



## 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

3 Phase, 50 Hz, PF 0.8

Voltage (V)	STANDBY RATING (ESP)		PRIME RATING (PRP)		STANDBY CURRENT (A)
	kW	kVA	kW	kVA	
400 / 231	64.0	80			115

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 period of operation.

## General Characteristics

Model Name	APG 80
Frequency (Hz)	50
Fuel Type	Natural Gas
Engine Make and Model	PSI 5.7LT CAC_ APG 80
Alternator Make and Model	Mecc Alte ECP 32-1L/4 C
Canopy	AUL5

## Engine Specifications

### General Data

Manufacturer	PSI
Engine Model	5.7LT CAC_ APG 80
Number of Cylinders / Type	8 cylinders - V type
Bore mm (in)	101,6 (4)
Stroke mm (in)	88,4 (3.48)



Displacement l (cu. In)	5,7 (350)
Compression Ratio	9.4:1
Engine Speed (rpm)	1500
Standby Power (kW/hp)	100 (134,1)
Block Heater (QTY)	1
Block Heater Power (Watt)	750
Governor System	ECU
Air Filter	Dry Type
Aspiration	Turbo Charged

### Lubrication System

Oil Capacity l (gal)	4,7 (1,24)
Max. Oil Temperature °C (F)	121 (250)

### Fuel System

Fuel Type	Natural Gas
Injection Type	Spark-Ignited
Type of Fuel Pump	-

### Electrical System

Operating Voltage (Vdc)	12 Vdc
Battery and Capacity (Qty/Ah)	1 / 66

### Cooling System

Cooling Method	Water Cooled
Coolant Capacity (engine only) l (gal)	7,8 (2,1)

### Exhaust System

Exhaust Gas Flow (m <sup>3</sup> /min)	20,2
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### Fuel Consumption

Fuel Cons. @100% Prime Load m <sup>3</sup> /h (kg/h)	31,4 (22,5)
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### Alternator Characteristics

Manufacturer	Mecc Alte
Alternator Model	ECP 32-1L/4 C
Frequency (Hz)	50
Power (kVA)	75



Voltage (V)	400
Phase	3
A.V.R.	DSR
Voltage Regulation	1
Insulation Class	H
Protection Class	IP23
Rated Power Factor	0.8
Weight Complete Generator (kg)	244
Temperature Rise Class	H
Cooling Air (m <sup>3</sup> /min)	15.7

### Open Generator Set Dimensions

Length mm (ft)	2950 (9,7)
Width mm	1163 (3,8)
Height mm (ft)	1682 (5,5)

### Canopy Characteristics

Length mm (ft)	2950 (117)
Width mm (ft)	1129 (45)
Height mm (ft)	1485 (59)

### Control Panel



## Standard Equipment

- Water cooled, gas 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 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

## Aksa Certificates

### Directive

- 2006/42/EC : Machinery Safety Directive
- 2004/108/EC : Electromagnetic Compatibility Directive
- 2006/95/EC : Low Voltage Directive

### Standarts

- EN ISO 8528-13:2016 : Reciprocating internal combustion engine-driven alternating current generating sets- Part:13: Safety



- Max load and overload ratings based on ISO 3046 gross flywheel power.
- Technical data based on ISO 3046-1 standards of 77°F(25°C), 14,5Psia (100kPa) and 30% relative humidity.
- Production tolerances in engines and installed components can account for power variations of  $\pm 5\%$ . Altitude, temperature and excessive exhaust and intake restrictions should be applied to power calculations.
- All fuel and thermal calculations unless otherwise noted are done at ISO 3046 rated load using LHV for NG of 48,17 MJ/kg.
- At 0,5 in-H<sub>2</sub>O of Package Restriction at STP
- Volume calculated using density of 0,717 kg/m<sup>3</sup> for NG and 0,51 kg/L for LPG