



# DINGOL DG274J Three-phase Alternator 225 kVA AVR

## Product description:

### **DINGOL DG274J THREEPHASE 250 KVA AVR**

DINGOL DG274J is a three-phase brushless alternator capable of delivering a maximum power of 225KVA complete with AVR voltage regulator.

DINGOL DG274J responds 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 parallel operation.

DINGOL DG274J are designed 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 IP23 standard protection against water up to  $60^\circ$  from vertical. Marine use requires the IP23 standard, and also a 5% derating of the alternator.

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. The THF (as defined by the directive BS4999 part 40) is at best 2%, while the TIF : Telephone Influence Factor as defined by the directive NEMA MG1-32) is better than 50.

DINGOL DG274J is a brushless alternator, this characteristic together with the high efficiency of the AVR ensure a low level of interference with radio waves.

DINGOL DG274J have twelve terminal blocks 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>



## AVR VOLTAGE REGULATOR

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 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 via 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 cold to operating temperature variations, up to cos-phy 0.8 and up to a 4% r.p.m. variation of the motor.

## TECHNICAL CHARACTERISTICS DINGOL DG274J

Phase Type: ThreePhase

Voltage (V): 400

Frequency (Hz): 50

Revolutions Per Minute (rpm): 1500

ThreePhase Power (kW): 180

ThreePhase Power (kVA): 225

Type of alternator: constant speed

Voltage regulator: AVR

Brushless

Protection class: IP22 (IP 23 upon request)

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.

### Product features:

Phase: Three phase

Frequency (Hz): 50

Voltage (V): 400

Engine rpm (rpm): 1500

Three-phase power (KW): 180

Three-phase power (KVA): 225

---



Efficiency (%): 92.6

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

