### **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



Customer Product line : NEMA Premium Efficiency Three-Product code: 12677340 Catalog #: 01018ET3HR215TC-S Frame : 213/5TC Locked rotor time : 27s (cold) 15s (hot) Output : 10 HP (7.5 kW) Temperature rise : 80 K Poles Duty cycle : Cont.(S1) : -20°C to +40°C Frequency : 60 Hz Ambient temperature Rated voltage : 575 V : 1000 m.a.s.l. Altitude Rated current : 9.76 A Protection degree : IP55 L. R. Amperes : 68.3 A Cooling method : IC411 - TEFC LRC : 7.0x(Code H) Mounting : W-6 No load current : 4.43 A Rotation<sup>1</sup> : Both (CW and CCW) Rated speed : 1760 rpm Noise level<sup>2</sup> : 60.0 dB(A) Starting method Slip : 2.22 % : Direct On Line Rated torque : 29.8 ft.lb Approx. weight<sup>3</sup> : 141 lb Locked rotor torque : 250 % Breakdown torque : 300 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 1.07 sq.ft.lb Design : B 25% 50% 75% 100% Output Foundation loads 90.2 91.7 : 434 lb Efficiency (%) 91.0 91.0 Max. traction Power Factor 0.41 0.78 0.84 0.67 Max. compression : 575 lb Drive end Non drive end Bearing type 6208 ZZ 6206 ZZ Sealing V'Ring Without Bearing Seal Lubrication interval Lubricant amount 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     |
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| Checked by   |            |                 |           | Page    | Revision |
| Date         | 12/04/2022 |                 |           | 1/6     |          |

### TORQUE AND CURRENT VS SPEED CURVE

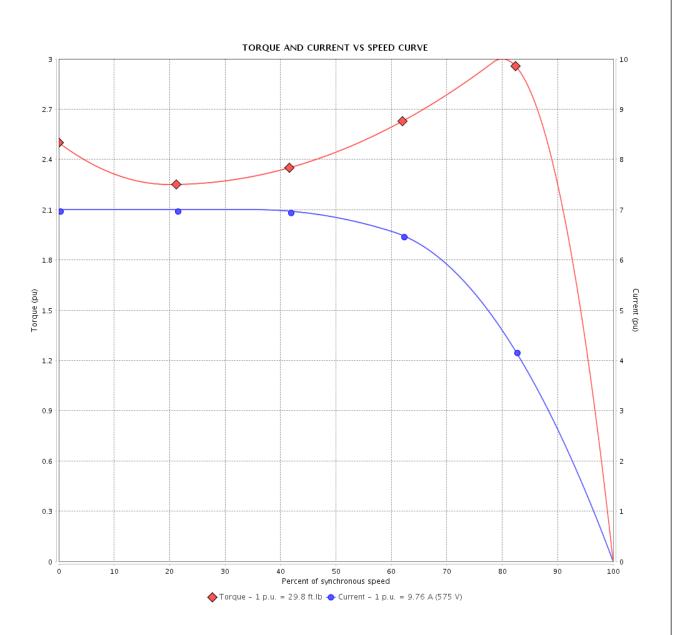
### Three Phase Induction Motor - Squirrel Cage



Customer

Product line : NEMA Premium Efficiency Three-Product code: 12677340

Catalog #: 01018ET3HR215TC-S



| Performance         | : 575 V 60 Hz 4P       |                       |                 |  |
|---------------------|------------------------|-----------------------|-----------------|--|
| Rated current       | : 9.76 A               | Moment of inertia (J) | : 1.07 sq.ft.lb |  |
| LRC                 | : 7.0                  | Duty cycle            | : Cont.(S1)     |  |
| Rated torque        | : 29.8 ft.lb           | Insulation class      | : F             |  |
| Locked rotor torque | : 250 %                | Service factor        | : 1.15          |  |
| Breakdown torque    | : 300 %                | Temperature rise      | : 80 K          |  |
| Rated speed         | : 1760 rpm             | Design                | : B             |  |
| Locked rotor time   | : 27s (cold) 15s (hot) |                       |                 |  |

Locked rotor time

| Rev.         | Changes Summary |  | Performed | Checked | Date     |
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| Date         | 12/04/2022      |  |           | 2/6     |          |

# LOAD PERFORMANCE CURVE

#### Three Phase Induction Motor - Squirrel Cage



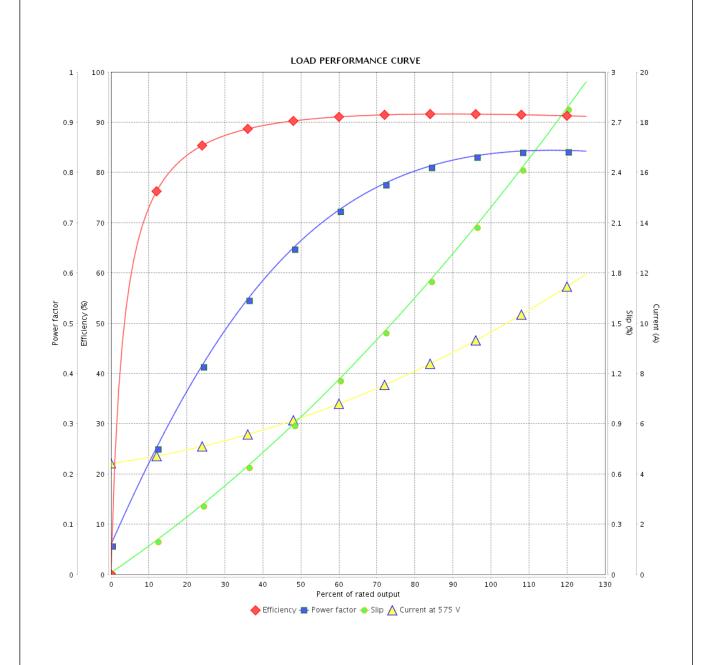
Customer

Product line : NEMA Premium Efficiency Three- Product code : 12677340

Phase

Catalog #: 01018ET3HR215TC-S

3/6



| Performance          | : 575 V 60 Hz 4P      |  |           |   |          |
|----------------------|-----------------------|--|-----------|---|----------|
| Rated current<br>LRC | : 9.76 A<br>: 7.0     | Moment of inertia (J)  |           | : 1.07 sq.ft.lb                               |          |
| Rated torque         | : 7.0<br>: 29.8 ft.lb | Duty cycle Insulation class Service factor Temperature rise Design |           | : Cont.(S1)<br>: F<br>: 1.15<br>: 80 K<br>: B |          |
| Locked rotor torque  | : 250 %               |  |           |   |          |
| Breakdown torque     | : 300 %               |  |           |   |          |
| Rated speed          | : 1760 rpm            |  |           |   |          |
| Rev.                 | Changes Summary       |  | Performed | Checked                                       | Date     |
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12/04/2022

Date

# THERMAL LIMIT CURVE

### Three Phase Induction Motor - Squirrel Cage



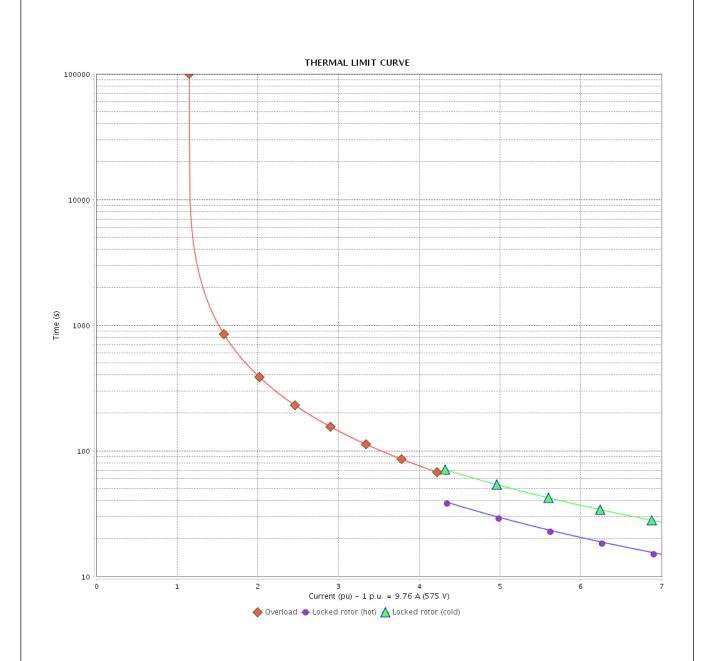
| Customer                        | :                                  |                         |                |                                |              |
|---------------------------------|------------------------------------|-------------------------|----------------|--------------------------------|--------------|
| Product line                    | : NEMA Premium Efficiency<br>Phase |                         | Product code : | 12677340<br>01018ET3HF         | <br>R215TC-S |
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|                                 |                                    |                         |                |                                |              |
| Performance                     | : 575 V 60 Hz 4P                   |                         |                |                                |              |
| Rated current<br>LRC            | : 9.76 A<br>: 7.0                  | Moment of<br>Duty cycle | inertia (J)    | : 1.07 sq.ft.lb<br>: Cont.(S1) |              |
| Rated torque                    | : 29.8 ft.lb                       | Insulation of           |                | : F                            |              |
| Locked rotor torque             | : 250 %<br>: 300 %                 | Service fac             |                | : 1.15<br>: 80 K               |              |
| Breakdown torque<br>Rated speed | : 300 %<br>: 1760 rpm              | Temperatu<br>Design     | ie lise        | : 80 K<br>: B                  |              |
| Heating constant                |                                    |                         |                |                                |              |
| Cooling constant                |                                    |                         |                |                                |              |
| Rev.                            | Changes Summary                    |                         | Performed      | Checked                        | Date         |
| Performed by                    |                                    |                         |                |                                |              |
| Checked by                      |                                    |                         |                | Page                           | Revision     |
| Data 12/04/20                   | 122                                |                         |                | 1/6                            | - 2          |

# THERMAL LIMIT CURVE

#### Three Phase Induction Motor - Squirrel Cage



Customer



| Rev.         |            | Changes Summary | Performed | Checked | Date     |
|--------------|------------|-----------------|-----------|---------|----------|
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| Date         | 12/04/2022 |                 |           | 5/6     |          |

## VFD OPERATION CURVE

#### Three Phase Induction Motor - Squirrel Cage

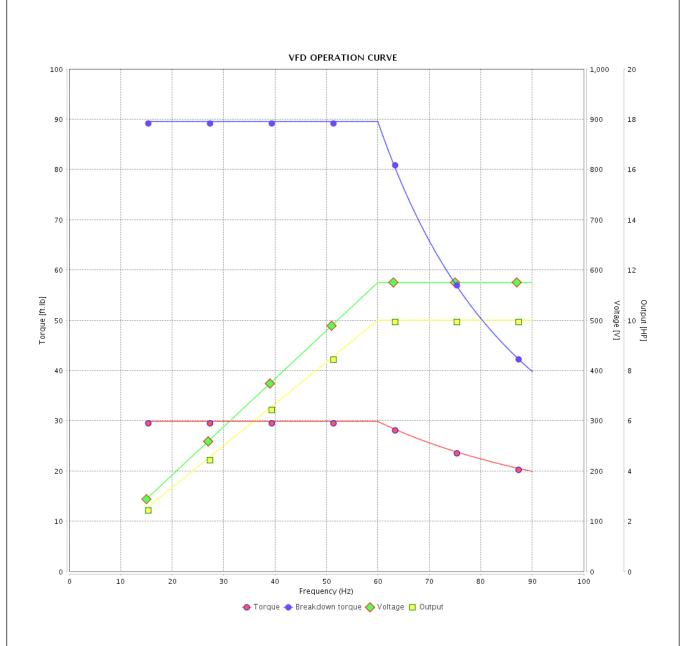


Customer

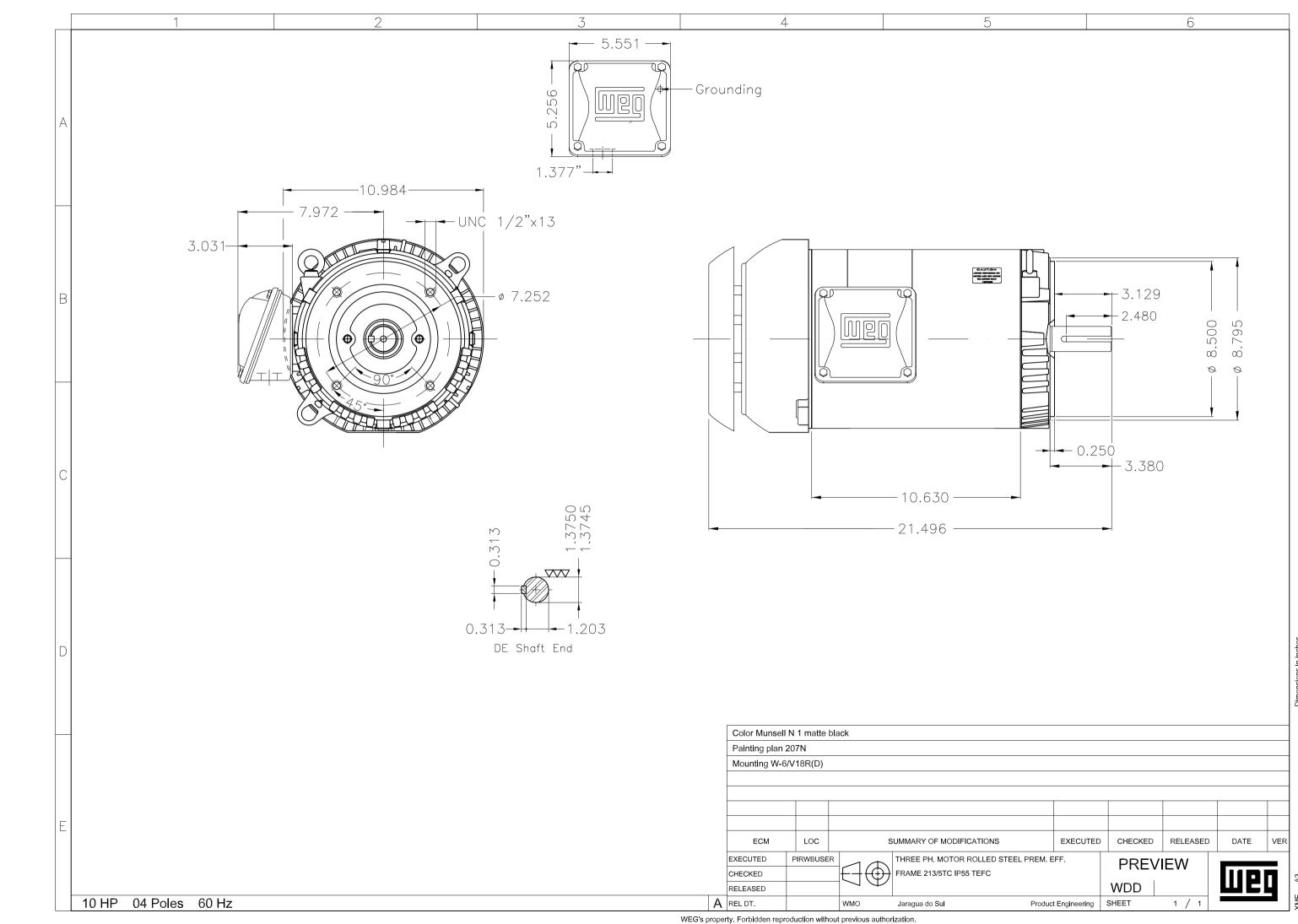
Product line : NEMA Premium Efficiency Three-

Product code: 12677340

Catalog #: 01018ET3HR215TC-S



Performance : 575 V 60 Hz 4P Rated current : 9.76 A Moment of inertia (J) : 1.07 sq.ft.lb **LRC** : 7.0 Duty cycle : Cont.(S1) : 29.8 ft.lb Insulation class Rated torque : F : 250 % Locked rotor torque Service factor : 1.15 Breakdown torque : 300 % Temperature rise : 80 K Rated speed : 1760 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by





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(**UL)**US LISTED 3PT9 FOR SAFE AREA

For 60Hz: Class I, Zone 2, IIC Energy Verified

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

> Hz 60 S/N 213/5TC 18MAR2022

MODEL 01018ET3HR215TC-S

N01.TE0IC0X0N 12677340

3FA P55 SH

1000 m.a.s.l

CONT

F AT 80K

SCI NCL WB

TEFC <del>0</del>

9.76 1.15 575 17.7

NEMA SPM 냃 监 CODE

NOM. EFF 91.7%

For safe area-inverter duty motor For use on VPWM 1000:1 VT, 4:1 CT ODE 6206-2Z

8208-ZZ

牌

MOBIL POLYREX EM

T2-WHT r3-ORG T1-BLU

WARNING: Motor must be grounded in accordance with local NTERCHANGE ANY TWO LINE WIRES TO REVERSE THE ROTATION



choc électrique grave. Déconnectez l'alimentation avant l'entretien de la machine



