DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer Product line : NEMA Premium Efficiency Three-Product code: 12438117 Catalog #: 00118ET3H143T-W22 Frame : 143/5T Locked rotor time : 32s (cold) 18s (hot) Output : 1 HP (0.75 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 : 1.18 A Protection degree : IP55 L. R. Amperes : 10.1 A Cooling method : IC411 - TEFC : 8.6x(Code M) LRC Mounting : F-1 No load current : 0.752 A Rotation¹ : Both (CW and CCW) Rated speed : 1760 rpm Noise level² : 51.0 dB(A) Starting method Slip : 2.22 % : Direct On Line Rated torque : 2.98 ft.lb Approx. weight³ : 45.4 lb Locked rotor torque : 290 % Breakdown torque : 350 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 0.1172 sq.ft.lb Design : B 25% 50% 75% 100% Output Foundation loads 80.0 84.0 85.5 : 68 lb Efficiency (%) 78.4 Max. traction Power Factor 0.31 0.55 0.68 0.75 Max. compression : 113 lb Drive end Non drive end Bearing type 6205 ZZ 6204 ZZ Sealing V'Ring V'Ring 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 |
|--------------|------------|-----------------|-----------|---------|----------|
| | | | | | |
| Performed by | | | | | |
| Checked by | | | | Page | Revision |
| Date | 14/04/2022 | | | 1/6 | |

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



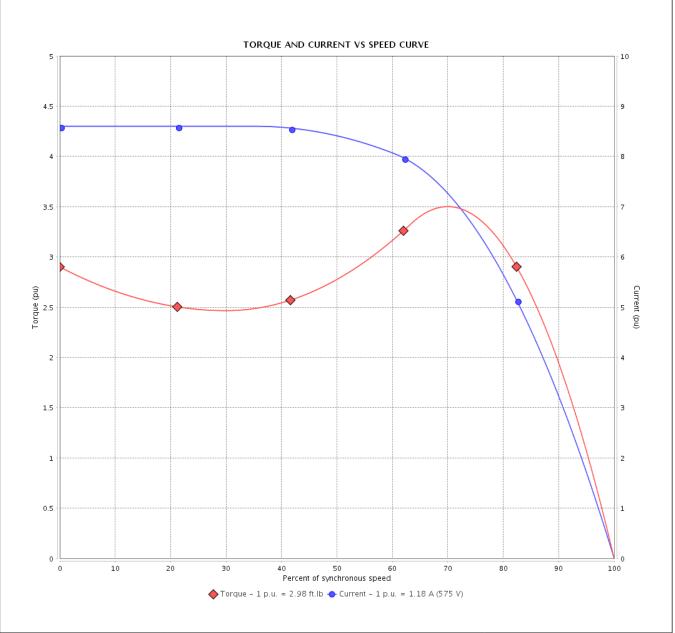
Customer :

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 12438117

Catalog #: 00118ET3H143T-W22



Performance : 575 V 60 Hz 4P Rated current : 1.18 A Moment of inertia (J) : 0.1172 sq.ft.lb **LRC** : 8.6 Duty cycle : Cont.(S1) Insulation class Rated torque : 2.98 ft.lb : F Locked rotor torque : 290 % Service factor : 1.25 Breakdown torque : 350 % Temperature rise : 80 K Rated speed : 1760 rpm Design : B

Locked rotor time : 32s (cold) 18s (hot)

| Rev. | Changes Summary | | Performed | Checked | Date |
|--------------|-----------------|--|-----------|---------|----------|
| | | | | | |
| Performed by | | | | | |
| Checked by | | | | Page | Revision |
| Date | 14/04/2022 | | | 2/6 | |

LOAD PERFORMANCE CURVE

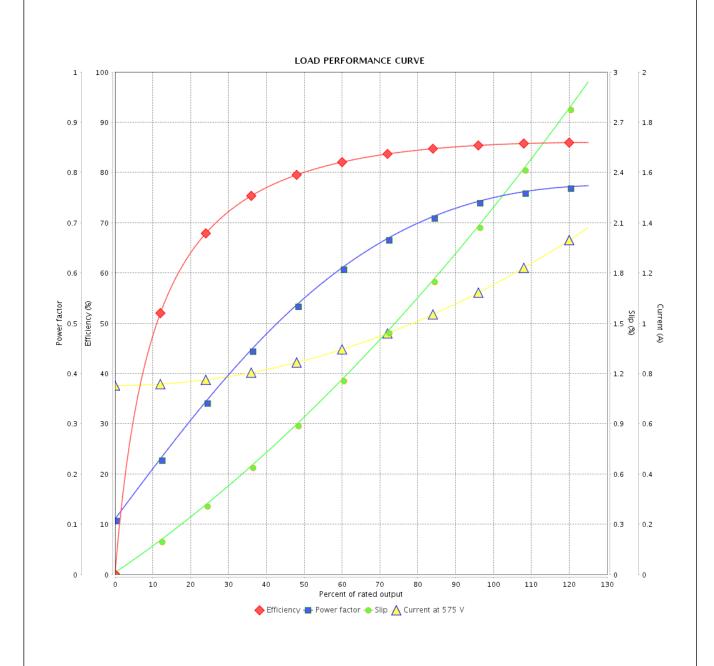
Three Phase Induction Motor - Squirrel Cage



Customer

Product line : NEMA Premium Efficiency Three-Product code: 12438117

Catalog #: 00118ET3H143T-W22



| Performance | : 5 | 75 V 60 Hz 4P | | | | |
|--------------------|------------|------------------------------|--------------------|-------------------------|-------------------|----------|
| Rated current | : 1 | 1.18 A Moment of inertia (J) | | f inertia (J) | : 0.1172 sq.ft.lb | |
| LRC | | .6 | Duty cycle | | : Cont.(S1) | |
| Rated torque | | 2.98 ft.lb Insulation class | | :F | | |
| Locked rotor torqu | ie : 2 | 90 % | 0 % Service factor | | : 1.25 | |
| Breakdown torque | : 3 | : 350 % | | Temperature rise Design | | |
| Rated speed | : 1760 rpm | | Design | | | |
| Rev. | | Changes Summary | - | Performed | Checked | Date |
| Performed by | | | | | | |
| Checked by | | | | | Page | Revision |
| Date | 14/04/2022 | | | | 3/6 | |

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



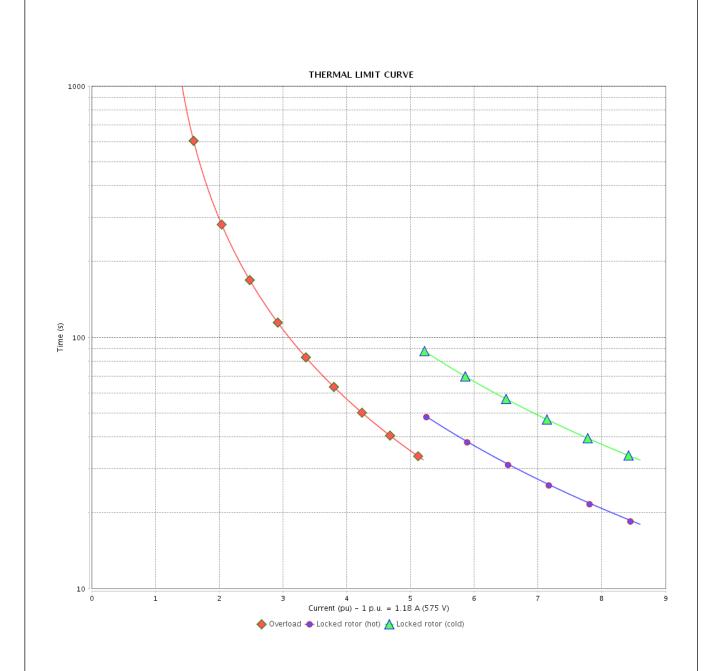
| Customer | : | | | | | |
|------------------------------------|--------------|-------------------------|--------------------------|----------------|------------------|-----------|
| | | | | | | |
| Product line | | NEMA Premium Efficiency | Three- | Product code : | 12438117 | |
| | Pi | hase | | Catalog # : | 00118ET3H1 | 43T-W22 |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Performance | · 5- | 75 V 60 Hz 4P | | | | |
| Rated current | | .18 A | Moment o | f inertia (J) | : 0.1172 sq.ft.l | h |
| LRC | : 8. | .6 | Duty cycle | ; | : Cont.(S1) | ~ |
| Rated torque Locked rotor torqu | | .98 ft.lb 90 % | Insulation Service fa | | : F : 1.25 | |
| Breakdown torque | | 90 % 50 % | Temperati | | : 80 K | |
| Rated speed | | 760 rpm | Design | | : B | |
| Heating constant | | | | | | |
| Cooling constant | | | | | | |
| Rev. | | Changes Summary | | Performed | Checked | Date |
| Dorformed by | | I | | | | |
| Performed by Checked by | | _ | | | Page | Revision |
| Checked by | 4.4/0.4/0555 | _ | | | Page | VEAISIOLI |

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer



| Rev. | | Changes Summary | Performed | Checked | Date |
|--------------|------------|-----------------|-----------|---------|----------|
| | | | | | |
| Performed by | | | | | |
| Checked by | | | | Page | Revision |
| Date | 14/04/2022 | | | 5/6 | |

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



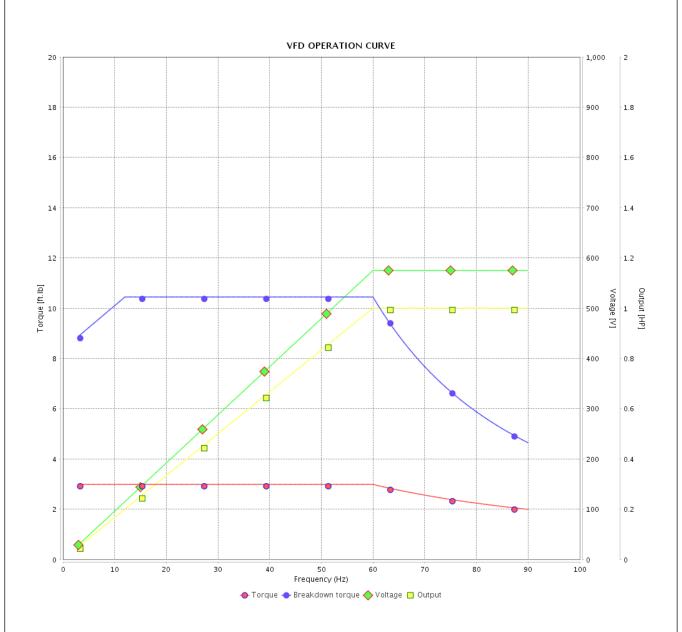
Customer :

Product line : NEMA Premium Efficiency Three-

Phase

Product code: 12438117

Catalog #: 00118ET3H143T-W22



| Performance | : | : 575 V 60 Hz 4P | | | | | | |
|---|-------|---|--|--|---------|--|--|--|
| Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed | iue : | 1.18 A 8.6 2.98 ft.lb 290 % 350 % 1760 rpm | Duty cycle Insulation Service fa | Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design | | : 0.1172 sq.ft.lb : Cont.(S1) : F : 1.25 : 80 K : B | | |
| Rev. | | Changes Summa | ary | Performed | Checked | Date | | |
| Performed by Checked by | | | | | Page | Revision | | |

6/6

14/04/2022

Date

