ULTIMATE POWER SOLUTION (FZC) The world's best dealer on Diesel Power Generation, Control Systems & Power Solution

POWERED BY

# LEROY-SOMER UDS

**CERTIFIED BY** 

60 Hz

ALTERNATOR DATA



500 KVA

**3 PHASE** 

# 450 KVA 3 PHASE 50 Hz

GENERATING SET MODEL ( UPS P 450P )			
Output Ratings	Prime	Standby	
380-415 V, 3 ph, 50 Hz, 1500 rpm	450 KVA	500 KVA	
	360 KW	400 KW	
380-415 V, 3 ph, 60 Hz, 1800 rpm	500 KVA	563 KVA	
	400 KW	450 KW	

# **ENGINE / TECHNICAL DATA**

# Ratings at 0.8 Power Factor

Engine Make	Cum	mins
Engine Model	NTAA855-G7A	
Governing Type	Electronic	
Number of Cylinders	6	
Cylinder Arrangement	Vertical in line	
Bore and Stroke mm	140 X 152	
Displacement / Cubic Capacity litres	14	.0
Induction System	Turbocharged and air to air charge cooled	
Cycle	4 stroke	
Combustion System	Direct Injection	
Compression Ratio	14.0:1	
Rotation	Anti-clockwise, viewed on flywheel	
Cooling System	Water - cooled	
Frequency and Engine Speed	50Hz & 1500rpm	60Hz & 1800rpm
Gross Engine Power kW (hp)	451 (605)	495 (664)
Fuel Consumption @ 50% load L/hr	47.5	
@ 75% load L/hr	67.8	
@ 100% load L/hr	89.2	
Total Lubrication System Capacity litres	38	38
Total Coolant Capacity litres	60	60
Exhaust Temperature: °C	473	473

Make	U	PS / Leroy Somer
Model	UPS354D	/LSA (TAL) 047B
No. of bearings		1
Insula	tion class	Н
Wires		6/12
Ingres	s Protection	IP23
Excita	tion System	SHUNT
Windi	ng Pitch	2/3
Overs	peed	2250 mn <sup>-1</sup>
Voltag	e Regulation (steady)	± 1%
CONT	ROL PANEL	
Make		Deep Sea
Model		4000 SERIES
The DSE 4000 Series is an Auto Start Control		

for single genset applications. It includes a LCD display which clearly shows the status of engine all the times. This module can either programmed using the front panel or by using the DSE configuration suite PC software. **Metering and Alarm indications:** 

- Generator frequency
- Underspeed, Overspeed
- Generator volts (L-L, L-N)
- Generator current
- · Engine oil pressure
- · Engine coolant temperature
- Hours run counter
- Battery volts
- Fail to start/stop
- Emergency stop
- · Failed to reach loading voltage/frequency
- Charge fail
- Low DC voltage
- · CAN diagnostics and CAN fail/error

Image for illustrative purposes only





# 450 KVA STANDARD SPECIFICATIONS 3 PHASE 50 Hz

### 1. ENGINE

Cummins four stroke heavy duty high performance industrial type diesel engine.

## 2. ENGINE FILTRATION SYSTEM

- Cartridge type dry air filter.
- Two Cartridge type fuel filters.
- Full flow lube oil filter.
- All filters have replaceable elements.

# 3. COOLING RADIATOR

Radiator and cooling fan, complete with safety guards, designed to cool the engine at high ambient temperatures (consult your dealer for de-ration factors)

# 4. EXHAUST SYSTEM

Exhaust gas flow Maximum allowable back pressure 98 m^3/min 6.80 (kPa)

# 5. CIRCUT BREAKER TYPE

3 pole MCCB. (4 pole is optional)

# 6. FUEL SYSTEM

The baseframe design is incorporated with an integral fuel tank with a capacity of approx. 8 hours running at Full Load. The tank is supplied complete with fill cap breather, fuel feed and return lines to the Engine and drain plug.

# STANDARD GENERATOR DIMENSION AND WEIGHT

# 7. ALTERNATOR

- 7.1 INSULATION SYSTEM
- The insulation system is Class H.

• All windings are impregnated in either a triple dip thermosetting liquid, oil and acid resisting polyester varnish or vacuum pressure impregnated with a special polyester resin.

• Heavy coat of antitracking varnish additional protection against moisture or condensation.

#### 7.2 AUTOMATIC VOLTAGE REGULATOR (AVR)

The fully sealed Automatic Voltage Regulator maintains the Voltage Regulation at  $\pm 1\%$ . Nominal adjustment by means of a trim pot incorporated on

# the AVR. 8. MOUNTING ARRANGEMENT

#### 8.1 COUPLING

The Engine and Alternator are directly coupled by means of an SAE flange. The Engine flywheel is flexibly coupled to the Alternator rotor.

#### 8.2 ANTI-VIBRATION MOUNTING PADS

Anti-Vibration pads are affixed between the Engine / Alternator feet and the Baseframe thus ensuring complete vibration isolation of the rotating assembly.

#### 8.3 SAFETY GUARDS

The Fan & Fan Drive along with the Battery Charging Alternator are Safety Guard protected for personnel protection.

# 9. FACTORY TEST

60 Hz

• The Generating set is load tested before dispatch • All protective devices control functions and site load conditions are simulated. The generator and it's systems are checked before dispatch.

500 KVA

3 PHASE

# **10. EQUIPMENT FINISHING**

All mild steel components are fully degreased and painted with powder coated paint to ensure maximum scuff resistance and durability.

# **11. DOCUMENTATION**

Operation & Maintenance manual, Circuit wiring diagrams and Commissioning / Fault Finding instruction leaflets are accompanied with the Generator.

## **12. QUALITY STANDARDS**

The equipment meets the following standards: BS4999, BS5000, BS5514 IEC 60034, VDE0530, NEMA MG 1.22 and ISO 8528.

# 13. WARRANTY

All of the Generating Sets are covered under a warranty policy for a period of 12 months or 1000 working hours, Warranty of the equipment is in line with manufacturers warranty terms & conditions. (check warranty statement for more details, as it may vary for different countries)

In line with continuous product development, we reserve the right to change specifications without notice.

# Silent Type (with Soundproof Canopy)



# Open Type (without Soundproof Canopy)



