



## DINGOL DG224F THREE-PHASE 72KVA AVR

Reference: DG224F

### DINGOL DG224F THREEPHASE 72KVA AVR

DINGOL DG224F is a threephase brushless alternator capable of delivering a maximum power of 72KVA complete with AVR voltage regulator.

DINGOL DG224F is equipped with a class H insulation system. All components are subjected to a specific coating and/or impregnation procedure in order to safeguard the functionality of the generator and to protect critical parts in various conditions of use.

The DINGOL DG224F alternators perform excellently 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 ( $3^\circ - 9^\circ - 15^\circ$ ). In fact in this way it also eliminates the excess of neutral current which sometimes appears with larger pitch windings during 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 DG224F adopt the IP22 (NEMA1) standard for industrial use suitable for protection against 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 DG224F 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 shown on the back of the termination box cover.

### AVR VOLTAGE REGULATOR

Electronic AVR's are installed indifferently on alternators intended for industrial 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. It is possible to expand the functions of the AVR.

The automatic voltage regulator, by means of 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 r.p.m. variation of 4%.

## TECHNICAL CHARACTERISTICS DINGOL DG224F

Phase type: Threephase  
Voltage (V): 400  
Frequency (Hz): 50  
Revolutions per minute (rpm): 1500  
Threephase power (kW): 58  
Threephase power (kVA): 72.5  
Type of alternator: constant speed  
Voltage regulator: AVR  
Brushless  
Protection class: IP22 (IP 23 on request)  
Weight (Kg): 316

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)	58
Three-phase power (KVA)	72.5
Efficiency (%)	90
Protection degree	IP22
Length (mm)	860
Width (mm)	500
Height (mm)	880
Dry weight (Kg)	316
Brushes	No
PMG	Optional
Type of alternator	Constant Speed
Voltage regulator	AVR