# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 P Base NEMA Premium Efficiency Three-Phase

Product code : 13017464

| | | | |
|---|---|---|---|
| Frame | : 404/5HP | Cooling method | : IC411 - TEFC |
| Insulation class | : F | Mounting | : W-6 |
| Duty cycle | : Cont.(S1) | Rotation¹ | : Both (CW and CCW) |
| Ambient temperature | : -20°C to +40°C | Starting method | : Direct On Line |
| Altitude | : 1000 m.a.s.l. | Approx. weight³ | : 511 kg |
| Protection degree | : IP55 | Moment of inertia (J) | : 0.5561 kgm² |
| Design | : B | | |

| | | | | | |
|---|---|---|---|---|---|
| Output [HP] | | 100 | 75 | 75 | 75 |
| Poles | | 2 | 2 | 2 | 2 |
| Frequency [Hz] | | 60 | 50 | 50 | 50 |
| Rated voltage [V] | | 230/460 | 380 | 400 | 415 |
| Rated current [A] | | 224/112 | 99.6 | 94.6 | 92.2 |
| L. R. Amperes [A] | | 1456/728 | 677 | 719 | 756 |
| LRC [A] | | 6.5x(Code G) | 6.8x(Code G) | 7.6x(Code H) | 8.2x(Code J) |
| No load current [A] | | 52.0/26.0 | 25.7 | 27.5 | 29.1 |
| Rated speed [RPM] | | 3545 | 2955 | 2960 | 2965 |
| Slip [%] | | 1.53 | 1.50 | 1.33 | 1.17 |
| Rated torque [kgfm] | | 20.5 | 18.4 | 18.4 | 18.4 |
| Locked rotor torque [%] | | 240 | 250 | 280 | 300 |
| Breakdown torque [%] | | 260 | 280 | 310 | 330 |
| Service factor | | 1.25 | 1.00 | 1.00 | 1.00 |
| Temperature rise | | 80 K | 80 K | 80 K | 80 K |
| Locked rotor time | | 25s (cold) 14s (hot) | 18s (cold) 10s (hot) | 18s (cold) 10s (hot) | 18s (cold) 10s (hot) |
| Noise level² | | 79.0 dB(A) | 74.0 dB(A) | 74.0 dB(A) | 74.0 dB(A) |
| Efficiency (%) | 25% | | | | |
| | 50% | 93.0 | 93.0 | 93.1 | 93.5 |
| | 75% | 94.1 | 93.8 | 93.8 | 94.0 |
| | 100% | 94.1 | 94.3 | 94.3 | 94.3 |
| Power Factor | 25% | | | | |
| | 50% | 0.83 | 0.82 | 0.80 | 0.78 |
| | 75% | 0.88 | 0.88 | 0.86 | 0.85 |
| | 100% | 0.89 | 0.89 | 0.89 | 0.88 |

Losses at normative operating points (speed;torque), in percentage of rated output power

| | | | | | |
|---|---|---|---|---|---|
| Losses (%) | P1 (0,9;1,0) | 5.9 | 5.9 | 5.9 | 5.9 |
| | P2 (0,5;1,0) | 4.6 | 4.6 | 4.6 | 4.6 |
| | P3 (0,25;1,0) | 4.4 | 4.4 | 4.4 | 4.4 |
| | P4 (0,9;0,5) | 2.8 | 2.8 | 2.8 | 2.8 |
| | P5 (0,5;0,5) | 1.6 | 1.6 | 1.6 | 1.6 |
| | P6 (0,5;0,25) | 0.9 | 0.9 | 0.9 | 0.9 |
| | P7 (0,25;0,25) | 0.5 | 0.5 | 0.5 | 0.5 |

| | | Drive end | Non drive end |
|---|---|---|---|
| Bearing type | : | 6316 C3 | 6314 C3 |
| Sealing | : | Lip Seal | Lip Seal |
| Lubrication interval | : | 2000 h | 3000 h |
| Lubricant amount | : | 34 g | 27 g |
| Lubricant type | : | Isoflex NBU-15 | |

Foundation loads

Max. traction

Max. compression

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.

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 |
|---|---|---|---|---|
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| Checked by | | | Page | Revision |
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# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage

Customer :

Notes
USABLE @208V 243A SF 1.10 SFA 268A

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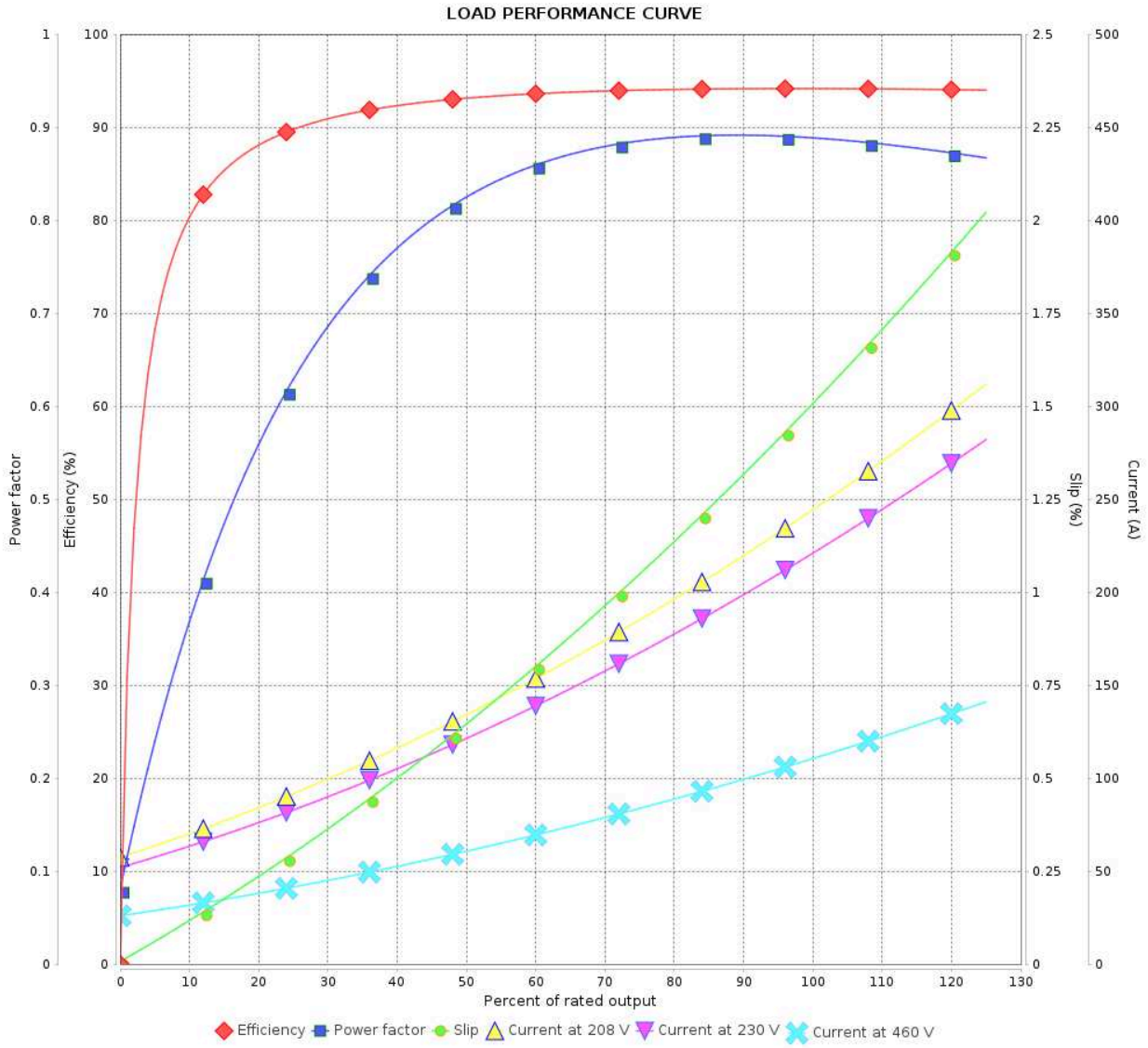
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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

| | |
|---|---|
| Customer | : |

| | | | |
|---|---|---|---|
| Product line | : W22 P Base NEMA Premium Efficiency Three-Phase | Product code : | 13017464 |




| | | | |
|---|---|---|---|
| Performance | : 230/460 V 60 Hz 2P | | |
| Rated current | : 224/112 A | Moment of inertia (J) | : 0.5561 kgm² |
| LRC | : 6.5 | Duty cycle | : Cont.(S1) |
| Rated torque | : 20.5 kgfm | Insulation class | : F |
| Locked rotor torque | : 240 % | Service factor | : 1.25 |
| Breakdown torque | : 260 % | Temperature rise | : 80 K |
| Rated speed | : 3545 rpm | Design | : B |

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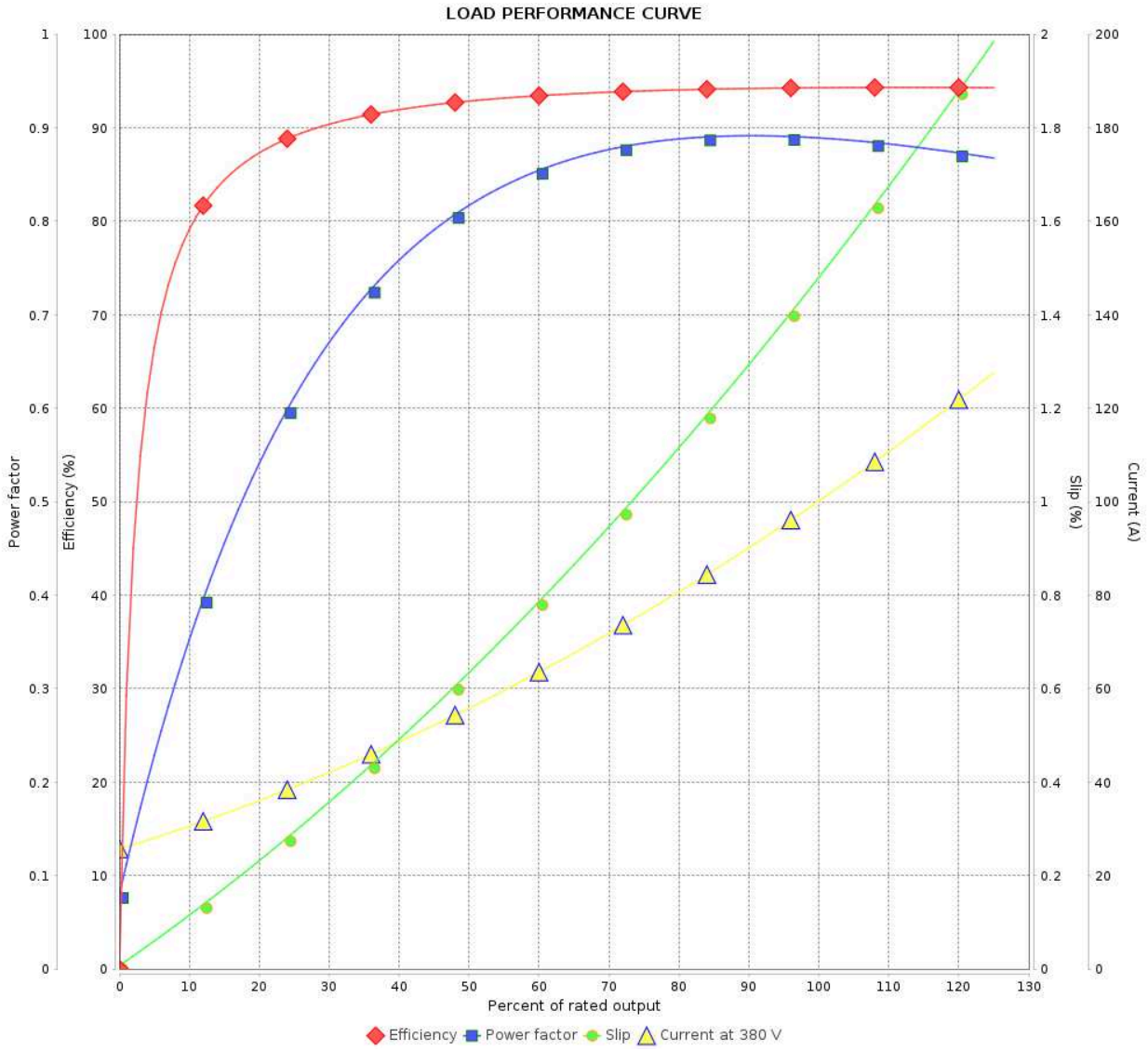
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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

| | | | |
|---|---|---|---|
| Customer | : | | |
| Product line | : W22 P Base NEMA Premium Efficiency Three-Phase | Product code : | 13017464 |




| | | | |
|---|---|---|---|
| Performance | : 380 V 50 Hz 2P IE3 | | |
| Rated current | : 99.6 A | Moment of inertia (J) | : 0.5561 kgm² |
| LRC | : 6.8 | Duty cycle | : Cont.(S1) |
| Rated torque | : 18.4 kgfm | Insulation class | : F |
| Locked rotor torque | : 250 % | Service factor | : 1.00 |
| Breakdown torque | : 280 % | Temperature rise | : 80 K |
| Rated speed | : 2955 rpm | Design | : B |

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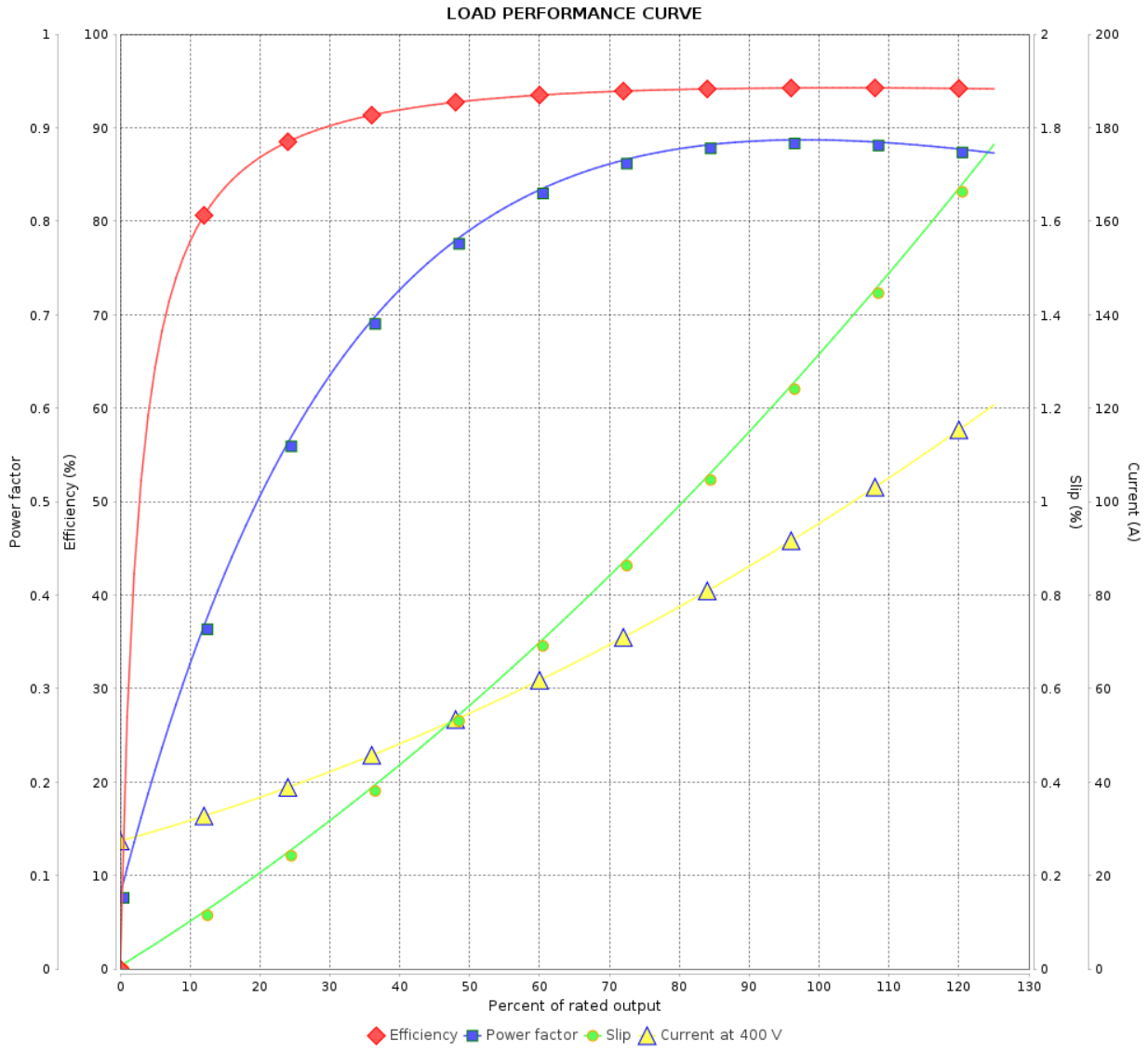
# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 P Base NEMA Premium Efficiency Three-Phase

Product code : 13017464




| | | | |
|---|---|---|---|
| Performance | : 400 V 50 Hz 2P IE3 | | |
| Rated current | : 94.6 A | Moment of inertia (J) | : 0.5561 kgm² |
| LRC | : 7.6 | Duty cycle | : Cont.(S1) |
| Rated torque | : 18.4 kgfm | Insulation class | : F |
| Locked rotor torque | : 280 % | Service factor | : 1.00 |
| Breakdown torque | : 310 % | Temperature rise | : 80 K |
| Rated speed | : 2960 rpm | Design | : B |

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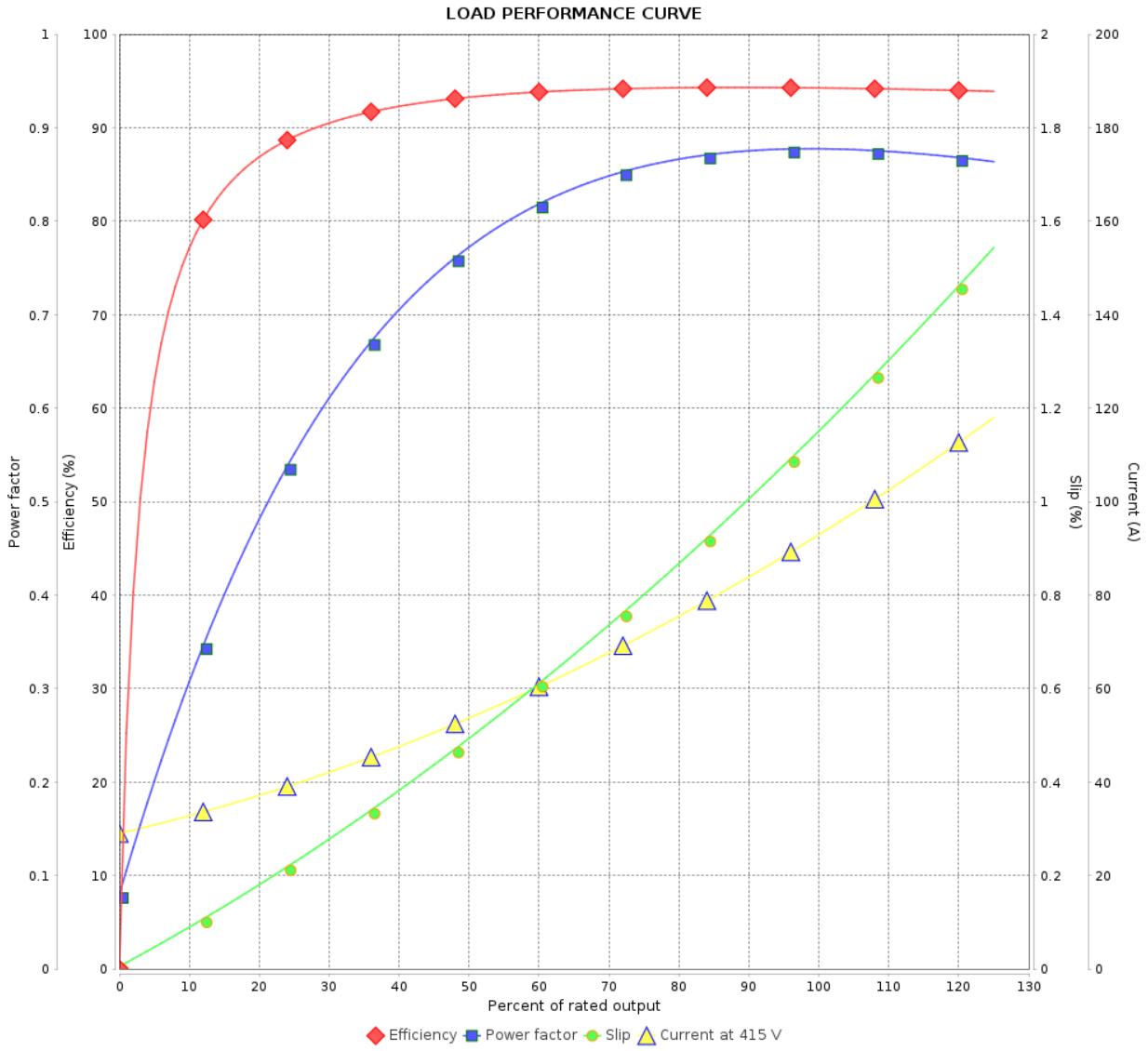
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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

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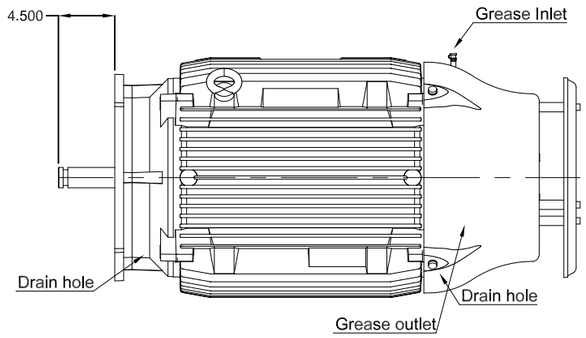


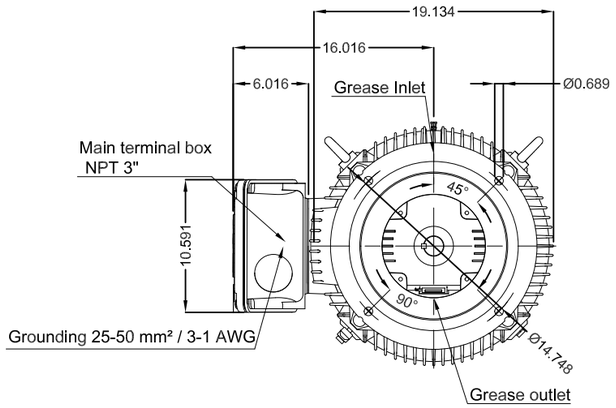

| | | | |
|---|---|---|---|
| Performance | : 415 V 50 Hz 2P IE3 | | |
| Rated current | : 92.2 A | Moment of inertia (J) | : 0.5561 kgm² |
| LRC | : 8.2 | Duty cycle | : Cont.(S1) |
| Rated torque | : 18.4 kgfm | Insulation class | : F |
| Locked rotor torque | : 300 % | Service factor | : 1.00 |
| Breakdown torque | : 330 % | Temperature rise | : 80 K |
| Rated speed | : 2965 rpm | Design | : B |

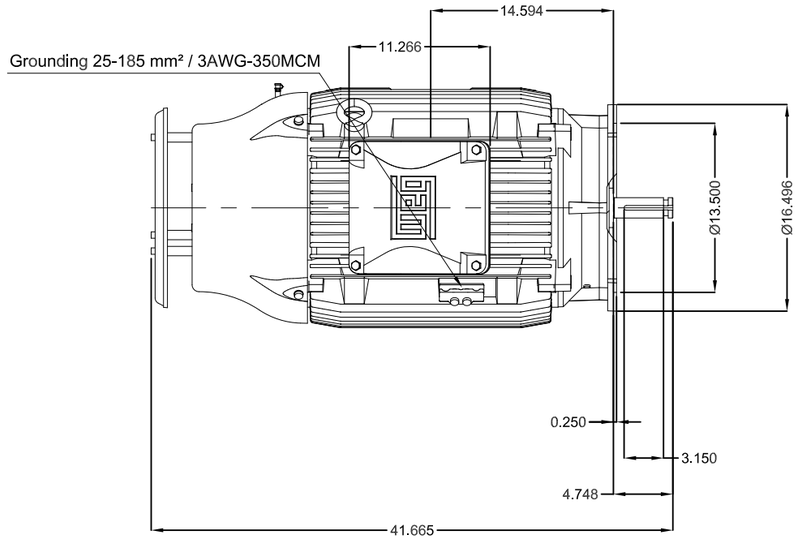
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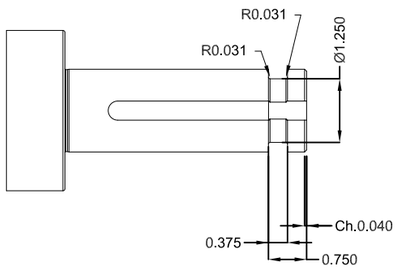
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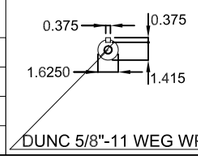



DE Shaft End




DUNC 5/8"-11 WEG WPR-7339

Color RAL 5009
Painting plan 203A
Mounting NEMA W-6
Mounting V1

100 HP 02 Poles 60 Hz | A

| ECM | LOC | SUMMARY OF MODIFICATIONS | EXECUTED | CHECKED | RELEASED | DATE | VER |
|---|---|---|---|---|---|---|---|
| | | | HYBRISUSER | | | | 00 |

| | |
|---|---|
| EXECUTED | HYBRISUSER |
| CHECKED | |
| RELEASED | |
| REL. DATE | |

THREE PH. MOTOR W22 P. BASE NEMA PREM. EFF.
FRAME 404/5HP IP55 TEFC

PREVIEW
WDD 00
SHEET /

Dimensions in inches

A3

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