



# 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  
Output : 600 kW (810 HP)  
Frequency : 50 Hz  
Poles : 4  
Rated speed : 1491 rpm  
Slip : 0.60 %  
Rated voltage : 690V  
Rated current : 620 A  
L. R. Amperes : 4774 A  
II/In : 7.7  
No load current : 196 A  
Rated torque : 3845 Nm  
Locked rotor torque : 150 %  
Breakdown torque : 225 %  
Design : N  
Insulation class : F  
Temperature rise : 75 K (SF 1.00)  
Locked rotor time : 16 s (hot)  
Service factor : 1.15  
Duty cycle : S1  
Ambient temperature : -20°C to +45°C  
Altitude : 1000 m.a.s.l

Enclosure : IP55 (TEFC)  
Mounting : B3T  
Rotation : Both  
Aprox. weight\* : 4650 kg  
Moment of inertia : 22.4 kgm<sup>2</sup>  
Sound Pressure Level : 82.0 dB(A) (global)  
Foundation loads  
- Max. traction : 29506 N  
- Max. compression : 75122 N

Load	Power factor	Efficiency (%)**
100%	0.84	96.4
75%	0.82	96.4
50%	0.73	96.0

	Bearing	Quantity (lubricant)
Front	6324-C3	72 g
Rear	6319-C3	45 g

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

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Revision

Nr.: 2 Date: 08-SEP-2015

Approved