



# DINGOL DG544C Threephase alternator 500 kVA AVR

# **Product description:**

## **DINGOL DG544C THREE-PHASE 500KVA AVR**

DINGOL DG544C is a three-phase brushless alternator capable of delivering a maximum power of 500KVA complete with AVR voltage regulator.

All the components that make up the DINGOL DG544C alternator are subjected to a specific coating and/or impregnation process to safeguard the generator's functionality and protect the critical parts in the various conditions of use.

On the test bench, the rotors are balanced to the best of BS6861: part 1 box 2.5. To allow operation with the minimum possible vibration. Bi-bearing alternators are balanced using a half key.

THF (as defined by BS4999 directive part 40) is better than 2% and TIF: Telephone Influence Factor as defined by NEMA MG1-32) is better than 50.

DINGOL DG544C respond optimally even in the presence of non-linear loads. This result is obtained by winding the electric cable of the stators with a 2/3 pitch, thus eliminating third order harmonics (3° - 9° - 15°) from the voltage curve. This also eliminates the excess of neutral current that sometimes appears with larger pitch windings, during parallel operation.

DINGOL DG544C are designed to guarantee IP22 protection class for industrial use suitable for protection from normal weather conditions.

DINGOL DG544C is equipped with twelve terminal blocks and are delivered pre-configured in three-phase configuration unless otherwise specified by the customer. However, if it is necessary to change the configuration, a table of possible configurations is shown on the back of the termination box cover.



DINGOL DG544C is a brushless alternator, this feature together with the high efficiency of the AVR ensure a low level of interference with radio waves.

#### **AVR REGULATOR**

The AVR is an electronic device that regulates the alternating current coming from the alternator and transforms it into direct current.

By means of a voltage regulator, it is possible to convert the alternating current into direct current and thus avoid voltage and current surges.

The high efficiency of the AVR ensures operation even when the residual excitation current is very low. The output from the excitation rotor that is used to power the main exciter passes through a wave rectifier bridge.

The rectifier itself is equipped with protection against overvoltages caused, for example, by a short circuit or a parallel run out of phase.

The AVR through sensing regulates the voltage of the alternator output current with a control margin of 0.5% over or under, from no-load to full load, including variations from cold to operating temperature, up to cos-phy 0.8 and up to a variation r.p.m. of 4%. The voltage is adjusted using a trimmer.

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#### TECHNICAL FEATURES DINGOL DG544C

Phase Type: Three-phase

Power Supply Voltage: 400 - 440 V

Frequency: 50 - 60 Hz

Maximum Power (50 Hz): 400KW Maximum Power (50 Hz): 500KVA Maximum Power (60 Hz): 428KW Maximum Power (60 Hz): 535KVA Revolutions Per Minute: 1500 rpm

Efficiency %: 94. 0 Brush Type: Brushless Voltage Regulator: AVR Protection Class: IP22

Width: 1337 mm Length: 862 mm Height: 971 mm Dry Weight: 1250 Kg

Are you looking for an alternator with different characteristics? <u>Here</u> you can find the whole range DINGOL or other specialized brands.



Images and technical data are not binding.

### **Product features:**

Phase: Three phase

Maximum power three phase (KW): 400 Maximum power three phase (KVA): 500

Frequency (Hz): 50 / 60

Voltage (V): 400

Engine rpm (rpm): 1500 Efficiency (%): 94.0 Protection degree: IP22 Length (mm): 1337

Width (mm): 862 Height (mm): 971 Dry weight (Kg): 1250

Brushes: No

Type of alternator: Constant Speed

Voltage regulator: AVR