## Over Product

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.

## Kracht (kVA)

3 Fasen,50 Hz, PF 0.8

| Spanning | Stand-by vermogen (ESP) | | Prime Power (PRP) | | Standby Amper |
|---|---|---|---|---|---|
| | kW | kVA | kW | kVA | |
| 400/231 | 936,00 | 1170,00 | 852,00 | 1065,00 | 1688,80 |

**Stand-by vermogen (ESP)** Het wordt gebruikt om te voldoen aan de variabele elektrische belastingvereiste in geval van uitval van de betrouwbare netvoeding. ESP voldoet aan ISO 8528-1 Overbelasting is niet toegestaan.

**Prime Power (PRP)** Wordt gedefinieerd als het continue bedrijfsvermogen onder variabele belasting. PRP voldoet aan ISO 8528-1 10% overbelasting kan elke 12 uur worden gedaan.

## Algemene kenmerken

| | |
|---|---|
| Modelnaam | APD 1170 M |
| Frequentie (HZ) | 50 |
| Brandstoftype | Diesel |
| Motormerk en -model | MITSUBISHI S12H-PTA |
| Alternatormerk en -model | ECO 43-2M/4 A |
| Configuratiescherm Model | DSE 7320 |
| Cabine | AK 96 - External Revomable Silencer |

## MOTORSPECIFICATIES

| | |
|---|---|
| Motor | MITSUBISHI |
| Motor model | S12H-PTA |
| Silindir Sayısı (L) | 12 cylinders - V type |
| Bore (mm.) | 150 |
| Stroke (mm.) | 175 |
| Silindir Hacmi (lt.) | 37.11 |
| Aspiratie | Turbo Charged and AfterCooled |
| Compressieverhouding | 14.0:1 |
| Hız (d/dk) | 1500 |
| Olie capaciteit (Filtre Dahil) (lt) | 200 |
| Stand-by vermogen (kW/HP) | 1020/1367 |
| Prime Power (kW/HP) | 930/1247 |
| Blokverwarmingshoeveelheid | 2 |
| Blokkeer verwarmingsvermogen (Watt) | 3000 |
| Brandstoftype | Diesel |
| Injectietype en systeem | Direct |
| Type brandstofpomp | Mistubishi Unit Injector x12 |
| Governor-systeem | Electronic |
| Bedrijfsspanning (Vdc) | 24 Vdc |

De fabrikant behoudt zich het recht voor om zonder voorafgaande kennisgeving wijzigingen aan te brengen in het model, technische specificaties, kleur, uitrusting, accessoires en afbeeldingen. (26.09.2019)

| | |
|---|---|
| Batterij en capaciteit (aantal / Ah) | 4x143 |
| Laaddynamo (A) | 30 |
| Koelmethode | Water Cooled |
| Koelventilatorluchtstroom (m³ / min) | 1800 |
| Koelvloeistofcapaciteit (alleen motor / met radiator) (lt) | 100/244 |
| Luchtfilter | Dry Type |
| Brandstofverbruik bij eerste 100% belasting (lt / uur) | 216.1 |
| Brandstofverbruik primair 75% belasting (lt / uur) | 168.6 |
| Brandstofverbruik bij eerste 50% belasting (lt / uur) | 118.8 |

## Dynamo specificaties

| | |
|---|---|
| Fabrikant | Mecc Alte |
| Alternatormerk en -model | ECO 43-2M/4 A |
| Frequentie (HZ) | 50 |
| Kracht (kVA) | 1150 |
| Spanning (V) | 400 |
| Fase | 3 |
| Automatische spanningsregelaar | DER1 |
| Voltage regulatie | (+/-)0,5%% |
| Isolatiesysteem | H |
| Bescherming | IP23 |
| Nominale vermogensfactor | 0.8 |
| Gewicht dynamo (Kg) | 2395 |
| Koellucht (m³/min) | 90 |

## OPEN TYPE GENERATOR AFMETINGEN (mm)

| | |
|---|---|
| Lengte | 4370 |
| Breedte | 2100 |
| Hoogte | 2210 |
| Droog gewicht (kg.) | 8720 |
| Inhoud brandstoftank (lt.) | 1000 |

## AFMETINGEN GENERATORKAST (mm)

| | |
|---|---|
| Lengte | 7500 |
| Breedte | 2300 |
| Hoogte | 2500 |
| Droog gewicht (kg.) | 12370 |
| Inhoud brandstoftank (lt.) | 1500 |

**1.** Steel structure made from steel sheet and steel profiles.
**2.** Canopy and panels made from powder coated sheet steel.

De fabrikant behoudt zich het recht voor om zonder voorafgaande kennisgeving wijzigingen aan te brengen in het model, technische specificaties, kleur, uitrusting, accessoires en afbeeldingen. (26.09.2019)

**3.** Emergency stop push button.
**4.** Control panel is mounted on the baseframe . Located at the back of the generator set
**5.** Cables out locations are under or back of the canopy.
**6.** Corrosion.resistant locks and hinges.
**7.** Oil could be drained via valve and a hose
**8.** Exhaust system in the canopy.
**9.** Special large access doors for easy maintanance
**10.** Fuel tank is at front of the canopy ,easy access to the fuel tank via lockable door.
**11.** Lifting points similar to ISO container , located on each top corner of the canopy.
**12.** the cap on the canopy provides easy accsess to radiator cap.
**13.** sound proofing materials
**14.** Integrated ladder built in to side of the canopy allows access to the top of the canopy.

## Over Product

Sound-attenuated and weather protective enclosures for generating sets from Aksa, meet event the sound requirements and provide optimum protection from inclement weather and development by our specialist acoustic engineers. Our modular designed sound insulated canopies provide ease of access for servicing and general maintenance and interchangeable components permitting on-site repair. Enclosures are designed to optimize genset cooling performance, providing you with confidence that genset ratings and ambient capability.

## Besturingskaart

| | |
|---|---|
| Controle Module | DSE |
| Besturingsmodule model | DSE 7320 |
| İletişim Portları | MODBUS |

**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

## Apparaten

DSE, model 7320 Auto Mains Failure control module Static battery charger Emergency stop push button and fuses for control circuits

## Structuur en verf

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

## Montage

Control panel is mounted generating set baseframe on robust steel stand or power module. Located at side of generating set with properly panel visibility.

## Generator regeleenheid

The DSE 7320 conrol module is a standard addition to our generator sets from 220 kVA upwards and it has been designed to start and stop diesel andgas generating sets that include electronic and non electronic engines.

The DSE 7320 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 DSE7320 also indicates operational status and fault conditions, automatically shutting down the generating set and

De fabrikant behoudt zich het recht voor om zonder voorafgaande kennisgeving wijzigingen aan te brengen in het model, technische specificaties, kleur, uitrusting, accessoires en afbeeldingen. (26.09.2019)

indicating faults by means of its LCD display on the front panel.

**Standaardfuncties**

Microprocessor controlled

- 132 x 64 pixel LCD display makes information easy to read
- Front panel programming and also via PC software
- Soft touch membrane keypad and five key menu navigation
- Remote communications via RS232, RS485 and ethernet.
- Event logging (50) showing date and time
- Multiple date and time engine exercise mode and maintenance scheduler
- Engine block heater control.
- Controls; stop, manuel, auto, test, start, mute lamb test/transfer to generator, transfer to mains, menu navigation.

**Meetindicatoren**

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

Earth current

kW

Pf

kVAr

kWh, kVAh, kVArh

Phase sequence

MAINS

Voltage (L-L, L-N)

Frequency

WARNING

Charge failure

Battery under voltage

Fail to stop

Low fuel level (opt.)

kW over load

Negative phase sequence

De fabrikant behoudt zich het recht voor om zonder voorafgaande kennisgeving wijzigingen aan te brengen in het model, technische specificaties, kleur, uitrusting, accessoires en afbeeldingen. (26.09.2019)

Loss of speed signal
PRE-ALARMS
Low oil pressure
High engine temperature
Low 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
Over /Under speed
Under/over generator frequency
Under/over generator voltage
Oil pressure sensor open
Phase rotation
ELECTRICAL TRIP
Earth fault
kW over load
Generator over current
Negative phase sequence

**Optie Kenmerken**

High oil temperature shut down
Low fuel level shut down
Low fuel level alarm
High fuel level alarm
EXPANSION MODULES
Editional LED module (2548)
Expension relay module (2157)
Expansion input module (2130)

**Standaarden**

Elecrical Safety / EMC compatibility
BS EN 60950 Electrical business equipment
BS EN 61000-6-2 EMC immunity standard

De fabrikant behoudt zich het recht voor om zonder voorafgaande kennisgeving wijzigingen aan te brengen in het model, technische specificaties, kleur, uitrusting, accessoires en afbeeldingen. (26.09.2019)

BS EN 61000-6-4 EMC emission standard

## Elektronische acculader

Battery charger is manufactured with switching-mode and SMD technology and it has high efficincy.

Battery charger models' output V-I characteristic is very close to square

2405 has fully output shot circuit protection and ıt can be used as a current source.

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.

Charge fail output is available.

Connect charge fail relay coil between positive output and CF output.

Input: 196-264V.

Output: 27,6V 5A or 13,8V 5A.

## Standaardfuncties

- 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
- Steel base frame and anti-vibration isolators
- Flexible fuel connection hoses
- Single bearing, class H alternator
- Industrial exhaust silencer and steel bellows supplied separately
- Static battery charger
- Manual for application and installation
- Generators Sets' voltage and frequency regulation comply with ISO 8528-5
- Generators Sets' can take 100% load at one step according to NFPA110

## Generator hardware-opties

ENGINE

Remote Radiator Cooling

Fuel-Water Seperator Filter

Oil heater

ALTERNATOR

Anti-Condensation Heater

Main line circuit breaker

CONTROL SYSTEM

Automatic synchronising and power control system ( multi gen-set Parallel )

Paralel system with mains.

Transition synchronization with mains

De fabrikant behoudt zich het recht voor om zonder voorafgaande kennisgeving wijzigingen aan te brengen in het model, technische specificaties, kleur, uitrusting, accessoires en afbeeldingen. (26.09.2019)

| |
|---|
| Remote relay output |
| Alarm output relays |
| Remote communication with modem |
| Earth fault, single set |
| Charge Ammeter |
| TRANSFER SWITCH |
| Three or four pole contactor |
| Three or four pole motor operated circuit breaker |
| OTHER ACCESSORIES |
| Main Fuel Tank |
| Automatic or manual fuel filling system |
| Manual oil drain pump |
| Low and high fuel level alarm |
| Residential silencer |
| Enclosure: weater protective or sound attenuated |
| Duct adapter ( on radiator) |
| Inlet and outlet motorised louvers |
| Inlet and outlet acoustic baffles |
| Tool kit for maintenance |
| 1500/3000 hours maintenance kit |
| Supplied with oil and coolant - 30 °C |

## Certificaten

- TS ISO 8528
- CE
- SZUTEST

De fabrikant behoudt zich het recht voor om zonder voorafgaande kennisgeving wijzigingen aan te brengen in het model, technische specificaties, kleur, uitrusting, accessoires en afbeeldingen. (26.09.2019)