

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



| | | | | | | | |
|--|-----------------|---------------------------------------|-------------------------|--|----------------|--------------|---------------------|
| Customer : | | | | | | | |
| Product line | | : NEMA Premium Efficiency Three-Phase | | | Product code : | | 11431396 |
| | | | | | Catalog # : | | 00236ST3QIE145T-W22 |
| 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 : 62.1 lb Moment of inertia (J) : 0.0605 sq.ft.lb | | | |
| Output [HP] | 2 | 1.5 | 1.5 | 1.5 | 2 | 2 | 2 |
| Poles | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Frequency [Hz] | 60 | 50 | 50 | 50 | 50 | 50 | 50 |
| Rated voltage [V] | 460 | 380 | 400 | 415 | 380 | 400 | 415 |
| Rated current [A] | 2.56 | 2.30 | 2.22 | 2.19 | 3.07 | 2.90 | 2.82 |
| L. R. Amperes [A] | 22.8 | 19.5 | 20.4 | 21.2 | 20.0 | 20.9 | 21.7 |
| LRC [A] | 8.9x(Code L) | 8.5x(Code K) | 9.2x(Code L) | 9.7x(Code M) | 6.5x(Code H) | 7.2x(Code J) | 7.7x(Code J) |
| No load current [A] | 0.900 | 0.890 | 0.960 | 1.01 | 0.890 | 0.960 | 1.01 |
| Rated speed [RPM] | 3475 | 2885 | 2895 | 2905 | 2835 | 2850 | 2865 |
| Slip [%] | 3.47 | 3.83 | 3.50 | 3.17 | 5.50 | 5.00 | 4.50 |
| Rated torque [ft.lb] | 3.02 | 2.73 | 2.72 | 2.71 | 3.70 | 3.69 | 3.67 |
| Locked rotor torque [%] | 350 | 370 | 409 | 450 | 270 | 300 | 330 |
| Breakdown torque [%] | 380 | 370 | 420 | 459 | 270 | 310 | 340 |
| Service factor | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| Temperature rise | 80 K | 80 K | 80 K | 80 K | 80 K | 80 K | 80 K |
| Locked rotor time | 30s (cold) | 25s (cold) | 25s (cold) | 25s (cold) | 25s (cold) | 25s (cold) | 25s (cold) |
| | 17s (hot) | 14s (hot) | 14s (hot) | 14s (hot) | 14s (hot) | 14s (hot) | 14s (hot) |
| Noise level ² | 68.0 dB(A) | 62.0 dB(A) | 62.0 dB(A) | 62.0 dB(A) | 62.0 dB(A) | 62.0 dB(A) | 62.0 dB(A) |
| Efficiency (%) | 25% | | | | | | |
| | 50% | 82.5 | 81.4 | 80.3 | 80.1 | 82.5 | 82.5 |
| | 75% | 85.5 | 83.3 | 83.1 | 83.1 | 84.0 | 84.0 |
| | 100% | 85.5 | 83.5 | 84.0 | 84.0 | 82.5 | 84.0 |
| Power Factor | 25% | | | | | | |
| | 50% | 0.71 | 0.69 | 0.66 | 0.64 | 0.79 | 0.76 |
| | 75% | 0.80 | 0.81 | 0.78 | 0.76 | 0.86 | 0.84 |
| | 100% | 0.86 | 0.87 | 0.85 | 0.83 | 0.90 | 0.89 |
| Bearing type | | Drive end : 6205 C3 | Non drive end : 6204 C3 | Foundation loads | | | |
| Sealing | | Inpro/Seal | Inpro/Seal | Max. traction | | : 77 lb | |
| Lubrication interval | | 20000 h | 20000 h | Max. compression | | : 139 lb | |
| Lubricant amount | | 4 g | 4 g | | | | |
| Lubricant type | | Mobil Polyrex EM | | | | | |
| Notes | | | | | | | |
| 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 | 13/04/2022 | | | | 1 / 36 | | |

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



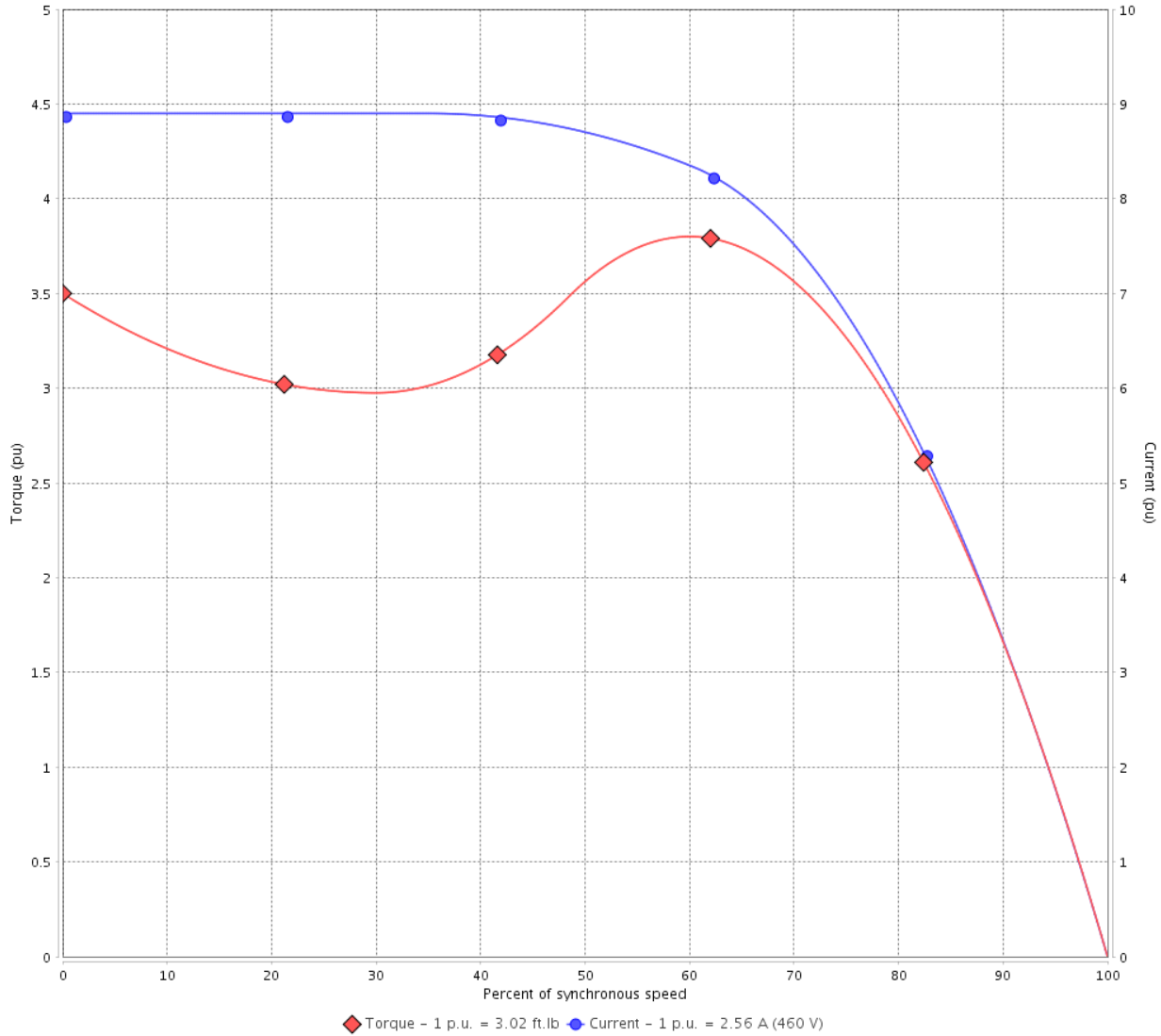
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11431396

Catalog # : 00236ST3QIE145T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 460 V 60 Hz 2P

| | | | |
|---------------------|--------------|-----------------------|-------------------|
| Rated current | : 2.56 A | Moment of inertia (J) | : 0.0605 sq.ft.lb |
| LRC | : 8.9 | Duty cycle | : Cont.(S1) |
| Rated torque | : 3.02 ft.lb | Insulation class | : F |
| Locked rotor torque | : 350 % | Service factor | : 1.25 |
| Breakdown torque | : 380 % | Temperature rise | : 80 K |
| Rated speed | : 3475 rpm | Design | : B |

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

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|---------|----------|
| | | | | |
| Performed by | | Page | | Revision |
| Checked by | | 2 / 36 | | |
| Date | 13/04/2022 | | | |

TORQUE AND CURRENT VS SPEED CURVE



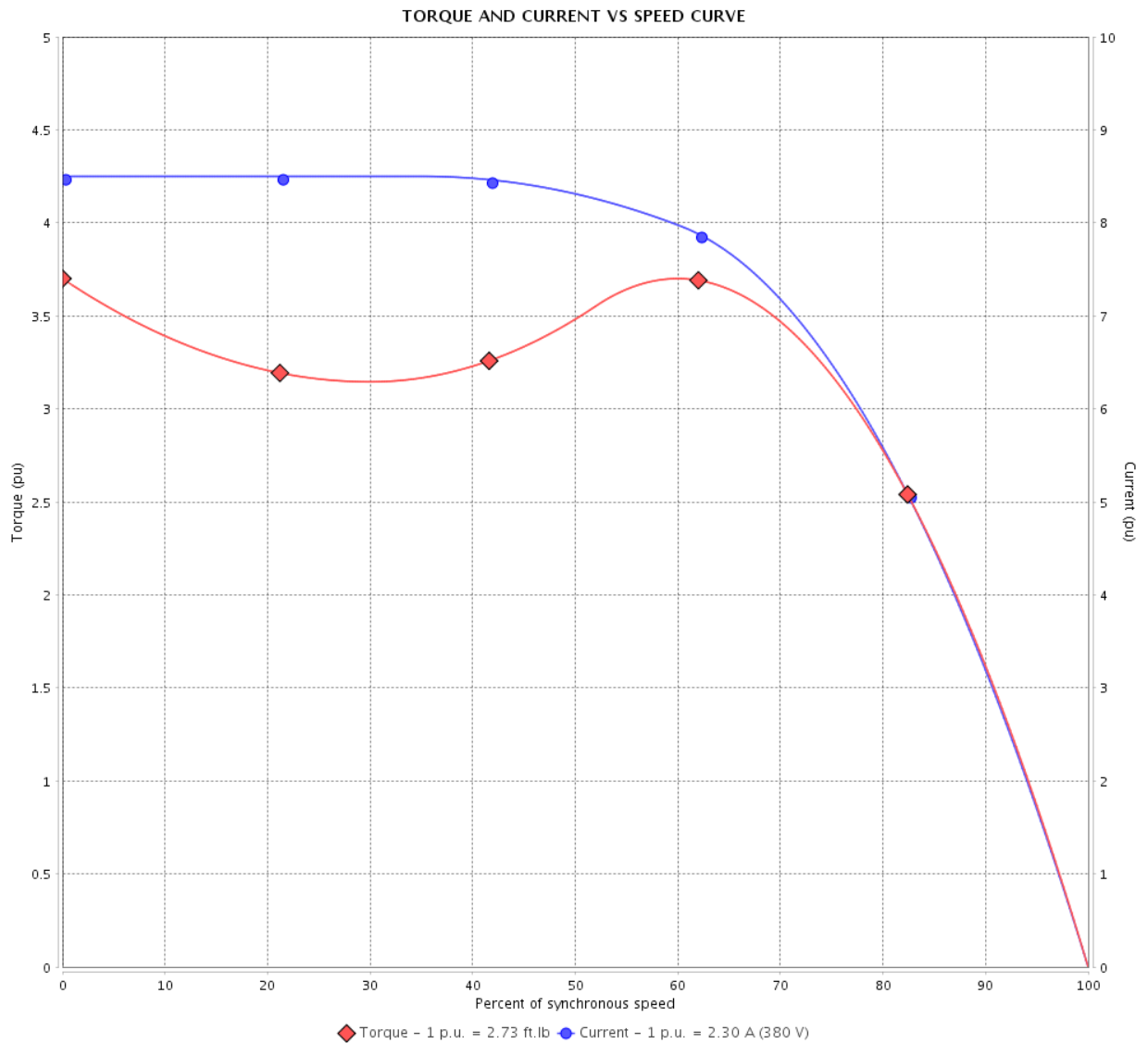
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11431396

Catalog # : 00236ST3QIE145T-W22



Performance : 380 V 50 Hz 2P IE3

| | | | |
|---------------------|--------------|-----------------------|-------------------|
| Rated current | : 2.30 A | Moment of inertia (J) | : 0.0605 sq.ft.lb |
| LRC | : 8.5 | Duty cycle | : Cont.(S1) |
| Rated torque | : 2.73 ft.lb | Insulation class | : F |
| Locked rotor torque | : 370 % | Service factor | : 1.25 |
| Breakdown torque | : 370 % | Temperature rise | : 80 K |
| Rated speed | : 2885 rpm | Design | : B |

Locked rotor time : 25s (cold) 14s (hot)

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|----------------|----------|
| | | | | |
| Performed by | | | Page 3 / 36 | Revision |
| Checked by | | | | |
| Date | 13/04/2022 | | | |

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



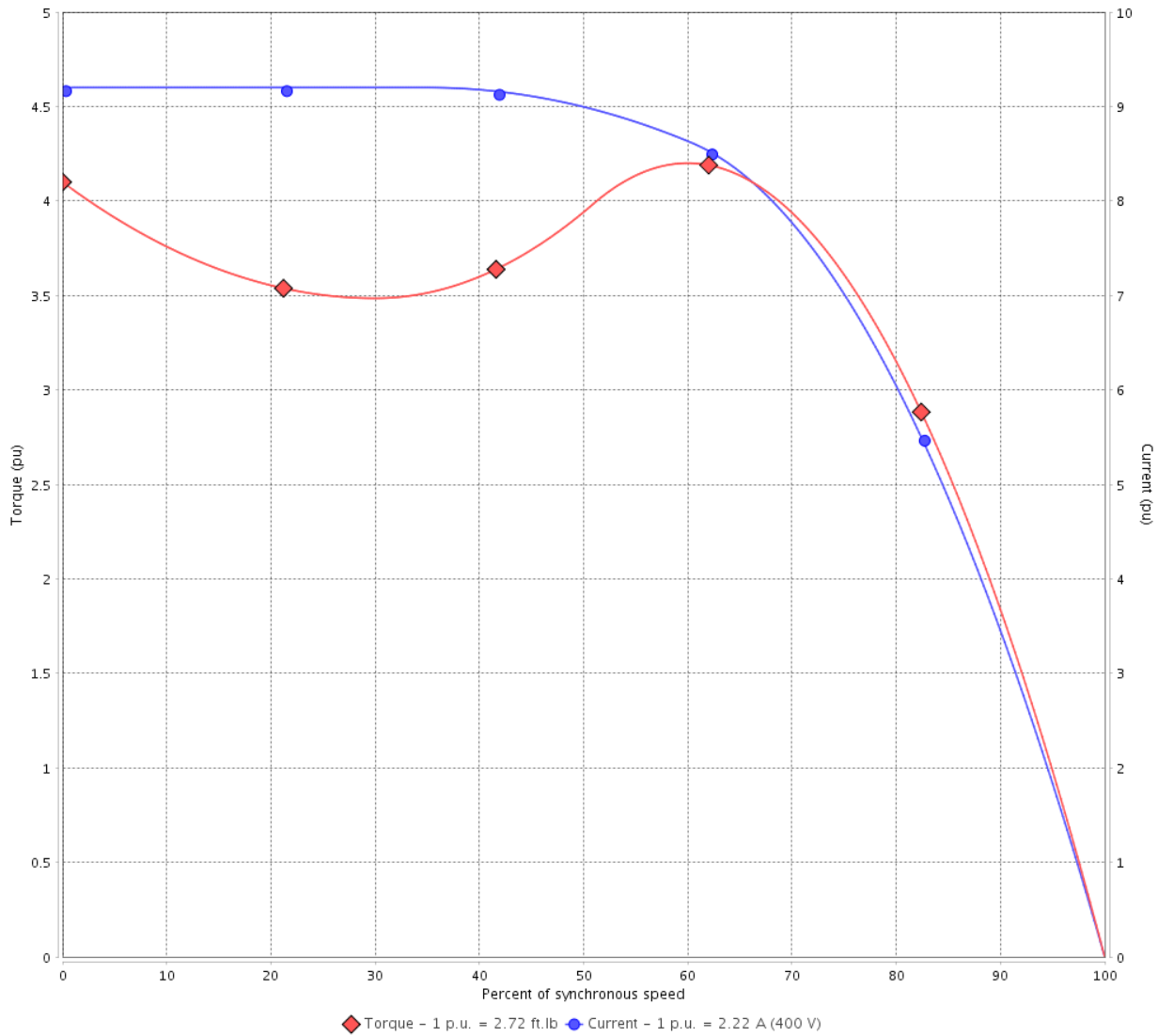
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11431396

Catalog # : 00236ST3QIE145T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 400 V 50 Hz 2P IE3

| | | | |
|---------------------|--------------|-----------------------|-------------------|
| Rated current | : 2.22 A | Moment of inertia (J) | : 0.0605 sq.ft.lb |
| LRC | : 9.2 | Duty cycle | : Cont.(S1) |
| Rated torque | : 2.72 ft.lb | Insulation class | : F |
| Locked rotor torque | : 409 % | Service factor | : 1.25 |
| Breakdown torque | : 420 % | Temperature rise | : 80 K |
| Rated speed | : 2895 rpm | Design | : B |

Locked rotor time : 25s (cold) 14s (hot)

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|----------------|----------|
| | | | | |
| Performed by | | | Page 4 / 36 | Revision |
| Checked by | | | | |
| Date | 13/04/2022 | | | |

TORQUE AND CURRENT VS SPEED CURVE



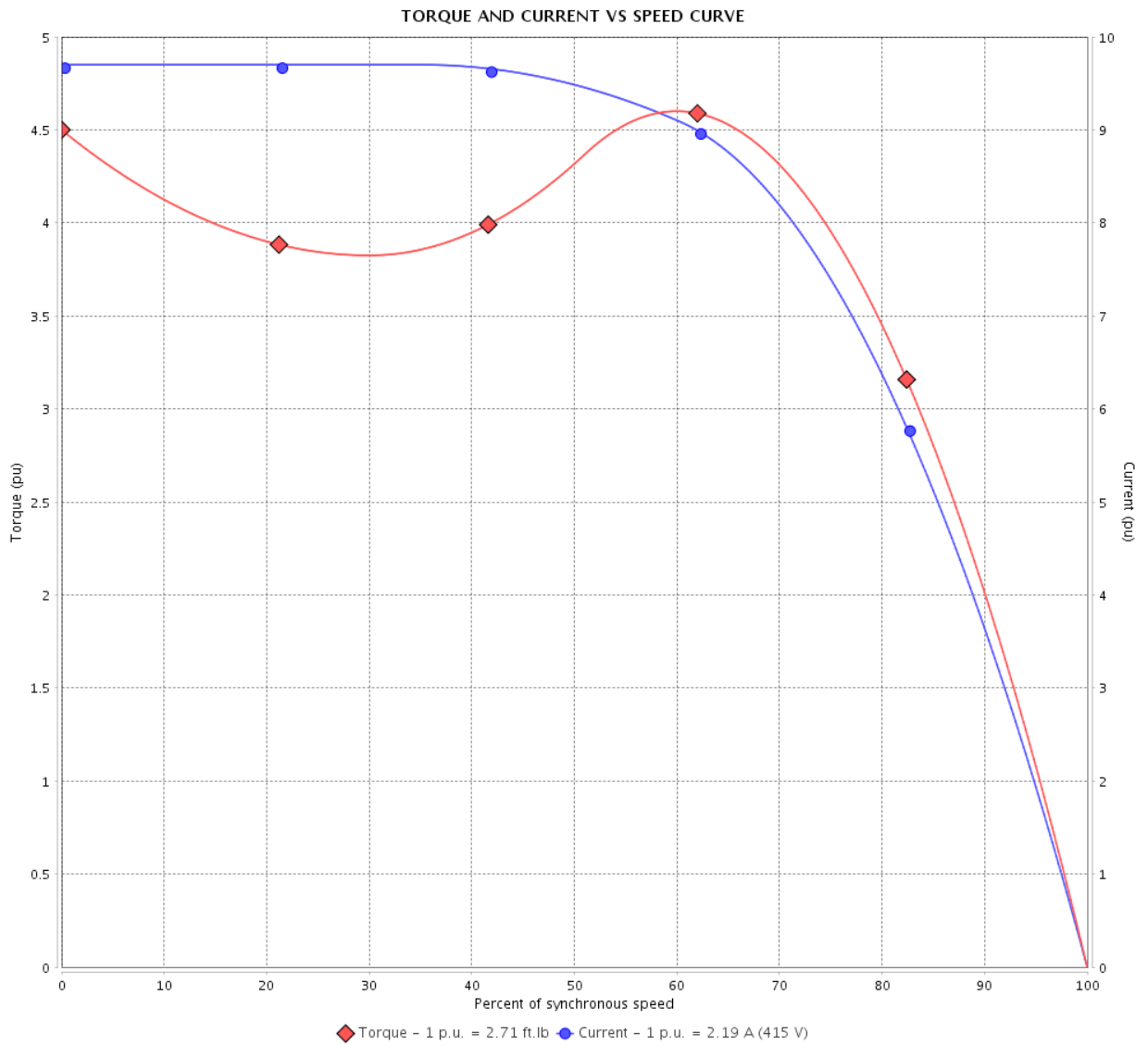
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11431396

Catalog # : 00236ST3QIE145T-W22



Performance : 415 V 50 Hz 2P IE3

| | | | |
|---------------------|--------------|-----------------------|-------------------|
| Rated current | : 2.19 A | Moment of inertia (J) | : 0.0605 sq.ft.lb |
| LRC | : 9.7 | Duty cycle | : Cont.(S1) |
| Rated torque | : 2.71 ft.lb | Insulation class | : F |
| Locked rotor torque | : 450 % | Service factor | : 1.25 |
| Breakdown torque | : 459 % | Temperature rise | : 80 K |
| Rated speed | : 2905 rpm | Design | : B |

Locked rotor time : 25s (cold) 14s (hot)

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|---------|----------|
| | | | | |
| Performed by | | | Page | Revision |
| Checked by | | | 5 / 36 | |
| Date | 13/04/2022 | | | |

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



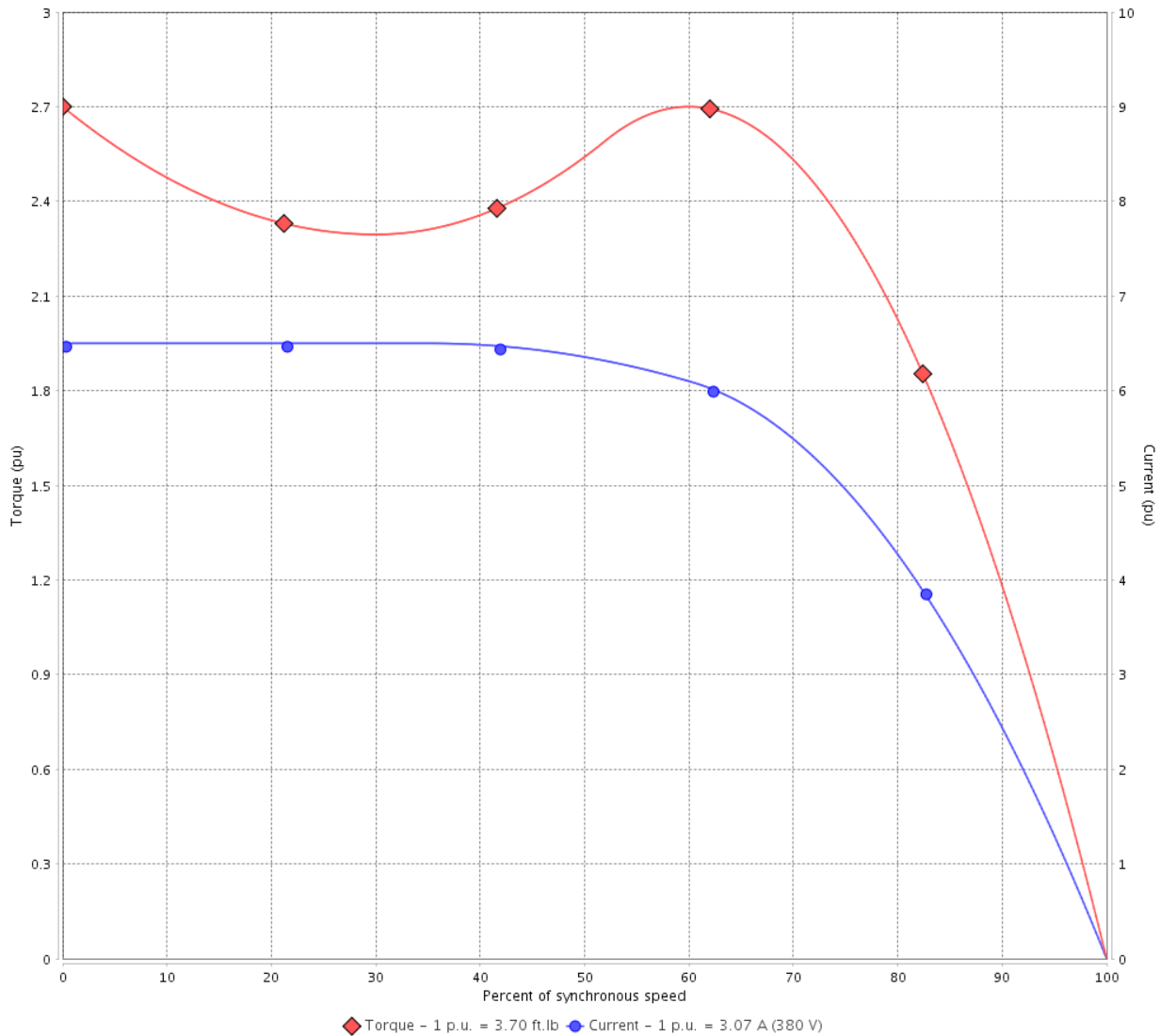
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11431396

Catalog # : 00236ST3QIE145T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 380 V 50 Hz 2P IE2

| | | | |
|---------------------|--------------|-----------------------|-------------------|
| Rated current | : 3.07 A | Moment of inertia (J) | : 0.0605 sq.ft.lb |
| LRC | : 6.5 | Duty cycle | : Cont.(S1) |
| Rated torque | : 3.70 ft.lb | Insulation class | : F |
| Locked rotor torque | : 270 % | Service factor | : 1.25 |
| Breakdown torque | : 270 % | Temperature rise | : 80 K |
| Rated speed | : 2835 rpm | Design | : B |

Locked rotor time : 25s (cold) 14s (hot)

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|----------------|----------|
| | | | | |
| Performed by | | | Page 6 / 36 | Revision |
| Checked by | | | | |
| Date | 13/04/2022 | | | |

TORQUE AND CURRENT VS SPEED CURVE



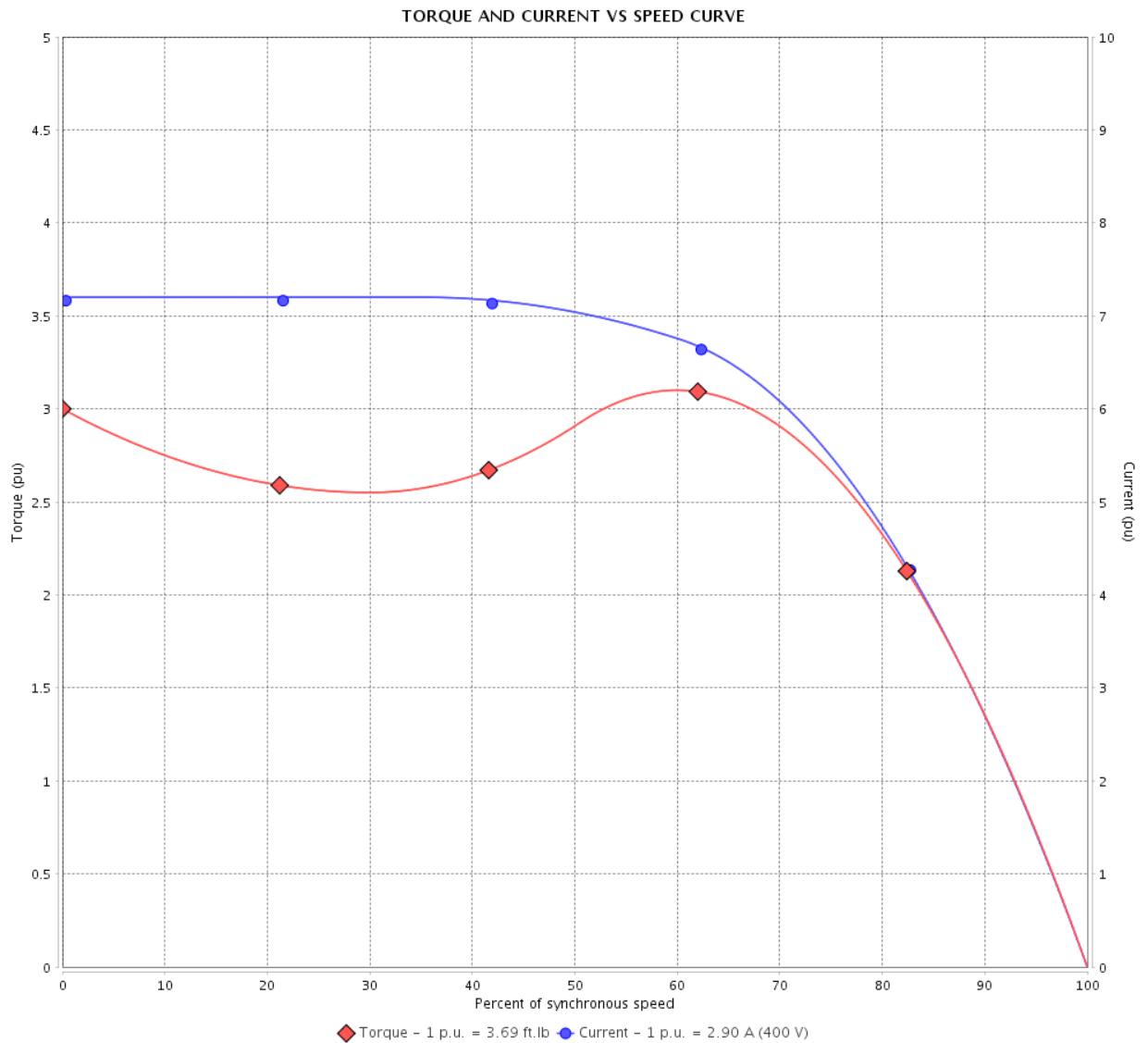
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11431396

Catalog # : 00236ST3QIE145T-W22



Performance : 400 V 50 Hz 2P IE2

| | | | |
|---------------------|--------------|-----------------------|-------------------|
| Rated current | : 2.90 A | Moment of inertia (J) | : 0.0605 sq.ft.lb |
| LRC | : 7.2 | Duty cycle | : Cont.(S1) |
| Rated torque | : 3.69 ft.lb | Insulation class | : F |
| Locked rotor torque | : 300 % | Service factor | : 1.25 |
| Breakdown torque | : 310 % | Temperature rise | : 80 K |
| Rated speed | : 2850 rpm | Design | : B |

Locked rotor time : 25s (cold) 14s (hot)

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|----------------|----------|
| | | | | |
| Performed by | | | Page 7 / 36 | Revision |
| Checked by | | | | |
| Date | 13/04/2022 | | | |

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



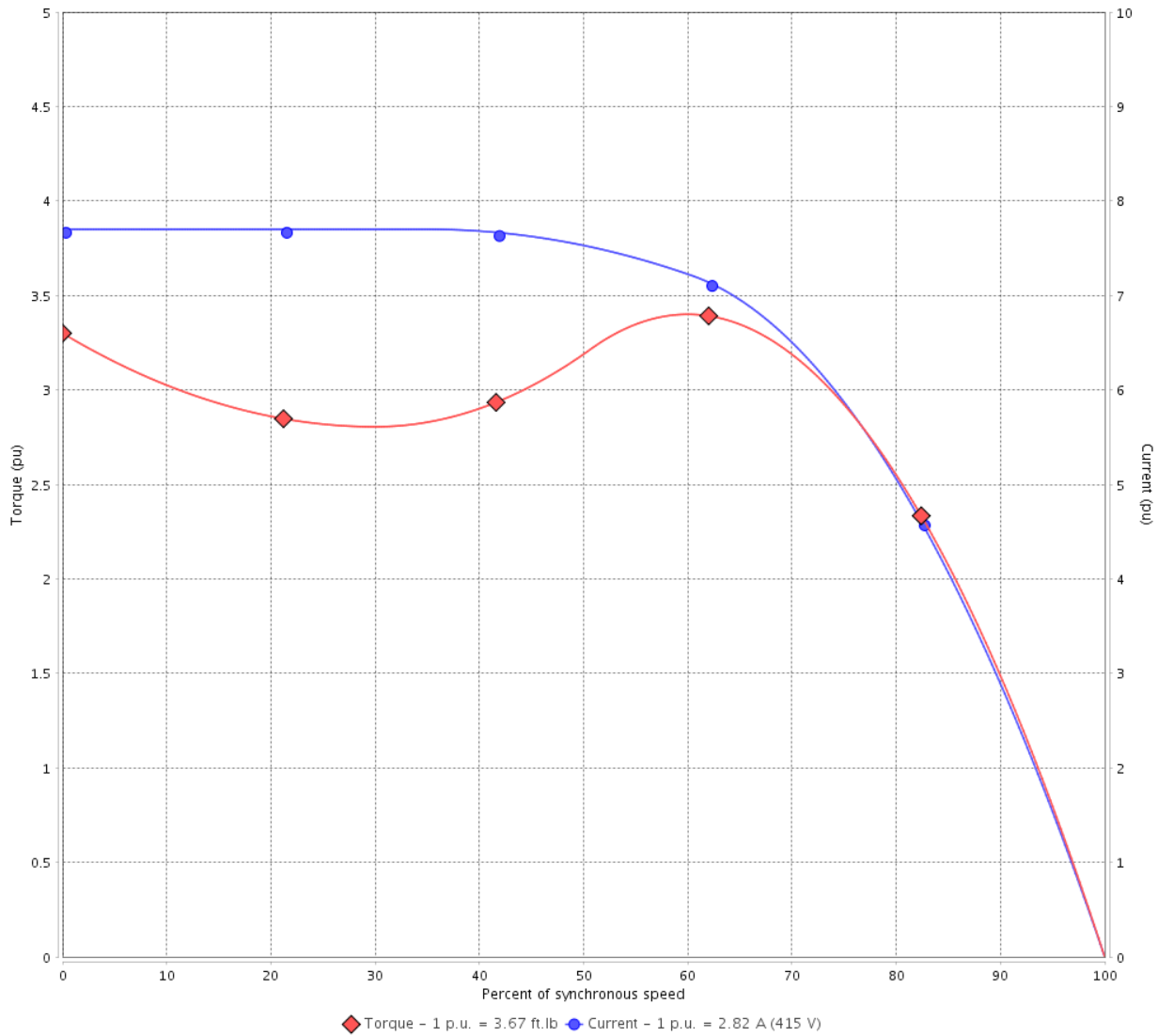
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11431396

Catalog # : 00236ST3QIE145T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 415 V 50 Hz 2P IE2

| | | | |
|---------------------|--------------|-----------------------|-------------------|
| Rated current | : 2.82 A | Moment of inertia (J) | : 0.0605 sq.ft.lb |
| LRC | : 7.7 | Duty cycle | : Cont.(S1) |
| Rated torque | : 3.67 ft.lb | Insulation class | : F |
| Locked rotor torque | : 330 % | Service factor | : 1.25 |
| Breakdown torque | : 340 % | Temperature rise | : 80 K |
| Rated speed | : 2865 rpm | Design | : B |

Locked rotor time : 25s (cold) 14s (hot)

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|---------|----------|
| | | | | |
| Performed by | | | Page | Revision |
| Checked by | | | | |
| Date | 13/04/2022 | | | |
| | | | 8 / 36 | |

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

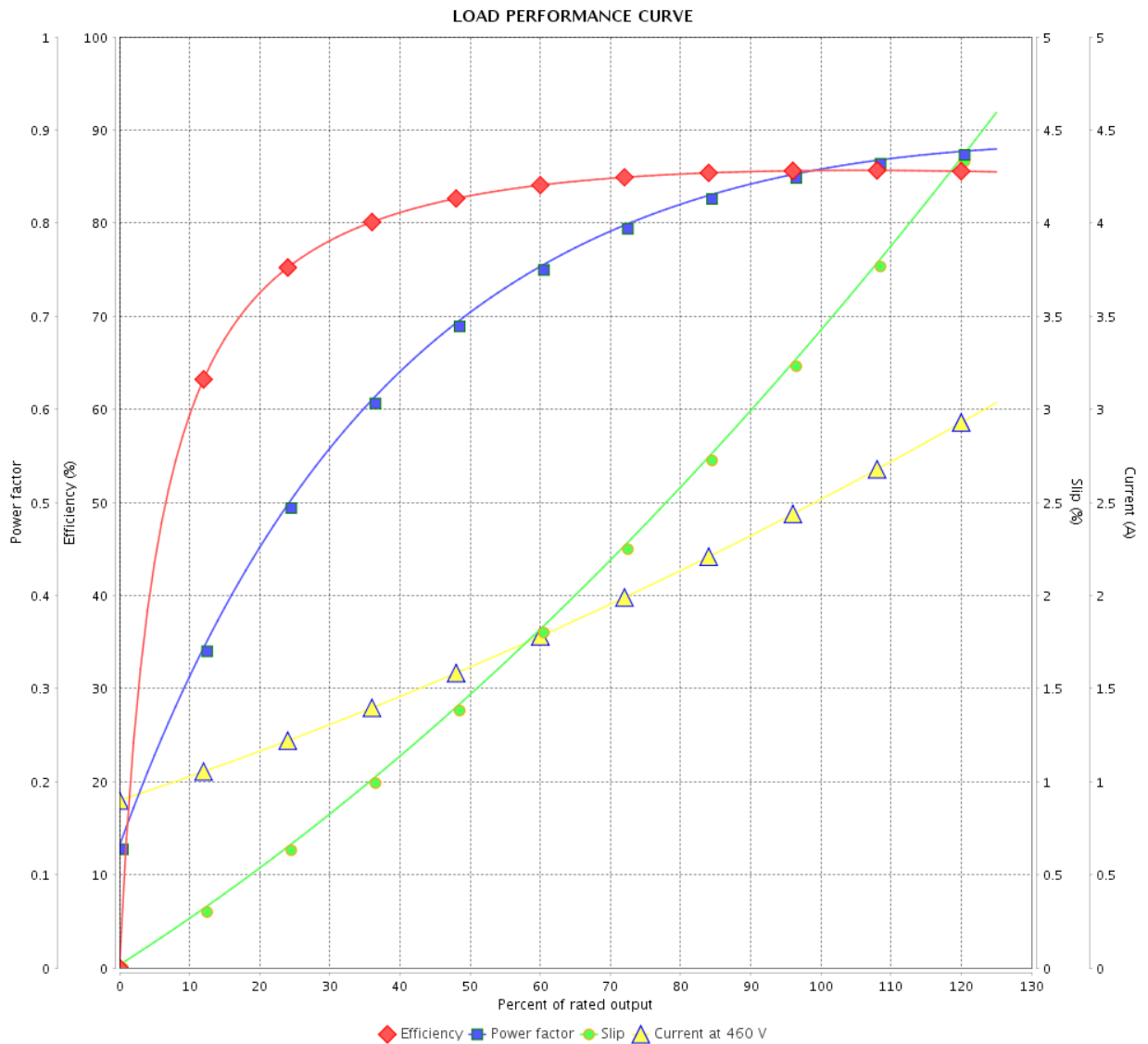


Customer : _____

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11431396

Catalog # : 00236ST3QIE145T-W22



Performance : 460 V 60 Hz 2P

Rated current : 2.56 A
 LRC : 8.9
 Rated torque : 3.02 ft.lb
 Locked rotor torque : 350 %
 Breakdown torque : 380 %
 Rated speed : 3475 rpm

Moment of inertia (J) : 0.0605 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|---------|----------|
| | | | | |
| Performed by | | | Page | Revision |
| Checked by | | | 9 / 36 | |
| Date | 13/04/2022 | | | |

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



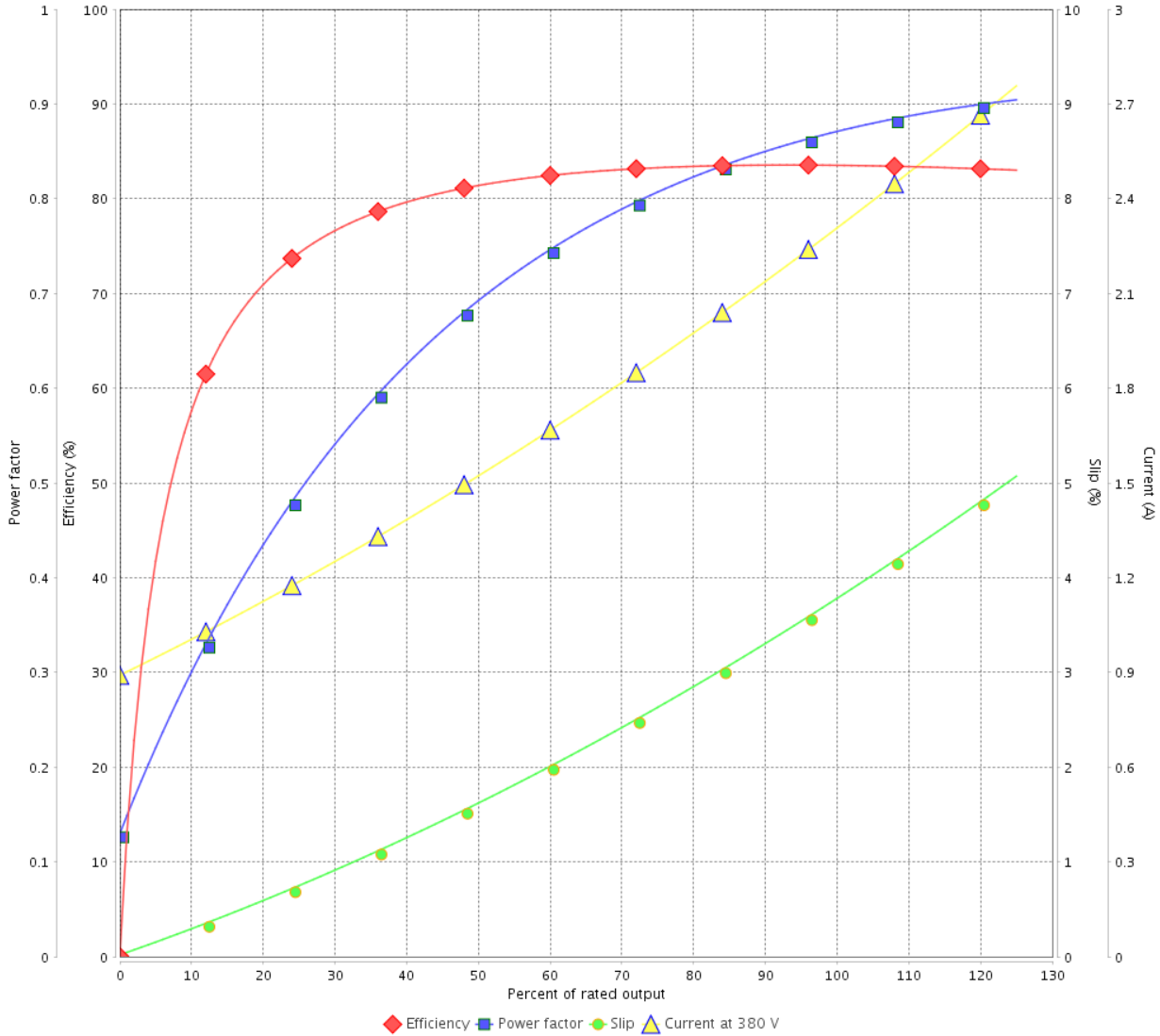
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11431396

Catalog # : 00236ST3QIE145T-W22

LOAD PERFORMANCE CURVE



Performance : 380 V 50 Hz 2P IE3

Rated current : 2.30 A
 LRC : 8.5
 Rated torque : 2.73 ft.lb
 Locked rotor torque : 370 %
 Breakdown torque : 370 %
 Rated speed : 2885 rpm

Moment of inertia (J) : 0.0605 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|---------|----------|
| | | | | |
| Performed by | | Page | | Revision |
| Checked by | | 10 / 36 | | |
| Date | 13/04/2022 | | | |

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

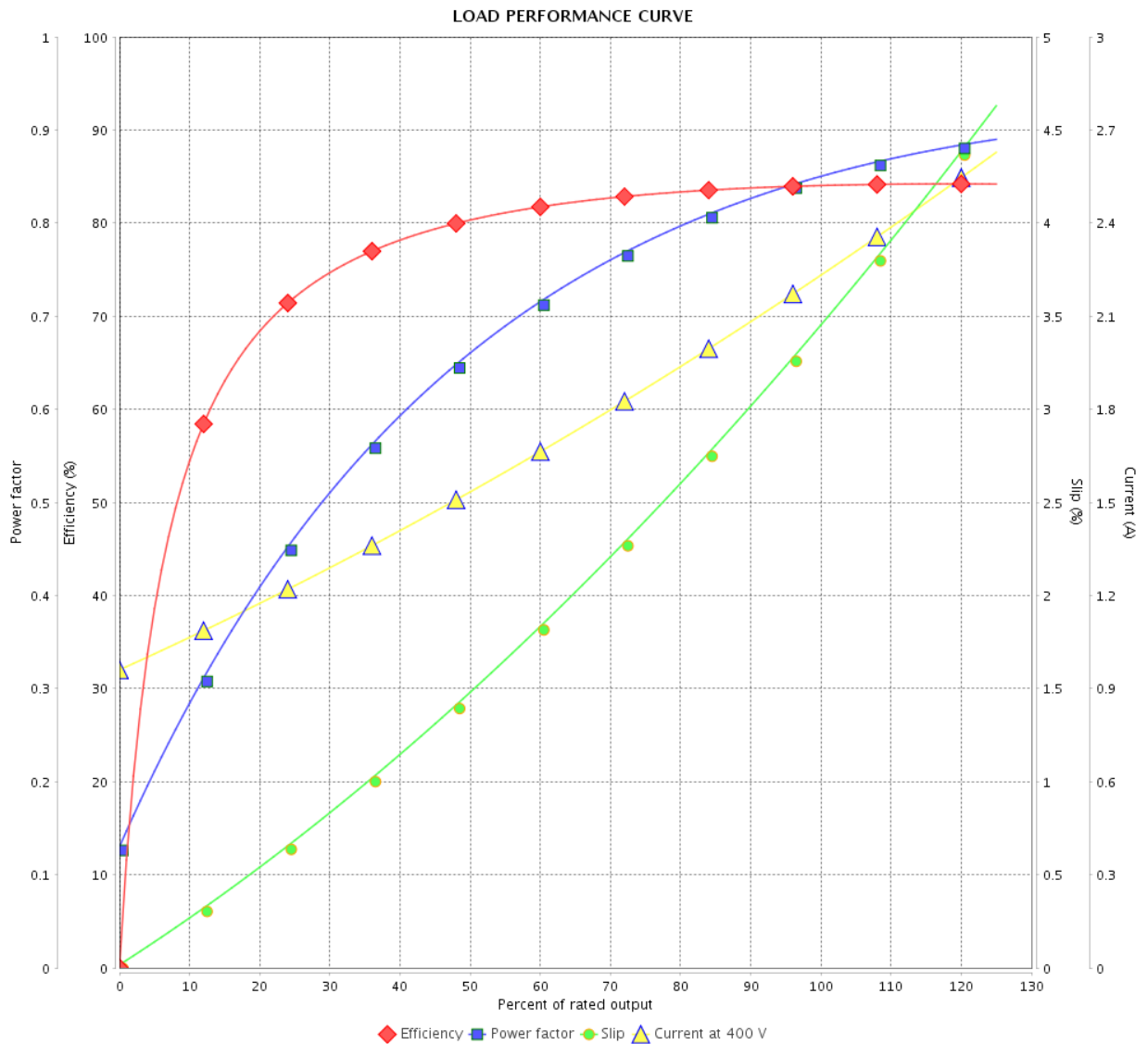


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11431396

Catalog # : 00236ST3QIE145T-W22



Performance : 400 V 50 Hz 2P IE3

Rated current : 2.22 A
 LRC : 9.2
 Rated torque : 2.72 ft.lb
 Locked rotor torque : 409 %
 Breakdown torque : 420 %
 Rated speed : 2895 rpm

Moment of inertia (J) : 0.0605 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|------------|---------|----------|
| | | | | |
| Performed by | | Page | | Revision |
| Checked by | | 11 / 36 | | |
| Date | | 13/04/2022 | | |

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



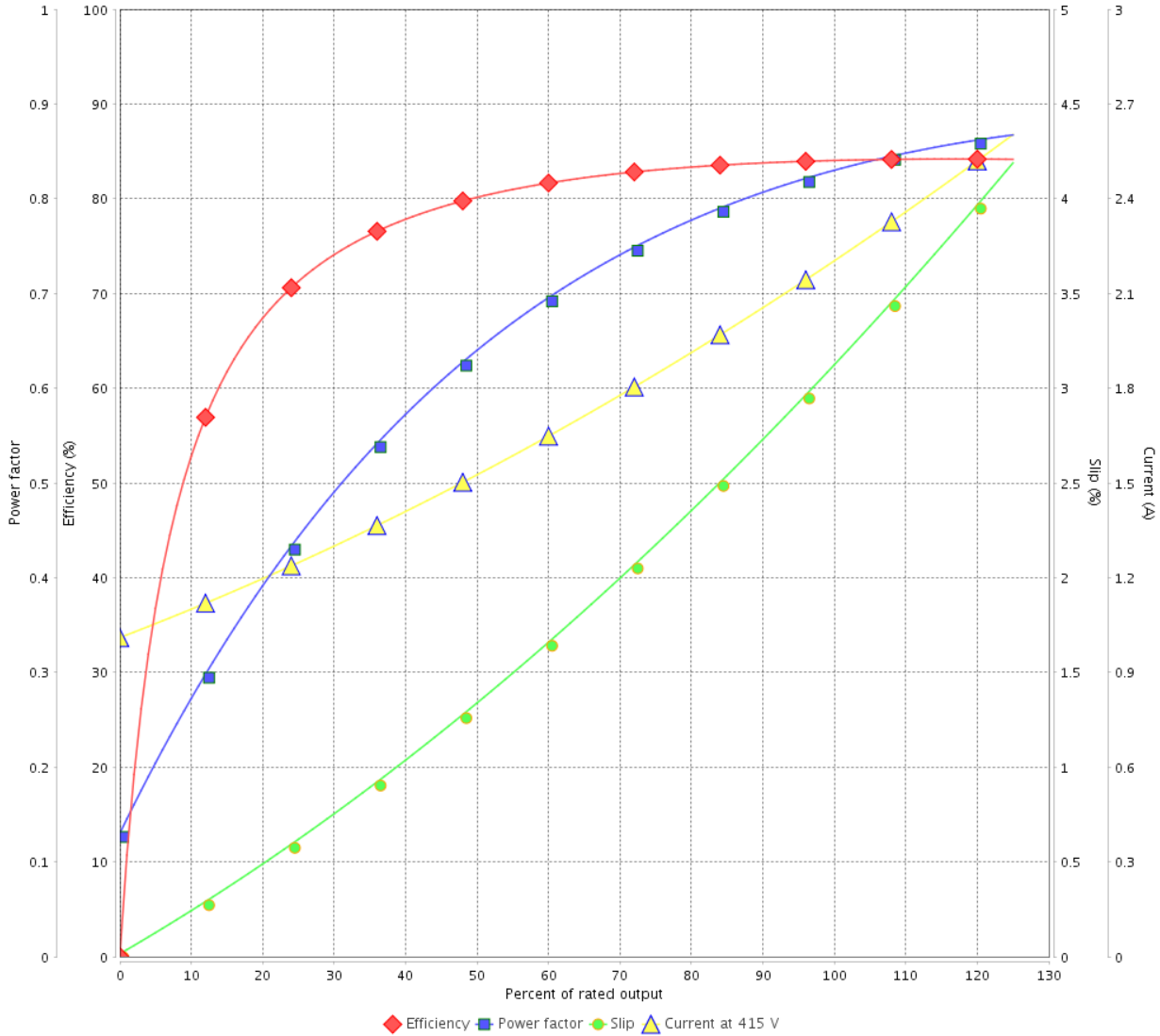
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11431396

Catalog # : 00236ST3QIE145T-W22

LOAD PERFORMANCE CURVE



Performance : 415 V 50 Hz 2P IE3

Rated current : 2.19 A
 LRC : 9.7
 Rated torque : 2.71 ft.lb
 Locked rotor torque : 450 %
 Breakdown torque : 459 %
 Rated speed : 2905 rpm

Moment of inertia (J) : 0.0605 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|-----------------|----------|
| | | | | |
| Performed by | | | Page 12 / 36 | Revision |
| Checked by | | | | |
| Date | 13/04/2022 | | | |

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

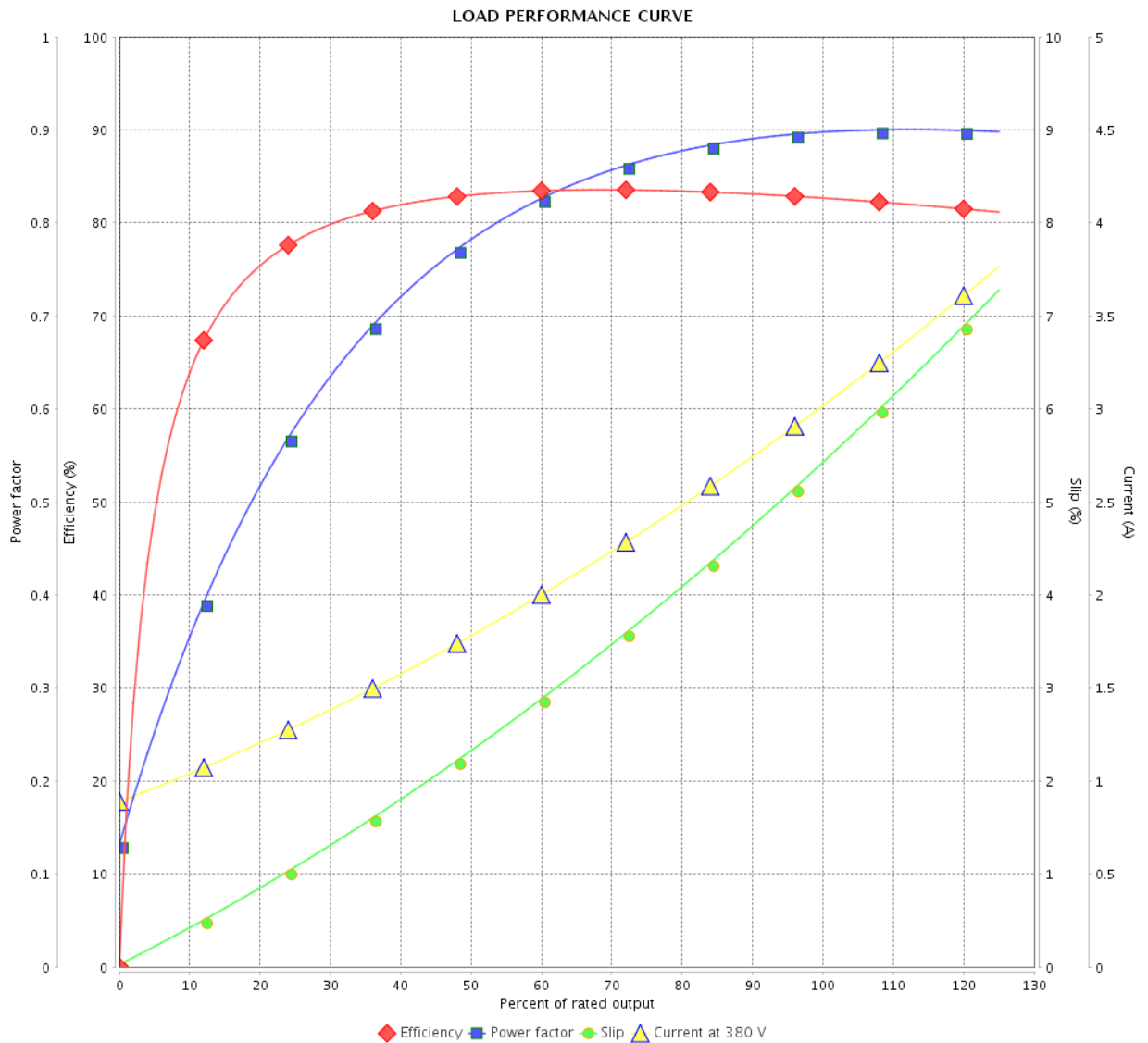


Customer : _____

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11431396

Catalog # : 00236ST3QIE145T-W22



Performance : 380 V 50 Hz 2P IE2

Rated current : 3.07 A
 LRC : 6.5
 Rated torque : 3.70 ft.lb
 Locked rotor torque : 270 %
 Breakdown torque : 270 %
 Rated speed : 2835 rpm

Moment of inertia (J) : 0.0605 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|---------|----------|
| | | | | |
| Performed by | | | Page | Revision |
| Checked by | | | 13 / 36 | |
| Date | 13/04/2022 | | | |

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



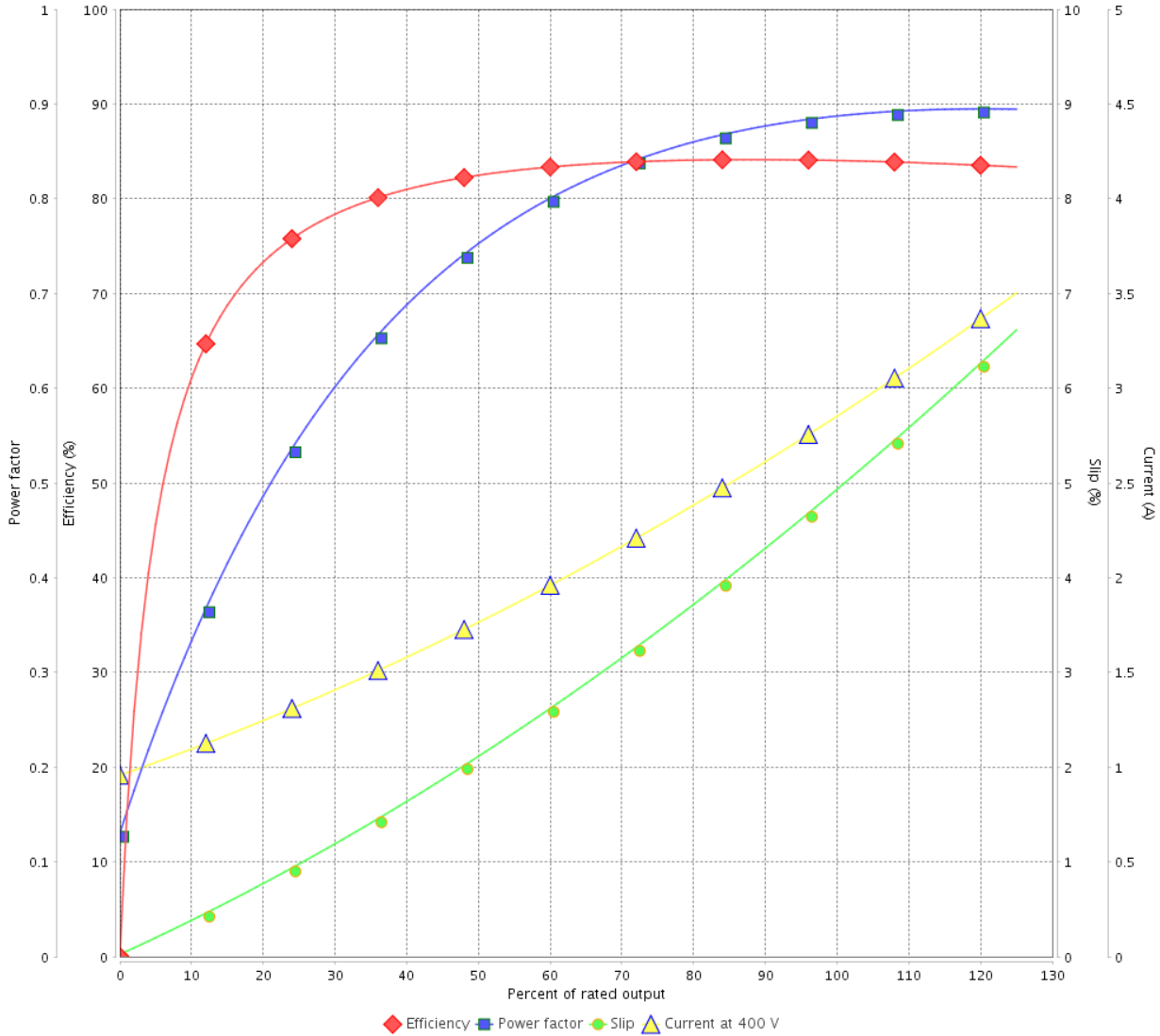
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11431396

Catalog # : 00236ST3QIE145T-W22

LOAD PERFORMANCE CURVE



Performance : 400 V 50 Hz 2P IE2

Rated current : 2.90 A
 LRC : 7.2
 Rated torque : 3.69 ft.lb
 Locked rotor torque : 300 %
 Breakdown torque : 310 %
 Rated speed : 2850 rpm

Moment of inertia (J) : 0.0605 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|---------|----------|
| | | | | |
| Performed by | | Page | | Revision |
| Checked by | | 14 / 36 | | |
| Date | 13/04/2022 | | | |

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

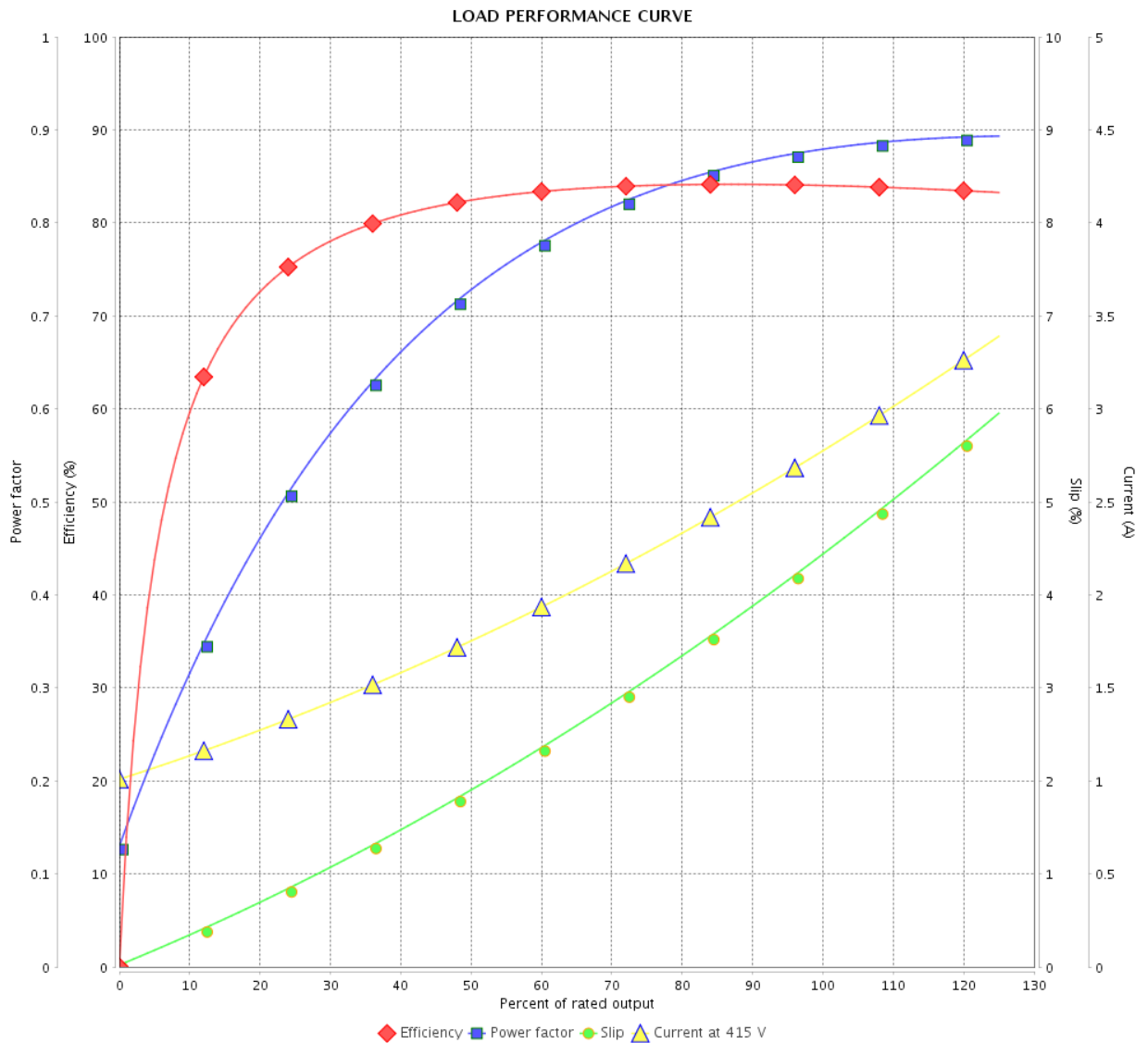


Customer : _____

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11431396

Catalog # : 00236ST3QIE145T-W22



Performance : 415 V 50 Hz 2P IE2

Rated current : 2.82 A
 LRC : 7.7
 Rated torque : 3.67 ft.lb
 Locked rotor torque : 330 %
 Breakdown torque : 340 %
 Rated speed : 2865 rpm

Moment of inertia (J) : 0.0605 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|------------|---------|----------|
| | | | | |
| Performed by | | Page | | Revision |
| Checked by | | 15 / 36 | | |
| Date | | 13/04/2022 | | |

THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase
Product code : 11431396
Catalog # : 00236ST3QIE145T-W22

Performance : 460 V 60 Hz 2P

| | | | |
|---------------------|--------------|-----------------------|-------------------|
| Rated current | : 2.56 A | Moment of inertia (J) | : 0.0605 sq.ft.lb |
| LRC | : 8.9 | Duty cycle | : Cont.(S1) |
| Rated torque | : 3.02 ft.lb | Insulation class | : F |
| Locked rotor torque | : 350 % | Service factor | : 1.25 |
| Breakdown torque | : 380 % | Temperature rise | : 80 K |
| Rated speed | : 3475 rpm | Design | : B |

Heating constant

Cooling constant

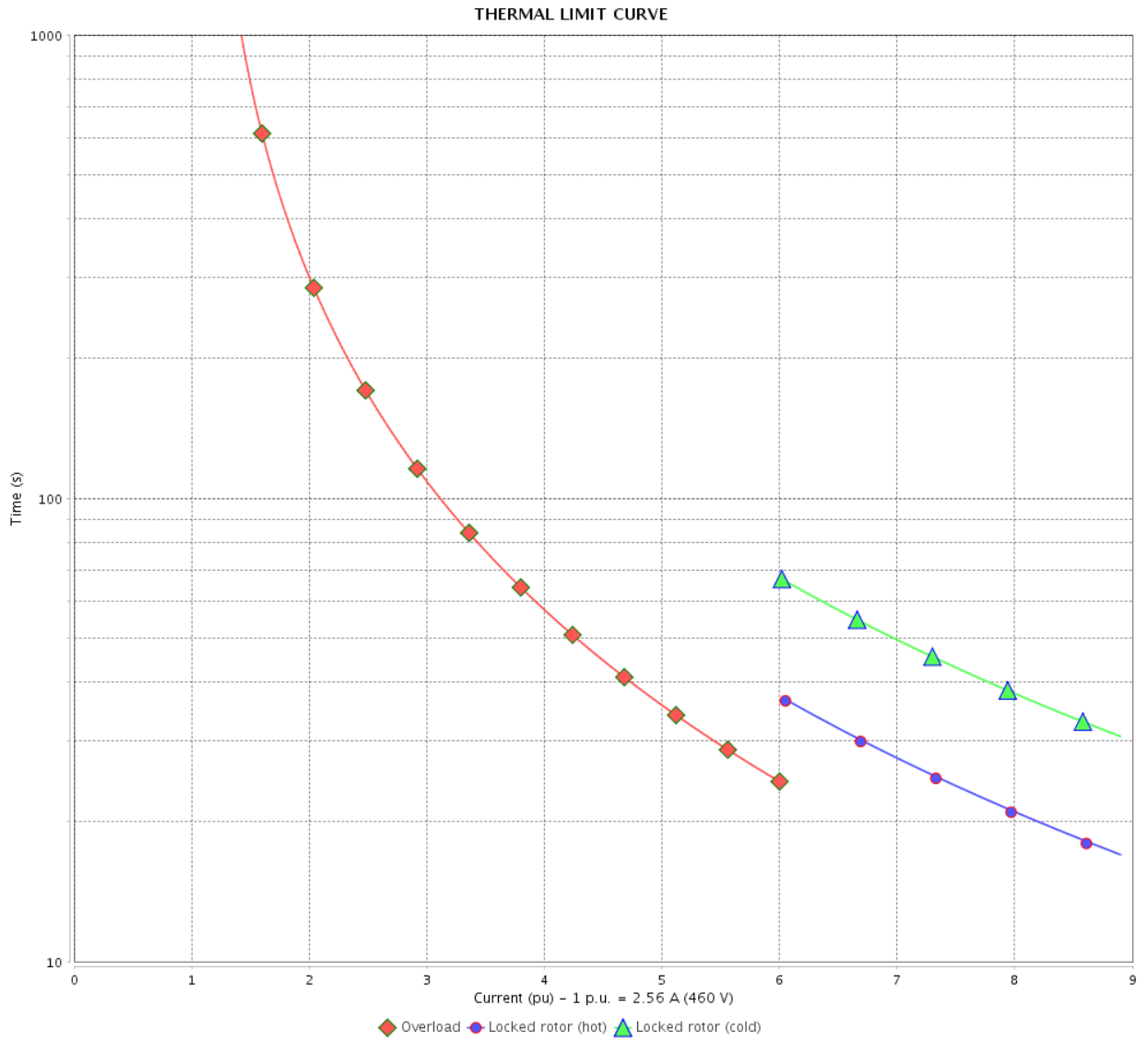
| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|---------|----------|
| | | | | |
| Performed by | | | | |
| Checked by | | | Page | Revision |
| Date | 13/04/2022 | | 16 / 36 | |

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------------|----------|------|
| | | | | |
| Performed by | | | | |
| Checked by | | | | |
| Date | | | | |
| | | Page 17 / 36 | Revision | |

THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase
Product code : 11431396
Catalog # : 00236ST3QIE145T-W22

Performance : 380 V 50 Hz 2P IE3

| | | | |
|---------------------|--------------|-----------------------|-------------------|
| Rated current | : 2.30 A | Moment of inertia (J) | : 0.0605 sq.ft.lb |
| LRC | : 8.5 | Duty cycle | : Cont.(S1) |
| Rated torque | : 2.73 ft.lb | Insulation class | : F |
| Locked rotor torque | : 370 % | Service factor | : 1.25 |
| Breakdown torque | : 370 % | Temperature rise | : 80 K |
| Rated speed | : 2885 rpm | Design | : B |

Heating constant

Cooling constant

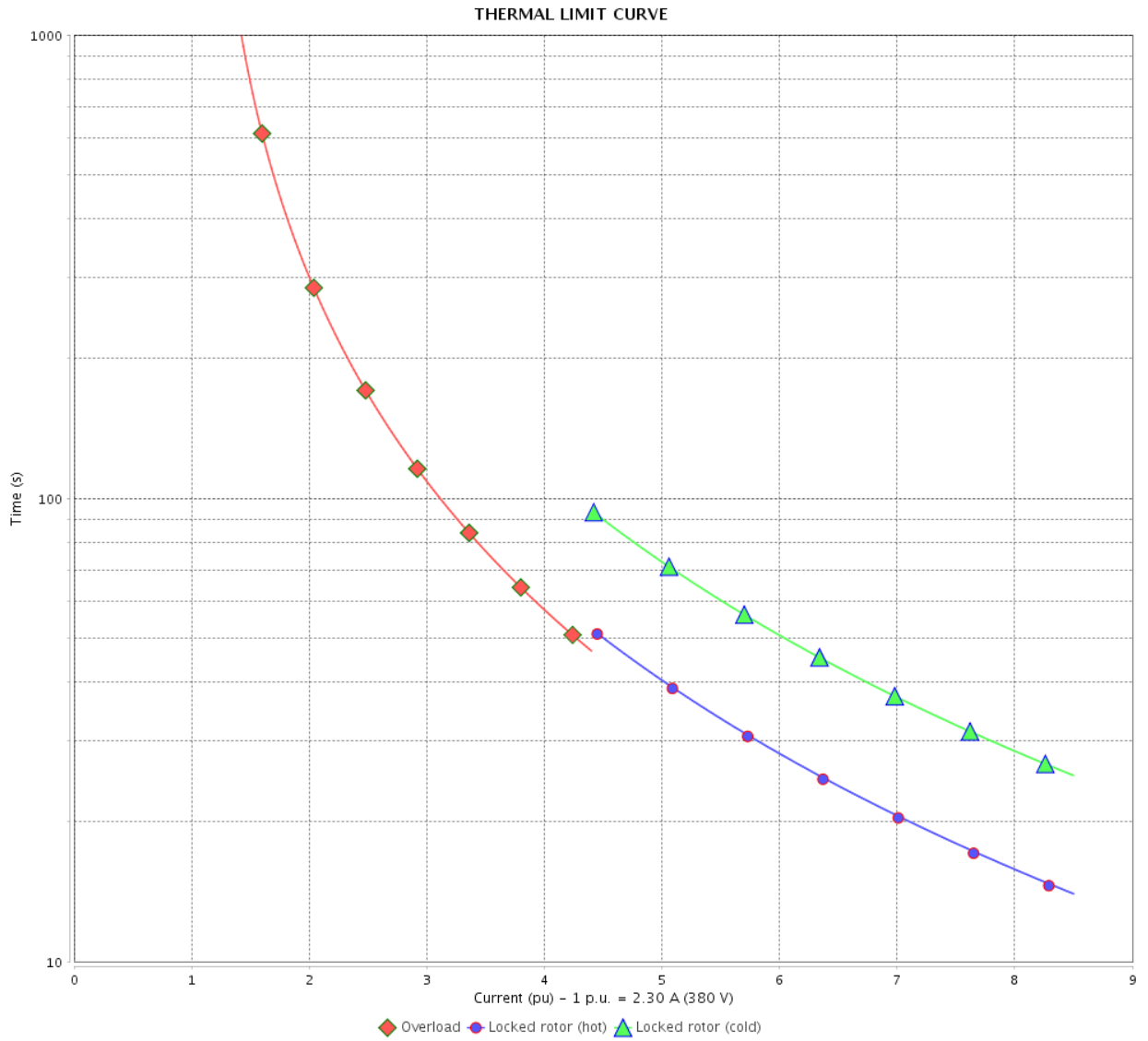
| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|---------|----------|
| Performed by | | | | |
| Checked by | | | Page | Revision |
| Date | 13/04/2022 | | 18 / 36 | |

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|------------|---------|----------|
| | | | | |
| Performed by | | Page | | Revision |
| Checked by | | 19 / 36 | | |
| Date | | 13/04/2022 | | |

THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase
Product code : 11431396
Catalog # : 00236ST3QIE145T-W22

Performance : 400 V 50 Hz 2P IE3

| | | | |
|---------------------|--------------|-----------------------|-------------------|
| Rated current | : 2.22 A | Moment of inertia (J) | : 0.0605 sq.ft.lb |
| LRC | : 9.2 | Duty cycle | : Cont.(S1) |
| Rated torque | : 2.72 ft.lb | Insulation class | : F |
| Locked rotor torque | : 409 % | Service factor | : 1.25 |
| Breakdown torque | : 420 % | Temperature rise | : 80 K |
| Rated speed | : 2895 rpm | Design | : B |

Heating constant

Cooling constant

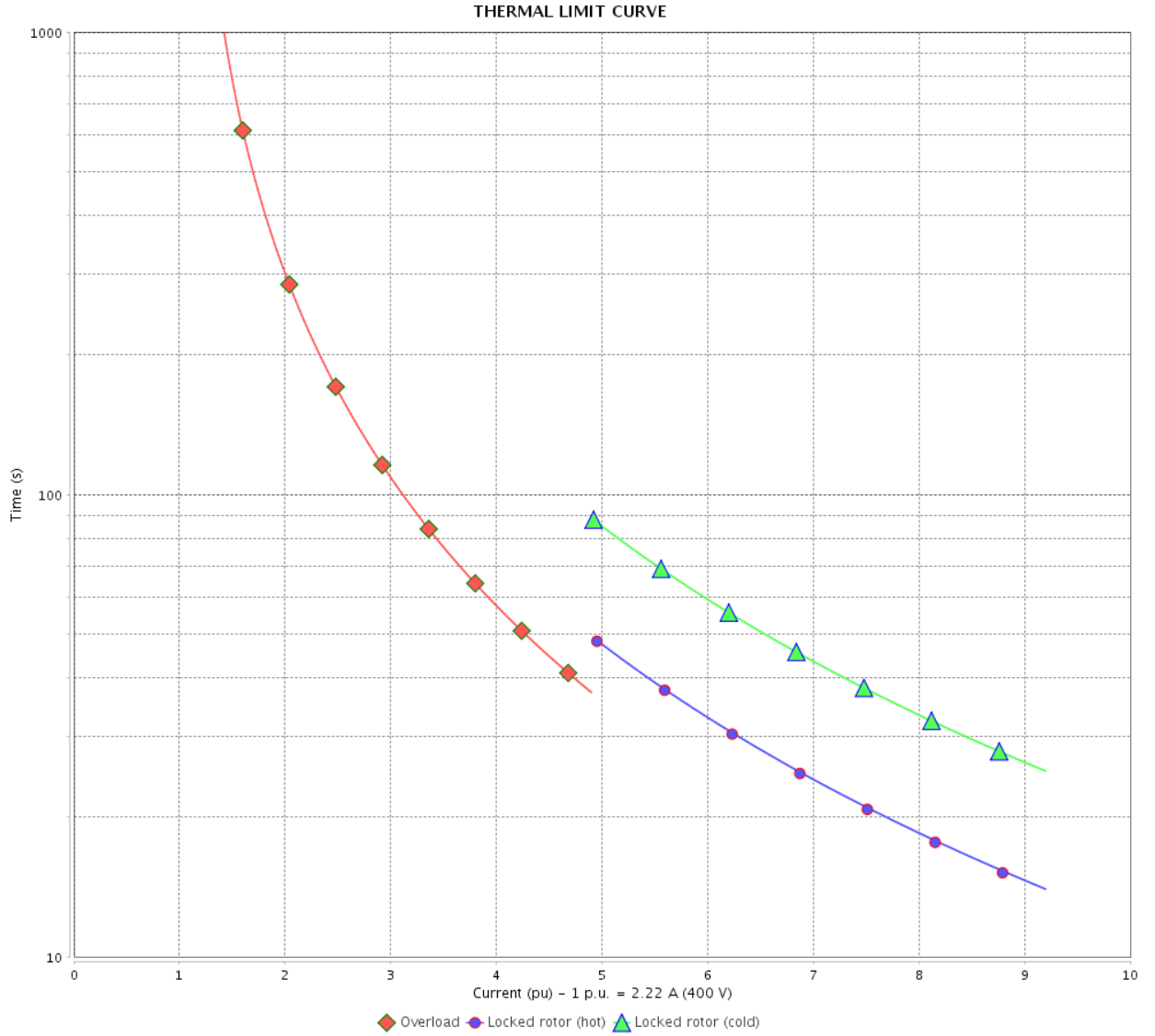
| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|-----------------|----------|
| | | | | |
| Performed by | | | | |
| Checked by | | | | |
| Date | 13/04/2022 | | Page 20 / 36 | Revision |

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------------|---------|----------|
| | | | | |
| Performed by | | Page 21 / 36 | | Revision |
| Checked by | | | | |
| Date | | | | |

THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase
Product code : 11431396
Catalog # : 00236ST3QIE145T-W22

Performance : 415 V 50 Hz 2P IE3

| | | | |
|---------------------|--------------|-----------------------|-------------------|
| Rated current | : 2.19 A | Moment of inertia (J) | : 0.0605 sq.ft.lb |
| LRC | : 9.7 | Duty cycle | : Cont.(S1) |
| Rated torque | : 2.71 ft.lb | Insulation class | : F |
| Locked rotor torque | : 450 % | Service factor | : 1.25 |
| Breakdown torque | : 459 % | Temperature rise | : 80 K |
| Rated speed | : 2905 rpm | Design | : B |

Heating constant

Cooling constant

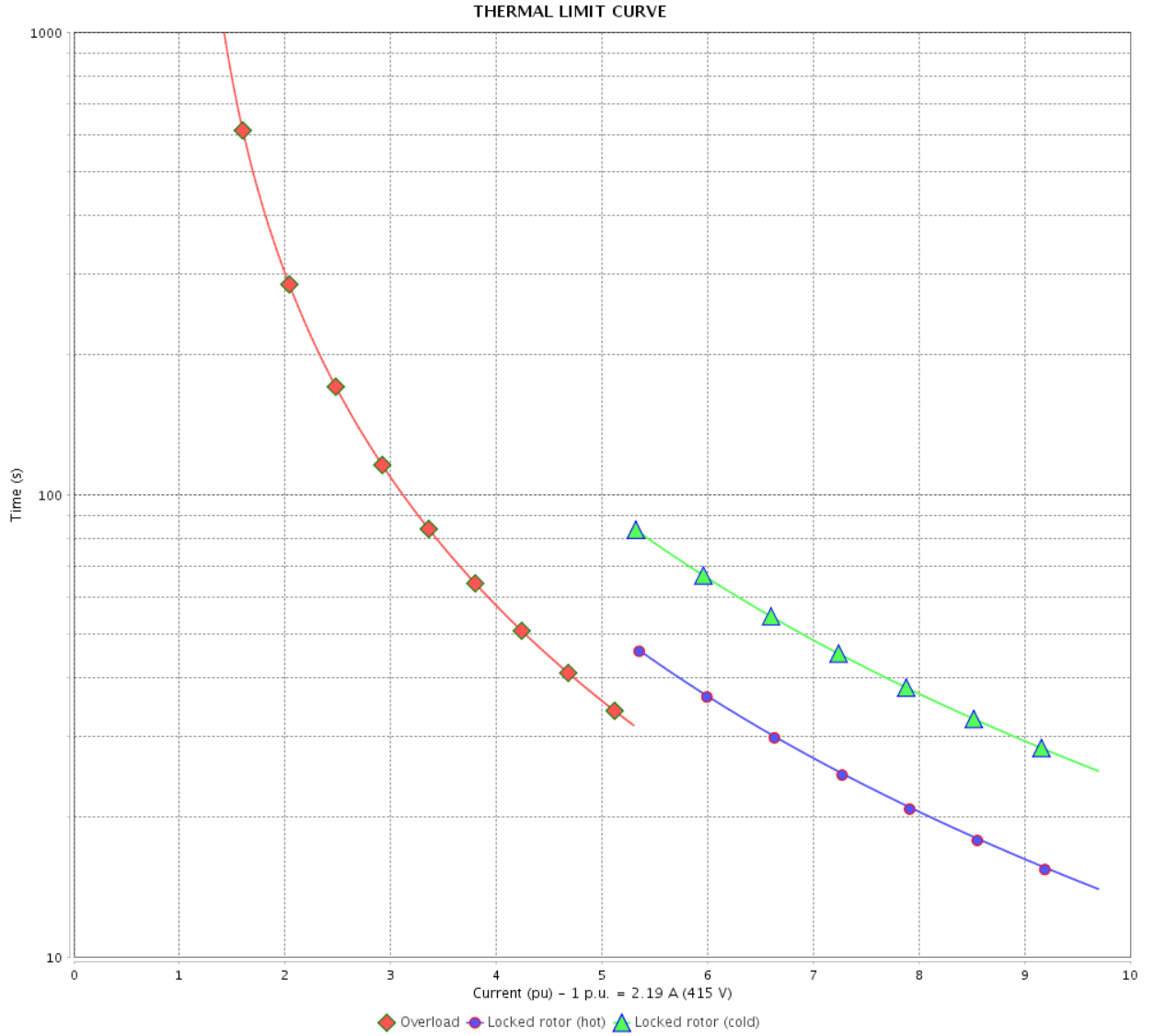
| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|---------|----------|
| | | | | |
| Performed by | | | | |
| Checked by | | | Page | Revision |
| Date | 13/04/2022 | | 22 / 36 | |

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------------|---------|----------|
| | | | | |
| Performed by | | Page 23 / 36 | | Revision |
| Checked by | | | | |
| Date | | | | |

THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase
Product code : 11431396
Catalog # : 00236ST3QIE145T-W22

Performance : 380 V 50 Hz 2P IE2

| | | | |
|---------------------|--------------|-----------------------|-------------------|
| Rated current | : 3.07 A | Moment of inertia (J) | : 0.0605 sq.ft.lb |
| LRC | : 6.5 | Duty cycle | : Cont.(S1) |
| Rated torque | : 3.70 ft.lb | Insulation class | : F |
| Locked rotor torque | : 270 % | Service factor | : 1.25 |
| Breakdown torque | : 270 % | Temperature rise | : 80 K |
| Rated speed | : 2835 rpm | Design | : B |

Heating constant

Cooling constant

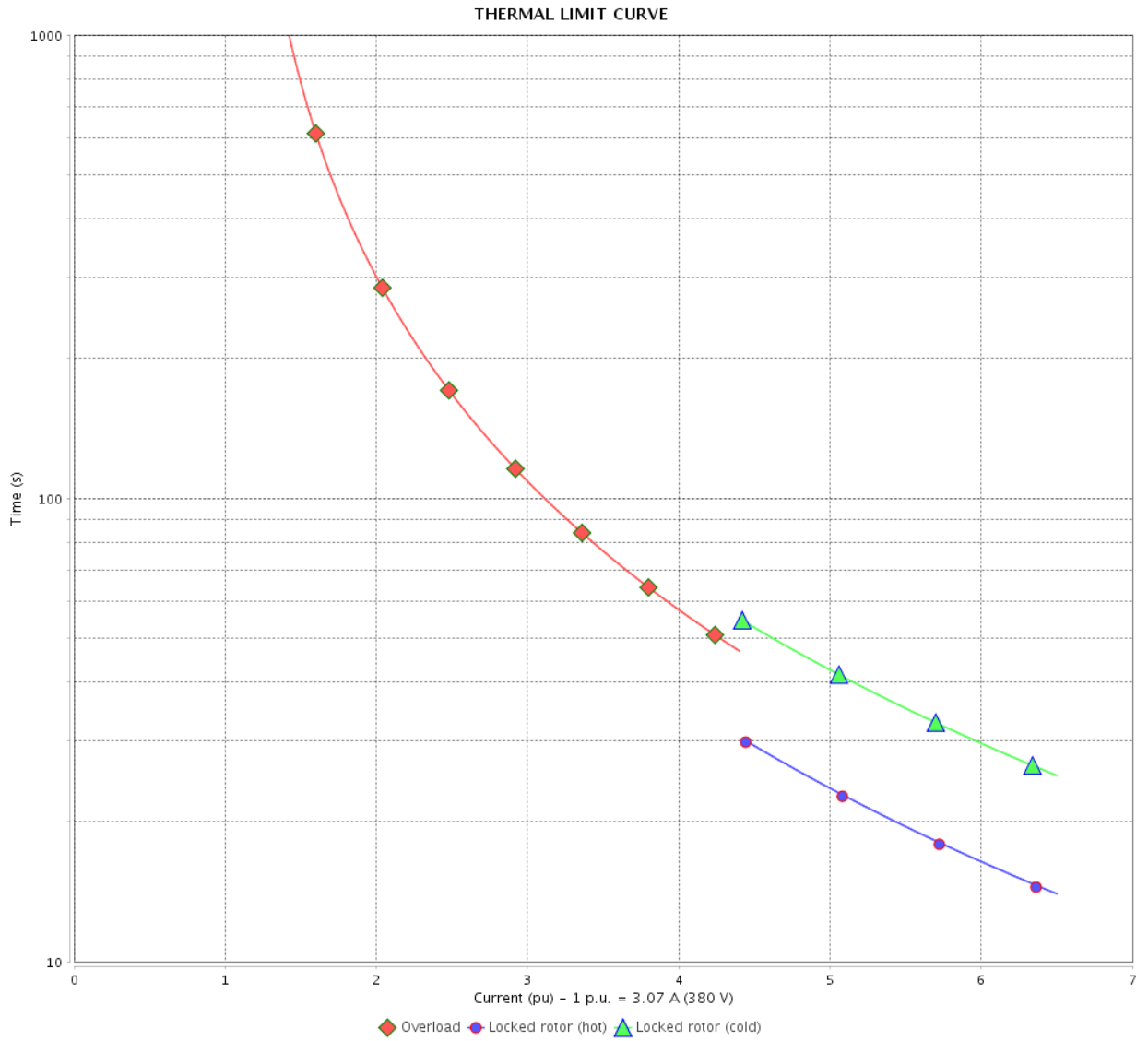
| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|---------|----------|
| | | | | |
| Performed by | | | | |
| Checked by | | | Page | Revision |
| Date | 13/04/2022 | | 24 / 36 | |

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|------------|---------|----------|
| | | | | |
| Performed by | | Page | | Revision |
| Checked by | | 25 / 36 | | |
| Date | | 13/04/2022 | | |

THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase
Product code : 11431396
Catalog # : 00236ST3QIE145T-W22

Performance : 400 V 50 Hz 2P IE2

| | | | |
|---------------------|--------------|-----------------------|-------------------|
| Rated current | : 2.90 A | Moment of inertia (J) | : 0.0605 sq.ft.lb |
| LRC | : 7.2 | Duty cycle | : Cont.(S1) |
| Rated torque | : 3.69 ft.lb | Insulation class | : F |
| Locked rotor torque | : 300 % | Service factor | : 1.25 |
| Breakdown torque | : 310 % | Temperature rise | : 80 K |
| Rated speed | : 2850 rpm | Design | : B |

Heating constant

Cooling constant

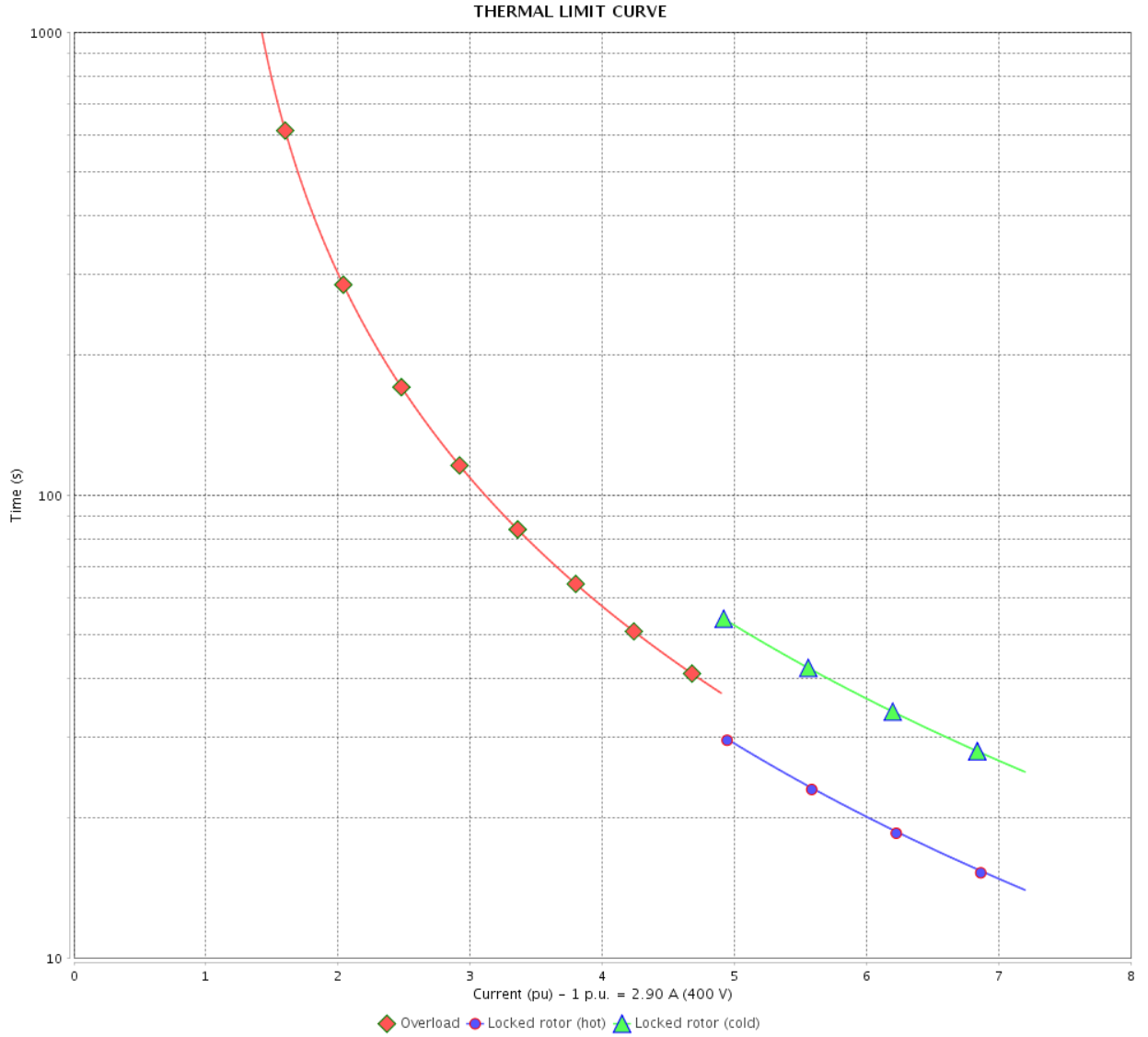
| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|---------|----------|
| Performed by | | | | |
| Checked by | | | Page | Revision |
| Date | 13/04/2022 | | 26 / 36 | |

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------------|---------|----------|
| | | | | |
| Performed by | | Page 27 / 36 | | Revision |
| Checked by | | | | |
| Date | | | | |

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase
Product code : 11431396
Catalog # : 00236ST3QIE145T-W22

Performance : 415 V 50 Hz 2P IE2

| | | | |
|---------------------|--------------|-----------------------|-------------------|
| Rated current | : 2.82 A | Moment of inertia (J) | : 0.0605 sq.ft.lb |
| LRC | : 7.7 | Duty cycle | : Cont.(S1) |
| Rated torque | : 3.67 ft.lb | Insulation class | : F |
| Locked rotor torque | : 330 % | Service factor | : 1.25 |
| Breakdown torque | : 340 % | Temperature rise | : 80 K |
| Rated speed | : 2865 rpm | Design | : B |

Heating constant

Cooling constant

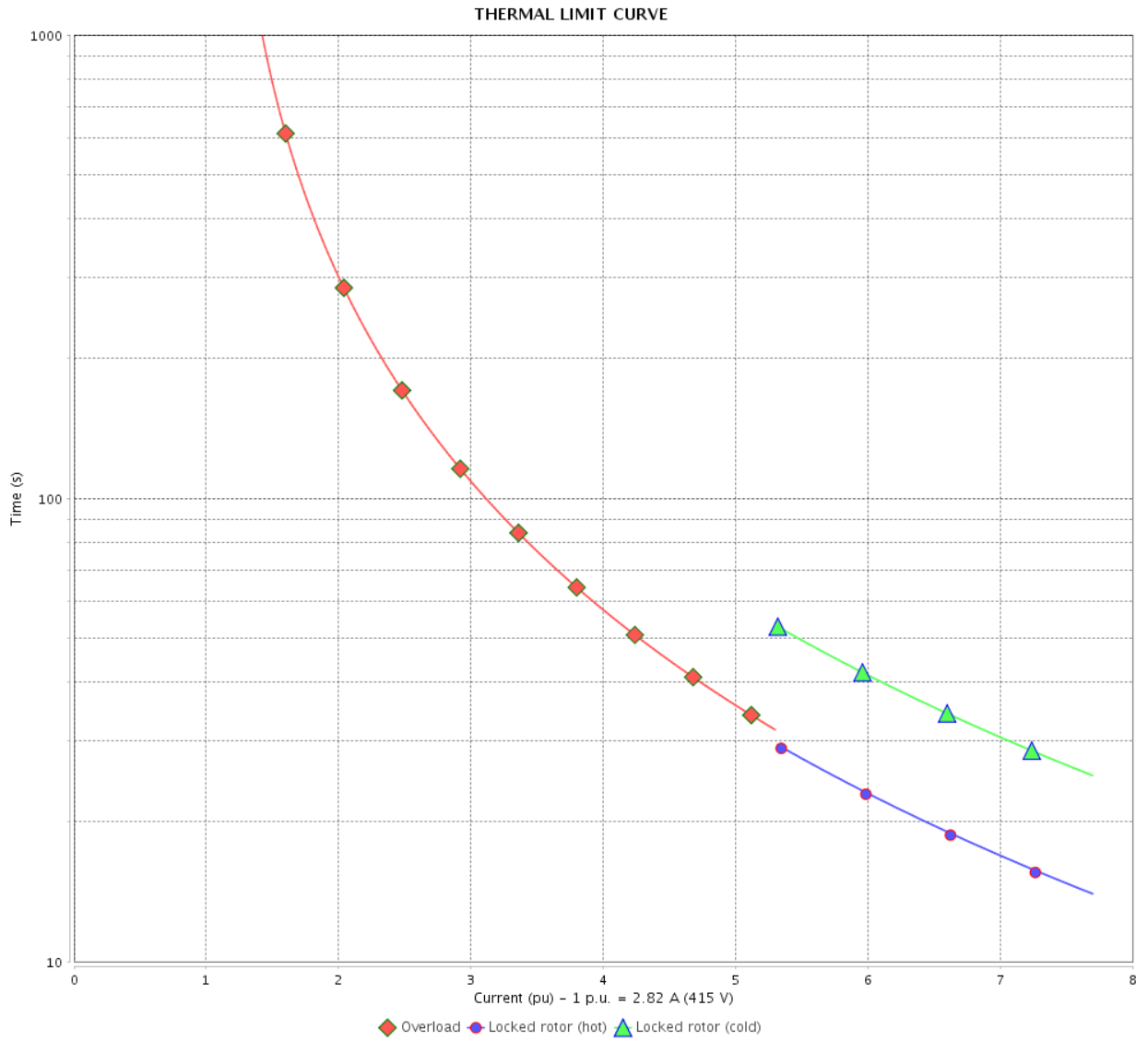
| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|---------|----------|
| Performed by | | | | |
| Checked by | | | Page | Revision |
| Date | 13/04/2022 | | 28 / 36 | |

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|------------|---------|----------|
| | | | | |
| Performed by | | Page | | Revision |
| Checked by | | 29 / 36 | | |
| Date | | 13/04/2022 | | |

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



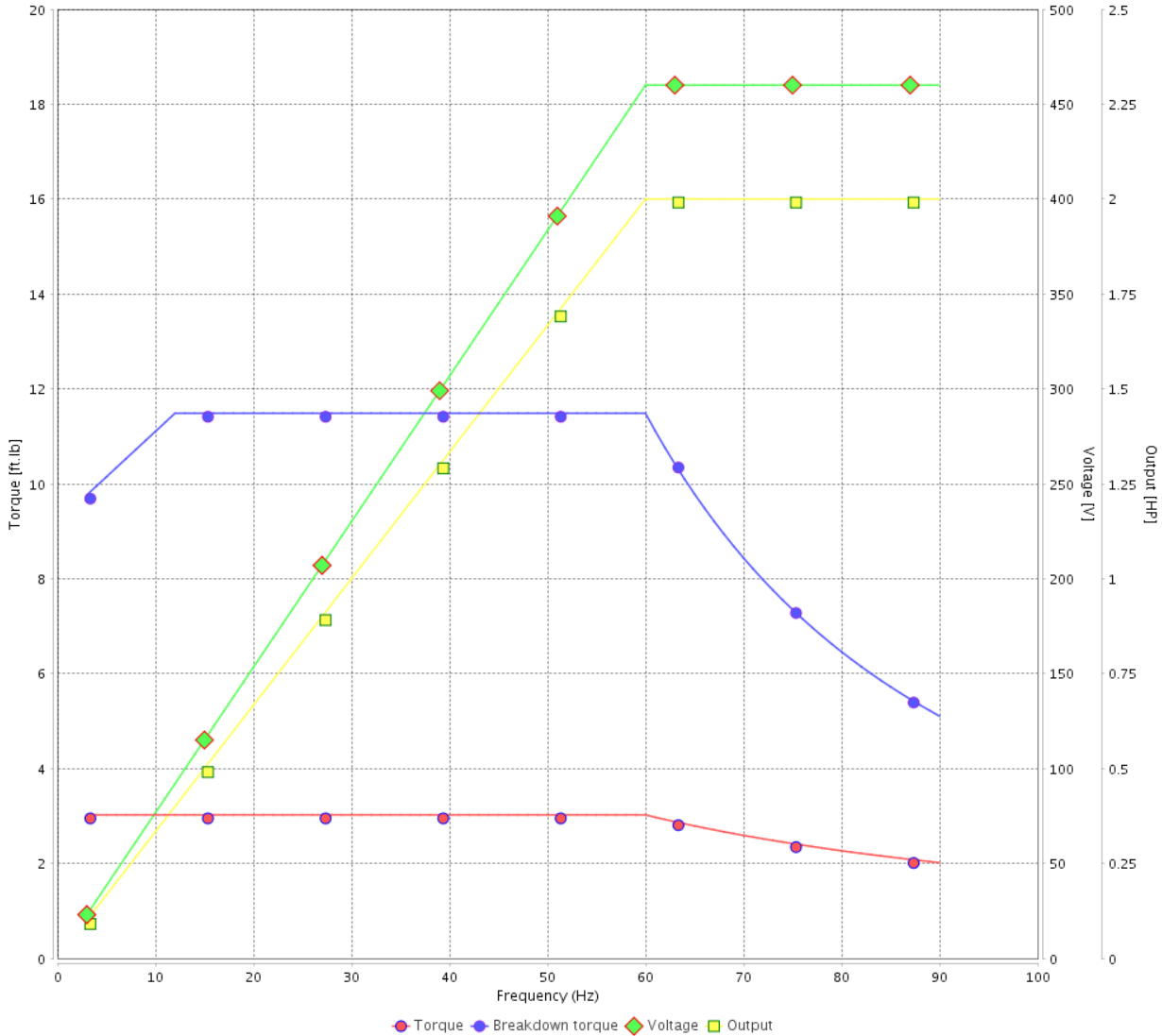
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11431396

Catalog # : 00236ST3QIE145T-W22

VFD OPERATION CURVE



Performance : 460 V 60 Hz 2P

Rated current : 2.56 A
 LRC : 8.9
 Rated torque : 3.02 ft.lb
 Locked rotor torque : 350 %
 Breakdown torque : 380 %
 Rated speed : 3475 rpm

Moment of inertia (J) : 0.0605 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

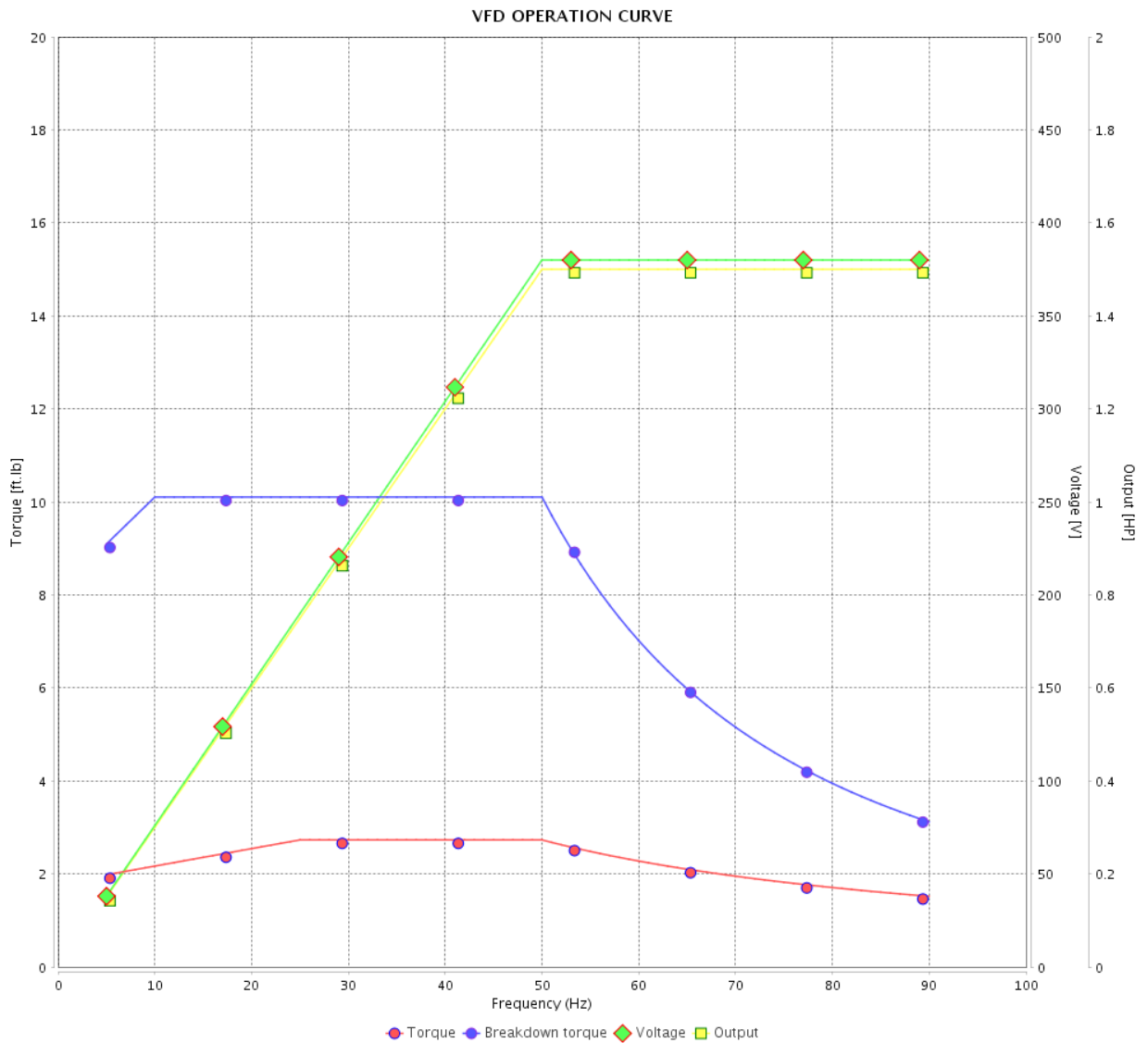


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11431396

Catalog # : 00236ST3QIE145T-W22



Performance : 380 V 50 Hz 2P IE3

Rated current : 2.30 A
 LRC : 8.5
 Rated torque : 2.73 ft.lb
 Locked rotor torque : 370 %
 Breakdown torque : 370 %
 Rated speed : 2885 rpm

Moment of inertia (J) : 0.0605 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|------------|---------|----------|
| | | | | |
| Performed by | | Page | | Revision |
| Checked by | | 31 / 36 | | |
| Date | | 13/04/2022 | | |

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



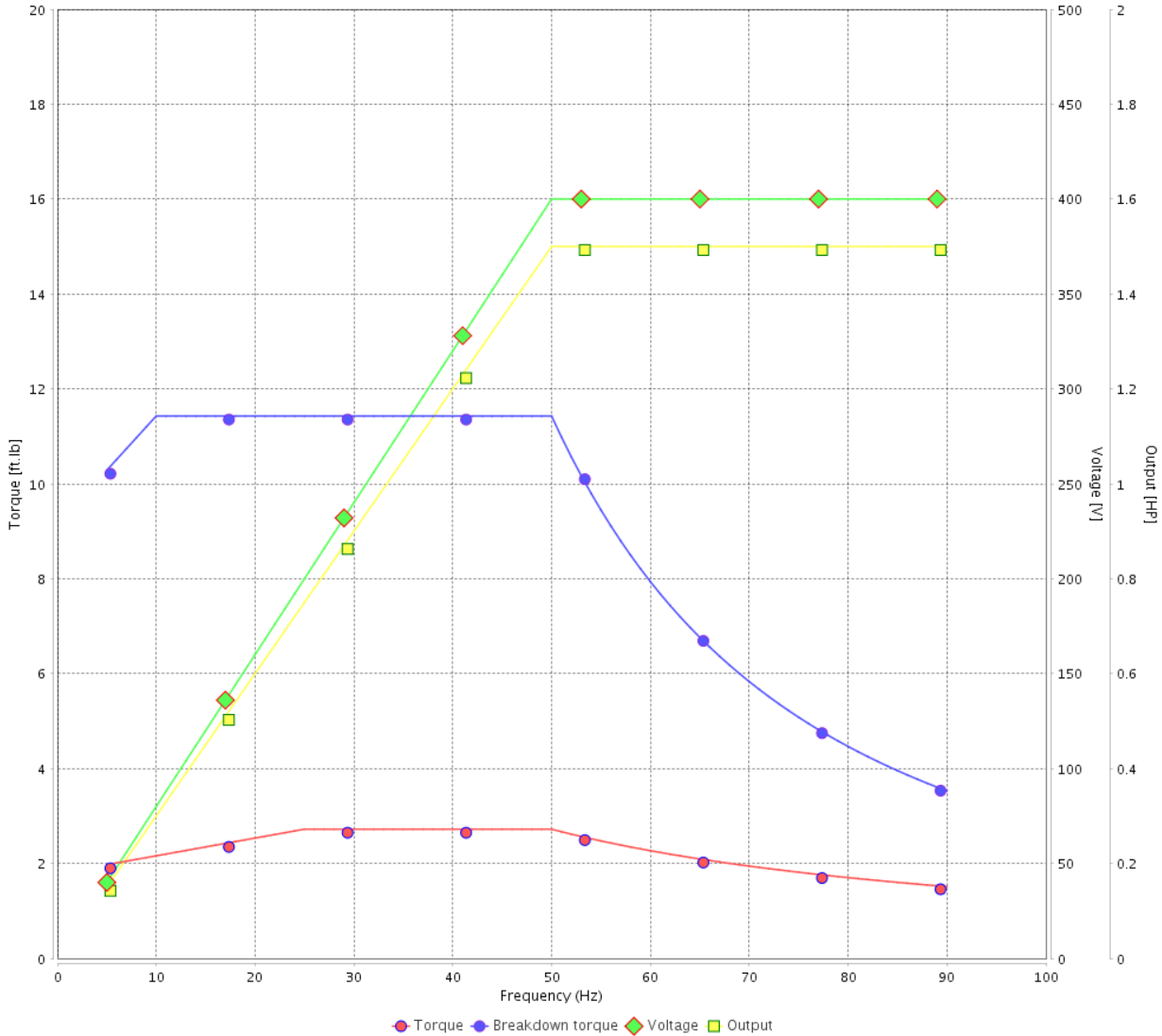
Customer : _____

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11431396

Catalog # : 00236ST3QIE145T-W22

VFD OPERATION CURVE



Performance : 400 V 50 Hz 2P IE3

Rated current : 2.22 A
 LRC : 9.2
 Rated torque : 2.72 ft.lb
 Locked rotor torque : 409 %
 Breakdown torque : 420 %
 Rated speed : 2895 rpm

Moment of inertia (J) : 0.0605 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|-----------------|----------|
| | | | | |
| Performed by | | | Page 32 / 36 | Revision |
| Checked by | | | | |
| Date | 13/04/2022 | | | |

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

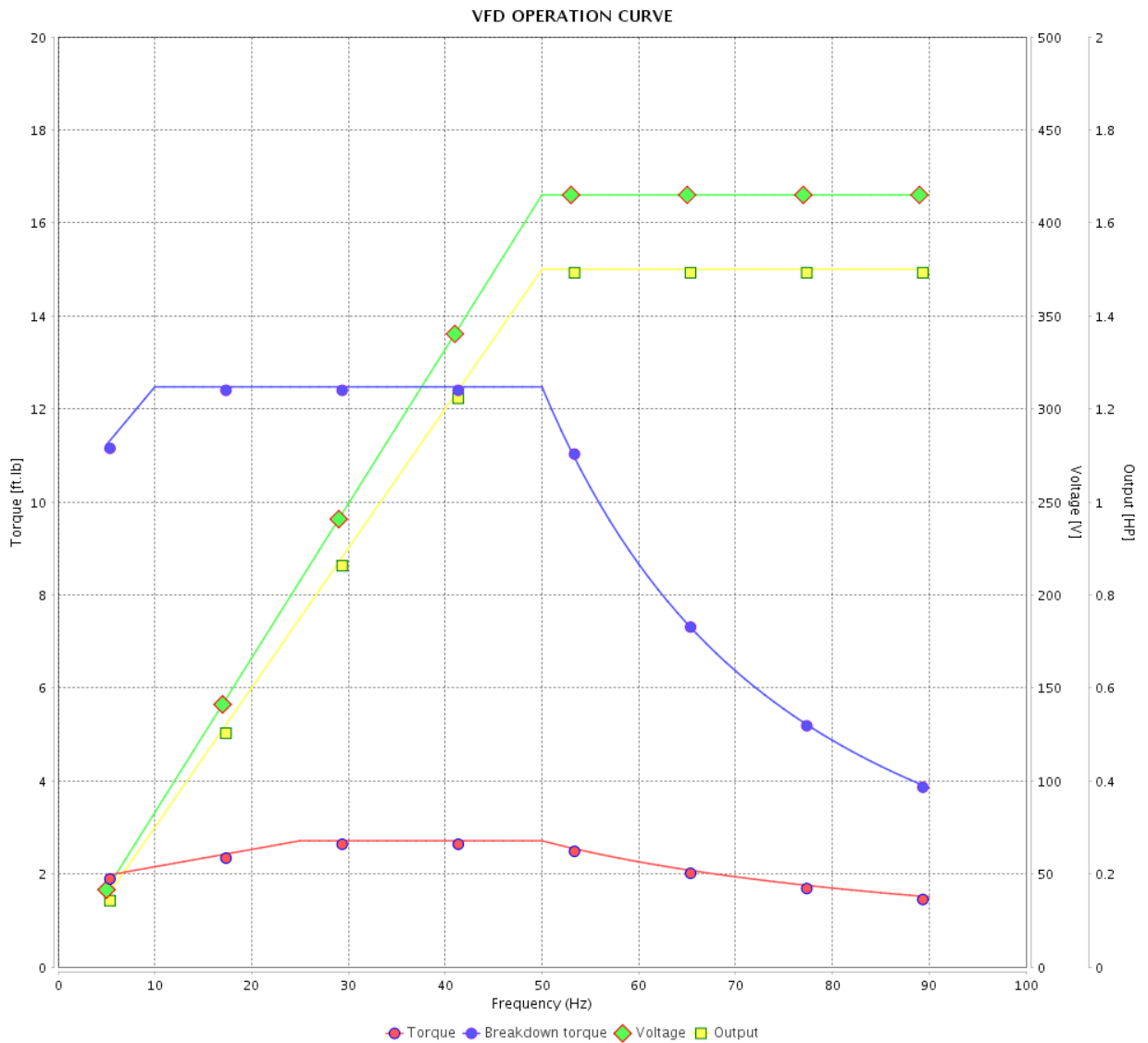


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11431396

Catalog # : 00236ST3QIE145T-W22



Performance : 415 V 50 Hz 2P IE3

Rated current : 2.19 A
 LRC : 9.7
 Rated torque : 2.71 ft.lb
 Locked rotor torque : 450 %
 Breakdown torque : 459 %
 Rated speed : 2905 rpm

Moment of inertia (J) : 0.0605 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|------------|---------|----------|
| | | | | |
| Performed by | | Page | | Revision |
| Checked by | | 33 / 36 | | |
| Date | | 13/04/2022 | | |

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



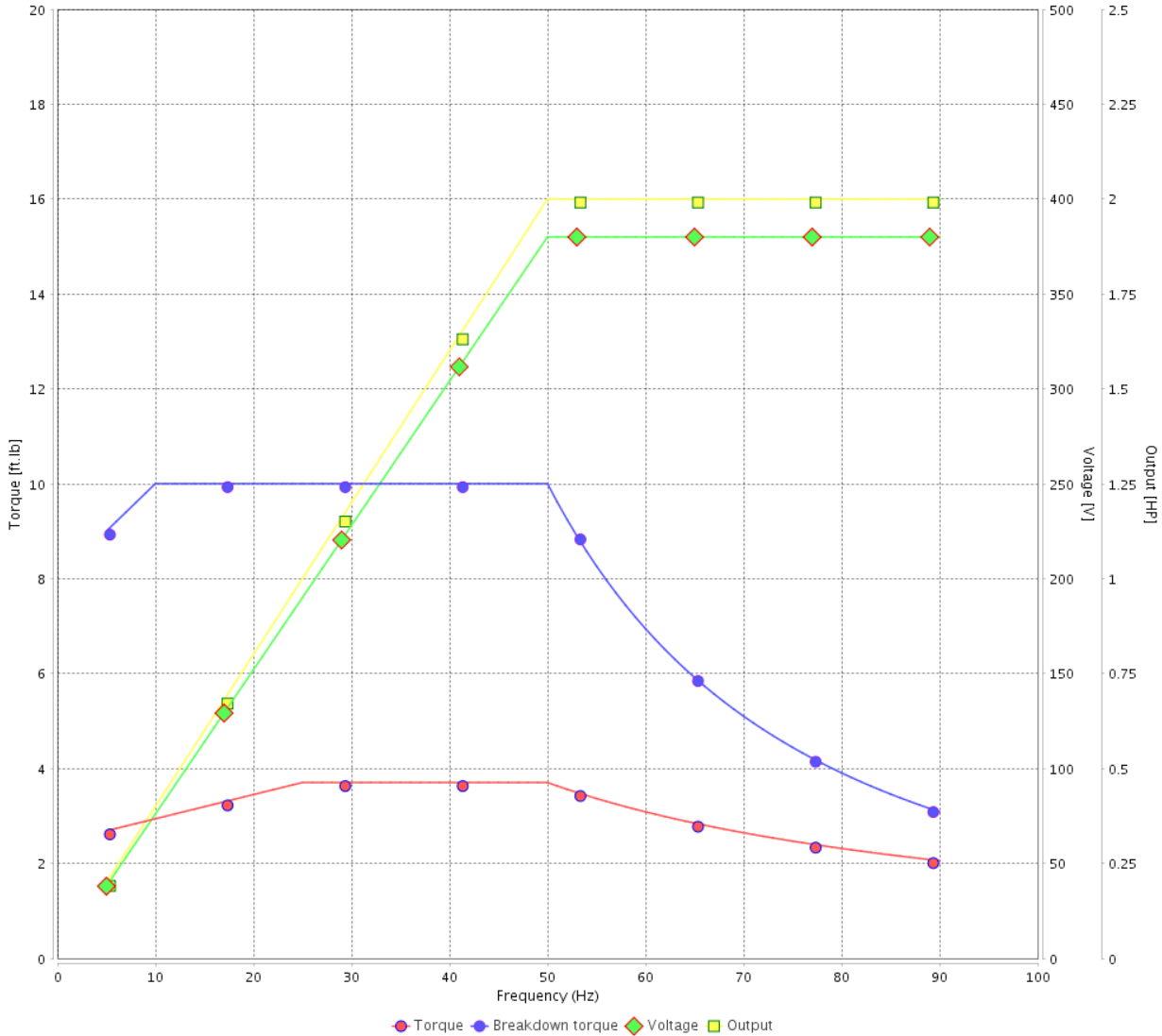
Customer : _____

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11431396

Catalog # : 00236ST3QIE145T-W22

VFD OPERATION CURVE



Performance : 380 V 50 Hz 2P IE2

Rated current : 3.07 A
 LRC : 6.5
 Rated torque : 3.70 ft.lb
 Locked rotor torque : 270 %
 Breakdown torque : 270 %
 Rated speed : 2835 rpm

Moment of inertia (J) : 0.0605 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|-----------------|----------|
| | | | | |
| Performed by | | | Page 34 / 36 | Revision |
| Checked by | | | | |
| Date | 13/04/2022 | | | |

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

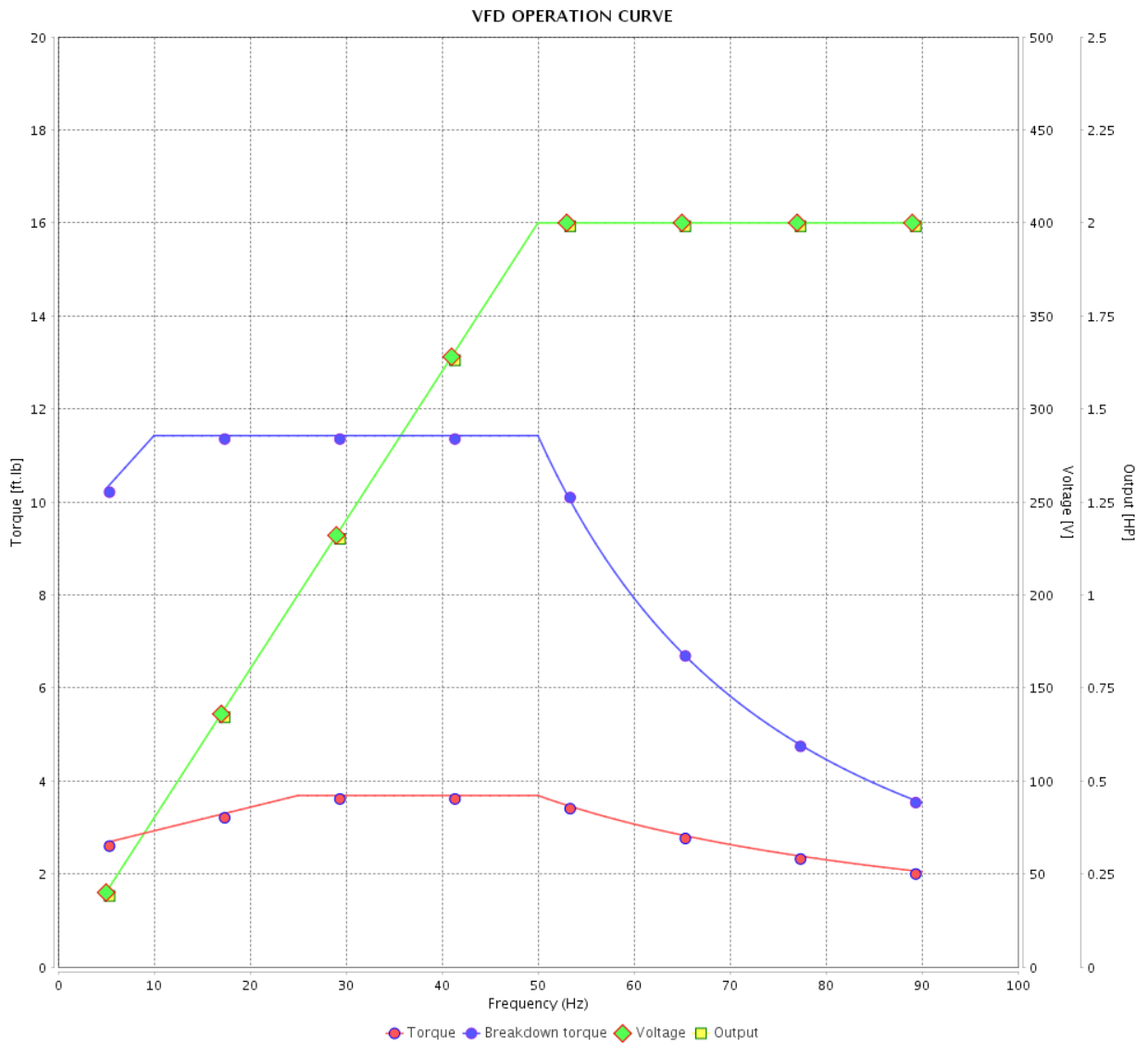


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11431396

Catalog # : 00236ST3QIE145T-W22



Performance : 400 V 50 Hz 2P IE2

Rated current : 2.90 A
 LRC : 7.2
 Rated torque : 3.69 ft.lb
 Locked rotor torque : 300 %
 Breakdown torque : 310 %
 Rated speed : 2850 rpm

Moment of inertia (J) : 0.0605 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|------------|---------|----------|
| | | | | |
| Performed by | | Page | | Revision |
| Checked by | | 35 / 36 | | |
| Date | | 13/04/2022 | | |

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



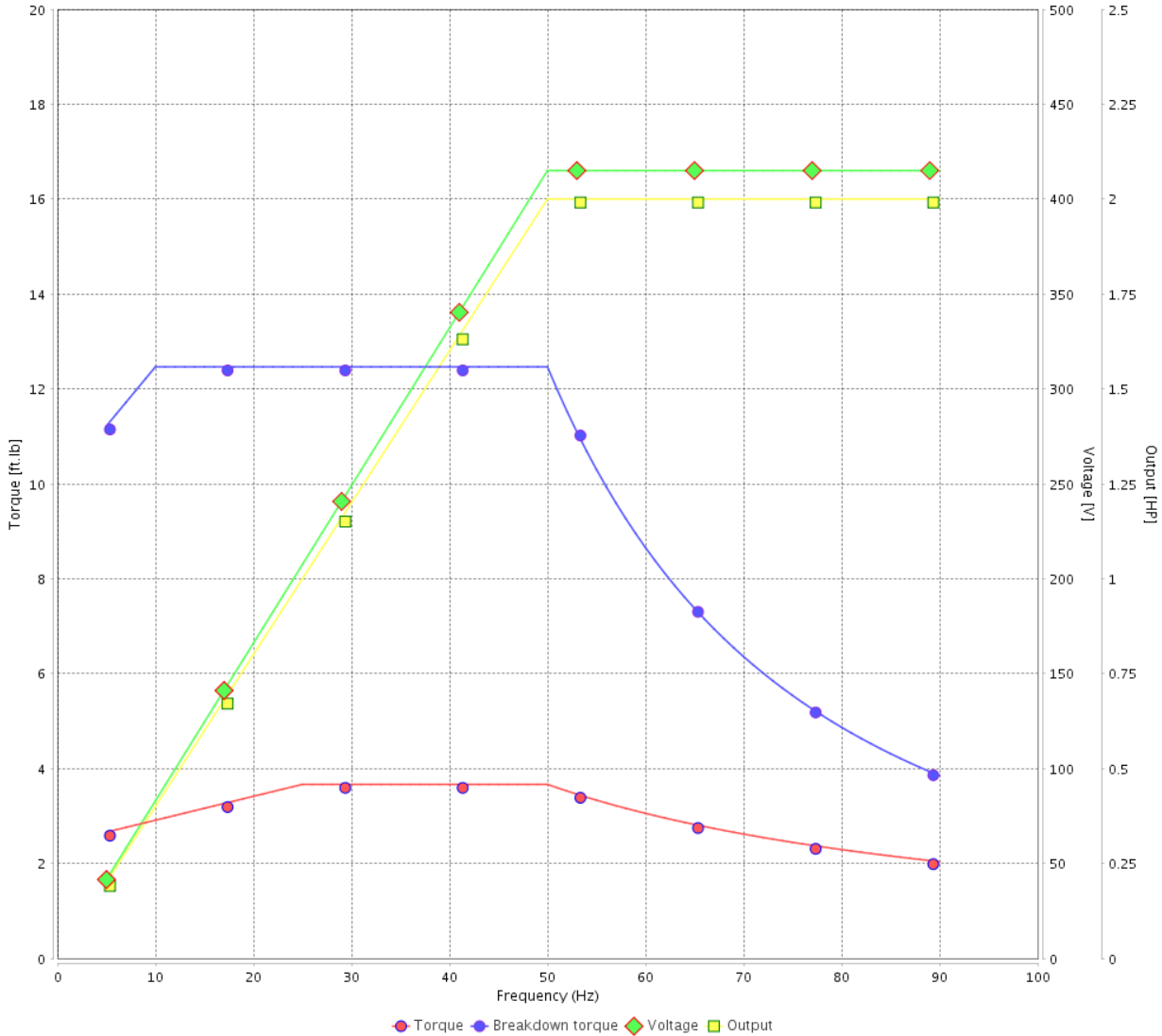
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11431396

Catalog # : 00236ST3QIE145T-W22

VFD OPERATION CURVE

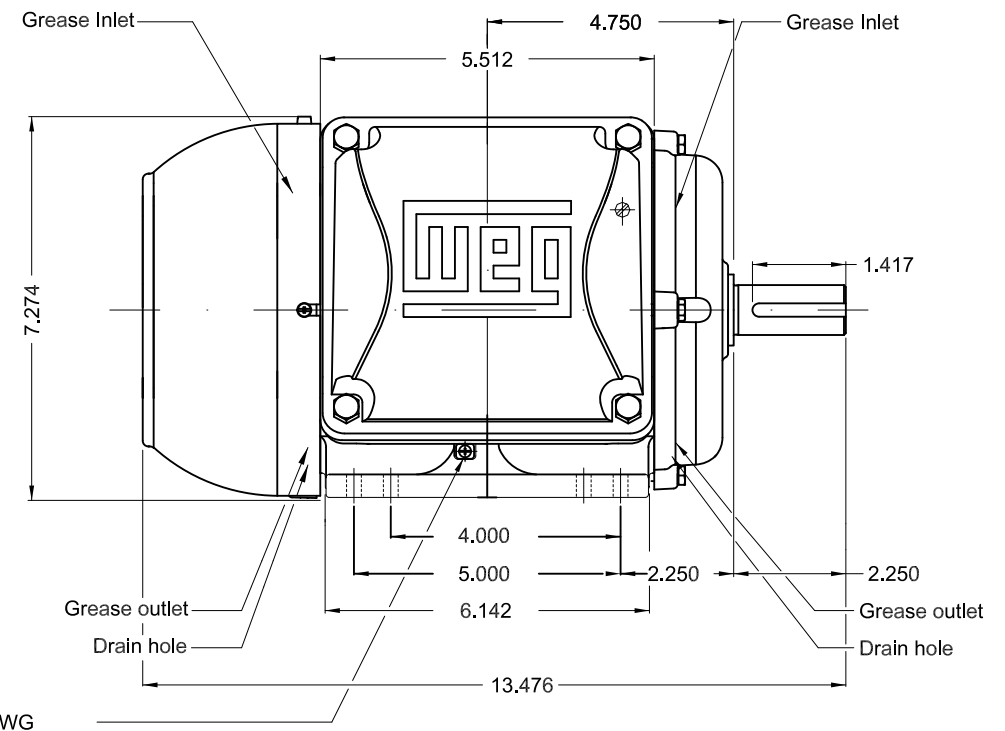
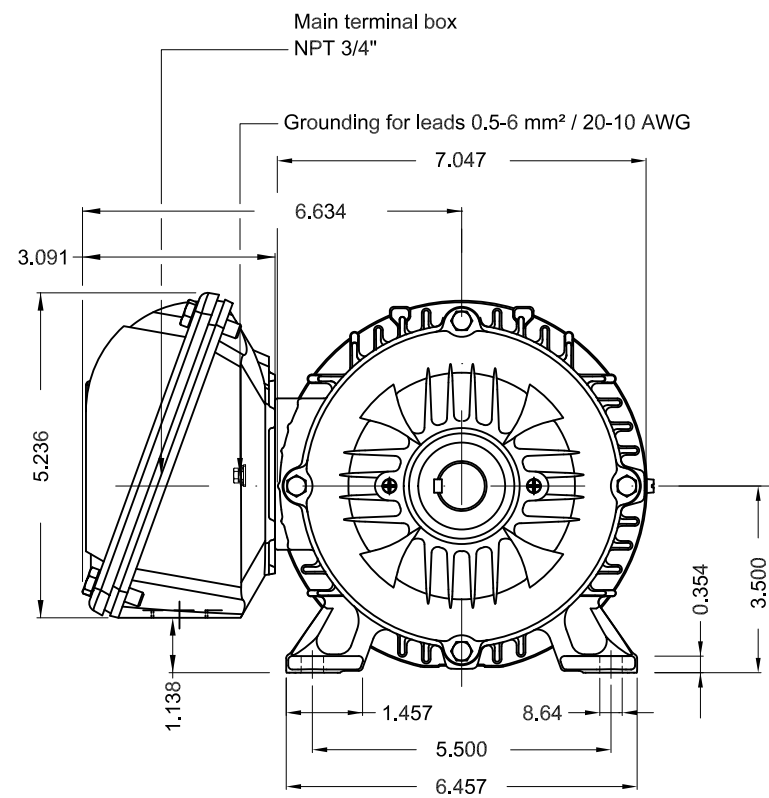


Performance : 415 V 50 Hz 2P IE2

Rated current : 2.82 A
 LRC : 7.7
 Rated torque : 3.67 ft.lb
 Locked rotor torque : 330 %
 Breakdown torque : 340 %
 Rated speed : 2865 rpm

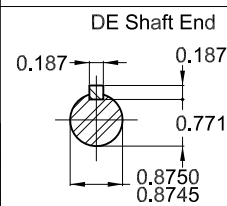
Moment of inertia (J) : 0.0605 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|-----------------|----------|
| | | | | |
| Performed by | | | Page 36 / 36 | Revision |
| Checked by | | | | |
| Date | 13/04/2022 | | | |



Grounding for leads 0.5-6 mm² / 20-10 AWG

Color RAL 5009
 Painting plan 202E
 Mounting B3R(D)



2 HP 02 Poles 60 Hz

Dimensions in inches

| ECM | LOC | SUMMARY OF MODIFICATIONS | EXECUTED | CHECKED | RELEASED | DATE | VER |
|----------|-----------|---|---------------------|---------|----------|------|-----|
| EXECUTED | PIRWBUSER | THREE PH. MOTOR IEEE 841 W22 PREM. EFF. | | | | | |
| CHECKED | | FRAME 143/5T IP55 TEFC | | | | | |
| RELEASED | | | | | | | |
| REL DT. | WMO | Jaragua do Sul | Product Engineering | SHEET | 1 / 1 | | |

PREVIEW
 WDD



MADE IN BRAZIL
11431396



NEMA
Premium



Class I, Div 2, Gr A, B, C and D - T3
Class I, Zone 2, IIC - T3
Class II, Div 2, Gr F and G - T5
For use on PWM: Gr. A, B, C, D, F and G,
VT 1000:1, CT 20:1, 1.00SF - T4A

MODEL 00236ST3QIE145T-W22

Inverter Duty Motor
Severe Duty

IEEE
841-2009



FOR SAFE AREA
Mod. TE1BFOXON
CC029A

PH3 60Hz Fr. 143/5T 1000m.a.s.l. IP55 TEFC 62lb

V 460

A 2.56

HP 2.0

kW 1.5

SF 1.25

SFA 3.20

RPM 3475

PF 0.86

AMB 40°C

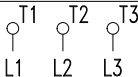
INS cl. F DT80K

NEMA NOM EFF 85.5%

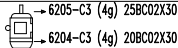
DUTY CONT.

DES B Code L

GUARANT. EFF 82.5%



460V



MOBIL POLYREX EM (20000h)

