

# DIESEL POWERED GENERATING SETS

**11  
33** kVA

**8,8  
26,4** kW



Generating Set Model	Power Pf.0,8 400 / 230 V - 50 Hz	
	Standby kVA	Prime kVA
AMT 11	11	10
AMT 16	16	14,5
AMT 22	22	20
AMT 33	33	30

**Standby:** Continuous running at variable load for duration of an emergency.No overload is permitted on these ratings.

**Prime:** Continuous running at variable load for unlimited periods with 10% overload available for 1 hour in any 12 hour period.  
Contact us for the other running periods.

## STANDARD GENSET SPECIFICATIONS

### ENGINE

- Mitsubishi diesel engine
- Four stroke, water cooled,
- Mechanical governor control system
- 12 V D.C. starter and charge alternator
- Replaceable fuel filter, oil filter and dry type air filter
- Cooling radiator and fan
- Starter battery (with lead acid) including Rack and Cables
- Flexible fuel connection hoses and manual oil sump drain valve
- Industrial capacity exhaust silencer and steel bellows
- Jacket water heater
- Operation manuals and circuit diagram documents

### ALTERNATOR

- Brushless, single bearing system, flexible disc, 4 poles
- Insulation class H
- Standard degree of protection IP21
- Self-exciting and self-regulating
- Solid state automatic voltage regulator
- Impregnation with tropicalised epoxy varnish
- Stator winding with 2/3 pitch for improved harmonics

### CHASSIS

- Steel chassis and anti-vibration pads
- Base frame design incorporates an integral fuel tank.
- The generating set can be lifted or carefully pushed/pulled by the base frame
- Dial type fuel gauge and drain plug on the fuel tank

### CANOPY

- All canopy parts are designed with modular principles
- Without welding assembly
- Lockable doors on each side
- All metal canopy parts are painted by electrostatic polyester powder paint
- Panel window
- Thermally insulated engine exhaust system
- Exterior emergency stop push button
- Easy lifting and moving
- Easy maintenance and operation

### QUALITY STANDARDS

The equipment meets the following standards:  
IEC 34-1, ISO 3046, VDE 0530, BS 4999, BS 5000.  
The generating sets are manufactured by a full accredited ISO 9001 Szutest.

SZUTEST



TS EN ISO 9001:2008

### CONTROL SYSTEM

Control, supervision and protection panel is mounted on the genset base frame. The control panel is equipped as follows:

#### 1. Auto. Mains Failure Control Panel - P 602

Panel equipments:

- Control with DSE, model 6020 module
- Static battery charger
- Emergency stop push button.

#### a) DSE 6020 Module Features:

- Automatic control generating set start and stop
- 3 phase generator and mains voltage monitoring
- Transfer between mains and generator power
- Scrolling digital LCD display
- 4-line, 64x132 graphic display with LED backlight
- Front panel configuration of timers and alarm trip points
- Easy push button control  
STOP/RESET - MANUAL - AUTO - TEST - START
- LCD display Scroll push-button
- Page button
- Remote start
- Micro processor controlled

#### b) Metering via LCD Display:

- Generator Volt (L-L, L-N)
- Generator Ampere (L1,L2,L3)
- Generator Frequency (Hz)
- Configurable timing
- Event log(5) events
- Engine hours run

- Engine oil pressure (PSI)
- Engine speed RPM
- Engine cooling temperature (°C)
- Plant battery volts
- Mains Volts (L-L, L-N)
- Mains frequency (Hz)

#### c) Protections

##### Shutdowns

- Under/Over Speed
- Fail to stop
- Over current / Electrical trip
- Engine low oil pressure
- High coolant temperature
- Fail to start
- Under/over generator frequency
- Under/over generator voltage
- Emergency stop
- Oil pressure sensor open
- Coolant temperature sensor open

##### Warning

- Under/Over generator voltage
- Over/under generator frequency
- Over/under speed
- Engine low oil pressure
- High coolant temperature
- Battery high/low voltage
- Charge alternator failure
- Fail to stop

#### d) LED Indications:

- Mains available
- Mains on load
- Generator available
- Generator on load



**DSE 6020**

## DIESEL GENERATING SETS 400 / 230 V - 50Hz

**GROUP**
**DIESEL ENGINE**

Model			AMT 11	AMT 16	AMT 22	AMT 33	
Power Pf. 0,8	Standby	kVA	11	16	22	33	
		kW	8,8	12,8	17,6	26,4	
	Prime	kVA	10	14.5	20	30	
		kW	8	11.6	16	24	
Engine Make			Mitsubishi				
Model			S3L2	S4L2	S4Q2	S4S	
Engine Power Output at rated rpm			11	15,4	22,4	31,6	
			14,8	20,7	30	42,4	
Aspiration and Cooling			Natural				
Total Displacement			Litre	1,318	1,758	2,505	3,33
No. of Cylinders and Build			3 - InLine		4 - InLine		
Engine Speed			rpm				1500
Bore ve Stroke			mmxmm		78 x 92	88 x 103	94 x 120
Compression Ratio			22:1				
Governor			Mechanical				
Fuel Consumption at full load			L / hr	3,3	4,9	6,3	8,8
Fuel Tank Capacity			Litre	50	50	50	70
Oil Capacity			Litre	4,2	6	6.5	10
Coolant Capacity			Litre	6,5	7,7	11,81	20,7

### Open Type

Dimensions (Length x Widht x Height)	mm	1250 x 850 x 935	1350 x 850 x 935	1363 x 850 x 1000	1490 x 900 x 1112
Dry Weight	kg.	330	405	470	630

### Sound Attenuated Type

Canopy Model	AK 10			AK 20	
Dimensions (Length x Widht x Height)	mm	1850 x 910x 1131		2100 x 960 x 1441	
Dry Weight	kg.	510	585	650	830

Manufacturer reserves the right to make changes in model, technical specifications, color, equipment and accessories without prior notice.

### Optional Equipments

#### Diesel Engine

- Remote radiator

#### Alternator

- 3 pole output circuit breaker

#### Panel

- Charge ammeter
- Transfer switch 3 pole
- Transfer switch 4 pole
- Earth fault, single set

#### Accessories

- Bulk fuel tank
- Automatic or manual fuel filling system
- Fuel - water separator filter
- Low fuel level alarm
- Residential silencer
- Enclosure or soundproof canopy
- Trailer
- Manual oil sump drain pump
- Tool kit for maintenance



Akxa makes its sound attenuated generator sets sound pressure level tests in accordance with Directive 2000/14/EC validation of the sound level test has been approved by the notified body szutest

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