





WATER-COOLED



THREE PHASE



50HZ 380-415V



DIESEL FUEL







## STANDARD SPECIFICATIONS

# 1. ENGINE

FOUR STROKE HEAVY DUTY HIGH PERFORMANCE INDUSTRIAL DIESEL ENGINE.

### 2. ENGINE FILTRATION SYSTEM

• AIR FILTER

• FUEL FILTER

• FULL FLOW LUBO OIL FILTER

ALL FILTERS HAS REPLACEABLE ELEMENTS

## 3. COOLING SYSTEM

EFFICIENT WATER-COOLED SYSTEM WITH COMPLETE SAFETY GUARDS, DESIGNED TO COOL THE ENGINE AT HIGH AMBIENT TEMPERATURES (CONSULT US FOR DE-RATION FACTORS)

### 4. EXHAUST SYSTEM

HEAVY DUTY INDUSTRIAL EXHAUST SILENCER

### 5. CIRCUIT BREAKER TYPE

DELIXI MCCB 3POLE

GENERATING SET MODEL		DPK-DC-44
OUTPUT RATING	PRIME	STANDBY
50HZ 380-415V, 1500RPM	40KVA	44KVA
	32KW	35KW

	ENGINE TECHNICAL DATA		
ENGINE MAKE	CUMMINS		
ENGINE MODEL	4BT3.9-G2		
GOVERNING TYPE	ELECTRICAL		
NUMBER OF CYLINDERS	4		
CYLINDER ARRANGEMENT	IN-LINE		
BORE AND STROKE (mm)	102 X 120		
DISPLACEMENT	3.9	L	
ASPIRATION	TURBOCHARGED		
CYCLE	4 STRO	KE	
COMPRESSION RATIO	18.0:	1	
COOLING SYSTEM	WATER-COOLING		
FREQUENCY & ENGINE SPEED	50HZ & 15	00RPM	
	PRIME	STANDBY	
GROSS ENGINE POWER kWm	36kWm	40kWm	
FUEL CONSUMPTION @ 100% L/hr	10.7	11.7	
FUEL CONSUMPTION @ 50% L/hr	6.2	_	

ALTERNATOR DATA		
MAKE	LEROY SOMER	
MODEL	LSA 42.3 S5	
NO.OF BEARINGS	1	
INSULATION CLASS	Н	
WIRES		
INGRESS PROTECTION	IP23	
EXCITATION SYSTEM	SHUNT	
VOLTAGE	±1%	

DIMENSION & WEIGHT	
LENGTH mm	2280
WIDTH mm	950
HEIGHT mm	1250
WEIGHT*kg	1144
FUEL TANK CAPACITY	90.9L

CONTROL PANEL						
MAKE	DEEP	SEA				
MODEL	DSE	6120				
	PLEASE REFER	TO DSE6120	BROCHURE	FOR	MORE	DETAILS

#### RATINGS DEFINITION

#### PRIME POWER

THESE RATING ARE APPLICABLE FOR SUPPLYING CONTINUOUS ELECTRICAL POWER (AT VARIABLE LOAD) IN LIEU OF COMMERCIALLY PURCHASED POWER. 10% OVERLOAD POWER IS AVAILABLE FOR 1HOUR IN 12HOURS CONTINUOUS OPERATION.

### STANDBY POWER

THESE RATING ARE APPLICABLE FOR SUPPLYING CONTINUOUS ELECTRICAL POWER (AT VARIABLE LOAD) IN THE EVENT OF A UTILITY POWER FAILURE. NO OVERLOAD IS PERMITTED.

### STANDARD REFERENCE CONDITIONS

OUTPUT RATING ARE PRESENTED AT 27°C AIR INLET TEMPERATURE, BAROMETRIC PRESSURE 100kPa, RELATIVE HUMIDITY 30%. THIS GENERATING SET IS DESIGNED TO OPERATE AT HIGH AMBIENT TEMPERATURE (UP TO 52°C), HUMIDITY (UP TO 90%) AND HIGH ALTITUDES. DE-RATION MAY APPLY, PLEASE CONSULT US FOR SPECIFIC SITE RATINGS.

### AVAILABLE OPTIONS & ACCESSORIES

WE OFFER A RANGE OF OPTIONAL FEATURES AND ACCESSORIES TO TAILOR OUR GENERATING SETS TO MEET YOUR POWER NEEDS.

### OPTIONS

- A VARIETY OF GENERATING SET CONTROL AND SYNCHRONIZING PANELS
- ADDITIONAL PROTECTION ALARMS AND SHUTDOWNS
- WATER FUEL SEPERATOR
- WATERJACKET HEATER
- BATTERY CHARGER

## ACCESSORIES

- GENUINE SPARE PARTS
- AUXILIARY FUEL TANKS
- MANUAL & AUTOMATIC TRANSFER SWITCHS





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# STANDARD SPECIFICATIONS

8.2 ANTI-VIBERATION MOUNTING DUMPER DUMPER ARE AFFIXED BETWEEN THE ENGINE & ALTERNATOR FEET AND THE CHASSIS, THUS ENSURING COMPLETE VIBRATION ISOLATION OF ROTATING ASSEMBLY.

#### 8.3 COUPLING

THE ENGINE AND ALTERNATOR ARE DIRECTLY COUPLED BY MEANS OF AN SAE FLANGE. THE ENGINE FLYWHEEL IS FLEXIBLY COUPLED TO THE ALTERNATOR ROTOR.

#### 8.4 SAFETY GUARDS

THE FAN & FAN DRIVE ALONG WITH THE BATTERY CHARGING ALTERNATOR ARE SAFETY GUARD PROTECTED FOR • THE INSULATION SYSTEM IS CLASS H PERSONAL PROTECTION.

- 9. TESTS
- THE GENERATING SET IS LOAD TEST BEFORE
- ALL PROTECTIVE DEVICES CONTROL FUNCTIONS AND SITE LOAD CONDITIONS ARE SIMULATED. THE GENERATOR AND IT'S SYSTEMS ARE CHECKED BEFORE DISPATCH.

### 10. EOUIPMENT FINISHING

ALL MILD STEEL COMPONENTS ARE FULLY DEGREASED AND PAINTED WITH POWDER COATED PAINT TO ENSURE MAXIMUM 7.2 AUTOMATIC VOLTAGE REGULATOR (AVR) SCUFF RESISTANCE AND DURABILITY.

#### 11. EOUIPMENT FINISHING

OPERATION & MAINTENANCE MANUAL, CIRCUIT WIRING DIAGRAMS.

# 12. QUALITY STANDARDS

THE EUQIPMENT MEETS THE FOLLOWING STANDARDS: BS4999, BS5000, BS5514, IEC60034, VDE0530 AND IS08528

### 13. WARRANTY

ALL OF THE GENERATING SETS ARE COVERED UNDER A WARRANTY POLICY FOR A PERIOD OF 1 YEAR OR 1000 WORKING HOURS (WHICHEVER COMES EARLIER) OF THE EQUIPMENT IS IN LINE WITH MANUFACTURERS WARRANTY TERMS AND CONDITIONS.

6. FUEL SYSTEM

ON GENERATING SETS UP TO 750KVA STANDBY, THE CHASSIS DESIGN IS INCORPORATED WITH INTEGRAL FUEL TANK WITH A CAPACITY OF APPROX 5HOURS TO 8HOURS RUNNING AT FULL LOAD. THE TANK IS SUPPLIED COMPLETE WITH FILL CAP, BREATHER, FUEL FEED AND RETURN LINES TO THE ENGINE AND DRAIN PLUG.

- 7. ALTERNATOR
- 7.1 INSULATION SYSTEM
- 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
- THE FULLY SEALED AUTOMATIC VOLTAGE REGULATOR MAINTAINS THE VOLTAGE REGULATION AT ±1%.
- 7.3 MOTOR STARING (OPTIONAL)
- AN OVERLOAD CAPACITY EQUIVALENT TO 300% OF THE FULL LOAD IMPEDANCE AT ZERO POWER FACTOR CAN BE SUSTAINED FOR 10 SECONDS, WHEN AREP (AUXILIARY WINDING) OPTION IS FITTED.
- 8. MOUNTING ARRANGMENT
- 8.1 CHASSIS

THE COMPLETE GENERATING SET IS MOUNTED AS A WHOLE ON A HEAVY DUTY FABRICATED STEEL CHASSIS.

IN LINE WITH CONTINUOUS PRODUCT DEVELOPMENT, WE RESERVE THE RIGHT TO CHANGE SPECIFICATIONS WITHOUT NOTICE.