



# DINGOL DG224D Three-phase Alternator 50 KVA AVR

## Product description:

### **DINGOL DG224D THREE PHASE 50KVA AVR**

DINGOL DG224D is a three-phase brushless alternator capable of delivering a maximum power of 50KVA complete with AVR voltage regulator.

DINGOL DG224D is equipped with a class H insulation system. All components are subjected to a specific coating and/or impregnation process in order to safeguard the functionality of the generator and to protect the critical parts in the various conditions of use.

DINGOL DG224D alternators are equipped with a class H insulation system.

The DINGOL DG224D alternators respond optimally even in the presence of non-linear loads. In fact, this also eliminates the excess of neutral current that sometimes appears with larger pitch windings during grid parallel operation. A fully connected auxiliary buffer winding contributes to drastically reducing parallel oscillations. The above, together with other constructive measures contribute to minimize waveform distortions.

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

DINGOL DG224D adopt the IP22 (NEMA1) standard for industrial use suitable to provide protection from normal weather conditions. For extreme weather conditions, the IP23 standard is also available, which provides protection against water up to 60° from vertical.

DINGOL DG224D have twelve end terminals 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 provided on the back of the termination box cover.



## VOLTAGE REGULATOR AV

VRs are installed indifferently on alternators intended for industrial use and those intended for marine use. They allow to transfer in a constant way the necessary energy from the excitation stator to the main exciter, independently from the power developed moment by moment by the generator.

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 automatic voltage regulator, 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 the engine of 4%.

## TECHNICAL FEATURES DINGOL DG224D

Phase Type: Three-phase  
Voltage (V): 400  
Frequency (Hz): 50  
Revolutions per minute (rpm): 1500  
Single-phase power (kVA): ----  
Three-phase power (kVA): 50  
Type of alternator: constant speed  
Voltage regulator: AVR  
Brushless  
Protection class: IP22 (on request IP 23)  
Weight (Kg): 268

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.

### Product features:

Phase: Three phase  
Frequency (Hz): 50  
Voltage (V): 400  
Engine rpm (rpm): 1500  
Three-phase power (KW): 40  
Three-phase power (KVA): 50

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Efficiency (%): 88.2

Protection degree: IP22

Length (mm): 750

Width (mm): 500

Height (mm): 880

Dry weight (Kg): 268

Brushes: No

PMG: Optional

Type of alternator: Constant Speed

Voltage regulator: AVR