



## 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, 60 Hz, PF 0.8

Voltage (V)	STANDBY RATING (ESP)		PRIME RATING (PRP)		STANDBY CURRENT (A)
	kW	kVA	kW	kVA	
380 / 220	38.4	48	35.20	44	73
480 / 277	40.0	50	36.00	45	60
208 / 120	38.4	48	35.20	44	133

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	AJD 50-6
Frequency (Hz)	60
Fuel Type	Diesel
Engine Make and Model	John Deere 3029TFG20
Alternator Make and Model	Mecc Alte ECP 32-2S/4 C
Canopy	AK 30
Noise Level @1m , @7m (dB(A))	80,9 / 71.5

## Engine Specifications

### General Data

Manufacturer	John Deere
Engine Model	3029TFG20
Number of Cylinders / Type	3 cylinders - in line



Bore mm (in)	106
Stroke mm (in)	110
Displacement l (cu. In)	2.9
Compression Ratio	17.2:1
Engine Speed (rpm)	1500
Standby Power (kW/hp)	42/56
Prime Power (kW/hp)	39/52
Block Heater (QTY)	1
Block Heater Power (Watt)	500
Governor System	Mechanic
Air Filter	Dry Type
Aspiration	Turbo Charged

#### Lubrication System

Oil Capacity l (gal)	8
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#### Fuel System

Fuel Type	Diesel
Injection Type	Direct Injection
Type of Fuel Pump	Delphi DP100G

#### Electrical System

Operating Voltage (Vdc)	12 Vdc
Battery and Capacity (Qty/Ah)	1x55

#### Cooling System

Cooling Method	Water Cooled
Coolant Capacity (engine only) l (gal)	6

#### Exhaust System

Exhaust Gas Flow (m <sup>3</sup> /min)	7.3
Exhaust Back Pressure in-Hg (kPa)	7.5
Exhaust Gas Temperature °C (F)	414

#### Radiator

Total Coolant Capacity (l)	19.2
Cooling Fan Air Flow m <sup>3</sup> /min (ft <sup>3</sup> /min)	59.1
External Restriction to Cooling Airflow (Pa)	125

#### Fuel Consumption



Fuel Cons. @100% Prime Load l/h (kg/h)	9,96
Fuel Cons. @75% Prime Load l/h (kg/h)	7.62
Fuel Cons. @50% Prime Load l/h (kg/h)	5.27

### Alternator Characteristics

Manufacturer	Mecc Alte
Alternator Model	ECP 32-2S/4 C
Frequency (Hz)	60
Power (kVA)	54
Voltage (V)	480
Phase	3
A.V.R.	DSR
Voltage Regulation	1
Insulation Class	H
Protection Class	IP23/IP44
Rated Power Factor	0,8
Weight Complete Generator (kg)	165
Temperature Rise Class	H
Cooling Air (m <sup>3</sup> /min)	18,5

### Open Generator Set Dimensions

Length mm	1490
Width mm	900
Height mm	1212
Open Gen.Set Gross Weight Dry kg	735
Full Tank Capacity (l)	70

### Canopy Characteristics

Length mm	2472
Width mm	1006
Height mm	1537
Dry Weight kg	915
Full Tank Capacity (l)	130

### Control Panel



## Standard Equipment

- 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 Equipment

**Engine**

**Alternator**



- Fuel-Water Separator Filter
- Oil heater

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

### Control Panel

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

### Transfer Panel

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

### Auxiliary Equipment

- Main Fuel Tank
- Automatic or manual fuel filling system
- Electrical or manual oil drain pump
- Low and high fuel level alarm
- Inlet and outlet motorized louvers
- Inlet and outlet acoustic baffles
- Tool kit for maintenance
- 1500/3000 hours maintenance kit
- Supplied with oil and coolant (-30°C)

### Exhaust

- Residential Silencer
- Silencer Spark Arrester
- Critical Silencer
- Catalytic Converter

### Canopy

- Galvanized Coating
- ISO Container
- Marine Grade Paint

### Optional Alternator and Control Panel

Please contact your dealer for additional Alternator, Control Panel and Circuit Breaker Switch options.

## Aksa Certificates

### Directive

- 2006/42/EC : Machinery Safety Directive
- 2014/30/EU : Electromagnetic Compatibility Directive
- 2014/35/EU : Low Voltage Directive

### Standarts

- TS ISO 8528-5:2022 / TS EN ISO 8528-13:2018 : Reciprocating internal combustion engine-driven alternating current generating sets- Part:13: Safety

### Quality Management Systems

- ISO 9001:2015
- ISO 14001:2015
- ISO 45001:2018
- ISO 50001:2018
- ISO 27001:2013



ISO 10002:2018