

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11408296
Catalog # : 35012ET3G449T-W22

| | | | |
|-----------------------|-------------------|-----------------------------|------------------------|
| Frame | : L447/9T | Locked rotor time | : 41s (cold) 23s (hot) |
| Output | : 350 HP (260 kW) | Temperature rise | : 80 K |
| Poles | : 6 | Duty cycle | : Cont.(S1) |
| Frequency | : 60 Hz | Ambient temperature | : -20°C to +40°C |
| Rated voltage | : 460 V | Altitude | : 1000 m.a.s.l. |
| Rated current | : 415 A | Protection degree | : IP55 |
| L. R. Amperes | : 2864 A | Cooling method | : IC411 - TEFC |
| LRC | : 6.9x(Code H) | Mounting | : F-1 |
| No load current | : 160 A | Rotation ¹ | : Both (CW and CCW) |
| Rated speed | : 1190 rpm | Noise level ² | : 71.0 dB(A) |
| Slip | : 0.83 % | Starting method | : Direct On Line |
| Rated torque | : 1520 ft.lb | Approx. weight ³ | : 3582 lb |
| Locked rotor torque | : 250 % | | |
| Breakdown torque | : 270 % | | |
| Insulation class | : F | | |
| Service factor | : 1.15 | | |
| Moment of inertia (J) | : 278 sq.ft.lb | | |
| Design | : A | | |

| | | | | | | |
|----------------|------|------|------|------|------------------|------------|
| Output | 25% | 50% | 75% | 100% | Foundation loads | |
| Efficiency (%) | 95.3 | 95.4 | 95.8 | 95.8 | Max. traction | : 10936 lb |
| Power Factor | 0.42 | 0.66 | 0.77 | 0.82 | Max. compression | : 14518 lb |

| | | Drive end | Non drive end |
|----------------------|---|------------------|---------------|
| Bearing type | : | 6322 C3 | 6319 C3 |
| Sealing | : | WSeal | WSeal |
| Lubrication interval | : | 11000 h | 13000 h |
| Lubricant amount | : | 60 g | 45 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 | | Page Revision 1 / 4 | | |
| Checked by | | | | |
| Date | 27/04/2018 | | | |

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line

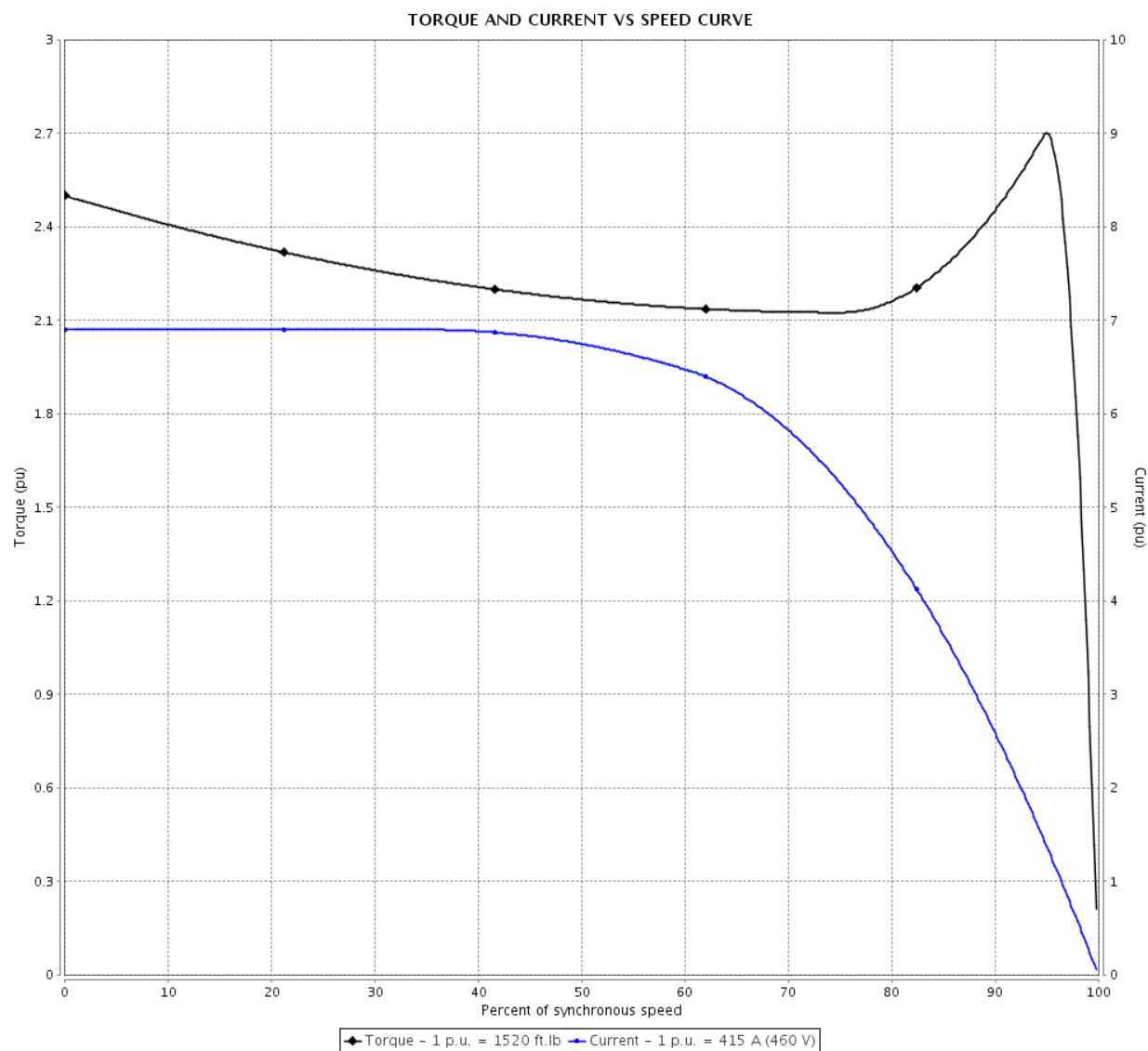
: W22 NEMA Premium Efficiency
Three-Phase

Product code :

11408296

Catalog # :

35012ET3G449T-W22



Performance : 460 V 60 Hz 6P

| | | | |
|---------------------|--------------|-----------------------|----------------|
| Rated current | : 415 A | Moment of inertia (J) | : 278 sq.ft.lb |
| LRC | : 6.9 | Duty cycle | : Cont.(S1) |
| Rated torque | : 1520 ft.lb | Insulation class | : F |
| Locked rotor torque | : 250 % | Service factor | : 1.15 |
| Breakdown torque | : 270 % | Temperature rise | : 80 K |
| Rated speed | : 1190 rpm | Design | : A |

Locked rotor time : 41s (cold) 23s (hot)

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|---|---------|------|
| | | | | |
| Performed by | | <div>Page 2 / 4</div> <div>Revision</div> | | |
| Checked by | | | | |
| Date | 27/04/2018 | | | |

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

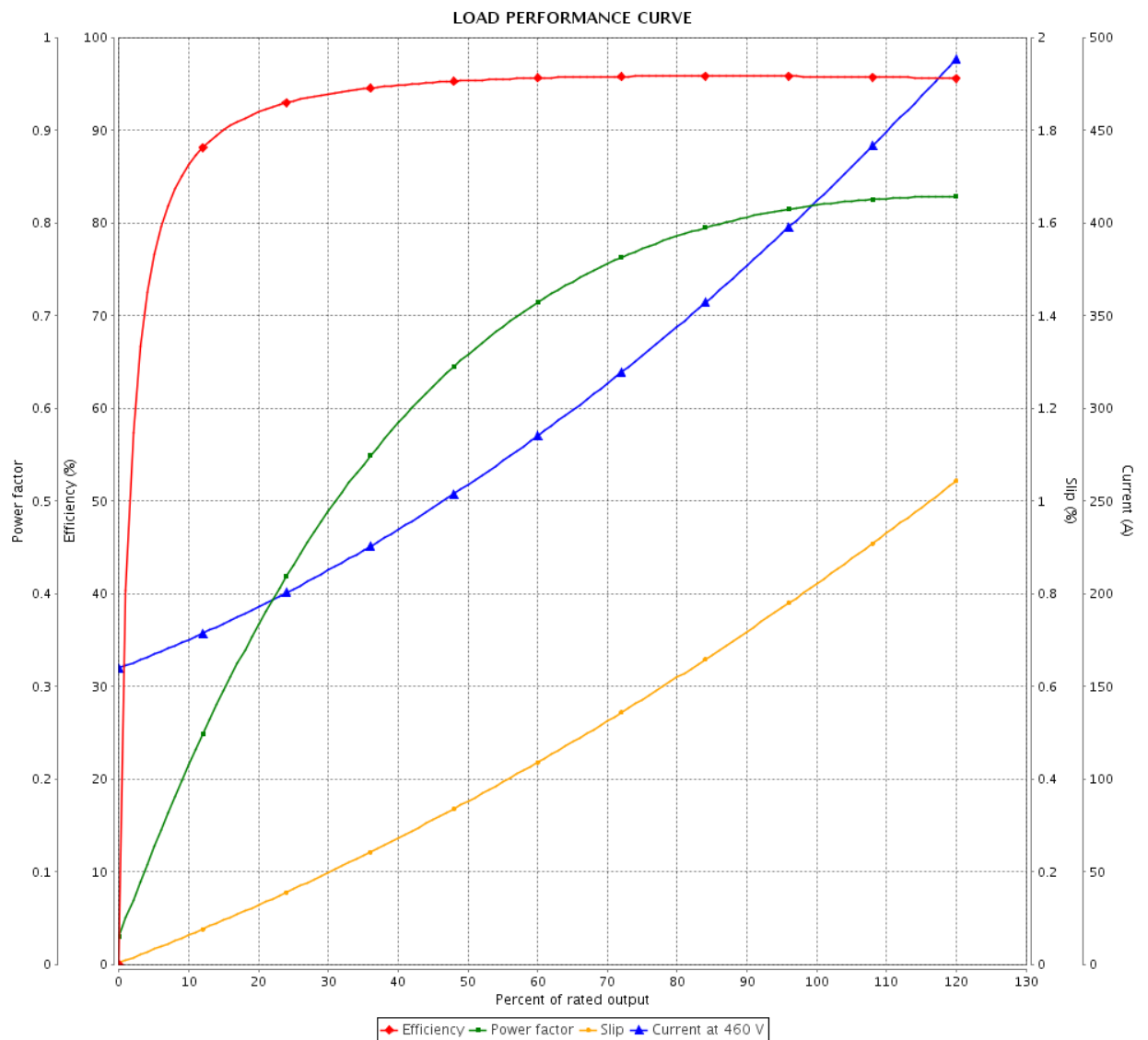


Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11408296

Catalog # : 35012ET3G449T-W22



Performance : 460 V 60 Hz 6P

Rated current : 415 A
LRC : 6.9
Rated torque : 1520 ft.lb
Locked rotor torque : 250 %
Breakdown torque : 270 %
Rated speed : 1190 rpm

Moment of inertia (J) : 278 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : A

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

Three Phase Induction Motor - Squirrel Cage

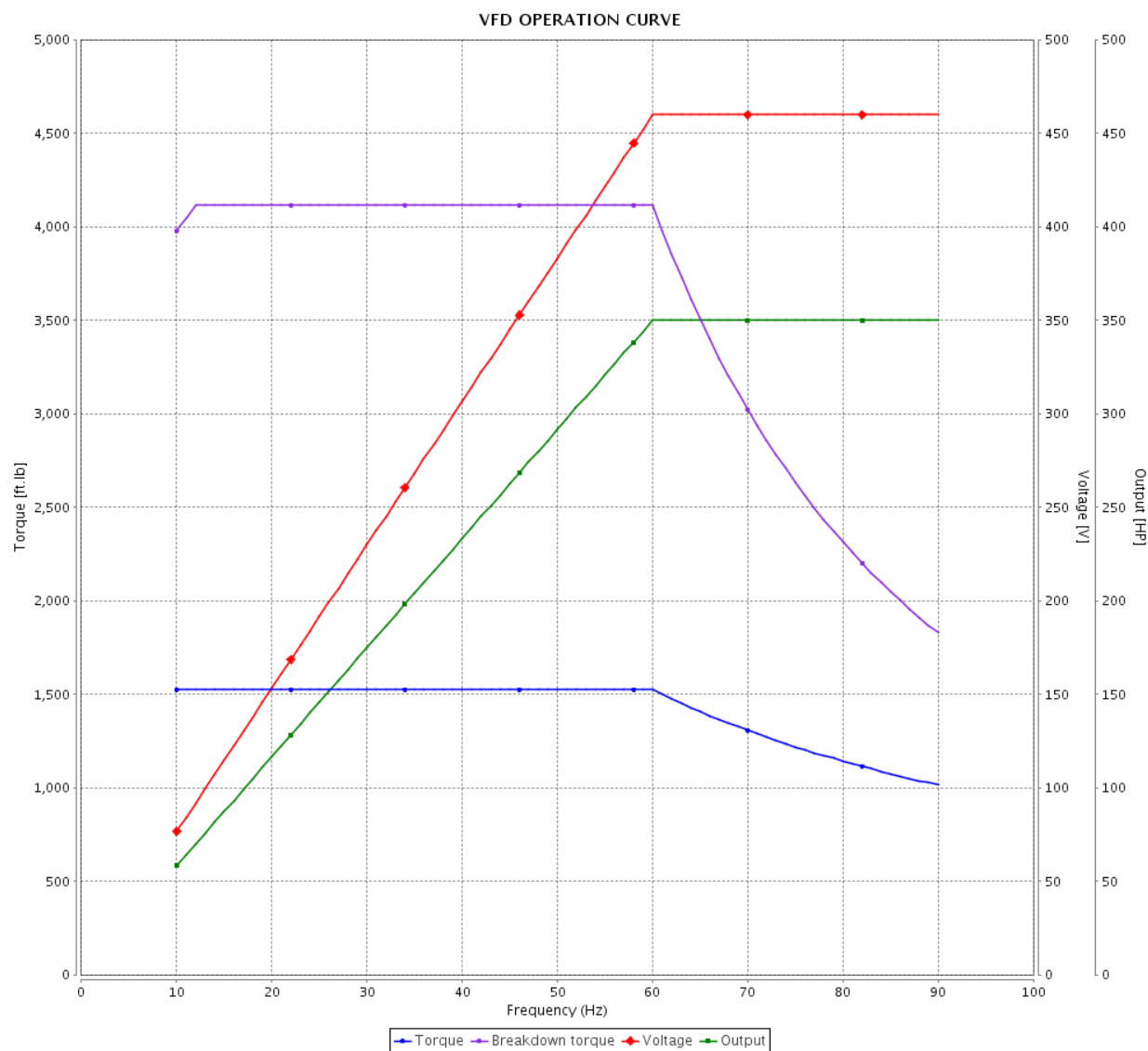


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Product line : W22 NEMA Premium Efficiency
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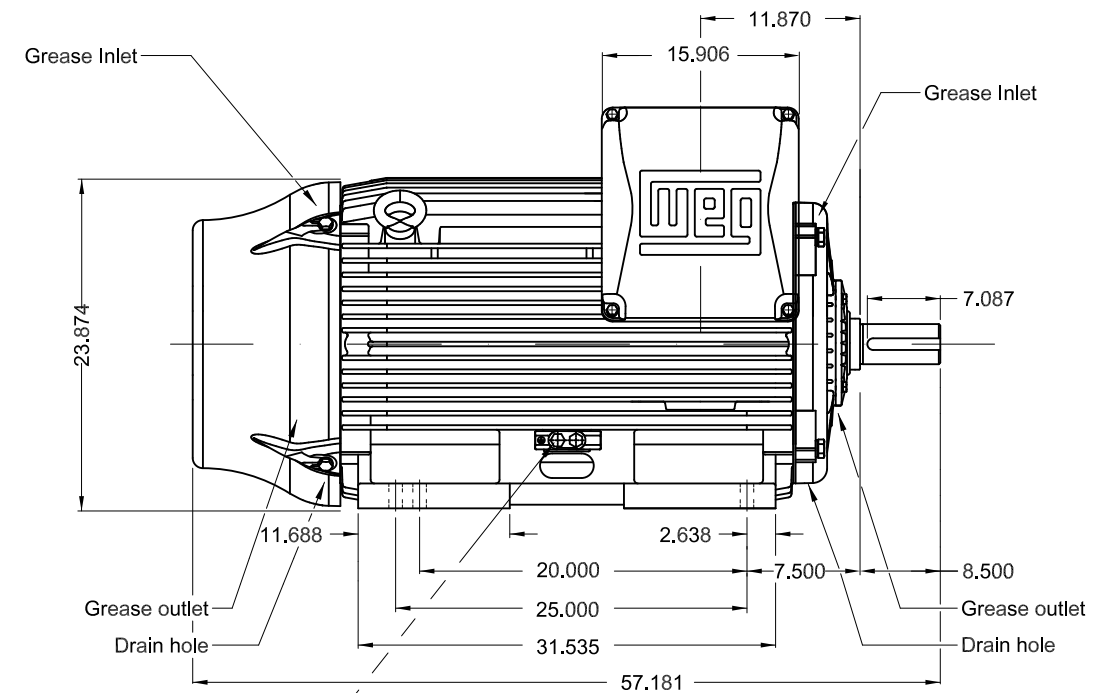


Performance : 460 V 60 Hz 6P

Rated current : 415 A
LRC : 6.9
Rated torque : 1520 ft.lb
Locked rotor torque : 250 %
Breakdown torque : 270 %
Rated speed : 1190 rpm

Moment of inertia (J) : 278 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : A

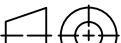

| Rev. | Changes Summary | | Performed | Checked | Date |
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| Date | | | | | |



350 HP 06 Poles 60Hz

Dimensions in inches

XME A3

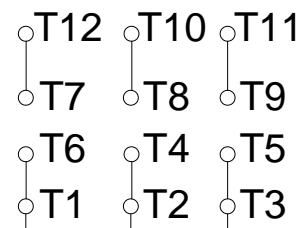
| | | | | | | | | | |
|----------|-----------|---|---|--|----------|---------------------|----------|---|-------|
| | | | | | | | | | |
| ECM | LOC | SUMMARY OF MODIFICATIONS | | | EXECUTED | CHECKED | RELEASED | DATE | VER |
| EXECUTED | USERADMIN |  | THREE PHASE W22 MOTOR - NEMA PREMIUM EFF FRAME L447/9T IP55 TEFC | | | PREVIEW WDD | |  | |
| CHECKED | | | | | | | | | |
| RELEASED | | | | | | | | | |
| REL DT | | WMO | Jaragua do Sul | | | Product Engineering | SHEET | | 1 / 1 |

1 2 3 4 5 6 7 8

A

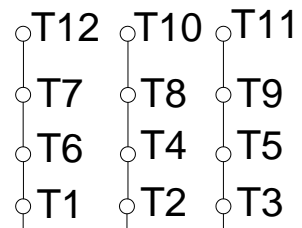
PART-WINDING

START



L1 L2 L3

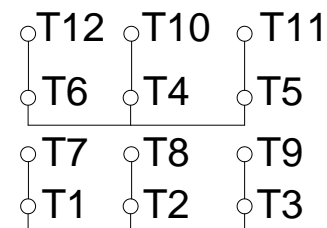
RUN



L1 L2 L3

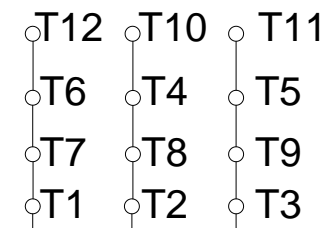
WYE-DELTA

START



L1 L2 L3

RUN



L1 L2 L3

B

C

D

E

F

Notes:

Performed by:

Checked:

Customer:

W22 NEMA Premium - Ball Bearings

Three-phase induction motor
Frame 447/9T - IP55

28-MAR-2018

