



## Ürün Hakkında

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.

## Güç

3 Phase, 50 Hz, PF 0.8

| Voltaj (V) | STANDBY GÜÇ(ESP) |     | PRIME GÜÇ (PRP) |     | STANDBY AKIM (A) |
|------------|------------------|-----|-----------------|-----|------------------|
|            | kW               | kVA | kW              | kVA |                  |
| 400 / 231  | 16,0             | 20  | 14.40           | 18  | 29               |

STANDBY RATING (ESP) Güvenilir bir şebeke kaynağının güç kesintisi süresince değişken elektrik yüküne güç sağlamak için geçerlidir. ESP, ISO 8528-1'e uygundur. Aşırı yüklemeye izin verilmez.

PRIME RATING (PRP) Değişken elektrik yüküne sınırsız saat boyunca güç sağlamak için geçerlidir. PRP, ISO 8528-1'e uygundur. %10 aşırı yük kapasitesi, 12 saatlik çalışma süresi içinde 1 saatlik bir süre için kullanılabilir.

## Genel Özellikler

|                                |                   |
|--------------------------------|-------------------|
| Model Adı                      | APD 20 BD         |
| Frekans (Hz)                   | 50                |
| Yakıt Tipi                     | Diesel            |
| Motor Marka ve Modeli          | Baudouin 4M06G2D0 |
| Alternatör Marka ve Modeli     | Aksa AK 216       |
| Kontrol Panel Modeli           | DSE 6120          |
| Kabin Modeli                   | ACP 3A            |
| Ses Seviyesi @1m , @7m (dB(A)) | 80 / 70.5         |

## Motor Özellikleri

### Genel Bilgiler

|                        |                       |
|------------------------|-----------------------|
| Üretici                | Baudouin              |
| Motor Modeli           | 4M06G2D0              |
| Silindir Sayısı / Tipi | 4 cylinders - in line |
| Bore mm (in)           | 89                    |



|                          |                     |
|--------------------------|---------------------|
| Stroke mm (in)           | 92                  |
| Hacim I (cu. In)         | 2.3                 |
| Sıkıştırma Oranı         | 17.5:1              |
| Motor Hızı (rpm)         | 1500                |
| Standby Güç (kW/hp)      | 20/26.8             |
| Prime Güç (kW/hp)        | 18/24.1             |
| Blok Isıtıcı (Adt)       | 1                   |
| Blok Isıtıcı Gücü (Watt) | 500                 |
| Governor Sistemi         | Electronic          |
| Hava Filtresi            | Dry Type            |
| Hava Emiş                | Naturally Aspirated |

#### Yağlama Sistemi

|                            |      |
|----------------------------|------|
| Yağ Kapasitesi I (qal)     | 11.5 |
| Maks. Yağ Sıcaklığı °C (F) | 115  |

#### Yakıt Sistemi

|                  |            |
|------------------|------------|
| Yakıt Tipi       | Diesel     |
| Enjeksiyon Tipi  | Direct     |
| Yakıt Pompa Tipi | Mechanical |

#### Elektrik Sistemi

|                          |        |
|--------------------------|--------|
| Çalışma Voltajı (Vdc)    | 12 Vdc |
| Akü ve Kapasite (Adt/Ah) | 1x55   |
| Şarj Alternatörü (A)     | 35     |

#### Soğutma Sistemi

|                                                 |              |
|-------------------------------------------------|--------------|
| Soğutma Metodu                                  | Water Cooled |
| Soğutma Suyu Kapasitesi (yalnızca motor)I (gal) | 5            |

#### Egzoz Sistemi

|                               |      |
|-------------------------------|------|
| Egzoz Gaz Debisi (m³/dk)      | 4.5  |
| Egzoz Geri Basınç in-Hg (kPa) | 8    |
| Egzoz Gaz Sıcaklığı °C (F)    | <700 |

#### Radyatör

|                                          |     |
|------------------------------------------|-----|
| Toplam Soğutma Suyu Kapasitesi (I)       | 8.6 |
| Soğutma Fan Hava Debisi m³/min (ft³/min) | 63  |
| Soğutma Havası Harici Direnç (Pa)        | 125 |

**Yakıt Tüketimi**

|                                            |     |
|--------------------------------------------|-----|
| %100 Prime Yükte Yakıt Tüketimi l/h (kg/h) | 4.6 |
| %75 Prime Yükte Yakıt Tüketimi l/h (kg/h)  | 3.6 |
| %50 Prime Yükte Yakıt Tüketimi l/h (kg/h)  | 2.6 |

**Alternator Özellikleri**

|                               |        |
|-------------------------------|--------|
| Üretici                       | Aksa   |
| Alternatör Model              | AK 216 |
| Frekans (Hz)                  | 50     |
| Güç (kVA)                     | 20     |
| Voltaj (V)                    | 400    |
| Faz                           | 3      |
| A.V.R.                        | SX460  |
| Voltaj Regülasyon             | 1,5%   |
| Yalıtım Sınıfı                | H      |
| Koruma Sınıfı                 | IP22   |
| Nominal Güç Faktörü           | 0.8    |
| Toplam Generator Ağırlık (kg) | 128    |
| Soğutma Havası (m³/dk)        | 5,7    |

**Açık Jeneratör Boyutları**

|                                    |      |
|------------------------------------|------|
| Uzunluk mm                         | 1696 |
| Genişlik mm                        | 892  |
| Yükseklik mm                       | 1003 |
| Açık Gen.Set Brüt Ağırlık, Kuru kg | 525  |
| Yakıt Tank Kapasitesi (l)          | 60   |

**Kabin Özellikleri**

|                           |      |
|---------------------------|------|
| Uzunluk mm                | 1980 |
| Genişlik mm               | 950  |
| Yükseklik mm              | 1128 |
| Kuru Ağırlık kg           | 655  |
| Yakıt Tank Kapasitesi (l) | 60   |

**Kontrol Paneli**

|                      |          |
|----------------------|----------|
| Üretici              | DSE      |
| Kontrol Modül Modeli | DSE 6120 |



## İletişim Portları

## 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

## Standart Cihazlar

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

## Kontrol Ünitesi

- 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.

## Yapım ve Boya

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.

## Montaj

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

## Durdurma

- 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

## Uyarılar

- 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

## Jeneratör

## Elektrik Açma



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

- Generator over current

### Şebeke

- Mains ready
- Mains enabled

### Opsiyonlar

- 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).

### Kontrol Paneli Uyumluluk Listesi

- 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

### Statik Akü Şarj Cihazı

- 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.

### Standart Ekipmanlar

- 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

### Opsiyonel Ekipmanlar

#### Motor

- Fuel-Water Separator Filter
- Oil heater

#### Alternatör

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

**Kontrol Paneli**

- 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 Panosu**

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

**Yardımcı Ekipmanlar**

- 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)

**Egzoz**

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

**Kabin**

- Galvanized Coating
- ISO Container
- Marine Grade Paint

**Opsiyonel Alternatör ve Kontrol Paneli**

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

**Aksa Sertifikalar****Direktifler**

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

**Standartlar**

- 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