DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer Product line : W40 NEMA Premium Efficiency Product code: 14272541 Three-Phase Catalog #: 15018OT3H444T-W40 Frame : 444/5T Locked rotor time : 39s (cold) 22s (hot) Output : 150 HP (110 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 : 136 A Protection degree : IP23 L. R. Amperes : 884 A Cooling method : IC01 - ODP LRC : 6.5x(Code G) Mounting : F-1 No load current : 46.4 A Rotation¹ : Both (CW and CCW) Rated speed : 1784 rpm Noise level² : 78.0 dB(A) Starting method Slip : 0.89 % : Direct On Line Rated torque : 442 ft.lb Approx. weight³ : 1380 lb : 200 % Locked rotor torque : 240 % Breakdown torque Insulation class : F Service factor : 1.25 Moment of inertia (J) : 42.1 sq.ft.lb Design : B 25% 50% 75% 100% Output Foundation loads 95.8 Efficiency (%) 95.3 95.4 95.8 Max. traction : 2135 lb Power Factor 0.74 0.85 0.49 0.82 Max. compression : 3515 lb Non drive end Drive end Bearing type 6314 C3 6319 C3

Sealing Without Bearing Seal Without Bearing Seal Lubrication interval 20000 h 20000 h Lubricant amount 45 g 27 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 |
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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

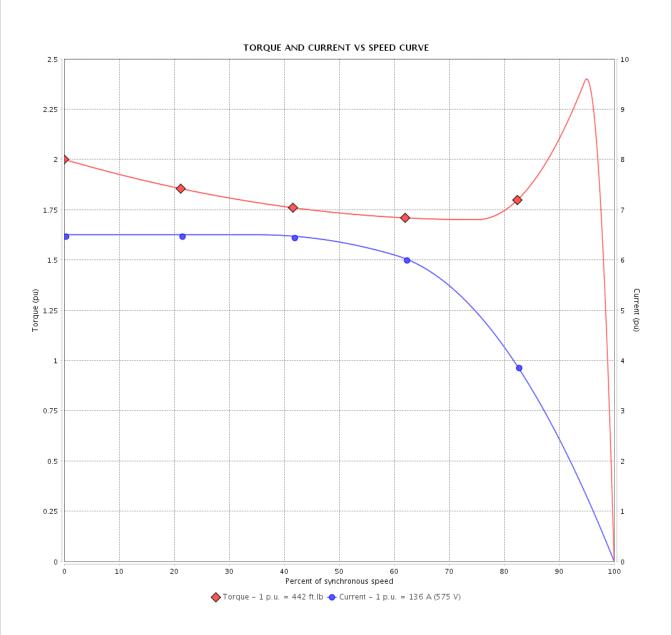


Customer :

Product line : W40 NEMA Premium Efficiency Product code : 14272541

Three-Phase

Catalog #: 15018OT3H444T-W40



| Performance | : 575 V 60 Hz 4P | | | |
|---------------------|----------------------|-----------------------------|--------------------|--|
| Rated current | : 136 A | Moment of inertia (J) | : 42.1 sq.ft.lb | |
| Rated torque | : 6.5 : 442 ft.lb | Duty cycle Insulation class | : Cont.(S1) : F | |
| Locked rotor torque | : 200 % | Service factor | : 1.25 | |
| Breakdown torque | : 240 % | Temperature rise | : 80 K | |
| Rated speed | : 1784 rpm | Design | : B | |

Locked rotor time : 39s (cold) 22s (hot)

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

Three Phase Induction Motor - Squirrel Cage

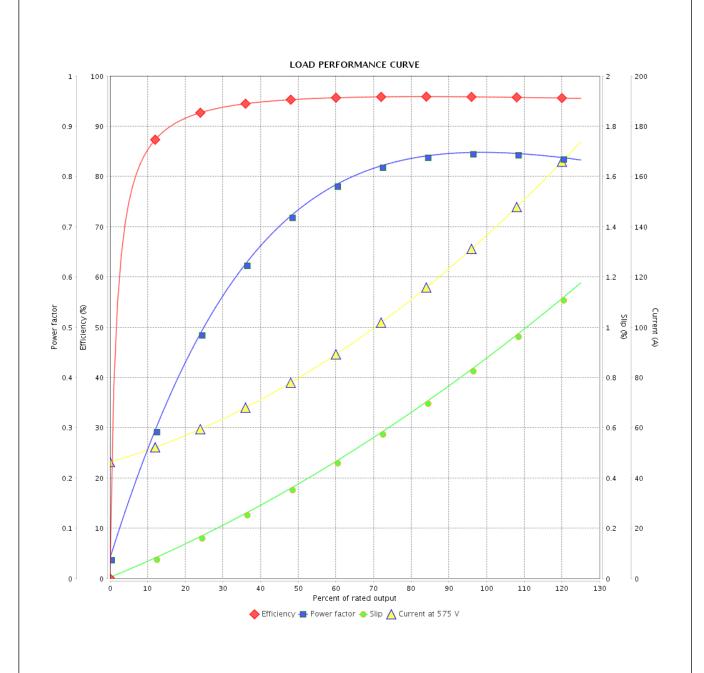


Customer

Product line : W40 NEMA Premium Efficiency Product code : 14272541

Three-Phase

Catalog #: 15018OT3H444T-W40



| Performance | : | 575 V 60 Hz 4P | | | | | |
|---------------------|------------|-----------------|-----------------------|------------------|-----------------|-------------|--|
| Rated current | : | 136 A | Moment of inertia (J) | | : 42.1 sq.ft.lb | | |
| LRC | : | 6.5 | Duty cycle | Duty cycle | | : Cont.(S1) | |
| Rated torque | : | 442 ft.lb | Insulation | Insulation class | | | |
| Locked rotor torque | e : | 200 % | Service fa | ctor | : 1.25 | | |
| Breakdown torque | : | : 240 % | | ıre rise | : 80 K | | |
| Rated speed | : | 1784 rpm | Design | | : B | | |
| Rev. | | Changes Summary | | Performed | Checked | Date | |
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



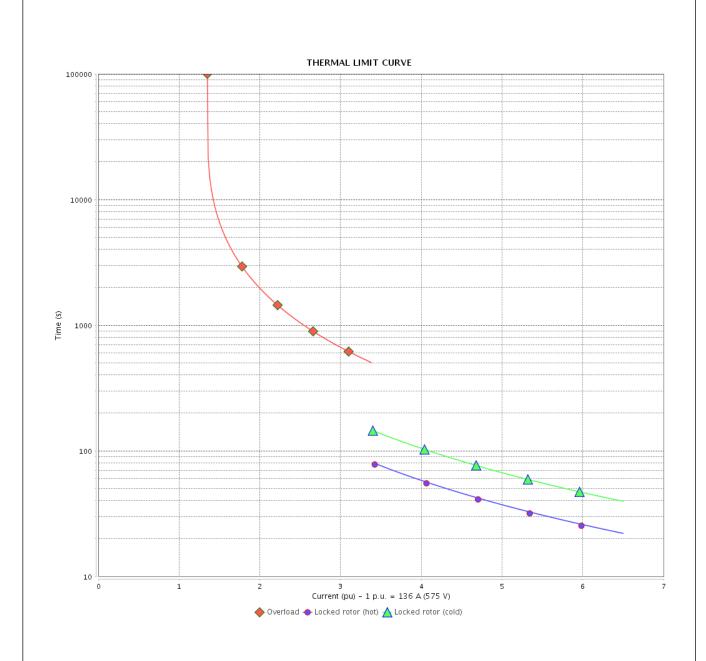
| Customer | | : | | | | | |
|--------------------------------|------------|---------------------------|---------------------|----------------|--------------------------------|----------|--|
| Product line | | : W40 NEMA Premium Effici | | Product code : | 14272541 | | |
| Product line | | Three-Phase | ency | Froduct code . | 14272541 | | |
| | | | | Catalog # : | 15018OT3H4 | 44T-W40 | |
| | | | | | | | |
| Performance | | 575 V 60 Hz 4P | | | | | |
| Rated current LRC | | 136 A 6.5 | Moment o | f inertia (J) | : 42.1 sq.ft.lb : Cont.(S1) | | |
| Rated torque | : | 442 ft.lb | Insulation | class | : F | | |
| Locked rotor torc | | 200 % | Service fa | | : 1.25 | | |
| Breakdown torqu Rated speed | | 240 % 1784 rpm | Temperatu Design | ure rise | : 80 K : B | | |
| | | 2 · · · p···· | | | · - | | |
| Heating constant | | | | | | | |
| Cooling constant Rev. | | Changes Summary | | Performed | Checked | Date | |
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer



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

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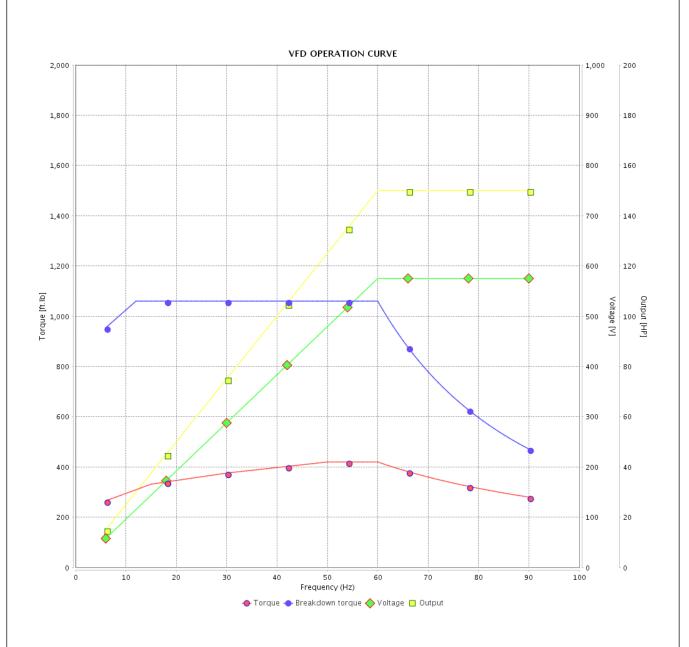
Customer :

Product line : W40 NEMA Premium Efficiency

Three-Phase

Product code: 14272541

Catalog #: 15018OT3H444T-W40



| Performance | : 575 V 60 Hz 4P | | | | |
|---------------------------------------------------------------------------------|---------------------------------------------------------------------|------------------------------------------------------------------------------------------|-----------|------------------------------------------------------------------|----------|
| Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed | : 136 A : 6.5 : 442 ft.lb : 200 % : 240 % : 1784 rpm | Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design | | : 42.1 sq.ft.lb : Cont.(S1) : F : 1.25 : 80 K : B | |
| Rev. | Changes Summary | | Performed | Checked | Date |
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13/04/2022

Date

