



## DINGOL DG444E Three-phase Alternator 350 kVA AVR

Reference: DG444E SAE0 disk joint 11.5

### DINGOL DG444E THREE-PHASE 350KVA AVR

DINGOL DG444E is a three-phase brushless alternator capable of delivering a maximum power of 350KVA complete with AVR voltage regulator.

All components that make up the DINGOL DG444E alternator are subjected to a specific coating and/or impregnation process to safeguard the functionality of the generator and to protect the critical peers in the various conditions of use.

DINGOL DG444E respond optimally even in the presence of non-linear loads. This result is obtained by winding the electrical cable of the stators with a pitch of 2/3, thus eliminating third order harmonics ( $3^\circ - 9^\circ - 15^\circ$ ) from the voltage curve. This also eliminates the excess of neutral current that sometimes appears with larger pitch windings, during grid parallel operation.

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

DINGOL DG444E are designed to ensure an IP22 protection class for industrial use suitable for protection from normal weather conditions.

For extreme atmospheric conditions, models are available that also guarantee IP23 standard protection against water up to  $60^\circ$  from vertical. Marine use requires IP23 standard, and also a 5% derating of the alternator.

DINGOL DG444E 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 DG444E 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.

All synchronous machines, in order to work, need an electronic control system, and this device, known as AVR, guarantees the good working of the machine and above all of the electric network behind it.

The high efficiency of the AVR ensures operation even when the residual excitation current is very low. The output current 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 made out of phase.

#### TECHNICAL CHARACTERISTICS DINGOL DG444E

Phase Type: Three Phase  
Power Supply Voltage: 400 - 440 V  
Frequency: 50 - 60 Hz  
Maximum Power (50 Hz): 280KW  
Maximum Power (50 Hz): 350KVA  
Maximum Power (60 Hz): 320KW  
Maximum Power (60 Hz): 400KVA  
Revolutions Per Minute: 1500 rpm  
Efficiency %: 93.3  
Brush type: Brushless  
Voltage regulator: AVR  
Protection class: IP22  
Width: 1172 mm  
Length: 776 mm  
Height: 852 mm  
Dry weight: 995 Kg

Are you looking for an alternator with different characteristics? [Here](#) you can find the whole range DINGOL or other specialized brands.

Images and technical data are not binding.

### Technical Sheet

Phase	Three phase
Maximum power three phase (KW)	280
Maximum power three phase (KVA)	350
Frequency (Hz)	50 / 60
Voltage (V)	400
Engine rpm (rpm)	1500
Efficiency (%)	93.3
Protection degree	IP22
Length (mm)	1172
Width (mm)	776
Height (mm)	852
Dry weight (Kg)	995
Brushes	No
Type of alternator	Constant Speed
Voltage regulator	AVR