

WINTPOWER®



WT-I22 20KVA Technical Data sheet



ISUZU

STAMFORD
power generation



Professional Genset Manufacture On Your Side
FUZHOU WINTPOWER TECHNOLOGY CO., LTD.

Powered by ISUZU Engine & Stamford Alternator

STANDARD SPECIFICATION

Three phase four wire, output voltage 380/220V, 50HZ, between 0.8 lagging, protection capability according with the standard of NEMA1 and IP23.

General Features:

- Δ Composed of ISUZU diesel engine and Stamford alternator
- Δ Oil and fuel filter fitted, water separator
- Δ Lube-oil drain valve fitted
- Δ Water-cooled diesel engine
- Δ 24V D.C Electric start system with Free Maintenance battery
- Δ Base skid fuel tank, separated independent fuel tank as option
- Δ Industrial/Residential silencers with flexible connects and elbow
- Δ Anti-vibration mountings for engine and alternator
- Δ Auto start & Manual Start, with AMF Function
- Δ Optional soundproof and weatherproof canopy
- Δ Standard 3 pole MCCB Delixi Circuit Breaker mounted
- Δ Test report of generator, Set of drawings and O&M manuals
- Δ Special Integrated Steel Base tank and sprayed overall in gloss enamel paint

Voltage Regulation

- Voltage regulation maintained within $\pm 0.5\%$
- Between 0.8 and 1.0 lagging and unity
- From no load to full load
- At speed droop variation up to 4.5%

Frequency Adjustable Ratio

- Change load from 0-100%, within 1.0% (electric speed regulator), within 4.5% (mechanical speed regulator)

Frequency Undulation

- load from 0-100%, frequency undulation within 0.25%
- No load wire volts max undulation ration\ within 1.8%
- Three Phase balanced load in the order of 5%

Effect factor of Telecom

- TIF better than 50
- THF to IEC60034 Part 40 better than 2%



50HZ, 1500RPM, 3-PHASE 380/220V

Genset model	Power output(KVA)		Power output (KW)		ISUZU Engine Model	Stamford Alternator
	Prime Power	Standby Power	Prime Power	Standby Power		
WT-I22	20	22	16	18	JE493DB-04	PI144D

Note:

(1) Available in the following voltages: 108V-240V AND 380V-480V

(2) PRP: Prime Power-Continuous duty operation, under variable load 24/24-h--10% overload permissible 1 hour/12 hours.

(3) Rating Definitions (Operation at Altitude $\leq 1000\text{m}$, Ambient temperature $\leq 40^\circ\text{C}$) Continuous Power. These ratings are applicable for supplying continuous electrical power (at variable load) in lieu of commercially purchased power.

Engine & Alternator

ENGINE--Industrial 4 stroke cooled diesel engine complete with air,fuel and oil filters,electric starting and charging equipment,engine protection against low water level.

ALTERNATOR--Brushless,self exciting,self regulation,sreen protected,drip proof rated in accordance with IEC60034.Voltage regulation maintained within $\pm 0.5\%$ from no load to full load.between 0.8 lagging and unity.All standard voltages available.

WATER COOLING--Radiator and colling fan complete with protection guards,designed to cool engine at specified output in air temperatures upto 45°C ,radiators suitable for higher temperatures are available.Low water level protection fitted as standard.

ELECTRICAL SYSTEM--24V upto. Axial type starter motor,battery charging alternator,high capacity lead acid battery,and battery tray mounted on the generator base frame,and heavy duty interconnecting cable with terminations.

EXHAUST SYSTEM--Heavy duty industrial exhaust silencer with flexible piping.

Technical Data Sheet

380/220V,50Hz,1500 rpm

Engine Model:	ISUZU JE493DB-04
Type	4 cylinder,4 cycle diesel
Aspiration	Natural
Bore/Stroke mm	93×102
Compress the ratio	18.2:1
Cooling system	Water-cooled
100% Load Fuel Consumption L/H	4.5
Engine Speed/Frequency RPM/Hz	1500/50HZ
Rated Output kw/Bhp	24/32
Exhaust air flow (m3/min)	96
Coolant Capacity L	4.5
Starting System	Electric 12 volt DC
Displacement L	2.8
Lubricant system Capacity L	4.5
Battery Volatge / Capacity	12VDC
Governing Type	Mechanical
Exhaust Gas Temperature $^{\circ}\text{C}$	500
Exhaust Gas flow m3/min	5.24
Noise level dBA@1m	$\leq 70\text{dBA}(\text{canopy type})$

Genset Option Features

ΔLow fuel level alarm shutdown
ΔAutomatic Fuel Filling System
ΔEngine oil feeding and drain pump
ΔAuto Transfter Switch(ATS)
ΔParallel control panels
ΔCircuit Breaker MCCB & ACB
ΔRemote Control Panel
ΔWeatherproof/soundproof Canopy
ΔTrailer type Gensets

QUALITY STANDARDS

ISO9001:2020, ISO14001, ISO3046
ISO8528 BS4999
BS5514,AS1359,ICE34
CE Compliance

Gensets Dimensions & Weight

Open type:L*W*H,mm
1550×800×1100 700KG
Enclosure type:L*W*H,mm
2000*900*1050 880KG

Alternator Technical data

Stamford: PI 144D

Δ Bruxhless,self exciting
Δ Class "H" insulation
Δ Standard degree of protection is IP23
Δ Self regulating
Δ With fan cooling
Δ Resist Humid grease
Δ AC excitation,roating rectification tube
Δ Stator grease insulation covered
Δ Rotator and exciation high polymer,Resist the corruption of oil and acid
Δ Rotator ballance is in accordance with BS5625 standard 12.5
Δ High-quality lubrication sealed long-time bearing
Δ Rotator silikon steel close tight

Exciter	Brushless
Cooling Fan	Cast alloy aluminum
Bearing	Single,double shielded
Windings	100% copper
Connection Type	Reconnectable
Insulation Type	Class H
Pitch	2/3
Amortisseur Winding	Full
Voltage Regulator	AS440
Voltage Regulator NL-FL	$\pm 0.5\%$
Underspeed Protection	Standard
Overexcitation Protection	IP23
TIF (1960 Weightings)	<50
Exciation System	PMG

Control Panel - DEEPSEA DSE4620

The base mounted control panel in a vibration isolated sheet steel enclosure. The control panel is equipped as follows:

- a) Instruments: Analogue Voltmeter, Hours Run Meter, Water pressure Meter.
- b) Controls: Emergency Stop Pushbutton, Voltmeter Phase Selector Switch.
- c) Control module: Standard collocation DEEPSEA DSE4620



DEEPSEA DSE4620

Main Features:

- Δ Automatic mains failure
- Δ Engine control, Generator protection
- Δ Built in alarms and warnings
- Δ Remote Start operation available
- Δ Daily / weekly / monthly exerciser
- Δ Weekly operation schedule programs
- Δ Fuel pump control
- Δ Mains simulation
- Δ Block heater control
- Δ Field adjustable parameters
- Δ Free MS-Windows Remote monitoring
- Δ LED displays
- Δ Configurable analogue inputs
- Δ I/O expansion capability

Robust Corrosion Resistant Construction

- Δ Black finish stainless steel lock and hinges
- Δ Body made from steel components treated with polyester powder coating

Excellent Access for Maintenance

- Δ two large doors on each side
- Δ radiator fill access plate
- Δ lube oil and cooling water drains pipes to exterior of the enclosure

Security and Safety

- Δ control panel viewing window in a lockable access door
- Δ emergency stop push button (red) mounted on enclosure interior
- Δ cooling fan and battery charging alternator fully guarded
- Δ exhaust silencing system totally enclosed for operator safety

Base Fuel Tank and Accessories

- Δ capacity designed for 8 hours running.
- Δ at least 3 mm thickness 100% steel adopted.
- Δ twice welding inside and outside of all the welding line
- Δ each fuel tank being tested against oil leakage on process
- Δ each fuel tank with our factory series number
- Δ fuel tank with necessary drain outlet
- Δ fuel tank with necessary fuel in and back outlet



WINTPOWER, reserves the right to modify the characteristics of its product at any time in order to incorporate the latest technological developments. The information contained in this document may therefore be changed without notice. For more technical data, contact sales@wintpower.com

Manufacture: FUZHOU WINTPOWER TECHNOLOGY CO., LTD.