

QASWAA AL-
BARARRY



قصواء البراري

ENERGY ON DEMAND
QBO 2000 - 2200

GENSET-SPECIFICATIONS

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|------------------------------|----------------------------------|
| • Model | ENERGY ON DEMAND / QBO 2000-2200 |
| • Serial number | |
| • Prime power (KW) | 1646.0 KWe |
| • Prime Capacity (KVA) | 2058.0 KVA |
| • Load Acceptance | 1634.0 KVA |
| • Frequency | 50 Hz. |
| • Voltage | 24 V. |
| • Year of Manufacturing | 2010 |
| • Country of origin | Assemble in BAGHDAD |
| • Inlet air temperature (c°) | 55 c° |
| • Relative Humidity | 93 % RH @ 40c° |
| • Altitude above sea level | ≤1000 m |

ENGINE- SPECIFICATIONS

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|---------------------------------|---------------------------------------|
| • Engine type (Manufacturer) | Diesel engine |
| • Engine model | Perkins 4016TAG2A |
| • Serial number | |
| • Cylinders (No. , Arrangement) | 16: 60° Vee form |
| • Cycle | 4 stroke |
| • Compression ratio | 13.6:1 |
| • Torque | N/A |
| • Bore and Stroke (mm) | 160 x 190 |
| • Direction of rotation | Anti-clockwise viewed on flywheel end |
| • Combustion type | Direct injection |
| • Displacement | 61.123 liters |
| • Engine power (KW) | Gross: 1766 KWm Net: 1715KWm |
| • Inlet air temperature (c°) | 55 c° |
| • Relative Humidity | 93 % RH @ 40c° |
| • Altitude above sea level | ≤1000 m |
| • Year of Manufacturing | 2010 |
| • Country of origin | United Kingdom. (U.K.) |
| • Cooling type | Water cooled |
| • Total coolant capacity | 316 liters |

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|---------------------------------|---|-------------|--------------|
| • Aspiration type | Turbocharged air to water charge cooled | | |
| • Air cooling type | Mounted air filter and turbocharger –Integral charge cooler | | |
| • Water separator | Available | | |
| • Air filter type | Dry | | |
| • Type of fuel governing system | <ul style="list-style-type: none"> ▪ Unit fuel injectors with lift pump and hand stop control ▪ Electronic governor to ISO 3046 Part 4 class A1 ▪ Full-flow spin-on fuel oil filters | | |
| • Speed | 1500 | | |
| • Type of injection | Fuel injection | | |
| • Silencer type | External. | | |
| • Fuel consumption (Full load) | 423.5 Liters/hr. | | |
| • Oil consumption | 0.52 G/KW.hr. | | |
| • Lube oil capacity | 237.2 Liters | | |
| • Radiator cooling air flow | 2058 m ³ /min. | | |
| • Max exhaust gas flow | 387.0 m ³ /min. | | |
| • Diesel fuel specification | Diesel fuel according to BS2869 Class or equivalent | | |
| • Lubrication oil specification | Lubricating oil is according to API CH4 (15W/40) | | |
| • Dimensions (mm) | Length: 4460 | Width: 2775 | Height: 3239 |
| • Total weight (Dry) | 8010.0 kg. | | |

ALTERNATOR- SPECIFICATIONS

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|-------------------------------------|---|------------|--|
| • Type (Manufacturing) | Leroy Somer | | |
| • Country of origin | ALL FACTORIES OF LEROY SOMER IN THE WORLD | | |
| • Model | LSA 51.2 M60 | | |
| • Serial number | | | |
| • Ratings (KW,KVA – Continues) | 1600.0 kw | 2000.0 KVA | |
| • Voltage line to line | Y 380v. | Δ 230v. | |
| • Frequency | 50 Hz. | | |
| • Number of phases | 3 Ph. (Y) | | |
| • Number of poles | 4 Poles. | | |
| • Insulation class/ T° rise | H | | |
| • Wires | 12 | | |
| • Drip proof | IP 23 | | |
| • Number of bearings | Single bearing | | |
| • Ambient Temperature (c°) | 55 c° | | |
| • Relative humidity | 92 % | | |
| • Altitude above sea level | 1000 Meters | | |
| • Over speed | 2250 min ⁻¹ | | |
| • Air flow | 2.5 m ³ /s. | | |
| • Excitation system | Shunt | Arep + PMI | |
| • A.V.R. model | --- | R449 | |
| • Voltage regulation (Steady state) | ± 0.5 % | | |
| • Sustained short - Circuit current | 300% (3 IN) : 10s | | |
| • Total harmonic (*) TGH/THC | < 2.5 % | | |
| • Power factor | 0.8 | | |

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|---|------------|-------------|------------|-----------|------------|
| Efficiency (%) Class (H) at P.F.=0.8 | 75%= 96.2 | 100%= 95.6 | | | |
| • No load Excitation current (A) (SHUNT/AREP) | 1.5 | | | | |
| • Full load Excitation current (A) (SHUNT/AREP) | 5.9 | | | | |
| • Full load Excitation voltage (V) (SHUNT/AREP) | 62 | | | | |
| • Delivering current to start motor for ten sec.(A) | N/A | | | | |
| • No load losses (KW) | 17.5 | | | | |
| • Heat rejection (KW) | 70.1 | | | | |
| • Dimensions | L- 1777 | LB- 1755 | B- 1000 | V- 844 | XG- 770 |
| • Total weight | 4040 Kg. | | | | |

CONTROL PANEL- SPECIFICATIONS

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|--|--|---------------|--|--|
| • Type (Manufacturer) | DEEP SEA ELECTRONIC | | | |
| • Model | DSE6110 | | | |
| • Country of origin | United Kingdom (U.K.) | | | |
| • Protections | Available all Options | | | |
| • Monitoring | Available | | | |
| • Ability of auto starting | Available | | | |
| • Programming I/Ps & O/Ps | N/A | | | |
| • DC supply range | 8v. to 35v. Continuous. | | | |
| • Standby current | 88mA at 12v. | 50mA at 24v. | | |
| • Max. Operation temperature (c°) | +70 c° - Hot | -30 c° - Cold | | |
| • Maximum humidity | 93 % RH @ 40c° | | | |
| • No. of errors log | More than 20 | | | |
| • Analogue input range | 15v. to 333v.AC(L-N) absolute maximum 50Hz-60Hz (min 15 v. AC) | | | |
| • Three Phase current control range (CT input) | Available | | | |
| • Generator voltage control range | 0.5v. RMS minimum | | | |
| • Documentation for the installation and setup | Documented with files | | | |

ATS OR MTS- SPECIFICATIONS

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| • Type of operation | Auto. & Manual. |
| • Capacity | 9 KVA to 2500 KVA |
| • Components | Relays, Contactors, Auxiliaries, Timers, Reader, Phase filler, Lamps, Selectors, Emergency stop & Looms. |
| • Country of origin | Europe. |