



Einführung

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.

Leistung

3 Phase, 50 Hz, PF 0.8

Spannung (V)	Bereitschaftsleistung (ESP)		Primärleistung		Standby-Strom
	kW	kVA	kW	kVA	
400 / 231	88,0	110	80.0	100	159

„STANDBY-RATING (ESP) Gilt für die Stromversorgung wechselnder elektrischer Lasten für die Dauer einer Stromunterbrechung einer zuverlässigen Versorgungsquelle. ESP entspricht ISO 8528-1. Überlast ist nicht erlaubt.“

PRIME RATING (PRP) Gilt für die Stromversorgung unterschiedlicher elektrischer Lasten für unbegrenzte Stunden. PRP entspricht ISO 8528-1. 10 % Überlast ist für einen Zeitraum von 1 Stunde innerhalb eines 12-stündigen Betriebszeitraums verfügbar.

Allgemeine Charakteristiken

Modellname	AC 110
Frequenz (Hz)	50
Treibstoffart	Diesel
Motor Marke und Modell	Cummins 6BTA5.9-G5
Marke und Modell des Generators	Aksa AK 480
Steuerung Modell	DSE 6120
Schalldämmhaube	AK 40
Lärmpegel @1m./@7m. (dB(A))	83.6 / 73

Motorspezifikationen

Allgemeine Daten

Hersteller	Cummins
Motor Modell	6BTA5.9-G5
Anzahl der Zylinder	6 cylinders - in line



Bohrung (mm)	102
Hub (mm.)	120
Hubraum (lt.)	5.9
Kompressionsrate	17.6:1
Motorumdrehungen (U/min)	1500
Standby-Leistung (kW/PS)	102/137
Prime Leistung (kW/PS)	93/125
Kühlwasservorwärmung Anzahl	1
Kühlwasservorwärmung (Watt)	1000
Drehzahlregelung	Electronic
Luftfilter	Dry Type
Ansaugung	Turbo Charged and After Cooled

Schmiersystem

Ölkapazität (lt)	16.4
Max. Öltemperatur (°C)	121

Kraftstoffsystem

Treibstoffart	Diesel
Injektionsart und -system	Direct
Typ der Kraftstoffpumpe	Bosch A In-Line

Elektrisches System

Betriebsspannung (Vdc)	12 Vdc
Batterie und Kapazität (Menge/Ah)	1x66
Lichtmaschine	55

Kühlsystem

Kühlungsmethode	Water Cooled
	9.1

Abgassystem

Abgasstrom (m³/min.)	21.42
Abgasgegendruck (kPa)	10.25
Abgastemp. (C)	533
Wärmeabgabe an das Abgas	85

Kühler

Gesamtkühlmittelkapazität (lt)	19.8
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Luftstrom des Kühlgebläses (m³/min.) 216

Externe Einschränkung des Kühlluftstroms (Pa) 125

Kraftstoffverbrauch

Kraftstoffverbrauch Prime mit 100 % Leistung (l/h) 25

Kraftstoffverbrauch Prime mit 75 % Leistung (l/h) 18

Kraftstoffverbrauch Prime mit 50 % Leistung (l/h) 12

Eigenschaften des Generators

Hersteller Aksa

Generatormodell AK 480

Frequenz (Hz) 50

Leistung (kVA) 100

Spannung (V) 400

Phase 3

Regler SX460

Spannungsregulierung 1

Isoliersystem H

Schutz IP22

Nennleistungsfaktor 0.8

Gewicht kompletter Generator (kg) 406

Kühlungsluft (m³/min) 30,84

Abmessungen des offenen Aggregates

Länge (mm) 2173

Breite (mm) 1050

Höhe (mm) 1633

1320

Tankinhalt (lt.) 240

Eigenschaften der Schalldämmhaube

Länge (mm) 3105

Breite (mm) 1107

Höhe (mm) 1803

Trockengewicht (kg.) 1620

Tankinhalt (lt.) 240



Steuerung

Hersteller	DSE
Steuerungsmodul Modell	DSE 6120
Kommunikationsanschlüsse	CANBUS



1. 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

Standardgeräte

DSE model 6120, Auto Mains Failure control module, Static battery charger input 198-264 volt, output 27,6V 5A (24V) or 13,8 Volt 5A (12V), fuses for control circuits. This Control Module is suitable for a wide variety of single gen-set applications

Steuergerät

- The DSE 6120 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 control the switch over to the generator when the mains power fails.
- The DSE6120 also indicates operational status and fault conditions, Automatically shutting down the Gen. Set and giving true first up fault condition of Gen. Set failure. The LCD display indicates the fault.

Bau und Fertigstellung

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

Installation

Control panel is mounted on baseframe with steel stand. Located at the right side of the generator set (When you look at the Gen.Set. from Alternator side)

Motor

- Engine speed
- Oil pressure
- Coolant temperature
- Run time
- battery volts
- Configurable timing

Abschaltung

- Fail to start
- Emergency stop
- Low oil pressure
- High coolant temperature
- Over /Under speed
- Under/over generator frequency
- Under/over generator voltage

Warnungen

- Charge failure
- Battery Low/High voltage
- Fail to stop.
- Low /High generator voltage
- Under /Over generator frequency
- Over /Under speed
- Low oil pressure



- Oil pressure sensor open
- Coolant temperature sensor open

- High coolant temperature

Generator

- Voltage (L-L, L-N)
- Current (L1-L2-L3)
- Frequency
- Gen. Set ready
- Gen. Set enabled

Elektrische Auslösung

- Generator over current

Netz

- Mains ready
- Mains enabled

Optionen

- Flexible sensor can be controlled with temperature, pressure, percentage (warning/shutdown/electrical trip)
- Local setting parameters and monitoring from PC to control module with USB connection (max 6 mt).

Compliance-Liste des Control Panels

- Electrical Safety / Electro Magnetic Compatibility (EMC)
- BS EN 60950 Electrical Safety
- BS EN 61000-6-2 EMC Generic Immunity Standard
- BS EN 61000-6-4 EMC Generic Emission Standard

Statisches Batterieladegerät

- 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, 13,8 V for 12 volt and 27,6 V for 24 V . Input 198 - 264 volt AC.
- 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 Ausrüstung

- 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

Optionale Ausrüstung

**Motor**

- Fuel-Water Separator Filter
- Oil heater

Generator

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

Steuerung

- 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

Transferpanel

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

Zusatzausrüstung

- 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)

Auspuff

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

Gehäuse

- Galvanized Coating
- ISO Container
- Marine Grade Paint

Optionales Generatorsteuerfeld

Please contact to your reseller for additional Alternator, Control Panel and Breaker Switch options.

Aksa-Zertifikate**Richtlinie**

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

Standards

- 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