DINGOL DG224E Three-phase Alternator 60 kVA AVR

Product description:

DINGOL DG224E THREE-PHASE 60KVA AVR

DINGOL DG224E is a three-phase brushless alternator capable of delivering a maximum power of 60KVA complete with AVR voltage regulator.

DINGOL DG224E is equipped with a class H insulation system. All the components are subjected to a specific coating and/or impregnation procedure in order to safeguard the functionality of the generator and to protect the critical parts in the various conditions of use.

DINGOL DG224E alternators are equipped with a class H insulation system.

The DINGOL DG224E 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° - 9° - 15°). In fact, this also eliminates the excess neutral current that 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 DG224E 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 DG224E 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 surges 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 output current from the alternator with a margin of control 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 DG224E

Phase Type: Three-phase
Voltage (V): 400
Frequency (Hz): 50
Revolutions per minute (rpm): 1500
Three-phase Power: 48 KW
Three-phase Power (kVA): 60
Type of alternator: constant speed
Voltage regulator: AVR
Brushless
Protection class: IP22 (IP 23 upon request)
Weight (Kg): 290

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): 48

Three-phase power (KVA): 60
Efficiency (%): 88.6
Protection degree: IP22
Length (mm): 860
Width (mm): 500
Height (mm): 880
Dry weight (Kg): 290
Brushes: No
PMG: Optional
Type of alternator: Constant Speed
Voltage regulator: AVR