

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



| | | |
|--|---|------|
| Customer : | | |
| Product line | : Rolled Steel NEMA Premium Efficiency Three-Phase | |
| Product code : | 12674953 | |
| Catalog # : | 00118OT3E143T-SG | |
| 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 | : 15.8 kg | |
| Moment of inertia (J) | : 0.0046 kgm ² | |
| Output [HP] | 1 | |
| Poles | 4 | |
| Frequency [Hz] | 60 | |
| Rated voltage [V] | 230/460 | |
| Rated current [A] | 3.02/1.51 | |
| L. R. Amperes [A] | 24.2/12.1 | |
| LRC [A] | 8.0x(Code L) | |
| No load current [A] | 1.92/0.958 | |
| Rated speed [RPM] | 1760 | |
| Slip [%] | 2.22 | |
| Rated torque [kgfm] | 0.412 | |
| Locked rotor torque [%] | 290 | |
| Breakdown torque [%] | 360 | |
| Service factor | 1.15 | |
| Temperature rise | 80 K | |
| Locked rotor time | 39s (cold) 22s (hot) | |
| Noise level ² | 52.0 dB(A) | |
| Efficiency (%) | 25% | 79.9 |
| | 50% | 81.5 |
| | 75% | 84.0 |
| | 100% | 85.5 |
| Power Factor | 25% | 0.29 |
| | 50% | 0.51 |
| | 75% | 0.65 |
| | 100% | 0.73 |
| 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 : 35 kgf | |
| | Max. compression : 50 kgf | |
| Notes | | |
| USABLE @208V 3.34A SF 1.00 SFA 3.34A | | |
| 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 | |
| 22/03/2021 | | |
| Page | Revision | |
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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

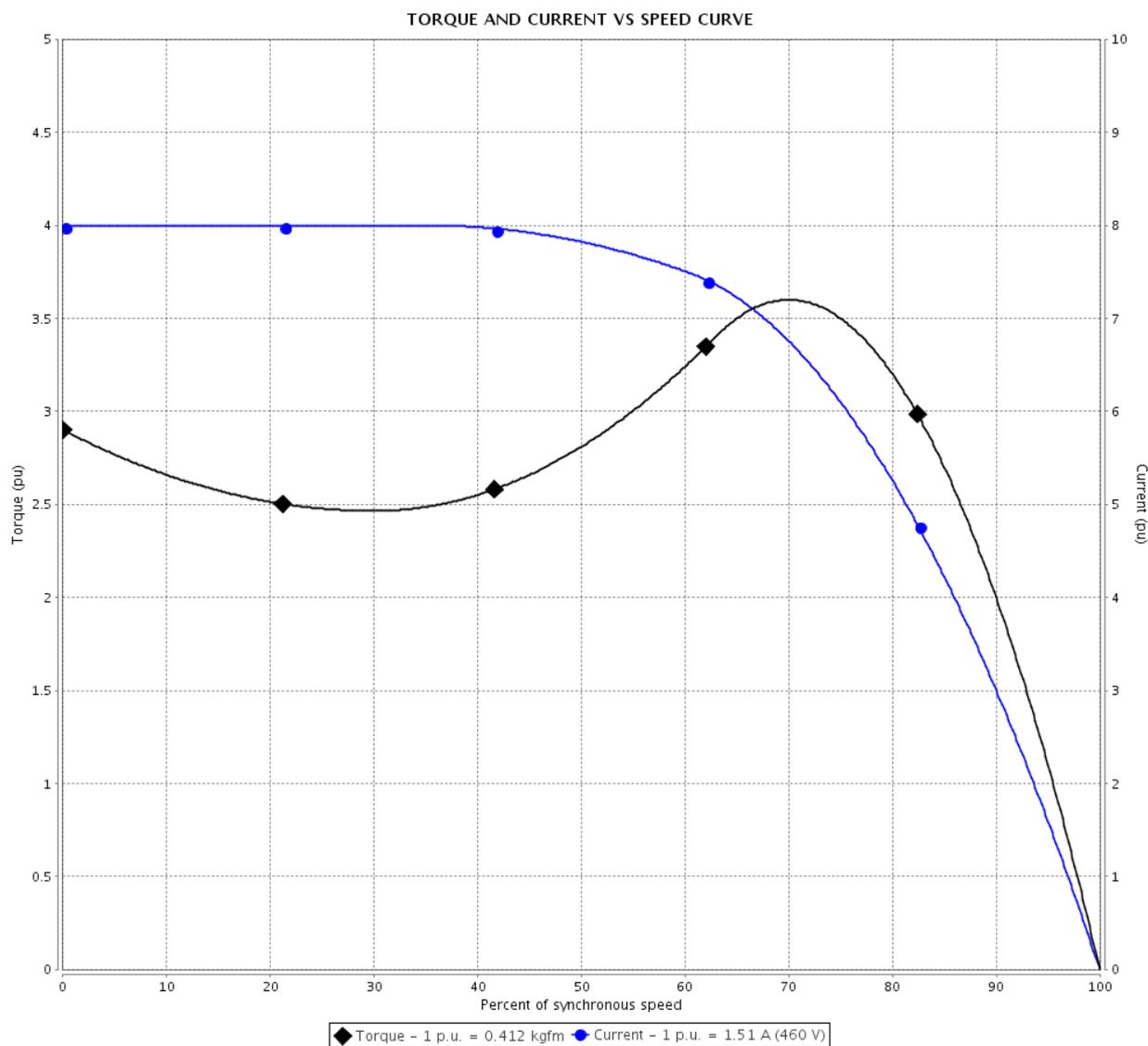


Customer :

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Product code : 12674953

Catalog # : 001180T3E143T-SG



Performance : 230/460 V 60 Hz 4P

Rated current : 3.02/1.51 A
 LRC : 8.0
 Rated torque : 0.412 kgfm
 Locked rotor torque : 290 %
 Breakdown torque : 360 %
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.0046 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : B

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

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TORQUE AND CURRENT VS SPEED CURVE



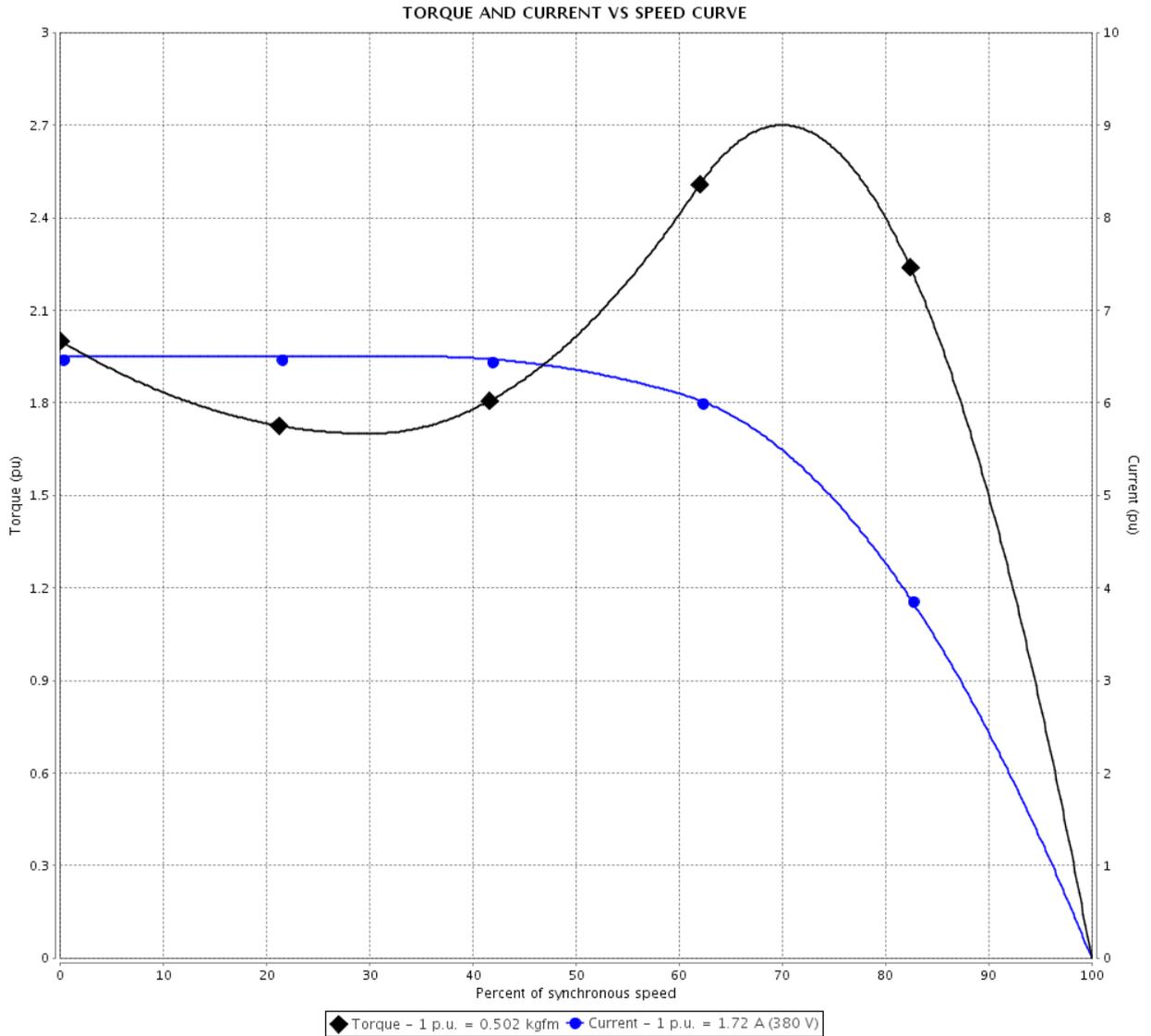
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Product code : 12674953

Catalog # : 00118OT3E143T-SG



Performance : 190/380 V 50 Hz 4P

Rated current : 3.44/1.72 A
 LRC : 6.5
 Rated torque : 0.502 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 270 %
 Rated speed : 1445 rpm

Moment of inertia (J) : 0.0046 kgm²
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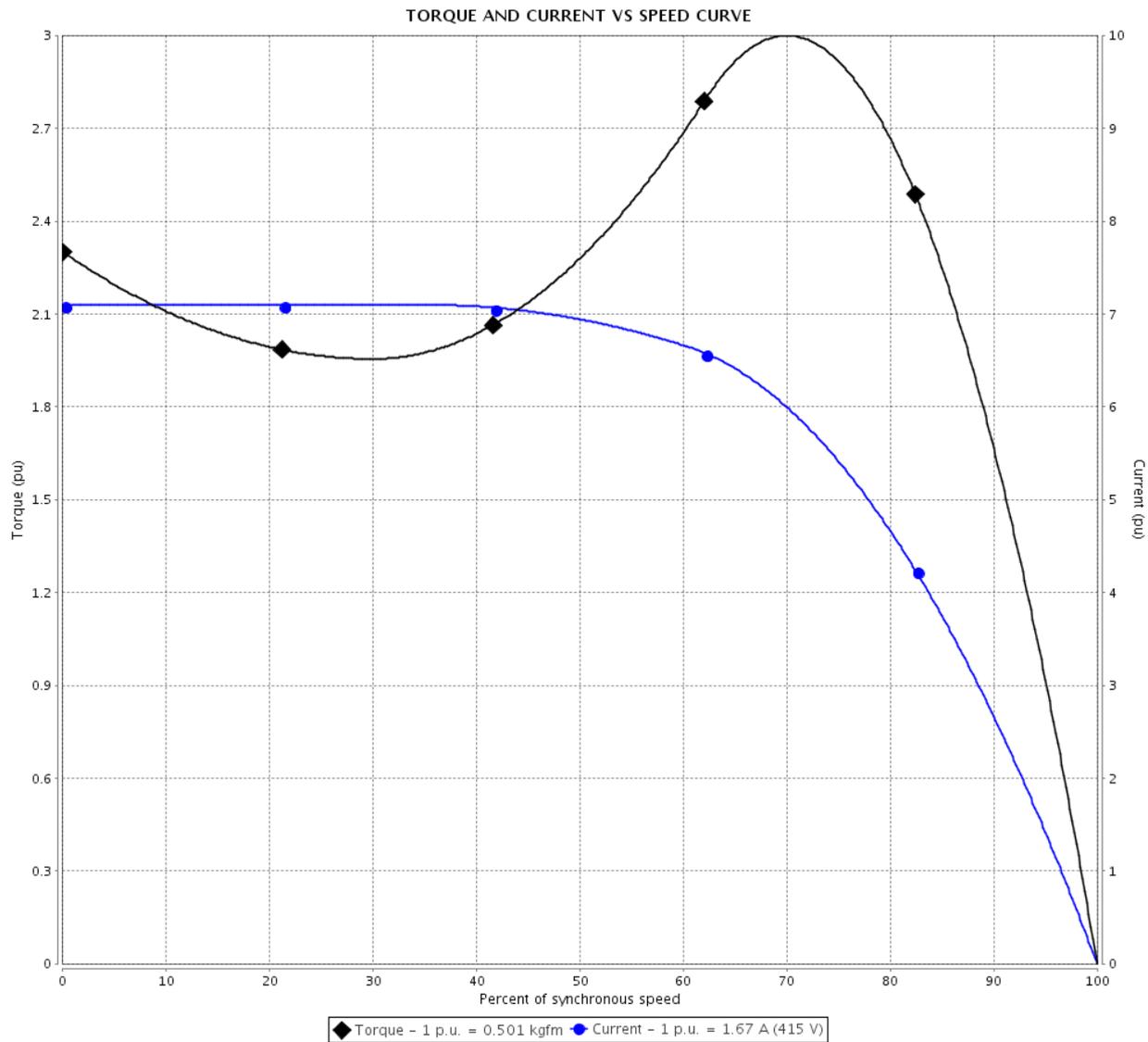


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Performance : 220/415 V 50 Hz 4P

| | | | |
|---------------------|---------------|-----------------------|---------------------------|
| Rated current | : 3.15/1.67 A | Moment of inertia (J) | : 0.0046 kgm ² |
| LRC | : 7.1 | Duty cycle | : Cont.(S1) |
| Rated torque | : 0.501 kgfm | Insulation class | : F |
| Locked rotor torque | : 229 % | Service factor | : 1.15 |
| Breakdown torque | : 300 % | Temperature rise | : 80 K |
| Rated speed | : 1450 rpm | Design | : B |

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

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LOAD PERFORMANCE CURVE

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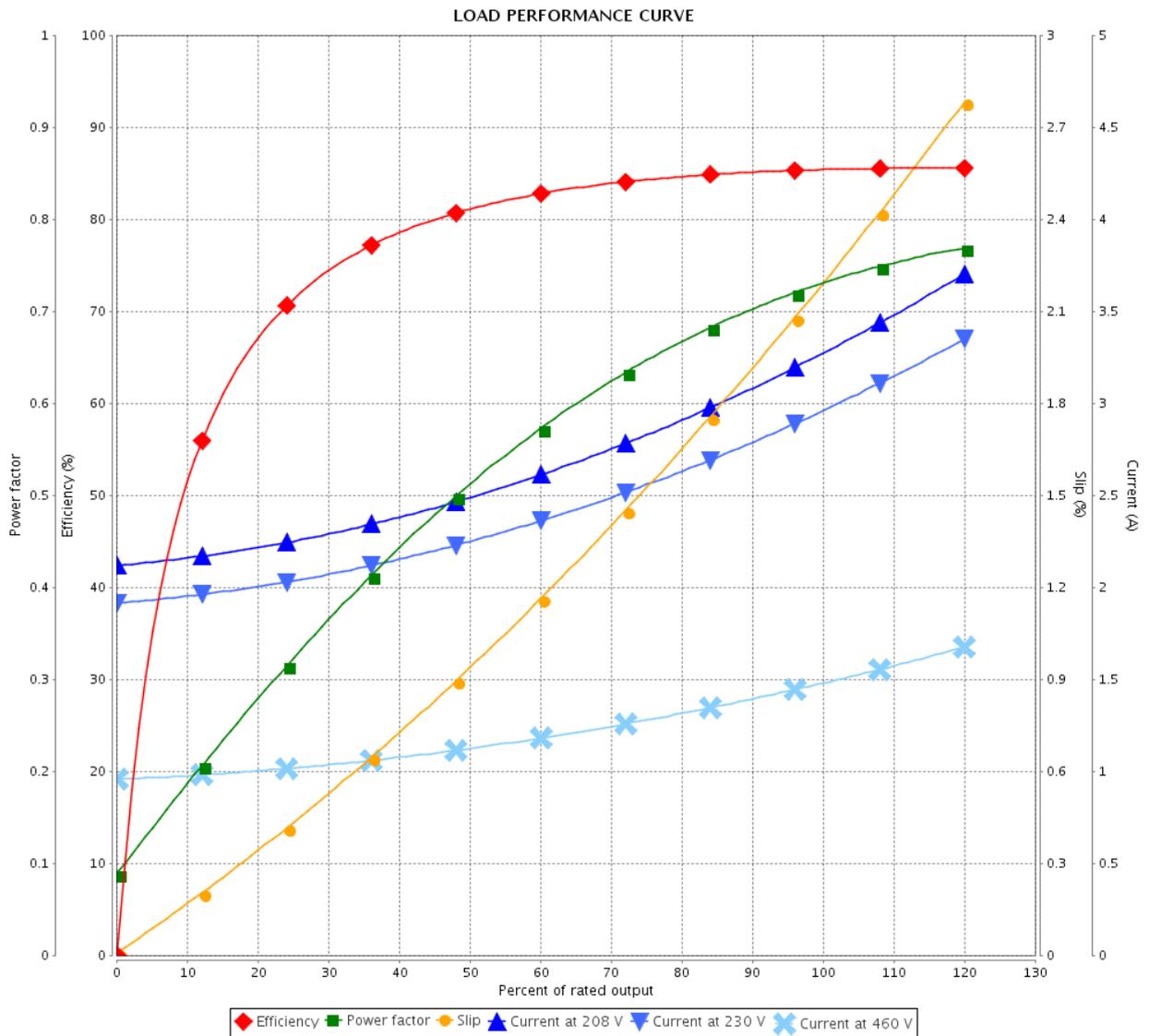


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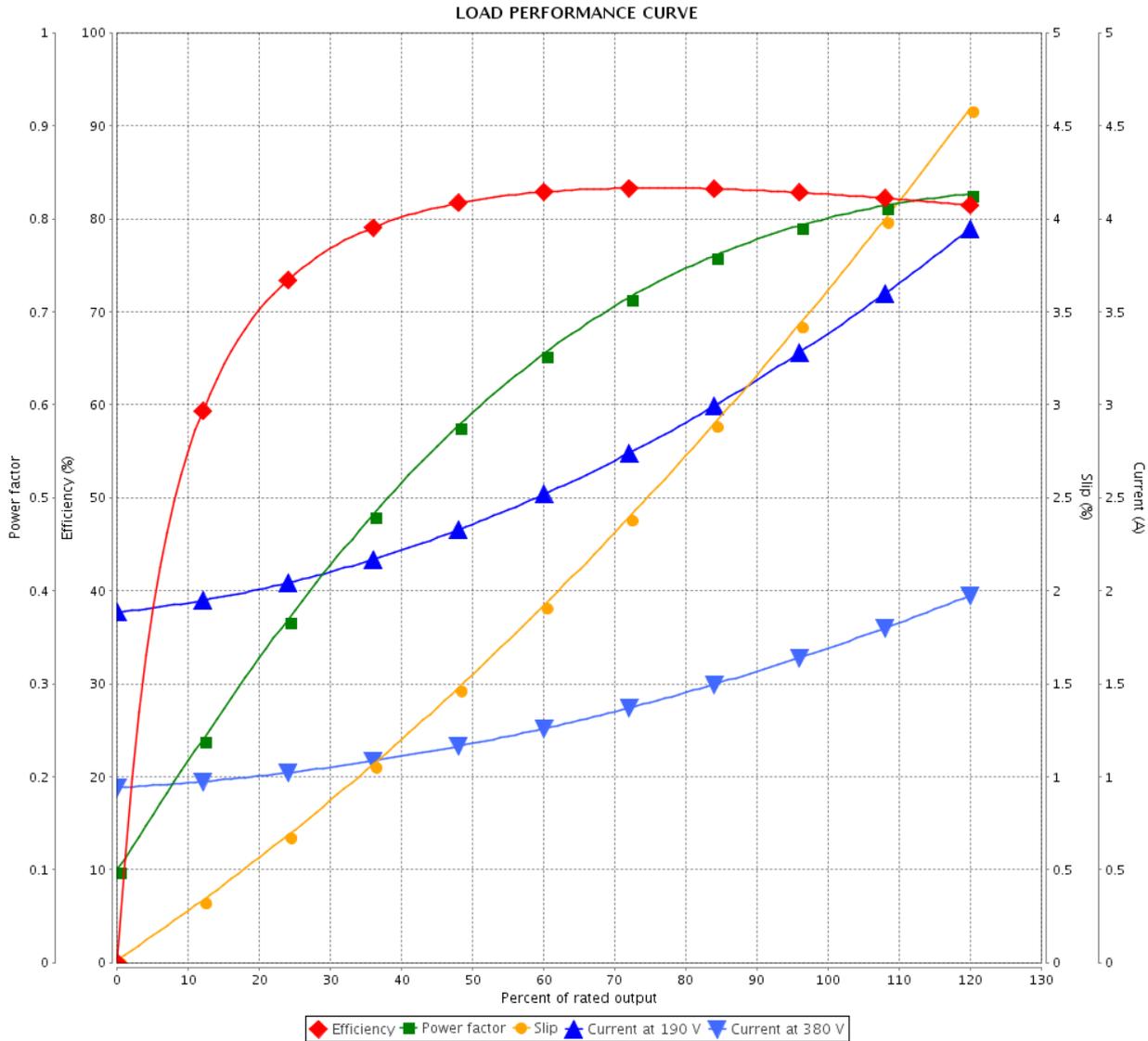


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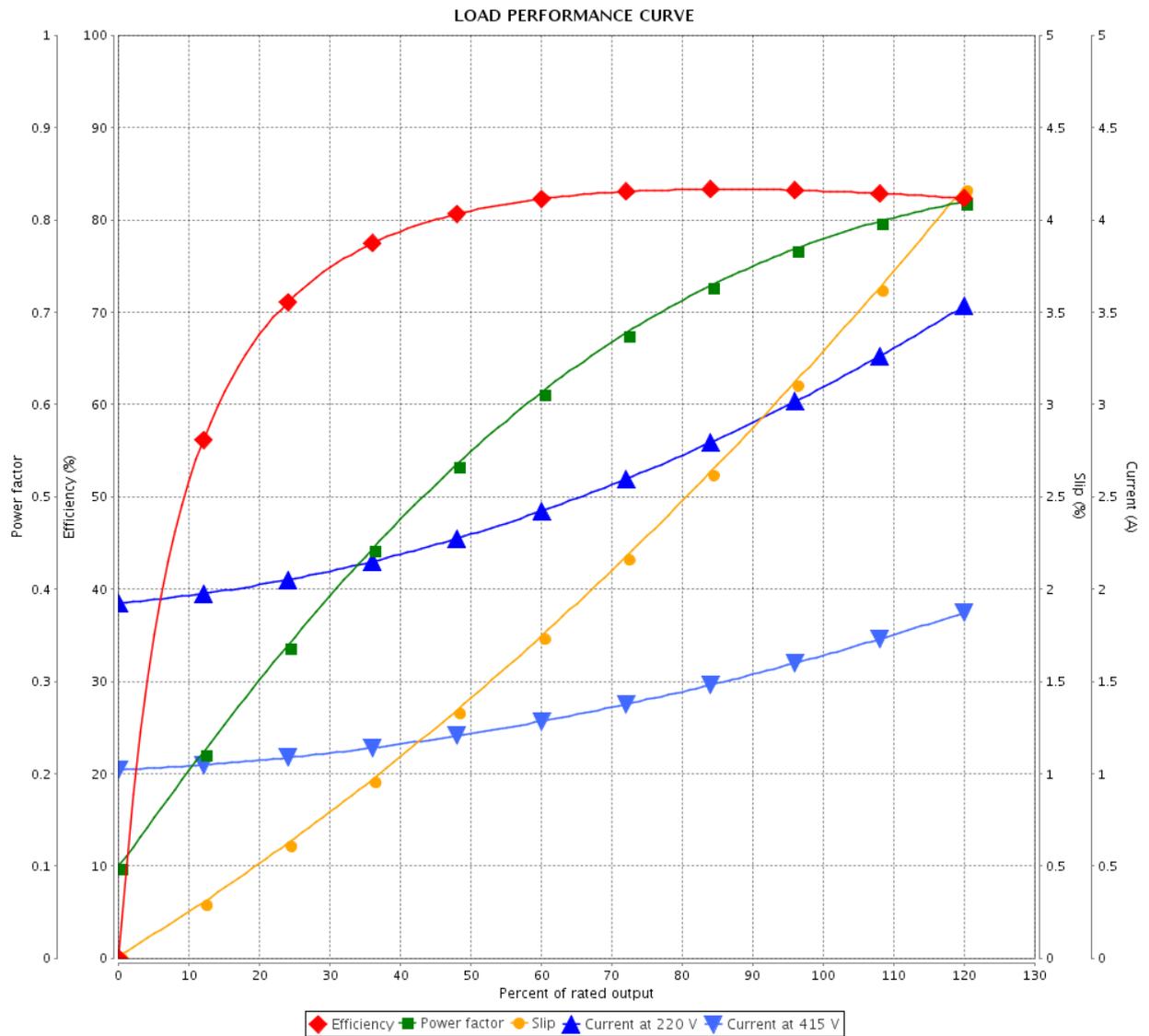


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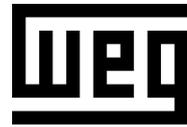
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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

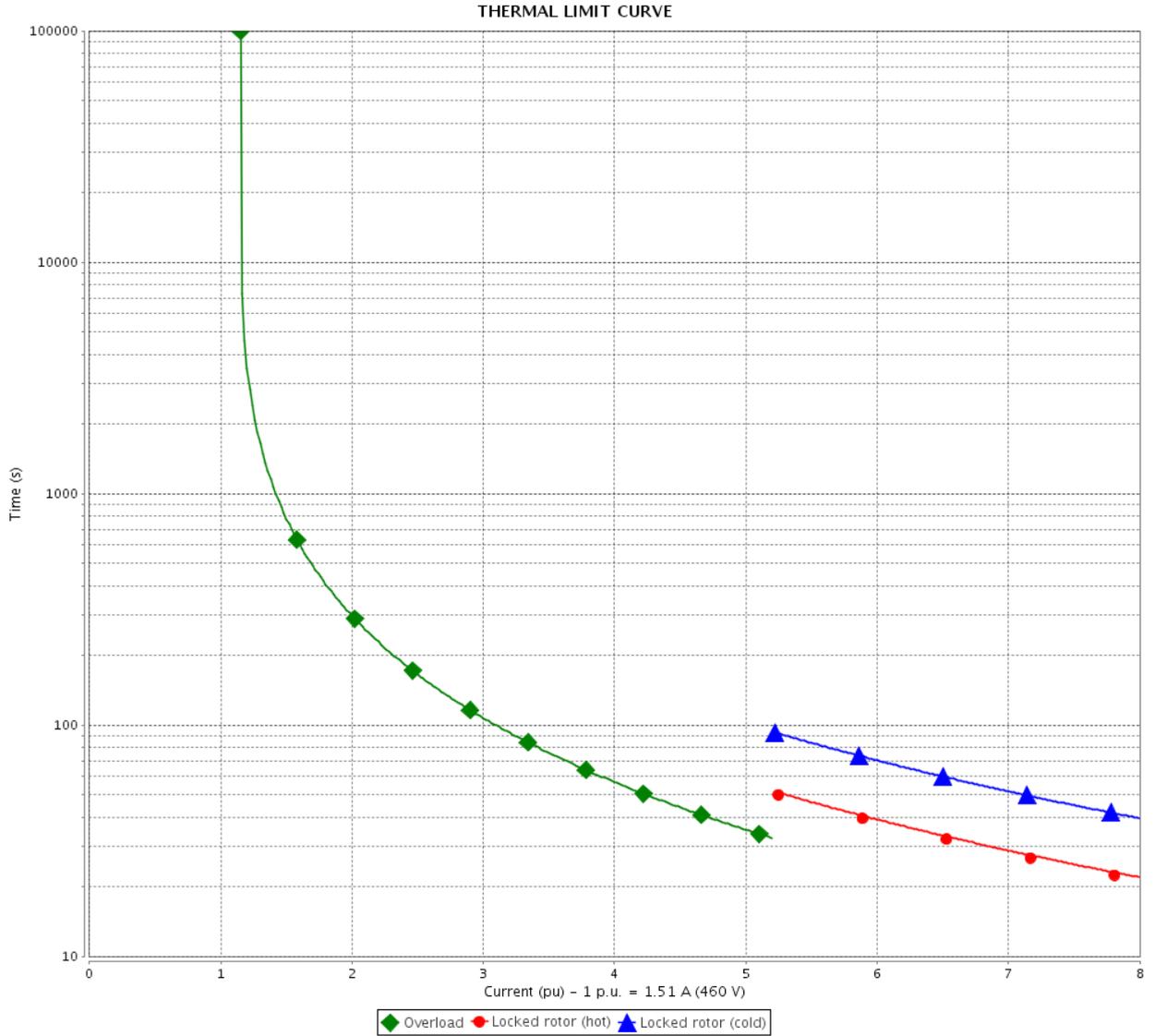
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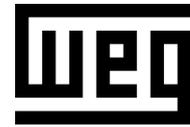


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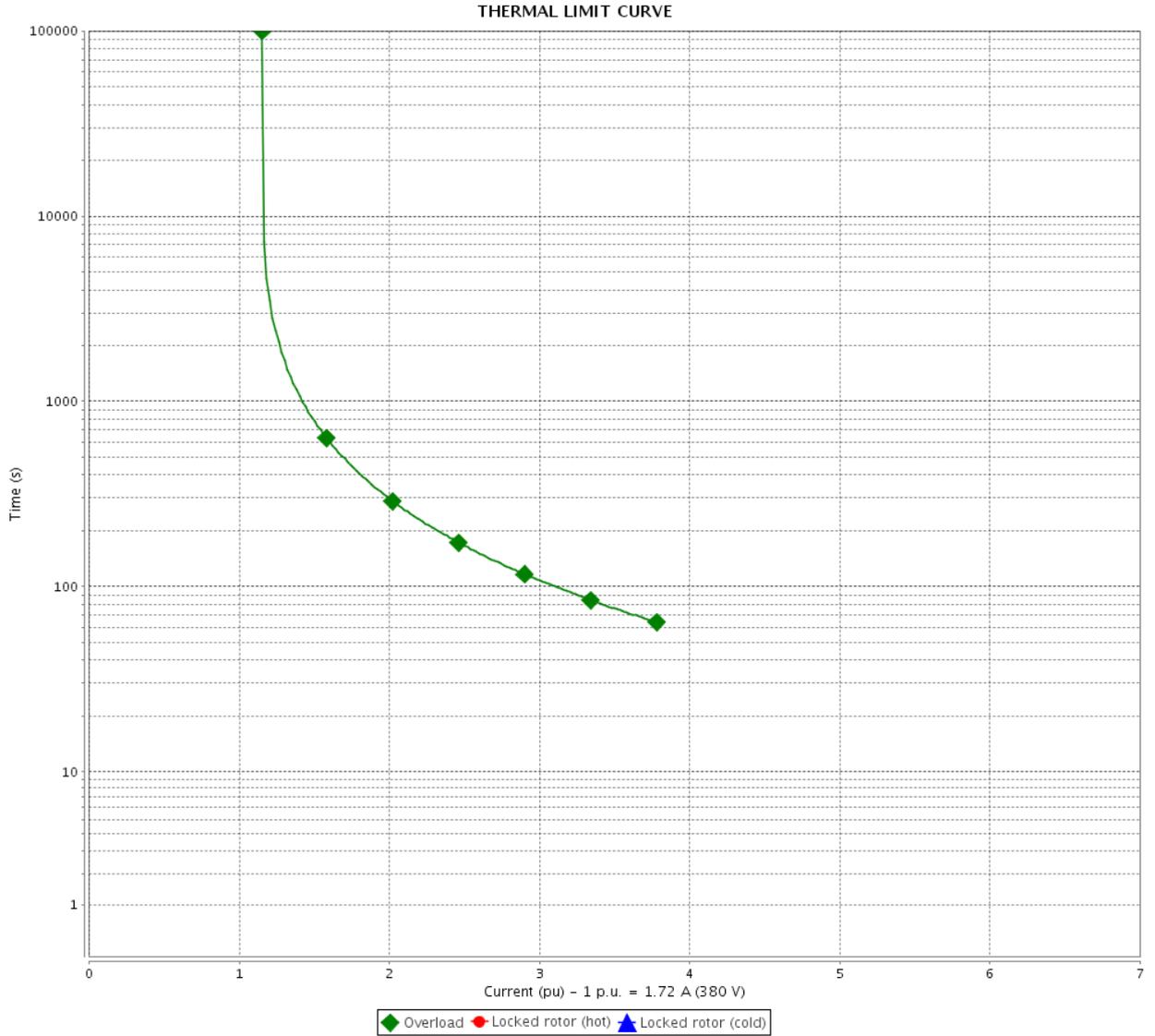
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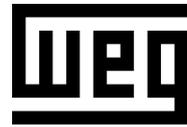


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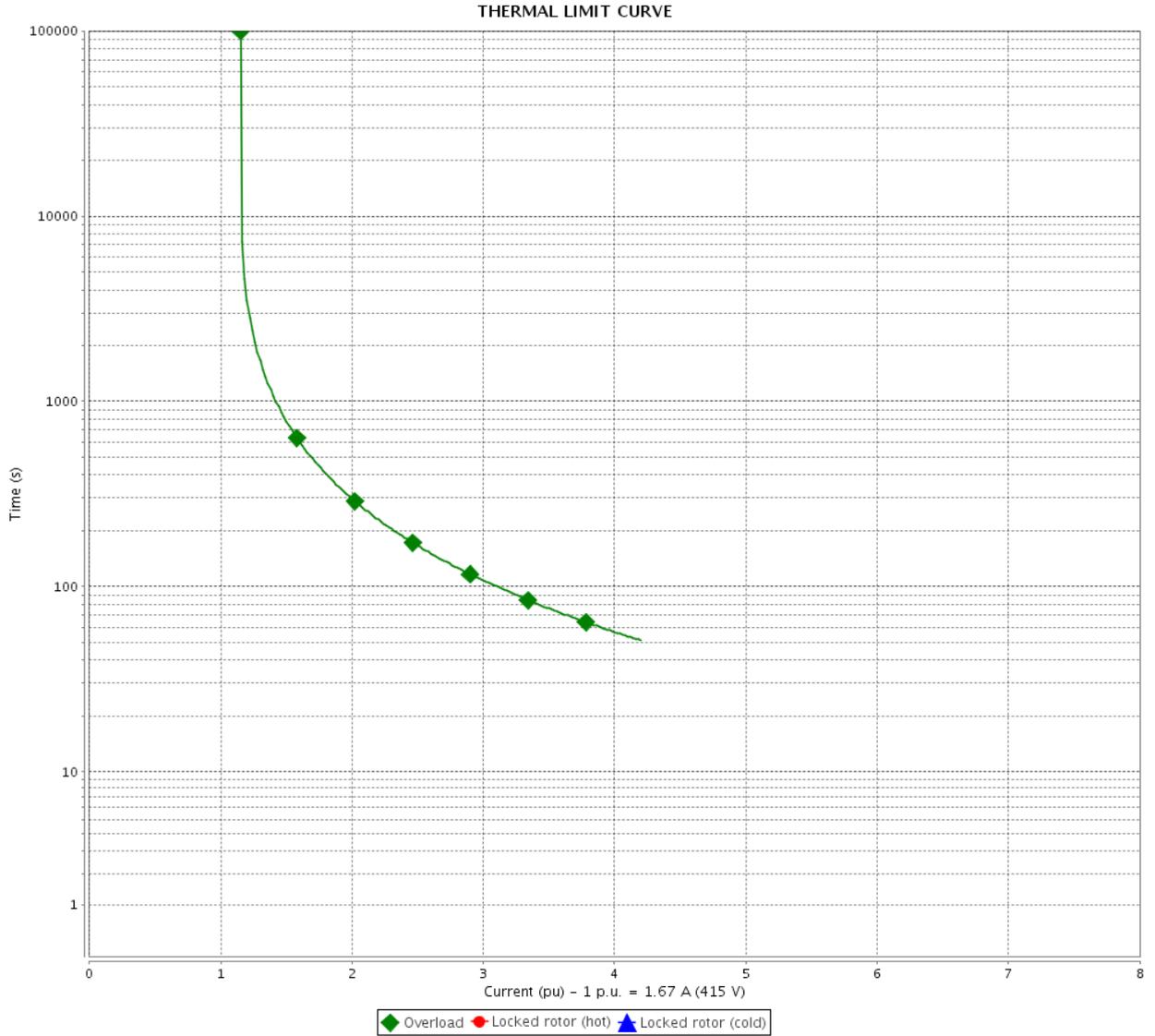
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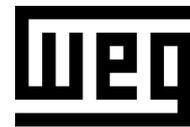
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

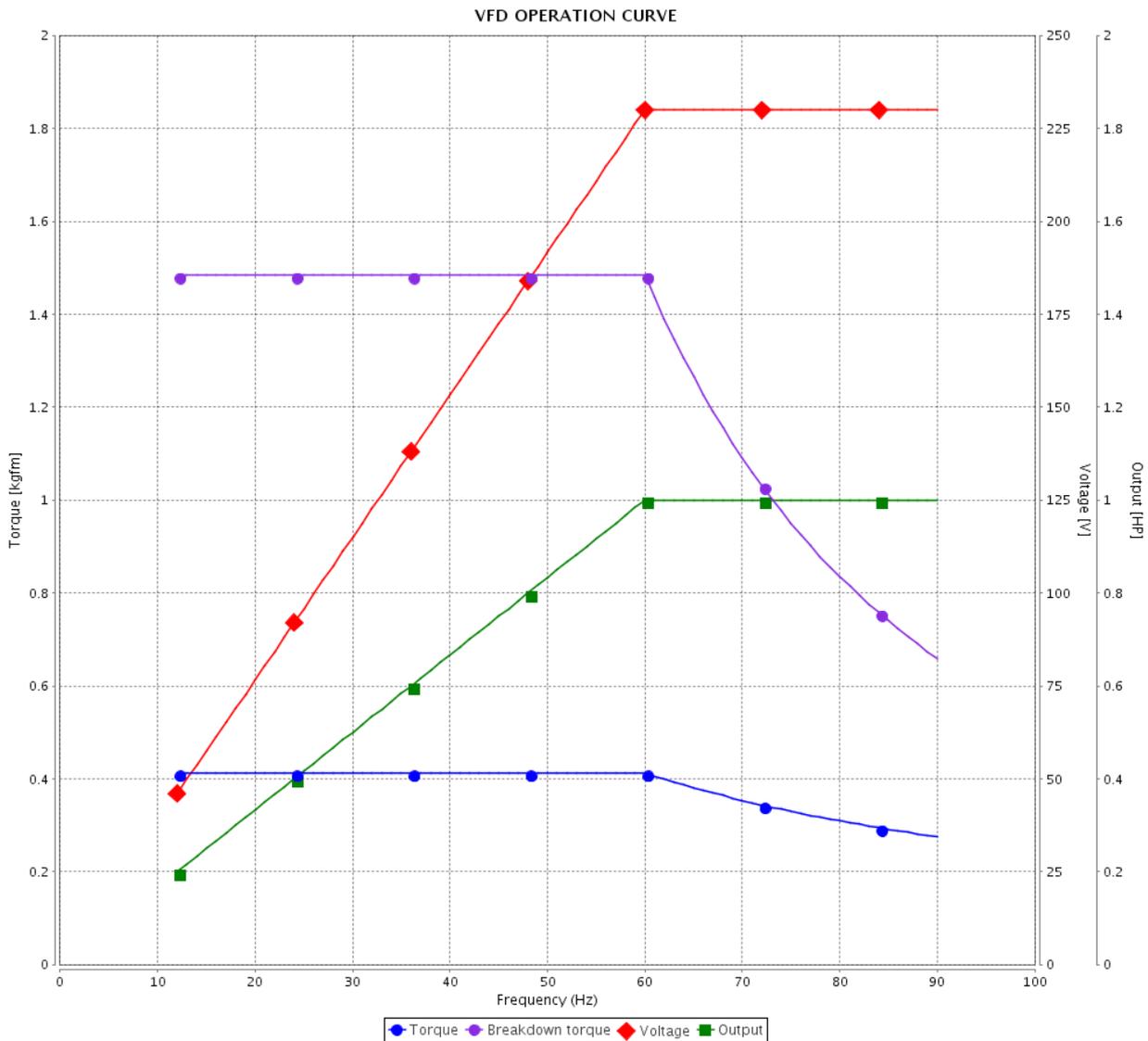


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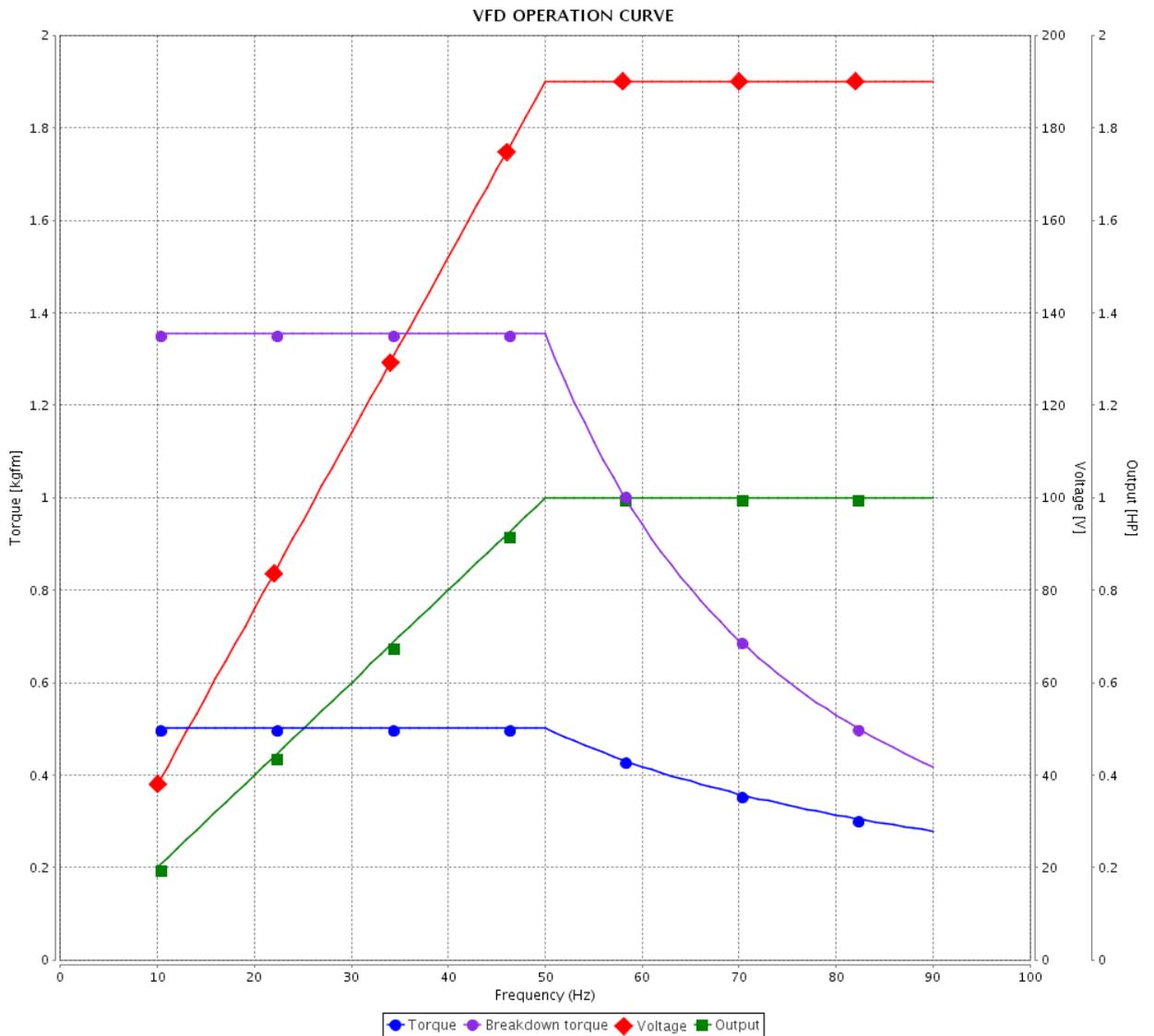


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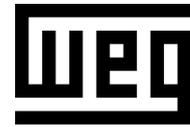
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VFD OPERATION CURVE

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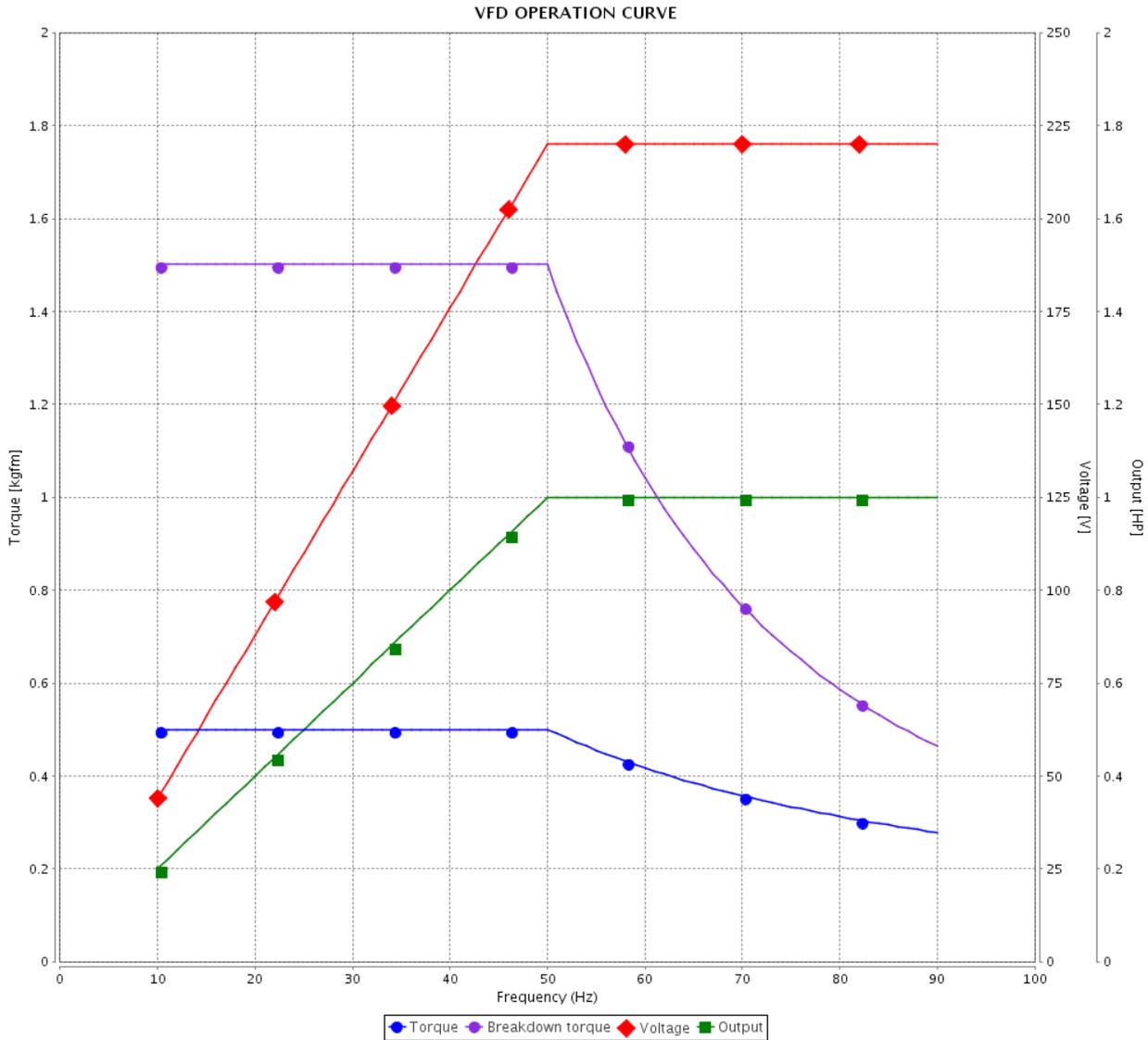


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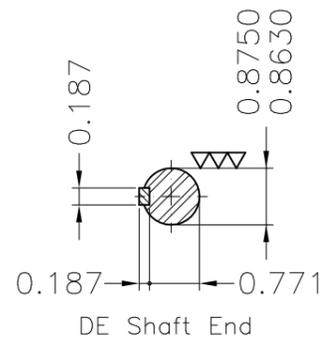
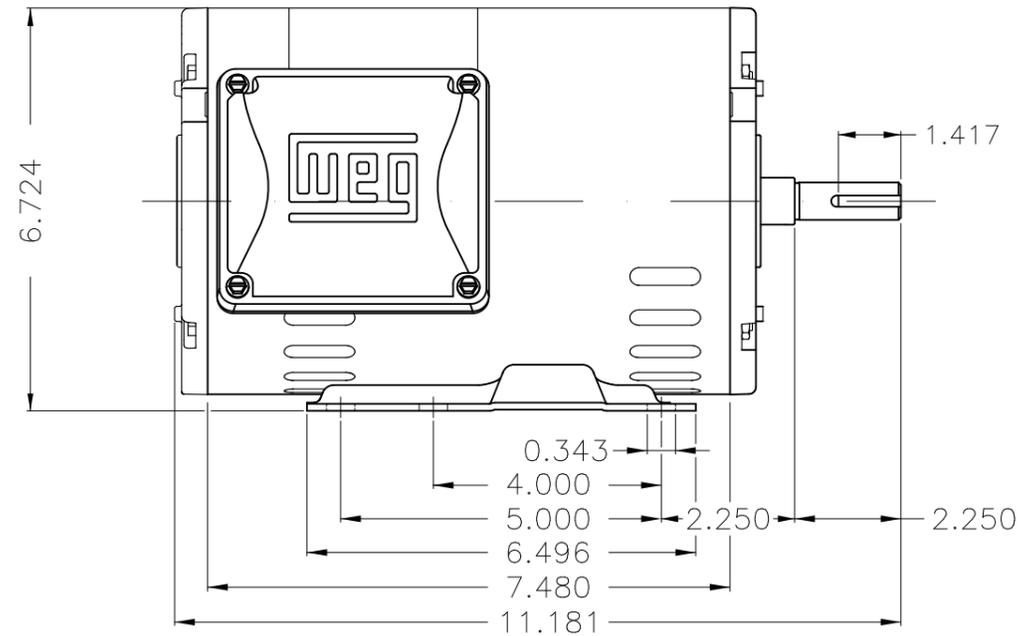
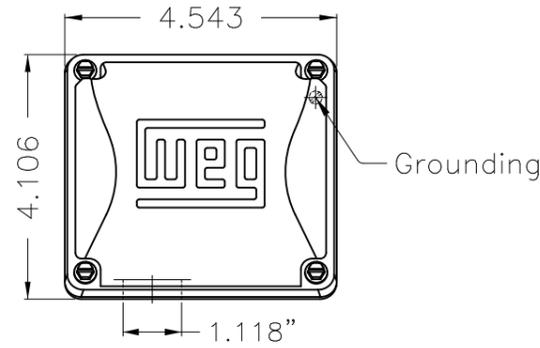
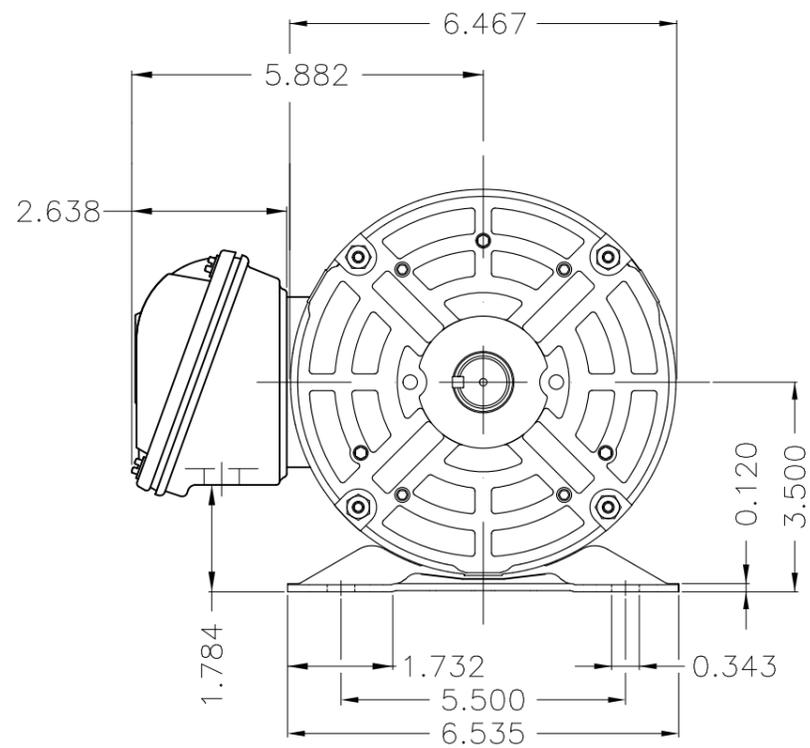
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EIXO
 PADRÃO
 OPCIONAL
 ESPECIAL

Dimensões em polegada
 Dimensions in inches

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



Internal AEGIS ground ring on the DE
 Bearing cap
 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: 12674953 | | | | | |
| REL DT | 22.03.2021 | WMO Jaragua do Sul | Product Engineering | SHEET | 1 / 1 | | |

1 HP 04 Poles 60Hz

A



ZME A3

**NEMA
Premium**

MADE IN MEXICO

MAT: 12674953 CC029A

W01.T00IC0X0N

MODEL 001180T3E143T-SG

07JAN2021 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 3.02/1.51 |
| INS CL F AT 80K | | SFA 3.47/1.74 |
| AMB 40°C | DES B | SF 1.15 |
| ENCL ODP | CODE L | PF 0.73 |
| USABLE @ 208V 3.34A | | RPM 1760 |
| SF1.00 | | NEMA NOM. EFF 85.5% |
| ALTERNATE RATING: 1.0HP 50Hz 190-220/380-415V SF1.15 | | |
| 3.44-3.15/1.72-1.67A 1445RPM EFF 82.6% (IE3) 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 |



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.

