



## DINGOL DG274K Three-phase Alternator 250 kVA AVR

Reference: DG274K

### DINGOL DG274K THREEPHASE 250 KVA AVR

DINGOL DG274K is a threephase brushless alternator capable of delivering a maximum power of 250KVA complete with AVR voltage regulator.

All components that make up the 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 DG274K responds optimally even in the presence of non-linear loads. This result is obtained by winding the stator electric cable with a 2/3 pitch, thus eliminating third-order harmonics ( $3^\circ - 9^\circ - 15^\circ$ ) from the voltage curve. This also eliminates the excess neutral current that sometimes appears with larger pitch windings during parallel operation.

DINGOL DG274K are designed in such a way as to guarantee an IP22 protection class for industrial use suitable for protection from normal weather conditions.

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

Models are available for extreme weather conditions.

On the test bench, the rotors are balanced to the best of the BS6861:part 1 box 2.5. directive to allow operation with as little vibration as possible. THF (as defined by BS4999 part 40) is at best 2%, while TIF : Telephone Influence Factor as defined by NEMA MG1-32) is better than 50.

DINGOL DG274K is a brushless alternator, this feature together with the high efficiency of the AVR ensure a low level of interference with radio waves.

All DINGOL DG274K alternators have twelve terminal pins and are delivered pre-configured in three-phase configuration unless otherwise specified by the customer. If it is necessary to change the configuration, all possible configurations are marked on the back of the termination box cover.<sup>1</sup>

### VOLTAGE REGULATOR AVR

The AVR are installed on both industrial and marine alternators. They allow to transfer in a constant way the necessary energy from the excitation stator to the main exciter independently from the power developed instant by instant 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 AVR through sensing regulates the voltage of the 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 CHARACTERISTICS DINGOL DG274K

Phase Type: ThreePhase  
Voltage (V): 400  
Frequency (Hz): 50  
Revolutions Per Minute (rpm): 1500  
ThreePhase Power (kW): 200  
ThreePhase Power (kVA): 250  
Type of alternator: constant speed  
Voltage regulator: AVR  
Brushless  
Protection class: IP22 (on request IP 23)  
Weight (Kg): 730

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)	200
Three-phase power (KVA)	250
Efficiency (%)	92.7
Protection degree	IP22
Length (mm)	1170
Width (mm)	600
Height (mm)	960
Dry weight (Kg)	730
Brushes	No
PMG	Optional
Type of alternator	Constant Speed
Voltage regulator	AVR