



## DINGOL DG224G THREE-PHASE 85KVA AVR

Reference: DG224G

### DINGOL DG224G THREE-PHASE 85KVA AVR

DINGOL DG224G is a three-phase brushless alternator capable of delivering a maximum power of 85KVA complete with AVR voltage regulator.

DINGOL DG224G 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 DG224G alternators are equipped with a class H insulation system.

The DINGOL DG224G alternators 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 ( $3^\circ - 9^\circ - 15^\circ$ ). In fact in this way it is also eliminated the excess of neutral current that sometimes appears with windings of greater pitch, during the operation in parallel network.

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

DINGOL DG224G 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  $60^\circ$  from vertical.

DINGOL DG224G 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 AVR

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

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  $\cos\phi$  0.8 and up to a variation r.p.m. of the engine of 4%.

The voltage is adjusted by acting on a trimmer.

#### TECHNICAL FEATURES DINGOL DG224G

Phase Type: Three-phase  
Voltage (V): 400  
Frequency (Hz): 50  
Revolutions per minute (rpm): 1500  
Three-phase Power: 68 KW  
Three-phase Power (kVA): 85  
Type of alternator: constant speed  
Voltage regulator: AVR  
Brushless  
Protection class: IP22 (IP 23 upon request)  
Weight (Kg): 370

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
Frequency (Hz)	50
Voltage (V)	400
Engine rpm (rpm)	1500
Three-phase power (KW)	68
Three-phase power (KVA)	85
Efficiency (%)	90.2
Protection degree	IP22
Length (mm)	900
Width (mm)	500
Height (mm)	880
Dry weight (Kg)	370
Brushes	No
PMG	Optional
Type of alternator	Constant Speed
Voltage regulator	AVR