



DATA SHEET

Nr.: [REDACTED]

Date: 01-AUG-2013

Three-phase Induction Motor - Squirrel Cage **CERTIFIED** WEG MOTORES

Customer : ZEST WEG GROUP AFRICA (PTY) LTD
 Product code :
 Product line : Special Motor

Certified document.
 Not subject to changes.

| | | | | |
|---------------------|-------------------|----------------------|------------------------------|----------------------|
| Frame | : HGF 400C/D/E | Enclosure | : IP55 (TEFC) | |
| Output | : 600 kW (810 HP) | Mounting | : B3T | |
| Frequency | : 50 Hz | Rotation | : Both | |
| Poles | : 4 | Aprox. weight* | : 4650 kg | |
| Rated speed | : 1491 rpm | Moment of inertia | : 22.4 kgm ² | |
| Slip | : 0.60 % | Sound Pressure Level | : 82.0 dB(A) (global) | |
| Rated voltage | : 690V | Foundation loads | | |
| Rated current | : 620 A | - Max. traction | : 29506 N | |
| L. R. Amperes | : 4774 A | - Max. compression | : 75122 N | |
| II/In | : 7.7 | | | |
| No load current | : 196 A | Load | Power factor | Efficiency (%)** |
| Rated torque | : 3845 Nm | 100% | 0.84 | 96.4 |
| Locked rotor torque | : 150 % | 75% | 0.82 | 96.4 |
| Breakdown torque | : 225 % | 50% | 0.73 | 96.0 |
| Design | : N | | | |
| Insulation class | : F | Front | Bearing | Quantity (lubricant) |
| Temperature rise | : 75 K (SF 1.00) | Rear | 6324-C3 | 72 g |
| Locked rotor time | : 16 s (hot) | | 6319-C3 | 45 g |
| Service factor | : 1.15 | | | |
| Duty cycle | : S1 | | | |
| Ambient temperature | : -20°C to +45°C | | | |
| Altitude | : 1000 m.a.s.l | | | |
| | | | Lubrication interval: 4500 h | |
| | | | Grease - MOBIL POLYREX EM | |

Notes:

Suitable for VFD applications below 690V. Conditions must remain within the following:

- Maximum voltage peak on motor terminals: 2200V
- dV/dt inverter terminals: $\leq 7800V/\mu s$
- Minimum rise time of the inverter: $t_r > 0,1\mu s$ (informed by the inverter manufacturer)
- Minimum time between consecutive pulses: $t_{ep} > 6\mu s$ (informed by the inverter manufacturer)

Phelps Dodge windings.

Space Heater: 180W, 110-127/200-240V

* Motor suitable for DOL starting 6xhour, with temperature rise F(100K), considering fluid coupling engaged after motors running full speed

This is an updated revision. The previous one must be disregarded. The figures given herewith are regarded as estimated values based on calculation and applied to sinusoidal power supplied motors, within permissible tolerances under SABS. Noise level with tolerance of +3 dB(A). (*) Weight value can be changed without previous notification. (**) Stray load losses 0.5% of input power.

Performed [REDACTED]

Checked [REDACTED]

Revision

Nr.: 2 Date: 08-SEP-2015

Approved