

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE2 Three-Phase

Product code : 12422935
Catalog # : 18512EP3Y315L-W22

| | | | |
|-----------------------|-------------------|-----------------------------|------------------------|
| Frame | : 315L | Locked rotor time | : 21s (cold) 12s (hot) |
| Output | : 250 HP (185 kW) | Temperature rise | : 80 K |
| Poles | : 6 | Duty cycle | : S1 |
| Frequency | : 50 Hz | Ambient temperature | : -20°C to +40°C |
| Rated voltage | : 380 V | Altitude | : 1000 m.a.s.l. |
| Rated current | : 351 A | Protection degree | : IP55 |
| L. R. Amperes | : 2422 A | Cooling method | : IC411 - TEFC |
| LRC | : 6.9 | Mounting | : B3L(E) |
| No load current | : 129 A | Rotation ¹ | : Both (CW and CCW) |
| Rated speed | : 990 rpm | Noise level ² | : 68.0 dB(A) |
| Slip | : 1.00 % | Starting method | : Direct On Line |
| Rated torque | : 1330 ft.lb | Approx. weight ³ | : 3159 lb |
| Locked rotor torque | : 200 % | | |
| Breakdown torque | : 210 % | | |
| Insulation class | : F | | |
| Service factor | : 1.15 | | |
| Moment of inertia (J) | : 243 sq.ft.lb | | |
| Design | : N | | |

| | | | | | |
|----------------|-----------|-----------|-----------|------------------|-----------|
| Output | 50% | 75% | 100% | Foundation loads | |
| Efficiency (%) | 95.2 94.7 | 95.4 95.3 | 95.2 95.4 | Max. traction | : 5567 lb |
| | 94.5 | 95.4 | 95.4 | | |
| Power Factor | 0.73 0.66 | 0.82 0.77 | 0.84 0.81 | Max. compression | : 8726 lb |
| | 0.65 | 0.78 | 0.83 | | |

Losses at normative operating points (speed;torque), in percentage of rated output power

| | | | | |
|------------|----------------|-----|-----|-----|
| Losses (%) | P1 (0,9;1,0) | 5.2 | 5.0 | 5.0 |
| | P2 (0,5;1,0) | 3.8 | 3.6 | 3.6 |
| | P3 (0,25;1,0) | 3.1 | 2.9 | 2.9 |
| | P4 (0,9;0,5) | 3.2 | 3.1 | 3.1 |
| | P5 (0,5;0,5) | 2.0 | 1.9 | 1.9 |
| | P6 (0,5;0,25) | 1.6 | 1.5 | 1.5 |
| | P7 (0,25;0,25) | 0.9 | 0.9 | 0.9 |

| | | | |
|----------------------|---|------------------|----------------------|
| | | <u>Drive end</u> | <u>Non drive end</u> |
| Bearing type | : | 6319 C3 | 6316 C3 |
| Sealing | : | WSeal | WSeal |
| Lubrication interval | : | 13000 h | 16000 h |
| Lubricant amount | : | 45 g | 34 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 |
|--------------|-----------------|-----------|---------------|----------|
| | | | | |
| Performed by | | | | |
| Checked by | | | | |
| Date | 26/03/2024 | | Page 1 / 1 | Revision |