INTRODUCTION

Aksa power generation system, providing optimum performance, and reliability, for stationary standby, prime power, and continuous duty applications. All generator sets are factory build, and production tested.

Power (kVA)

3 Phase,50 Hz, PF 0.8

Voltage	STANDBY RATING (ESP)		PRIME RATING (PRP)		Standby Amper
	kW	kVA	kW	kVA	
400/231	64,00	80,00			115,47

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 8528-1. Overload is not allowed.

PRIME RATING (PRP) Applicable for supplying power to varying electrical load for unlimited hours. PRP is in accordance with ISO 8528-1. 10 % overload capability is available for a period of 1 hour within 12-hour perod of operation.

General Characteristics

Model Name	APG 80
Frequency (Hz)	50
Fuel Type	Natural Gas
Engine Made and Model	GM NG PSI 8.8L
Alternator Made and Model	ECP 32-3L/4 B
Control Panel Model	4520
Canopy	AK40-APG80

ENGINE SPECIFICATIONS

Engine	GM NG
Engine Model	PSI 8.8L
Number of Cylinder (L)	8 cylinders - V type
Bore (mm.)	110.49
Stroke (mm.)	114.30
Displacement (lt.)	8.800
Aspiration	Naturally Aspirated
Compression Ratio	10.0:1
RPM (d/dk)	1500
Oil Capacity (Total With Filter) (lt)	8,5
Fuel Type	Natural Gas
Governor System	Electronic
Operating Voltage (Vdc)	12 Vdc
Battery and Capacity (Qty/Ah)	1x85
Cooling Method	Water Cooled
Cooling Fan Air Flow (m3/min)	120
Coolant Capacity (engine only / with radiator) (lt)	/25,5
Air Filter	Dry Type

ALTERNATOR CHARACTERISTICS

Manufacturer	Mecc Alte
Alternator Made and Model	ECP 32-3L/4 B
Frequency (Hz)	50
Power (kVA)	75
Voltage (V)	400
Phase	3
A.V.R.	DSR
Voltage Regulation	(+/-)1%
Insulation System	H
Protection	IP23
Rated Power Factor	0.8
WEIGHT COMP. GENERATOR (Kg)	293
COOLING AIR (m³/min)	11.8

Open Gen.Set Dimensions (mm)

LENGTH	2150
WIDTH	1050
HEIGHT	1543
DRY WEIGHT (kg.)	1120

Gen.Set Canopy Dimensions (mm)

LENGTH	3100
WIDTH	1050
HEIGHT	1641
DRY WEIGHT (kg.)	1300

INTRODUCTION

No Data

Control Panel

Control Module	DSE
Control Module Model	4520
Communication Ports	MODBUS

1 - Main Status and instrumentation display
2 - Menu navigation buttons
3 - Auto mode
4 - Manual mode / start button
5 - Reset/Stop button

Devices

DSE, model 4520 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 4520 conrol module is a standard addition to our generator sets between 10kva and 20kva and it has been designed to start and stop diesel generating sets that include electronic and non electronic engines. The DSE 4520 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 DSE4520 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.
- *Front panel programming and also via PC software.
- *Soft touch membrane keypad and two key menu navigation.
- *Event logging (15) showing date and time.
- *Date and time engine exercise mode and maintenance scheduler.
- *Control buttons; stop, manuel/start, auto, 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

kVA

kW

Pf

kVAr

kWh, kVAh, kVArh

MAINS

Voltage (L-L, L-N)

Frequency

WARNING

Charge failure

Battery Low/High voltage

Fail to stop

Low fuel level (opt.)

Over current

PRE-ALARMS

Low oil pressure

High 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 (opt.)

Over /Under speed

Under/over generator frequency

Under/over generator voltage

Oil pressure sensor open

ELECTRICAL TRIP

Generator over current

Options

High oil temperature shut down

Low fuel level shut down

Low fuel level alarm

High fuel level alarm

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

STATIC BATTERY CHARGER

- Battery charger is manufactured with switching-mode and SMD technology and ıt has high efficinecy. Battery charger models' output V-I characteristic is very close to square and output is 5 amper, 13,8 V for 12 volt and 27,6 V for 24 V . Input 198 - 264 volt AC. Proline 2405 has fully output shot circuit protection and ıt can be used as a current source.

Proline 1205/2405 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. Connect charge fail relay coil between positive output and CF output. They are equipped with RFI filter to reduce electrical noise radiated from the device. Galvanically isolated input and output typically 4kV for high reliability.

STANDARD SPECIFICATIONS

- Heavy duty, water cooled naturalgas engine
- 46/50 °C ambient rated radiator with mechanical fan
- Protective grille for fan and rotating parts
- Electric starter and charge alternator
- Starting battery (with lead acid) including rack and cables
- Engine jacket cooling 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 belows supplied separately
- Static battery charger
- Manual for use and installation

OPTIONAL EQUIPMENTS

ENGINE

Remote Radiator Cooling

Low Coolant level alarm

ALTERNATOR

Anti-Condensation heater

Over sized alternator

Main line circuit breaker

CONTROL SYSTEM

Remote annunciator panel

Uzağa alarm paneli

Alarm output relays

Earth fault, single set

Charging ammeter

TRANSFER ANAHTARI

Üç kutuplu kontaktör

Four Pole Contactor

VISE ACCESSORIES

Manual oil drain pump

Electrical oil drain pump

Enclosure: weater protective or sound attenuated

Duct adapter (on radiator)

Inlet and outlet motorised louvers

- Tool kit for maintenance
- Supplied with oil and coolant - 30 °C
- Automatic transfer switch

AKSA CERTIFICATES

- TS ISO 8528
- CE
- SZUTEST
- 2000/14/EC