

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, 50 Hz, PF 0,8

	Standby Rating (ESP)		Prime Rating (PRP)		
Voltage	kVA	kw	kVA	kw	Amp
400/230	510,00	408,00	455,00	364,00	657,50

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 perod 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**

- Fuel-Water Seperator Filter
- Oil heater

## **ALTERNATOR**

- Anti-Condensation Heater
- Main line circuit breaker

# **CONTROL SYSTEM**

- Automatic synchronising and power control system ( multi gen-set Parallel)
- Paralel system with mains.
- Transition synchronization with mains
- Remote relay output
- Alarm output relays
- Remote communication with modem
- Earth fault, single set
- Charge Ammeter

#### OTHER ACCESSORIES

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

#### TRANSFER SWITCH

- Three or four pole contactor
- Three or four pole motor operated circuit breaker



# • DIESEL ENGINE SPECIFICATIONS

Manufacturer		Volvo Penta		تولید کننده
Model		TAD1345GE		مدل
No. of Cylinders and Build		6 Cylinder, In Line		تعداد سیلندرها و نوع آرایش آنها
Aspiration and Cooling		تم تنفس و خنک کاری Turbo Charged and After Cooled		سیستم تنفس و خنک کاری
		1500 rpm		
Maximum Standby Power		441,00 kw [600,00HP		توان Standby
Total Displacement	L	12,780	ایی کل 780,	
Bore and Stroke	mm	131X158		قطر سیلندر و کورس پیستون
Compression Ratio		18,1:1		نسبت تراكم
Rated Speed (rpm)	rpm	ت مجاز 1500		سرعت مجاز
Governor		Electronic		گاورنر
Oil Capacity	L	36,00	فيت روغن 00	
Coolant Capacity	L	44,00		ظرفیت خنک کننده
Intake Air Flow	m³ /min.	27,60		جریان هوای مصرفی
Radiator Cooling Air	m³ /min.	ان هوای خنک کننده رادیاتور 402,00		میزان هوای خنک کننده رادیاتور
Start System		24 V d.c.		استارتر
Fuel Consumption	Load	%100	in A	
i dei Consumption	L/h	101,70		مصرف سوخت

## • ALTERNATOR SPECIFICATIONS

Make		Mecc Alte	تولید کننده
Model		ECO40 3S/4	مدل
Frequency	Hz	50	فركانس
Power	kVA	500,00	فرکانس توان
Design		Brushless, 4 poles	طراحي
Cos Phi		0,80	طراحی کسینوس فی
Phase		3	فاز
Voltage	V	400/230	ولتاژ
Current	А	721,00	جريان
Insulation Class		Н	جریان کلاس عایق بندی سیستم تحریک
Excitation System		Electronic ( AVR )	سیستم تحریک

# DIEMENSIONS AND WEIGHT

Open Type	Dry Weight	Lenght	Width	Height	Tank Capacity
	kg.	mm.	mm.	mm.	L
AVP 510					



# P 732 control system - Control System



- Menu navigation buttons
- 2 Close mains button
- 3 Main Status and instrumentation display
- 4 Alarm LED's
- 5 Close generator button
- 6 Status LED's
- 7 Operation selecting buttons

## Devices

DSE, model 7320 Auto Mains Failure control module Static battery charger Emergency stop push button and fuses for control circuits

#### Construction and Finish

Comonents 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 or power module. Located at side of generating set with properly panel visibility.

## Generating Set Control Unit

The DSE 7320 conrol module is a standard addition to our generator sets from 220 kVA upwards and it has been designed to start and stop diesel andgas generating sets that include electronic and non electronic engines. The DSE 7320 includes the additional capability of being able to monitor a mains (utility) supply and is therefore suitable for controlling a standby generating set in conjunction with an automatic transfer switch. The DSE7320 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

132 x 64 pixel LCD display makes information easy to read

Front panel programming and also via PC software

Soft touch membrane keypad and five key menu navigation

Remote communications via RS232, RS485 and ethernet and SMS messaging

Event logging (50) showing date and time

Multiple date and time engine exercise mode and maintenance scheduler

Engine block heater control.

Controls; stop, manuel, auto, test, start, mute lamb test/transfer to generator, transfer to mains, menu navigation.



#### Instruments

**ENGINE** Engine speed Oil pressure Coolant temperature Run time Battery volts Engine maintenance due **GENERATOR** Voltage (L-L, L-N) Current (L1-L2-L3) Frequency Earth current kW kVAr kWh, kVAh, kVArh Phase sequence MAINS Voltage (L-L, L-N) Frequency

## **Options**

High oil temperature shut down Low fuel level shut down Low fuel level alarm High fuel level alarm **EXPANSION MODULES** Editional LED module (2548) Expension relay module (2157) Expansion input module (2130)

Static Battery Charger

Protection Circuits

WARNING Charge failure Battery under voltage Fail to stop Low fuel level (opt.) kW over load Negative phase sequence Loss of speed signal PRE-ALARMS Low oil pressure High engine temperature Low engine temperature Over /Under speed Under/over generator frequency Under/over generator voltage ECU warning SHUT DOWNS Fail to start Emergency stop Low oil pressure High engine temperature Low coolant level Over /Under speed Under/over generator frequency Under/over generator voltage Oil pressure sensor open Phase rotation **ELECTRICAL TRIP** Farth fault kW over load Generator over current Negative phase sequence

## Standards

Elecrical 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

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