

ACQ 515

**aksa** POWER GENERATION



|                   |                      |         |
|-------------------|----------------------|---------|
| 230/400 V - 50 Hz | Generating Set Model | ACQ 515 |
| Power<br>Pf. 0,8  | Standby kVA          | 515     |
|                   | Prime kVA            | 460     |

**Standby:**Continuous running at variable load running position.It can run to main energy auxiliary.No overload is permitted on these ratings. In accordance with BS 5514, ISO 3046

**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. In accordance with ISO 8528, ISO 3046.

### DESIGN SPECIFICATIONS

- High quality, reliable and complete power unit
- Compact design
- Easy start and maintenance possibility
- Every generating set is subjected to a comprehensive test programme which includes full load testing and checking and providing of all control and safety shut down functions testing
- Full engineered with a wide range of options and accessories:Canopy,soundproof and on road trailer

### STANDARD GENSET SPECIFICATIONS

#### ENGINE:

- CUMMINS heavy duty diesel engine
- Four cycle, water cooled, turbo charged and after cooled
- Electronic Governor Control System
- Direct injection fuel system
- Replaceable wet type cylinder liners
- 4 valves per cylinder
- 24 V D.C. starter and charge alternator
- Replaceable fuel filter ,oil filter and dry element air filter
- Cooling radiator and fan
- Starter battery(with lead acid) including Rack and Cables
- Flexible fuel connection hoses and manual oil sump drain pump
- Industrial capacity exhaust silencer and steel bellows
- Jacket water heater (at automatic models)
- Operation manuals and circuit diagram documents

#### ALTERNATOR:

- Brushless, single bearing system, 4 poles
- Insulation class H
- Standard degree of protection IP21 or IP23
- Self-exciting and self-regulating
- Stator winding with 2/3 pitch
- Impregnation with tropicalised epoxy varnish
- Solid state Automatic Voltage Regulator

#### CHASSIS:

- The complete genset is mounted as whole on a heavy-duty fabricated, steel base frame. Antivibration pads are fixed between the engine/ alternator feet and the base frame.
- 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 bung on the fuel tank

#### CANOPY:

- All canopy parts are designed with modular principles
- Without welding assembly
- All metal canopy parts are painted by electrostatic polyester powder paint
- Exhaust silencer is protected against environment influences
- Thermally insulated engine exhaust system
- Emergency stop push button is installed outside of canopy
- To enable for lifting easy maintenance and operation

#### QUALITY STANDARDS:

- The equipment meets the following standards: ISO 3046, VDE 0530, BS 4999, BS 5000, EN 60034-I, IEC 34. The generating set is manufactured by a full accredited NQA-ISO 9001.

#### WARRANTY:

- 12 months warranty from commissioning date as standard.

#### CONTROL SYSTEM:

- Control, supervision and protection panel is mounted on the genset base frame. The control panel is equipped as follows;
- Control Modules Common Features
- Automatic controls generating set, start and shutdown
- Front panel programming of the module settings
- Remote communication via RS 232 port or RS 485 "modbus" output.
- Scrolling digital LCD display
- Event logging of shutdown alarms
- Control Modules Common Features
- Generator Volts(F-F/F-N)
- Generator Amperes(L1,L2,L3)
- Generator Frequency (Hz)
- Generator kVA
- Generator kW
- Generator Cos j

- Engine Temperature (Cantigrade & Fahrenheit)
- Engine Speed RPM
- Engine hours run
- Plant attery volts
- XCommon Alarms
- Under / over generator volts
- Under / over generator frequency
- Over current
- Low oil pressure
- High engine temperature
- Under / over speed
- Low coolantlevel
- Fail to start
- Fail to stop
- Emergency stop
- Charge fail
- Low / High battery volts
- Auto Mains Failure Control System P2020
- Control with DSE model 5220
- Static battery charger
- Emergency stop push button
- Additional Features
- Monitoring AC mains supply
- Provides signal to change over switch gear
- Easy push button control
- Stop / Reset-Auto-Manual-Test-Start
- Additional Metering
- Mains volts (F-F / F-N)
- Mains frequency (Hz)
- Additional Alarms
- Under / over mains volts
- Under / over mains frequency
- Can data fail
- Can ECU fail
- Auto Start Control System P2010
- Control with DSE model 5210 module
- Emergency stop push button
- Additional Features
- Provides signal to load transfer
- Easy pushbutton control
- Stop / Reset-Auto-Manual-Test-Start

| <b>TECHNICAL DATA</b>                           |                    |         |            |
|---|--------------------|---------|------------|
| <b>Diesel Generating Sets 230/400 V - 50 Hz</b> |                    |         |            |
| <b>G<br/>R<br/>O<br/>U<br/>P</b>                | <b>MODEL</b>       | ACQ 515 |            |
|   | Power<br>Pf. 0,8   |         | 515<br>412 |
|   |                    |         | 460<br>368 |
| <b>D</b>  | <b>Engine Make</b> | Cummins |            |

|   |  |                     |              |                    |             |              |
|---|--|---------------------|--------------|--------------------|-------------|--------------|
| I<br>E<br>S<br>E<br>L<br><br>E<br>N<br>G<br>I<br>N<br>E | Model                                  |                     | QSX 15 G6    |                    |             |              |
|   | Gross engine power output at rated rpm |                     | kWm<br>hp    | 459<br>615         |             |              |
|   | Aspiration and Cooling                 |                     |              | Turbo After Cooled |             |              |
|   | Cylinders Capacity                     |                     | Lt           | 15                 |             |              |
|   | Cylinders and Build                    |                     |              | 6 In line          |             |              |
|   | Engine Speed                           |                     | rpm          | 1500 rpm           |             |              |
|   | Bore and Stroke                        |                     | mmxmm        | 137x169            |             |              |
|   | Compression Ratio                      |                     |              | 17.0:1             |             |              |
|   | Governor                               |                     |              | Electronic         |             |              |
|   |  |                     |              |                    |             |              |
|   | Fuel Consumption                       |                     | Load<br>L/hr | 1/2<br>51.3        | 3/4<br>74.3 | Full<br>95.9 |
|   | Fuel Tank Capacity                     |                     | Lt           | 620                |             |              |
|   | Oil Capacity                           |                     | Lt           | 91                 |             |              |
|   | Water Capacity                         |                     | Lt           | 90                 |             |              |
|   |  |                     |              |                    |             |              |
| Air Intake - Engine                                     |  | m <sup>3</sup> /min | 36           |                    |             |              |
| Exhaust Gas Flow  |  | m <sup>3</sup> /min | 81           |                    |             |              |
|   |  |                     |              |                    |             |              |
| Alternator Voltage Regulation                           |  |                     | ± %1         |                    |             |              |

| OPEN TYPES                           |    |                |
|--------------------------------------|----|----------------|
| Dimensions (length x width x height) | mm | 3600x1300x1960 |
| Dry weight                           | kg | 4485           |

| SOUND ATTENUATED TYPE                |    |                |
|--------------------------------------|----|----------------|
| Canopy Model                         |    | AK 80          |
| Dimensions (length x width x height) | mm | 4900x1590x2520 |
| Dry weight                           | kg | 5900           |

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

| OPTIONAL EQUIPMENTS             |                                 |
|---------------------------------|---------------------------------|
| * Fuel - Water separator filter | * Automatic fuel filling system |
| * Engine oil heater             | * Manual sump oil drain pump    |
| * Residential silencer          | * Enclosure, Sound proof canopy |
| * Trailer                       | * Low fuel level alarm          |

- \* Charge ammeter
- \* Main fuel tank
- \* 4 pole contactor
- \* Over sized alternator
- \* Automatic Synchronising and power control system
- \* Anti condensation heater for alternator
- \* 3 pole alternator case circuit breaker (only for automatic models)
- \* Tool kit
- \* Automatic transfer switch by contactor or motorized circuit breaker