

Standby Power (ESP)

Standby power is defined as the maximum power available during a variable electrical power sequence, under the stated operating conditions, for which a generating set is capable of delivering in the event of a utility power outage or under test conditions for up to 500 hours of operation per year under average of 70% load. Overloading is not permissible

Prime Power (PRP)

Prime power is defined as being the maximum power which a generating set is capable of delivering continuously whilst supplying a variable electrical load. Average load should be 70%. The generator can be overloaded 10% for 1 hour per 12 hours.

Power Output Ratings

50 Hz. / 400 V

Standby Power (ESP)	kVA	375
	kW	300
Prime Power (PRP)	kVA	338
	kW	270,4

Engine

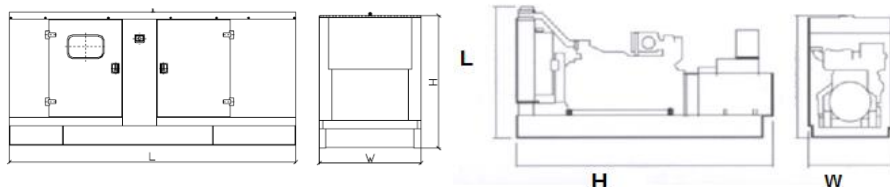
Manufacturer	SDEC	
Model	SC12E460D2	
No of Cylinder / Configuration	6 IN-LINE	
Displacement lt	lt	12,9
Bore / Stroke	mm	135/150
Compression Ratio	17:01	
Aspiration	TURBO CHARGED	
Governor Type	ELECTRONIC	
Cooling System	WATER	
Coolant Capacity (engine only)	lt	23
Lubrication Oil Capacity	lt	34,4
Electrical System	VDC	24
Speed / Frequency	rpm	1500 rpm / 50 Hz
Engine Gross Power	kWm	320
Fuel Consumption lt/h	100%	63,5
	75%	47
	50%	31,5
Exhaust Outlet Temperature	°C	550
Exhaust Gas Flow	m³/min	9,5
Air Intake-Engine	m³/min	3,2
Radiator Cooling Air	110	

Alternator

Manufacturer	YANAN	
Model	SLG314EL	
Power Factor	0,8	
No of Bearing	SINGLE	
No of Poles	4	
No of Leads	12	
Voltage Regulation (Steady State)	± %0,5	
Insulation	H	
Degree of Protection	IP23	
Excitation System	AVR, BRUSHLESS	
Connection Type	STAR	
Total Harmonic Content (No Load)	< %2	
Frequency	Hz	50
Voltage Output	VAC	231/400

DIMENSION

	L x W x H (mm)	Weight (kg)	Fuel Tank (lt)
Canopied	3970x1300x1950	2950	450
Open Skid	3000x1100x1560	2250	450



Technical information and values are according to ISO8528, ISO3046, NEMA MG1.22, IEC 600341, BS 49995000, VDE 0530 standards. Producing with ISO9001, CE standards.

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DESIGN SPECIFICATIONS

High quality, reliable and complete power unit, Compact design, Easy start and maintenance possibility, Every generating set is subjected to a comprehensive test programme which includes full load testing and checking and providing of all control and safety shut down functions testing, Full engineered with a wide range of options and accessories: Canopy, soundproof and on road trailer. ACCORDING TO ISO 8529

STANDARD GENSET SPECIFICATIONS

ENGINE

Heavy duty diesel engine. Four stroke, water cooled. Direct injection fuel system. 12 V DC starter and charge alternator. Replaceable fuel filter. Oil filter and dry element air filter. Cooling radiator and fan, starter battery (with lead acid) including rack and cables, flexible fuel connection hoses and manual oil sump drain valve, industrial capacity exhaust silencer and steel bellows, jacket water heater (at automatic models) operation manuals and circuit diagrams

ALTERNATOR

Brushless, single bearing system, flexible disc, 4 poles, Insulation class H, Standard degree of protection IP21, Self-exciting and self-regulating, Impregnation with tropicalised epoxy varnish, Solid state Automatic Voltage Regulator

BASE FRAME

The complete genset is mounted as whole on a heavy-duty fabricated, steel base frame. Antivibration pads are fixed between the engine/ alternator feet and the base frame. Base frame design incorporates an integral fuel tank. The generating set can be lifted or carefully pushed / pulled by the base frame, Dial type fuel gauge and drain plug on the fuel tank. forklift pockets within base frame.

CANOPY

All canopy parts are designed with modular principles. Doors on each side. Without welding assembly. All metal canopy parts are painted by electrostatic Easy maintenance and operation polyester powder paint Thermally insulated engine exhaust system Emergency stop push button is installed outside of canopy To enable for lifting easy maintenance and operation

CONTROL SYSTEM

Panel Equipments;

Control, supervision and protection panel is mounted on the genset base frame. The control panel is equipped as follows:

1-Auto. Mains Failure Control Panel

Control Panel Equipments:
Control panel with DKG 309 module
Static battery charger
Emergency stop push button

1.1 Generating Set control module DKG 309 features:

The module is used to monitor a mains supply and automatic start a stand-by generating set.
Micro-processor based design
Monitors engine performance and AC power output
LED and LCD alarm indication
Front panel configuration of timers and alarm trip points
provides signal to change over switch panel
event logging of shutdown alarms
Remote communication via RS232 port or RS485 modbus output
easy push button control
STOP/RESET-MANUAL-AUTO-TEST-START
Operation indicators accessed by the LCD display scroll push button.

Metering via LCD Display:

Generator Volts (L-L/L-N)
Generator Amps (L1-L2-L3)
Generator Frequency (Hz)
Engine hours run
Engine oil pressure (PSI&Bar)
Engine speed RPM
Engine temperature (C & F)
Generator kVA
Generator kW
Generator power factor
Mains Frequency (Hz)
Mains Volts (F-F/F-N)
Plant battery volts



Automatic shutdown on fault conditions

Under/Over Speed
High Engine Temperature
Low Oil Pressure
Under/over generator volts
Under/over generator frequency
under/over mains frequency
under/over mains voltage
Low/High battery volts
Fail to start
Fail to stop
Charge fail
Over current
Emergency stop
CAN data fail
CAN ECU fail

LED indications

Mains available
Generator available
Mains on load
Generator on Load

2. Power Outlet Terminal Board Mounted on the Genset Baseframe