

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



| | | |
|--|---|------|
| Customer : | | |
| Product line | : JP Pump NEMA Premium Efficiency Three-Phase | |
| Product code : | 14328034 | |
| Catalog # : | 00152ET3E182JP-S | |
| Frame | : 182/4JP | |
| 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 | : 65.9 lb | |
| Moment of inertia (J) | : 0.2800 sq.ft.lb | |
| Output [HP] | 1.5 | |
| Poles | 6 | |
| Frequency [Hz] | 60 | |
| Rated voltage [V] | 230/460 | |
| Rated current [A] | 4.44/2.22 | |
| L. R. Amperes [A] | 30.6/15.3 | |
| LRC [A] | 6.9x(Code K) | |
| No load current [A] | 2.73/1.36 | |
| Rated speed [RPM] | 1170 | |
| Slip [%] | 2.50 | |
| Rated torque [ft.lb] | 6.73 | |
| Locked rotor torque [%] | 240 | |
| Breakdown torque [%] | 340 | |
| Service factor | 1.15 | |
| Temperature rise | 80 K | |
| Locked rotor time | 99s (cold) 55s (hot) | |
| Noise level ² | 52.0 dB(A) | |
| Efficiency (%) | 25% | 82.8 |
| | 50% | 84.0 |
| | 75% | 86.5 |
| | 100% | 87.5 |
| Power Factor | 25% | 0.29 |
| | 50% | 0.50 |
| | 75% | 0.63 |
| | 100% | 0.71 |
| Bearing type | : <u>Drive end</u> 6207 ZZ <u>Non drive end</u> 6205 ZZ | |
| Sealing | : V'Ring Without Bearing Seal | |
| Lubrication interval | : - | |
| Lubricant amount | : - | |
| Lubricant type | : Mobil Polyrex EM | |
| Foundation loads | Max. traction : 119 lb | |
| | Max. compression : 185 lb | |
| Notes USABLE @208V 4.91A SF 1.00 SFA 4.91A | | |
| 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 | 12/04/2022 | |
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| Revision | | |

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



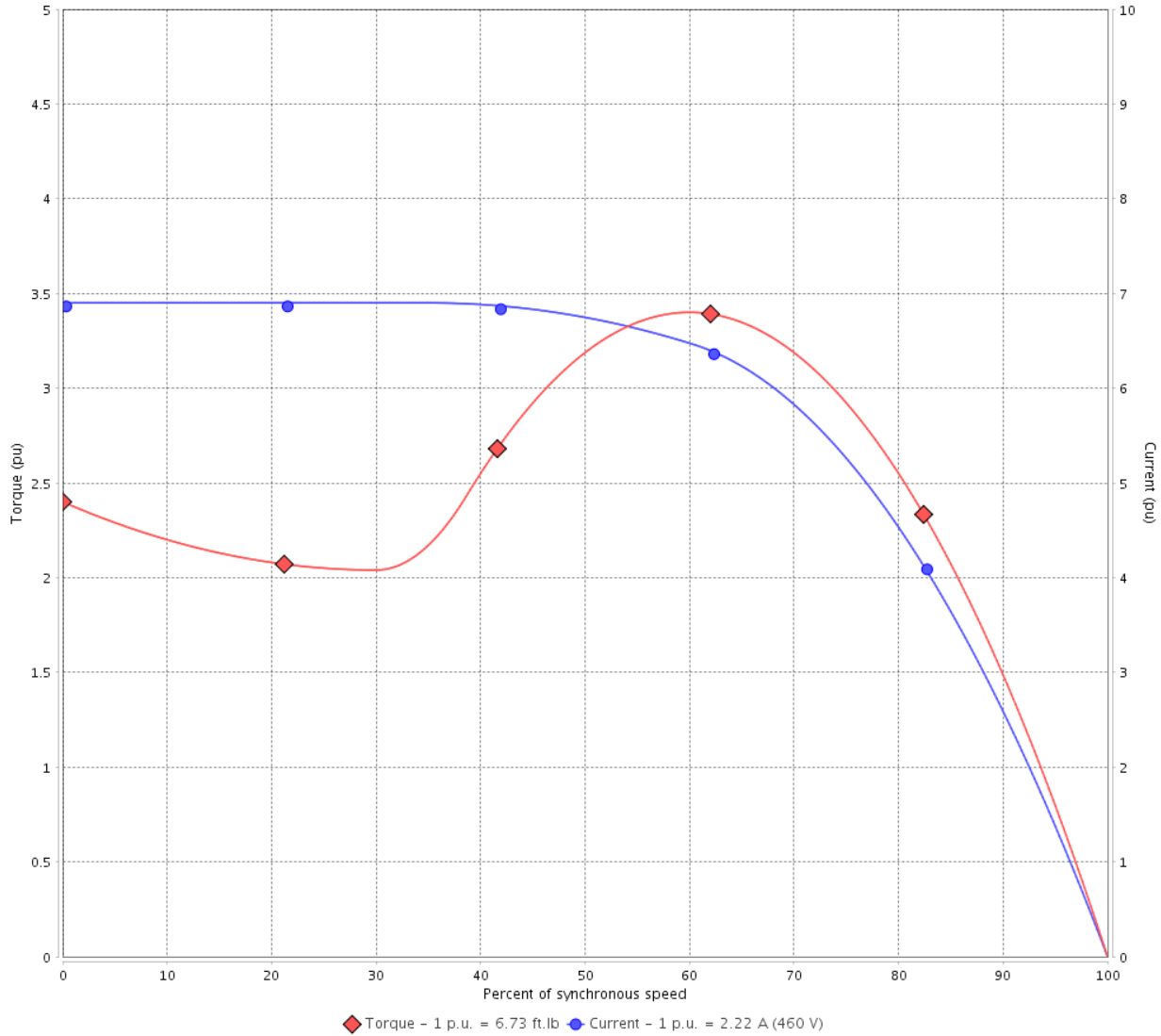
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Efficiency Three-Phase

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Catalog # : 00152ET3E182JP-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 6P

Rated current : 4.44/2.22 A
LRC : 6.9
Rated torque : 6.73 ft.lb
Locked rotor torque : 240 %
Breakdown torque : 340 %
Rated speed : 1170 rpm

Moment of inertia (J) : 0.2800 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

Locked rotor time : 99s (cold) 55s (hot)

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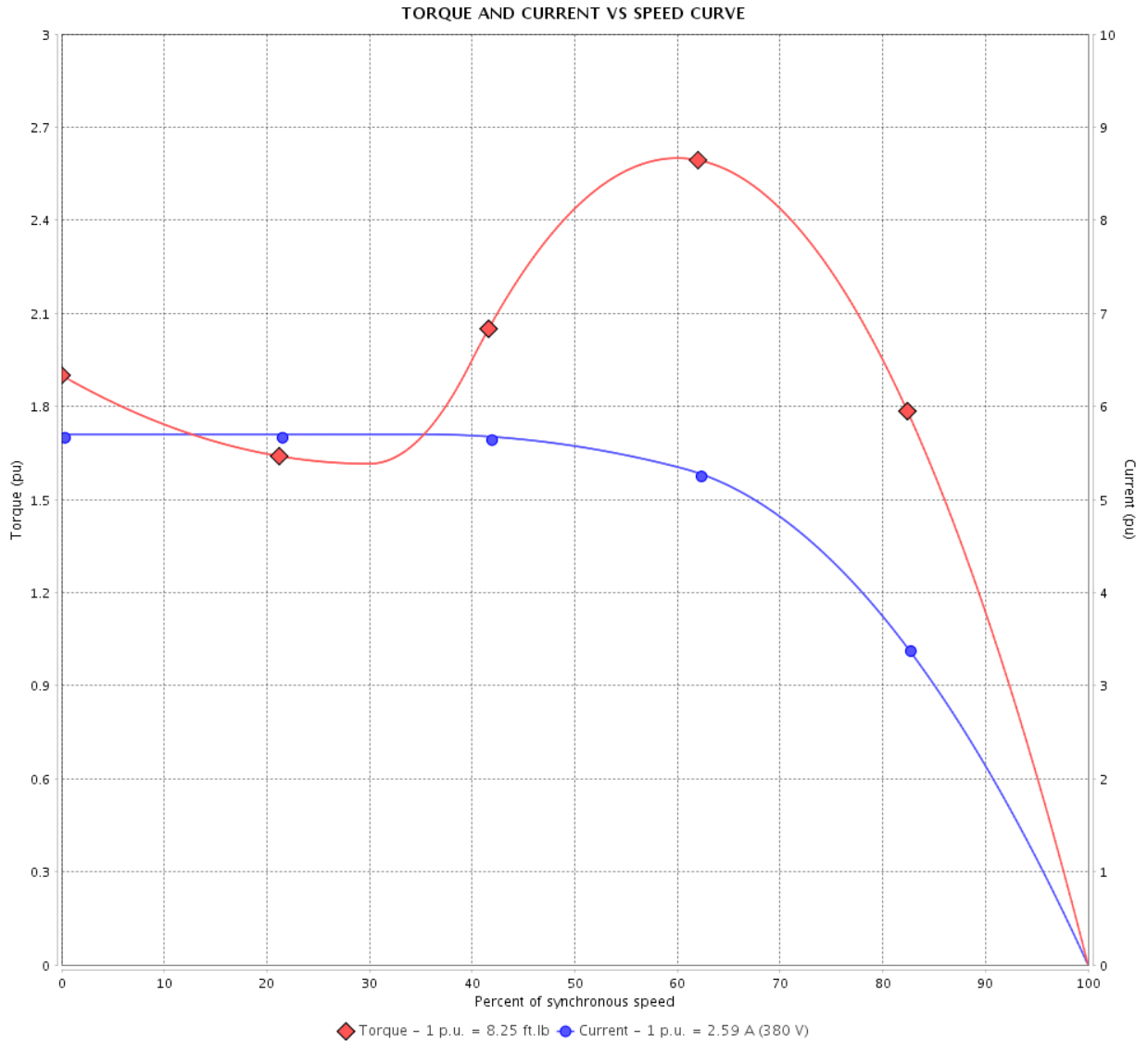
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Performance : 190/380 V 50 Hz 6P

Rated current : 5.18/2.59 A
LRC : 5.7
Rated torque : 8.25 ft.lb
Locked rotor torque : 190 %
Breakdown torque : 260 %
Rated speed : 955 rpm

Moment of inertia (J) : 0.2800 sq.ft.lb
Duty cycle : Cont.(S1)
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Locked rotor time : 0s (cold) 0s (hot)

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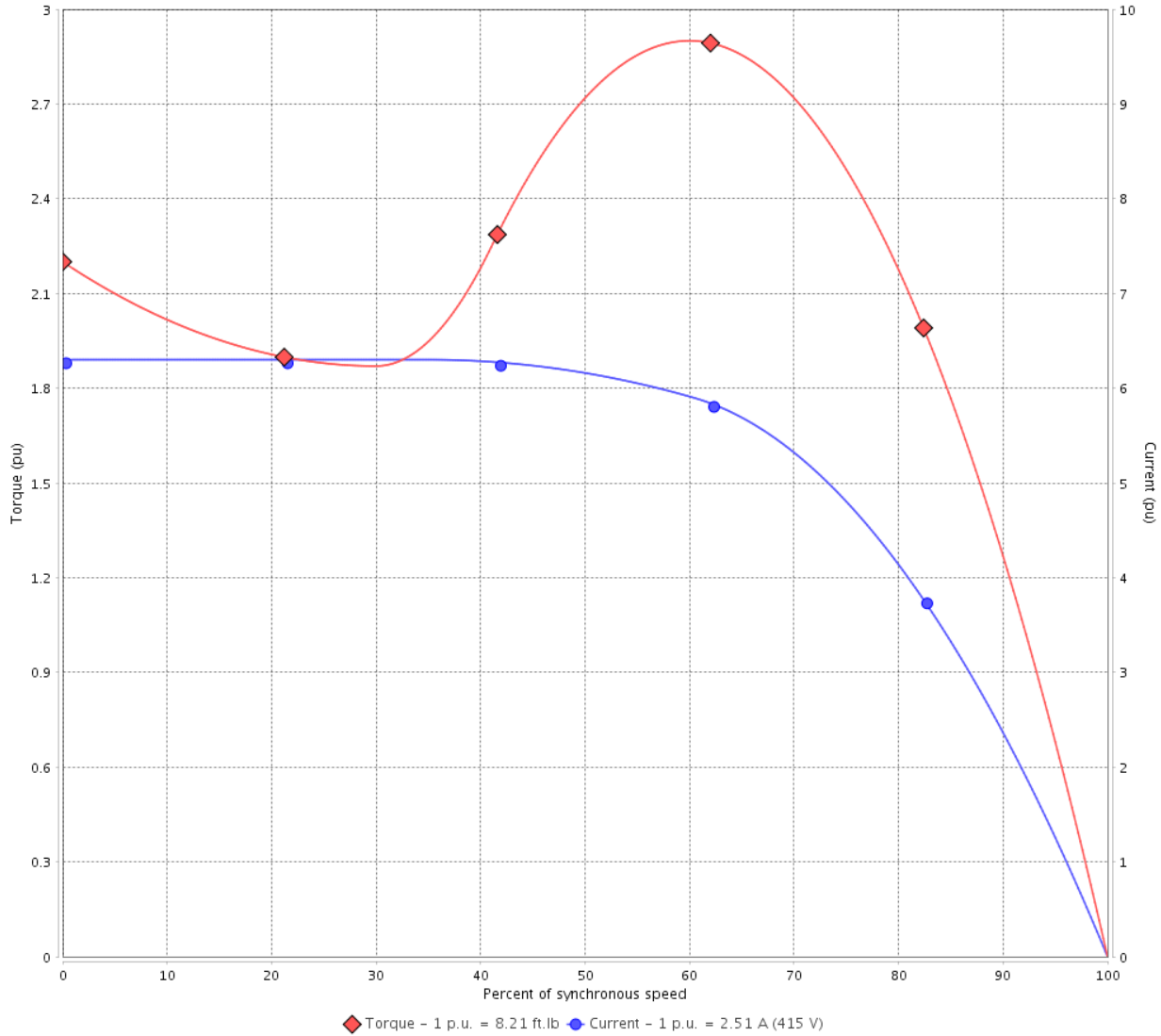
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 6P

| | | | |
|---------------------|---------------|-----------------------|-------------------|
| Rated current | : 4.73/2.51 A | Moment of inertia (J) | : 0.2800 sq.ft.lb |
| LRC | : 6.3 | Duty cycle | : Cont.(S1) |
| Rated torque | : 8.21 ft.lb | Insulation class | : F |
| Locked rotor torque | : 220 % | Service factor | : 1.15 |
| Breakdown torque | : 290 % | Temperature rise | : 80 K |
| Rated speed | : 960 rpm | Design | : B |

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

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LOAD PERFORMANCE CURVE

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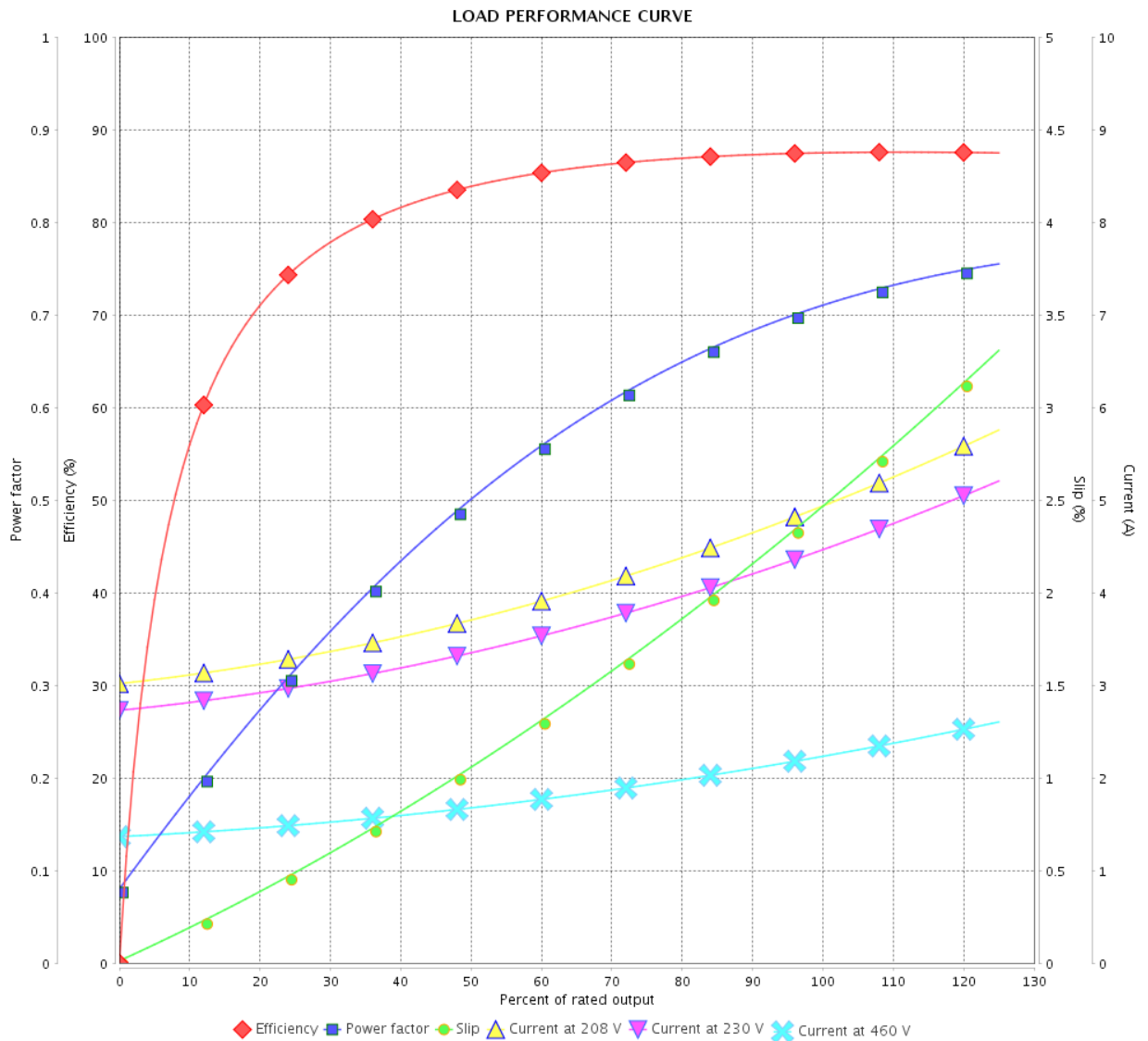


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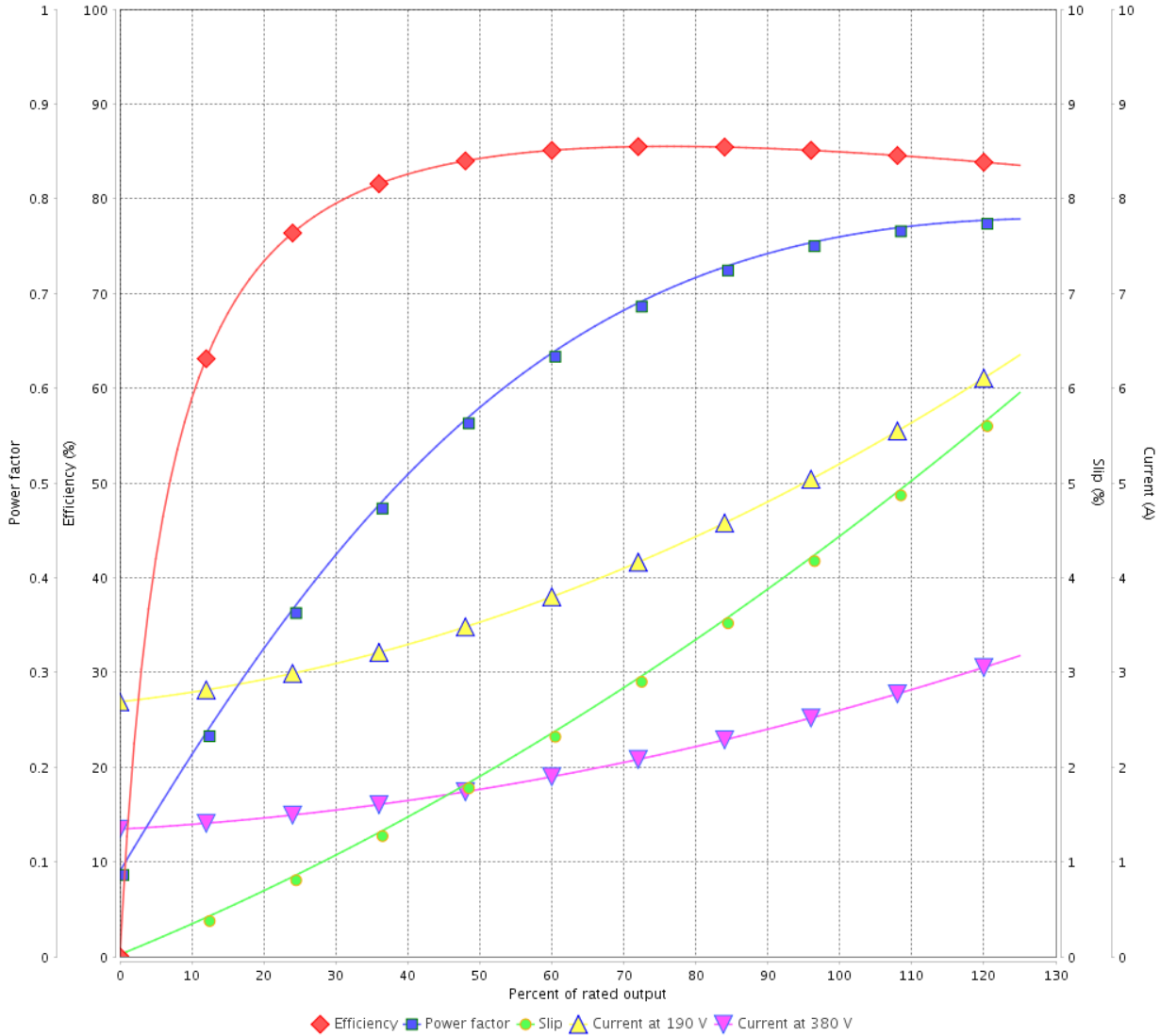
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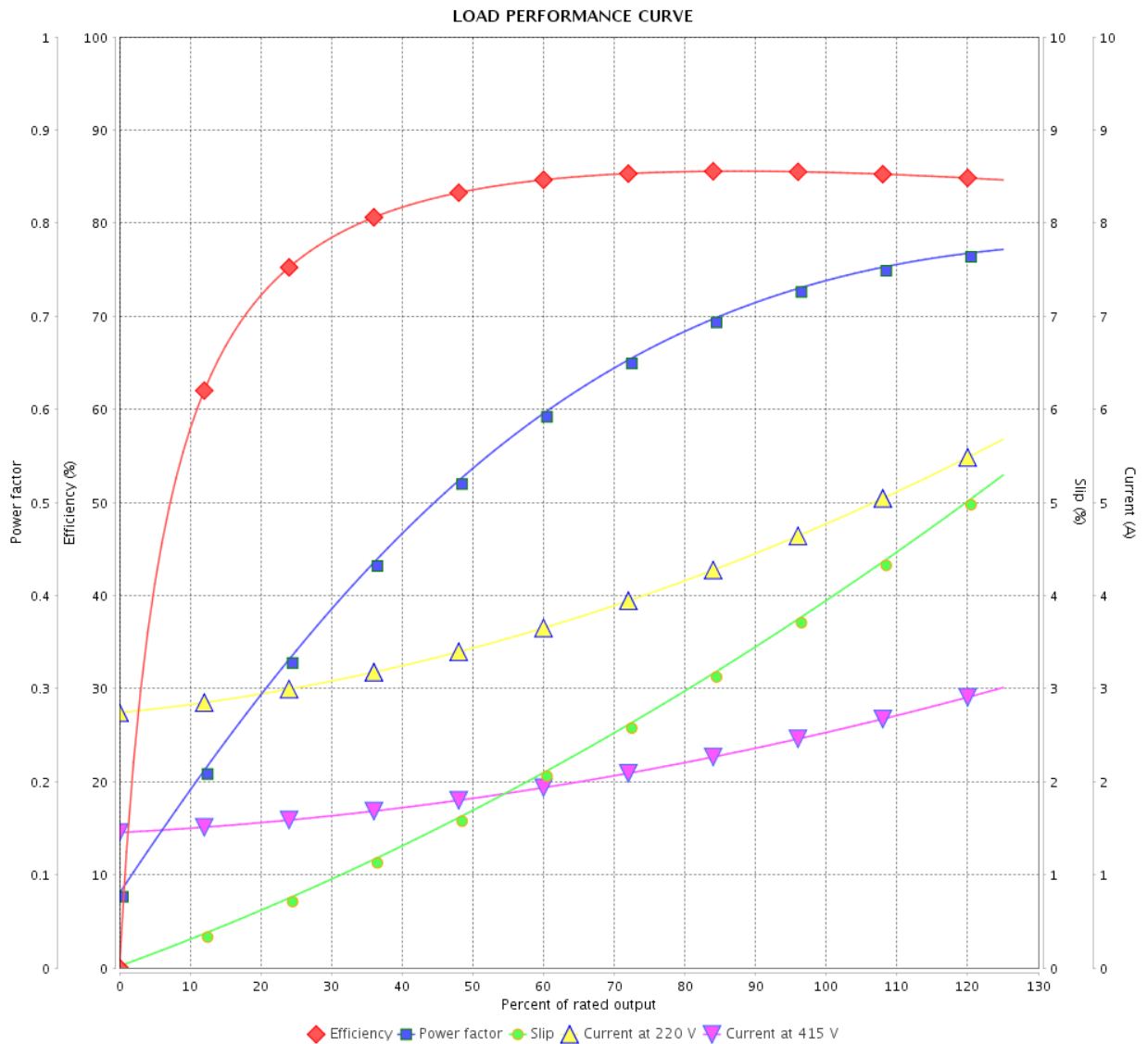


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THERMAL LIMIT CURVE



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Design : B

Heating constant

Cooling constant

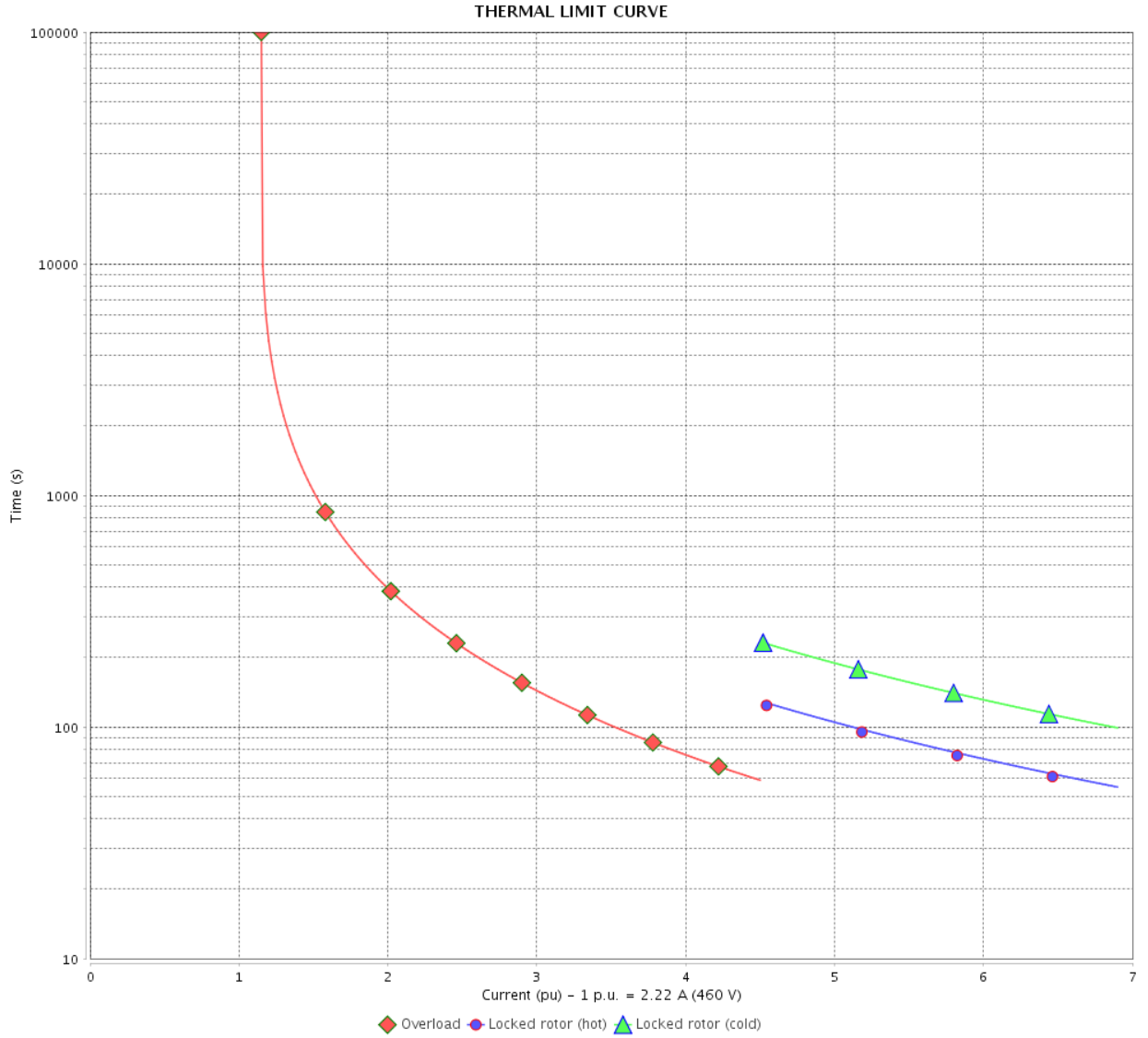
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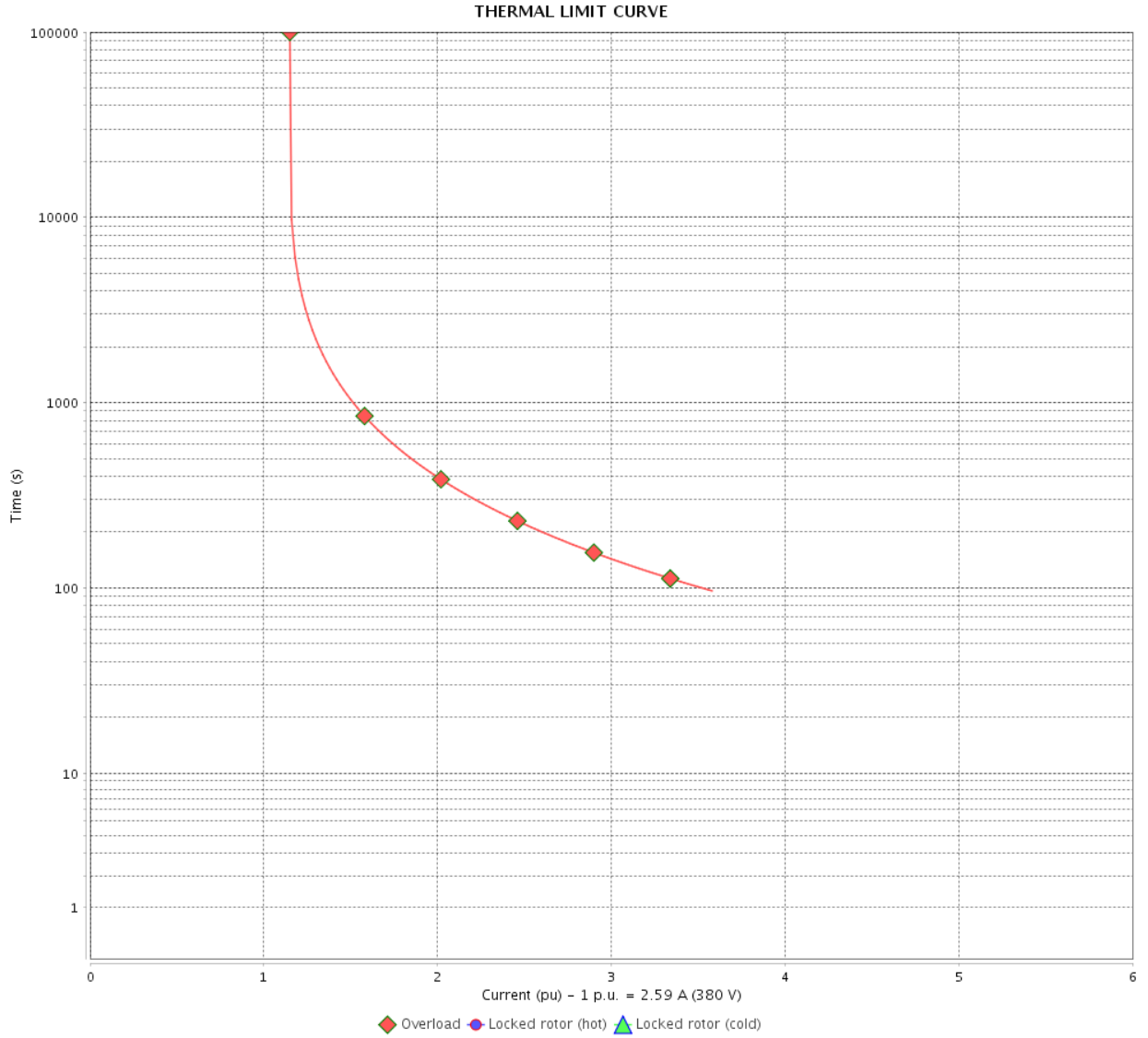
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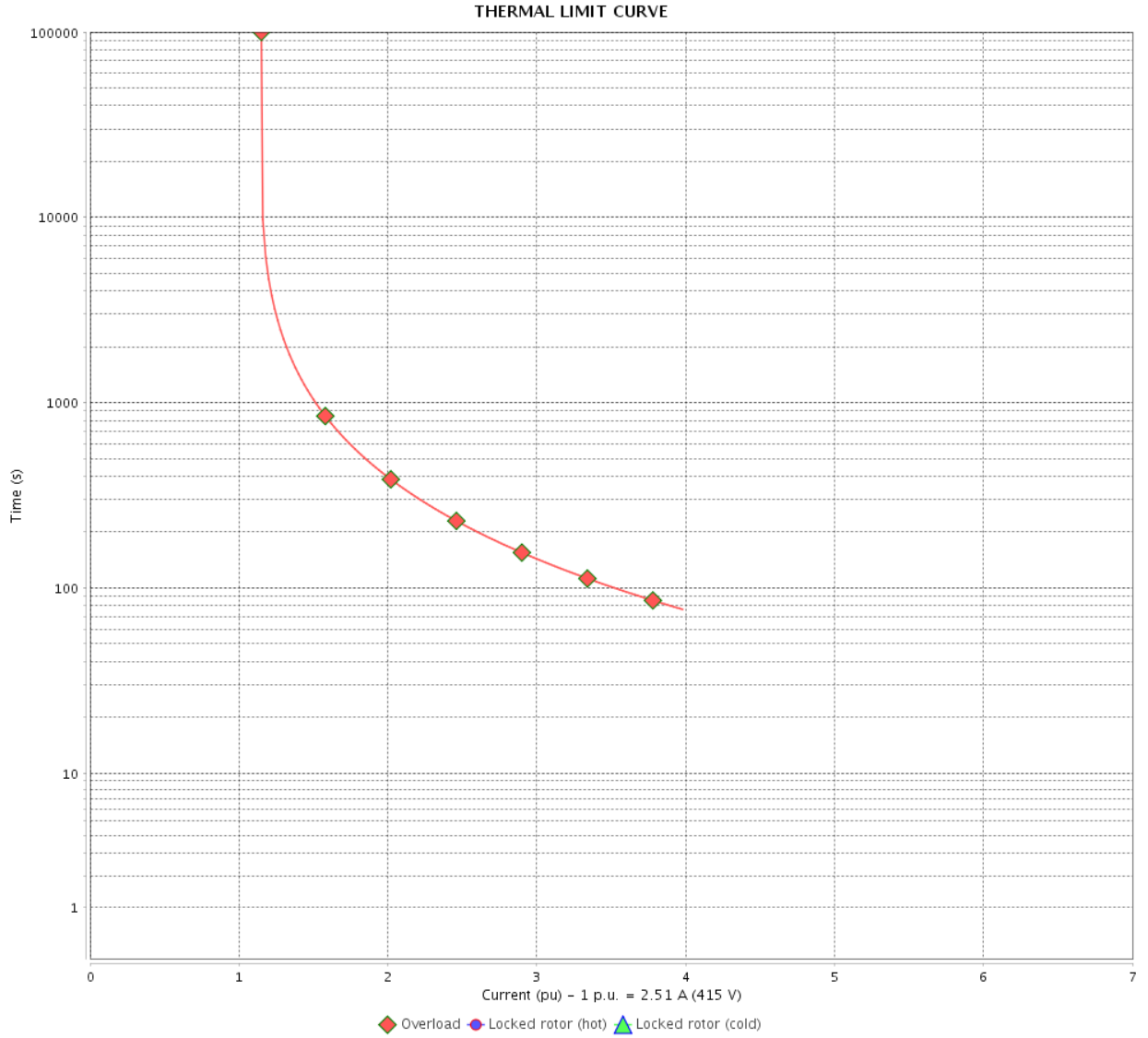
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VFD OPERATION CURVE

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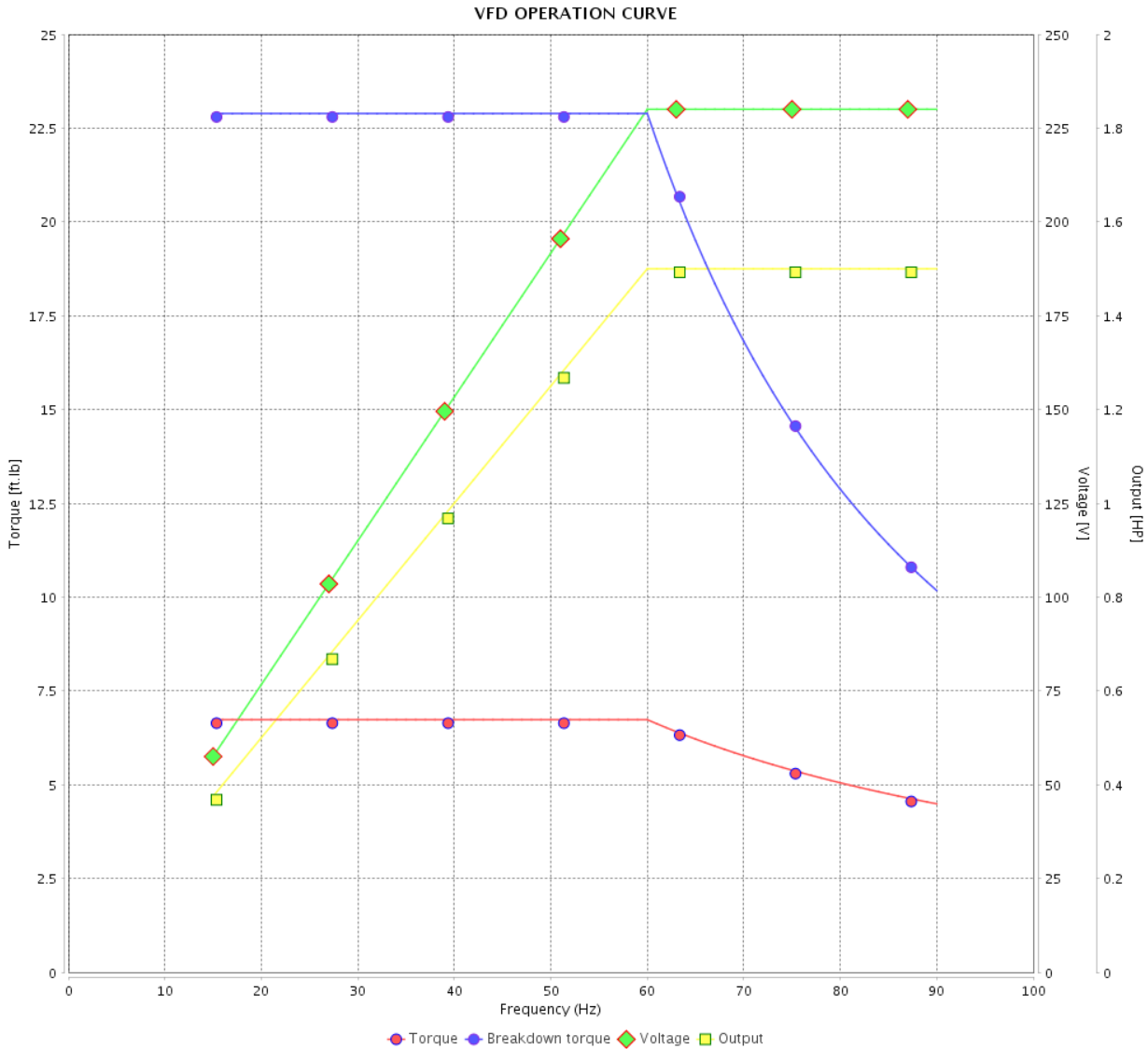


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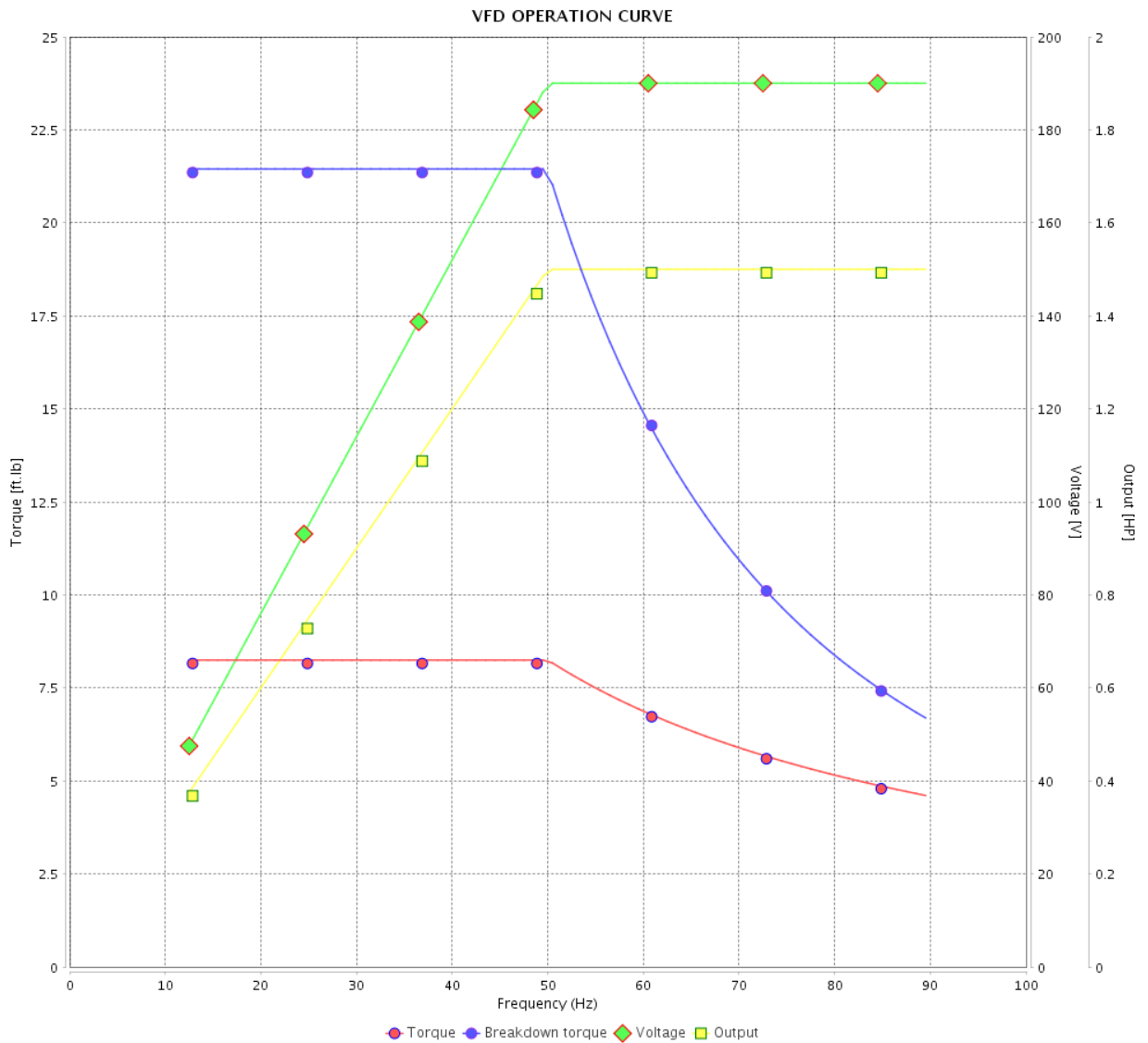


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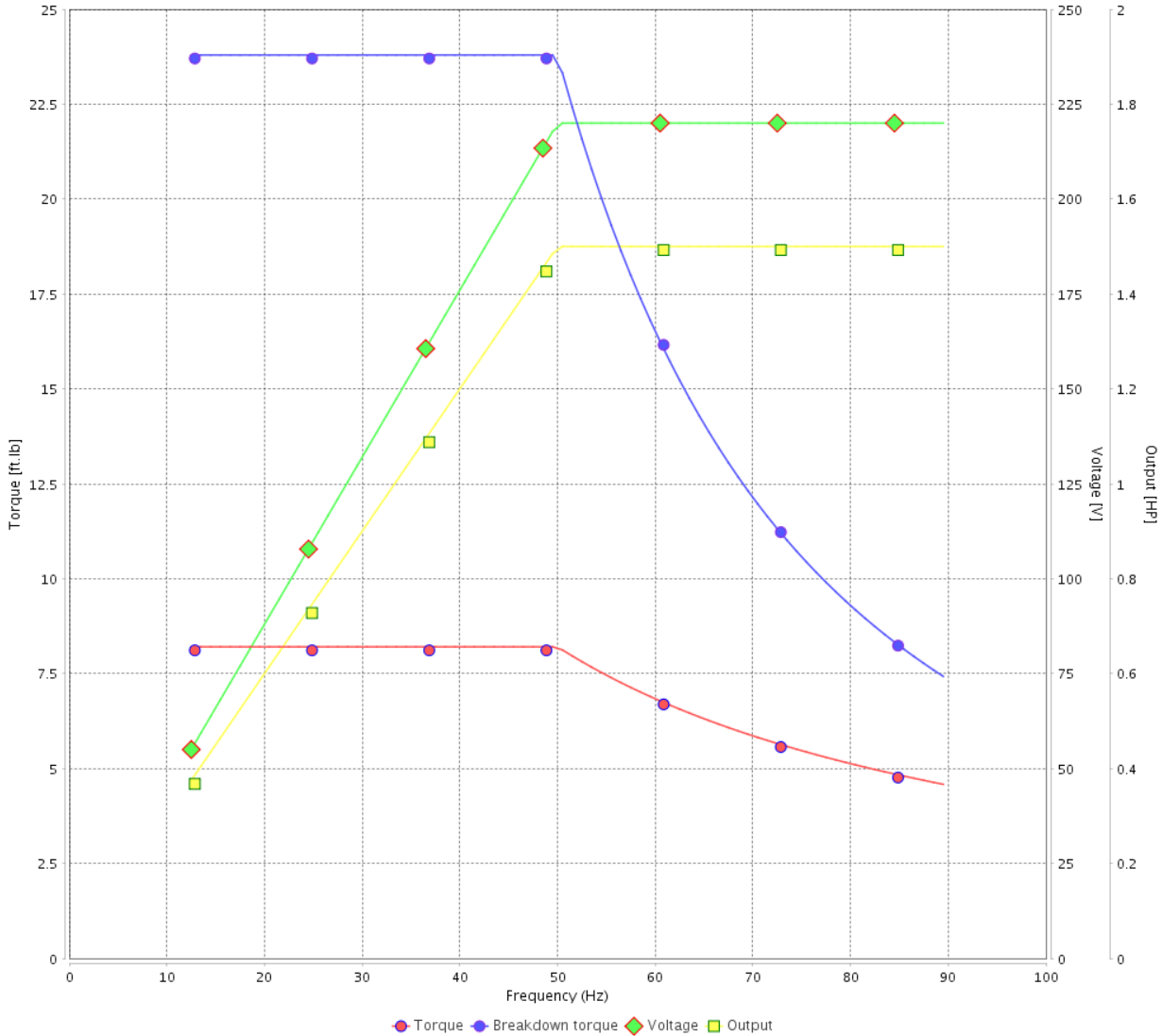
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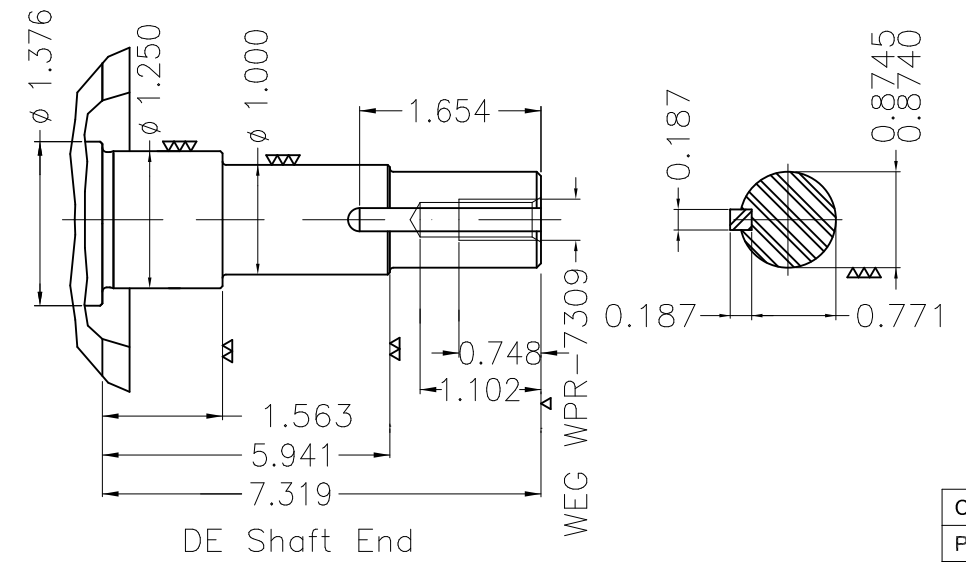
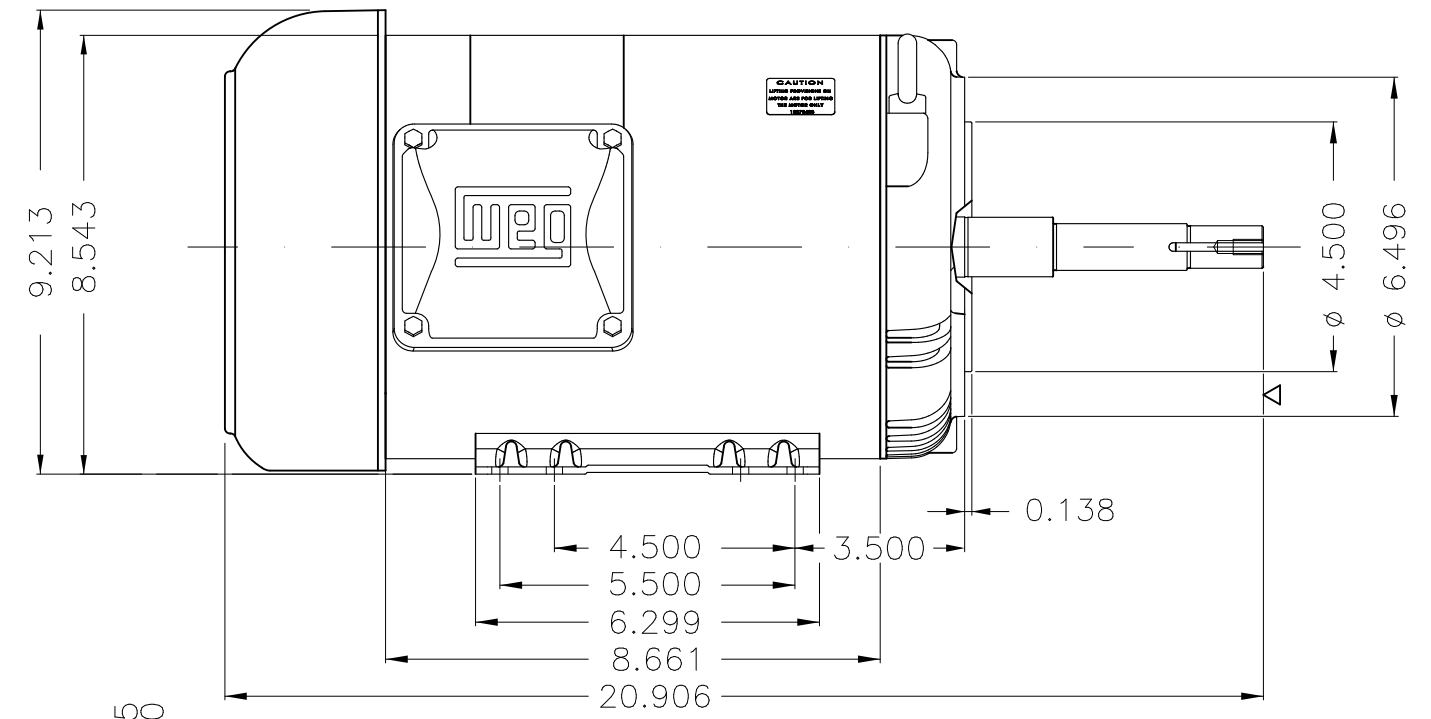
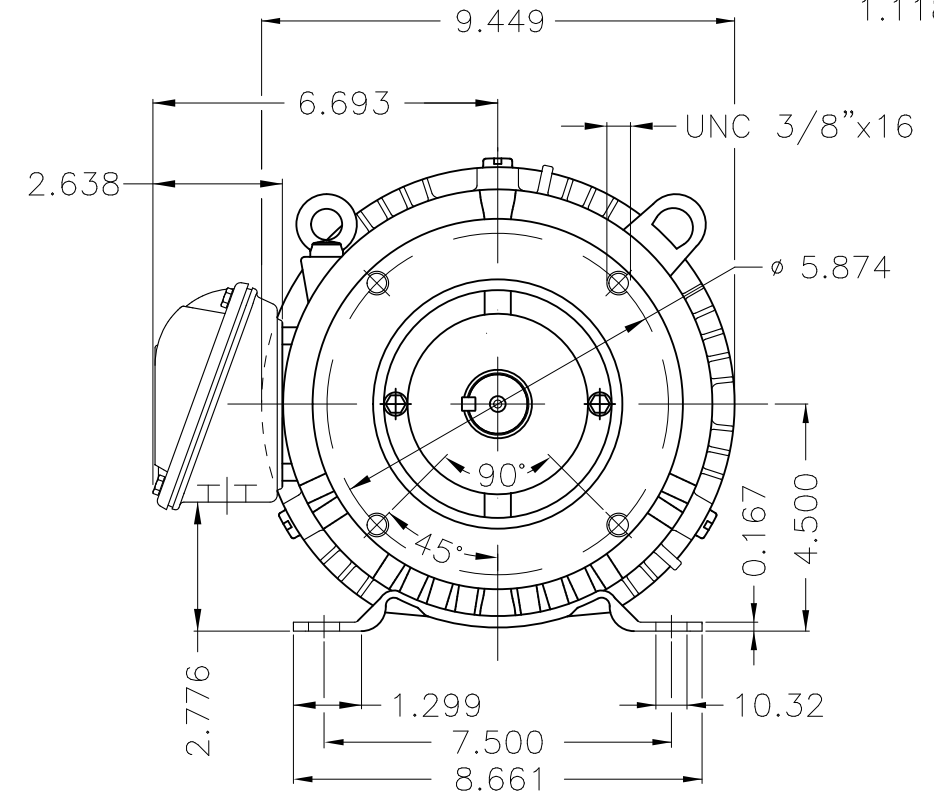
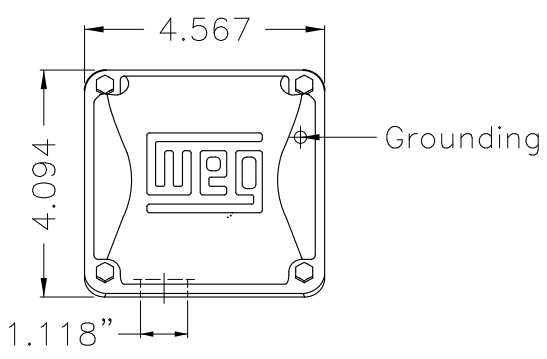
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1 2 3 4 5 6

A
B
C
D
E



EUNC 3/8"-16 WEG WPR-7309

DE Shaft End

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 | PIRWUSER | THREE PH. MOTOR ROLLED STEEL CLOSE COUPLED PUMP JP 3/4 DE PRELIMET | | | | | |
| CHECKED | | FRAME 182/4JP IP55 TEFC | | | | | |
| RELEASED | | | | | | | |
| REL DT. | WMO | Jaragua do Sul | Product Engineering | WDD | SHEET | 1 / 1 | |

1.5 HP 06 Poles 60 Hz

