# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W40 High Efficiency Three-Phase

Product code : 14788715
Catalog # : 02036OP3EFP254TC-W40

| | | | |
|---|---|---|---|
| Frame | : 254TC | Locked rotor time | : 28s (cold) 16s (hot) |
| Output | : 20 HP (15 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 | : 48.6/24.3 A | Protection degree | : IP23 |
| L. R. Amperes | : 287/143 A | Cooling method | : IC01 - ODP |
| LRC | : 5.9x(Code G) | Mounting | : F-1 |
| No load current | : 14.0/7.00 A | Rotation¹ | : Both (CW and CCW) |
| Rated speed | : 3530 rpm | Starting method | : Direct On Line |
| Slip | : 1.94 % | Approx. weight³ | : 224 lb |
| Rated torque | : 29.8 ft.lb | | |
| Locked rotor torque | : 170 % | | |
| Breakdown torque | : 240 % | | |
| Insulation class | : F | | |
| Service factor | : 1.15 | | |
| Moment of inertia (J) | : 0.8718 sq.ft.lb | | |
| Design | : B | | |

| Output | 25% | | 50% | | 75% | | 100% | |
|---|---|---|---|---|---|---|---|---|
| Efficiency (%) | 89.3 | 87.0 | 89.5 | 87.5 | 90.2 | 87.5 | 90.2 | 87.8 |
| | 87.1 | 87.9 | 87.5 | 88.5 | 88.5 | 88.5 | 88.6 | 89.0 |
| Power Factor | 0.54 | 0.58 | 0.77 | 0.82 | 0.85 | 0.88 | 0.86 | 0.89 |
| | 0.52 | 0.48 | 0.78 | 0.74 | 0.86 | 0.84 | 0.89 | 0.87 |

Foundation loads

Max. traction

Max. compression

| | | Drive end | Non drive end |
|---|---|---|---|
| Bearing type | : | 6309 Z C3 | 6209 Z C3 |
| Sealing | : | Without Bearing Seal | Without Bearing Seal |
| Lubrication interval | : | 20000 h | 20000 h |
| Lubricant amount | : | 13 g | 9 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 | | | Page | Revision |
| Date | 26/03/2024 | | 1 / 1 | |

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