



# SOMMERS

## SMG DP 100

MODEL:SMGDP 100

Power rating @ 60Hz		Power rating @ 50Hz	
<b>Prime</b>	90 KW	<b>Prime</b>	80 KW
<b>Standby</b>	100 KW	<b>Standby</b>	88 KW

Generator set comprising engine and alternator assembly mounted on fabricated steel profile baseframe. Baseframe is painted with a phosphate primer and top coat.

The alternator is directly coupled to the engine and the rotor is fixed to the flywheel using steel discs for flexibility. This assembly guarantees perfect alignment and the absence of vibration.

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

### ENGINE: PERKINS (Four- stroke diesel engine with direct injection)

Model	1104C-44TAG2	Aspiration	Turbocharged
No. of cylinders	4	Cooling	air to air charge cooled
Engine capacity	4.4litres (269cu.In.)	Speed 60 / 50Hz	Water cooled
Bore	105mm.	Standby Hp @ 60Hz	1800 / 1500 rpm
Stroke	127mm.		158 Hp
Compression Ratio	18.3:1		

**Standard Single Wall Sub-base Tank:** 157 Litre

#### Fuel Consumption

Load	I / h	I / h
	60Hz	50Hz
25% load	0	0
50% load	14.1	11.8
75% load	20.2	17.1
100% load	26.9	22.6

#### Cooling System

Closed circuit water cooled with expansion tank included in the radiator. Tropical radiator and fan with guard. Suitable for working at ambient temperatures of up to 53°C.

Air flow fan 60 / 50 Hz	225/225 m3min
Cooling system capacity	12.6L

#### Lubrication system

Forced lubrication with gear type pump. Oil filter.

Lubricating oil capacity: Total system	8.0 L
Oil consumption	Max. 0.15% of fuel consumption

## Air intake system

Turbo charged with dry air filter.

Combustion air flow 7.80 / 7.75 m3min

## Injection system

Rotary injection pump with Perkins LCS Electronic Governor

## Electrical system

12 V starting system. Axial starter motor. 97 Ah battery 55 Amp Battery charging alternator.

## Protection System

Automatic engine shutdown with LED indication for low oil pressure, high engine temperature, battery charge failure, overcrank, & overspeed

## Exhaust System

Consists of residential exhaust silencer with 10dB(A) noise reduction, stainless steel flexible hose and brackets. Optionally, a critical or hospital grade silencer can be supplied.

## Alternator

Stamford / Newage Brushless Alternator. Self regulated via SX460 AVR keeping voltage within 1.5%. Windings are Class H insulated, All wound components are impregnated with polyester resin for resistance to acids and oils. Protection grade IP 22.

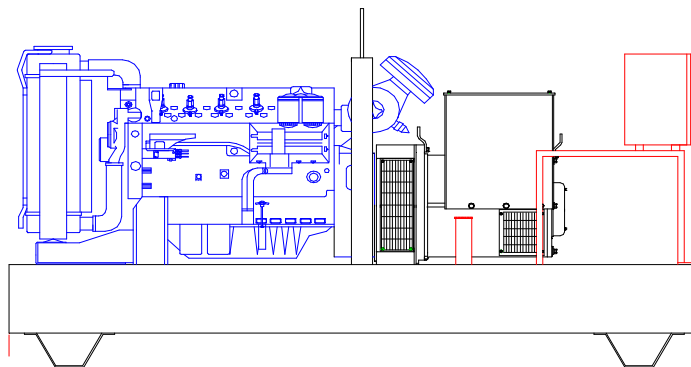
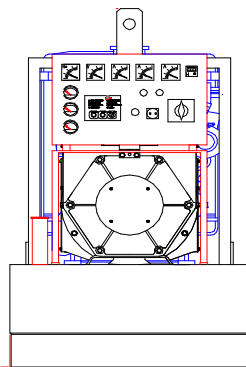
## ELECTRICAL SYSTEM

### Control Panel GPM-2

Voltmeter switch	1	Manual start up	■
Ammeter	3 (on 3Ph system only)	Remote control start up	■
Frequency meter	1	Startup failure	■
Hours run meter	■	Battery charge failure	■
Fuel level gauge	■	Low oil level	■
Water temperature gauge	■	High water temperature	■
Oil pressure gauge	□	Low fuel level	■
Battery intensity gauge	□	Water level in radiator	■
Battery voltage gauge	□	Emergency stop button (housed units only)	■
Main Line Breaker	■	Overspeeding	■
Auto start up for main failure	□	Overload	■
		Maintenance	■

**Breaker:** 120 / 240V, 1Ph = 400Amp  
 120 / 208V, 3Ph = 350Amp  
 347 / 600V, 3Ph = 125Amp

## Dimensions



	<b>SILENT</b>	<b>OPEN</b>
Length (L)	110	81.29
Width (W)	39	31.49
Height (H)	60	68.18
Weight (lb')	3616	2315.25

Open Unit  
 Outlet Air Louvre 30"  
 Inlet Air Louvre 30"

NOTE: Not for  
 Construction use  
 Consult factory.