



#### ISO8528

This generator set has been designed to meet ISO 8528 regulation.

#### SZUTEST

This generator set is manufactured in facilities certified to ISO 9001.



This generator set is available with CE certification.

#### 2000/14/EC

Enclosed product is tested according to EU noise legislation 2000/14/EC

#### 3 Phase Ratings, 60 Hz, PF 0,8

Voltage	Standby Rating (ESP)		Prime Rating (PRP)		
	kVA	kw	kVA	kw	Amp
480/277		97,00		88,00	132,00
380/220		95,00		86,00	163,00
208/120		96,00		88,00	305,00

**Standby Rating (ESP):** Applicable for supplying power to varying electrical load for the duration of power interruption of a reliable utility source. ESP is in accordance with ISO 8528. Overload is not allowed.

**Prime Rating (PRP):** Applicable for supplying power to varying electrical load for unlimited hours. PRP is in accordance with ISO 8528. 10 % overload capability is available for a period of 1 hour within 12-hour period of operation, in accordance with ISO 3046.

#### STANDARD SPECIFICATIONS

Water cooled, Diesel engine  
Radiator with mechanical fan  
Protective grille for rotating and hot parts  
Electric starter and charge alternator  
Starting battery (with lead acid) including rack and cables  
Engine coolant heater  
Base frame design incorporates an integral fuel tank and anti-vibration isolators  
Flexible fuel connection hoses  
Single bearing, class H alternator  
Industrial exhaust silencer and steel bellows supplied separately (for open sets)  
Static battery charger  
Manual for application and installation

#### OPTIONAL EQUIPMENTS

##### ENGINE

- Electronic governor control
- Fuel-Water Separator Filter
- Low water level alarm
- Oil heater

##### ALTERNATOR

- Anti-Condensation Heater
- Over sized alternator
- PMG excitation + AVR
- Main line circuit breaker

##### CONTROL SYSTEM

- Earth fault, single set
- Charge Ammeter

##### OTHER ACCESSORIES

- Automatic or manual fuel filling system
- Manual oil drain pump
- Electrical oil drain pump
- Low and high fuel level alarm
- Residential silencer
- Enclosure: weather protective or sound attenuated
- Duct adapter (on radiator)
- Inlet and outlet motorised louvers
- Inlet and outlet acoustic baffles
- Trailer
- Tool kit for maintenance
- 1500/3000 hours maintenance kit
- Double wall chassis
- Supplied with oil and coolant - 30 °C
- Battery isolating switch
- Battery heater
- Main Fuel Tank
- Automatic transfer switch

##### TRANSFER SWITCH

- Three Pole Contactor
- Four Pole Contactor

## ➤ DIESEL ENGINE SPECIFICATIONS

Manufacturer		John Deere			تولید کننده
Model		4045 HF			مدل
No. of Cylinders and Build		4 Cylinder, In Line			تعداد سیلندرها و نوع آرایش آنها
Aspiration and Cooling		Turbo Charged and After Cooled			سیستم تنفس و خنک کاری
Maximum Standby Power		1800 rpm	Standby توان		
		115,00 kw[HP]			
Total Displacement	L	4,500			جابه جایی کل
Bore and Stroke	mm	106 X 127			قطر سیلندر و کورس پیستون
Compression Ratio		17.0:1			نسبت تراکم
Rated Speed (rpm)	rpm	1800			سرعت مجاز
Governor		Mechanical			گاورنر
Oil Capacity	L	13,00			ظرفیت روغن
Coolant Capacity	L	30,00			ظرفیت خنک کننده
Intake Air Flow	m <sup>3</sup> /min.	10,00			جریان هوای مصرفی
Exhaust Gas Flow	m <sup>3</sup> /min.	26,00			جریان گاز خروجی از اگزوز
Exhaust Gas Temperature	° C	490,00			دمای گاز خروجی از اگزوز
Start System		12 V d.c.			استارتر
Fuel Consumption	Load	%100	%75	%50	مصرف سوخت
	L/h	27,00	21,00	13,50	

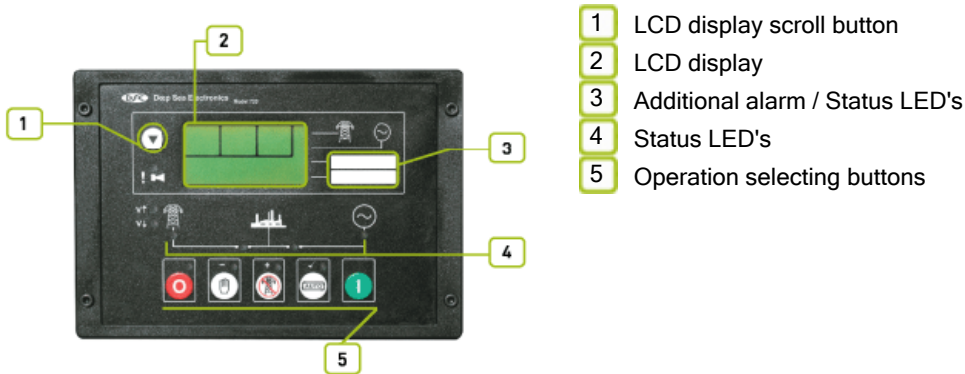
## ➤ ALTERNATOR SPECIFICATIONS

Make		Stamford			تولید کننده
Model		UCI 274D			مدل
Frequency	Hz	60			فرکانس
Power	kw	116,00			توان
Design		Brushless, 4 poles			طراحی
Cos Phi		0,80			کسینوس فی
Phase		3			فاز
Voltage	V	480/277			ولتاژ
Current	A	174,00			جریان
Insulation Class		H			کلاس عایق بندی
Temperature		H			دما
Stator		2 / 3 steps			استاتور
Rotor		Single Bearing System, Flexible Disc			روتور
Excitation System		Electronic ( AVR )			سیستم تحریک

## ➤ DIEMENSIONS AND WEIGHT

Open Type	Dry Weight	Lenght	Width	Height	Tank Capacity
	kg.	mm.	mm.	mm.	L
AJD 97-6	1285,00	2150,00	1020,00	1530,00	215,00
Canopy	Dry Weight	Lenght	Width	Height	Tank Capacity
	kg.	mm.	mm.	mm.	L
ASM 5	1745,00	3120	1070	1720	195

## ➤ P 72 - Control System



## ➤ Devices

DSE, model 720 Auto Mains Failure control module  
 Static battery charger 5A, 220/240 volt  
 Emergency stop push button and fuses for control circuits

## ➤ Construction and Finish

Components installed in sheet steel enclosure. Phosphate chemical, pre-coating of steel provides corrosion resistant surface  
 Polyester composite powder topcoat forms high gloss and extremely durable finish  
 Lockable hinged panel door provides for easy component access

## ➤ Installation

Control panel is mounted generating set baseframe on robust steel stand.  
 Located at side of generating set with properly panel visibility.

## ➤ Generating Set Control Unit

### DSE 720

The DSE 720 control module is a standard addition to our generator sets up to 250kVA and it has been designed to start and stop diesel and gas generating sets. The DSE 720 module has been designed to monitor generator frequency, volt, current, engine oil pressure, coolant temperature, running hours and battery volts. Module monitors the mains supply and switch over to the generator when the mains power fails. The DSE720 also indicates operational status and fault conditions, automatically shutting down the generating set and indicating faults by means of its LCD display on the front panel.

### Standard Specifications

Microprocessor controlled  
 LCD display makes information easy to read  
 Black-lit character/icon LCD display  
 Transfer between mains (utility) and generator power  
 On-site module configuration and remote configuration (max 100 meters) using PC software  
 User-friendly set-up and button layout  
 Front panel programming  
 Remote start  
 Multiple engine parameters are monitored simultaneously  
 Controls: Stop/Reset, Manual, Auto, Test, Start, buttons. An additional push button next to the LCD display is used to scroll through the modules' metering displays

## ➤ Instruments

ENGINE  
Engine speed  
Oil pressure  
Coolant temperature  
Run time  
Battery volts  
GENERATOR  
Voltage (L-N)  
Current (L1-L2-L3)  
Frequency  
MAINS  
Voltage (L-L, L-N)

## ➤ Options

High oil temperature shut down  
Low fuel level alarm  
High fuel level alarm  
Low coolant level

## ➤ Static Battery Charger

Battery charger is manufactured with switching-mode and SMD technology and it has high efficiency.  
Battery charger models' output V-I characteristic is very close to square and output is 5 amper, 12 volt DC. Input 198 - 260 volt AC.  
1205 has fully output short circuit protection and it can be used as a current source.  
1205 charger has high efficiency, long life, low failure rate, light weight and low heat radiated in accordance with linear alternatives.  
The charger is fitted with a protection diode across the output.  
Charge fail output is available. Connect charge fail relay coil between positive output and CF output.

## ➤ Protection Circuits

WARNING  
Battery charge failure  
Low battery voltage  
  
SHUT DOWNS  
Fail to start  
Emergency stop  
Low oil pressure  
High engine temperature  
Over /Under speed  
Under/over generator  
frequency  
Failed to reach loading  
voltage  
Failed to reach loading  
frequency  
ELECTRICAL TRIP  
Generator over current

## ➤ Standards

Electrical Safety / EMC compatibility  
BS EN 60950 Electrical business  
equipment  
BS EN 61000-6-2 EMC immunity  
standard  
BS EN 61000-6-4 EMC emission  
standard for the industrial environment



- 1 Steel structures.
- 2 Emergency stop push button.
- 3 Control panel is mounted on the baseframe . Located at the right side of the generator set.
- 4 Corrosion-resistant locks and hinges.
- 5 oil could be drained via valve and a hose
- 6 Exhaust system in the canopy.
- 7 special large access doors for easy maintenance
- 8 Base frame -fuel tank.
- 9 Lifting Points.
- 10 sound proofing materials.

## Introduction

Sound-attenuated and weather protective enclosures for generating sets from abyaran, meet event the sound requirements and provide optimum protection from inclement weather and development by our specialist acoustic engineers. Our modular designed sound insulated canopies (8 - 275kVA) fit directly to the open generator set to provide ease of access for servicing and general maintenance and interchangeable components permitting on-site repair. Enclosures are designed to optimize genset cooling performance, providing you with confidence that genset ratings and ambient capability.

## Standard Specifications

Compact footprint, low profile design.

Enclosure, generator set, exhaust system and base-tank are pre-assembled, pre-integrated and shipped as one package

Body made from steel components treated with polyester powder coating

Fire retardant foam insulation

Easy access to all service points

Exhaust system inside canopy

Large doors on each side

Control panel viewing window in a lockable access door

Emergency stop push button mounted on enclosure exterior

Cooling fan and battery charging alternator fully guarded

Fuel fill and battery can only be reached via lockable access doors.

Lifting points on the top of canopy and base frame

Customer options available to meet your applications needs.

Width	mm.	1070
Lenght	mm.	3120
Height	mm.	1720
Fuel Tank Capacity	L	195