DATA SHEET

Three Phase Induction Motor - Squirrel Cage

: 210 %



Customer

Product line : W40 High Efficiency Three-Phase Product code:

> Catalog #: 07536OP3EFP364TS-W40

Locked rotor time Frame : 364/5TS : 46s (cold) 26s (hot) Output : 75 HP (55 kW) Temperature rise : 80 K

Poles : 2 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 : 171/85.3 A Protection degree : IP23 : IC01 - ODP L. R. Amperes : 989/495 A Cooling method **LRC** : 5.8x(Code F) Mounting : F-1

No load current : 50.4/25.2 A Rotation¹ : Both (CW and CCW) Rated speed : 3550 rpm Starting method : Direct On Line

Slip : 1.39 % Approx. weight3 : 661 lb Rated torque : 111 ft.lb Locked rotor torque : 160 % Breakdown torque

: F Insulation class Service factor : 1.15 Moment of inertia (J) : 5.60 sq.ft.lb

Design 25% 50% Output 75% 100% Foundation loads

Efficiency (%) 90.3 91.0 92.4 93.0 Max. traction : 586 lb Power Factor 0.55 0.80 0.85 0.87 Max. compression : 1247 lb

Non drive end Drive end 6314 C3 Bearing type 6212 Z C3 Without Bearing Seal Without Bearing Seal Sealing

14418 h Lubrication interval 20000 h Lubricant amount

27 g 13 g Lubricant type Mobil Polyrex EM

USABLE @208V 186A SF 1.00 SFA 186A

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 | | | | Page | Revision |
| Date | 10/04/2020 | | | 1/5 | |

TORQUE AND CURRENT VS SPEED CURVE

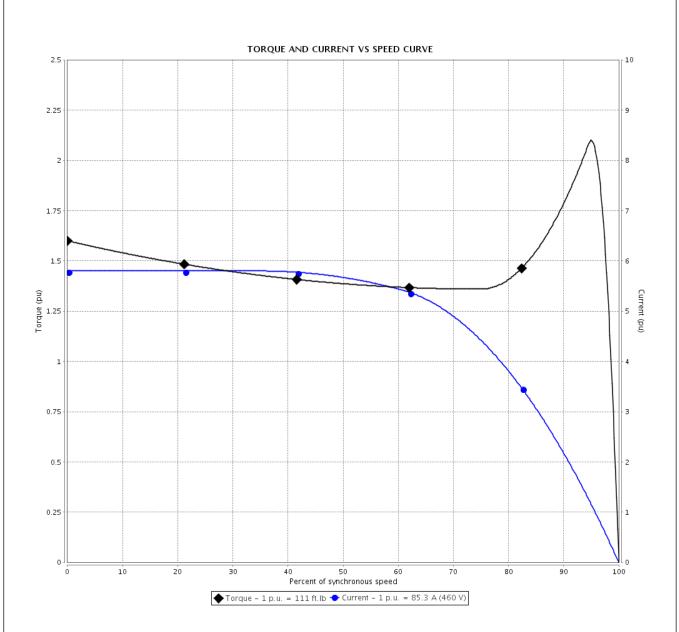
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 High Efficiency Three-Phase Product code : 14281358

Catalog #: 07536OP3EFP364TS-W40



Performance : 230/460 V 60 Hz 2P Rated current : 171/85.3 A Moment of inertia (J) : 5.60 sq.ft.lb **LRC** : 5.8 Duty cycle : Cont.(S1) : F Insulation class Rated torque : 111 ft.lb Service factor Locked rotor torque : 160 % : 1.15 Breakdown torque : 210 % Temperature rise : 80 K Rated speed : 3550 rpm Design : B

Locked rotor time : 46s (cold) 26s (hot)

| Rev. | | Changes Summary | Performed | Checked | Date |
|--------------|------------|-----------------|-----------|---------|----------|
| | | | | | |
| Performed by | | | | | |
| Checked by | | | | Page | Revision |
| Date | 10/04/2020 | | | 2/5 | |

LOAD PERFORMANCE CURVE

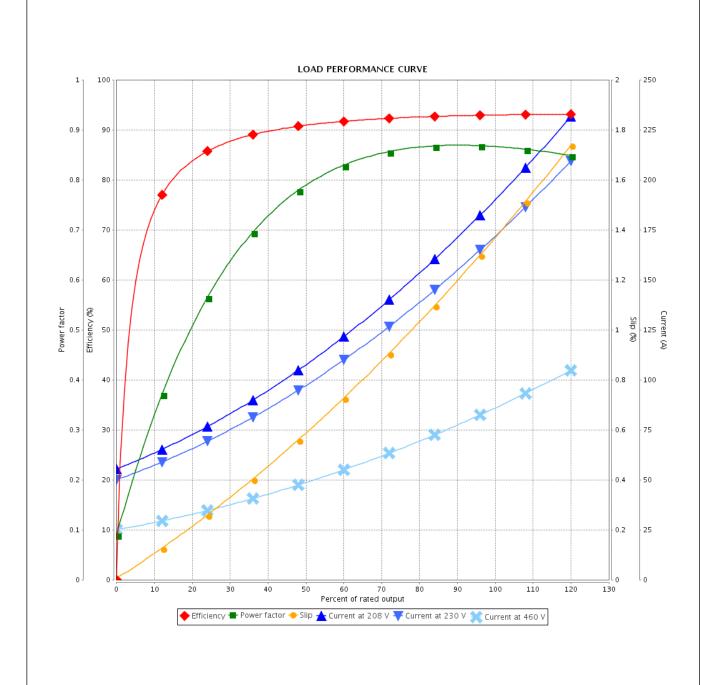
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 High Efficiency Three-Phase Product code : 14281358

Catalog #: 07536OP3EFP364TS-W40



| Performance | : | : 230/460 V 60 Hz 2P | | | | | | |
|---------------------|------------|----------------------|-----------------------|-----------|-----------------|----------|--|--|
| Rated current | : | 171/85.3 A | Moment of inertia (J) | | : 5.60 sq.ft.lb | | | |
| LRC | | 5.8 | Duty cycle | | : Cont.(S1) | | | |
| Rated torque | : | 111 ft.lb | Insulation class | | :F | | | |
| Locked rotor torque | : | 160 % | Service factor | | : 1.15 | | | |
| Breakdown torque | :: | 210 % | Temperature rise | | : 80 K | | | |
| Rated speed | : | 3550 rpm | Design | | : B | | | |
| Rev. | | Changes Summary | | Performed | Checked | Date | | |
| Performed by | | | | | | | | |
| Checked by | | | | | Page | Revision | | |
| Date | 10/04/2020 | | | | 3/5 | | | |

THERMAL LIMIT CURVE

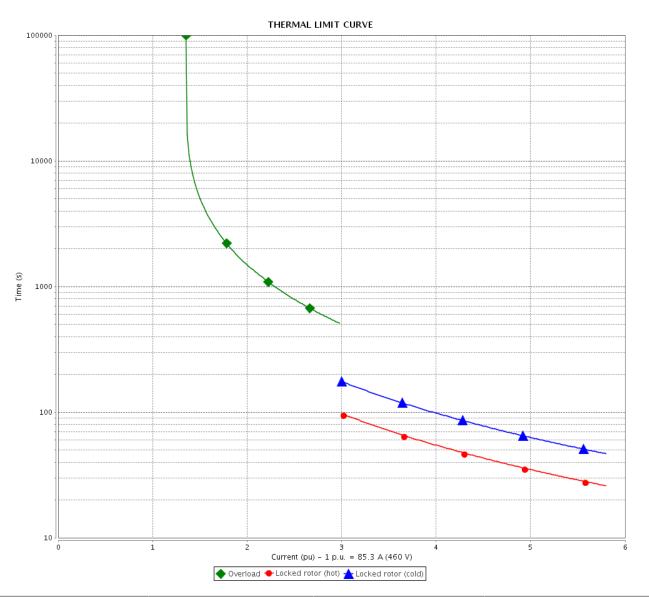
Three Phase Induction Motor - Squirrel Cage



| _ | |
|----------|--|
| Customer | |
| | |

Product line : W40 High Efficiency Three-Phase Product code : 14281358

Catalog # : 07536OP3EFP364TS-W40



Performance : 230/460 V 60 Hz 2P Rated current : 171/85.3 A Moment of inertia (J) : 5.60 sq.ft.lb **LRC** : 5.8 Duty cycle : Cont.(S1) Insulation class : F Rated torque : 111 ft.lb Locked rotor torque : 160 % Service factor : 1.15 : 210 % Breakdown torque : 80 K Temperature rise Rated speed : 3550 rpm Design Heating constant Cooling constant

| o o o g o o o to | • | | | | |
|------------------|------------|-----------------|-----------|---------|----------|
| Rev. | | Changes Summary | Performed | Checked | Date |
| | | | | | |
| Performed by | | | | | |
| Checked by | | | | Page | Revision |
| Date | 10/04/2020 | | | 4/5 | |

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

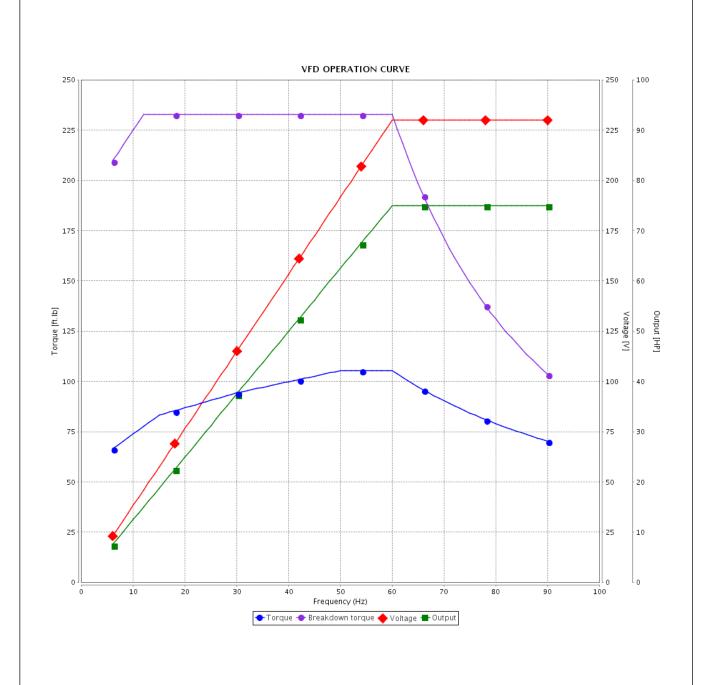


Customer

Product line : W40 High Efficiency Three-Phase Product code : 14281358

Catalog # : 07536OP3EFP364TS-W40

5/5



| Performance | : 230/460 V 60 Hz 2P | | | | |
|--|--|--|-----------|--|----------|
| Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed | : 171/85.3 A : 5.8 : 111 ft.lb : 160 % : 210 % : 3550 rpm | Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design | | : 5.60 sq.ft.lb : Cont.(S1) : F : 1.15 : 80 K : B | |
| Rev. | Changes Summary | | Performed | Checked | Date |
| Performed by | | | | I | |
| Checked by | | | | Page | Revision |

10/04/2020

Date

