

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

|                                                                                                                                                                                                                                                                                        |                                       |                             |                         |                                                                                                                          |                         |                         |                         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|-----------------------------|-------------------------|--------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------|-------------------------|
| Customer :                                                                                                                                                                                                                                                                             |                                       |                             |                         |                                                                                                                          |                         |                         |                         |
| Product line                                                                                                                                                                                                                                                                           | : NEMA Premium Efficiency Three-Phase | Product code :              | 14335221                |                                                                                                                          |                         |                         |                         |
|                                                                                                                                                                                                                                                                                        |                                       | Catalog # :                 | 03012ET3ER326TSC-W22    |                                                                                                                          |                         |                         |                         |
| Frame                                                                                                                                                                                                                                                                                  | : 326TSC                              | Cooling method              | : IC411 - TEFC          |                                                                                                                          |                         |                         |                         |
| Insulation class                                                                                                                                                                                                                                                                       | : F                                   | Mounting                    | : W-6                   |                                                                                                                          |                         |                         |                         |
| Duty cycle                                                                                                                                                                                                                                                                             | : Cont.(S1)                           | Rotation <sup>1</sup>       | : Both (CW and CCW)     |                                                                                                                          |                         |                         |                         |
| Ambient temperature                                                                                                                                                                                                                                                                    | : -20°C to +40°C                      | Starting method             | : Direct On Line        |                                                                                                                          |                         |                         |                         |
| Altitude                                                                                                                                                                                                                                                                               | : 1000 m.a.s.l.                       | Approx. weight <sup>2</sup> | : 594 lb                |                                                                                                                          |                         |                         |                         |
| Protection degree                                                                                                                                                                                                                                                                      | : IP55                                | Moment of inertia (J)       | : 13.2 sq.ft.lb         |                                                                                                                          |                         |                         |                         |
| Design                                                                                                                                                                                                                                                                                 | : B                                   |                             |                         |                                                                                                                          |                         |                         |                         |
| Output [HP]                                                                                                                                                                                                                                                                            | 30                                    | 25                          | 25                      | 25                                                                                                                       | 30                      | 30                      | 30                      |
| Poles                                                                                                                                                                                                                                                                                  | 6                                     | 6                           | 6                       | 6                                                                                                                        | 6                       | 6                       | 6                       |
| Frequency [Hz]                                                                                                                                                                                                                                                                         | 60                                    | 50                          | 50                      | 50                                                                                                                       | 50                      | 50                      | 50                      |
| Rated voltage [V]                                                                                                                                                                                                                                                                      | 230/460                               | 380                         | 400                     | 415                                                                                                                      | 380                     | 400                     | 415                     |
| Rated current [A]                                                                                                                                                                                                                                                                      | 72.4/36.2                             | 36.9                        | 36.2                    | 35.4                                                                                                                     | 43.7                    | 41.7                    | 40.7                    |
| L. R. Amperes [A]                                                                                                                                                                                                                                                                      | 449/224                               | 214                         | 228                     | 237                                                                                                                      | 214                     | 225                     | 236                     |
| LRC [A]                                                                                                                                                                                                                                                                                | 6.2x(Code G)                          | 5.8x(Code G)                | 6.3x(Code H)            | 6.7x(Code H)                                                                                                             | 4.9x(Code E)            | 5.4x(Code F)            | 5.8x(Code G)            |
| No load current [A]                                                                                                                                                                                                                                                                    | 29.0/14.5                             | 14.0                        | 15.0                    | 16.0                                                                                                                     | 14.0                    | 15.0                    | 16.0                    |
| Rated speed [RPM]                                                                                                                                                                                                                                                                      | 1180                                  | 975                         | 980                     | 980                                                                                                                      | 970                     | 975                     | 980                     |
| Slip [%]                                                                                                                                                                                                                                                                               | 1.67                                  | 2.50                        | 2.00                    | 2.00                                                                                                                     | 3.00                    | 2.50                    | 2.00                    |
| Rated torque [ft.lb]                                                                                                                                                                                                                                                                   | 134                                   | 135                         | 134                     | 134                                                                                                                      | 162                     | 162                     | 161                     |
| Locked rotor torque [%]                                                                                                                                                                                                                                                                | 220                                   | 190                         | 220                     | 240                                                                                                                      | 160                     | 180                     | 200                     |
| Breakdown torque [%]                                                                                                                                                                                                                                                                   | 240                                   | 229                         | 260                     | 280                                                                                                                      | 200                     | 220                     | 240                     |
| Service factor                                                                                                                                                                                                                                                                         | 1.25                                  | 1.00                        | 1.15                    | 1.15                                                                                                                     | 1.00                    | 1.15                    | 1.15                    |
| Temperature rise                                                                                                                                                                                                                                                                       | 80 K                                  | 80 K                        | 80 K                    | 80 K                                                                                                                     | 80 K                    | 80 K                    | 80 K                    |
| Locked rotor time                                                                                                                                                                                                                                                                      | 37s (cold)<br>21s (hot)               | 27s (cold)<br>15s (hot)     | 27s (cold)<br>15s (hot) | 27s (cold)<br>15s (hot)                                                                                                  | 27s (cold)<br>15s (hot) | 27s (cold)<br>15s (hot) | 27s (cold)<br>15s (hot) |
| Noise level <sup>2</sup>                                                                                                                                                                                                                                                               | 62.0 dB(A)                            | 60.0 dB(A)                  | 60.0 dB(A)              | 60.0 dB(A)                                                                                                               | 60.0 dB(A)              | 60.0 dB(A)              | 60.0 dB(A)              |
| Efficiency (%)                                                                                                                                                                                                                                                                         | 25%                                   | 91.5                        | 91.2                    | 91.2                                                                                                                     | 90.4                    | 92.1                    | 91.3                    |
|                                                                                                                                                                                                                                                                                        | 50%                                   | 91.7                        | 91.3                    | 91.3                                                                                                                     | 90.7                    | 91.7                    | 91.0                    |
|                                                                                                                                                                                                                                                                                        | 75%                                   | 93.0                        | 91.8                    | 92.2                                                                                                                     | 91.9                    | 91.7                    | 92.4                    |
|                                                                                                                                                                                                                                                                                        | 100%                                  | 93.0                        | 91.7                    | 92.1                                                                                                                     | 92.0                    | 91.0                    | 91.7                    |
| Power Factor                                                                                                                                                                                                                                                                           | 25%                                   | 0.41                        | 0.41                    | 0.39                                                                                                                     | 0.36                    | 0.48                    | 0.41                    |
|                                                                                                                                                                                                                                                                                        | 50%                                   | 0.65                        | 0.64                    | 0.61                                                                                                                     | 0.58                    | 0.71                    | 0.65                    |
|                                                                                                                                                                                                                                                                                        | 75%                                   | 0.76                        | 0.76                    | 0.74                                                                                                                     | 0.71                    | 0.80                    | 0.76                    |
|                                                                                                                                                                                                                                                                                        | 100%                                  | 0.82                        | 0.83                    | 0.80                                                                                                                     | 0.79                    | 0.84                    | 0.82                    |
| Bearing type                                                                                                                                                                                                                                                                           | : 6312 C3                             | 6212 C3                     | Foundation loads        |                                                                                                                          |                         |                         |                         |
| Sealing                                                                                                                                                                                                                                                                                | : V'Ring                              | V'Ring                      | Max. traction           | : 1184 lb                                                                                                                |                         |                         |                         |
| Lubrication interval                                                                                                                                                                                                                                                                   | : 20000 h                             | 20000 h                     | Max. compression        | : 1778 lb                                                                                                                |                         |                         |                         |
| Lubricant amount                                                                                                                                                                                                                                                                       | : 21 g                                | 13 g                        |                         |                                                                                                                          |                         |                         |                         |
| Lubricant type                                                                                                                                                                                                                                                                         | : Mobil Polyrex EM                    |                             |                         |                                                                                                                          |                         |                         |                         |
| Notes                                                                                                                                                                                                                                                                                  |                                       |                             |                         |                                                                                                                          |                         |                         |                         |
| USABLE @208V 79.2A SF 1.15 SFA 91.0A                                                                                                                                                                                                                                                   |                                       |                             |                         |                                                                                                                          |                         |                         |                         |
| This revision replaces and cancel the previous one, which must be eliminated.<br>(1) Looking the motor from the shaft end.<br>(2) Measured at 1m and with tolerance of +3dB(A).<br>(3) Approximate weight subject to changes after manufacturing process.<br>(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                                                                                                                                                                                                                                                                                   | 14/04/2022                            |                             |                         |                                                                                                                          | 1 / 36                  |                         |                         |

# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



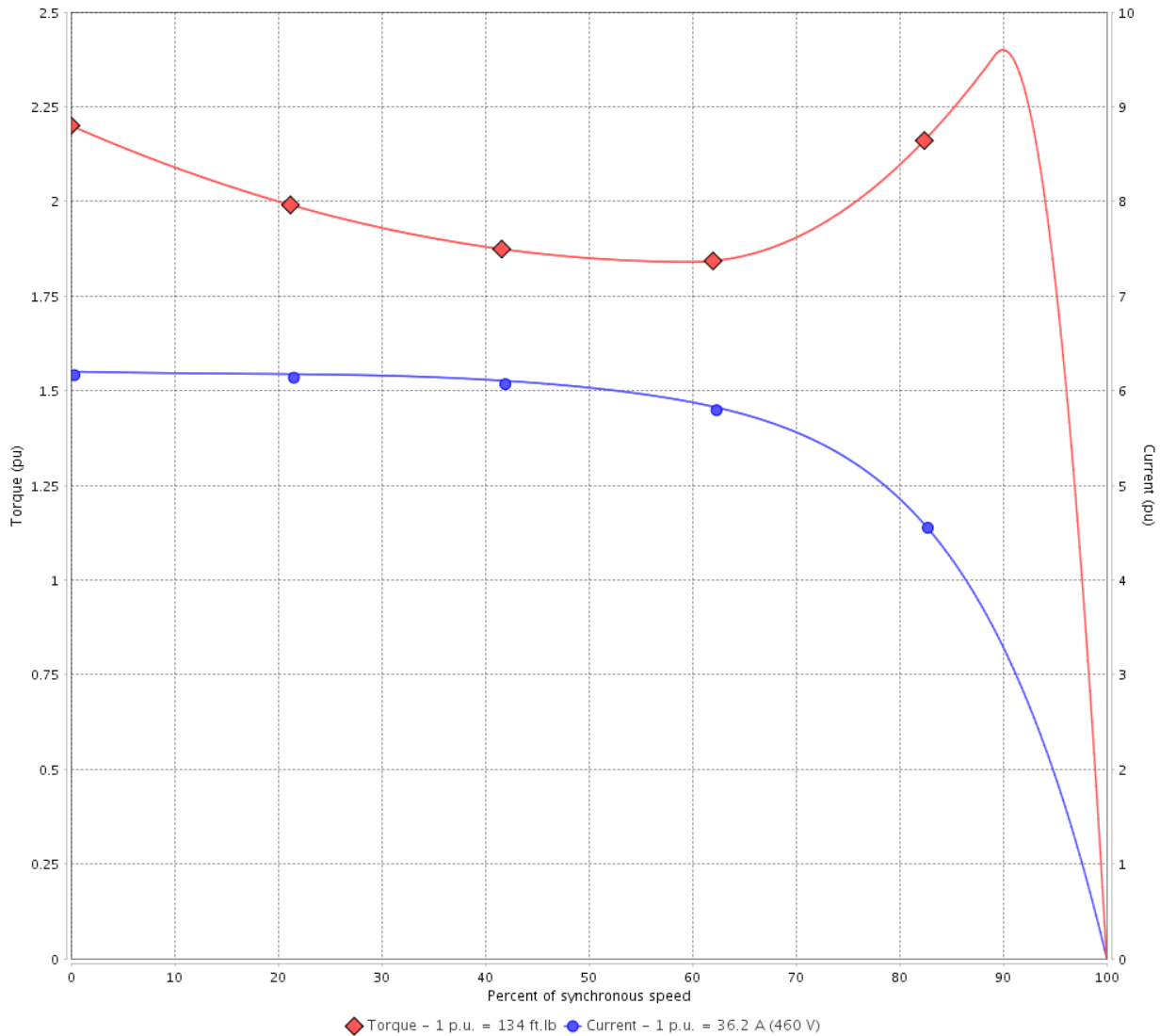
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14335221

Catalog # : 03012ET3ER326TSC-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 6P

|                     |               |                       |                 |
|---------------------|---------------|-----------------------|-----------------|
| Rated current       | : 72.4/36.2 A | Moment of inertia (J) | : 13.2 sq.ft.lb |
| LRC                 | : 6.2         | Duty cycle            | : Cont.(S1)     |
| Rated torque        | : 134 ft.lb   | Insulation class      | : F             |
| Locked rotor torque | : 220 %       | Service factor        | : 1.25          |
| Breakdown torque    | : 240 %       | Temperature rise      | : 80 K          |
| Rated speed         | : 1180 rpm    | Design                | : B             |

Locked rotor time : 37s (cold) 21s (hot)

| Rev.         | Changes Summary | Performed | Checked        | Date     |
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| Checked by   |                 |           |                |          |
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# TORQUE AND CURRENT VS SPEED CURVE



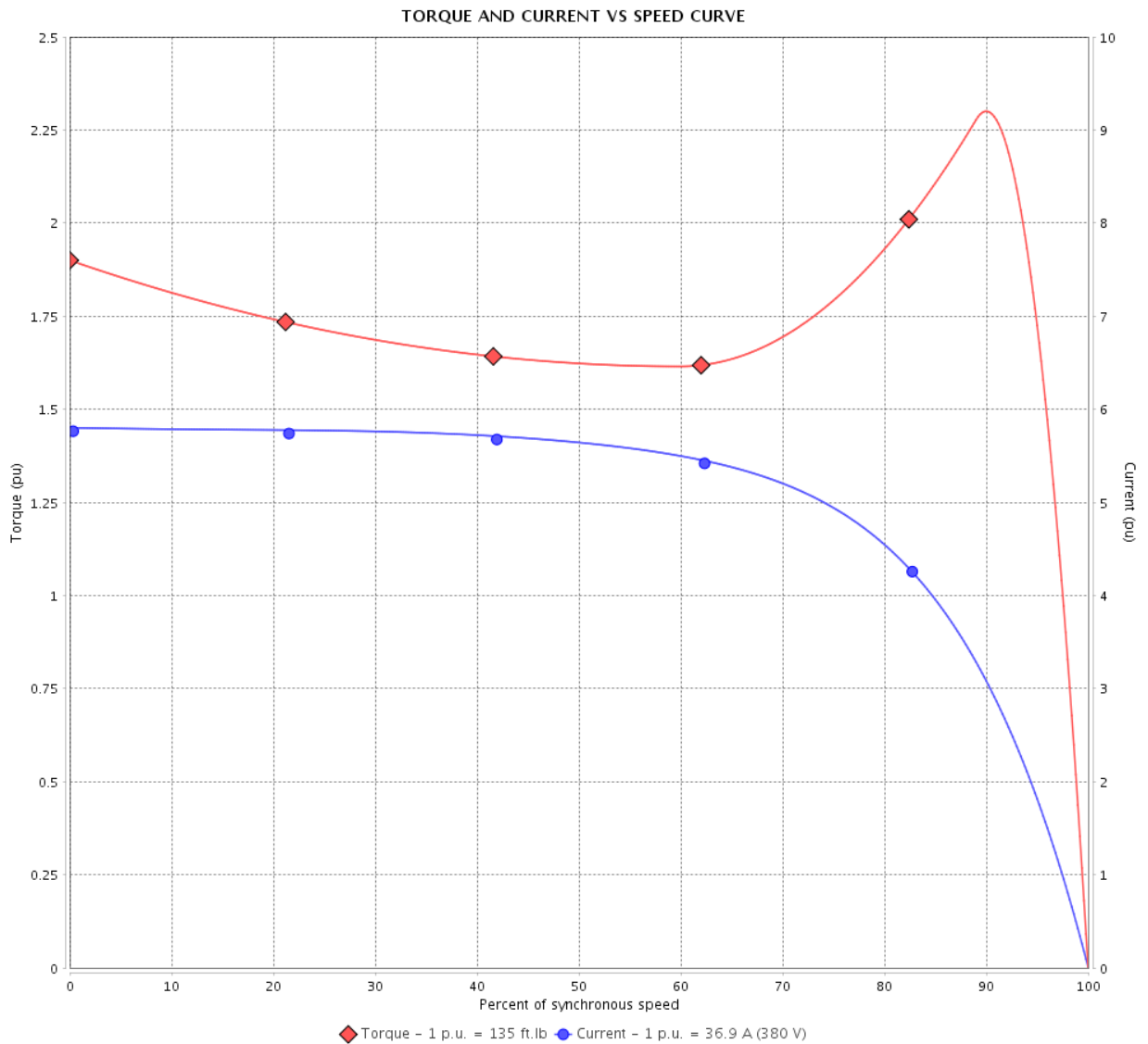
## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14335221

Catalog # : 03012ET3ER326TSC-W22



Performance : 380 V 50 Hz 6P IE3

|                     |             |                       |                 |
|---------------------|-------------|-----------------------|-----------------|
| Rated current       | : 36.9 A    | Moment of inertia (J) | : 13.2 sq.ft.lb |
| LRC                 | : 5.8       | Duty cycle            | : Cont.(S1)     |
| Rated torque        | : 135 ft.lb | Insulation class      | : F             |
| Locked rotor torque | : 190 %     | Service factor        | : 1.00          |
| Breakdown torque    | : 229 %     | Temperature rise      | : 80 K          |
| Rated speed         | : 975 rpm   | Design                | : B             |

Locked rotor time : 27s (cold) 15s (hot)

| Rev.         | Changes Summary | Performed | Checked        | Date     |
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| Date         | 14/04/2022      |           |                |          |

# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



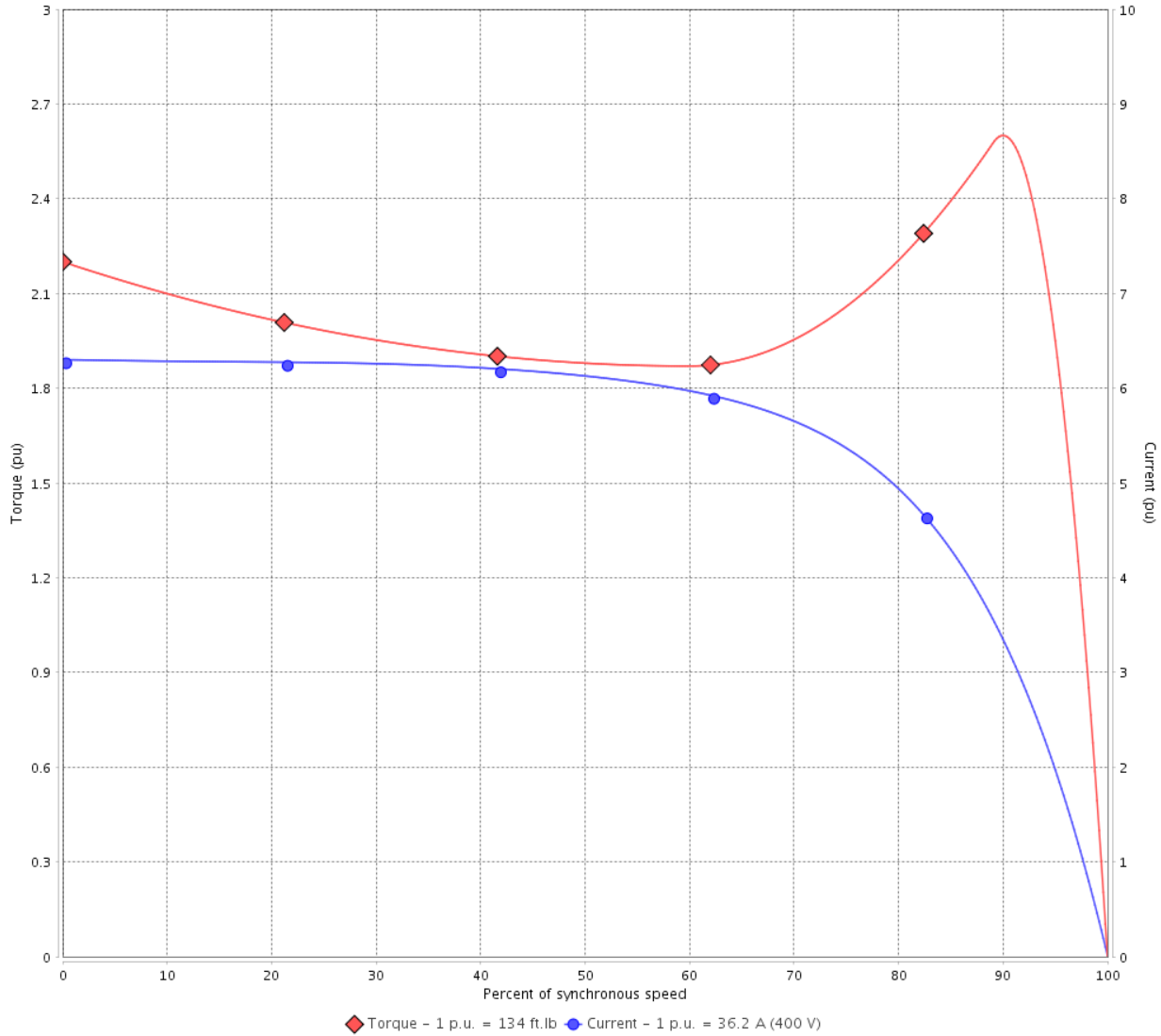
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14335221

Catalog # : 03012ET3ER326TSC-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 400 V 50 Hz 6P IE3

|                     |             |                       |                 |
|---------------------|-------------|-----------------------|-----------------|
| Rated current       | : 36.2 A    | Moment of inertia (J) | : 13.2 sq.ft.lb |
| LRC                 | : 6.3       | Duty cycle            | : Cont.(S1)     |
| Rated torque        | : 134 ft.lb | Insulation class      | : F             |
| Locked rotor torque | : 220 %     | Service factor        | : 1.15          |
| Breakdown torque    | : 260 %     | Temperature rise      | : 80 K          |
| Rated speed         | : 980 rpm   | Design                | : B             |

Locked rotor time : 27s (cold) 15s (hot)

| Rev.         | Changes Summary | Performed | Checked        | Date     |
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# TORQUE AND CURRENT VS SPEED CURVE



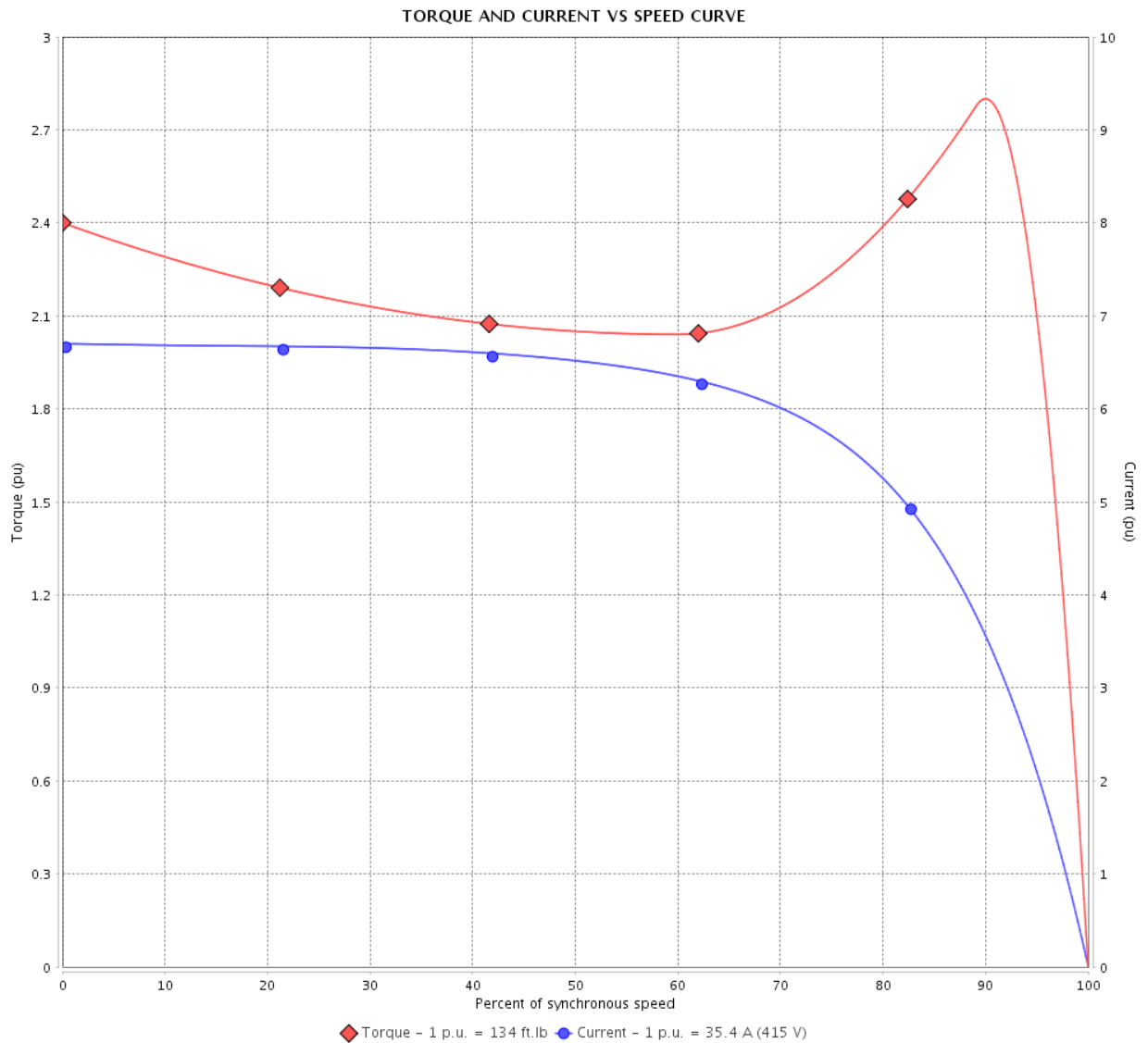
## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14335221

Catalog # : 03012ET3ER326TSC-W22



Performance : 415 V 50 Hz 6P IE3

|                     |             |                       |                 |
|---------------------|-------------|-----------------------|-----------------|
| Rated current       | : 35.4 A    | Moment of inertia (J) | : 13.2 sq.ft.lb |
| LRC                 | : 6.7       | Duty cycle            | : Cont.(S1)     |
| Rated torque        | : 134 ft.lb | Insulation class      | : F             |
| Locked rotor torque | : 240 %     | Service factor        | : 1.15          |
| Breakdown torque    | : 280 %     | Temperature rise      | : 80 K          |
| Rated speed         | : 980 rpm   | Design                | : B             |

Locked rotor time : 27s (cold) 15s (hot)

| Rev.         | Changes Summary | Performed | Checked        | Date     |
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# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

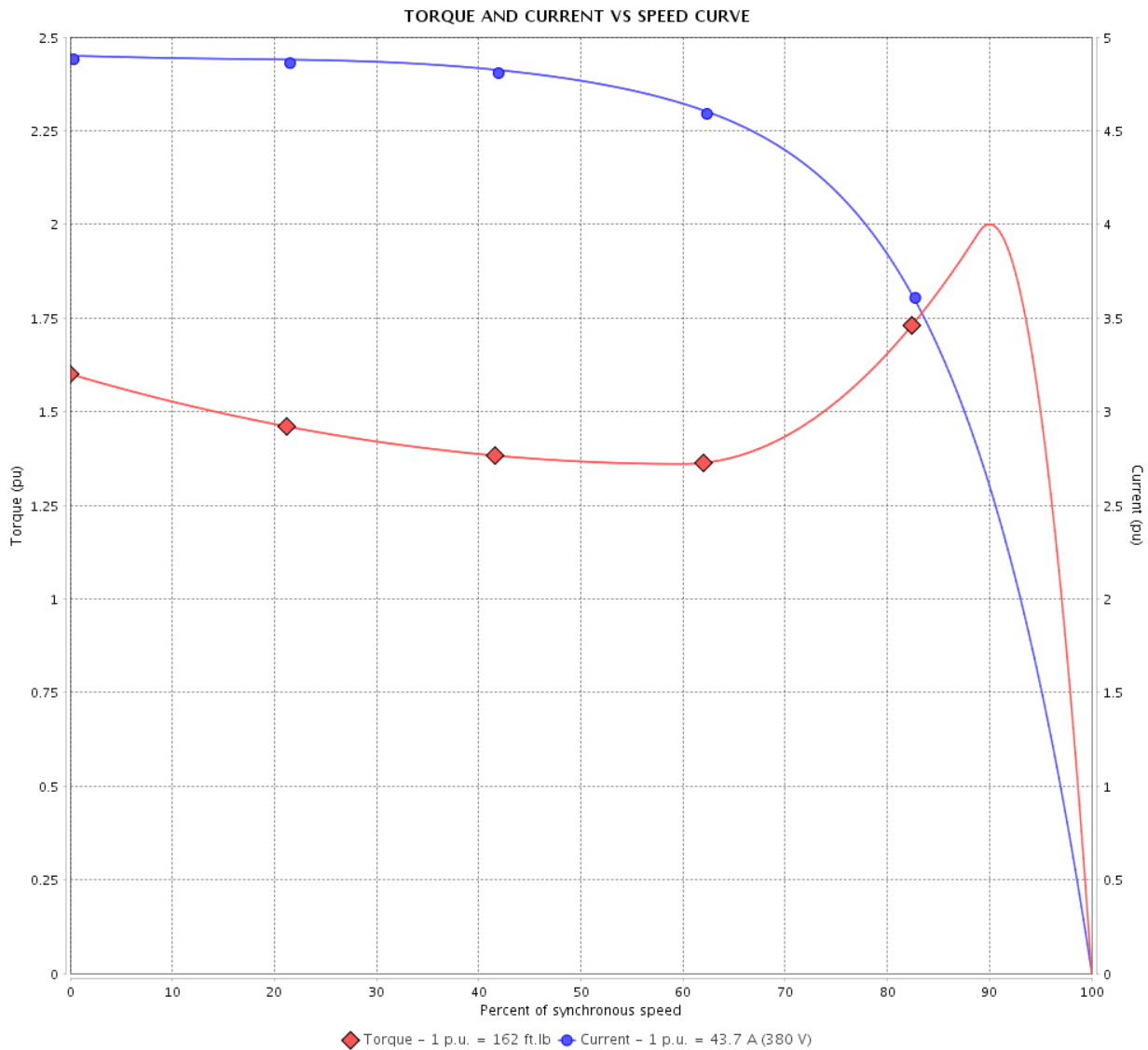


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14335221

Catalog # : 03012ET3ER326TSC-W22



Performance : 380 V 50 Hz 6P IE2

|                     |             |                       |                 |
|---------------------|-------------|-----------------------|-----------------|
| Rated current       | : 43.7 A    | Moment of inertia (J) | : 13.2 sq.ft.lb |
| LRC                 | : 4.9       | Duty cycle            | : Cont.(S1)     |
| Rated torque        | : 162 ft.lb | Insulation class      | : F             |
| Locked rotor torque | : 160 %     | Service factor        | : 1.00          |
| Breakdown torque    | : 200 %     | Temperature rise      | : 80 K          |
| Rated speed         | : 970 rpm   | Design                | : B             |

Locked rotor time : 27s (cold) 15s (hot)

| Rev.         | Changes Summary | Performed | Checked        | Date     |
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# TORQUE AND CURRENT VS SPEED CURVE



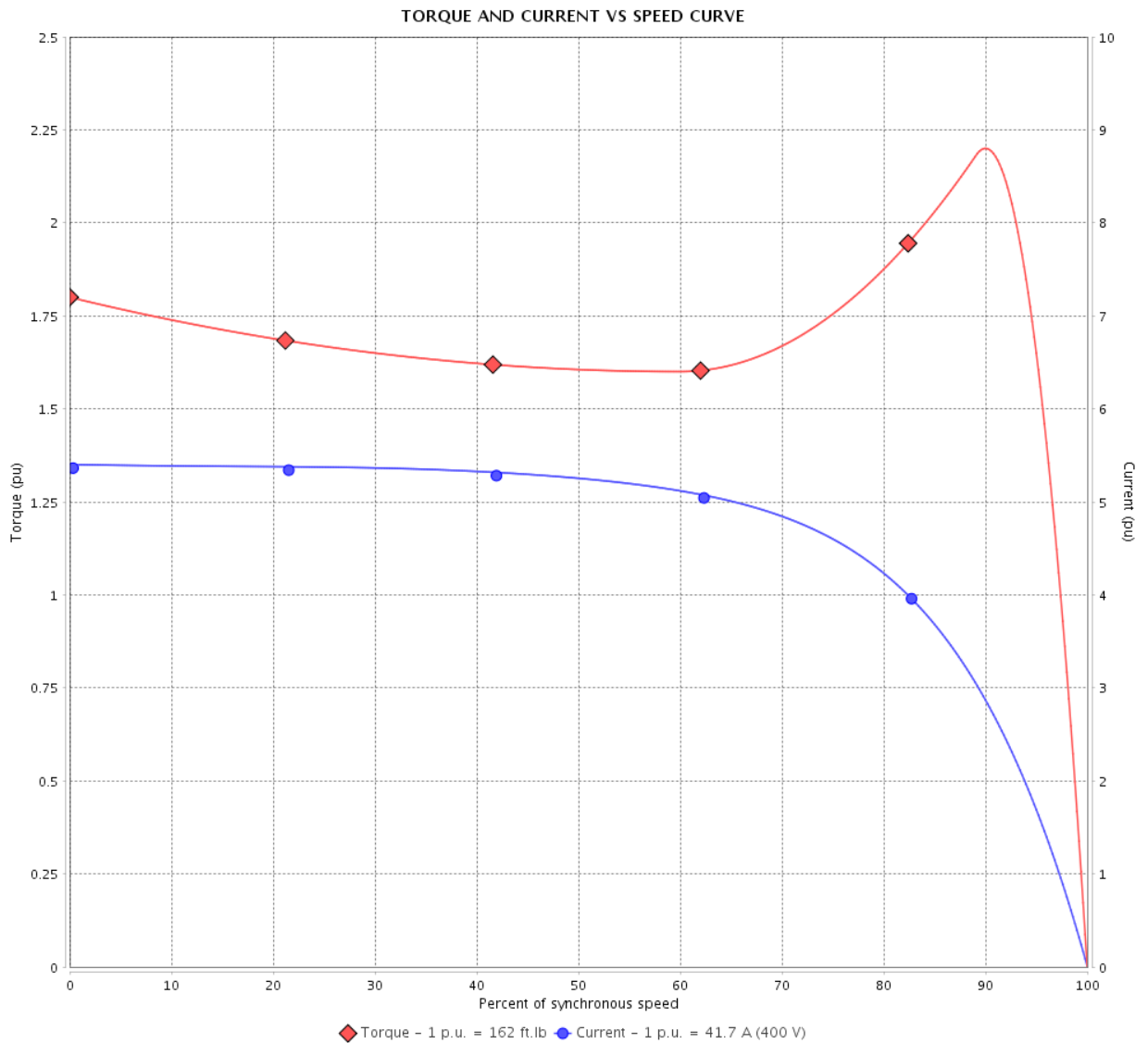
## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14335221

Catalog # : 03012ET3ER326TSC-W22



Performance : 400 V 50 Hz 6P IE2

|                     |             |                       |                 |
|---------------------|-------------|-----------------------|-----------------|
| Rated current       | : 41.7 A    | Moment of inertia (J) | : 13.2 sq.ft.lb |
| LRC                 | : 5.4       | Duty cycle            | : Cont.(S1)     |
| Rated torque        | : 162 ft.lb | Insulation class      | : F             |
| Locked rotor torque | : 180 %     | Service factor        | : 1.15          |
| Breakdown torque    | : 220 %     | Temperature rise      | : 80 K          |
| Rated speed         | : 975 rpm   | Design                | : B             |

Locked rotor time : 27s (cold) 15s (hot)

| Rev.         | Changes Summary | Performed | Checked        | Date     |
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# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



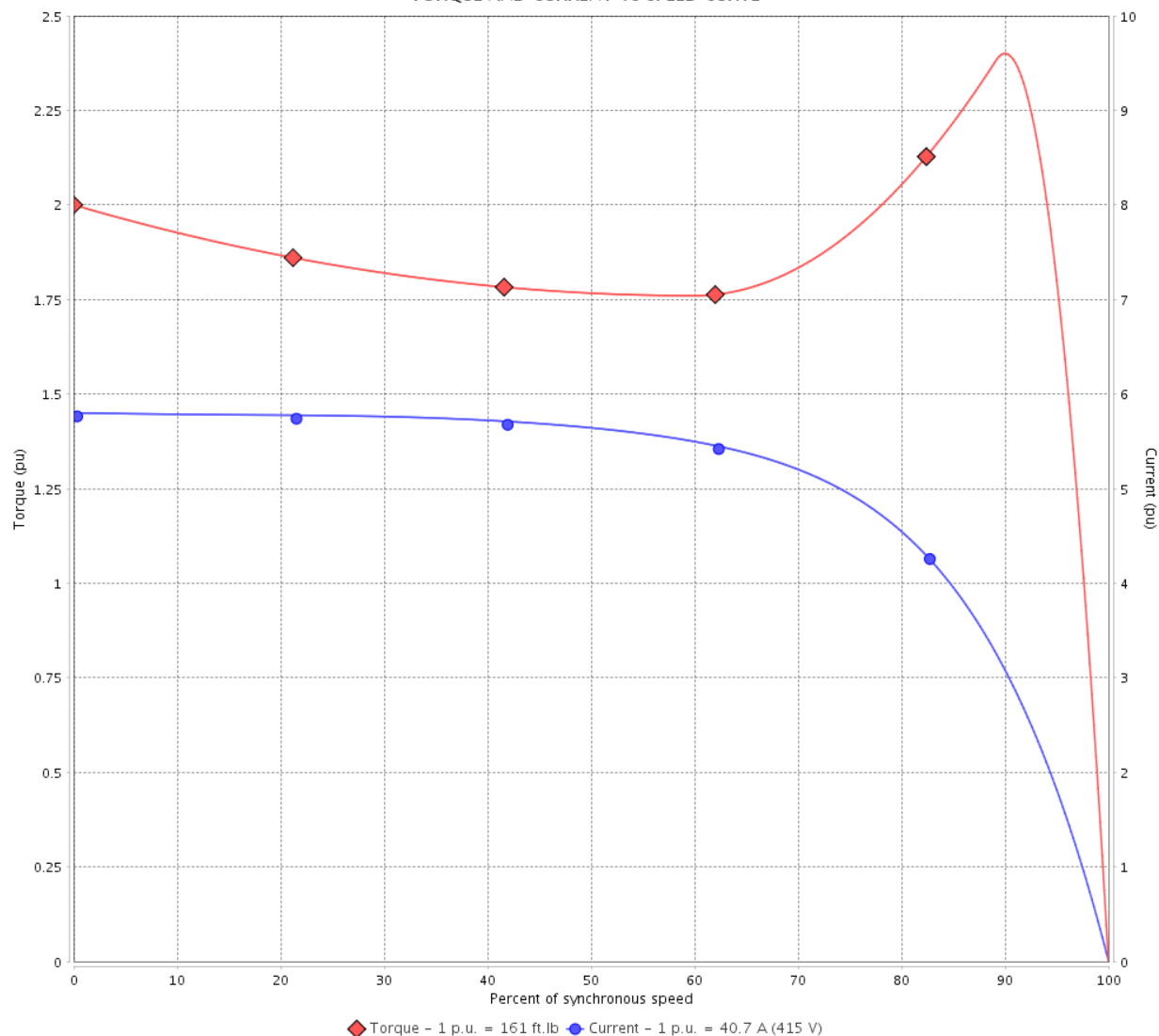
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14335221

Catalog # : 03012ET3ER326TSC-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 415 V 50 Hz 6P IE2

|                     |             |                       |                 |
|---------------------|-------------|-----------------------|-----------------|
| Rated current       | : 40.7 A    | Moment of inertia (J) | : 13.2 sq.ft.lb |
| LRC                 | : 5.8       | Duty cycle            | : Cont.(S1)     |
| Rated torque        | : 161 ft.lb | Insulation class      | : F             |
| Locked rotor torque | : 200 %     | Service factor        | : 1.15          |
| Breakdown torque    | : 240 %     | Temperature rise      | : 80 K          |
| Rated speed         | : 980 rpm   | Design                | : B             |

Locked rotor time : 27s (cold) 15s (hot)

| Rev.         | Changes Summary | Performed | Checked        | Date     |
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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

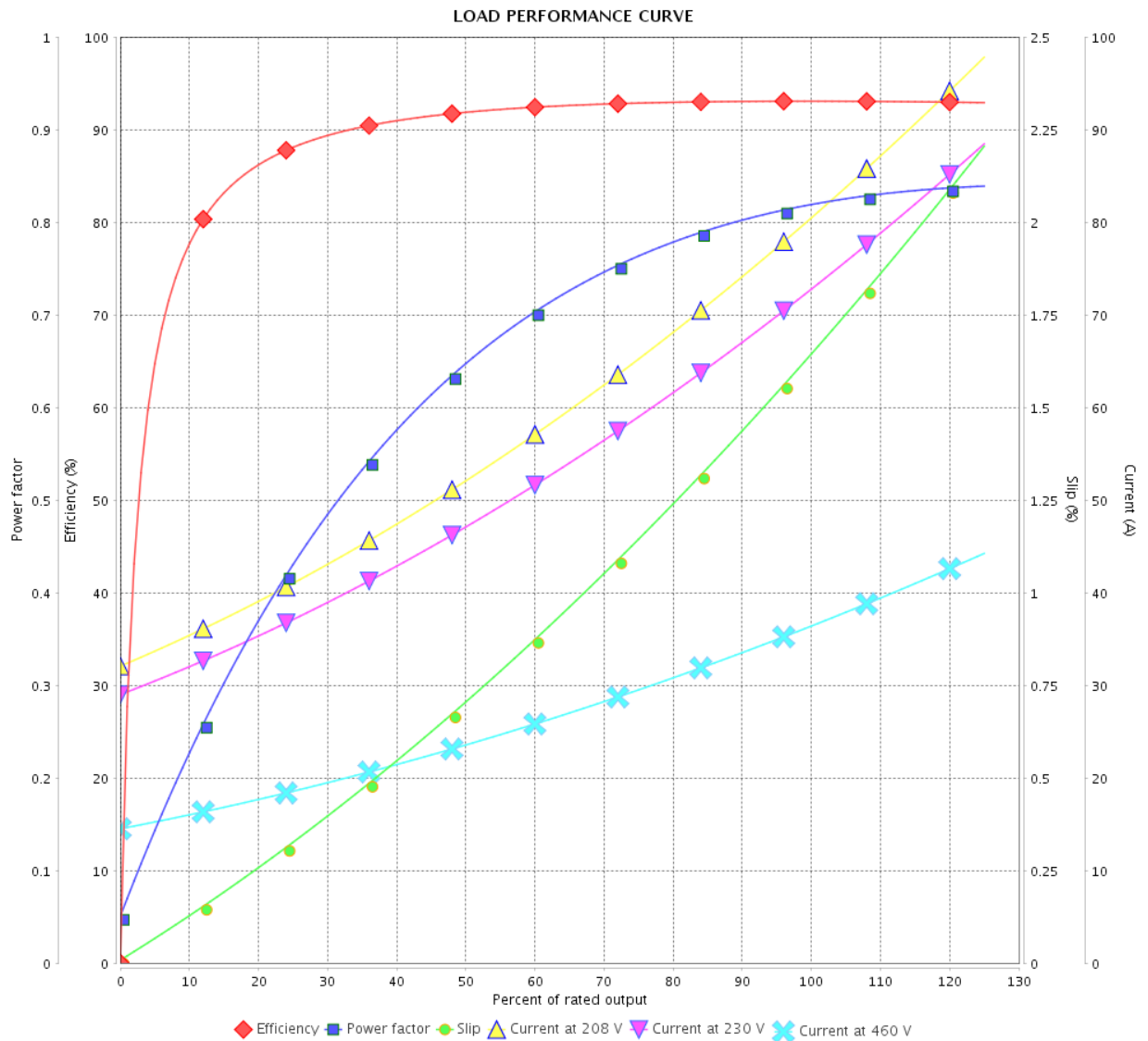


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14335221

Catalog # : 03012ET3ER326TSC-W22



Performance : 230/460 V 60 Hz 6P

Rated current : 72.4/36.2 A  
 LRC : 6.2  
 Rated torque : 134 ft.lb  
 Locked rotor torque : 220 %  
 Breakdown torque : 240 %  
 Rated speed : 1180 rpm

Moment of inertia (J) : 13.2 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     |
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# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



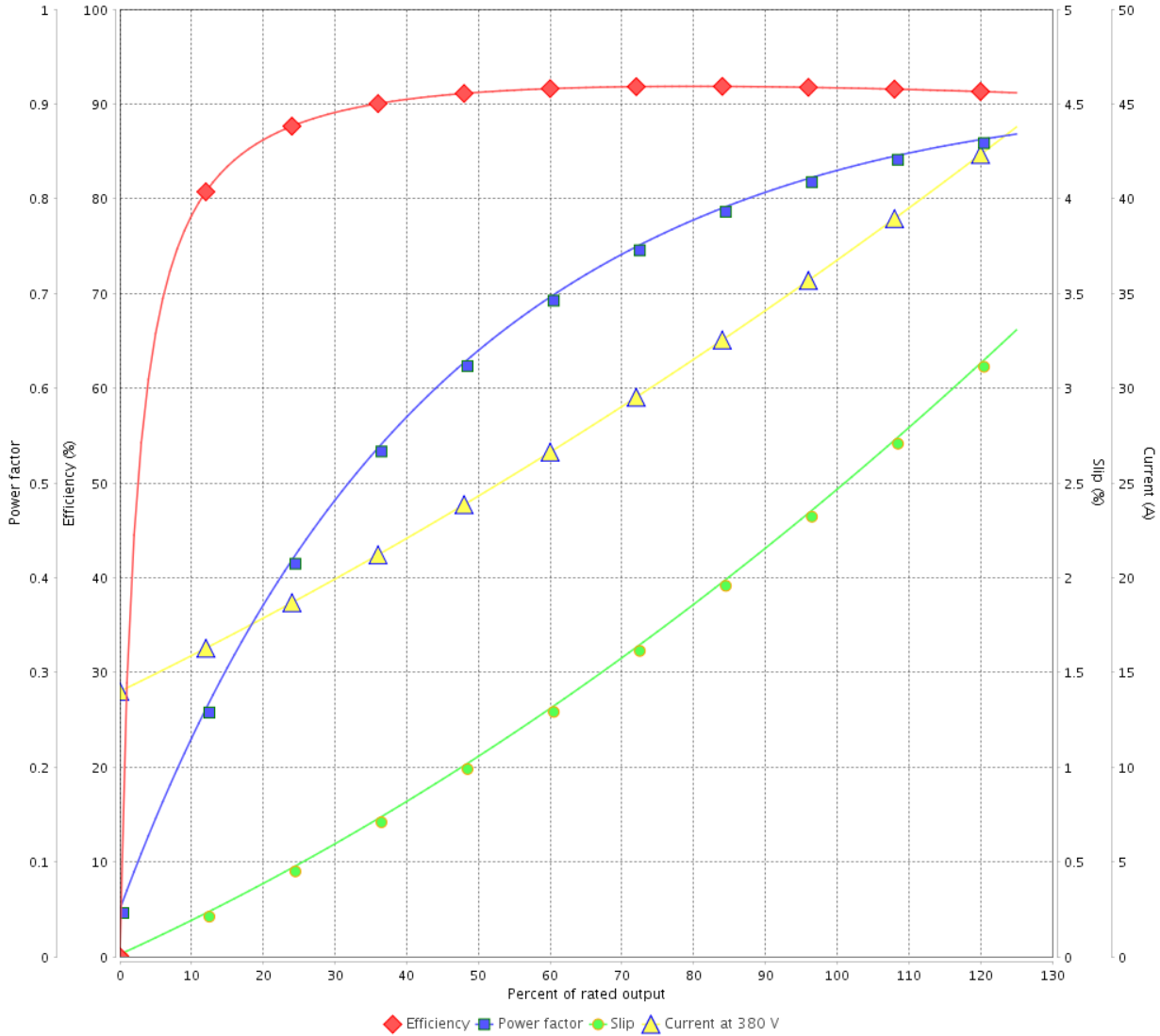
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14335221

Catalog # : 03012ET3ER326TSC-W22

LOAD PERFORMANCE CURVE



Performance : 380 V 50 Hz 6P IE3

Rated current : 36.9 A  
 LRC : 5.8  
 Rated torque : 135 ft.lb  
 Locked rotor torque : 190 %  
 Breakdown torque : 229 %  
 Rated speed : 975 rpm

Moment of inertia (J) : 13.2 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

| Rev.         | Changes Summary | Performed | Checked         | Date     |
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| Date         | 14/04/2022      |           |                 |          |

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

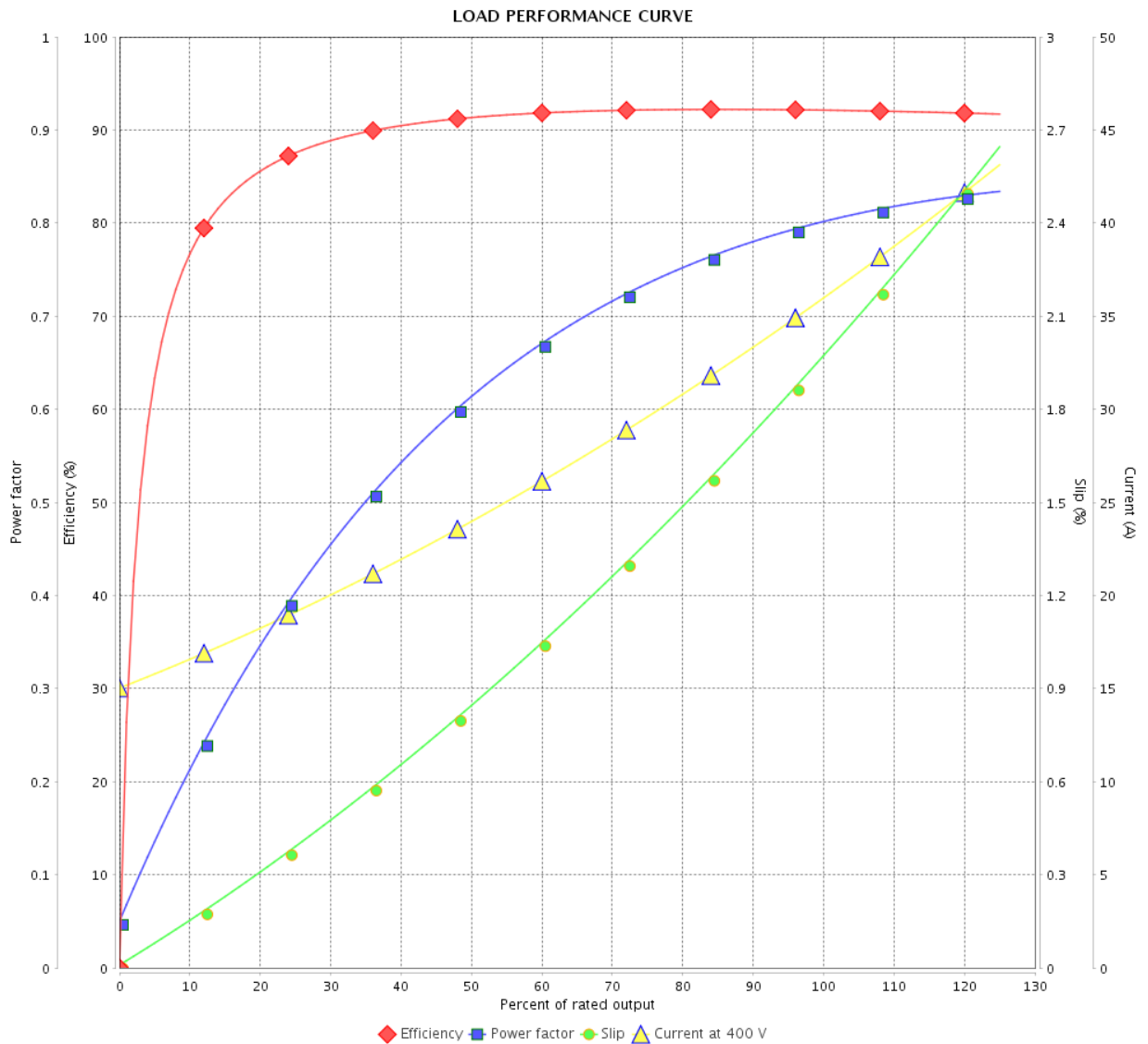


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Product line : NEMA Premium Efficiency Three-Phase

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Performance : 400 V 50 Hz 6P IE3

Rated current : 36.2 A  
 LRC : 6.3  
 Rated torque : 134 ft.lb  
 Locked rotor torque : 220 %  
 Breakdown torque : 260 %  
 Rated speed : 980 rpm

Moment of inertia (J) : 13.2 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

| Rev.         | Changes Summary | Performed | Checked | Date     |
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| Performed by |                 |           | Page    | Revision |
| Checked by   |                 |           |         |          |
| Date         |                 |           |         |          |
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# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



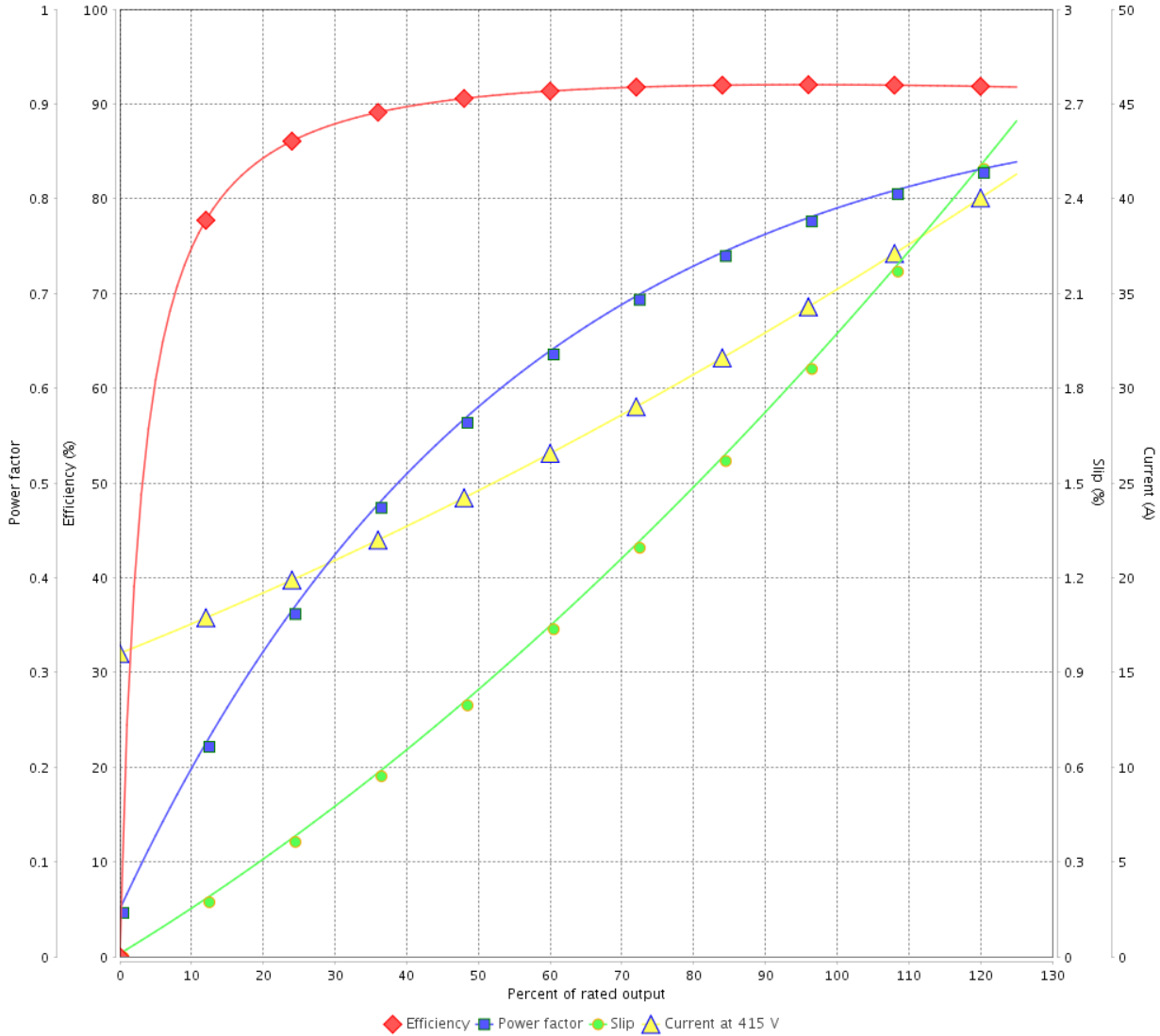
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14335221

Catalog # : 03012ET3ER326TSC-W22

LOAD PERFORMANCE CURVE



Performance : 415 V 50 Hz 6P IE3

Rated current : 35.4 A  
 LRC : 6.7  
 Rated torque : 134 ft.lb  
 Locked rotor torque : 240 %  
 Breakdown torque : 280 %  
 Rated speed : 980 rpm

Moment of inertia (J) : 13.2 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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|--------------|-----------------|-----------|---------|----------|
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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

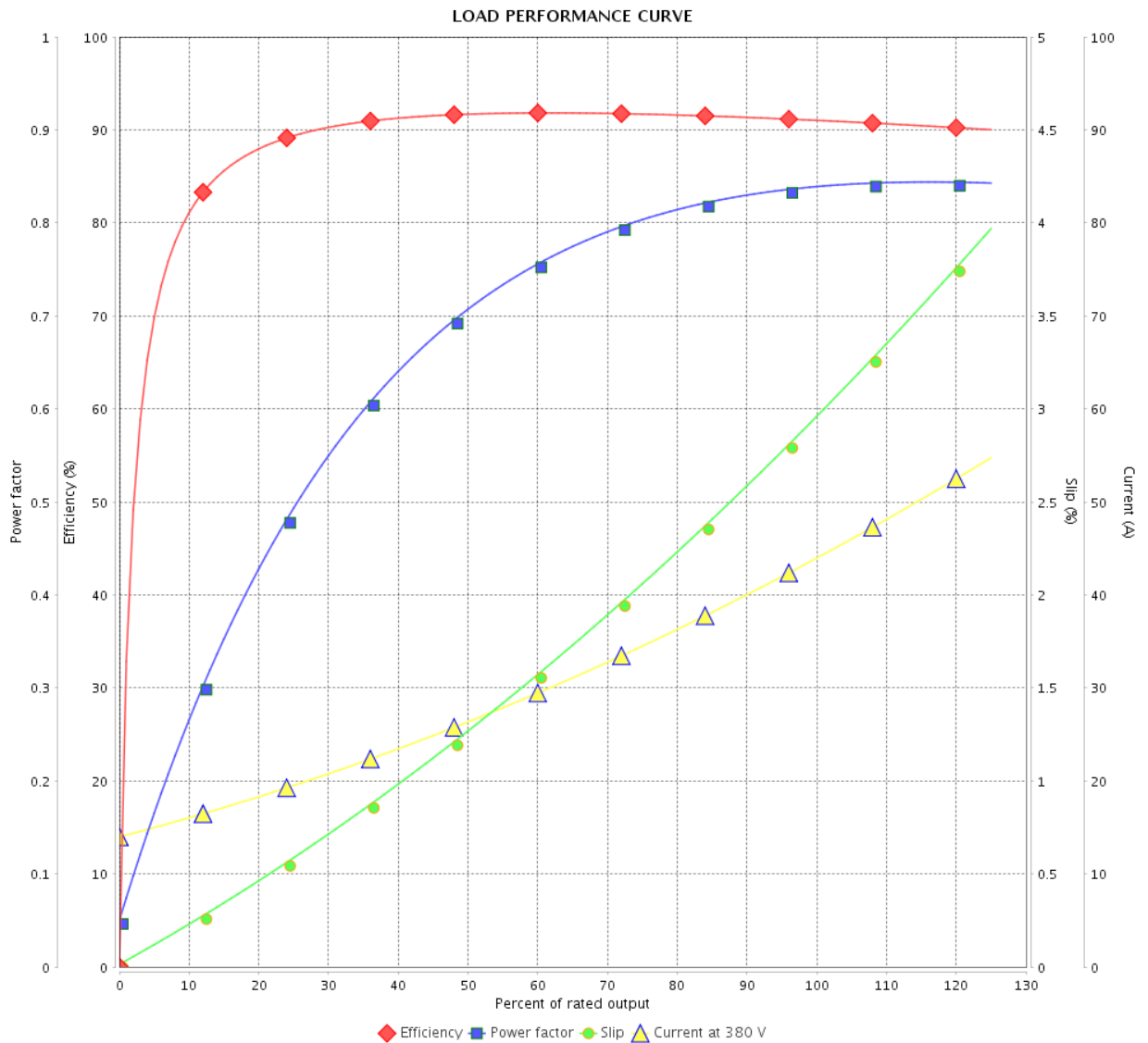


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14335221

Catalog # : 03012ET3ER326TSC-W22



Performance : 380 V 50 Hz 6P IE2

Rated current : 43.7 A  
 LRC : 4.9  
 Rated torque : 162 ft.lb  
 Locked rotor torque : 160 %  
 Breakdown torque : 200 %  
 Rated speed : 970 rpm

Moment of inertia (J) : 13.2 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

| Rev.         | Changes Summary | Performed  | Checked | Date     |
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# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



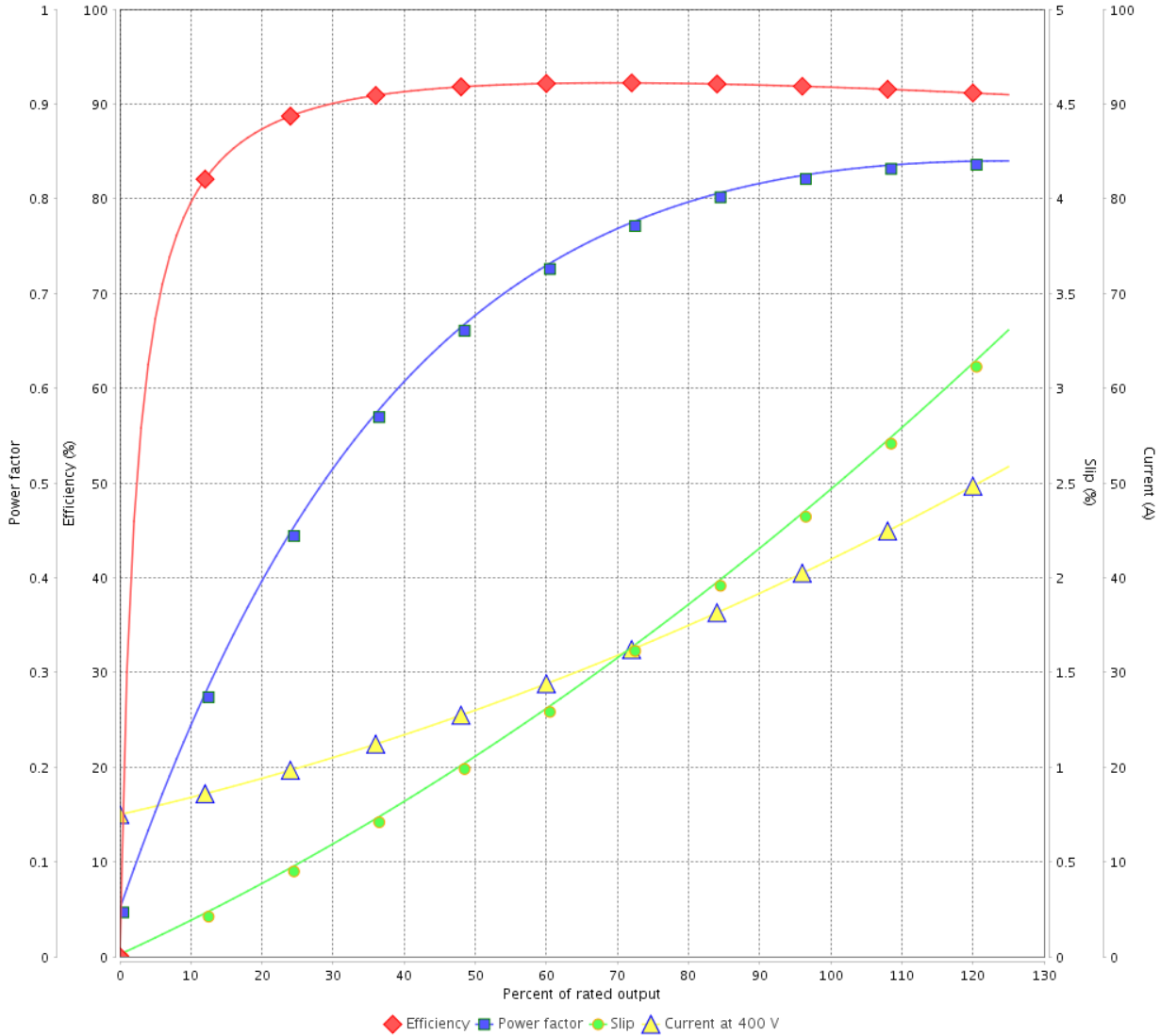
Customer :

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Catalog # : 03012ET3ER326TSC-W22

LOAD PERFORMANCE CURVE



Performance : 400 V 50 Hz 6P IE2

Rated current : 41.7 A  
 LRC : 5.4  
 Rated torque : 162 ft.lb  
 Locked rotor torque : 180 %  
 Breakdown torque : 220 %  
 Rated speed : 975 rpm

Moment of inertia (J) : 13.2 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

| Rev.         | Changes Summary | Performed | Checked         | Date     |
|--------------|-----------------|-----------|-----------------|----------|
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| Checked by   |                 |           |                 |          |
| Date         | 14/04/2022      |           |                 |          |

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

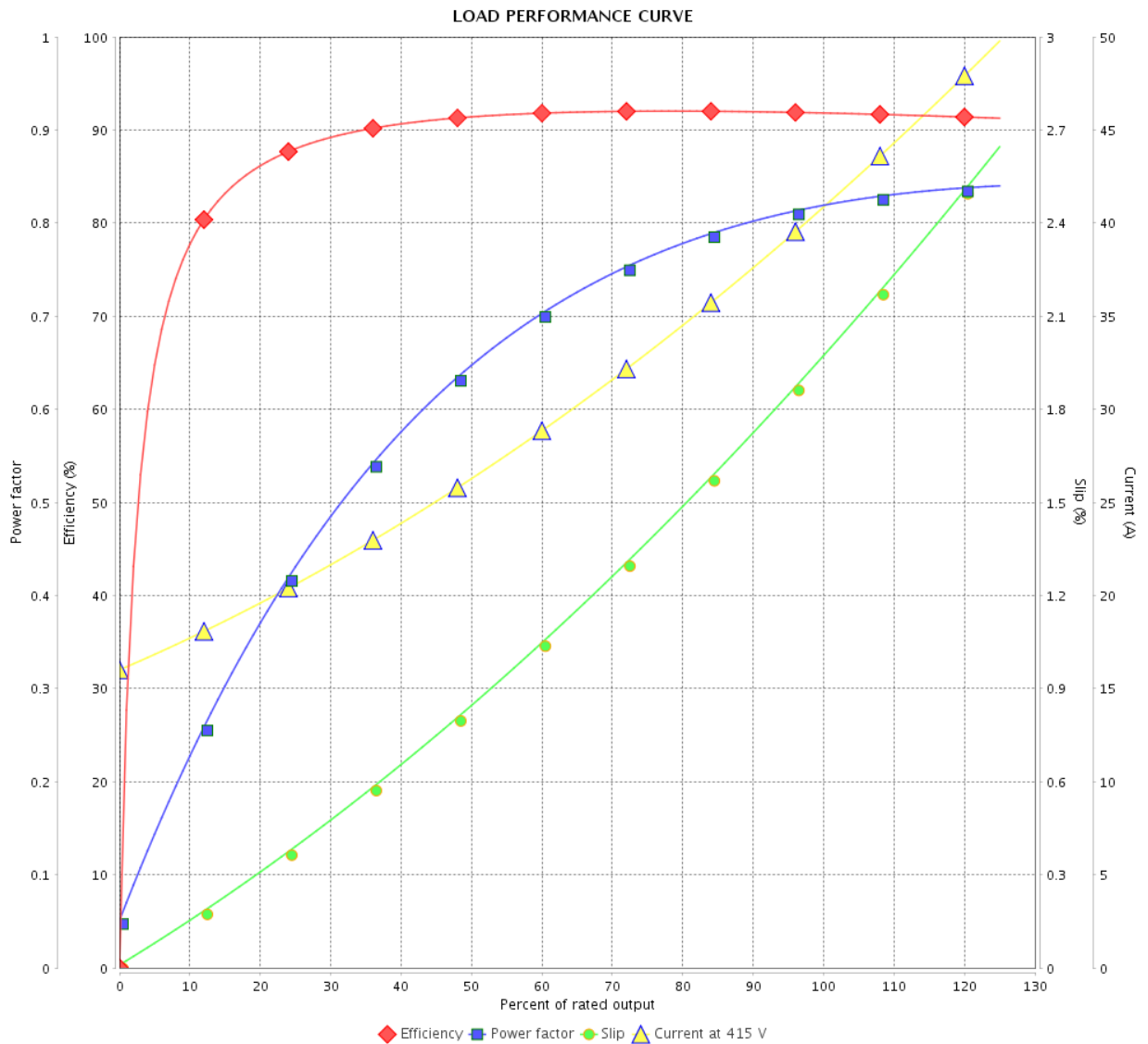


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14335221

Catalog # : 03012ET3ER326TSC-W22



Performance : 415 V 50 Hz 6P IE2

Rated current : 40.7 A  
 LRC : 5.8  
 Rated torque : 161 ft.lb  
 Locked rotor torque : 200 %  
 Breakdown torque : 240 %  
 Rated speed : 980 rpm

Moment of inertia (J) : 13.2 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

| Rev.         | Changes Summary | Performed  | Checked | Date     |
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| Date         |                 | 14/04/2022 |         |          |

# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase  
Product code : 14335221  
Catalog # : 03012ET3ER326TSC-W22

Performance : 230/460 V 60 Hz 6P

|                     |               |                       |                 |
|---------------------|---------------|-----------------------|-----------------|
| Rated current       | : 72.4/36.2 A | Moment of inertia (J) | : 13.2 sq.ft.lb |
| LRC                 | : 6.2         | Duty cycle            | : Cont.(S1)     |
| Rated torque        | : 134 ft.lb   | Insulation class      | : F             |
| Locked rotor torque | : 220 %       | Service factor        | : 1.25          |
| Breakdown torque    | : 240 %       | Temperature rise      | : 80 K          |
| Rated speed         | : 1180 rpm    | Design                | : B             |

Heating constant

Cooling constant

| Rev.         | Changes Summary | Performed | Checked | Date     |
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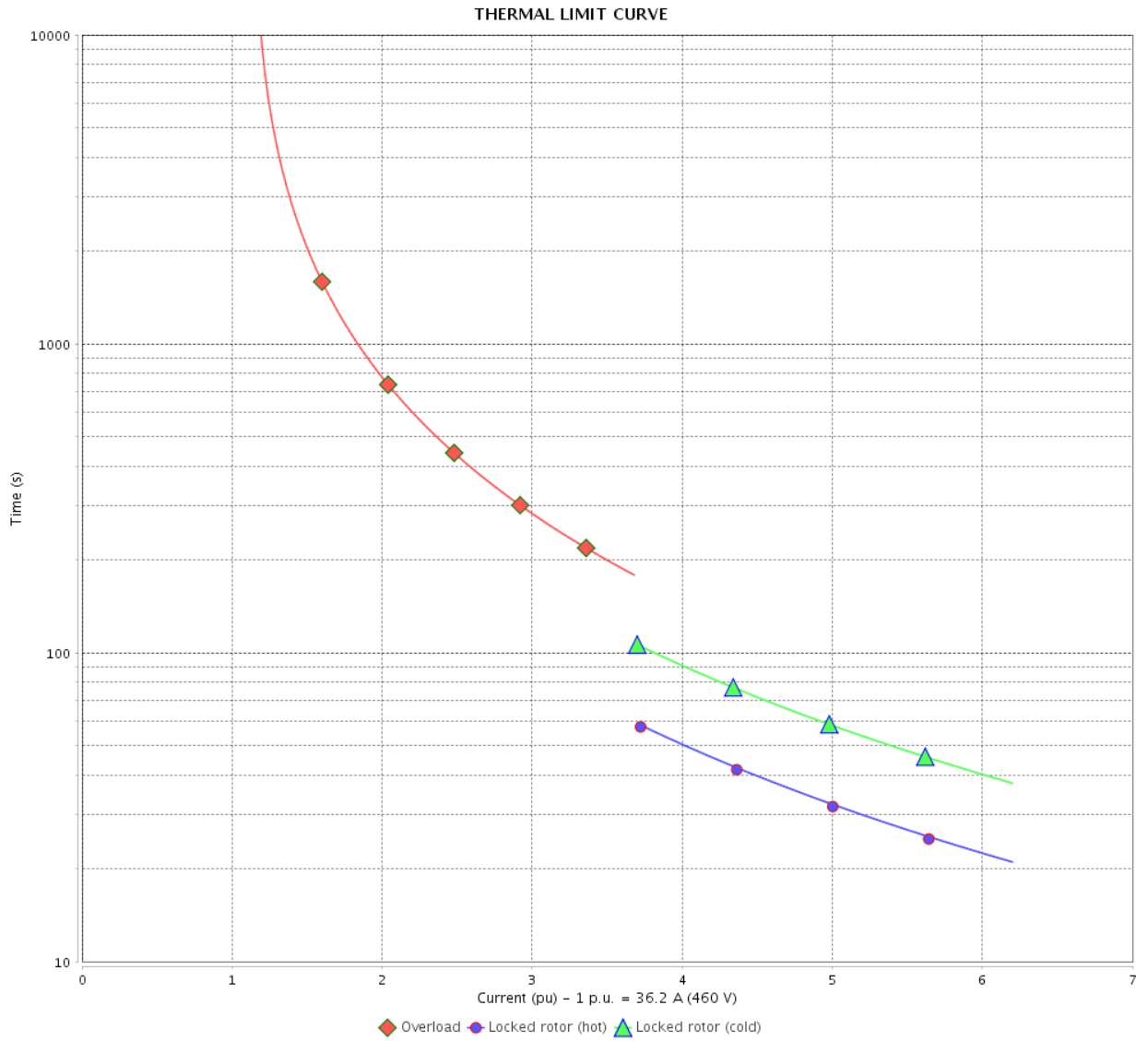


# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_



| Rev.         | Changes Summary | Performed  | Checked | Date     |
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| Date         |                 | 14/04/2022 |         |          |

# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14335221

Catalog # : 03012ET3ER326TSC-W22

Performance : 380 V 50 Hz 6P IE3

|                     |             |                       |                 |
|---------------------|-------------|-----------------------|-----------------|
| Rated current       | : 36.9 A    | Moment of inertia (J) | : 13.2 sq.ft.lb |
| LRC                 | : 5.8       | Duty cycle            | : Cont.(S1)     |
| Rated torque        | : 135 ft.lb | Insulation class      | : F             |
| Locked rotor torque | : 190 %     | Service factor        | : 1.00          |
| Breakdown torque    | : 229 %     | Temperature rise      | : 80 K          |
| Rated speed         | : 975 rpm   | Design                | : B             |

Heating constant

Cooling constant

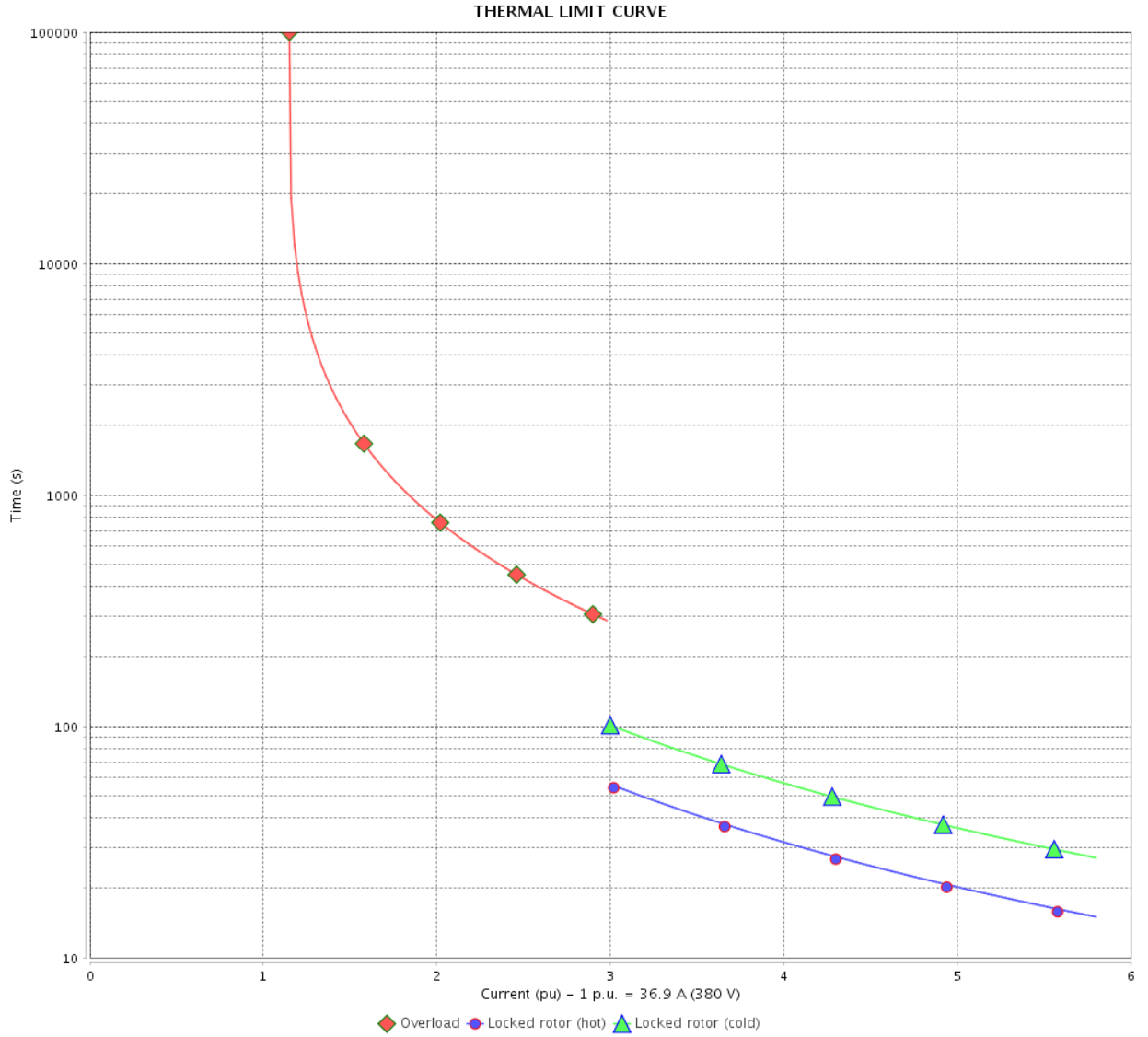
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_



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| Checked by   |                 |           |         |          |
| Date         |                 |           |         |          |

# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase  
 Product code : 14335221  
 Catalog # : 03012ET3ER326TSC-W22

Performance : 400 V 50 Hz 6P IE3

|                             |                                       |
|-----------------------------|---------------------------------------|
| Rated current : 36.2 A      | Moment of inertia (J) : 13.2 sq.ft.lb |
| LRC : 6.3                   | Duty cycle : Cont.(S1)                |
| Rated torque : 134 ft.lb    | Insulation class : F                  |
| Locked rotor torque : 220 % | Service factor : 1.15                 |
| Breakdown torque : 260 %    | Temperature rise : 80 K               |
| Rated speed : 980 rpm       | Design : B                            |

Heating constant

Cooling constant

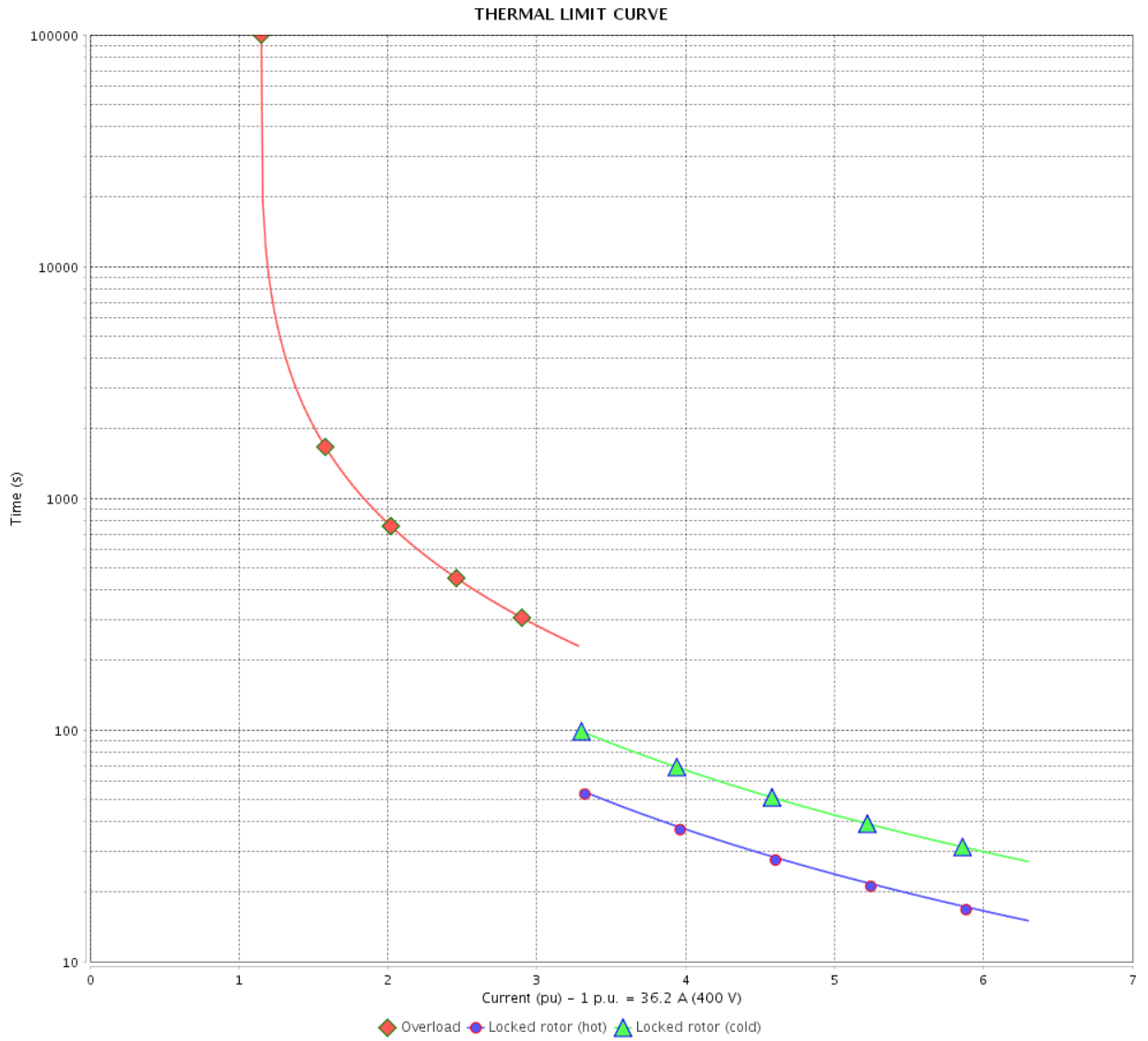
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# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_



| Rev.         | Changes Summary | Performed  | Checked | Date     |
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# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase  
Product code : 14335221  
Catalog # : 03012ET3ER326TSC-W22

Performance : 415 V 50 Hz 6P IE3

|                     |             |                       |                 |
|---------------------|-------------|-----------------------|-----------------|
| Rated current       | : 35.4 A    | Moment of inertia (J) | : 13.2 sq.ft.lb |
| LRC                 | : 6.7       | Duty cycle            | : Cont.(S1)     |
| Rated torque        | : 134 ft.lb | Insulation class      | : F             |
| Locked rotor torque | : 240 %     | Service factor        | : 1.15          |
| Breakdown torque    | : 280 %     | Temperature rise      | : 80 K          |
| Rated speed         | : 980 rpm   | Design                | : B             |

Heating constant

Cooling constant

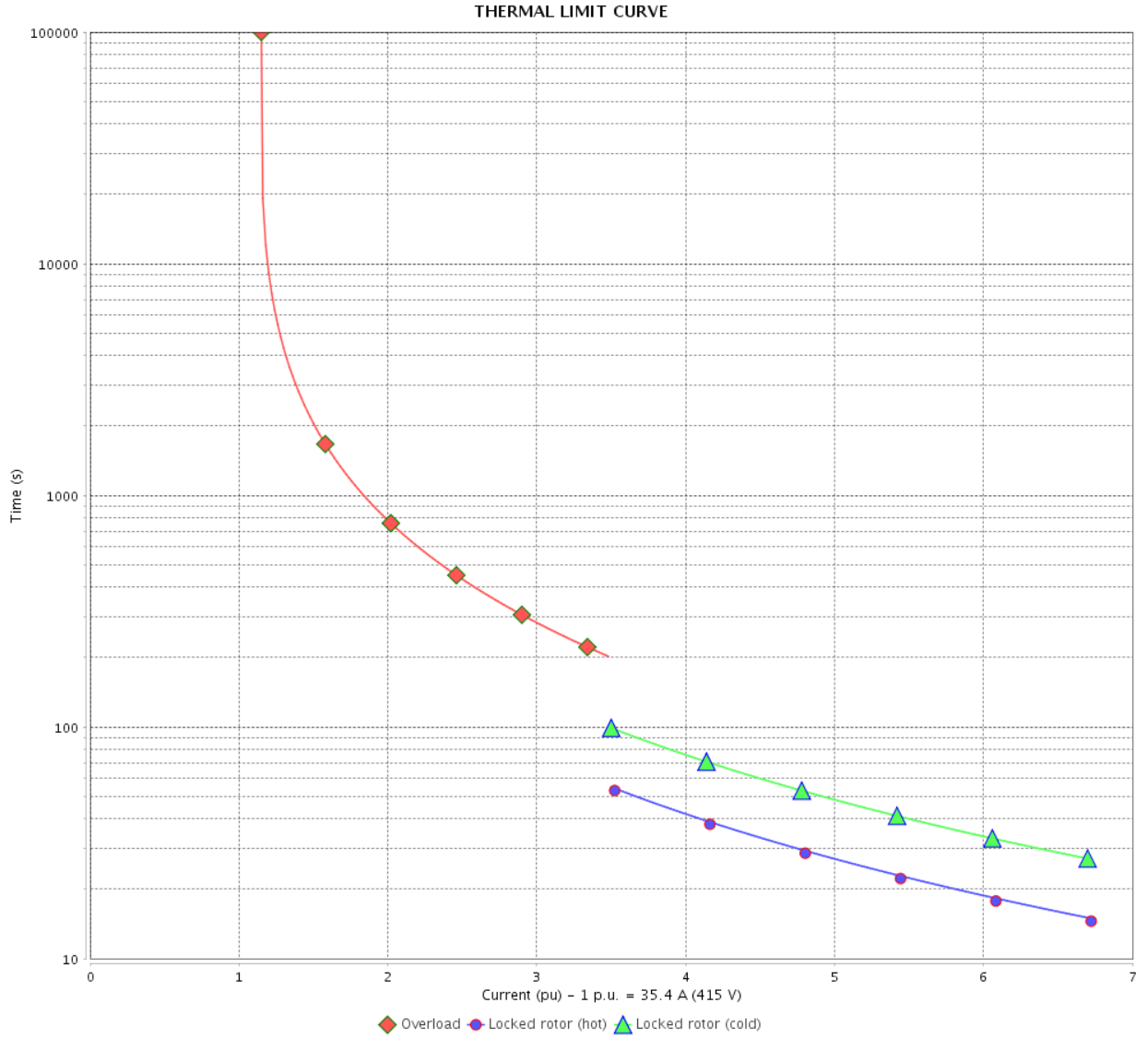
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_



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| Date         |                 |                 |         |          |

# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14335221

Catalog # : 03012ET3ER326TSC-W22

Performance : 380 V 50 Hz 6P IE2

|                     |             |                       |                 |
|---------------------|-------------|-----------------------|-----------------|
| Rated current       | : 43.7 A    | Moment of inertia (J) | : 13.2 sq.ft.lb |
| LRC                 | : 4.9       | Duty cycle            | : Cont.(S1)     |
| Rated torque        | : 162 ft.lb | Insulation class      | : F             |
| Locked rotor torque | : 160 %     | Service factor        | : 1.00          |
| Breakdown torque    | : 200 %     | Temperature rise      | : 80 K          |
| Rated speed         | : 970 rpm   | Design                | : B             |

Heating constant

Cooling constant

| Rev.         | Changes Summary | Performed | Checked | Date     |
|--------------|-----------------|-----------|---------|----------|
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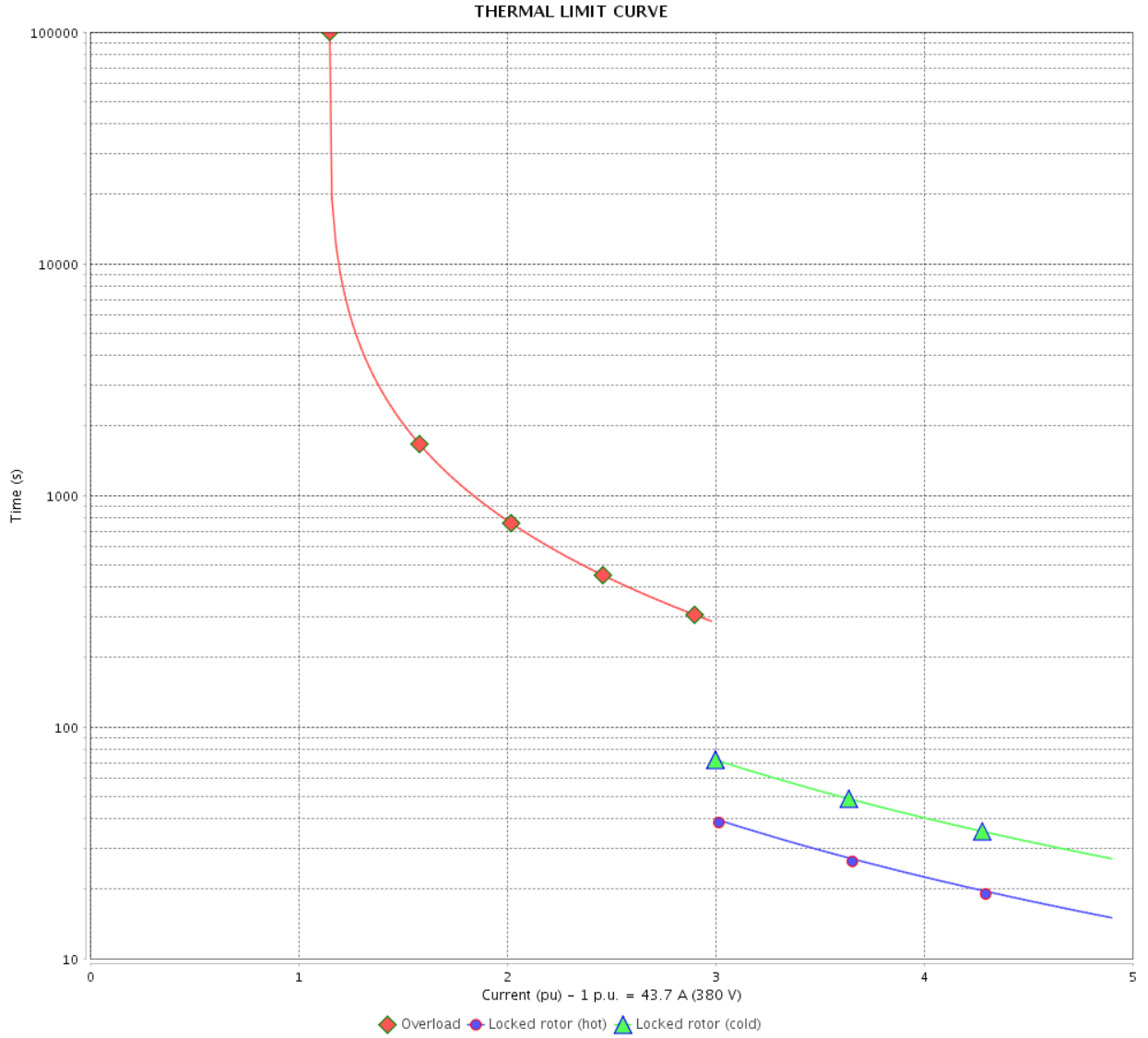


# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_



| Rev.         | Changes Summary | Performed       | Checked  | Date |
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# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase  
Product code : 14335221  
Catalog # : 03012ET3ER326TSC-W22

Performance : 400 V 50 Hz 6P IE2

|                     |             |                       |                 |
|---------------------|-------------|-----------------------|-----------------|
| Rated current       | : 41.7 A    | Moment of inertia (J) | : 13.2 sq.ft.lb |
| LRC                 | : 5.4       | Duty cycle            | : Cont.(S1)     |
| Rated torque        | : 162 ft.lb | Insulation class      | : F             |
| Locked rotor torque | : 180 %     | Service factor        | : 1.15          |
| Breakdown torque    | : 220 %     | Temperature rise      | : 80 K          |
| Rated speed         | : 975 rpm   | Design                | : B             |

Heating constant

Cooling constant

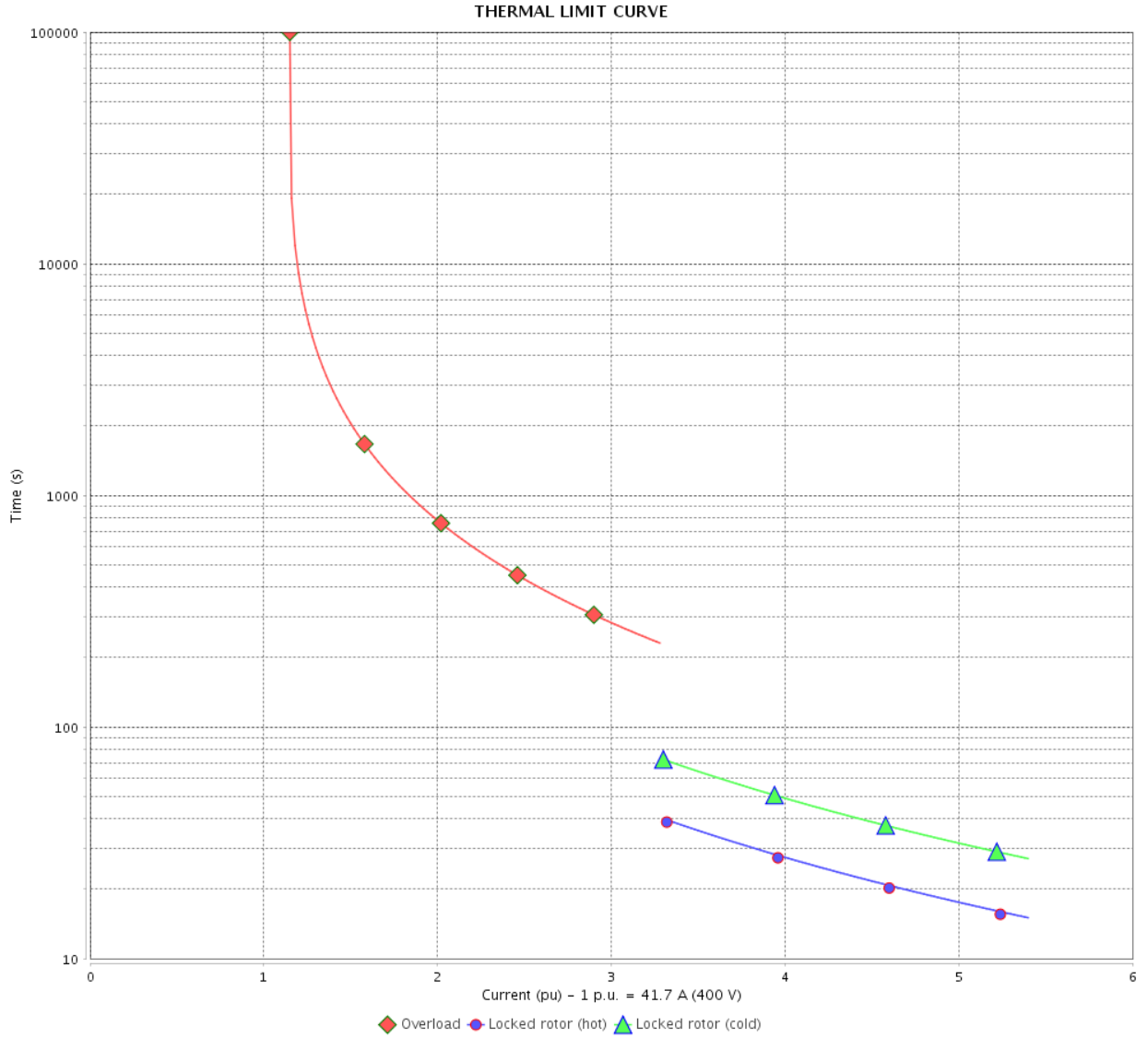
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_



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| Date         |                 | 14/04/2022 |         |          |

# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase  
Product code : 14335221  
Catalog # : 03012ET3ER326TSC-W22

Performance : 415 V 50 Hz 6P IE2

|                     |             |                       |                 |
|---------------------|-------------|-----------------------|-----------------|
| Rated current       | : 40.7 A    | Moment of inertia (J) | : 13.2 sq.ft.lb |
| LRC                 | : 5.8       | Duty cycle            | : Cont.(S1)     |
| Rated torque        | : 161 ft.lb | Insulation class      | : F             |
| Locked rotor torque | : 200 %     | Service factor        | : 1.15          |
| Breakdown torque    | : 240 %     | Temperature rise      | : 80 K          |
| Rated speed         | : 980 rpm   | Design                | : B             |

Heating constant

Cooling constant

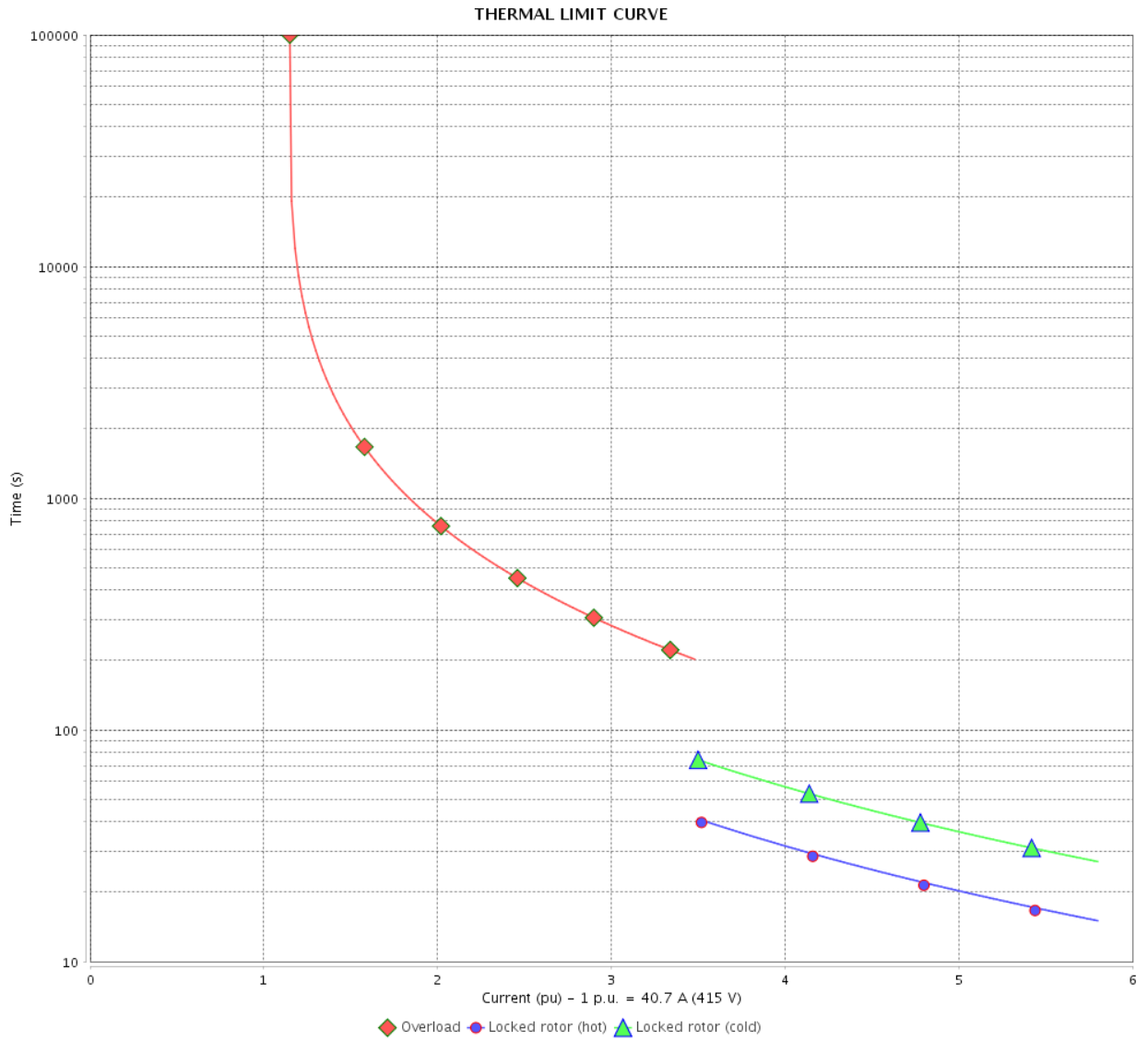
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_



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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



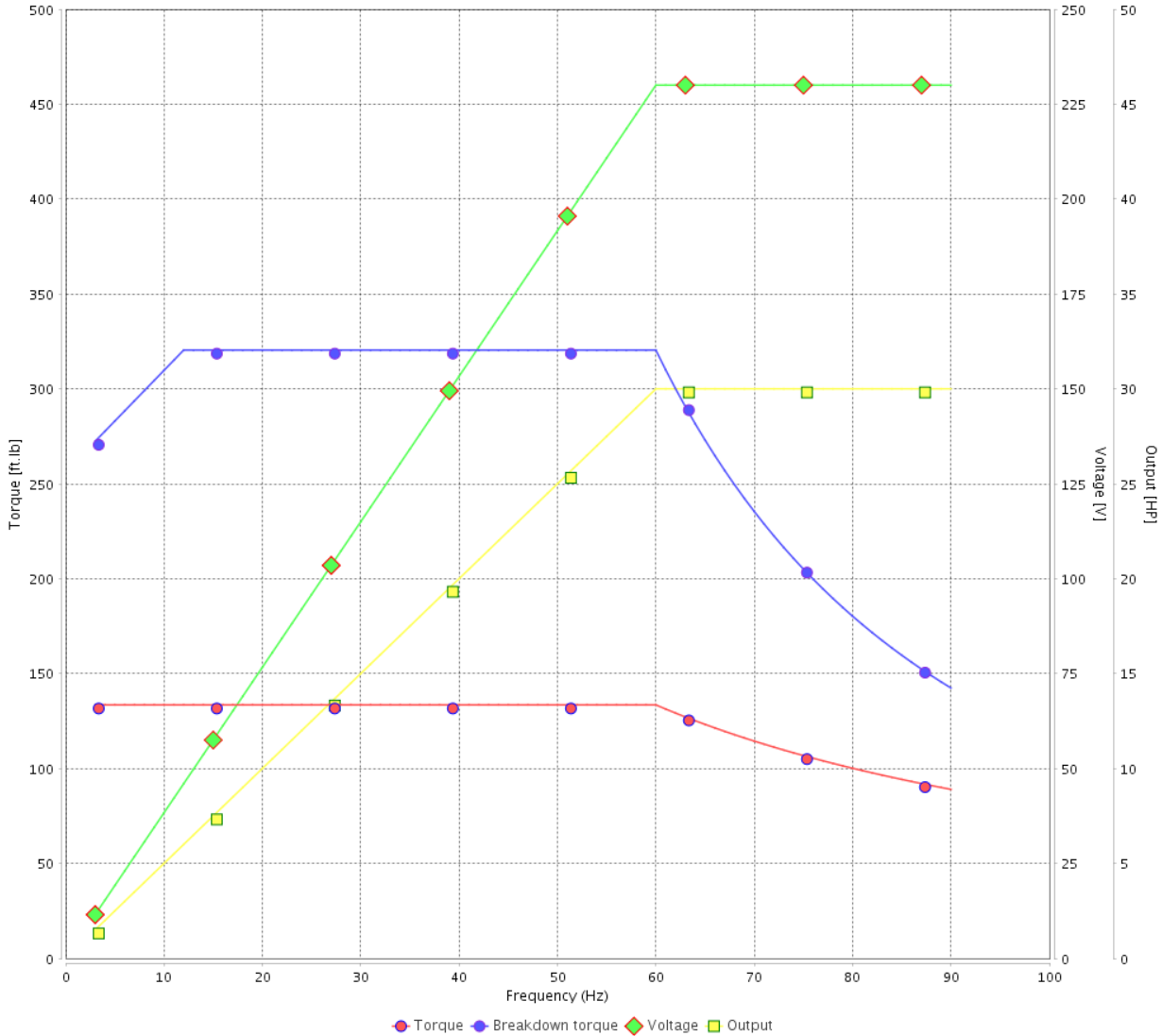
Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14335221

Catalog # : 03012ET3ER326TSC-W22

VFD OPERATION CURVE



Performance : 230/460 V 60 Hz 6P

Rated current : 72.4/36.2 A  
 LRC : 6.2  
 Rated torque : 134 ft.lb  
 Locked rotor torque : 220 %  
 Breakdown torque : 240 %  
 Rated speed : 1180 rpm

Moment of inertia (J) : 13.2 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     |
|--------------|-----------------|-----------|---------|----------|
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| Checked by   |                 |           |         |          |
| Date         |                 |           |         |          |
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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

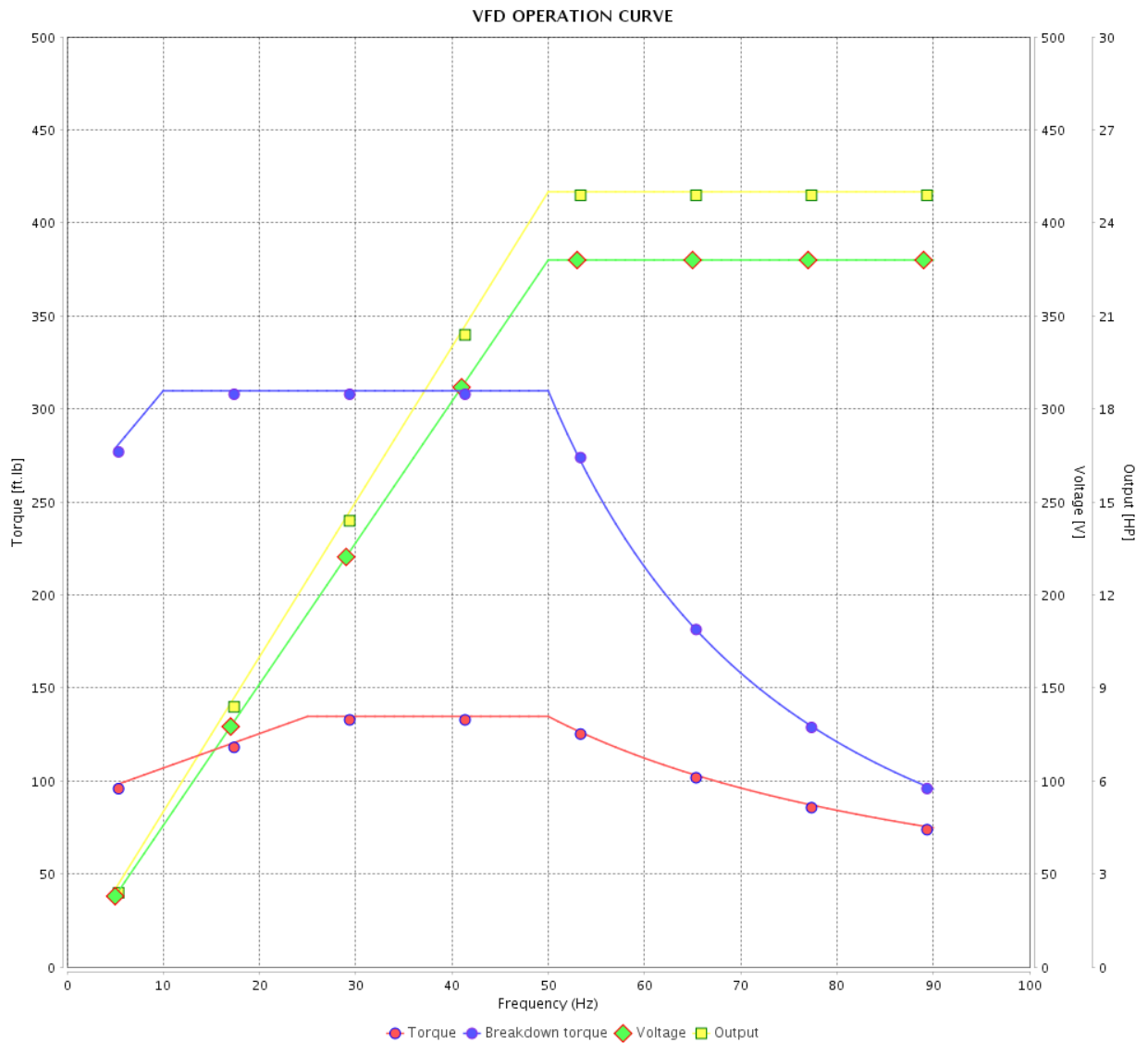


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14335221

Catalog # : 03012ET3ER326TSC-W22



Performance : 380 V 50 Hz 6P IE3

Rated current : 36.9 A  
 LRC : 5.8  
 Rated torque : 135 ft.lb  
 Locked rotor torque : 190 %  
 Breakdown torque : 229 %  
 Rated speed : 975 rpm

Moment of inertia (J) : 13.2 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

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

Three Phase Induction Motor - Squirrel Cage



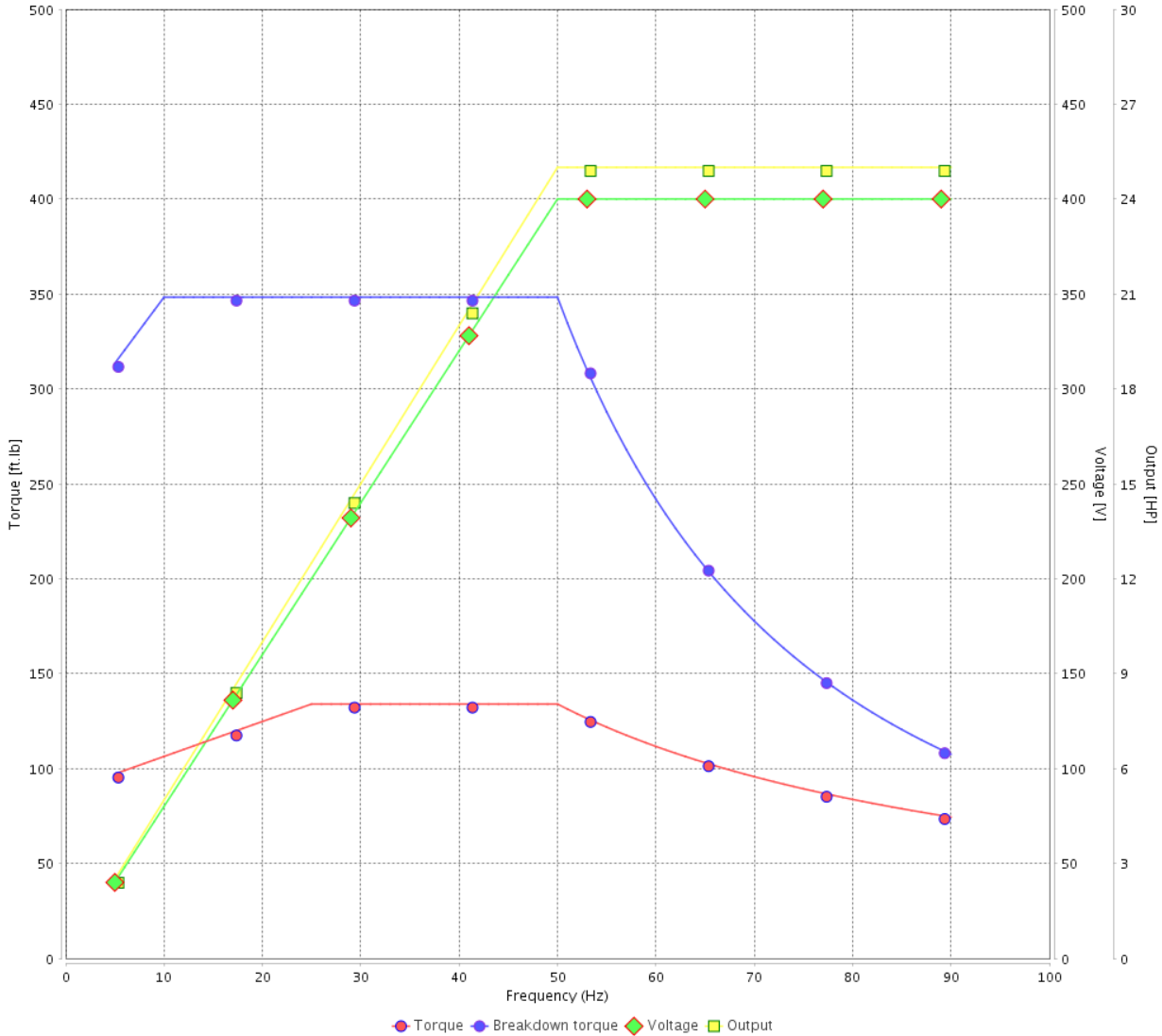
Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14335221

Catalog # : 03012ET3ER326TSC-W22

VFD OPERATION CURVE



Performance : 400 V 50 Hz 6P IE3

Rated current : 36.2 A  
 LRC : 6.3  
 Rated torque : 134 ft.lb  
 Locked rotor torque : 220 %  
 Breakdown torque : 260 %  
 Rated speed : 980 rpm

Moment of inertia (J) : 13.2 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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

Three Phase Induction Motor - Squirrel Cage

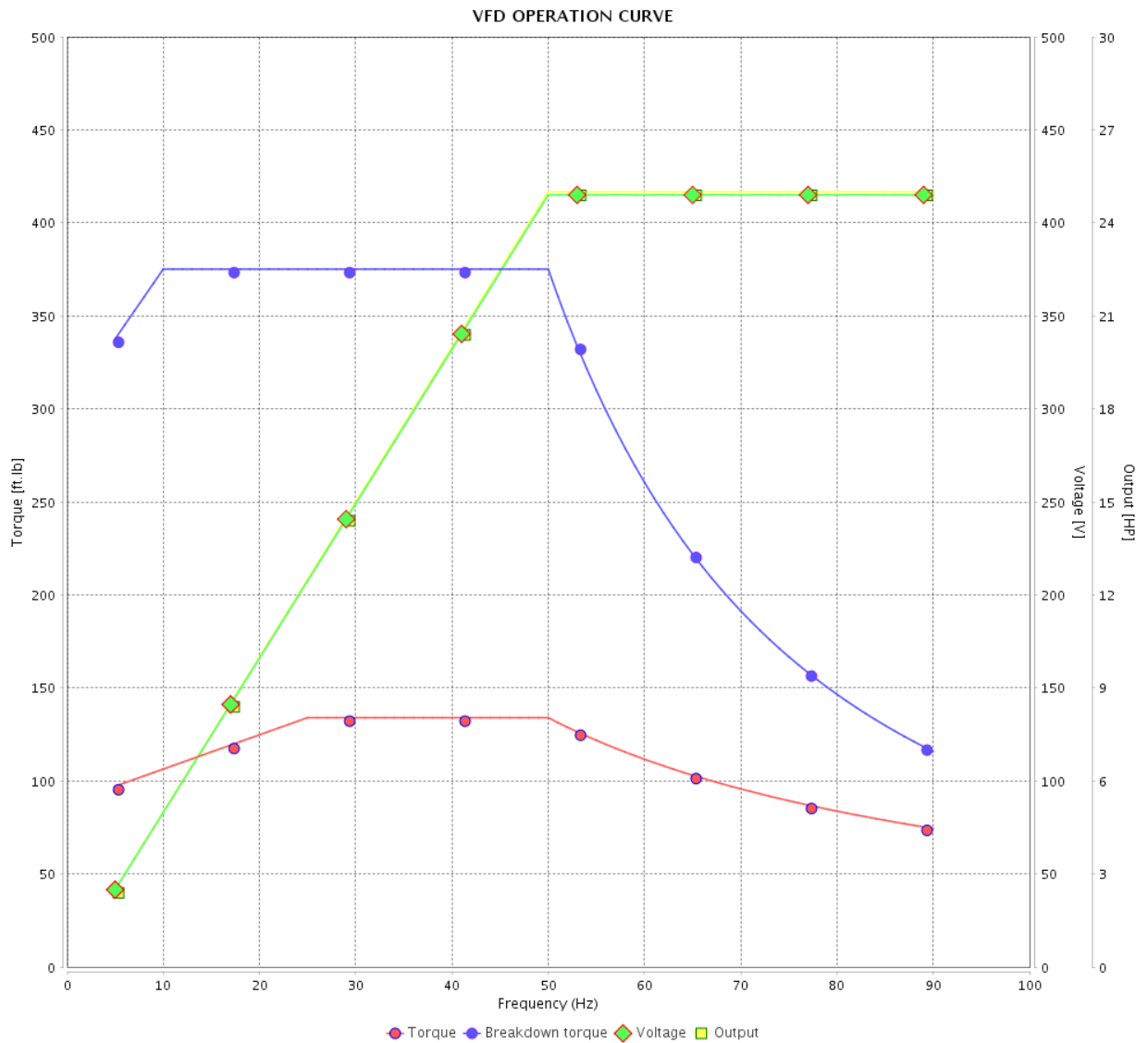


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14335221

Catalog # : 03012ET3ER326TSC-W22



Performance : 415 V 50 Hz 6P IE3

Rated current : 35.4 A  
 LRC : 6.7  
 Rated torque : 134 ft.lb  
 Locked rotor torque : 240 %  
 Breakdown torque : 280 %  
 Rated speed : 980 rpm

Moment of inertia (J) : 13.2 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

| Rev.         | Changes Summary | Performed | Checked         | Date     |
|--------------|-----------------|-----------|-----------------|----------|
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| Date         | 14/04/2022      |           |                 |          |

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



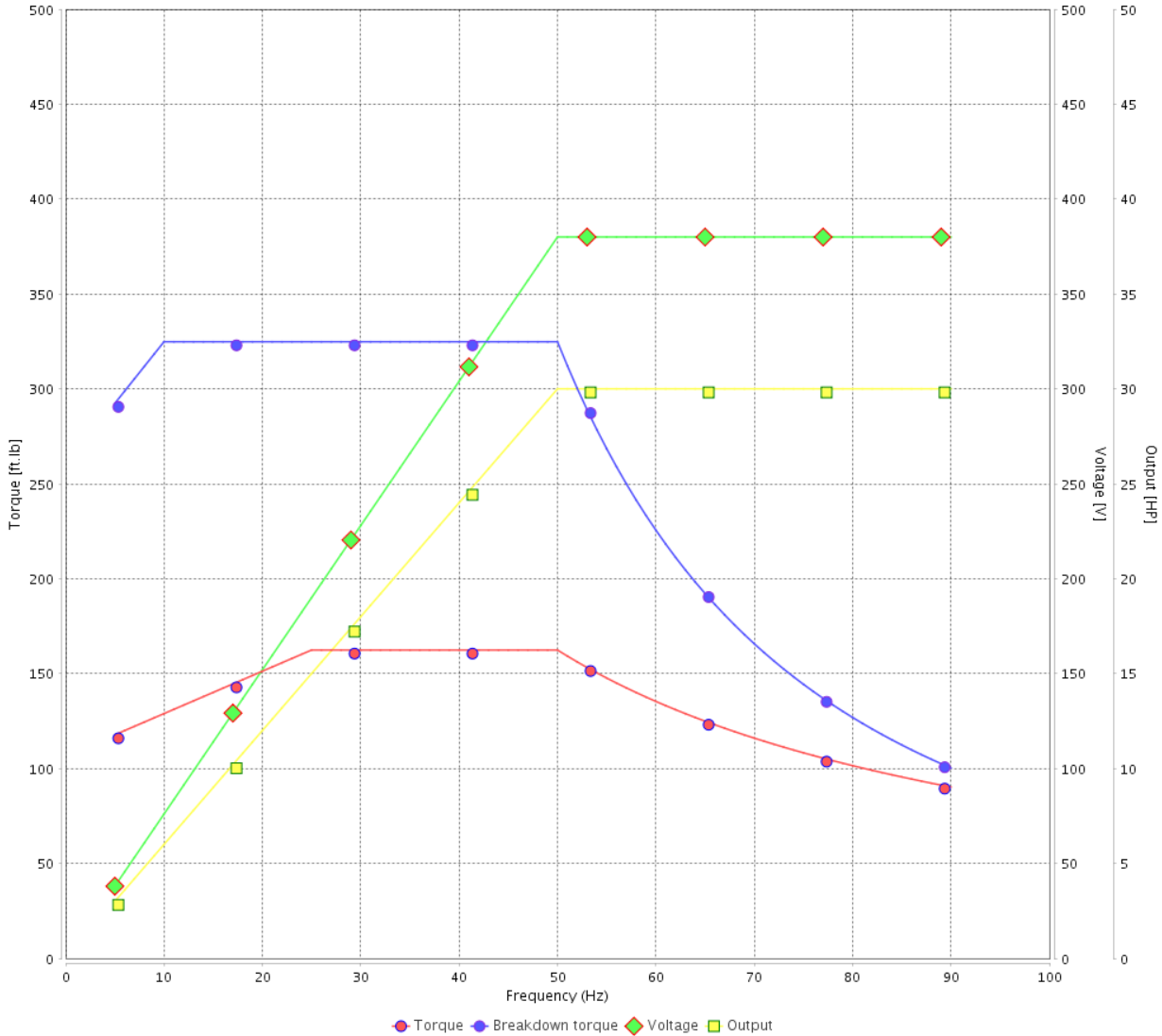
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14335221

Catalog # : 03012ET3ER326TSC-W22

VFD OPERATION CURVE



Performance : 380 V 50 Hz 6P IE2

|                     |             |                       |                 |
|---------------------|-------------|-----------------------|-----------------|
| Rated current       | : 43.7 A    | Moment of inertia (J) | : 13.2 sq.ft.lb |
| LRC                 | : 4.9       | Duty cycle            | : Cont.(S1)     |
| Rated torque        | : 162 ft.lb | Insulation class      | : F             |
| Locked rotor torque | : 160 %     | Service factor        | : 1.00          |
| Breakdown torque    | : 200 %     | Temperature rise      | : 80 K          |
| Rated speed         | : 970 rpm   | Design                | : B             |

| Rev.         | Changes Summary | Performed | Checked         | Date     |
|--------------|-----------------|-----------|-----------------|----------|
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| Checked by   |                 |           |                 |          |
| Date         | 14/04/2022      |           |                 |          |

# VFD OPERATION CURVE

## Three Phase Induction Motor - Squirrel Cage

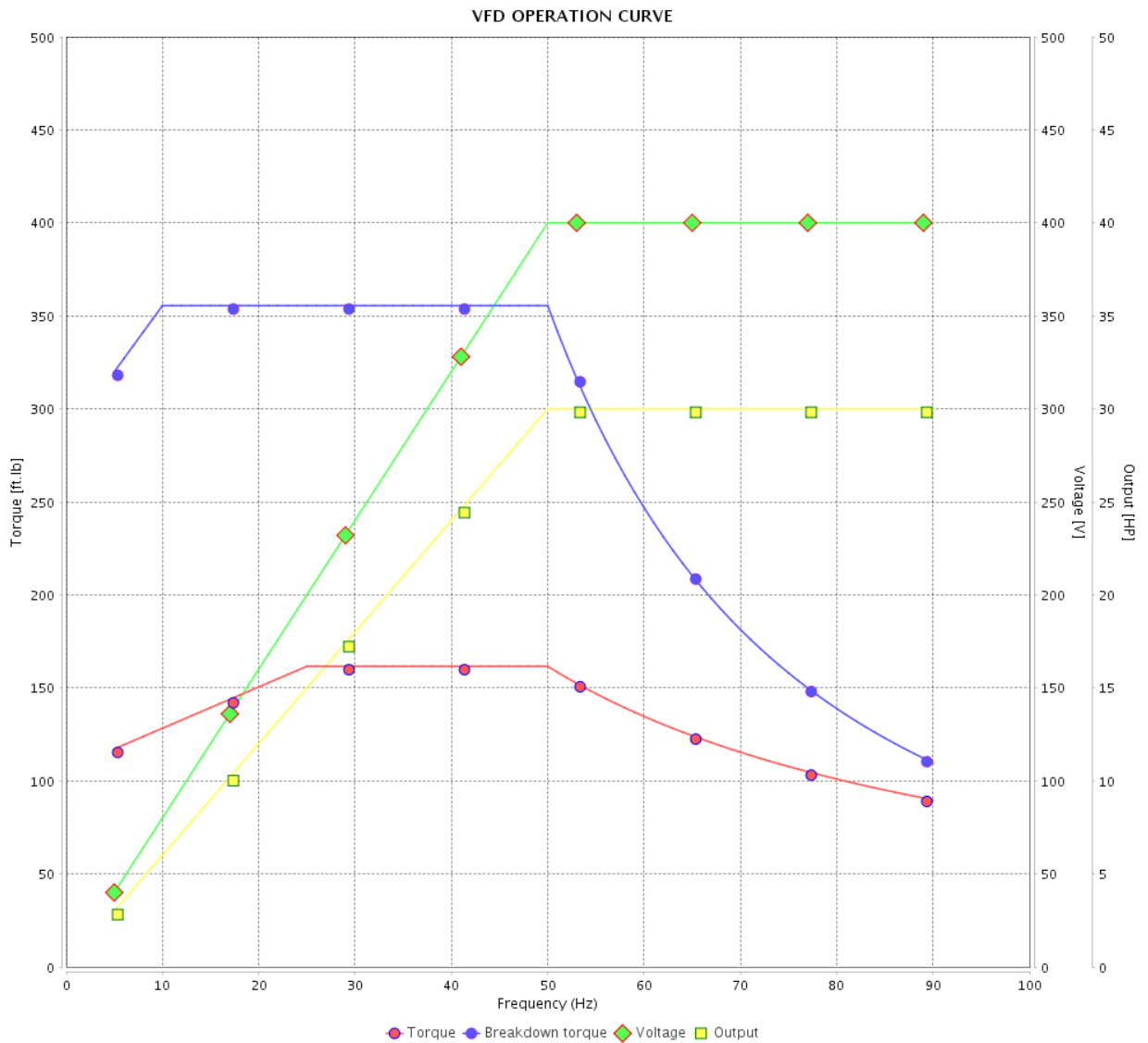


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14335221

Catalog # : 03012ET3ER326TSC-W22



Performance : 400 V 50 Hz 6P IE2

Rated current : 41.7 A  
 LRC : 5.4  
 Rated torque : 162 ft.lb  
 Locked rotor torque : 180 %  
 Breakdown torque : 220 %  
 Rated speed : 975 rpm

Moment of inertia (J) : 13.2 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

| Rev.         | Changes Summary | Performed | Checked         | Date     |
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| Checked by   |                 |           |                 |          |
| Date         | 14/04/2022      |           |                 |          |

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



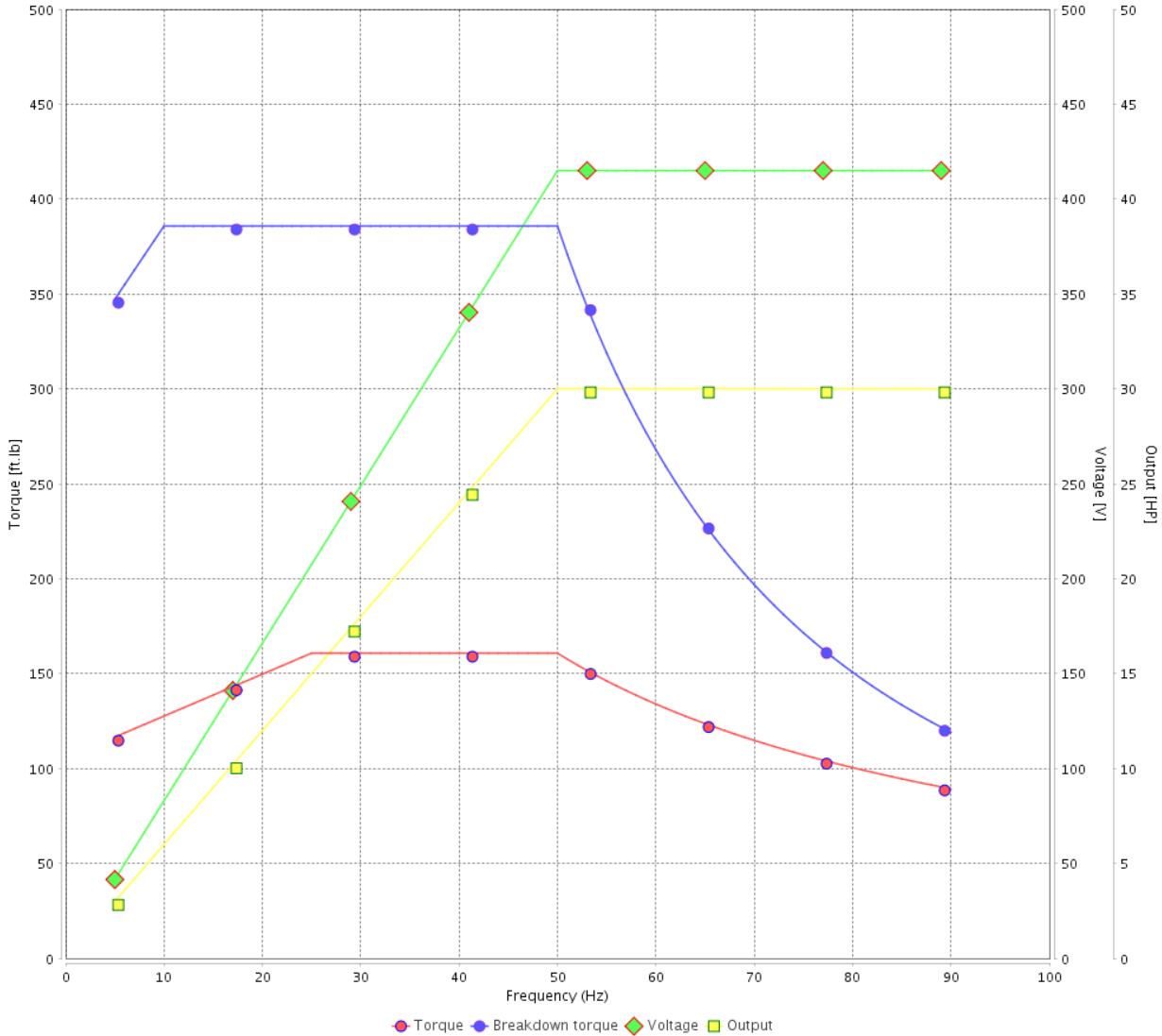
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14335221

Catalog # : 03012ET3ER326TSC-W22

VFD OPERATION CURVE

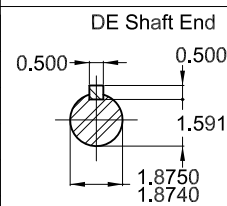
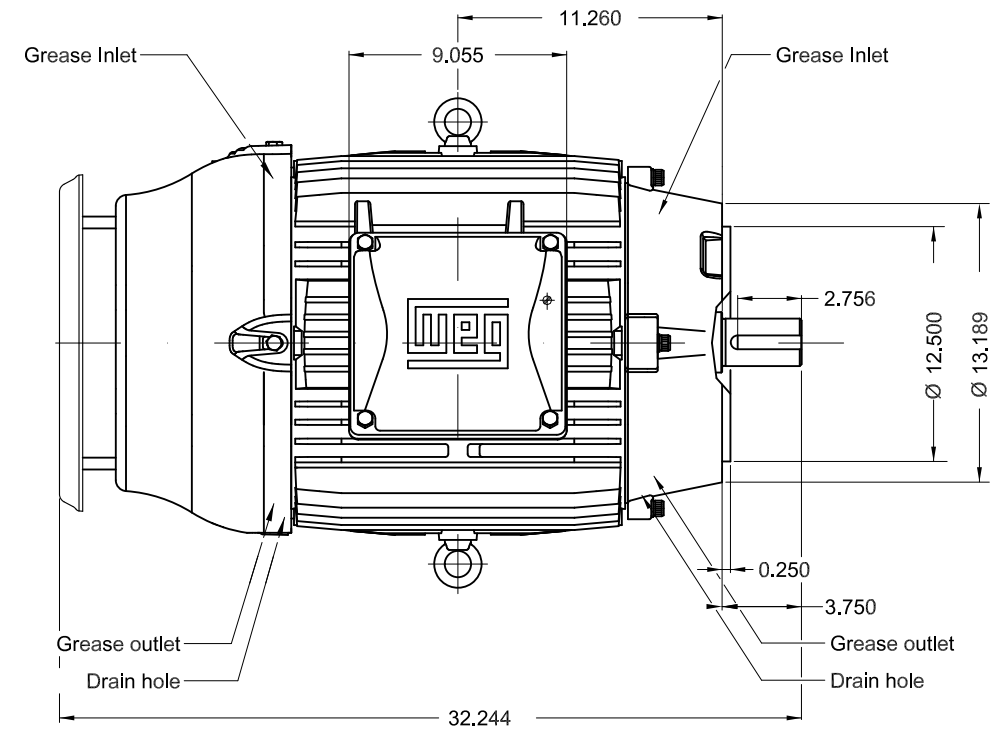
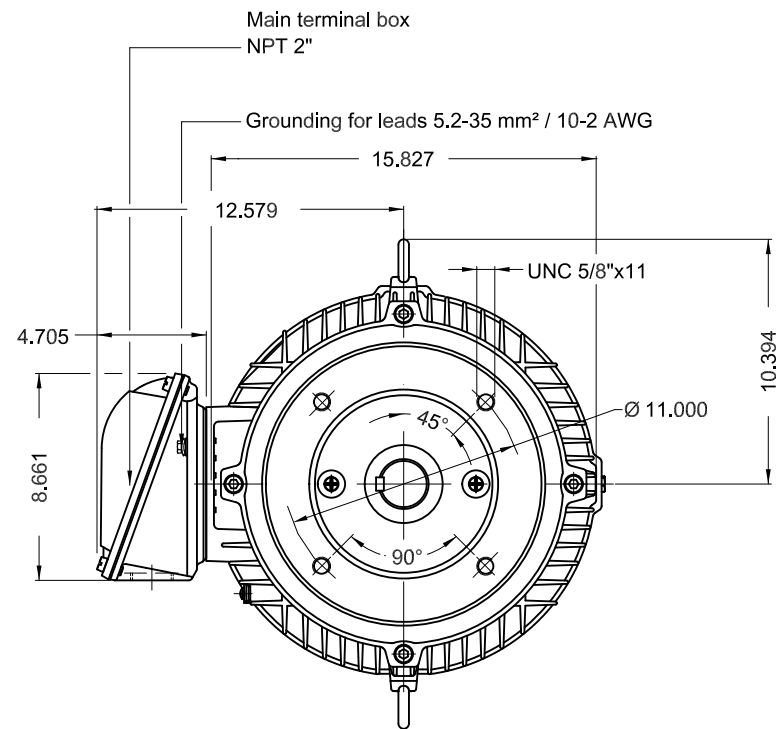


Performance : 415 V 50 Hz 6P IE2

Rated current : 40.7 A  
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 Rated torque : 161 ft.lb  
 Locked rotor torque : 200 %  
 Breakdown torque : 240 %  
 Rated speed : 980 rpm

Moment of inertia (J) : 13.2 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

| Rev.         | Changes Summary | Performed | Checked         | Date     |
|--------------|-----------------|-----------|-----------------|----------|
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| Checked by   |                 |           |                 |          |
| Date         | 14/04/2022      |           |                 |          |



30 HP 06 Poles 60 Hz A

| ECM      | LOC       | SUMMARY OF MODIFICATIONS                                 | EXECUTED | CHECKED | RELEASED | DATE | VER |
|----------|-----------|----------------------------------------------------------|----------|---------|----------|------|-----|
| EXECUTED | PIRWBUSER | THREE PH. MOTOR W22 PREM. EFF.<br>FRAME 326TSC IP55 TEFC |          |         |          |      |     |
| CHECKED  |           |                                                          |          |         |          |      |     |
| RELEASED |           |                                                          |          |         |          |      |     |
| REL DT.  |           |                                                          |          |         |          |      |     |

**PREVIEW**  
WDD



- Without vertical jackscrews
- TS shaft end
- Color RAL 5009
- Painting plan 203A
- Mounting NEMA W-6
- Mounting V18