

# VITOLUX POWER GENERATOR



WATER-COOLED



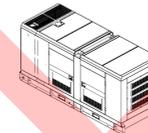
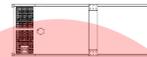
THREE PHASE



50HZ



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		50VITOLUX-3	
OUTPUT RATING	PRIME	STANDBY	
400/230V, 3PH, 50HZ, 1500RPM	45KVA	50KVA	
	36KW	40KW	
ENGINE TECHNICAL DATA			
ENGINE MAKE	RICARDO		
ENGINE MODEL	ZH4102ZD		
GOVERNING TYPE	Mechanical		
NUMBER OF CYLINDERS	4		
CYLINDER ARRANGEMENT	IN-LINE		
BORE AND STROKE (mm)	102 X 115		
DISPLACEMENT	3,76		L
ASPIRATION	TURBOCHARGED		
CYCLE	4 STROKE		
COMPRESSION RATIO	17:1		
COOLING SYSTEM	WATER-COOLING		
FREQUENCY & ENGINE SPEED	50HZ & 1500RPM		
	PRIME	STANDBY	
GROSS ENGINE POWER kW	50kW	-	
FUEL CONSUMPTION @ 100% L/hr	10,6	-	
FUEL CONSUMPTION @ 50% L/hr	-	-	

ALTERNATOR DATA	
MAKE	VITOLUX
MODEL	VTC184JH
NO.OF BEARINGS	1
INSULATION CLASS	H
WIRES	12
INGRESS PROTECTION	IP23
EXCITATION SYSTEM	SHUNT
VOLTAGE	±1%
DIMENSION & WEIGHT	
LENGTH mm	2160
WIDTH mm	950
HEIGHT mm	1250
WEIGHT*kg	985
FUEL TANK CAPACITY	103L
CONTROL PANEL	
MAKE	SMARTGEN
MODEL	HGM6120NC

PLEASE REFER TO HGM6120NC BROCHURE FOR MORE DETAILS

**AN INSPIRED DESIGN TO MEET YOUR NEEDS**

# VITOLUX POWER GENERATOR

## RATINGS DEFINITION

### PRIME POWER

THESE RATING ARE APPLICABLE FOR SUPPLYING CONTINUOUS ELECTRICAL POWER (AT VARIABLE LOAD) IN LIEU OF COMMERCIALY 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

## STANDARD SPECIFICATIONS

### 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

- 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 ±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.

### 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 PERSONAL PROTECTION.

### 9. TESTS

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

### 10. EQUIPMENT FINISHING

ALL MILD STEEL COMPONENTS ARE FULLY DEGREASED AND PAINTED WITH POWDER COATED PAINT TO ENSURE MAXIMUM 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 12MONTHS OR 1 YEAR (WHICHEVER COMES EARLIER) OF THE EQUIPMENT IS IN LINE WITH MANUFACTURERS WARRANTY TERMS AND CONDITIONS.

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