





WATER-COOLED



3 PHASE



50 HZ 380-415V



DIESEL FUEL







STANDARD SPECIFICATIONS

1. ENGINE

FOUR STROKE HEAVY DUTY IGH PERFORMANCE INDUSTRIAL DIESEL ENGINE

2. ENGINE FILTRATION SYSTEM

- AIR FILTER
- FUEL FILTER
- FULL FOLLOW LUBO OIL FILTER

ALL FILTERS HAS REPLACEABLE ELEMENTS

- 3. COOLING SYSTEM
- 4. EXHAUST SYSTEM

HEAVY DUTY INDUSTRIAL EXHAUST SILENCER

5. CIRCUIT BREAKER TYPE

DELIXI MCCB 3POLE

GENERATING SET MODEL		PWG-DC-88
OUTPUT RATING	PRIME	STANDBY
380V,3PH, 50HZ,1500RPM	80 kVA	88 kVA
	64 KW	70 KW
GENERATING SET MODEL		
ENGINE MAKE	CUMMINS	
ENGINE MODEL	4BTA3.9-G11	
GOVERNING TYPE	Electrical	
NUMBER OF CYLINDERS	4	
CYLINDER ARRANGEMENT	IN-LINE	
BORE AND STROKE (mm)	102 X 120	
DISPLACEMENT	3.9L	
CYCLE	4 STROKE	
COMPRESSION RATIO	17.3:1	
ASPIRATION	TURBOCHARGED AND AFTERCOOLED	
COOLING SYSTEM	WATER-COOLING	
FREQUENCY & ENGINE SPEED	50 HZ & 1500RPM	
NOISE LEVEL @ 7M	70 dBA	
	PRIME	STANDBY
GROSS ENGINE POWER kW	70KW	-
FUEL CONSUMPTION @ 100% L/hr	15.85	-
FUEL CONSUMPTION @ 50% L/hr	10.8	

ALTERNATOR DATA	
MAKE	STAMFORD
MODEL	DPC224G
NO. OF BEARINGS	1
INSULATION CLASS	Н
WIRES	12
EXCITATION SYSTEM	SHUNT
INGRESS PROTECTION	IP23
VOLTAGE	±1%



DIMENSION & WEIGHT	
LENGTH (mm)	2550
WIDTH (mm)	950
HEIGHT (mm)	1200
WEIGHT*kg	1276
FUEL TANK CAPACITY	115L
CONTROL PANEL	
MAKE	DEEPSEA
MODEL	6020

RATINGS DEFINITION

PRIME POWER

THESE RATING ARE APPLICABLE FOR SUPPLYING CONTINUOUSPURCHASED 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 AN UTILITY POWER FAILURE. NO OVERLOAD IS PERMITTED.

STANDARD REFERENCE CONDITIONS

OUTPUT RATING ARE PRESENTED AT 27% AIR INLET TEMPERATURE, BAROMETRIC PRESSURE 100kPa, RELAIVE HUMIDITY 30%, THIS GENERATING SET IS DESIGNED TO OPERATE AT HIGH AMBIENT TEMPERATURE (UP TO 52%), HUMIDITY (UP TO 90%) AND HIGH ALTITUDES. DERATION 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



1. 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.

2. ALTERNATOR

2.1. 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

2.2. AUTOMATIC VOLTAGE REGULATOR (AVR)

THE FULLY SEALED AUTOMATIC VOLTAGE REGULATOR MAINTAINS THE VOLTAGE REGULATION AT ±1%.

2.3. 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.

3. MOUNTING ARRANGEMENT

3.1. CHASSIS

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

3.2. ANTI-VIBERATION MOUNTING DUMPER

DUMPER ARE AFFIXED BETWEEN THE ENGINE & ALTERNATOR FEET AND THE CHASSIS, THUS ENSURING COMPLETE

3.3. COUPLING

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

3.4. SAFETY GUARDS

THE FAN & FAN DRIVE ALONG WITH THE BATTERY CHARGING ALTERNATOR ARE SAFETY GUARD PROTECTED FOR PERSONAL PROTECTION.

4.TESTS

THE GENERATING SET IS LOAD TEST BEFORE DISPATCH.

ALL PROTECTIVE DEVICES CONTROL FUNCTIONS AND SITE LOAD CONDITIONS ARE SIMULATED. THE GENERATOR AND Its SYSTEMS ARE CHECKED BEFORE DISPATCH.

5. EQUIPMENT 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.

6. EQUIPMENT FINISHING

OPERATION & MAINTENANCE MANUAL, CIRCUIT WIRING DIAGRAMS

7. QUALITY STANDARDS

THE EUQIPMENT MEETS THE FOLLOWING STANDARDS:BS4999, BS5000, BS5514, IEC60034, VDE0530 AND ISO8528

8. WARRANTY

ALL OF THE GENERATING SETS ARE COVERED UNDER AWARRANTY POLICY FOR A PERIOD OF 12MONTHS OR 1 YEAR (WHICHEVER COMES EARLIER) OF THE EQUIPMENT IS IN LINE WITH MANUFACTURERS WARRANTY TERMS AND CONDITIONS.

DISTRIBUTED BY



POWERGUARD GENERATOR

FOURTEEN STAR ENGINEERING CO.,LTD

No.121B, Myat Lay Street, Pale Myo Thit, Mingalardon Township, Yangon, Myanmar.

Tel: 09 792939 222

Email: powerguard@14starengineering.com

https://www.14starengineering.com/