

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



| | | | | | |
|---|--|--|---------------------------|----------------------|----------|
| Customer : | | | | | |
| Product line | | : W22 NEMA Premium Efficiency Three-Phase | Product code : | 11355724 | |
| Frame | : 364/5T | Cooling method | : IC411 - TEFC | | |
| Insulation class | : F | Mounting | : F-1 | | |
| Duty cycle | : Cont.(S1) | Rotation ¹ | : Both (CW and CCW) | | |
| Ambient temperature | : -20°C to +40°C | Starting method | : Direct On Line | | |
| Altitude | : 1000 m.a.s.l. | Approx. weight ³ | : 346 kg | | |
| Protection degree | : IP55 | Moment of inertia (J) | : 0.9884 kgm ² | | |
| Design | : B | | | | |
| Output [HP] | 30 | 30 | 30 | 30 | |
| Poles | 8 | 8 | 8 | 8 | |
| Frequency [Hz] | 60 | 50 | 50 | 50 | |
| Rated voltage [V] | 230/460 | 380 | 400 | 415 | |
| Rated current [A] | 76.2/38.1 | 45.5 | 43.3 | 42.2 | |
| L. R. Amperes [A] | 472/236 | 223 | 238 | 249 | |
| LRC [A] | 6.2x(Code G) | 4.9x(Code E) | 5.5x(Code F) | 5.9x(Code G) | |
| No load current [A] | 32.0/16.0 | 16.0 | 17.0 | 18.0 | |
| Rated speed [RPM] | 882 | 725 | 725 | 730 | |
| Slip [%] | 2.00 | 3.33 | 3.33 | 2.67 | |
| Rated torque [kgfm] | 24.7 | 30.0 | 30.0 | 29.8 | |
| Locked rotor torque [%] | 160 | 120 | 140 | 150 | |
| Breakdown torque [%] | 229 | 160 | 190 | 200 | |
| Service factor | 1.25 | 1.00 | 1.00 | 1.00 | |
| Temperature rise | 80 K | 105 K | 105 K | 105 K | |
| Locked rotor time | 45s (cold) 25s (hot) | 30s (cold) 17s (hot) | 34s (cold) 19s (hot) | 32s (cold) 18s (hot) | |
| Noise level ² | 60.0 dB(A) | 56.0 dB(A) | 56.0 dB(A) | 56.0 dB(A) | |
| Efficiency (%) | 25% | | | | |
| | 50% | 91.5 | 89.0 | 90.5 | |
| | 75% | 91.7 | 89.5 | 90.6 | |
| | 100% | 91.7 | 89.5 | 90.6 | |
| Power Factor | 25% | | | | |
| | 50% | 0.62 | 0.71 | 0.67 | |
| | 75% | 0.73 | 0.79 | 0.77 | |
| | 100% | 0.79 | 0.82 | 0.81 | |
| Losses at normative operating points (speed;torque), in percentage of rated output power | | | | | |
| Losses (%) | P1 (0,9;1,0) | 8.9 | 8.9 | 8.9 | 8.9 |
| | P2 (0,5;1,0) | 7.7 | 7.7 | 7.7 | 7.7 |
| | P3 (0,25;1,0) | 7.2 | 7.2 | 7.2 | 7.2 |
| | P4 (0,9;0,5) | 3.9 | 3.9 | 3.9 | 3.9 |
| | P5 (0,5;0,5) | 2.8 | 2.8 | 2.8 | 2.8 |
| | P6 (0,5;0,25) | 1.7 | 1.7 | 1.7 | 1.7 |
| | P7 (0,25;0,25) | 1.3 | 1.3 | 1.3 | 1.3 |
| Bearing type | : Drive end : 6314 C3 Non drive end : 6314 C3 | Foundation loads | | | |
| Sealing | : WSeal WSeal | Max. traction | : 497 kgf | | |
| Lubrication interval | : 20000 h 20000 h | Max. compression | : 843 kgf | | |
| Lubricant amount | : 27 g 27 g | | | | |
| Lubricant type | : Mobil Polyrex EM | | | | |
| 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 |
| Performed by | | | | | |
| Checked by | | | | Page | Revision |
| Date | 21/10/2024 | | | 1 / 6 | |

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Three Phase Induction Motor - Squirrel Cage



Customer : _____

Notes
USABLE @208V 81.8A SF 1.10 SFA 90.0A

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|--------------|-----------------|-----------|---------|----------|
| Performed by | | | | |
| Checked by | | | Page | Revision |
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LOAD PERFORMANCE CURVE

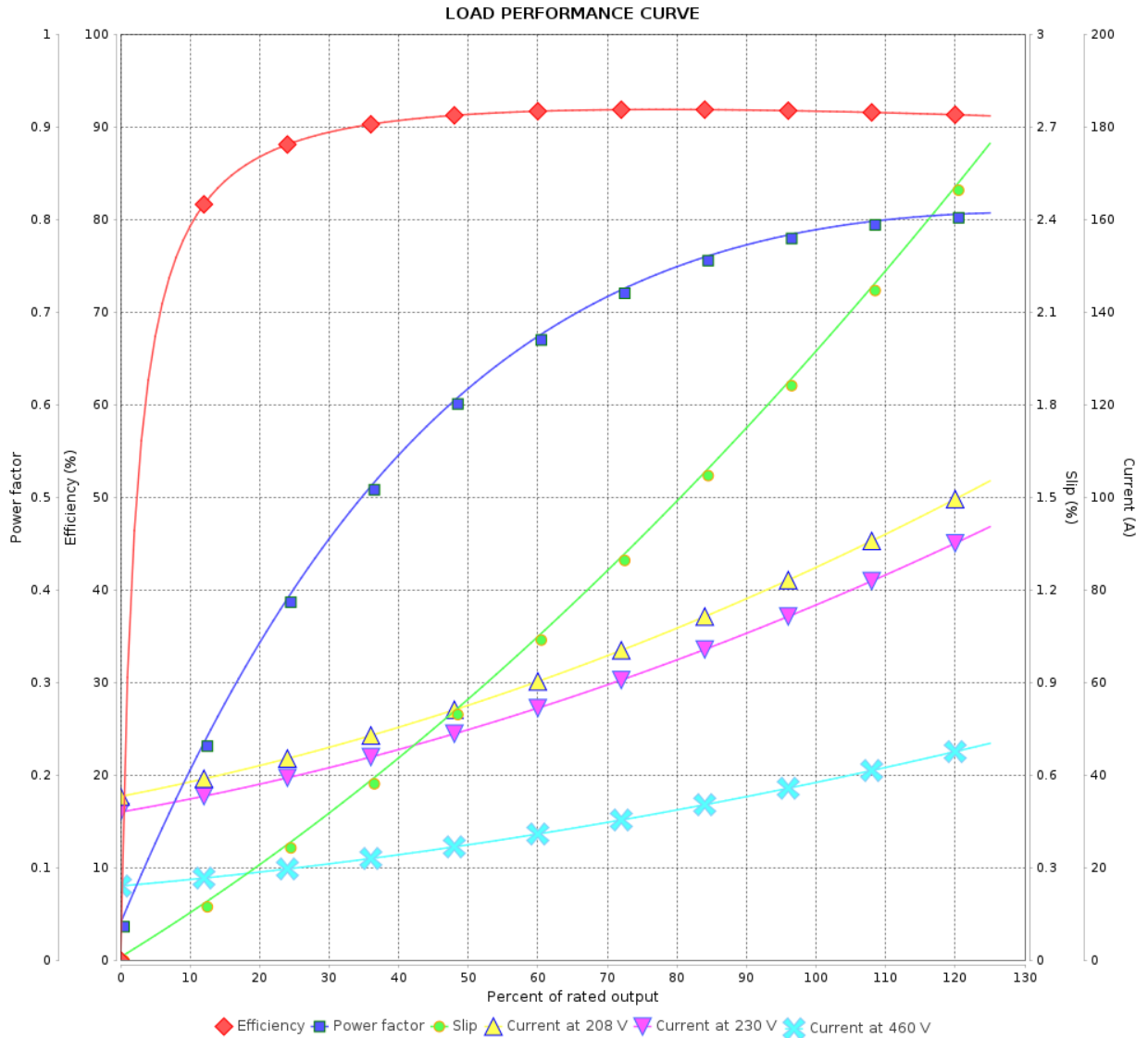
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11355724



Performance : 230/460 V 60 Hz 8P

Rated current : 76.2/38.1 A
 LRC : 6.2
 Rated torque : 24.7 kgfm
 Locked rotor torque : 160 %
 Breakdown torque : 229 %
 Rated speed : 882 rpm

Moment of inertia (J) : 0.9884 kgm²
 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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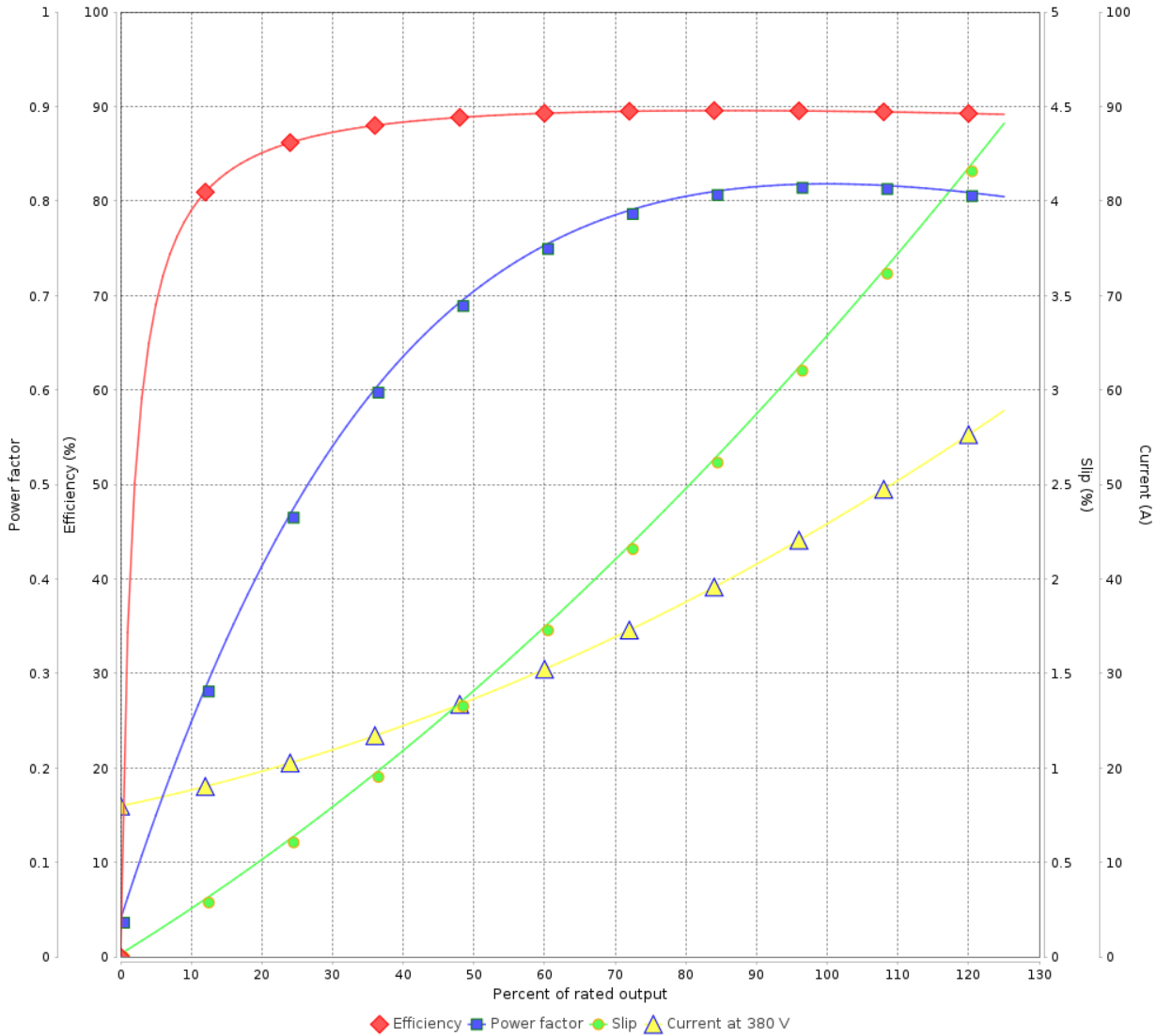
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11355724

LOAD PERFORMANCE CURVE



Performance : 380 V 50 Hz 8P IE2

| | | | |
|---------------------|-------------|-----------------------|---------------------------|
| Rated current | : 45.5 A | Moment of inertia (J) | : 0.9884 kgm ² |
| LRC | : 4.9 | Duty cycle | : Cont.(S1) |
| Rated torque | : 30.0 kgfm | Insulation class | : F |
| Locked rotor torque | : 120 % | Service factor | : 1.00 |
| Breakdown torque | : 160 % | Temperature rise | : 105 K |
| Rated speed | : 725 rpm | Design | : B |

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| Date | 21/10/2024 | | | |

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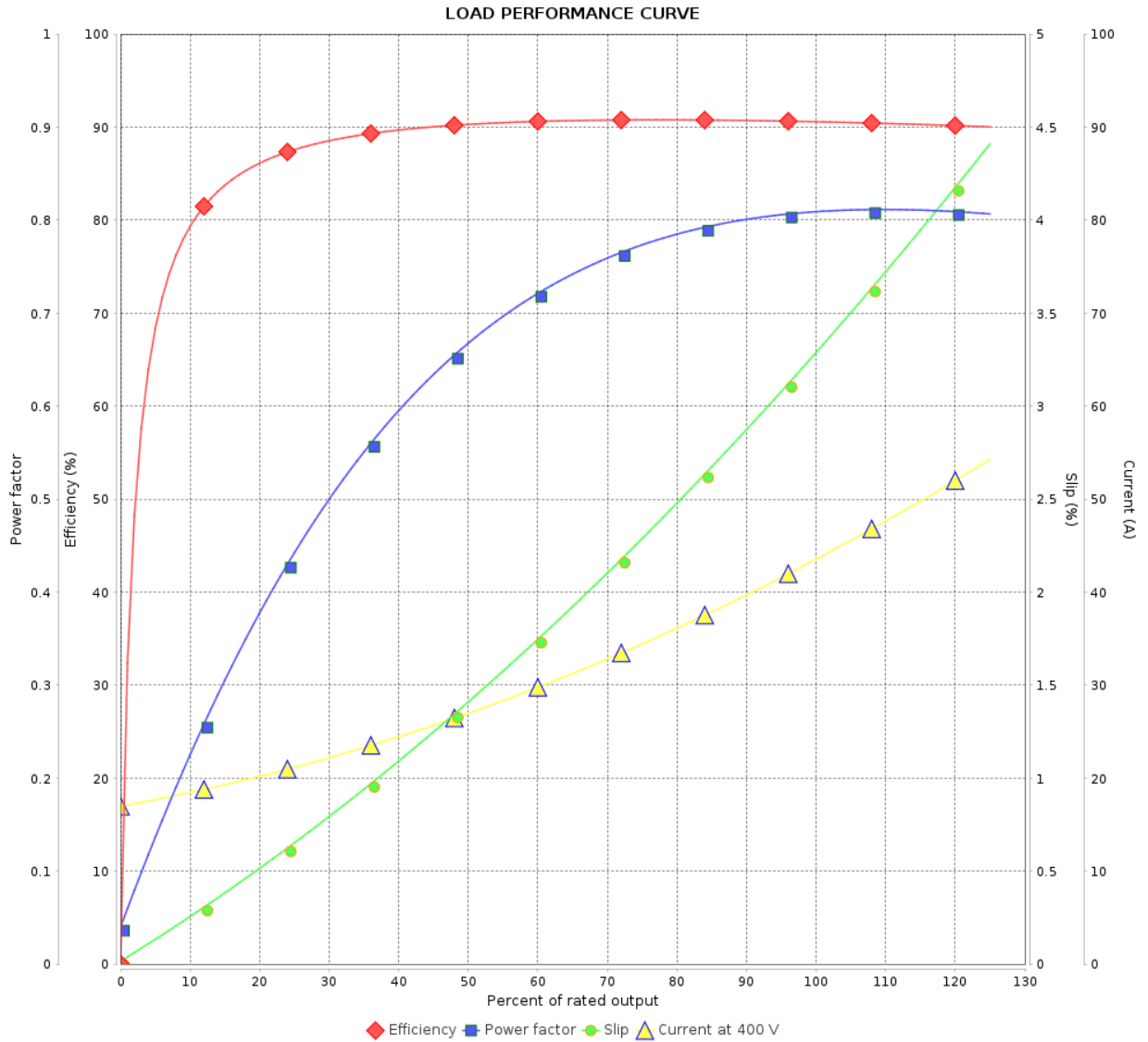
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11355724



Performance : 400 V 50 Hz 8P IE3

Rated current : 43.3 A
 LRC : 5.5
 Rated torque : 30.0 kgfm
 Locked rotor torque : 140 %
 Breakdown torque : 190 %
 Rated speed : 725 rpm

Moment of inertia (J) : 0.9884 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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

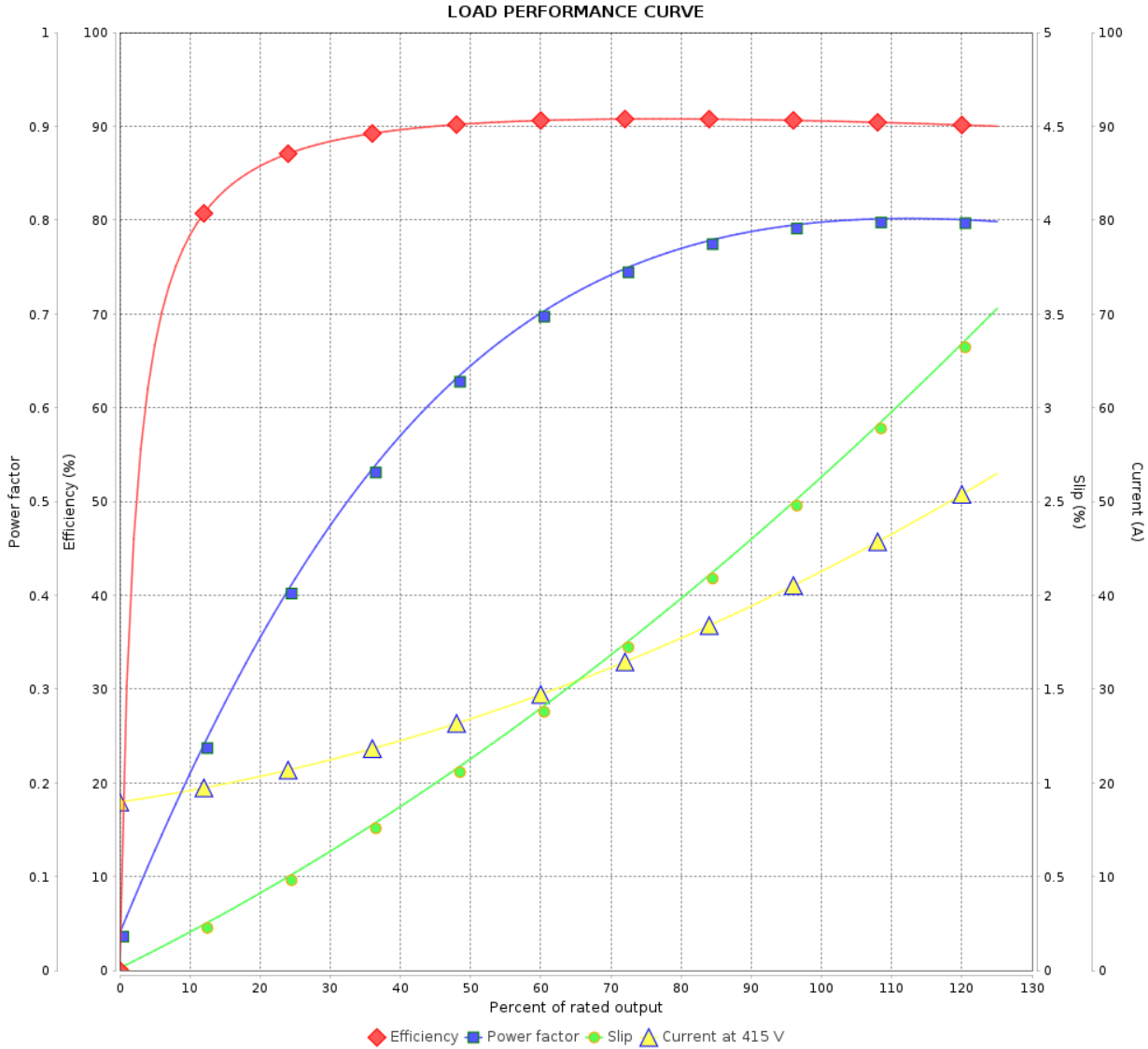
LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

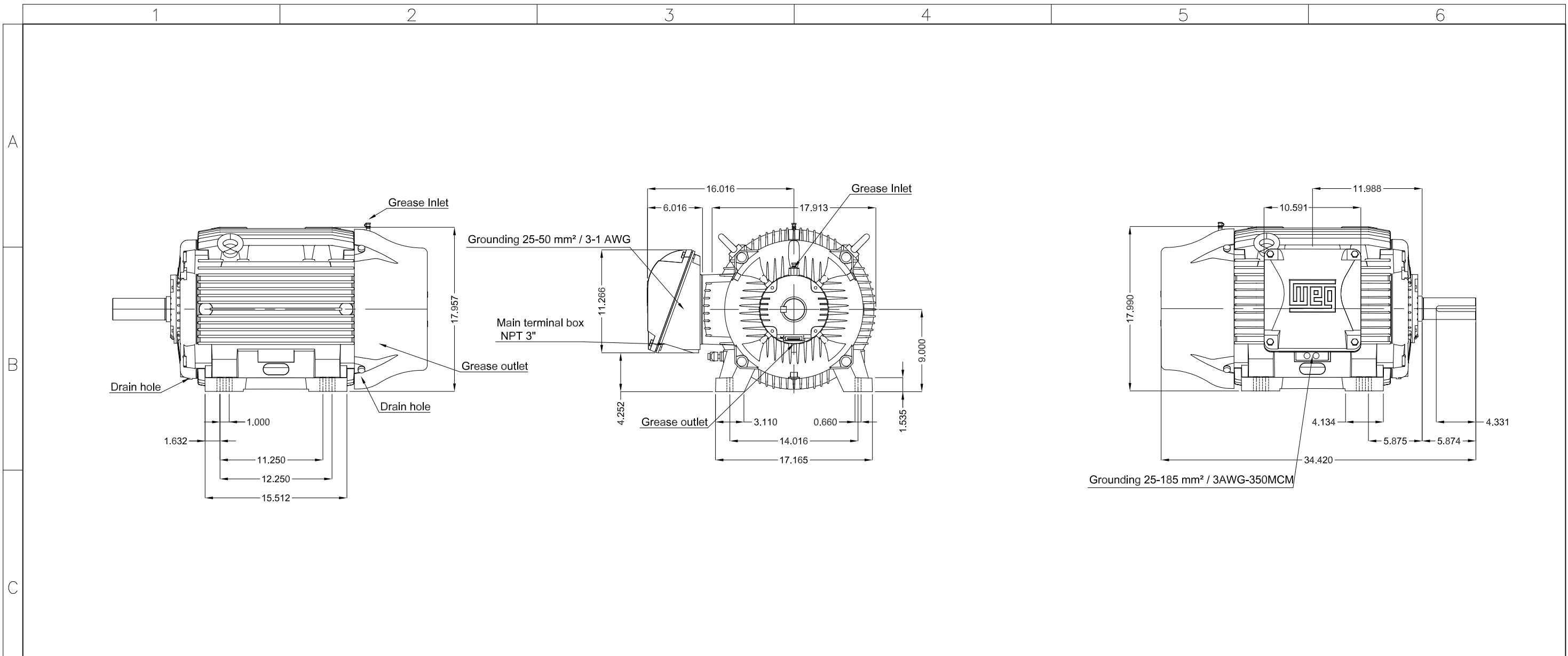
Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11355724



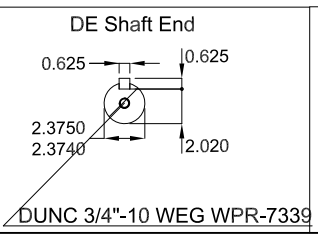
Performance : 415 V 50 Hz 8P IE3

| | | | |
|---------------------|-------------|-----------------------|---------------------------|
| Rated current | : 42.2 A | Moment of inertia (J) | : 0.9884 kgm ² |
| LRC | : 5.9 | Duty cycle | : Cont.(S1) |
| Rated torque | : 29.8 kgfm | Insulation class | : F |
| Locked rotor torque | : 150 % | Service factor | : 1.00 |
| Breakdown torque | : 200 % | Temperature rise | : 105 K |
| Rated speed | : 730 rpm | Design | : B |

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|---------------|----------|
| | | | | |
| Performed by | | | Page 6 / 6 | Revision |
| Checked by | | | | |
| Date | 21/10/2024 | | | |



Color RAL 5009
 Painting plan 203A
 Mounting B3R(D)



| | | | | | | | | | | | |
|----------------------|------------|-------------------------------------|--|--|--|--|----------|---------|----------|------|-----|
| 30 HP 08 Poles 60 Hz | | | | | | | | | | A | |
| HYBRISUSER | | | | | | | | | | 00 | |
| ECM | LOC | SUMMARY OF MODIFICATIONS | | | | | EXECUTED | CHECKED | RELEASED | DATE | VER |
| EXECUTED | HYBRISUSER | THREE PH. MOTOR W22 NEMA PREM. EFF. | | | | | PREVIEW | | | | |
| CHECKED | | FRAME 364/5T IP55 TEFC | | | | | WDD 00 | | | | |
| RELEASED | | | | | | | SHEET / | | | | |
| REL. DATE | | | | | | | | | | | |

