

MODELS: GB-425051-R00-D, GB-425051-R10-D

- NOTES:
1. COUPLING GUARD NOT SHOWN IN TOP VIEW.
 2. ALL DIMENSIONS ARE FOR REFERENCE ONLY.

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11549071
Catalog # : 20012ET3G447T-W22

| | | | |
|-----------------------|-------------------|-----------------------------|------------------------|
| Frame | : 445/7T | Locked rotor time | : 27s (cold) 15s (hot) |
| Output | : 200 HP (150 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 | : 237 A | Protection degree | : IP55 |
| L. R. Amperes | : 1492 A | Cooling method | : IC411 - TEFC |
| LRC | : 6.3x(Code G) | Mounting | : F-1 |
| No load current | : 94.0 A | Rotation ¹ | : Both (CW and CCW) |
| Rated speed | : 1188 rpm | Noise level ² | : 69.0 dB(A) |
| Slip | : 1.00 % | Starting method | : Direct On Line |
| Rated torque | : 884 ft.lb | Approx. weight ³ | : 2493 lb |
| Locked rotor torque | : 229 % | | |
| Breakdown torque | : 240 % | | |
| Insulation class | : F | | |
| Service factor | : 1.15 | | |
| Moment of inertia (J) | : 145 sq.ft.lb | | |
| Design | : B | | |

| | | | | | | |
|----------------|------|------|------|------|------------------|-----------|
| Output | 25% | 50% | 75% | 100% | Foundation loads | |
| Efficiency (%) | 94.5 | 95.0 | 95.4 | 95.8 | Max. traction | : 5325 lb |
| Power Factor | 0.43 | 0.68 | 0.79 | 0.83 | Max. compression | : 7817 lb |

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

| P1 (0,9;1,0) | P2 (0,5;1,0) | P3 (0,25;1,0) | P4 (0,9;0,5) | P5 (0,5;0,5) | P6 (0,5;0,25) | P7 (0,25;0,25) |
|--------------|--------------|---------------|--------------|--------------|---------------|----------------|
| 4.7 | 4.0 | 3.6 | 2.4 | 1.7 | 1.2 | 0.8 |

| | Drive end | Non drive end |
|----------------------|--------------------|---------------|
| Bearing type | : 6319 C3 | : 6316 C3 |
| Sealing | : WSeal | : WSeal |
| Lubrication interval | : 13000 h | : 16000 h |
| Lubricant amount | : 45 g | : 34 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 | | | | |
| Date | 27/09/2024 | | | |

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Revision

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

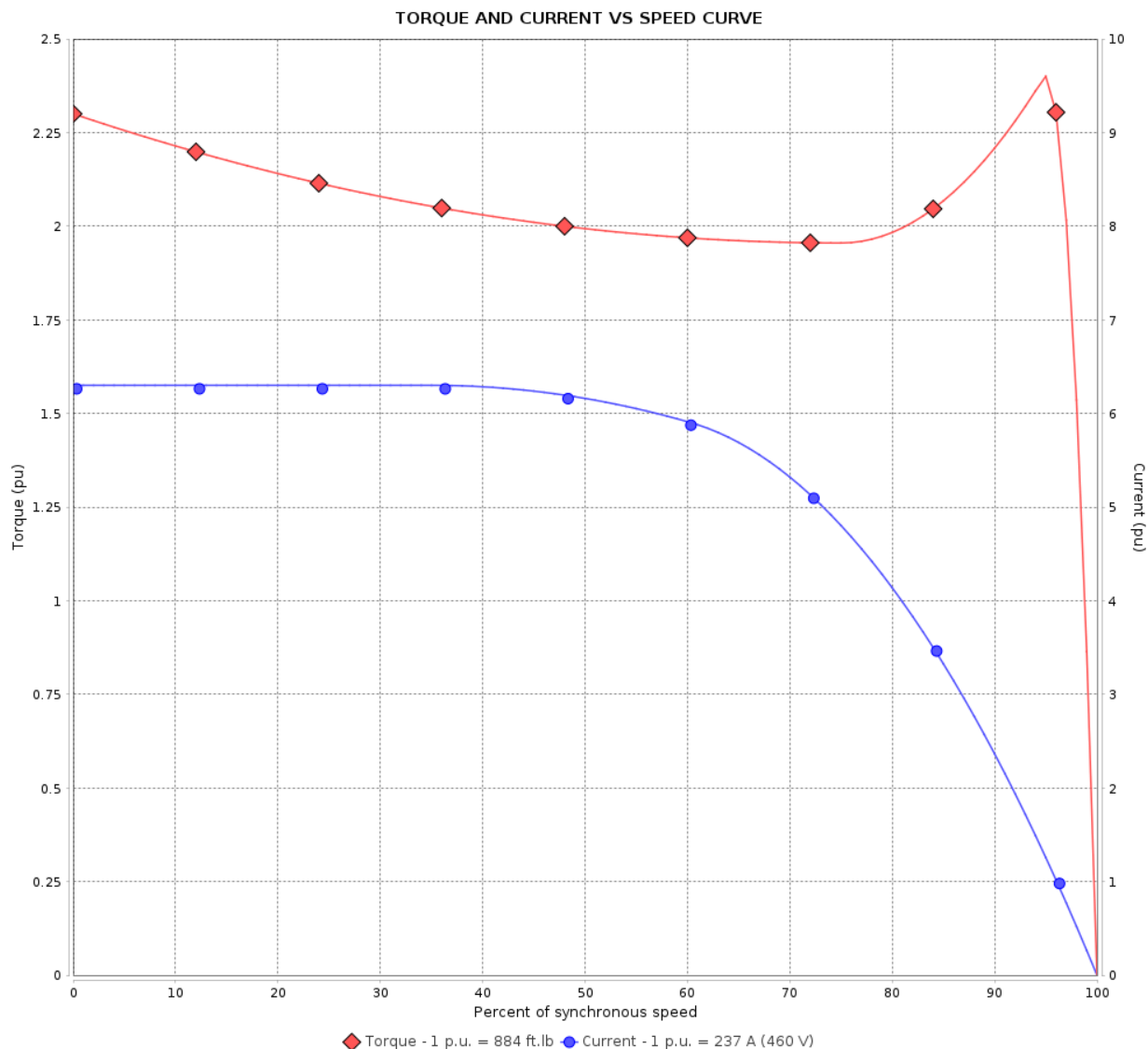


Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11549071

Catalog # : 20012ET3G447T-W22



Performance : 460 V 60 Hz 6P

| | | | |
|---------------------|-------------|-----------------------|----------------|
| Rated current | : 237 A | Moment of inertia (J) | : 145 sq.ft.lb |
| LRC | : 6.3 | Duty cycle | : Cont.(S1) |
| Rated torque | : 884 ft.lb | Insulation class | : F |
| Locked rotor torque | : 229 % | Service factor | : 1.15 |
| Breakdown torque | : 240 % | Temperature rise | : 80 K |
| Rated speed | : 1188 rpm | Design | : B |

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

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|---------------------|---------|------|
| | | | | |
| Performed by | | Page 2 / 6 Revision | | |
| Checked by | | | | |
| Date | 27/09/2024 | | | |

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

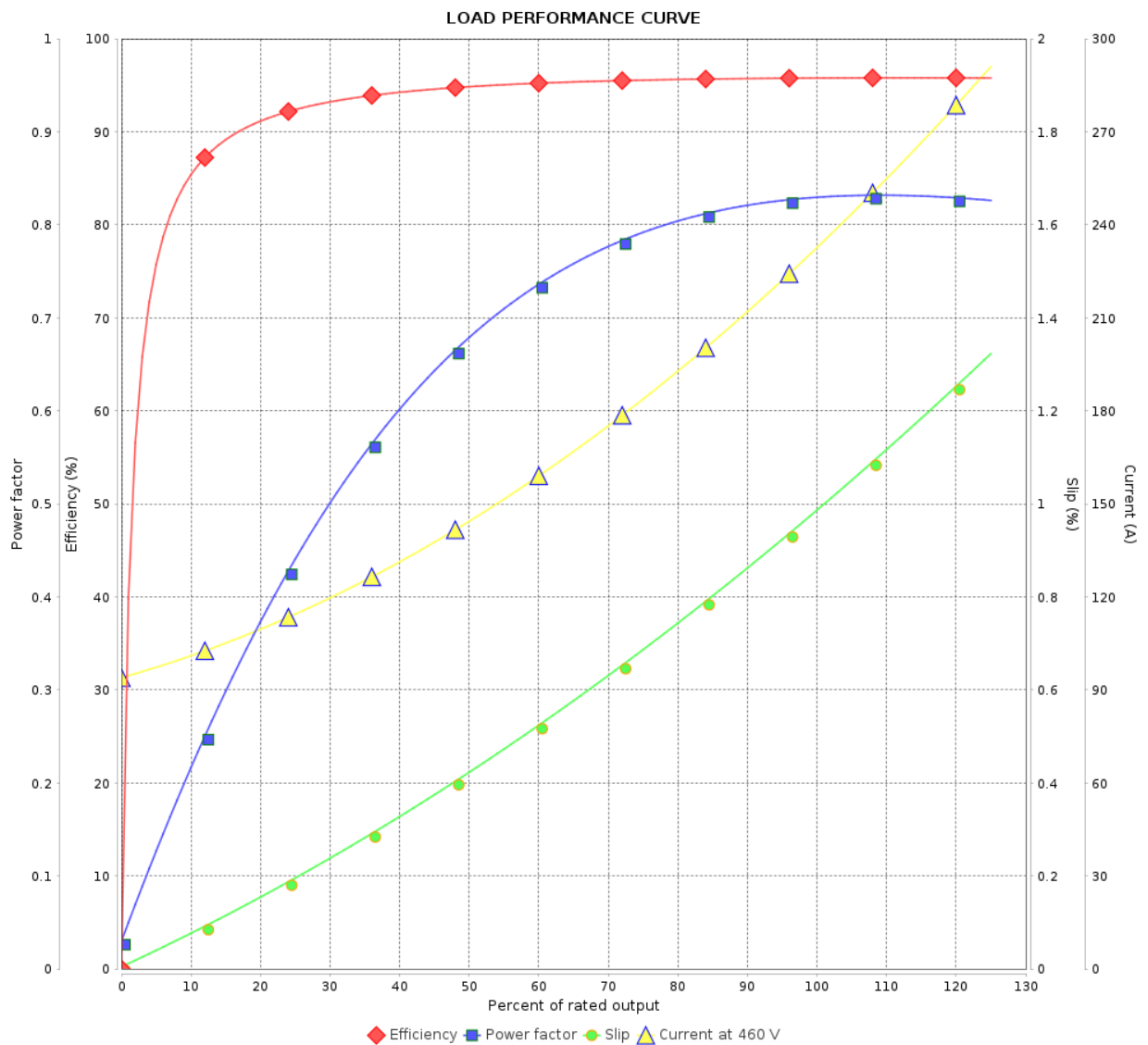


Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11549071

Catalog # : 20012ET3G447T-W22



Performance : 460 V 60 Hz 6P

Rated current : 237 A
LRC : 6.3
Rated torque : 884 ft.lb
Locked rotor torque : 229 %
Breakdown torque : 240 %
Rated speed : 1188 rpm

Moment of inertia (J) : 145 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 |
|--------------|-----------------|-----------------------|---------|------|
| | | | | |
| Performed by | | Page 3 / 6Revision | | |
| Checked by | | | | |
| Date | 27/09/2024 | | | |

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



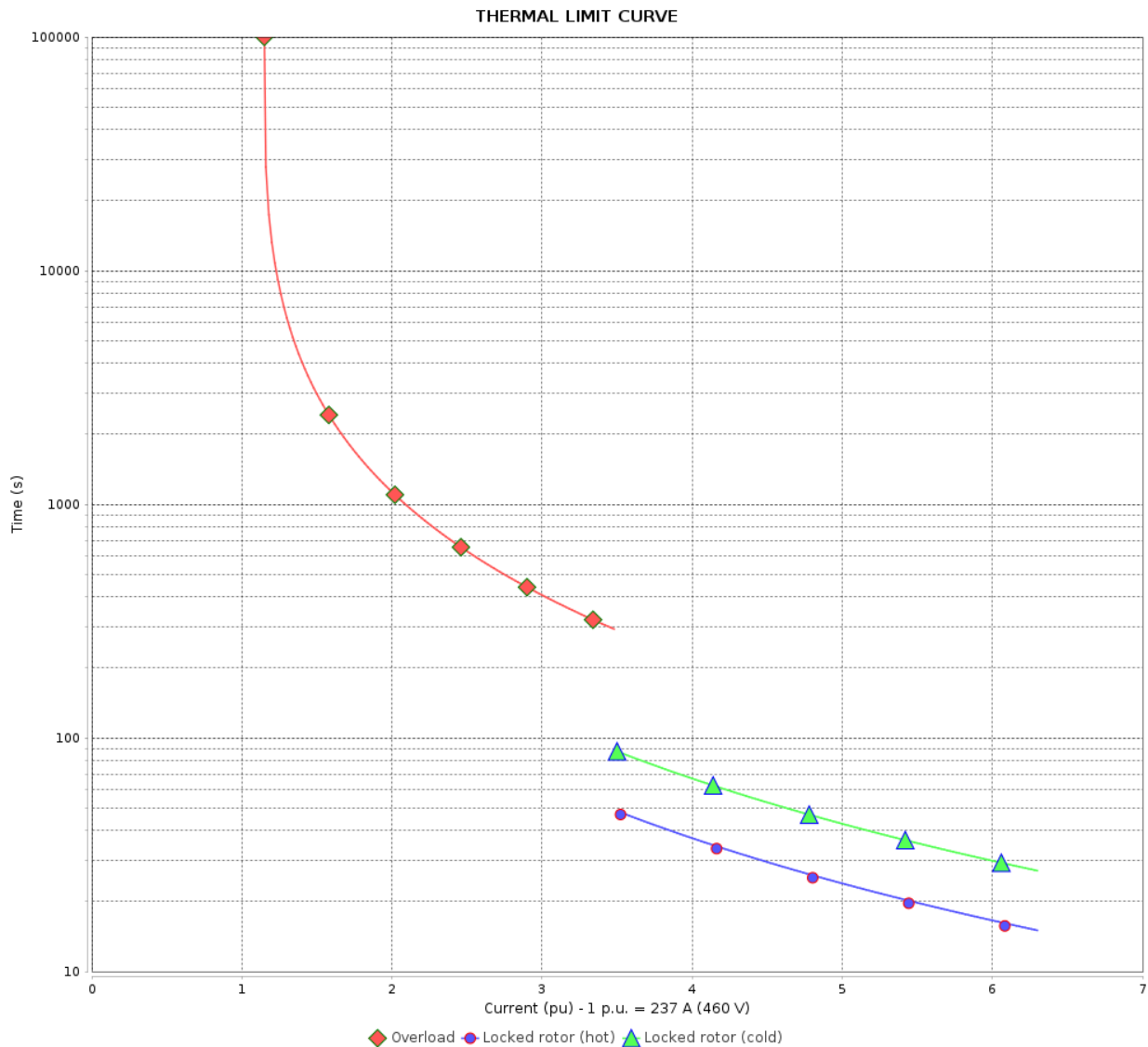
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|---|-----------------|--|-----------|------------------------|------|
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| LRC : 6.3 | | Duty cycle : Cont.(S1) | | | |
| Rated torque : 884 ft.lb | | Insulation class : F | | | |
| Locked rotor torque : 229 % | | Service factor : 1.15 | | | |
| Breakdown torque : 240 % | | Temperature rise : 80 K | | | |
| Rated speed : 1188 rpm | | Design : B | | | |
| Heating constant | | | | | |
| Cooling constant | | | | | |
| Rev. | Changes Summary | | Performed | Checked | Date |
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| Performed by | | | | Page Revision 4 / 6 | |
| Checked by | | | | | |
| Date | 27/09/2024 | | | | |

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :



| 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

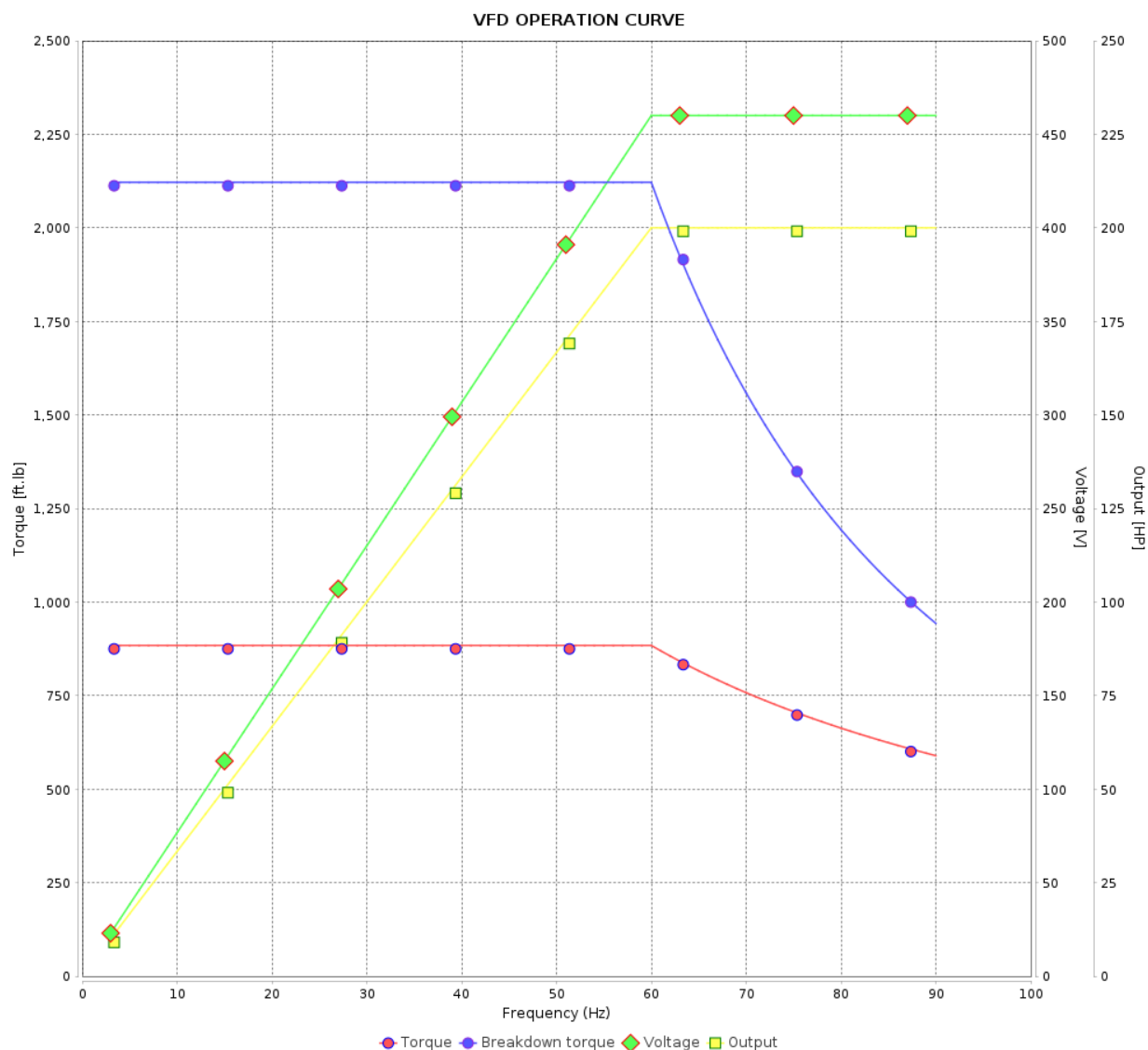


Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11549071

Catalog # : 20012ET3G447T-W22



Performance : 460 V 60 Hz 6P

Rated current : 237 A
LRC : 6.3
Rated torque : 884 ft.lb
Locked rotor torque : 229 %
Breakdown torque : 240 %
Rated speed : 1188 rpm

Moment of inertia (J) : 145 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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| Date | | | | |
| | 27/09/2024 | | | Revision |

MADE IN MEXICO

11549071


NEMA
Premium
W22

MODEL 20012ET3G447T-W22

 Inverter Duty Motor
 Severe Duty

PH3 60Hz Fr. 445/7T 1000m.a.s.l. IP55 TEFC 2453lb

V 460

A 237

HP 200

kW 150

SF 1.15

SFA 273

RPM 1185

PF 0.83

AMB 40°C

INS cl. F DT80K NEMA NOM EFF 95.8%

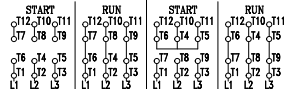
DUTY CONT.

DES B Code G


 FOR SAFE AREA
 Mod. TE1BFOXON
 CC029A

 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 - T3C
 For use on PWM: Gr. A, B, C, D and F,
 VT 1000:1, CT 20:1, 1.00SF - T3

PART-WINDING



→ 6319-C3 (45g)

→ 6316-C3 (34g)



MOBIL POLYREX EM (13000h)

