

INDUSTRIAL DIESEL GENSET

SERIES DP 60

POWER RATING	1500 rpm/50 Hz	1800 rpm/60 Hz
Prime	60.0 kVA, 47.5 kW	72.0 kVA, 57.6 kW
Standby	65.5 kVA, 52.3 kW	79.0 kVA, 63.4 kW

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

Manufacturer.....	Perkins
Type.....	4 stroke diesel engine with direct injection.
Model.....	T4.236
No. of cylinders.....	4
Engine capacity.....	3 860 cc
Bore.....	98.4 mm
Stroke.....	127.0 mm
Compression ratio.....	16: 1
Aspiration.....	Turbocharged
Cooling.....	Water cooled
Engine speed 50 / 60 Hz.....	1500 / 1800 rpm
Prime power 50 / 60 Hz.....	73.2 / 88.3 bhp ISO 3046
Fuel consumption 100% load 50 / 60 Hz.....	14.1 / 16.8 ltr/h
Fuel tank capacity.....	110 litres
Approximate running time without refill 50 / 60 Hz.....	7.8 / 6.5 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 temperatures of up to 52° C.

Cooling air flow from fan 50 / 60 Hz.....	89 m3/min
Cooling system capacity.....	16.5 litres

Lubrication system

Forced lubrication using gear driven pump. Oil filter

Oil sump capacity.....	7.1 litres
Consumption.....	Max. 1% of fuel consumption

Air intake system

Turbocharged intake via dry air filter.

Combustion air flow.....	3.5 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. 95 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 or battery charge defect..

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 are impregnated with polyester resin, making them resistant to acids and oil. IP 22 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	UC 224 E
Power rating.....	60 kVA at 1500; 70 kVA at 1800 rpm
Voltage (*).....	380/220 V three phase
Frequency.....	50 / 60 Hz
Speed	1500 / 1800 rpm
Regulation.....	Electronic
Nominal current	91 A

(*) 12 wire output permitting reconnection to any existing voltage.

VERSIONS

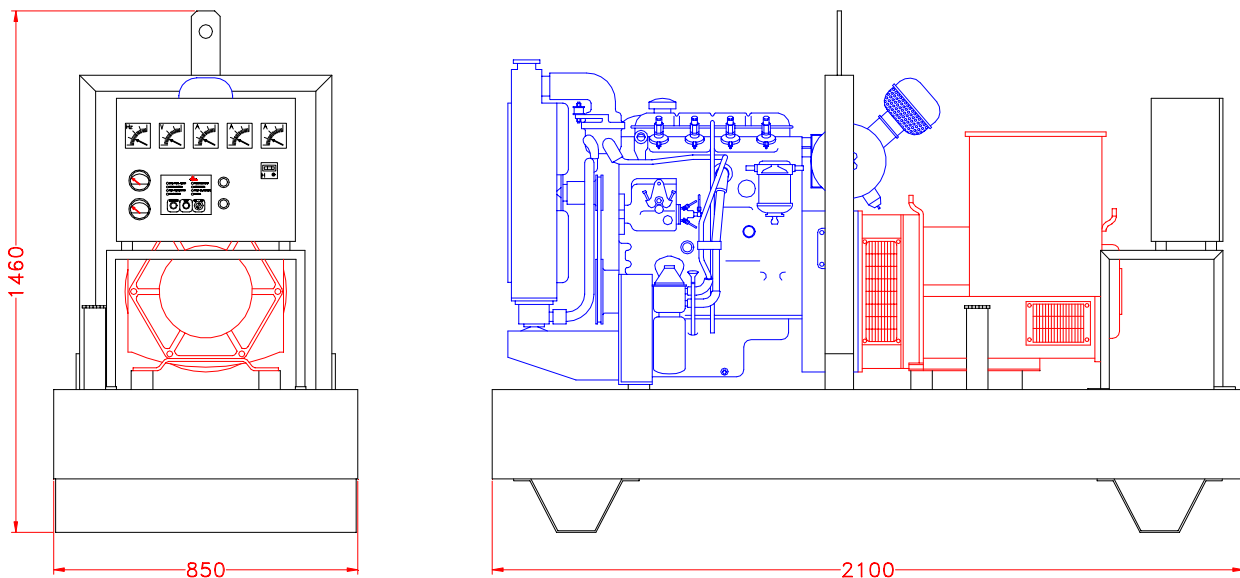
The **DP 60** generator set may be supplied in the following versions:

STATIONARY, STATIONARY WITH CANOPY, MOBILE WITH CANOPY AND AUTOMATIC

STATIONARY VERSION

DP 60

In the stationary version, the set is supplied on a skidbase with a control panel operated manually using an ignition key.



Control panel

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

Equipped with:

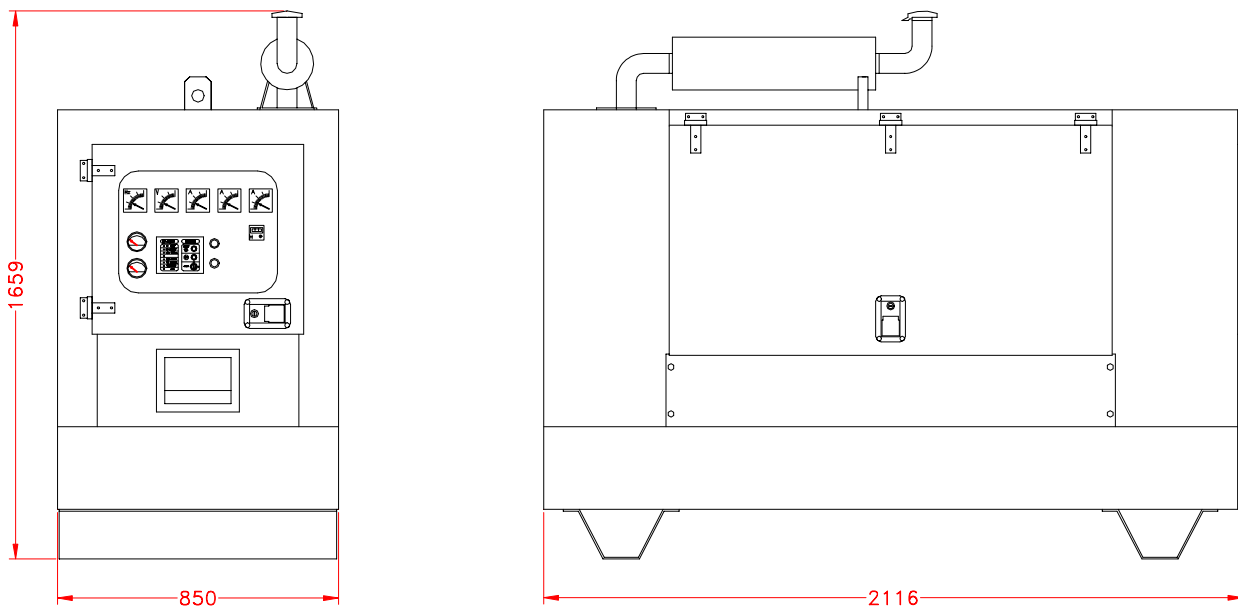
- Thermo - magnetic circuit breaker.
- 3 Ammeters.
- Frequency meter.
- Voltmeter with selector switch.
- Hours run meter.
- Three phase output terminals.
- Engine temperature meter
- Fuel meter.
- On light.
- Heater button.

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.

STATIONARY VERSION WITH CANOPY

DP 40-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 painted with a phosphate primer and a long lasting top coat.

Control panel

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

Equipped with:

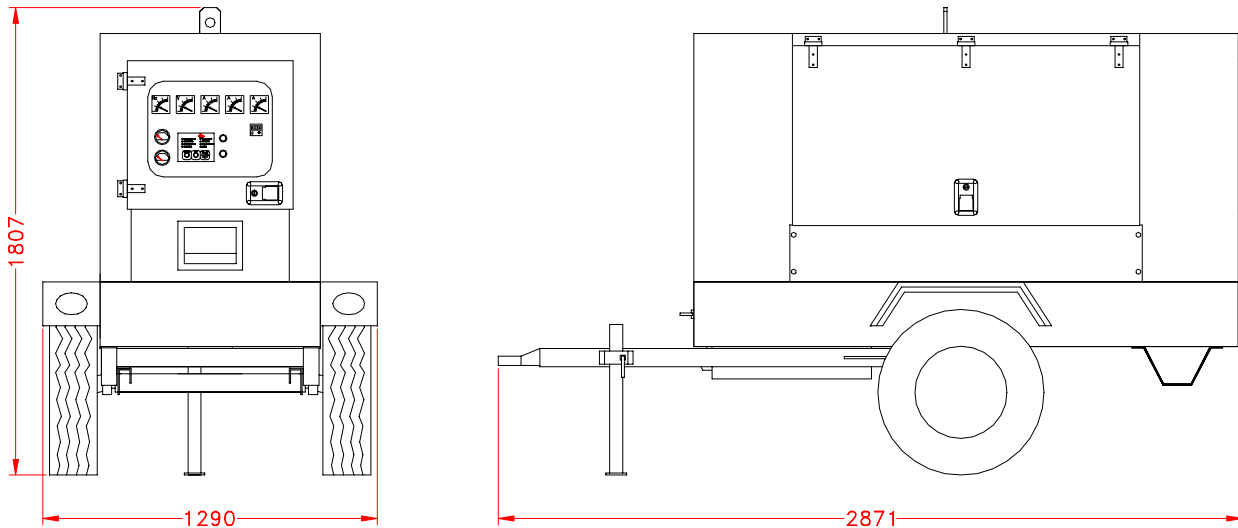
- Thermo - magnetic circuit breaker.
- 3 Ammeters.
- Frequency meter.
- Voltmeter with selector switch.
- Hours run meter.
- Three phase output terminals.
- Engine temperature meter
- Fuel meter.
- On light.
- Heater button.

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 60-MC

Set on baseframe mounted on independent trailer. Incorporates metal canopy housing the control panel which is operated manually using an ignition key.



Metal canopy

Ideal for outdoor use, it is painted with a phosphate coating and a long lasting top coat.

Trailer

Made up of: wheels with tyres, DIN towing eye, rubber axle suspension, and support leg. Jockey wheel on request.

As an option, A TRAILER ADAPTED FOR ROAD TRANSPORTATION may be supplied.

Control panel

Metal cabinet, with IP 54 protection, mounted on the baseframe with anti-vibration pads. Equipped with:

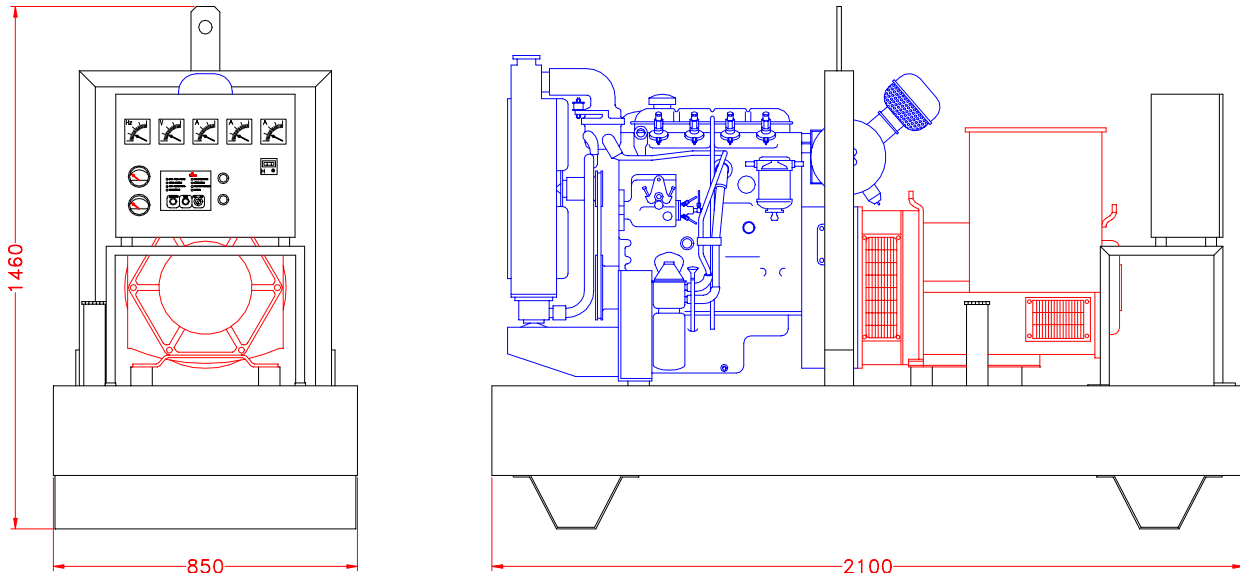
- Thermo - magnetic circuit breaker.
- 3 Ammeters.
- Frequency meter.
- Voltmeter with selector switch.
- Hours run meter.
- Three phase output terminals.
- Engine temperature meter
- Fuel meter.
- On light.
- Heater button.

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.

AUTOMATIC STATIONARY VERSION

DP 60-N

Automatic version generator set 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 contactors which are mechanically and electronically activated. 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: 3 Ammeters

- 1 Voltmeter
- 1 Mains-generator set voltmeter selector switch.
- 1 Frequency meter
- 1 Battery voltmeter.
- Selector switch for Disconnect, Automatic Service, Manual Service and Test
- Off button
- Start-up 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 80 A contactors with mechanical and electrical activation. WORKING VOLTAGE: 380/220V

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