

Industrial Diesel Genset

DVS 205

OUTPUT	1500 rpm/50 Hz	1800 rpm/60 Hz
Continuous	207 kVA, 166 kW	233 kVA, 187 kW
Standby	228 kVA, 182 kW	256 kVA, 205 kW

Generator set consisting of engine and alternator mounted on a fabricated steel profile base, finished with a phosphate coating 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.

The set is supplied with a **SOUNDPROOFED METAL CANOPY** in all versions. This canopy is covered on the inside with soundproofing material which added to the silencer gives a **noise level of 68 db(A) at 7 mts.**

ENGINE

Type..... 4 stroke diesel direct injection.
Manufacturer Volvo Penta
Model TD 1010 G
N° of cylinders..... 6
Engine capacity 9600 cc
Bore 120.65 mm
Stroke 140 mm
Compression ratio 14.3:1
Aspiration..... Turbocharged
Cooling Water
Engine speed 50/60Hz 1500 / 1800 rpm
Continuous power 50/60 Hz ISO 3046 248/276hp
Consumption 100% load 50/60Hz 44/49 l/h
Fuel tank capacity..... 365 l
Approx. runtime w/o refill 50/60Hz..... 8/7 h

Cooling system

Closed circuit water cooled with expander tank included in the radiator. Tropicalised 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 111 m³/min
Cooling system capacity..... 42.3 litres

Lubrication system

Forced lubrication using gear driven pump. Oil filter
Oil housing capacity..... 25 litres
Consumption 0.12 ltr/h

Aspiration system

Turbocharged aspiration via dry air filter and intermediate water cooling system of aspirated air
Aspirated air flow 12.1 m³/min

Injection system

Injection pump in line with centrifugal regulator.
Diesel fuel filter and prefilter.

Electrical system

24 V electric starting system. Axial starter motor.
2x180 Ah battery. 60 Amp battery charging alternator. Oil pressure gauge and engine temperature thermal contact.

Protection system

Automatic engine shutdown if oil pressure too low, fuel lacking, temperature too high or battery charge defective.

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 varnish, making them resistant to acids and oil. IP 22 protection. Manufactured 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 274 H
Power 1500/1800rpm 200 / 245 kVA
Voltage (*)..... 380/220 V three phase
Frequency..... 50 / 60 Hz
Speed 1500 / 1800 rpm
Regulation..... Electronic
Nominal intensity 304 A
(*) 12 wire output permitting reconnection to any existing voltage.

VERSIONS

The **DVS 205** generator set may be supplied in the following versions:

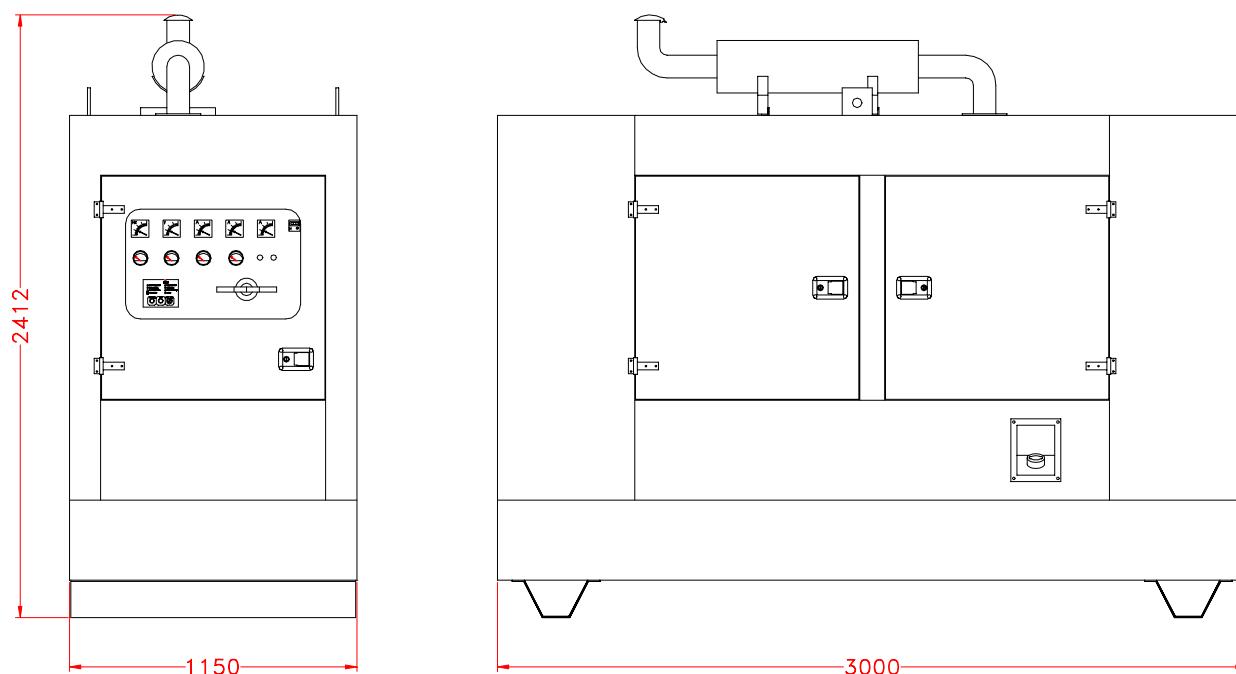
FIXED, MOBILE AND AUTOMATIC



Stationary Version

DVS 205

In this version, the set is supplied on a baseframe 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 baseframe with anti-vibration pads.

Equipped with:

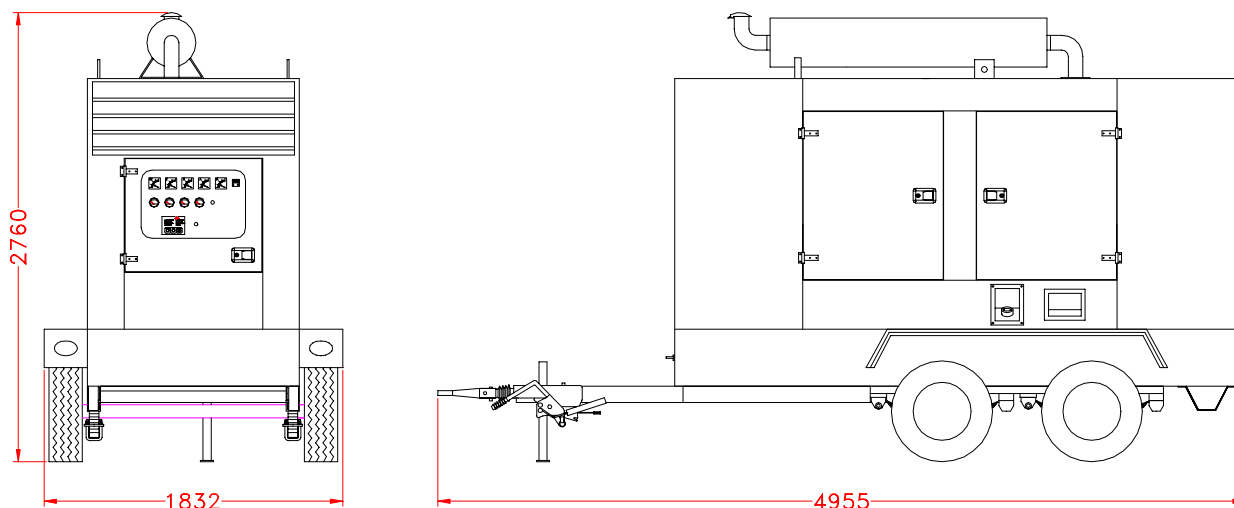
- Manual switch with fuses.
- 3 Ammeters.
- Frequency meter.
- Voltmeter with commutator.
- Hour run meter.
- Three phase output terminal.
- Engine temperature meter
- Fuel oil meter.
- Oil pressure meter
- Battery charge meter
- Connection indicator lamp.
- Heater button
- Overintensity indicator lamp

Control board including: ignition key. Start/stop buttons. Indicator lamps for: low oil pressure, battery charge, high temperature, lack of fuel, overload and start-up failure.

Mobile Version

DVS 205-M

Set on baseplate mounted on independent trailer kit. Incorporates metal canopy which houses the control panel and is operated manually via an ignition key.



Metal canopy

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

Trailer kit

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

As an option, AN APPROVED TRAILER KIT for road transportation may also be supplied

Control panel

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

- Manual switch with fuses.
- 3 Ammeters.
- Frequency meter.
- Voltmeter with commutator.
- Hour run meter.
- Three phase output terminal.
- Engine temperature meter
- Fuel oil meter.
- Oil pressure meter
- Battery charge meter
- Connection indicator lamp.
- Heater button
- Overintensity indicator lamp

Control board

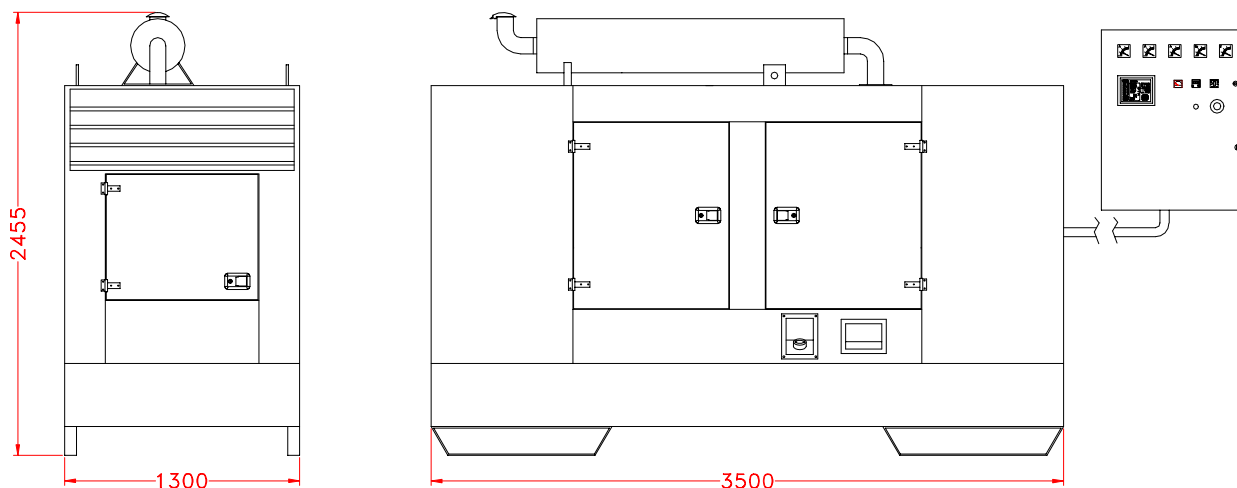
including:

- ignition key
- Start/stop buttons
- Indicator lamps for:
 - low oil pressure
 - battery charge
 - high temperature
 - lack of fuel
 - overload
 - start-up failure.

Automatic Version

DVS 205-N

The automatic version generator set is supplied on a baseplate 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.
- N° 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 commutator.
- 1 Frequency meter
- 1 Battery voltmeter.
- Selector switch for Disconnect, Automatic Service, Manual Service and Test
- Off button.
- Heater 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 transfer.

TRANSFER SYSTEM

Made up of two 350 A contactors with mechanical and electrical activation

WORKING VOLTAGE: 380/220 V

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.