

Industrial Genset

DP 27

Power Rating	1500 rpm/50 Hz	1800 rpm/60 Hz
Prime	27.5kVA, 22.0kW	32.5kVA, 25.9kW
Standby	30.0kVA, 24.1kW	35.5kVA, 28.5kW

Generator set consisting of engine and alternator mounted on a fabricated steel profile base, painted with a phosphate primer and top coat.

The alternator is directly coupled to the engine flywheel housing to SAE standards. The rotor is fixed to the flywheel using steel discs for flexibility. Perfect alignment and the absence of vibration are thus guaranteed.

The unit is fixed to the baseframe using anti-vibration pads.

ENGINE

Type..... 4-stroke diesel
direct injection.
Manufacturer Perkins
Model..... 3.152.4
No. of cylinders..... 3
Engine capacity 2500 cc
Bore 91.4 mm
Stroke 127mm
Compression ratio 16.5 : 1
Aspiration..... Atmospheric
Cooling Water cooled
Engine speed 50/60 Hz 1500/1800 rpm
Prime power 50/60Hz ISO3046..... 33.9 / 40.4 bhp
Fuel consume 100%load 50/60Hz 6.9 / 8.3 ltr/h
Fuel tank capacity..... 56 litres
Approx. runtime w/o 50/60 Hz 8 / 7 hours

Cooling system

Closed circuit water cooled with expander tank included in the radiator. Tropical radiator and pusher fan with guard. Equipped to work at ambient temperature of up to 52° C.
Cooling air flow from fan 50/60 Hz . 85 / 94 m3/min
Cooling system capacity..... 9.9 litres

Lubrication system

Forced lubrication using gear driven pump. Oil filter
Oil sump capacity 5.75 litres
Consumption Max. 1% of fuel

Aspiration system

Natural aspiration via dry air filter.
Aspired air flow..... 1.87 m3/min

Injection system

Rotating injection pump with mechanical governor.
Fuel filter and pre-filter.

Electrical system

12 V electric starting system. Axial starter motor.
70 A.h. battery. 55 Amp battery charging alternator.
Oil pressure and engine temperature sensors.

Protection system

Automatic engine shutdown for low oil pressure, low fuel level, high temperature, battery charge defect and overload.

Exhaust system

Consists of silencer with 10 db(A) noise reduction, flexible exhaust pipe and brackets. Residential silencer optional.

ALTERNATOR

Synchronous, three phase and brushless. Self regulation via automatic voltage regulator maintaining voltage within +/- 1.5%. Class "H" insulation. All windings impregnated with polyester resin, making them resistant to acids and oil. IP 23 protection.

Electrical characteristics to BS 5000, VDE 0530, UTE 5100, NEMA MG 1-22, CMA IEC 34, CSA 22,2 and AS 1359. Harmonic distortion below 3.5%. Radio interference suppression to BS-800.

Manufacturer Stamford
Model BC 184 C
Power rating 1500/1800rpm..... 27.5 34.4kVA
Voltage (*) 3x380/220Vac
Frequency 50/60Hz
Speed 1500/1800rpm
Regulation Electronic
Nominal current..... 41A

(*) 12 wire output connects to any existing voltage.

VERSIONS

The DP 27 generator set may be supplied in the following versions:

STATIONARY, STATIONARY WITH CANOPY, MOBILE WITH CANOPY AND AUTOMATIC

PowerSources

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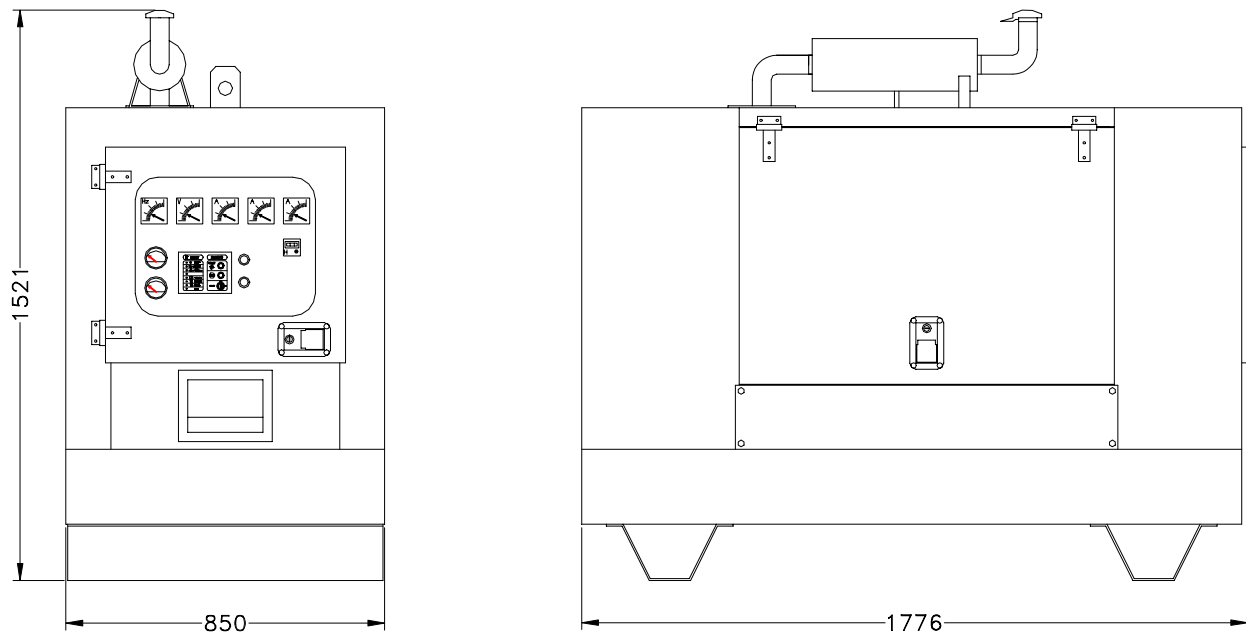
Stationary -1 □

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Stationary Version with Canopy

DP 27-C

In this version, the set is supplied on a skidbase with a metal canopy for outdoor use. The control panel is set in the canopy and is operated manually using an ignition key.



METAL CANOPY

Ideal for outdoor use, it is finished with a phosphate coating and a long lasting top coat of paint

CONTROL PANEL

Metal cabinet, with IP 54 protection, mounted on the frame with anti-vibration pads.

Equipped with:

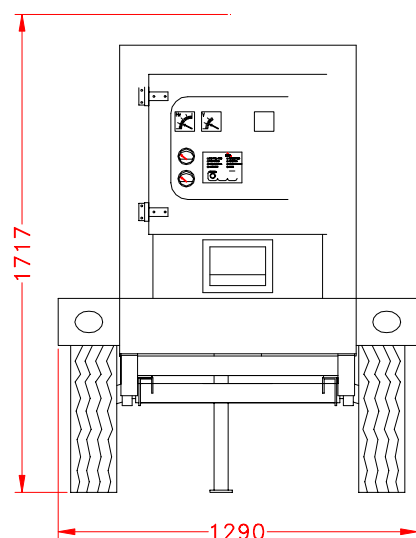
- Thermo-magnetic circuit breaker.
- 3 ammeters.
- Frequency meter.
- Voltmeter with selector switch..
- Hours run meter.
- Three phase output terminals.
- Engine temperature gauge.
- Fuel gauge.
- On light.
- Heater button.

Control card including: ignition key, start/stop buttons and Indicator lights for low oil pressure, battery charge, high temperature, low fuel level, overload and start-up failure.

Mobile Version with Canopy

DP 27-MC

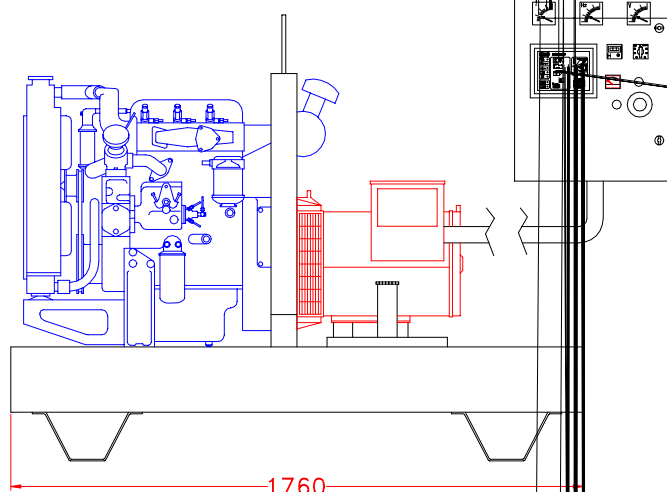
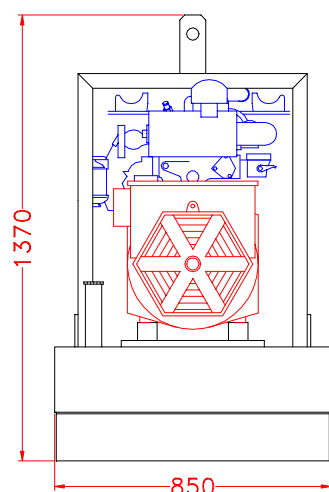
Set on baseframe mounted on independent trailer. Incorporates metal canopy housing the control panel which is operated manually via an ignition key. **METAL CANOPY** ideal for outdoor use, it is finished with a phosphate coating



Automatic Version

DP 27-C

Automatic version genset supplied on a skidbase with an automatic start/stop panel for mains failure.



ELECTRICAL PANEL

Mounted in a metal cabinet with IP 54 protection and supplied loose for wall mounting. Includes control, measuring and transfer system.

MONITORING AND CONTROL SYSTEM

Automatically monitors the mains, and, if the mains fails (in one or all three phases) connects the consumers to the generator set via mechanically and electrically interlocking contactors. When the mains is restored, the load is reconnected to the mains, the set idles and then stops. Equipped with:

- Push button controls, indicating lamp and protection fuses.
- No. of start up attempts: 3
- Three phase voltage monitor with adjustable values.

MEASURING EQUIPMENT

Consists of the following items:

- 1 Ammeter
- 1 Voltmeter
- 1 Mains-genset voltmeter selector switch.
- 1 Frequency meter
- 1 Battery voltmeter.
- Selector switch for Disconnect, Automatic Service, Man. Service, Test
- Off button.
- Start-up selector switch.
- Heater indicator lamp
- Battery maintenance system.
- Battery indicator lamp
- Audible alarm for faults
- Visible alarm system for low oil pressure, high temperature and/or overload
- Large emergency stop push button.

The set may be selected to run manually or automatically. When running manually a pushbutton is used for shutdown and a selector switch is used for start up and changeover.

TRANSFER SYSTEM

Made up of two mechanically and electrically interlocking 60 A contactors. VOLTAGE: 380/220 Vac

HEATER

In this version, the set incorporates a heater which aids diesel engine start-up and response. It consists of a tank connected to the engine cooling system and a heating element with an adjustable thermostat.