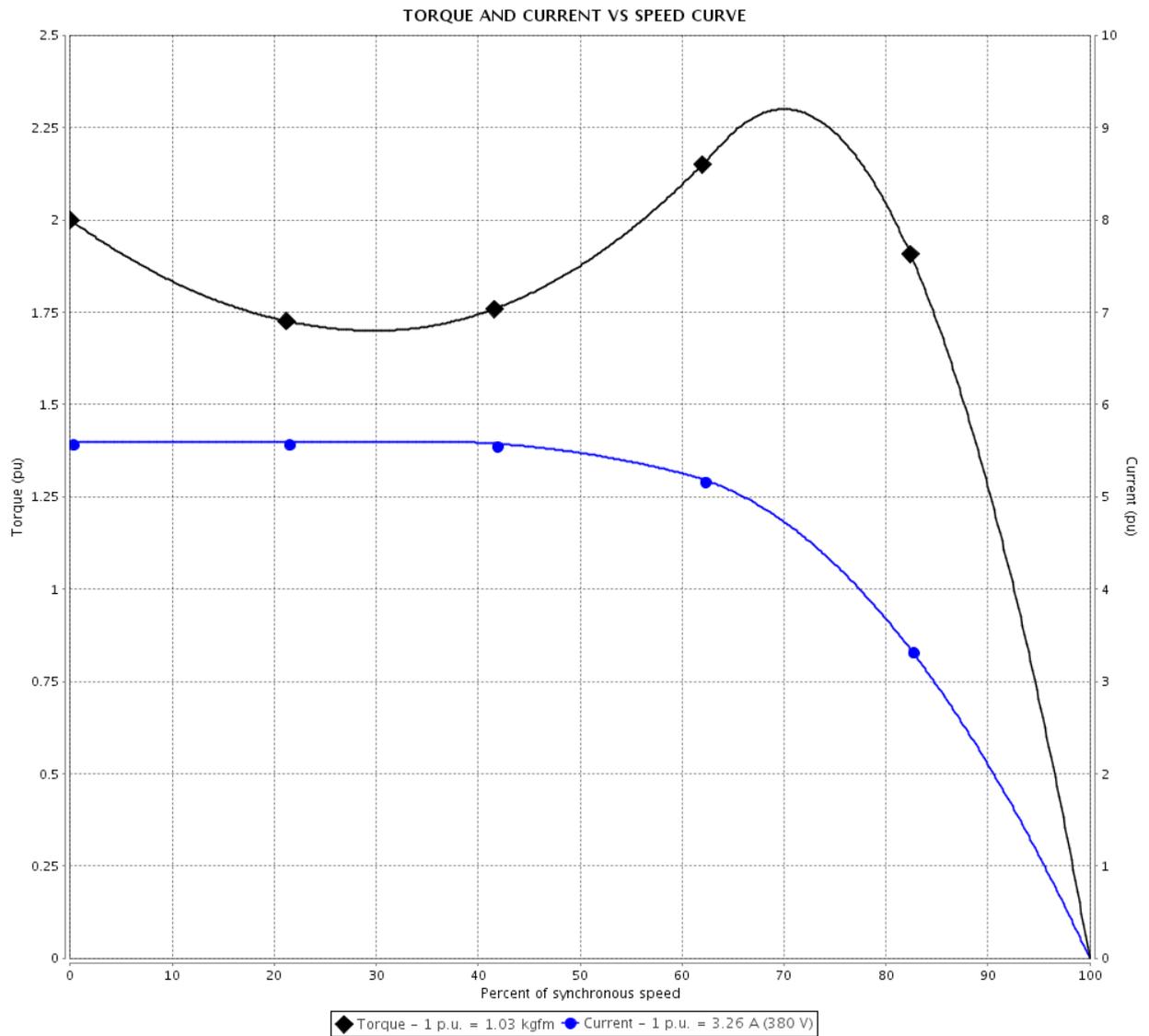
Three Phase Induction Motor - Squirrel Cage

Customer :

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Product code : 12628876

Catalog # : 002180T3E145T-S



Performance : 190/380 V 50 Hz 4P

Rated current : 6.52/3.26 A
 LRC : 5.6
 Rated torque : 1.03 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 229 %
 Rated speed : 1410 rpm

Moment of inertia (J) : 0.0049 kgm²
 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	22/03/2021			

TORQUE AND CURRENT VS SPEED CURVE

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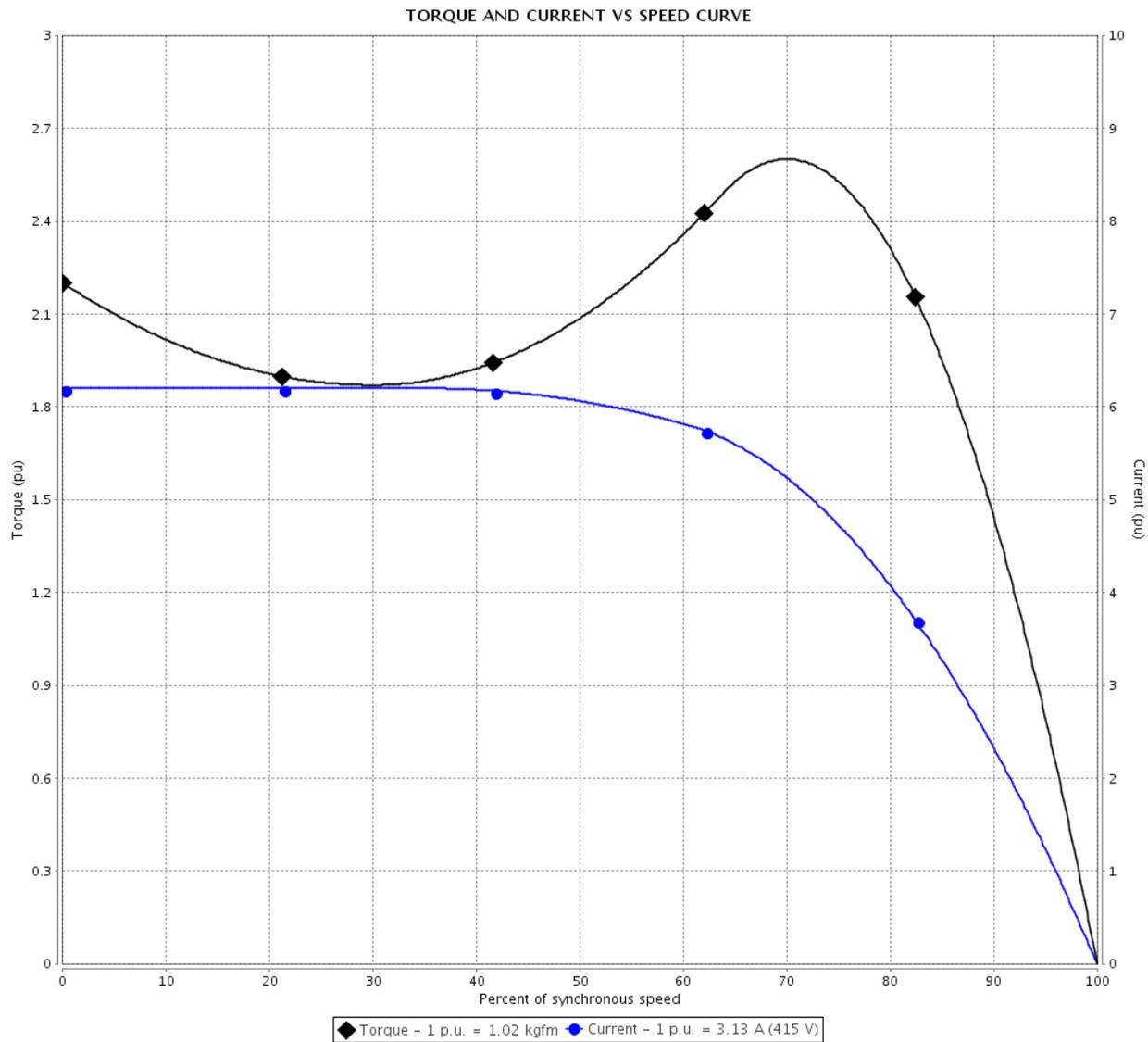


Customer :

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Performance : 220/415 V 50 Hz 4P

Rated current	: 5.90/3.13 A	Moment of inertia (J)	: 0.0049 kgm ²
LRC	: 6.2	Duty cycle	: Cont.(S1)
Rated torque	: 1.02 kgfm	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 1420 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	22/03/2021			

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Three Phase Induction Motor - Squirrel Cage

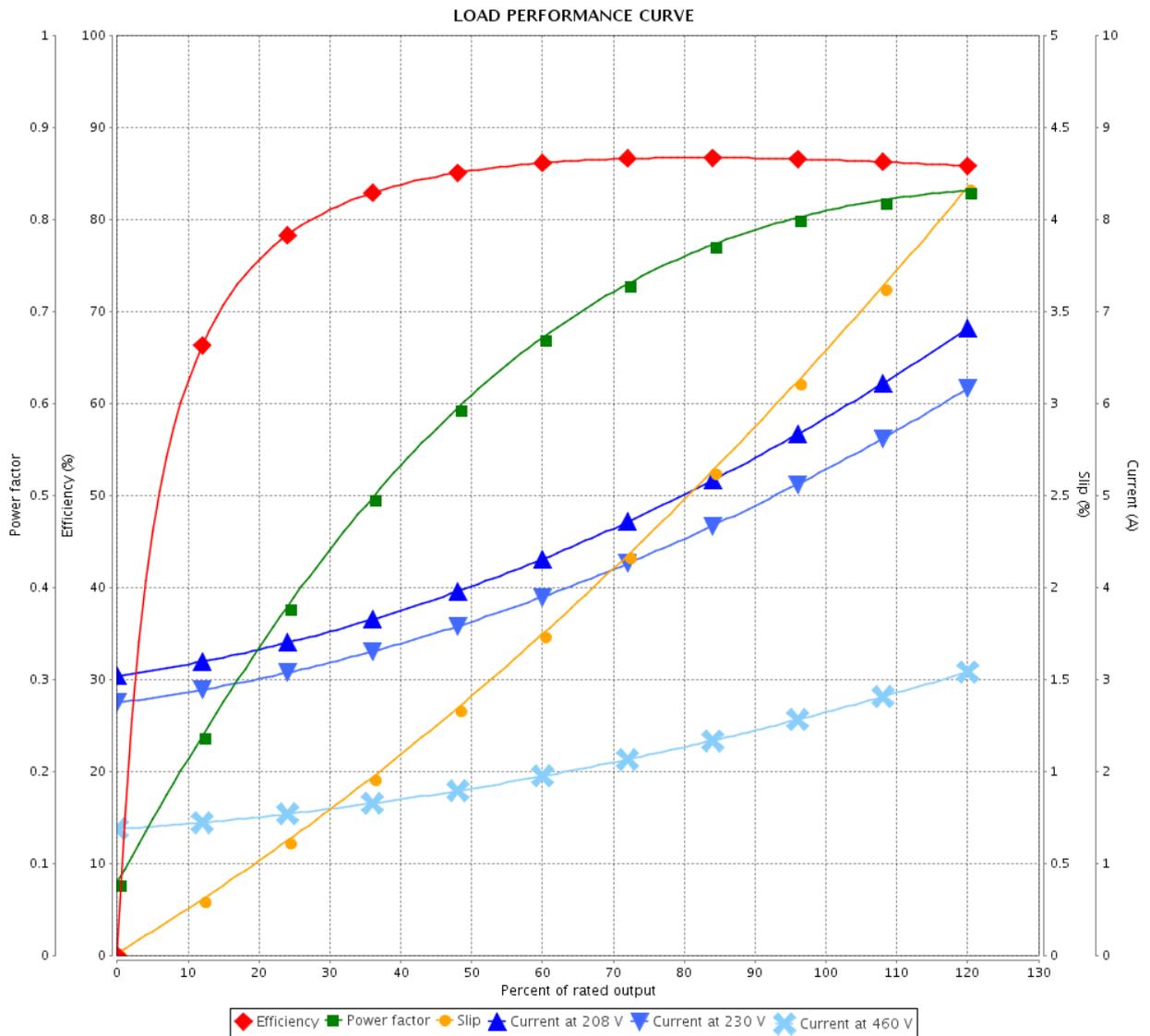


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Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		5 / 16		
Date		22/03/2021		

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Three Phase Induction Motor - Squirrel Cage

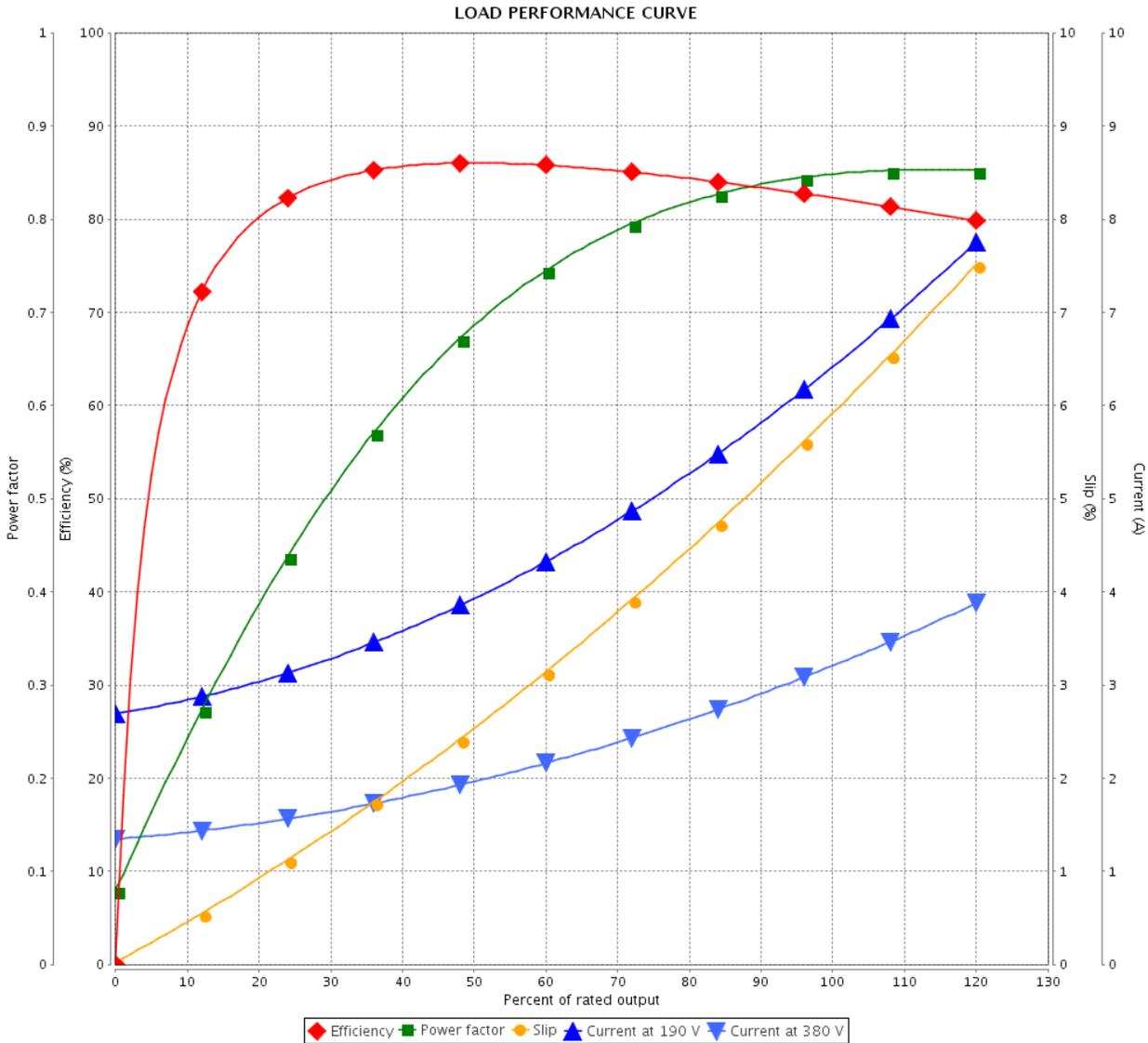


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 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		6 / 16		
Date		22/03/2021		

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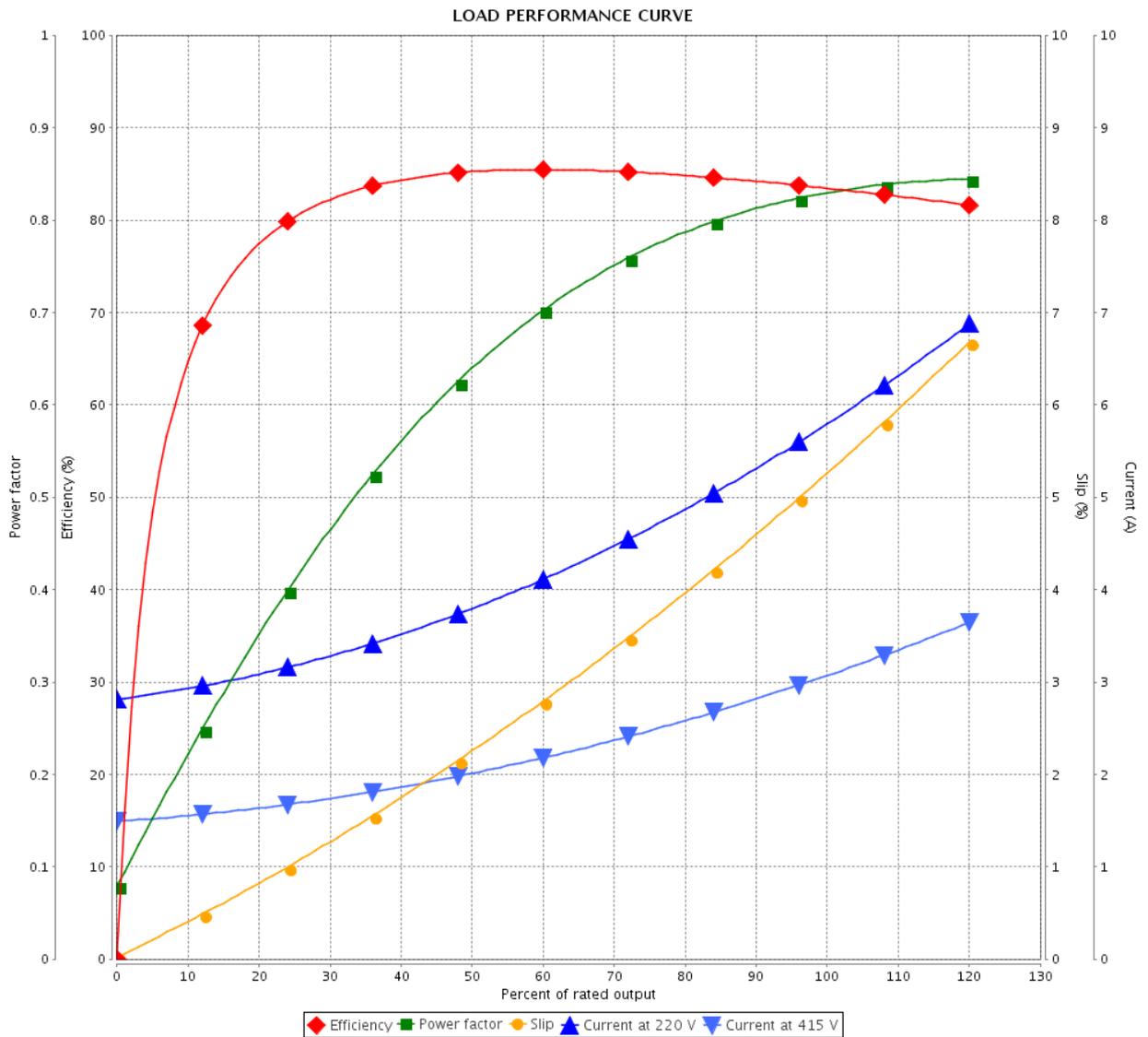


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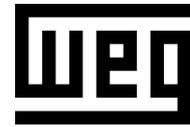
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Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
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THERMAL LIMIT CURVE



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Duty cycle : Cont.(S1)
Insulation class : F
Service factor :
Temperature rise : 80 K
Design : B

Heating constant

Cooling constant

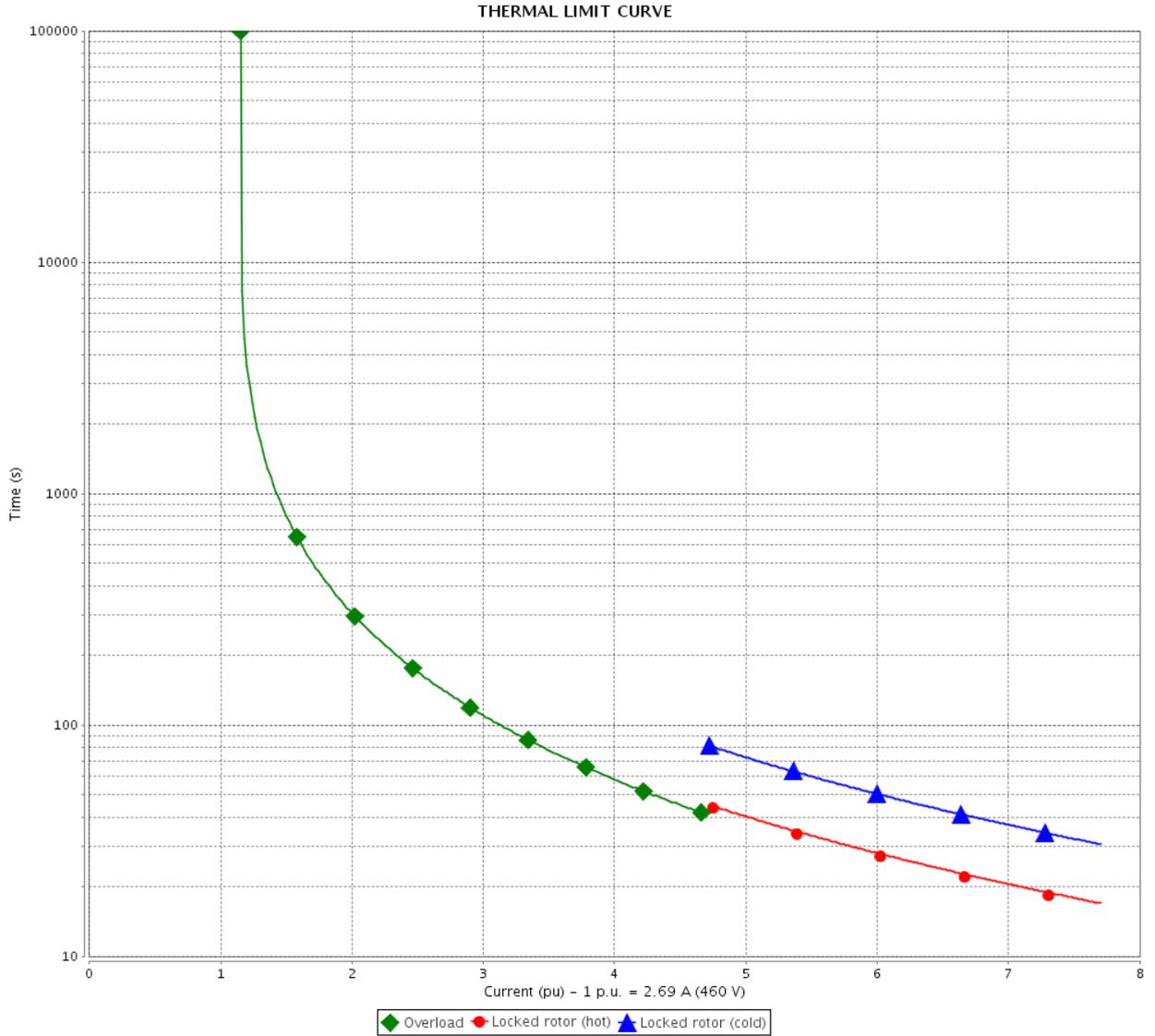
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	22/03/2021		8 / 16	

THERMAL LIMIT CURVE

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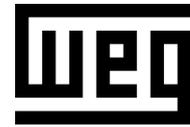


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Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page Revision 9 / 16		
Checked by				
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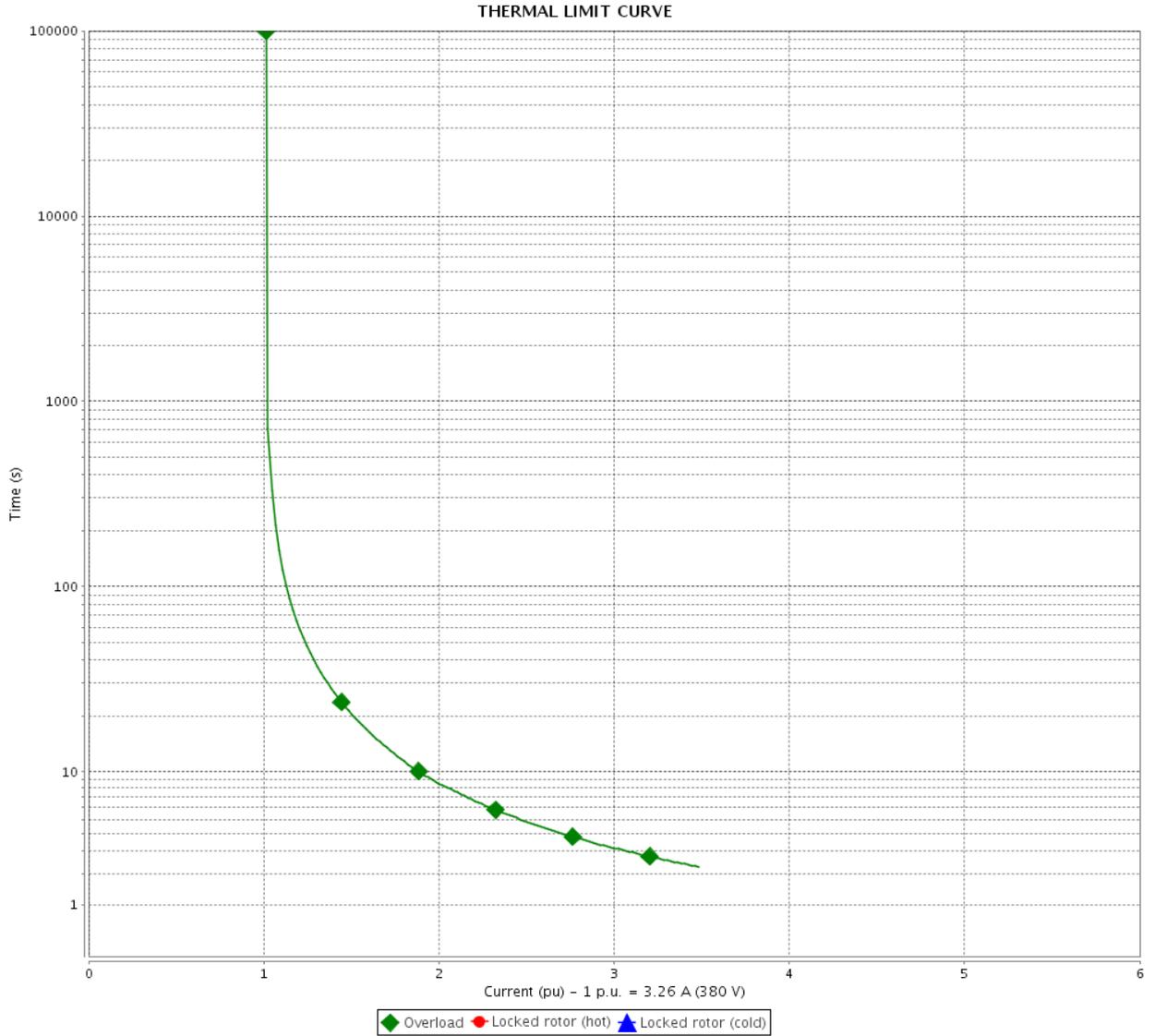
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	22/03/2021		10 / 16	

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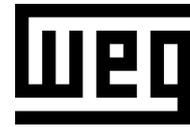
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Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		11 / 16		
Date		22/03/2021		

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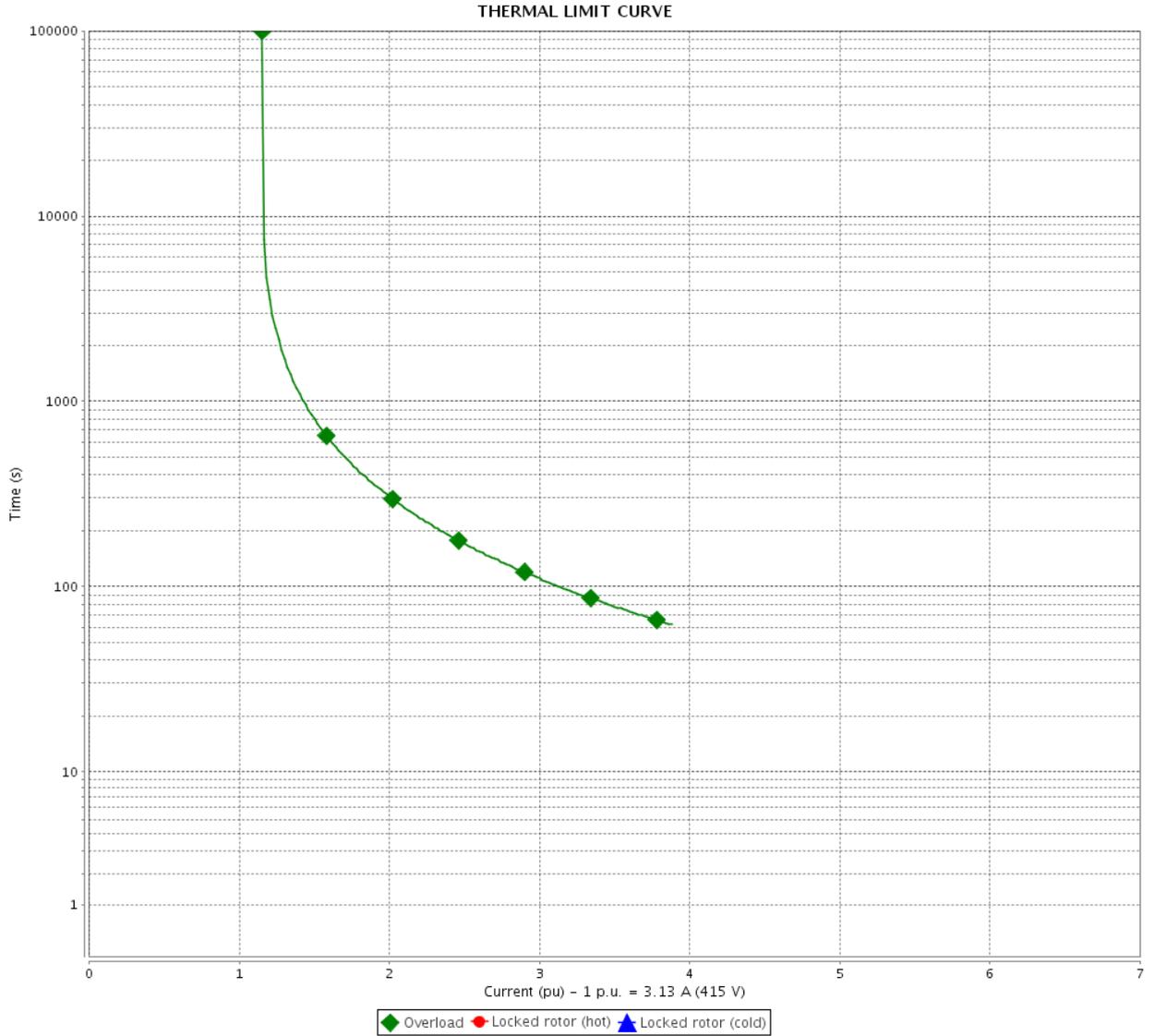
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	22/03/2021		12 / 16	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

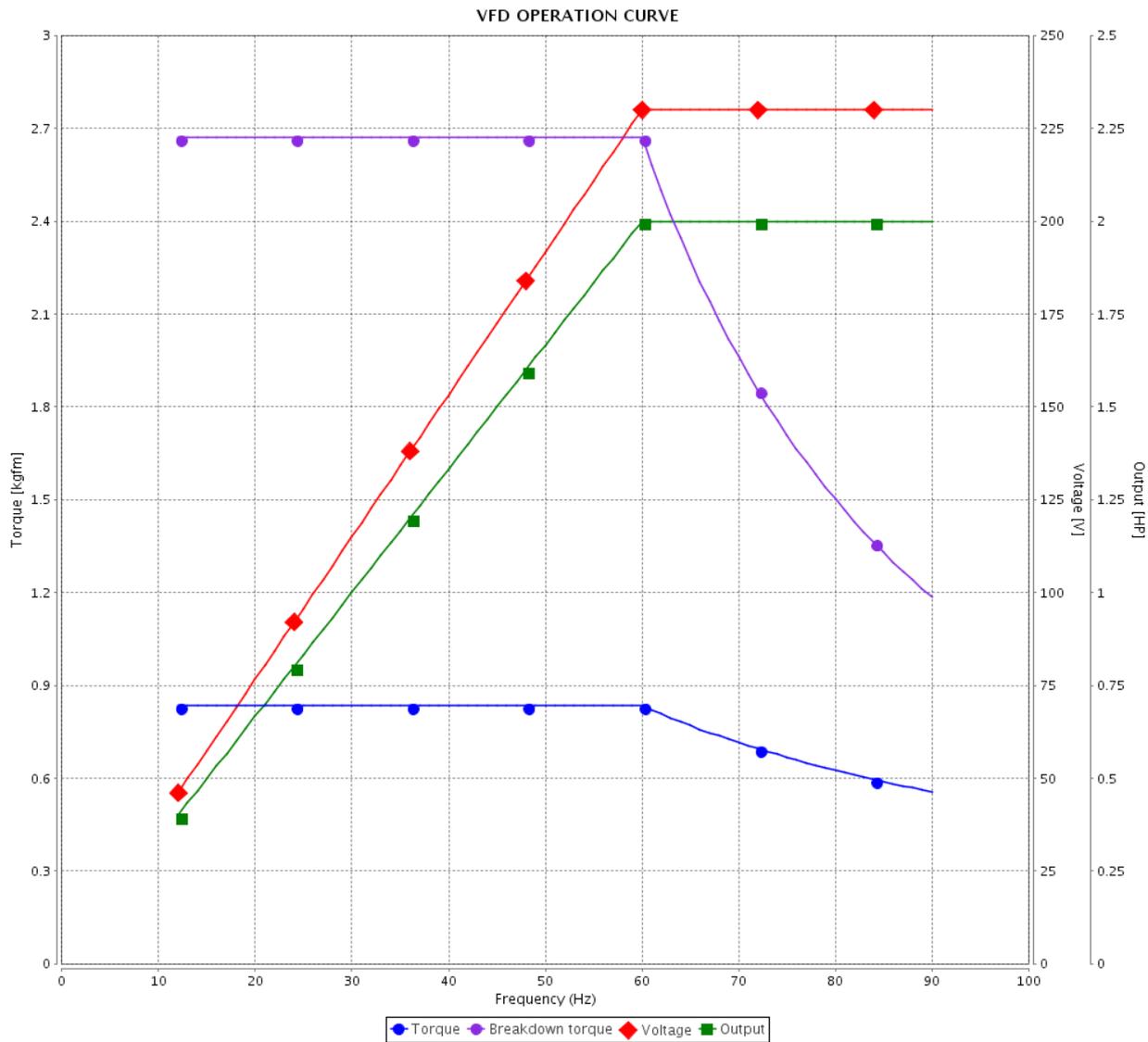


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 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 14 / 16	Revision
Checked by				
Date	22/03/2021			

VFD OPERATION CURVE

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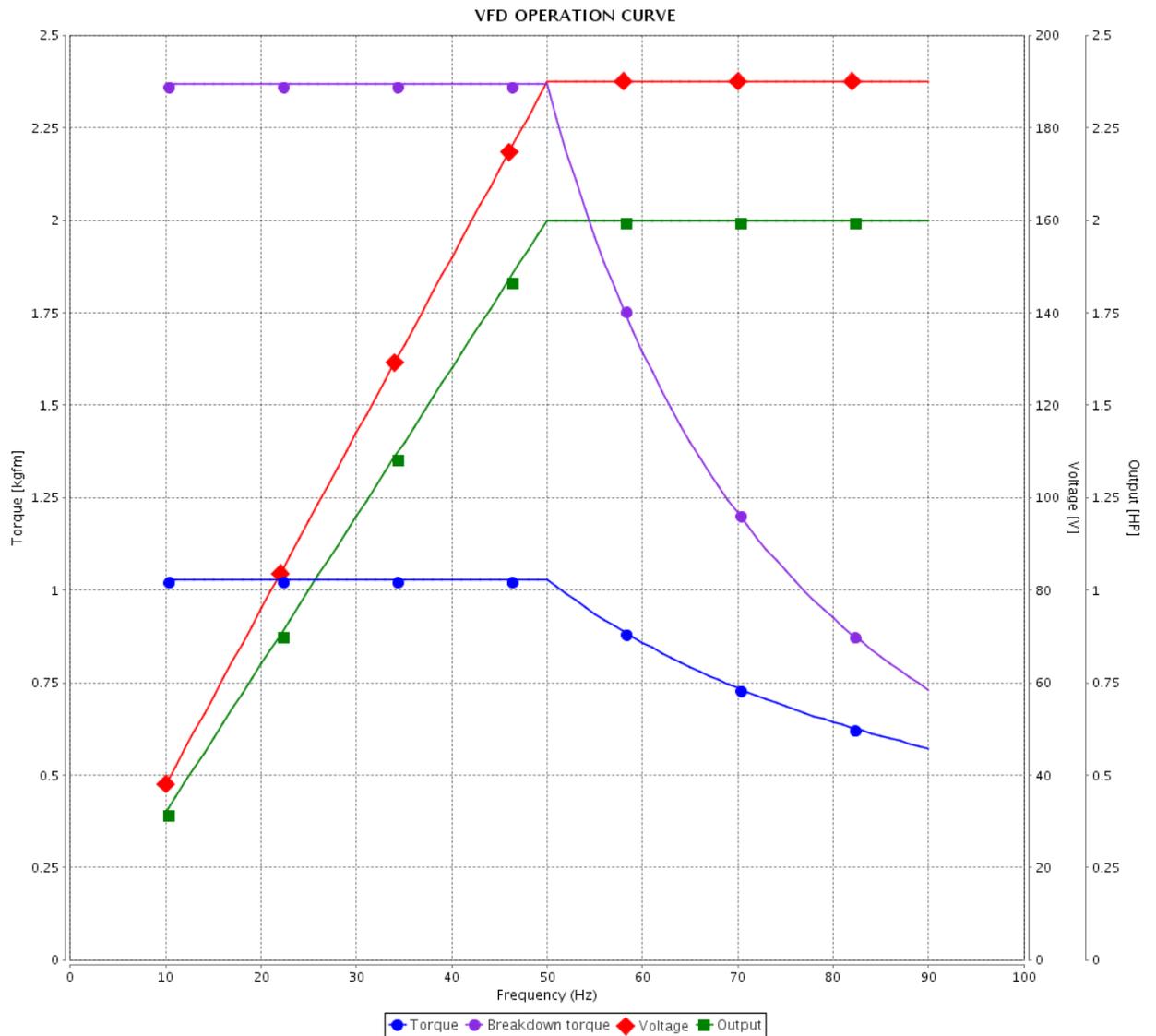


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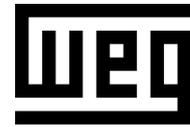
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 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		15 / 16		
Date		22/03/2021		

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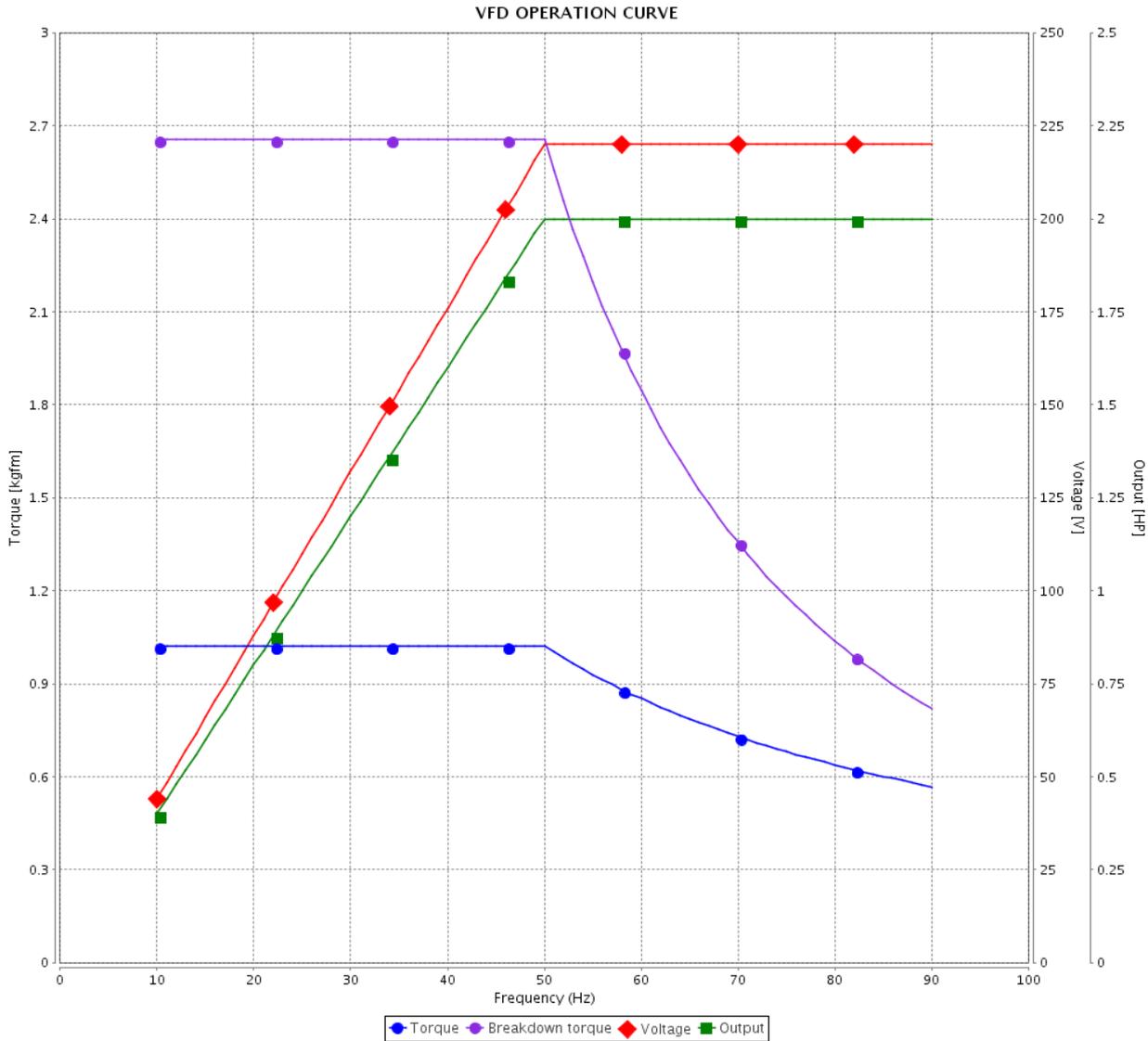


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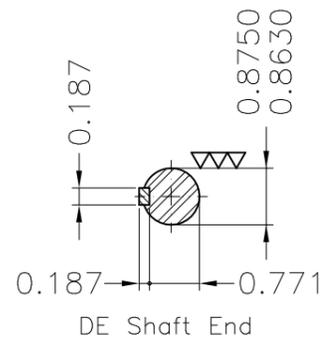
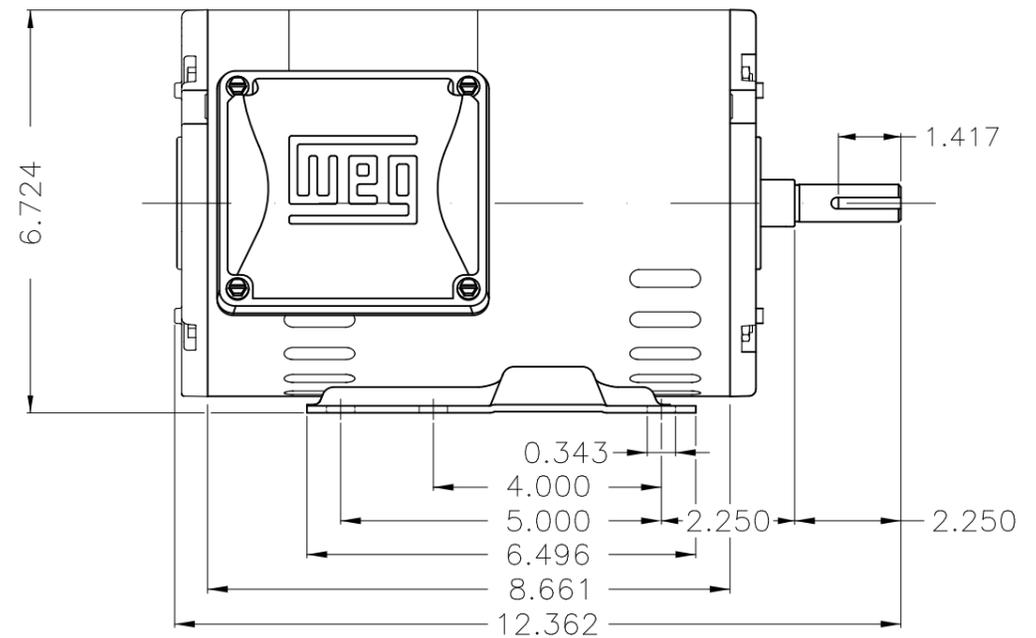
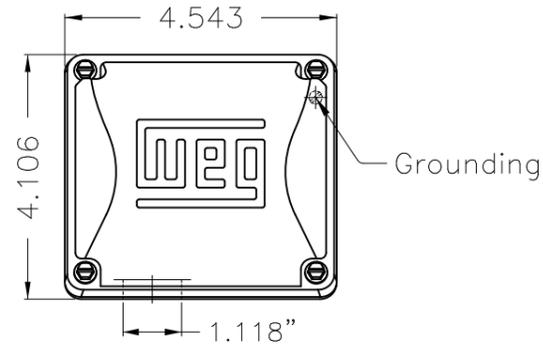
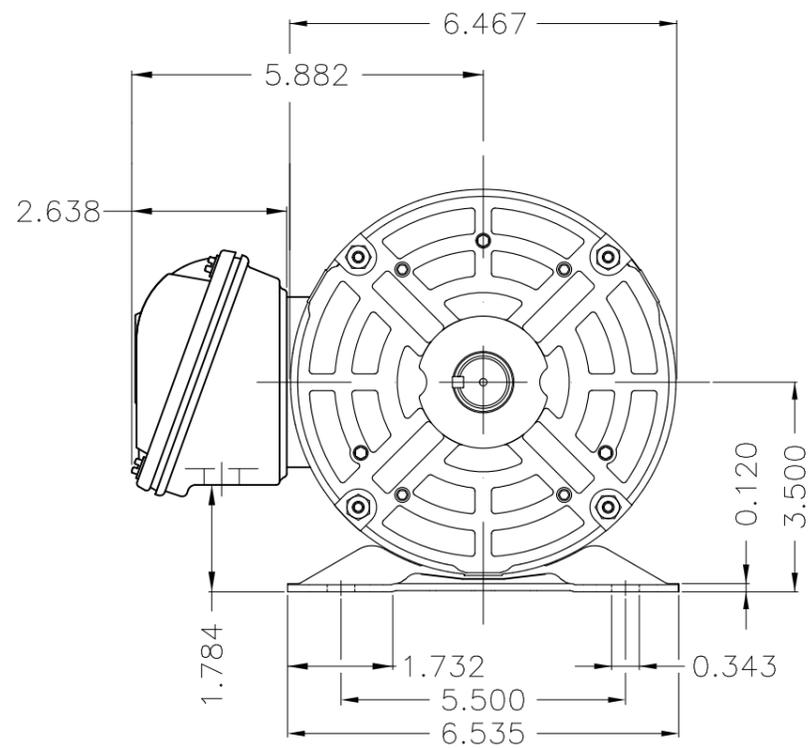
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 16 / 16	Revision
Checked by				
Date	22/03/2021			

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EIXO
 PADRÃO
 OPCIONAL
 ESPECIAL

Dimensões em polegada
 Dimensions in inches

THIS IS AN UPDATED REVISION, THE PREVIOUS ONE MUST BE DISREGARDED.



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	USERADMIN	THREE P. MOTOR OPEN ROLLED STEEL NEMA PREM					
CHECKED		FRAME 143/5T ODP					
RELEASED		WEG code: 12628876					
REL DT	22.03.2021	WMO Jaragua do Sul	Product Engineering	SHEET	1 / 1		

2 HP 04 Poles 60Hz

A



**NEMA
Premium**

3PT9



Energy Verified

MADE IN BRAZIL

MAT: 12628876 CC029A**W01.T00IC0X0N****MODEL 002180T3E145T-S****24MAR2021 B/N:**

PH 3	Hz 60	HP 2.0
FR 143/5T		KW 1.5
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 5.38/2.69
INS CL F AT 80K		SFA 6.19/3.09
AMB 40°C	DES B	SF 1.15
ENCL ODP	CODE K	PF 0.81
USABLE @ 208V 5.95A		RPM 1740
SF1.00		NEMA NOM. EFF 86.5%

ALTERNATE RATING: 2.0HP 50Hz 190-220/380-415V SF1.00**6.52-5.79/3.26-3.07A 1410RPM EFF 82.2% (IE1) IEC 60034-1****Inverter duty motor For 80Hz use on VPWM 1000:1 VT, 5:1 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.

