

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



| | | | | |
|--|---|--|----------------------|----------|
| Customer : | | | | |
| Product line | : Premium Efficiency Three-Phase | Product code : | 12809603 | |
| | | Catalog # : | .7536OT3E56C-S | |
| Frame | : 56C | 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 | : 19.0 lb | |
| | | Moment of inertia (J) | : 0.0453 sq.ft.lb | |
| Output [HP] | 0.75 | 0.75 | 0.75 | |
| Poles | 2 | 2 | 2 | |
| Frequency [Hz] | 60 | 50 | 50 | |
| Rated voltage [V] | 208-230/460 | 190/380 | 220/415 | |
| Rated current [A] | 2.52-2.28/1.14 | 2.64/1.32 | 2.49/1.32 | |
| L. R. Amperes [A] | 16.4-14.8/7.41 | 13.2/6.60 | 13.4/7.13 | |
| LRC [A] | 6.5x(Code J) | 5.0x(Code G) | 5.4x(Code H) | |
| No load current [A] | 1.12-1.30/0.650 | 1.20/0.600 | 1.64/0.871 | |
| Rated speed [RPM] | 3485 | 2840 | 2860 | |
| Slip [%] | 3.19 | 5.33 | 4.67 | |
| Rated torque [ft.lb] | 1.13 | 1.39 | 1.38 | |
| Locked rotor torque [%] | 240 | 180 | 200 | |
| Breakdown torque [%] | 280 | 210 | 240 | |
| Service factor | | 1.25 | 1.25 | |
| Temperature rise | 80 K | 80 K | 80 K | |
| Locked rotor time | 59s (cold) 33s (hot) | 64s (cold) 36s (hot) | 57s (cold) 32s (hot) | |
| Noise level ² | 62.0 dB(A) | 60.0 dB(A) | 60.0 dB(A) | |
| Efficiency (%) | 25% | 65.5 | 70.8 | 67.5 |
| | 50% | 68.0 | 70.9 | 68.5 |
| | 75% | 74.0 | 74.2 | 73.0 |
| | 100% | 76.8 | 73.6 | 73.6 |
| Power Factor | 25% | 0.35 | 0.41 | 0.34 |
| | 50% | 0.57 | 0.66 | 0.60 |
| | 75% | 0.70 | 0.79 | 0.74 |
| | 100% | 0.79 | 0.86 | 0.82 |
| Bearing type | : Drive end 6203 ZZ Non drive end 6202 ZZ | Foundation loads | | |
| Sealing | : Without Without Bearing Seal Bearing Seal | Max. traction | : 23 lb | |
| | | Max. compression | : 42 lb | |
| Lubrication interval | : - - | | | |
| Lubricant amount | : - - | | | |
| Lubricant type | : Mobil Polyrex EM | | | |
| Notes USABLE @208V SF 1.00 | | | | |
| 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 | Checked | Date |
| Performed by | | | | |
| Checked by | | | Page | Revision |
| Date | 11/04/2022 | | 1 / 13 | |

TORQUE AND CURRENT VS SPEED CURVE

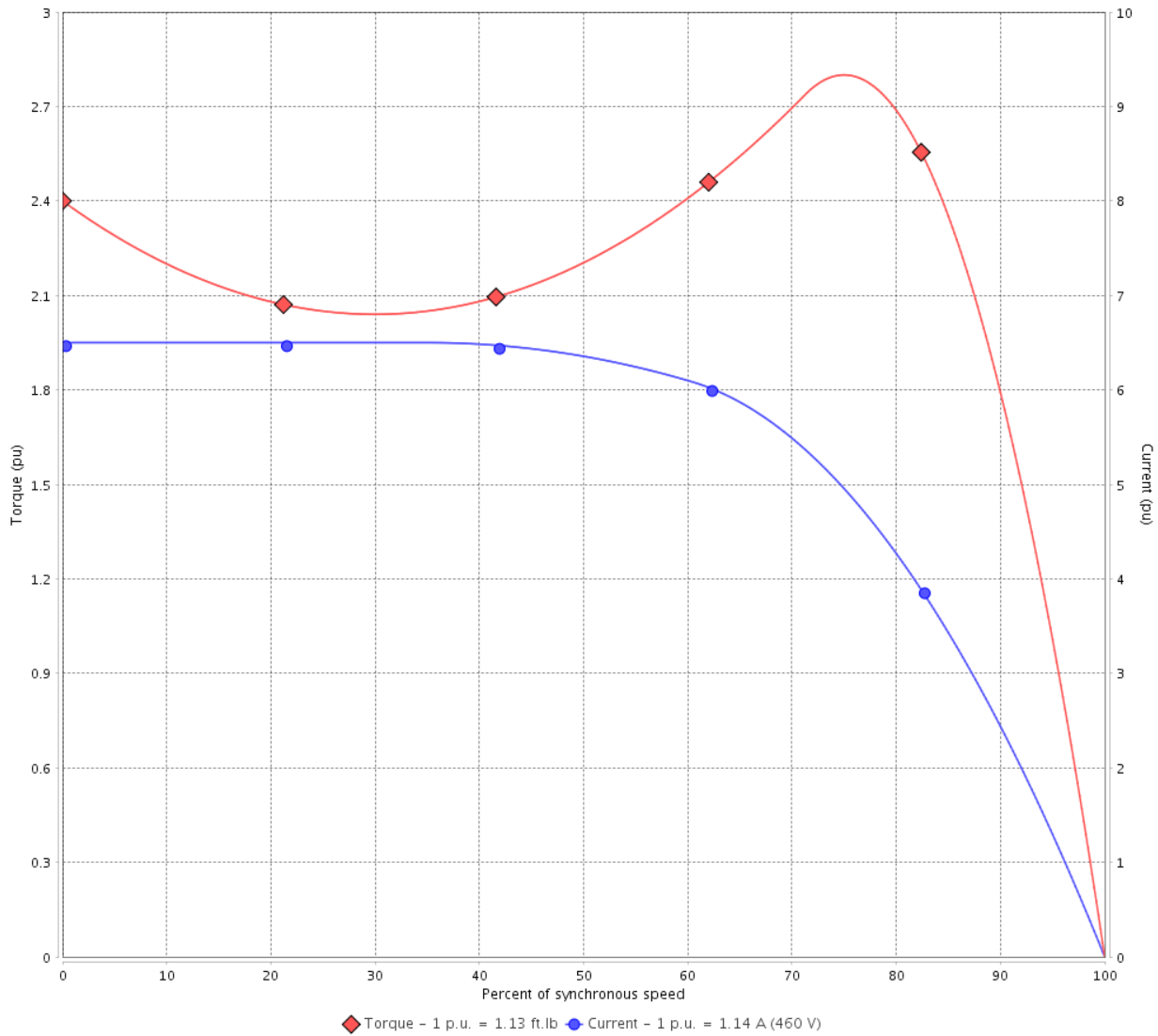
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Premium Efficiency Three-Phase Product code : 12809603
 Catalog # : .7536OT3E56C-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 208-230/460 V 60 Hz 2P

| | | | |
|---------------------|--------------------|-----------------------|-------------------|
| Rated current | : 2.52-2.28/1.14 A | Moment of inertia (J) | : 0.0453 sq.ft.lb |
| LRC | : 6.5 | Duty cycle | : Cont.(S1) |
| Rated torque | : 1.13 ft.lb | Insulation class | : F |
| Locked rotor torque | : 240 % | Service factor | : |
| Breakdown torque | : 280 % | Temperature rise | : 80 K |
| Rated speed | : 3485 rpm | | |

Locked rotor time : 59s (cold) 33s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



Three Phase Induction Motor - Squirrel Cage

Customer : _____

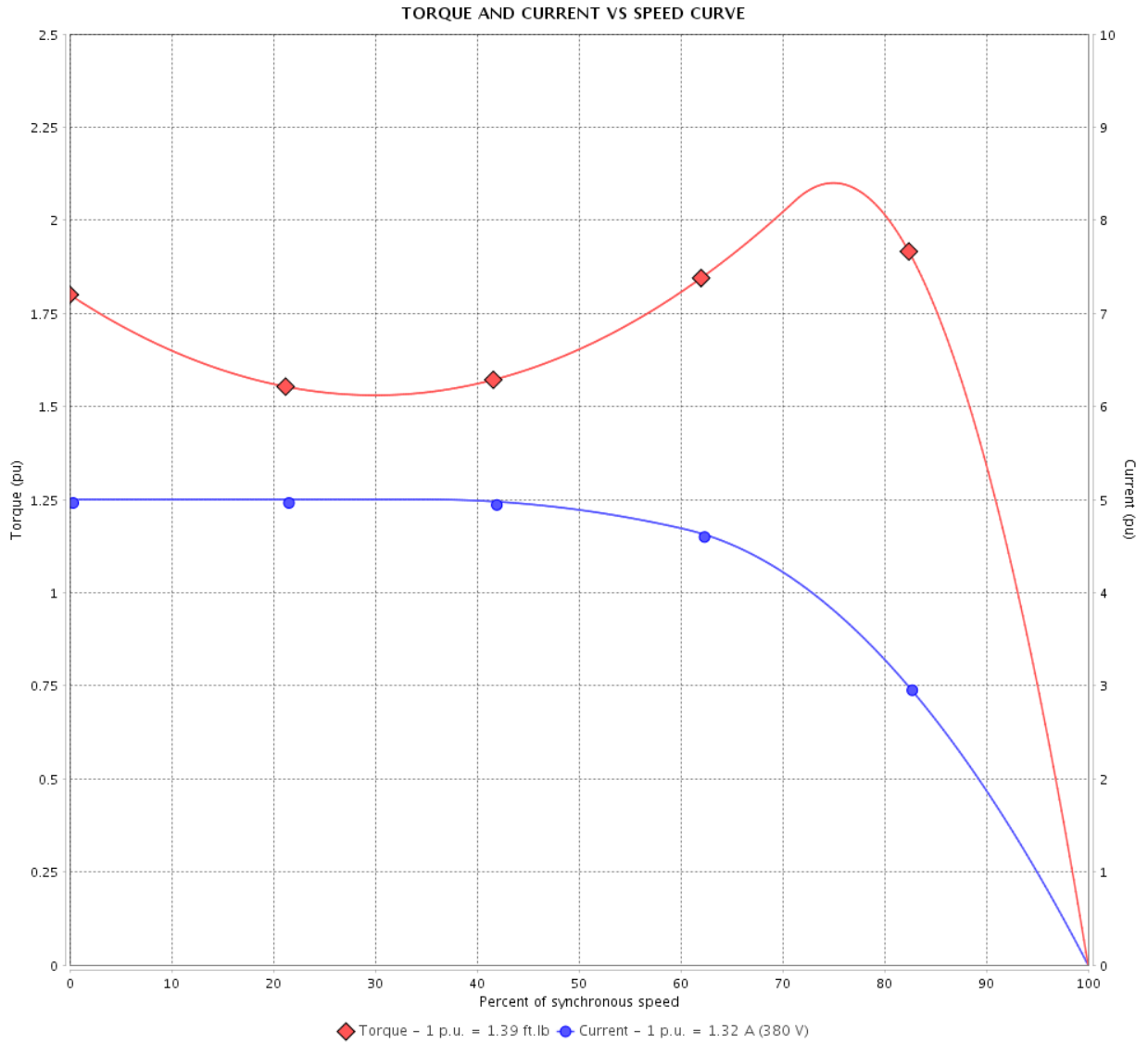
Product line : Premium Efficiency Three-Phase

Product code :

12809603

Catalog # :

.7536OT3E56C-S



Performance : 190/380 V 50 Hz 2P

Rated current : 2.64/1.32 A
 LRC : 5.0
 Rated torque : 1.39 ft.lb
 Locked rotor torque : 180 %
 Breakdown torque : 210 %
 Rated speed : 2840 rpm

Moment of inertia (J) : 0.0453 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K

Locked rotor time : 64s (cold) 36s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

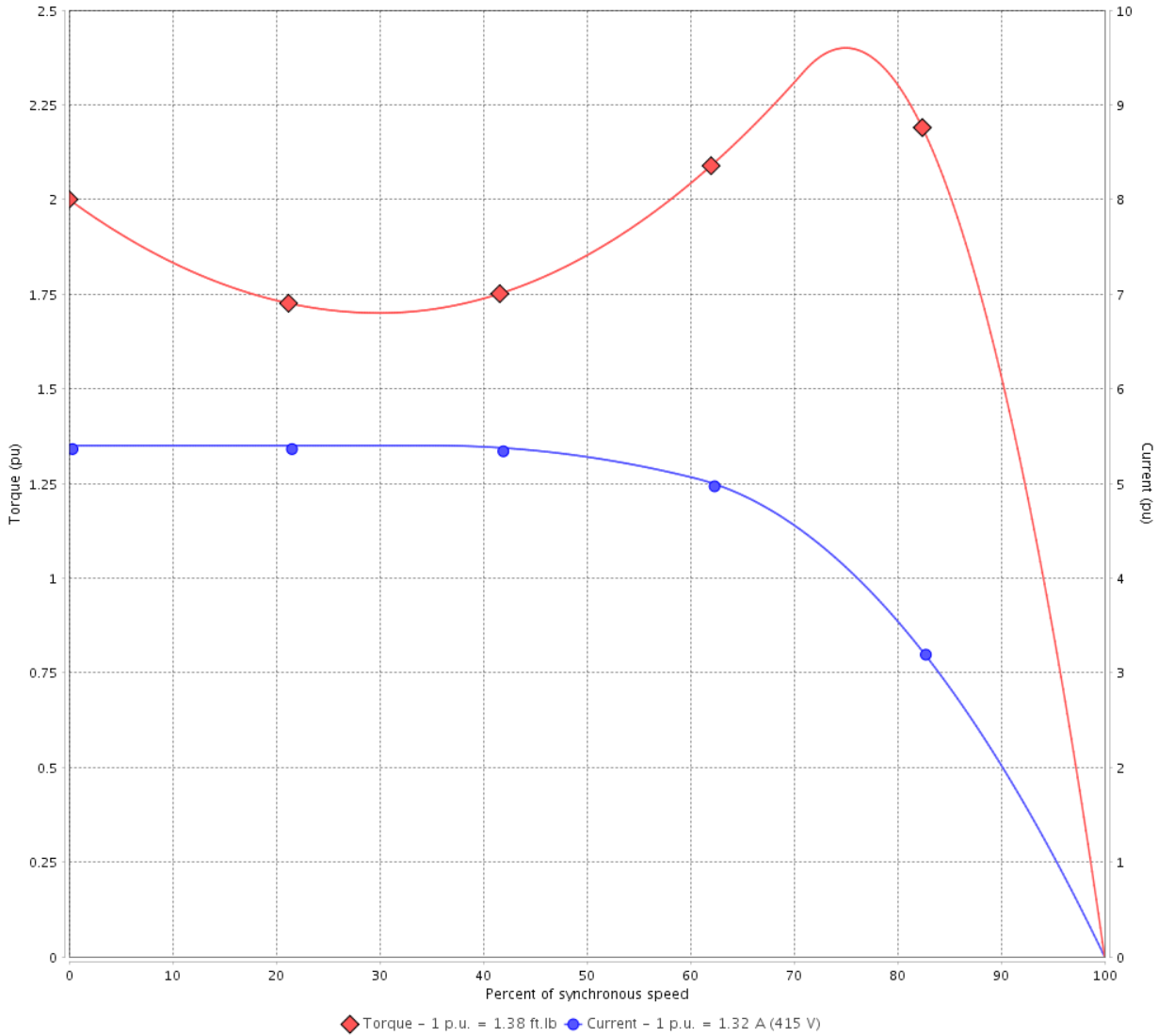
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Premium Efficiency Three-Phase Product code : 12809603
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 2P

| | | | |
|---------------------|---------------|-----------------------|-------------------|
| Rated current | : 2.49/1.32 A | Moment of inertia (J) | : 0.0453 sq.ft.lb |
| LRC | : 5.4 | Duty cycle | : Cont.(S1) |
| Rated torque | : 1.38 ft.lb | Insulation class | : F |
| Locked rotor torque | : 200 % | Service factor | : 1.25 |
| Breakdown torque | : 240 % | Temperature rise | : 80 K |
| Rated speed | : 2860 rpm | | |

Locked rotor time : 57s (cold) 32s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

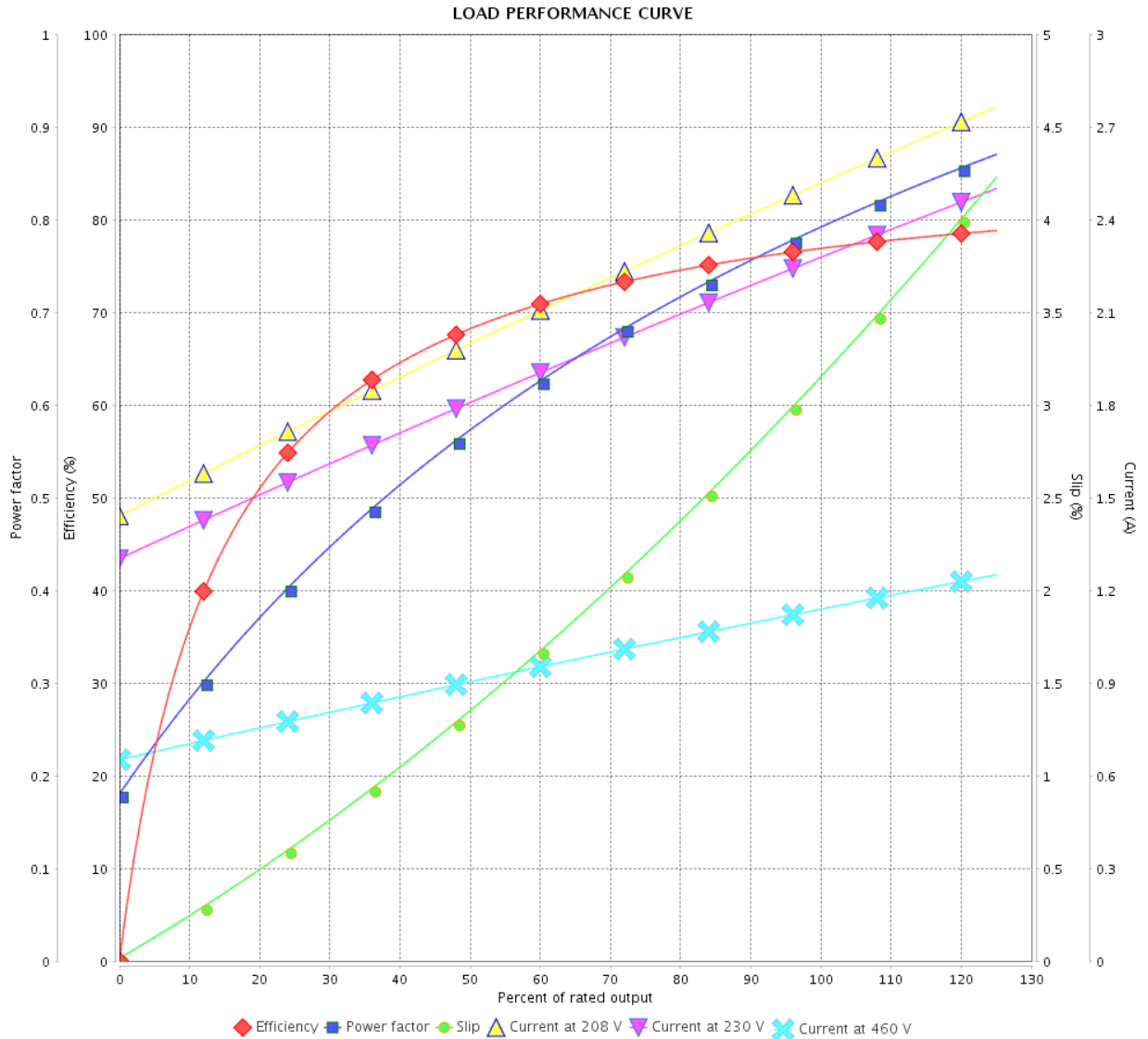
Product line : Premium Efficiency Three-Phase

Product code :

12809603

Catalog # :

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Performance : 208-230/460 V 60 Hz 2P

Rated current : 2.52-2.28/1.14 A
 LRC : 6.5
 Rated torque : 1.13 ft.lb
 Locked rotor torque : 240 %
 Breakdown torque : 280 %
 Rated speed : 3485 rpm

Moment of inertia (J) : 0.0453 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K

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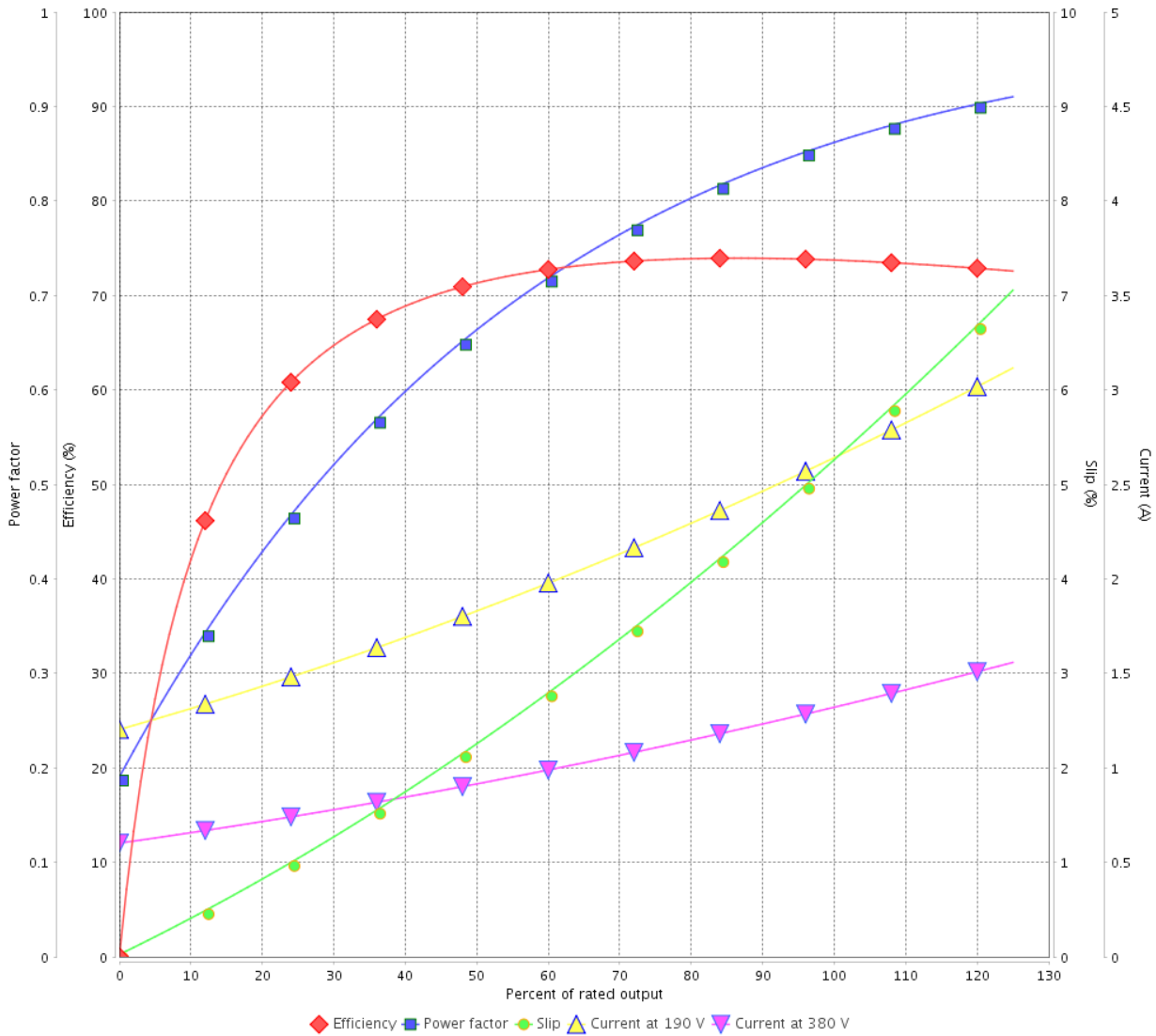
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 Breakdown torque : 210 %
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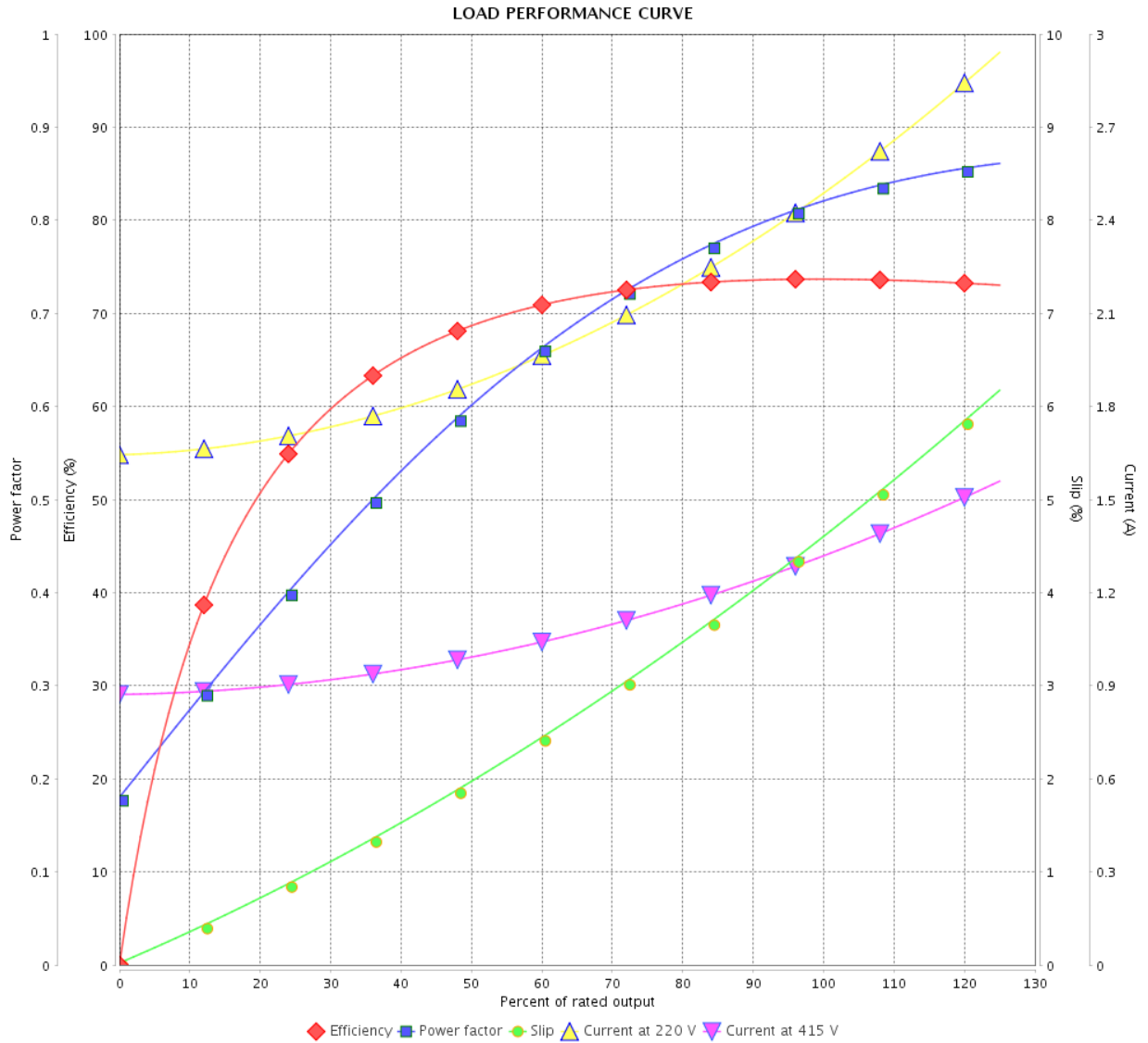
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 LRC : 5.4
 Rated torque : 1.38 ft.lb
 Locked rotor torque : 200 %
 Breakdown torque : 240 %
 Rated speed : 2860 rpm

Moment of inertia (J) : 0.0453 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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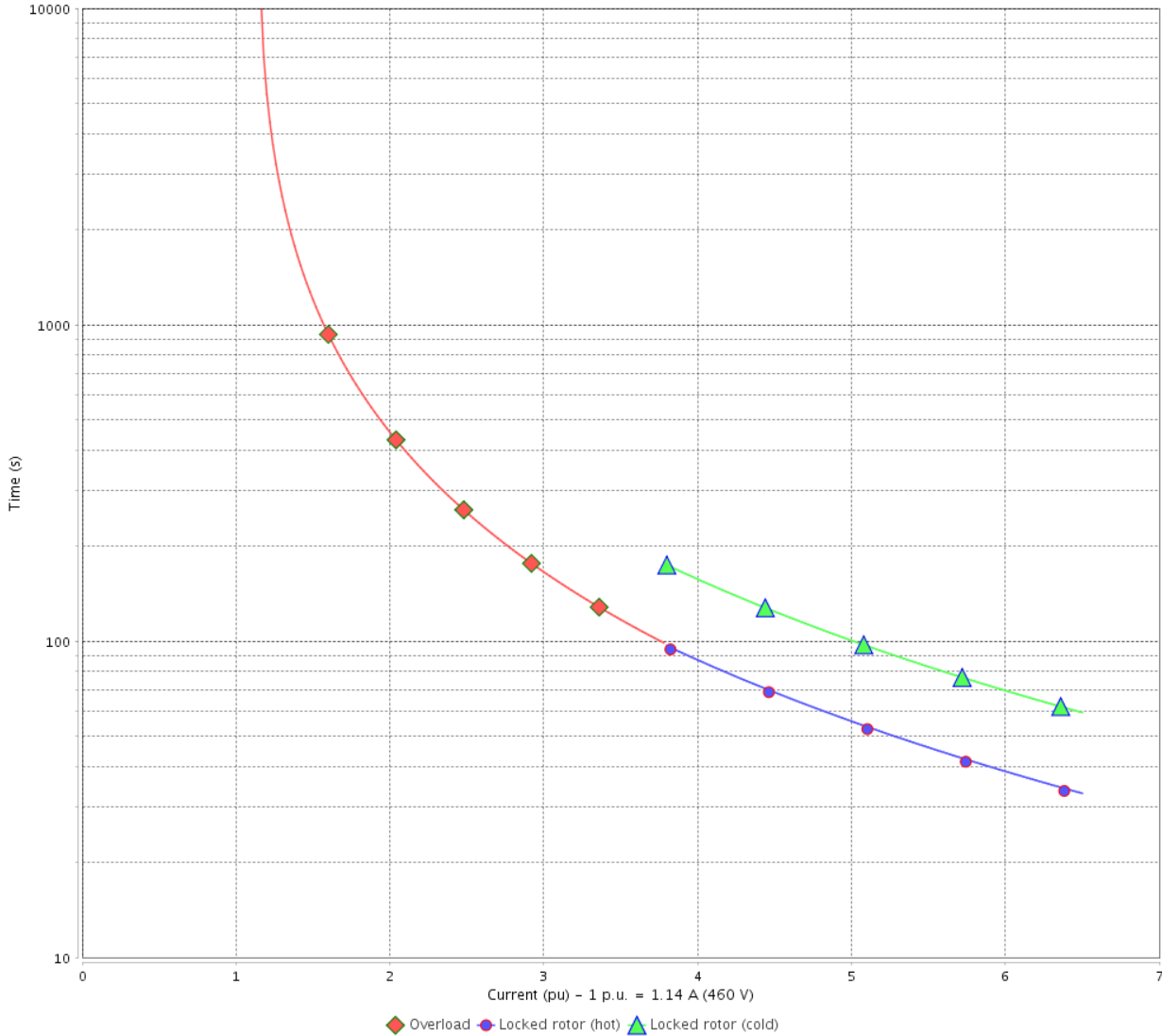
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THERMAL LIMIT CURVE



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Rated current : 2.52-2.28/1.14 A
 LRC : 6.5
 Rated torque : 1.13 ft.lb
 Locked rotor torque : 240 %
 Breakdown torque : 280 %
 Rated speed : 3485 rpm

Moment of inertia (J) : 0.0453 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K

Heating constant

Cooling constant

| Rev. | Changes Summary | Performed | Checked | Date |
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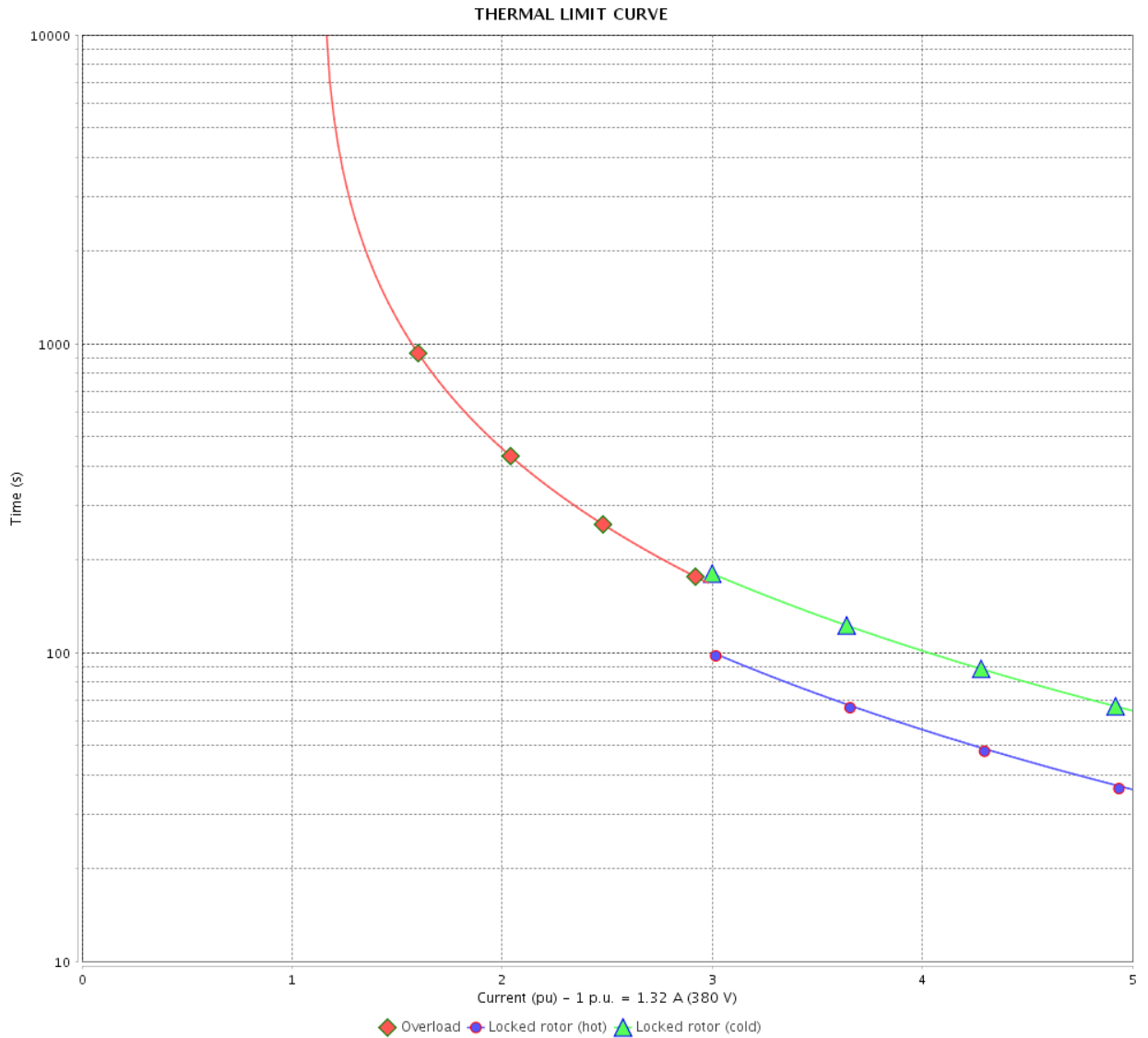
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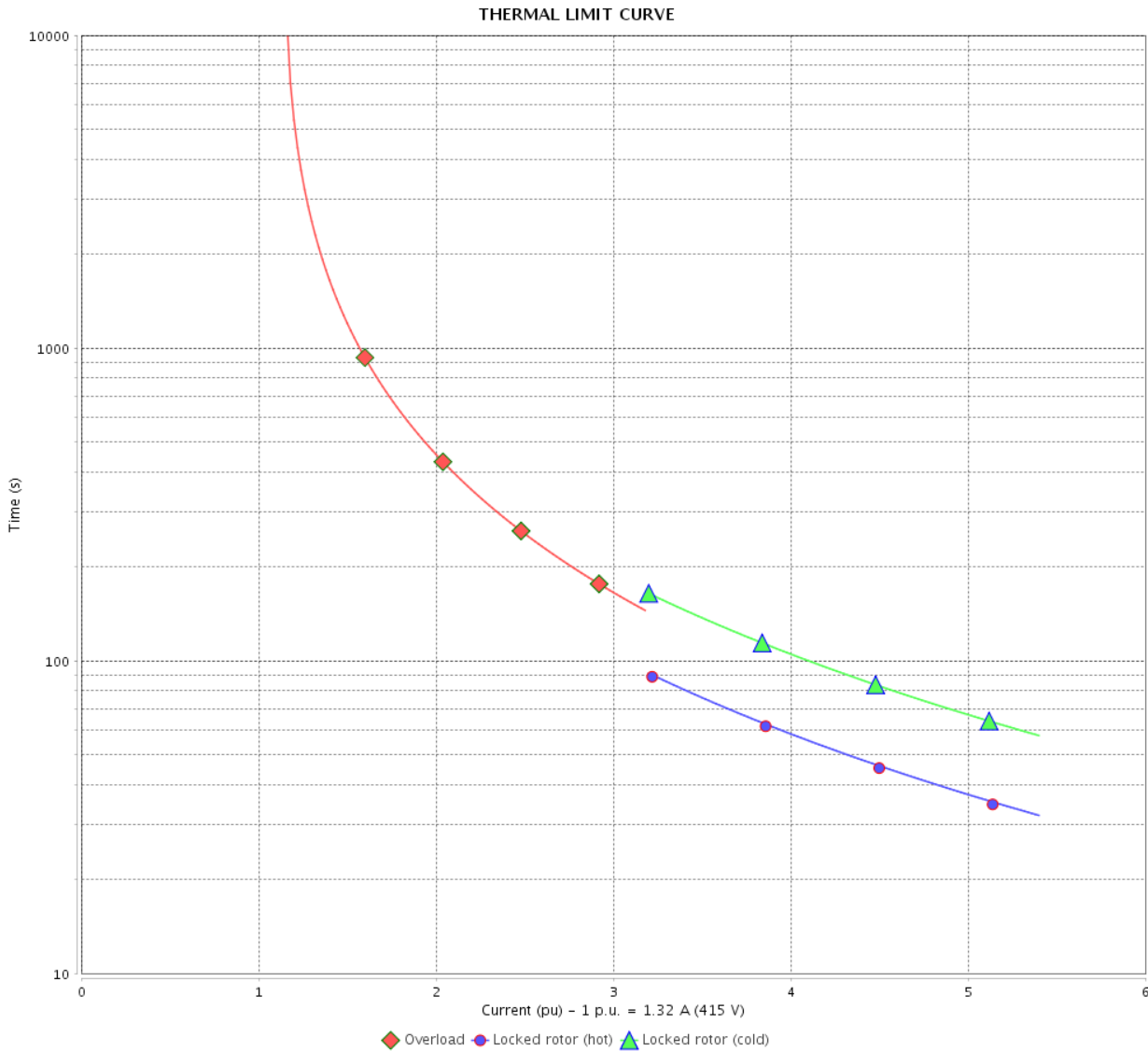
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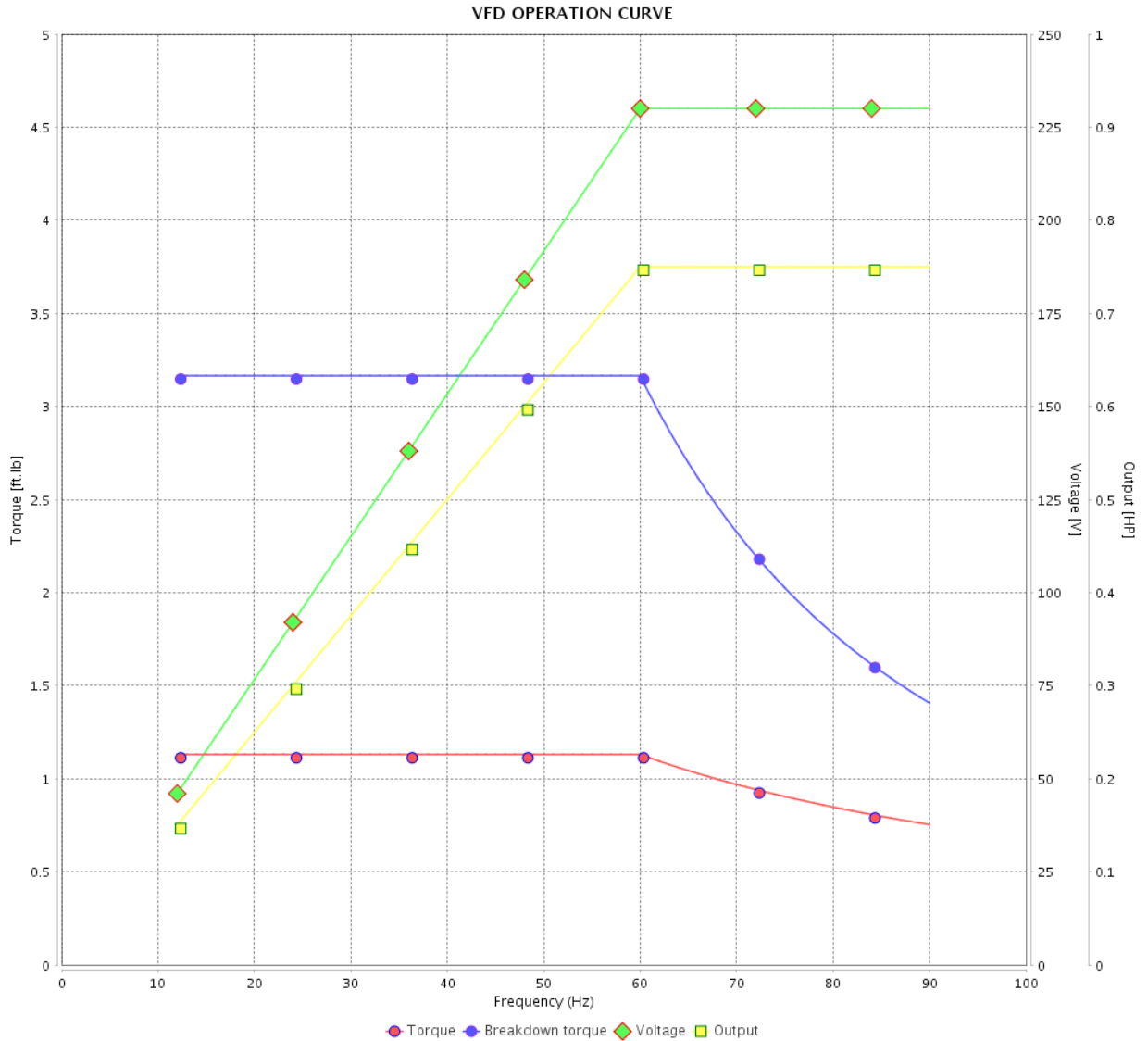
VFD OPERATION CURVE

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

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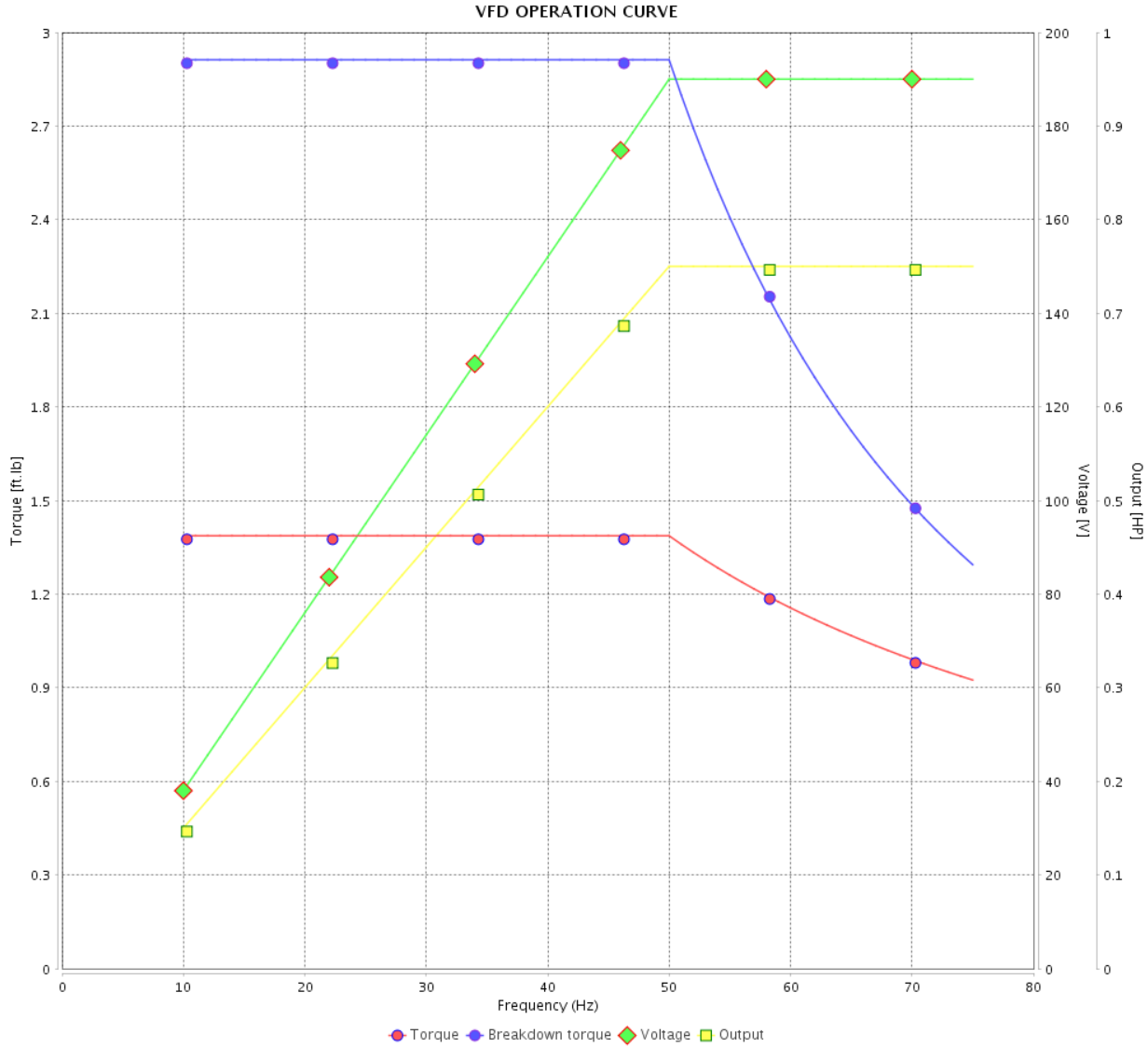
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 Service factor : 1.25
 Temperature rise : 80 K

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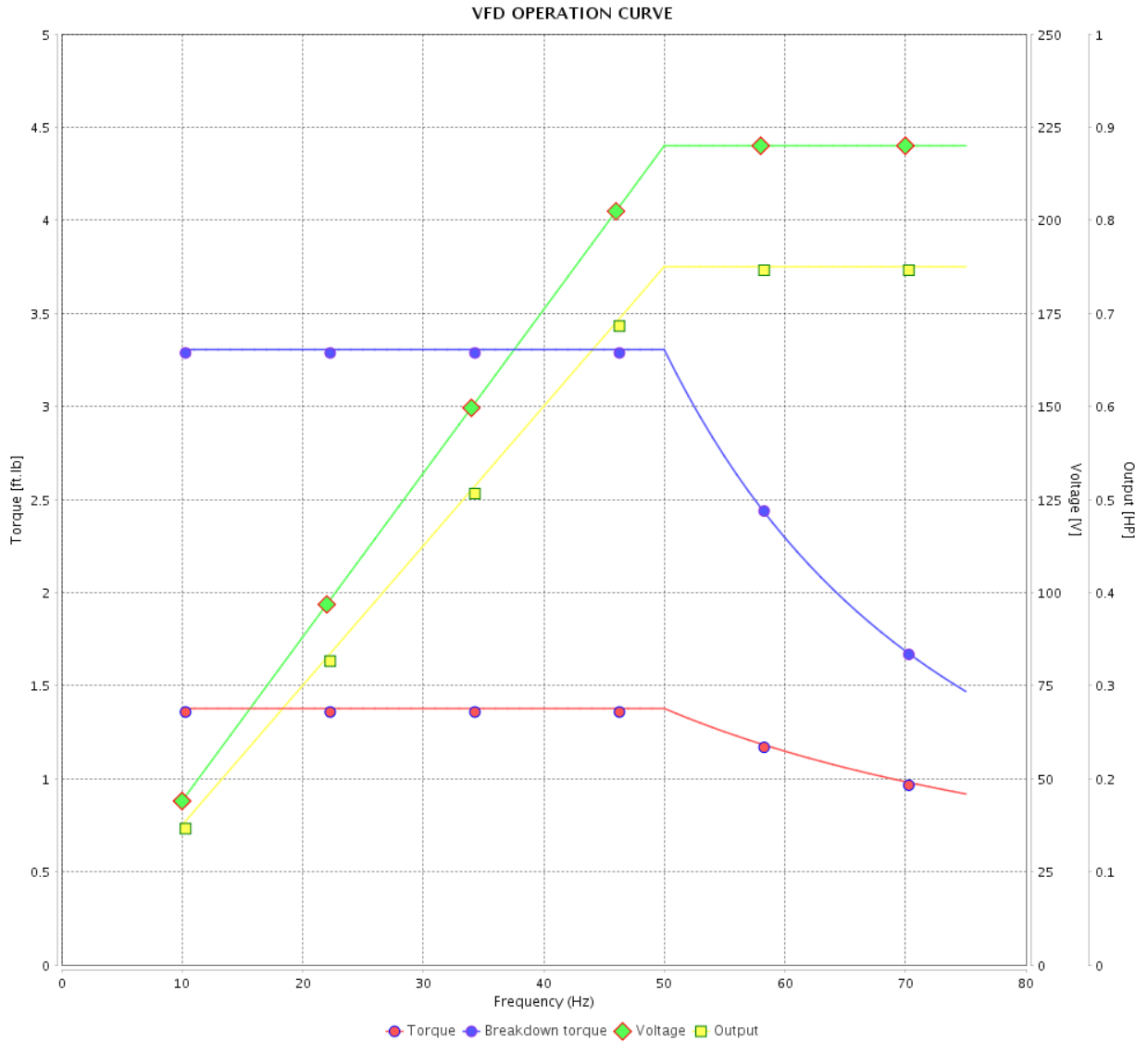
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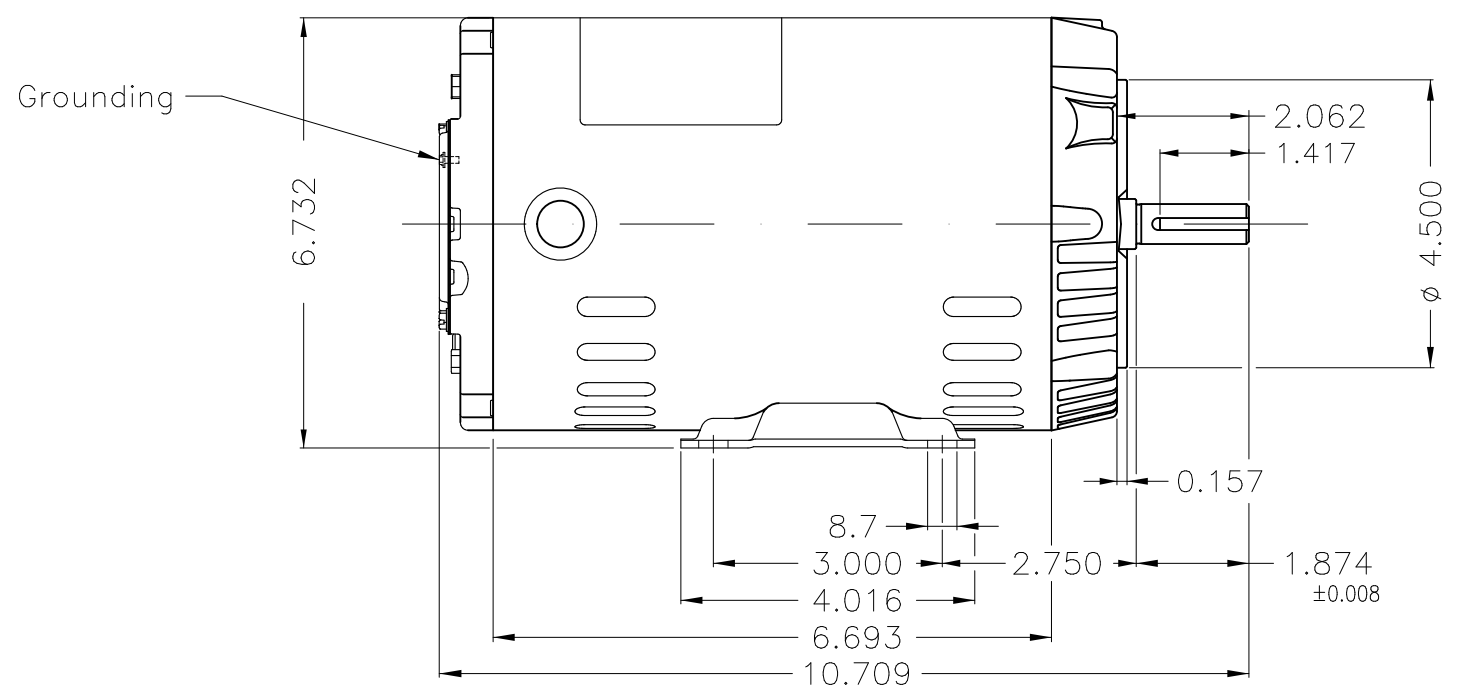
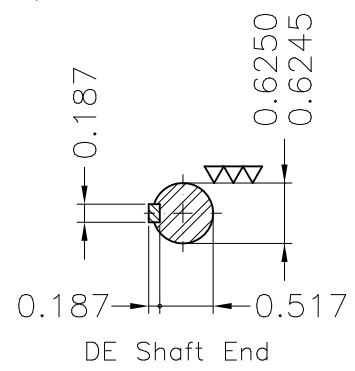
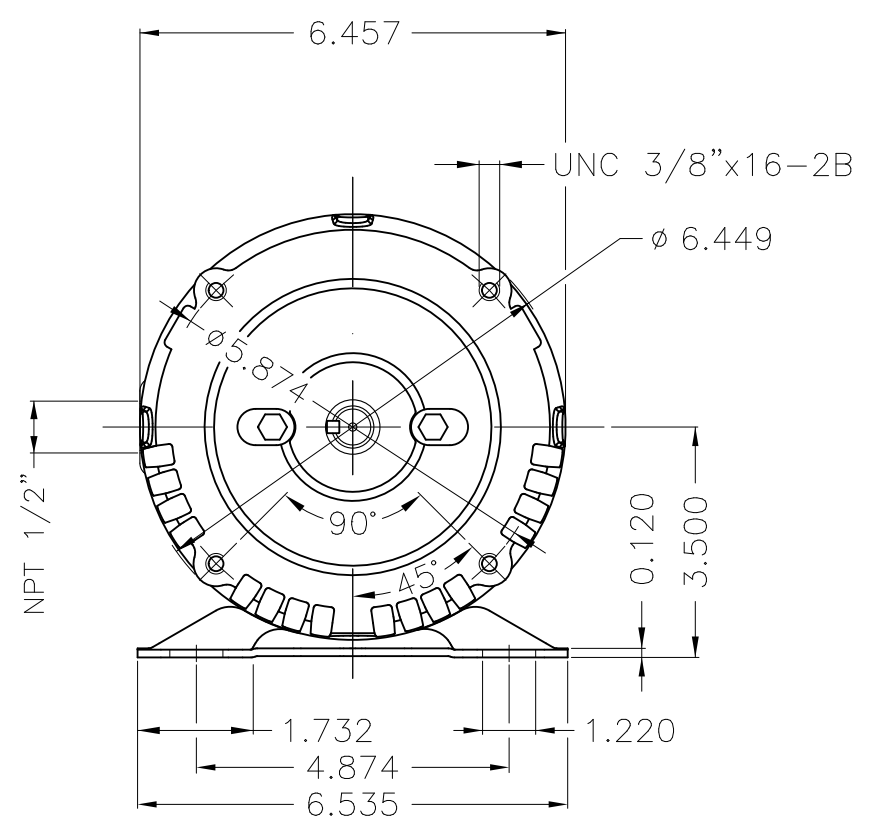
A

B

C

D

E



| | | | | | | | | | | |
|----------------------|----------|---|----------------|---------------------|-------|----------|---------|----------|------|-----|
| Without coating | | | | | | | | | | |
| Mounting F-1/B34R(D) | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| ECM | LOC | SUMMARY OF MODIFICATIONS | | | | EXECUTED | CHECKED | RELEASED | DATE | VER |
| EXECUTED | PIRWUSER | THREE PH. MOTOR ROLLED STEEL PREM. EFF. | | | | | PREVIEW | | | |
| CHECKED | | FRAME 56C IP21 ODP | | | | | WDD | | | |
| RELEASED | | | | | | | | | | |
| REL DT. | | WMO | Jaragua do Sul | Product Engineering | SHEET | 1 / 1 | | | | |

0.75 HP 02 Poles 60 Hz

A



NEMA
Premium



3PT9



Energy Verified

MADE IN MEXICO

MAT: 12809603

W01.T00IC0X0X

MODEL 75360T3E56C-S

01FEB2022 B/N:

| | | |
|---------------------|--------|------------------------|
| PH 3 | Hz 60 | HP 0.75 |
| FR 56C | | KW 0.55 |
| DUTY CONT. | | V 230/460 |
| ALT 1000 m.a.s.l. | | A 2.28/1.14 |
| INS CL F AT 80K | | SFA 2.85/1.42 |
| AMB 40°C | DES - | SF 1.25 |
| ENCL ODP | CODE J | PF 0.79 |
| USABLE @ 208V 2.52A | | RPM 3485 |
| SF1.00 | | AVG.F.L. 76.8% EFF. |

ALTERNATE RATING: 0.75HP 50Hz 190-220/380-415V SF1.25
2.84-2.49/1.32-1.32A 2840RPM EFF 73.2% (IE1) IEC 60034-1

Inverter duty motor For 80Hz use on VPWM 1000:1 VT, 5:1 CT

| | | |
|------------|-------------|------------------|
| DE 6203-ZZ | ODE 6202-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.

