



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	35,2	44	32.00	40	64

„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	APG 44
Frequenz (Hz)	50
Treibstoffart	Natural Gas
Motor Marke und Modell	PSI 4.3L (4X)_ APG44
Marke und Modell des Generators	Mecc Alte ECP 32-2S/4 C
Steuerung Modell	DSE 6120
Schalldämmhaube	AUL3

Motorspezifikationen

Allgemeine Daten

Hersteller	PSI
Motor Modell	4.3L (4X)_ APG44
Anzahl der Zylinder	6 cylinders - V type
Bohrung (mm)	101,6 (4)



Hub (mm.)	88 (3,5)
Hubraum (lt.)	4,3 (262)
Kompressionsrate	9.8:1
Motorumdrehungen (U/min)	1500
Standby-Leistung (kW/PS)	48,2 (64,7)
Prime Leistung (kW/PS)	43,4 (58,2)
Kühlwasservorwärmung Anzahl	1
Kühlwasservorwärmung (Watt)	500
Drehzahlregelung	ECU
Luftfilter	Dry Type
Ansaugung	Naturally Aspirated

Schmiersystem

Ölkapazität (lt)	4,3 (1,1)
Max. Öltemperatur (°C)	121 (250)

Kraftstoffsystem

Treibstoffart	Natural Gas
Injektionsart und -system	Spark-Ignited
Typ der Kraftstoffpumpe	-

Elektrisches System

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

Kühlsystem

Kühlungsmethode	Water Cooled
	7,3 (1,93)

Abgassystem

Abgasstrom (m³/min.)	8,5
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Kraftstoffverbrauch

RowFuelConsPrimeWith100LoadNG	12,4 (8,9) (standby)
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Eigenschaften des Generators

Hersteller	Mecc Alte
Generatormodell	ECP 32-2S/4 C



Frequenz (Hz)	50
Leistung (kVA)	45
Spannung (V)	400
Phase	3
Regler	DSR
Spannungsregulierung	1
Isoliersystem	H
Schutz	IP23
Nennleistungsfaktor	0.8
Gewicht kompletter Generator (kg)	165
Temperaturerhöhungs-Klasse	125
Kühlungsluft (m³/min)	15.7

Abmessungen des offenen Aggregates

Length3	2278 (7,5)
Breite (mm)	1063 (3,5)
Height3	1404 (4,6)

Eigenschaften der Schalldämmhaube

Length3	2274 (90)
Width3	1062 (42)
Height3	1307 (52)

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 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
- Oil pressure sensor open
- Coolant temperature sensor open

Warnungen

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

Compliance-Liste des Control Panels

- Electrical Safety / Electro Magnetic Compatibility (EMC)
- BS EN 60950 Electrical Safety



- Local setting parameters and monitoring from PC to control module with USB connection (max 6 mt).

- 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, 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-Zertifikate

Richtlinie

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

Standards



- 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-H₂O of Package Restriction at STP
- Volume calculated using density of 0,717 kg/m³ for NG and 0,51 kg/L for LPG