#### **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



Customer : Automation Direct

Product line : Premium Efficiency Three-Phase Product code : 14786559

Catalog #: 00118ET3E56CFL-S

Frame : 56C Locked rotor time : 34s (cold) 19s (hot)

Output : 1 HP (0.75 kW) Temperature rise : 80 K

Poles : 4 Duty cycle : Cont.(S1)
Frequency : 60 Hz Ambient temperature : -20°C to +40°C
Rated voltage : 230/460 V Altitude : 1000 m.a.s.l.

Rated current : 2.94/1.47 A Protection degree : IP55

 L. R. Amperes
 : 25.3/12.6 A
 Cooling method
 : IC411 - TEFC

 LRC
 : 8.6x(Code M)
 Mounting
 : F-1

No load current : 1.78/0.890 A Rotation¹ : Both (CW and CCW)
Rated speed : 1765 rpm Noise level² : 52.0 dB(A)

Slip : 1.94 % Starting method : Direct On Line

Rated torque : 2.98 ft.lb Approx. weight³ : 36.5 lb

Locked rotor torque : 280 %

Breakdown torque : 300 %
Insulation class : F

Service factor : 1.15

Moment of inertia (J) : 0.1232 sq.ft.lb

Design : B

 Output
 25%
 50%
 75%
 100%
 Foundation loads

 Efficiency (%)
 81.0
 82.5
 84.0
 85.5
 Max. traction
 : 98 lb

Power Factor 0.30 0.52 0.66 0.75 Max. traction : 98 ib

Drive end<br/>Bearing typeNon drive end<br/>6204 ZZSealing:6204 ZZV'RingWithout Bearing Seal

Lubrication interval : - -

Lubricant amount : - -

Lubricant type : Mobil Polyrex EM

Notes

USABLE @208V 3.25A SF 1.00 SFA 3.25A

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 |            |                 |           |         |          |
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| Date         | 22/08/2022 |                 |           | 1/5     |          |

### TORQUE AND CURRENT VS SPEED CURVE

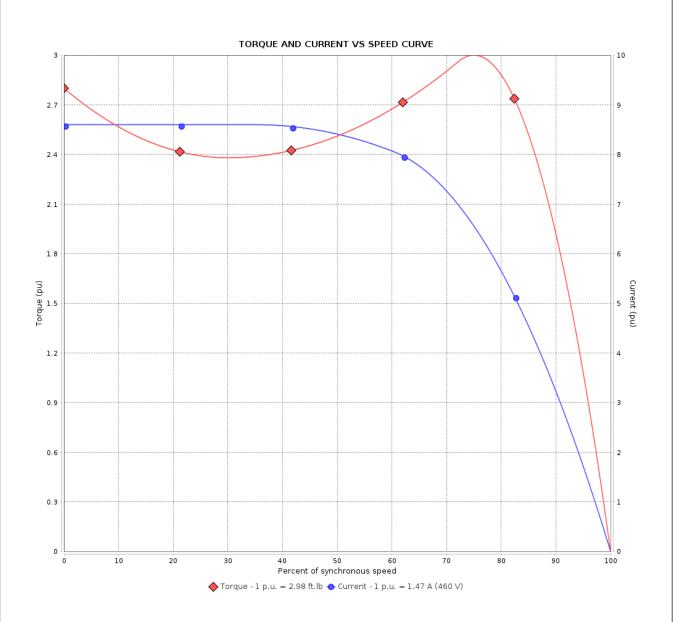
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| Performance :   | : 230/460 V 60 Hz 4P   |  |   |
|---|--|--|---|
| LRC : Rated torque : Locked rotor torque : Breakdown torque : | : 2.94/1.47 A<br>: 8.6<br>: 2.98 ft.lb<br>: 280 %<br>: 300 %<br>: 1765 rpm | Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design | : 0.1232 sq.ft.lb<br>: Cont.(S1)<br>: F<br>:<br>: 80 K<br>: B |

Locked rotor time : 34s (cold) 19s (hot)

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

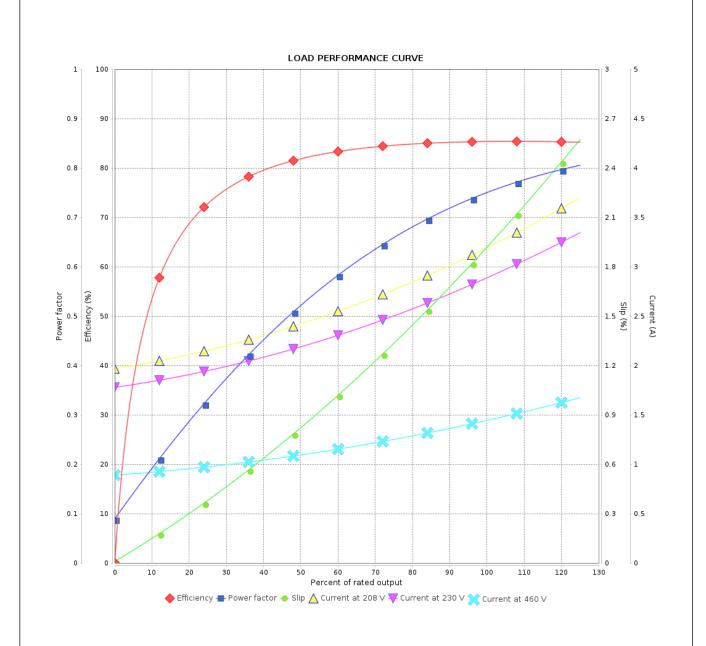
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Customer : Automation Direct

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Catalog #: 00118ET3E56CFL-S



| Performance  | : 230/460 V 60 Hz 4P   |   |  |         |   |  |
|--|--|---|--|---------|---|--|
| Rated current<br>LRC<br>Rated torque<br>Locked rotor torque<br>Breakdown torque<br>Rated speed | : 2.94/1.47 A<br>: 8.6<br>: 2.98 ft.lb<br>: 280 %<br>: 300 %<br>: 1765 rpm | Duty cycle<br>Insulation cla<br>Service facto | Insulation class Service factor Temperature rise |         | : 0.1232 sq.ft.lb<br>: Cont.(S1)<br>: F<br>:<br>: 80 K<br>: B |  |
| Rev.   | Changes Summary  |   | Performed  | Checked | Date  |  |
| Performed by   |  |   |  |         |   |  |
| Checked by   |  |   |  | Page    | Revision  |  |

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22/08/2022

Date

# THERMAL LIMIT CURVE

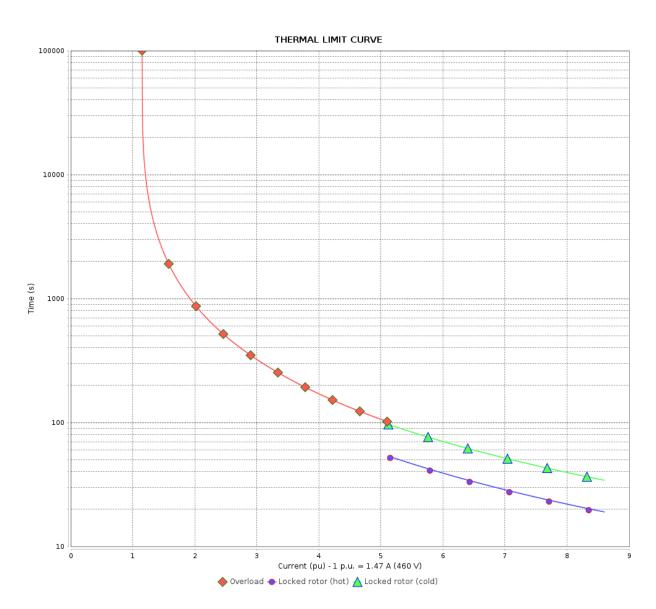
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Customer : Automation Direct

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Catalog #: 00118ET3E56CFL-S



| Performance         | : 230/460 V 60 Hz 4P |                       |                   |
|---------------------|----------------------|-----------------------|-------------------|
| Rated current       | : 2.94/1.47 A        | Moment of inertia (J) | : 0.1232 sq.ft.lb |
| LRC                 | : 8.6                | Duty cycle            | : Cont.(S1)       |
| Rated torque        | : 2.98 ft.lb         | Insulation class      | : F               |
| Locked rotor torque | : 280 %              | Service factor        | :                 |
| Breakdown torque    | : 300 %              | Temperature rise      | : 80 K            |
| Rated speed         | : 1765 rpm           | Design                | : B               |
| Heating constant    |                      |                       |                   |
| Cooling constant    |                      |                       |                   |

| Cooling Constant | •          |                 |           |         |          |
|------------------|------------|-----------------|-----------|---------|----------|
| Rev.             |            | Changes Summary | Performed | Checked | Date     |
|                  |            |                 |           |         |          |
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# VFD OPERATION CURVE

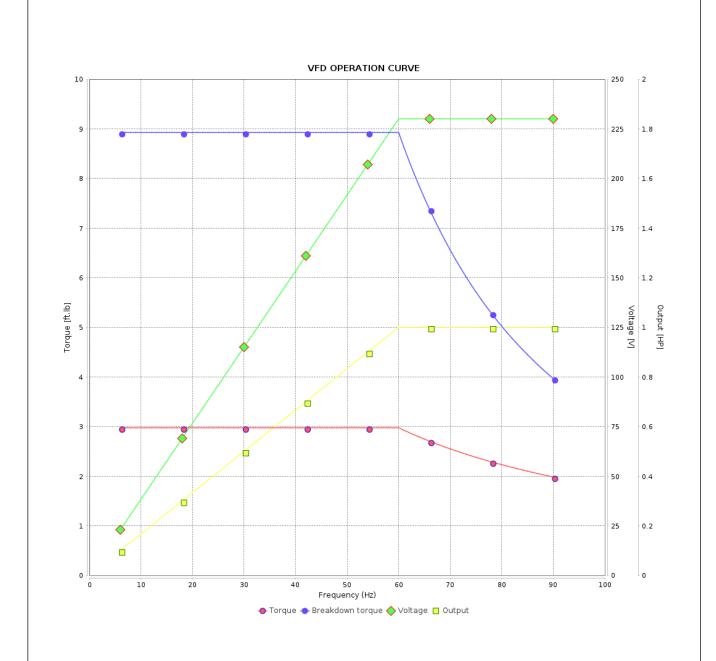
## Three Phase Induction Motor - Squirrel Cage



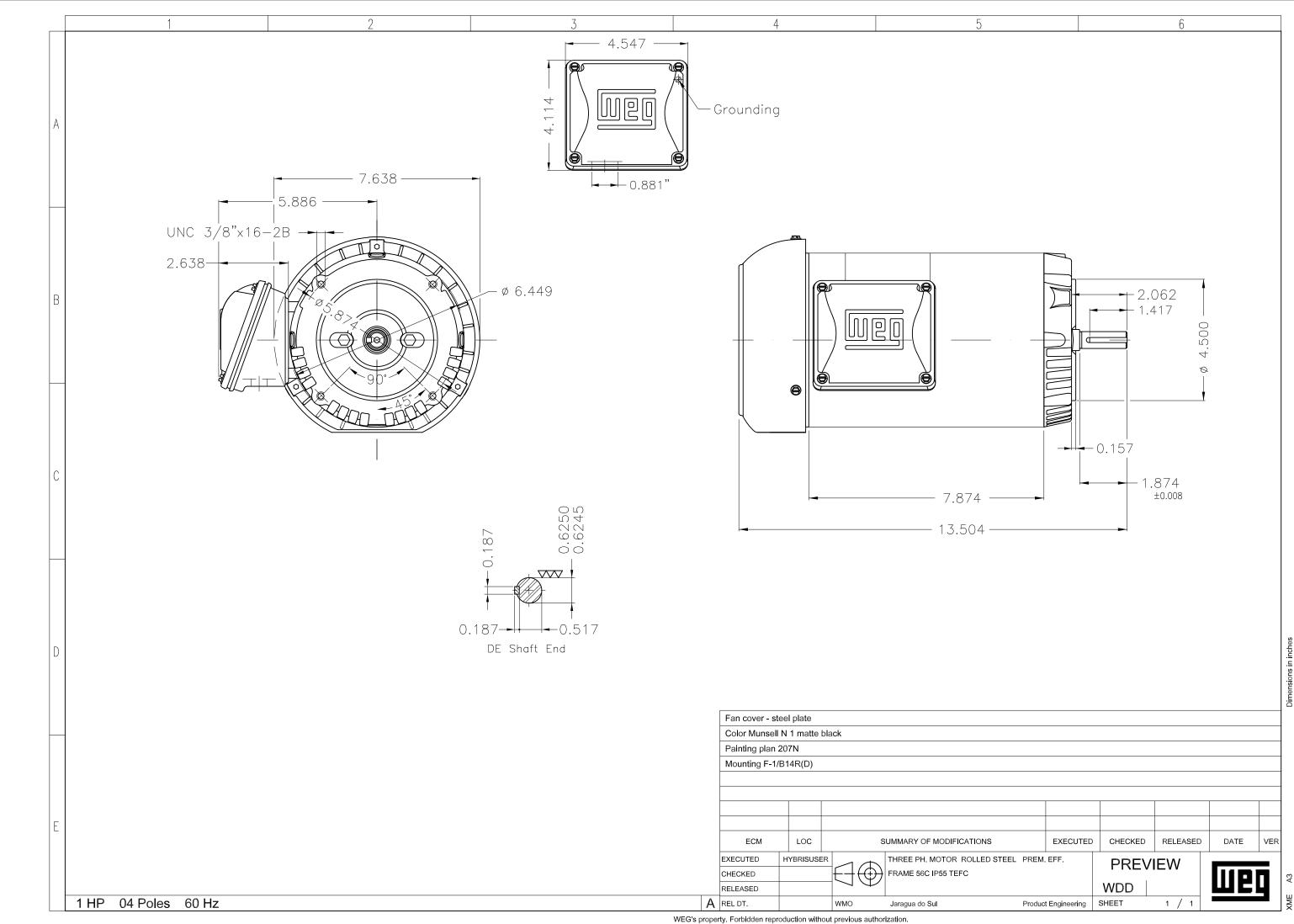
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Catalog #: 00118ET3E56CFL-S



| Performance          | : 2        | 230/460 V 60 Hz 4P              |                  |                       |      |             |  |
|----------------------|------------|---------------------------------|------------------|-----------------------|------|-------------|--|
| Rated current        | : 2        | 2.94/1.47 A                     | Moment o         | Moment of inertia (J) |      | lb          |  |
| LRC                  |            | 3.6                             | Duty cycle       | Duty cycle            |      | : Cont.(S1) |  |
| Rated torque         |            | 2.98 ft.lb                      | Insulation class |                       | : F  |             |  |
| Locked rotor torque  |            | 280 %                           | Service factor   |                       | :    |             |  |
| Breakdown torqu      | e :3       | : 300 % Temperature rise Design |                  | Temperature rise      |      |             |  |
| Rated speed          | : 1        |                                 |                  |                       | : B  |             |  |
| Rev. Changes Summary |            |                                 | Performed        | Checked               | Date |             |  |
| Performed by         |            |                                 |                  |                       |      |             |  |
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NEX MADE IN BRAZIL

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(**UL)**US LISTED

FOR SAFE AREA

3PT9

Energy Verifi

MODEL 00118ET3E56CFL-S B/N NO1.TEOICOXOX 14786559 25AUG2022

For 60Hz: Class I, Zone 2, IIC Class I, DIv.2, Gr. A,B,C,D - T3 Div 2 Inverter Duty (SF1.00) CT 2:1/VT 1000:1

> 9 2 CONT 56C

CODE SHO SABLE @ 208V 3.25A

TEFC 2°04

ZPM 3FA 냃 쌆

3.38/1.69

P55

1000 m.a.s.l

F AT 80K

SCI

1.15

2.94/1.47 230/460

> 1.0HP 3.40-3.06/1.70-1.62A ALTERNATE RATING:

SF1.00 NCL W

85.5%

NOM EFF NEMA

1450RPM 50 Hz ODE 6202-22

MOBIL POLYREX EM **EFF 82.9%** 

For safe area-inverter duty motor For 60Hz use on VPWM 1000:1 VT. 5:1 CT

IEC 60034-1

SF1.00

190-220/380-415V

9

2

8204-ZZ

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shocks. Disconnect power source before servicing unit. NTERCHANGE ANY TWO LINE WIRES TO REVERSE THE ROTATION WARNING: Motor must be grounded in accordance with local and national electrical codes to prevent serious electrical

T2-WHT r4-YEL T9-RRK RFD 13-ORG 1-810 I7-PNK F5-BLK

T8-RED F6-GRY

AVERTISSEMENT: Le moteur doit être mis à la terre

choc électrique grave. Déconnectez l'alimentation ayant l'entretien de la machine. conformément aux codes électriques locaux et nationaux afin d'éviter tout