

## 15-62.5 KVA DIESEL GENERATOR SETS

### Design Features

#### ENGINE

- | Heavy duty diesel engine.
- | Four stroke, water cooled, turbocharged
- | Direct injection fuel system.
- | 12/24 V D.C. 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.
- | Fuel stop solenoid
- | Fuel pump
- | Jacket water heater (at automatic models).
- | Operation manuals and circuit diagram documents.

#### CHASSIS

- | The complete generator set is mounted as whole on a heavy-duty fabricated steel base frame.
- | Anti vibration 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.

#### CONTROL SYSTEM

- | Control, supervision and protection panel is mounted on the generator set base frame.

The control panel is equipped as follows:

- 1. Auto, Mains Failure Control Panel:

Panel equipment:

Control with AMF module

Static battery charger

Emergency stop push button

#### ALTERNATOR

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

#### CANOPY

- | All canopy parts are designed with modular principles.
- | Without welding assembly.
- | Doors on each side.
- | All metal canopy parts are painted by electrostatic polyester powder paint.
- | Exhaust silencer is protected against environment influences.
- | Thermally insulated engine exhaust system.
- | Emergency stop push button is installed outside of canopy.
- | Easy lifting and moving.
- | Easy maintenance and operation.



**a) Generating set control module features:**

The module is used to monitor a mains supply and automatically start a Stand-by generating set.

Micro-processor based design

Automatic control of mains and generator contactors

Monitors engine performance and AC power output

LED alarm indication

Front panel configuration of timers and alarm trip points

Easy push button control

STOP/RESET - MANUAL - AUTO - TEST - START

**b) Metering via LED display:**

Generator Volts (L-L / L-N)

Generator Ampere (L1,L2,L3)

Generator Frequency (Hz)

Engine hours run

Engine oil pressure (PSI-Bar)

Engine temperature ( C)

Plant battery volts

Mains Volts (Ph-Ph/Ph-N)

**c) Alarms:**

Over and Under Speed -

Start and Stop Failure -

Over Current -

Under / Over Generator Voltage

Low and High Battery Volt

Charge fall

Low Oil Pressure

Emergency stop

High engine temperature

**d) LED Indications:**

Mains available

Generator available

Mains on load

Generator on load

**ACCESSORIES (Option\*)**

Bulk fuel tank

Automatic filling system

Low fuel level alarm

Residential silencer

Enclosure of soundproof canopy

Trailer

Manual oil drain pump

Tool kit for maintenance



## DIESEL GENERATOR SETS Technical Data

Model	ULS-15	ULS-24	ULS-30	ULS-40	ULS-50
Power Standby	18KW	28KW	35KW	46KW	56KW
Power Prime	15KW	24KW	30KW	40KW	50KW
<b>DIESEL ENGINE</b>	Direct Injection, Electric Start				
Designed By	Ricardo	Ricardo	Ricardo	Ricardo	Ricardo
Model	495D	R4100D	R495ZD	R4100ZD	R4105ZD
Alternator	Urogen	Urogen	Urogen	Urogen	Urogen
Model	184E	184G	184H	224D	224E
Engine Power Output	20KW	30KW	37.5KW	50KW	62.5KW
Cooling	Water-cooled	Water-cooled	Water-cooled	Water-cooled	Water-cooled
Aspiration	Natural	Natural	Turbocharged	Turbocharged	Turbocharged
Total Displacement (liters)	3.26	3.61	3.26	3.61	4.33
No. of Cylinders and build	4	4	4	4	4
Engine Speed (rpm)	1500	1500	1500	1500	1500
Compression Ratio	17 : 1	19 : 1	17 : 1	19 : 1	16 : 1
Governor	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical
Fuel Consumption at full load (L/Hr)	4.7	7.7	9.6	12.9	14.9
Fuel Tank Capacity (Liters)	90	90	120	120	140
Oil Capacity (Liters)	10	10	10	10	14
Current (Ampere)					
220V (Max)	43.3	72.1	90.2	120	152
380V (Max)	27.3	41.5	54.6	73	90.2
<b>Noise Level dbA @ 7 m</b>					
Open Type	95				
Canopy Type	75				
<b>Dimension</b>					
Open Type (MM)	1840 x 910 x 1510		1960 x 910 x 1510		2070 x 920 x 1660
Canopy Type (MM)	2070 x 1020 x 1240		2220 x 1050 x 1310		2320 x 1050 x 1500
<b>Weight</b>					
Open Type(KG)	600	707	835	965	1025
Canopy Type (KG)	782	900	1025	1165	1225