





WATER-COOLED

1. ENGINE

FOUR STROKE HEAVY DUTY HIGH PERFORMANCE INDUSTRIAL DIESEL ENGINE.

STANDARD SPECIFICATIONS

3 PHASE / 1 PHASE 2. ENGINE FILTRATION SYSTEM

50HZ 380-415V

• AIR FILTER

FUEL FILTER

• FULL FLOW LUBO OIL FILTER

ALL FILTERS HAS REPLACEABLE ELEMENTS



DIESEL FUEL





MODEL

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)

D100

PLEASE REFER TO DATAKOM BROCHURE FOR MORE DETAILS

4. EXHAUST SYSTEM

HEAVY DUTY INDUSTRIAL EXHAUST SILENCER

5. CIRCUIT BREAKER TYPE DELIXI MCCB 3POLE

GENERATING SET MODEL		DPK-DK-13
OUTPUT RATING	PRIME	STANDBY
50Hz 380-415V,3PH,1500RPM	12.5KVA	13.8KVA
	10 OKW	11 OKW

ENGINE TECHNICAL DATA				
ENGINE MAKE	DEPCO			
ENGINE MODEL		DEPCO-385		
GOVERNING TYPE		MECHANICAL		
NUMBER OF CYLINDERS		4		
CYLINDER ARRANGEMENT		In-line		
BORE AND STROKE (mm)		85 x 90		
DISPLACEMENT		1.532		L
ASPIRATION		Natural		
CYCLE		4 STROKE		
COMPRESSION RATIO		18:1		
COOLING SYSTEM	W.	ATER-COOLING		
FREQUENCY & ENGINE SPEED	50	OHZ & 1500RPM		
	PRIME		STANDBY	
GROSS ENGINE POWER kW	12kW		/	
FUEL CONSUMPTION @ 100% L/hr	3.4		-	
FUEL CONSUMPTION @ 50% L/hr	-		_	

ALTERNATOR DATA		
MAKE	DEPCO	
MODEL	DEPCO-10-3	
NO.OF BEARINGS	1	
INSULATION CLASS	н	
WIRES		
INGRESS PROTECTION	IP23	
EXCITATION SYSTEM	SHUNT	
VOLTAGE	±1%	

DIMENSION & WEIGHT	
LENGTH mm	1300
WIDTH mm	680
HEIGHT mm	760
WEIGHT*kg	462
FUEL TANK CAPACITY	25L
CONTROL PANEL	
MAKE	DATAKOM

# 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  $52^{\circ}$ ), HUMIDITY (UP TO  $90^{\circ}$ ) 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

ON GENERATING SETS UP TO 750KVA, THE CHASSIS DESIGN

IS INCORPORATED WITH INTEGRAL FUEL TANK WITH A

CAPACITY OF APPROX 12HOURS TO 13HOURS RUNNING AT

FULL LOAD. THE TANK IS SUPPLIED COMPLETE WITH FILL CAP, BREATHER, FUEL FEED AND RETURN LINES TO THE

# 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 7.1 INSULATION SYSTEM ALTERNATOR ARE SAFETY GUARD PROTECTED FOR PERSONAL • THE INSULATION SYSTEM IS CLASS H PROTECTION.

#### 9. TESTS

- 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. EQUIPMENT FINISHING

OPERATION & MAINTENANCE MANUAL, CIRCUIT WIRING DIAGRAMS.

# 12. QUALITY STANDARDS

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

# 13. WARRANTY

ALL OF THE GENERATING SETS ARE COVERED UNDER A WARRANTY POLICY FOR A PERIOD OF 1000 WORKING HOURS 8.1 CHASSIS OR 1 YEAR (WHICHEVER COMES EARLIER) OF THE EQUIPMENT IS IN LINE WITH MANUFACTURERS WARRANTY TERMS AND CONDITIONS

# 7. ALTERNATOR

6. FUEL SYSTEM

ENGINE AND DRAIN PLUG.

- ALL WINDINGS ARE IMPREGNATED IN EITHER A TRIPLE DIP THERMOSETTING LIQUID, OIL AND ACID RESISTING THE GENERATING SET IS LOAD TEST BEFORE DISPATCH. 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

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.