

G780X | G780QX



DIESEL GENERATOR

FUEL OPTIMISED

ELECTRICAL

| Frequency (Hz) | Phases | Voltage (V) | Prime | | Standby | | Rated Speed (RPM) |
|----------------|--------|-------------|-------|-----|---------|-----|-------------------|
| | | | kVA | kW | kVA | kW | |
| 50 | 3 | 400/230V | 709 | 567 | 779 | 623 | 1500 |
| | | | | | | | |

POWER FACTOR

| | |
|---------|-----|
| 3 Phase | 0.8 |
| 1 Phase | 1 |

ALL RATINGS ARE TO STANDARD REFERENCE CONDITIONS ISO 8528

Prime: This rating is for the supply of continuous electrical power, at variable load, in lieu of commercially purchase power. There is no limitation on the annual hours of operation and 10% over load power can be supplied for 1 hour in 12.

Standby: This rating is for the supply of continuous electrical power, at variable load, in the event of a utility power failure. No overload is permitted.

"Stage IIIa" models are only emissions compliant at 50Hz Prime Power in accordance with 97-68EC.

FUEL CONSUMPTION

| | | | |
|-------------------|-----|------|--------|
| 100% Load Prime | L/h | 50Hz | 137.92 |
| 75% Load Prime | L/h | | 102.36 |
| 50% Load Prime | L/h | | 68.24 |
| 100% Load Standby | L/h | | 154.98 |
| 100% Load Prime | L/h | 60Hz | - |
| 75% Load Prime | L/h | | - |
| 50% Load Prime | L/h | | - |
| 100% Load Standby | L/h | | - |

EXHAUST SYSTEM

| | | | |
|----------------------------------|------|------|-----|
| Maximum Temperature 100% Standby | °C | 50Hz | 578 |
| Exhaust Gas Flow 100% Standby | kg/s | | TBA |
| Maximum Allowed Back Pressure | mbar | | TBA |
| Maximum Temperature 100% Standby | °C | 60Hz | - |
| Exhaust Gas Flow 100% Standby | kg/s | | - |
| Maximum Allowed Back Pressure | mbar | | - |

AIR SYSTEM

| | | | |
|-------------------------------------|-------------------|------|-------|
| Intake Air Flow 100% Standby | m ³ /h | 50Hz | 2234 |
| Total Cooling Air Flow 100% Standby | m ³ /s | | 19.4 |
| Alternator Fan Airflow | m ³ /s | | 1.614 |
| Intake Air Flow 100% Standby | m ³ /h | 60Hz | - |
| Total Cooling Air Flow 100% Standby | m ³ /s | | - |
| Alternator Fan Airflow | m ³ /s | | - |

ENGINE

| 1500 RPM | | |
|-------------------------|----|-----|
| Output Rating (PRP) | kW | 596 |
| Output Rating (Standby) | kW | 655 |
| 1800 RPM | | |
| Output Rating (PRP) | kW | - |
| Output Rating (Standby) | kW | - |

| | | |
|--------------------------|-------------------------------|-----------|
| Manufacturer and Model | Scania DC16-78A (02-43) | |
| Fuel | Diesel | |
| Injection | Direct | |
| Aspiration | Turbo Charged and Aftercooled | |
| Cylinders | V8 | |
| Bore and Stroke | mm | 131 x 154 |
| Displacement | L | 16.40 |
| Cooling | Water | |
| Engine Oil Specification | ACEA E3, E4, E5 or E7 | |
| Compression Ratio | 16.7:1 | |
| Engine Oil Capacity | L | 48.00 |
| Coolant Capacity | L | 68.00 |
| Governor | Electronic | |
| Air Filter | Dry | |
| Engine Oil Consumption | 100% Load | 0.2 g/kWh |

FUEL SYSTEM

| | | |
|----------------------|-------|--|
| Diesel Specification | EN590 | |
|----------------------|-------|--|

ALTERNATOR

| | |
|---------------------------------|-------------------------------------|
| Poles | 4 |
| Winding Connections | Star-Series |
| Insulation | Class H |
| Enclosure | IP23 |
| Exciter System | Self-excited brushless |
| Voltage Regulator | AVR (electronic) |
| Steady State Voltage Regulation | +/- 1.0% |
| Bearing | Twin Bearing |
| Coupling | Flexible disc |
| Cooling | Direct drive centrifugal blower fan |
| Coating | Winding Protection Grey |

STARTING SYSTEM

| | | |
|---------------------|----|----|
| Starter Motor | kW | 7 |
| Auxiliary Voltage | V | 24 |
| Number of Batteries | | 2 |

BATTERY FEATURES

| | |
|--|----|
| Battery Isolator | ● |
| Battery Size (Ah) | 75 |
| Number of Batteries | 2 |
| Battery Charger | ● |
| Standard: ● Not Available: x Optional: Δ | |

MECHANICAL FEATURES

| | |
|--|---|
| Cooling Pack | ● |
| Air Filter | ● |
| Mechanical Governor | x |
| Electronic Governor | ● |
| High Coolant Temperature Sender | x |
| Low Oil Pressure Sender | x |
| Advanced Coolant Temperature Sender | ● |
| Advanced Oil Pressure Sender | ● |
| Oil Temperature Sender | ● |
| Water Level Sender | ● |
| Radiator Guards | ● |
| Hot Component Guards | ● |
| Water Jacket Heater | ● |
| Manual Fuel Fill | Δ |
| Electric Fuel Fill | Δ |
| Racor Fuel Filter (No Alarm) | Δ |
| Racor Fuel Filter (With Alarm) | Δ |
| Pre-Filter with Separator | x |
| External Spark Arrestor | Δ |
| Fuel Level Sender | ● |
| Industrial Silencer | ● |
| Standard: ● Not Available: x Optional: Δ | |

ELECTRICAL FEATURES

| | |
|---|---|
| AVR DSR | ● |
| AVR DER | x |
| Winding Protection Standard | x |
| Winding Protection Standard + | x |
| Winding Protection Grey | ● |
| Winding Protection Total | Δ |
| Winding Protection Total + | Δ |
| MAUX | ● |
| PMG | Δ |
| Anti-Condensation Heater | Δ |
| Miniature Circuit Breaker (Integrated busbar) | x |
| Moulded Case Circuit Breaker (with integrated busbar) | ● |
| Earth Leakage Protection (Shunt Trip) | ● |
| Synchronisation | Δ |
| Preparation for Earth Spike | ● |
| Remote Screen | Δ |
| Panel Door Micro Switch | Δ |
| Copper Busbar/Tails | Δ |
| Emergency Stop Button | ● |
| Standard: ● Not Available: x Optional: Δ | |

JCB COMMUNICATION AND CONTROL

| | |
|--|---|
| CPI | Δ |
| CP2 | Δ |
| ATP | Δ |
| DSE7320 | ● |
| JCB LiveLink | ● |
| Standard: ● Not Available: x Optional: Δ | |

SYNCHRONISATION PANEL

| | |
|--|---|
| DSE8610 | Δ |
| DSE8620 | Δ |
| Standard: ● Not Available: x Optional: Δ | |

REFERENCE STANDARDS

JCB Generators are CE certified and conform to the following Directives (subject to a country requiring such standard):

- EN 12100, EN13857, EN60204
 - 2006/42/CE Machinery safety
 - 2006/95/EC Low voltage
 - 2004/108/CE Electromagnetic compatibility
 - 2000/14/EC Sound Power Level (amended by 2005/88/EC)
 - 97/68/EC Emissions(amended by 2002/88/EC & 2004/26/EC)
 - Power according to ISO 8528 and ISO 3046
 - Ambient reference conditions 1000mbar, 25°C, 30% relative humidity ISO3046
- Information based on standard specification equipment unless otherwise stated.

WEIGHT AND DIMENSIONS – OPEN SET

| | | |
|-----------------------------|----------------|-------|
| Length | mm | 3600 |
| Width | mm | 1460 |
| Height | mm | 2096 |
| Shipping Volume (sea ready) | m ³ | 11.00 |
| Weight* | Kg | 3917 |

*Standard build with all fluids except fuel

WEIGHT AND DIMENSIONS – CANOPY SET

| | | |
|-----------------------------|----------------|-------|
| Length | mm | 4500 |
| Width | mm | 1800 |
| Height | mm | 2340 |
| Shipping Volume (sea ready) | m ³ | 18.95 |
| Weight* | Kg | 5627 |

*Standard build with all fluids except fuel

SOUND PRESSURE (CANOPY ONLY)

| | | | |
|----------|------|-------|----|
| LpA (7m) | 50Hz | dB(A) | 83 |
| LpA (7m) | 60Hz | dB(A) | - |

FUEL TANK

| | Material | Capacity (L) |
|------------|----------|--------------|
| Open Set | Steel | 740 |
| Canopy Set | Steel | 740 |

CANOPY FEATURES

| | |
|--|---|
| Lockable Maintenance Access Doors | ● |
| Control Panel Viewing Window | ● |
| Fork Pockets | ● |
| Single Lift Point | ● |
| Rental Sledging Base | △ |
| Bunding | ● |
| Bund Level Indicator | △ |
| 50mm Rock Wool Sound Insulation | ● |
| Yellow Paint | ● |
| Red Paint | △ |
| White Paint | △ |
| Manual Oil Drain Pump (Canopy) | ● |
| Residential Silencer | ● |
| 3 Way Fuel Valve and Coupling Nest | △ |
| Socket Box (inclusive of heavy duty busbar & micro switch) | △ |
| External Emergency Stop Button | ● |

Standard: ● Not Available: x Optional: △