



## STANDARD SPECIFICATIONS

### Output Ratings

The following 3 phase ratings are available:  
50HZ 415/240V 400/230V 380/220V 230/115V  
220/110V  
60HZ 480/277V 440/254V 415/240V 400/230V  
380/220V 240/120V 230/115V 220/127V  
220/110V

### Engine

Heavy duty industrial diesel engine (technical details are supplied on the reverse of this sheet).  
Lube oil drain valve fitted as standard.

### Governor

Mechanical compliant with BS5514, Class A 1.

### Electrical System

12 volt DC. Energized to run shutdown solenoid.  
Oil pressure and water temperature shutdown via senders and switch gauges.

### Alternator

Our alternators have been carefully selected to match the overload performance of the engine and incorporate the following; screen protected and drip-proof, self exciting, self regulating brushless alternator with fully interconnected damper windings; IC06 cooling system and sealed-for-life bearings. 12 wire reconnectable windings provide a wide range of 3 phase voltages.

### Insulation System

The Insulation system is Class H. All windings are Impregnated in either a triple dip thermo-setting moisture, oil and acid resisting polyester varnish or vacuum pressure impregnated with a special polyester resin. Heavy coat of anti-tracking varnish for additional protection against moisture or condensation.

### Electrical Characteristics

Electrical design in accordance with BS5000 Part 99, IEC34-1, VDE0530, UTE5100, NEMAMG-122, CEMA, CSA22.2 and AS1359

### Automatic Voltage Regulator

The fully sealed automatic voltage regulator maintains the voltage within the limits of  $\pm 1.5\%$  from no load to full load including cold to hot variations at any power factor between 0.8 lagging and unity and inclusive of a speed variation of 4.0%. Nominal adjustment is by means of a trimmer incorporated in the AVR.

### Radio Interference

Suppression is in line with the provisions of BS EN 50081 and VDE Class G.

### Control System

Independently mounted and operated control panel of fabricated sheet steel construction with a hinged lockable door.

The control panel is isolated from vibration and comprises of the following instrumentation and controls:

Oil pressure gauge, Water temperature gauge, Battery charge ammeter, Voltmeter and selector switch, Ammeter and selector switch, Frequency meter and hours counter. A key start control module and emergency stop button are fitted as standard.

### Shutdown Protection Devices with Indicators for:

High Coolant Temperature/ Low Oil Pressure

### Circuit Breaker

3 Pole molded case circuit breaker independently mounted on the base frame in a vibration isolated sheet steel box with adequate access for incoming and outgoing cables.

### Fuel System

The base frame design incorporates an integral fuel tank with a capacity of approx. 8 hours.

The tank is supplied complete with level indicator, fuel fill cap, bosses for vent, drain and remote fuel tank connections and fuel feed and return lines to engine.

### Cooling Radiator

Radiator and cooling fan complete with protection guards, designed to cool the engine at specified output, in air-on temperatures up to  $50^{\circ}\text{C}$  ( $122^{\circ}\text{F}$ ).

Coolant drain valve fitted as standard.

### Engine Filtration System

Sealed paper mesh type dry air filters. Cartridge type fuel filters and full flow lube oil filters. All filters have replaceable elements.

### Exhaust System

Heavy duty industrial capacity exhaust silencer. Stainless steel exhaust bellows.

### Electrical System

12 Volt system with battery charging alternator, axial type starter motor, high capacity maintenance free lead acid starting battery, battery rack mounted on the generator set base frame, and heavy duty interconnecting cables with terminations.

### Mounting Arrangement

The complete generator set is mounted, as a whole, on a heavy duty fabricated, welded steel base frame. The base frame incorporates specially designed lifting eyes and apertures for either slings or forklift operation.

### Cooling

The engine and alternator are directly coupled by means of an SAE flange so that there is no possibility of misalignment after prolonged use. The engine flywheel is flexibly coupled to the alternator rotor and a full torsional analysis has been carried out to guarantee no harmful vibration will occur in the assembly.

### Anti-Vibration Mounting Pads

Anti-Vibration pads are affixed between engine/alternator feet and the base frame thus ensuring complete vibration isolation of the rotating assemblies.

### Safety Guards

The fan, fan drive and battery charging alternator drive are fully guarded for personnel protection. A stone guard protects the radiator core from accidental damage.

### General Arrangement

The generator set is designed and constructed for installation in a weather-protected building. Various types of weatherproof and sound attenuated enclosures are available.

### Documentation

A full set of operation and maintenance manuals and circuit wiring diagrams.

### Factory Tests

The generator set is load tested before dispatch. All protective devices, control functions are simulated and the generator and its systems checked, proved and then passed for dispatch. A test certificate is provided as standard.

### Equipment Finish

Primer on all equipment. Final coat to manufacturer's standard.

### Quality Standards

The equipment meets the following standards: BS4999, BS5000, BS5514, IEC 34, VDE0530, NEMA MG.122

### Product Endorsement

All equipment is guaranteed for a period of 12 months from date of commissioning, or 18 months from date of ex works shipment, whichever occurs first.

Extended warranty terms are available, for details please contact our Customer Services Department.

Equipment must only be used in accordance with recommended operating practices and subject to any specified load limitations.

