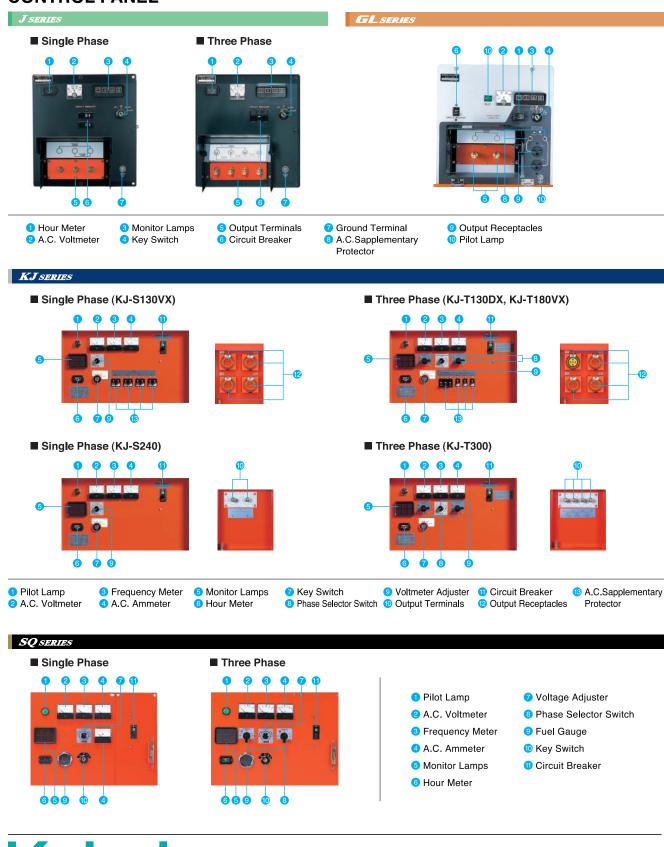
### **CONTROL PANEL**





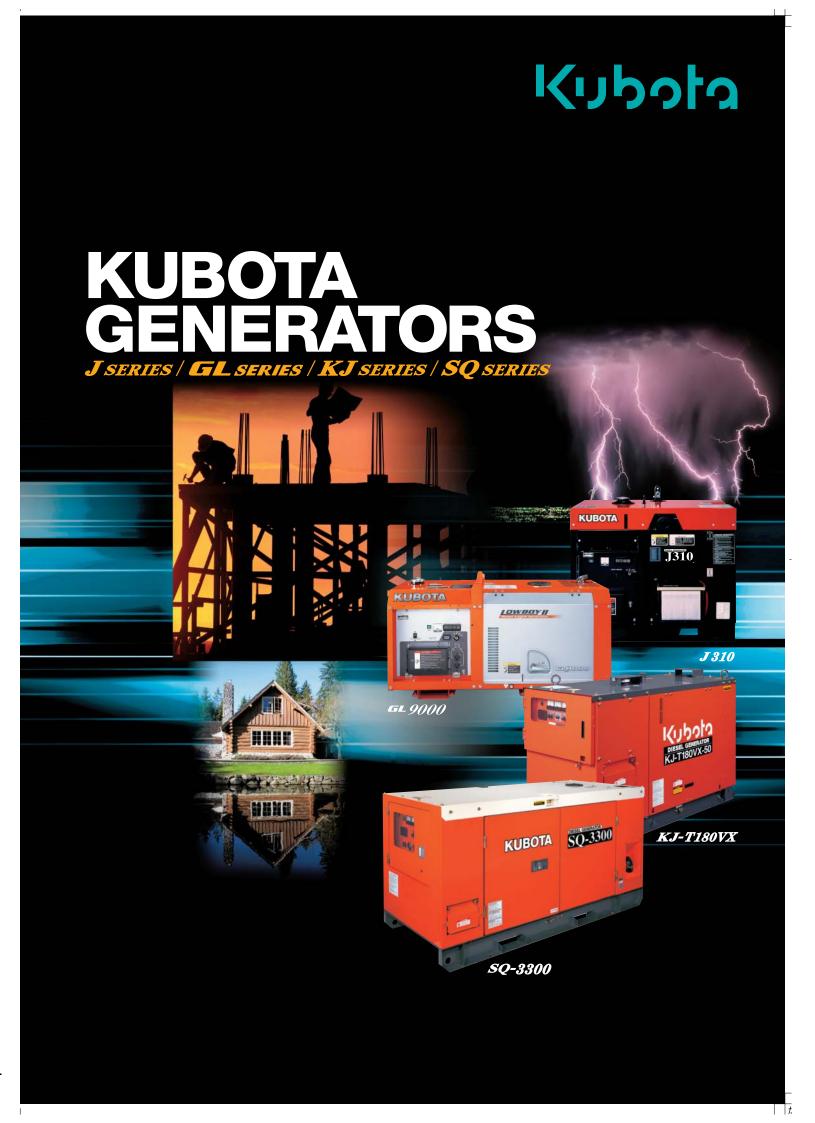
### **KUBOTA Tractor Australia PTY LTD**

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# Everything you value in a generator

The heart of Kubota generators are Kubota's own diesel engines.

Used widely in world-renowned machinery, these sturdily built, one-side-maintenance type diesel engines promise great reliability and service life for almost any application. Kubota is well known as one of the top engine manufacturers in the world, with over 80 years of experience. Reliability is guaranteed when powered by a Kubota engine.

# There's no end to the quest.

What makes Kubota different?

High Performance, Energy Efficient, Labor Saving and the Respect for Humanity. These four founding fundamentals remain unchanged at Kubota ever since the beginning of engine production in 1922.

Cleaner emissions and the ability to readily match most any enginerequirements a customer needs are the

results of Kubota engine's comprehensive strength. There's no end to the quest. Challenging spirit is at the core of Kubota technology.



### **Kubota Generator Lineup**

### J SERIES

- ■2-Pole Single-Phase & Three-Phase
- ■Output Range: 8.0kVA to 12.0kVA



# Easy to use anywhere for longer periods of time

These semi-open type generators are powered by either a Super Mini or a Kubota 05 Series engine. The series' "easy to use anywhere" design permits operation even in limited space.

The larger capacity fuel tank and its exceptional fuel efficency guarantee longer hours of continual electrical energy on a single tank of fuel.

J series Prime output (kVA)

| J108 | 8.0  |
|------|------|
| J112 | 12.0 |
| J310 | 10.0 |

### GL SERIES

- ■2-Pole Single-Phase
- Output Range: 5.5kVA to 8.0kVA



# LOWBOY II saves space and the environment.

The LOWBOY II series is designed to have the minimum possible height while using vertical diesel engines.

This is achieved by direct coupling of the engine crankshaft with the cooling fan.

Since they require less space for operation, the range of possible applications has been greatly increased.

#### GL series Prime output (kVA)

|        | . , , |
|--------|-------|
| GL6000 | 5.5   |
| GL9000 | 8.0   |

### **KJ** SERIES

■4-Pole Single-Phase & Three-Phase ■Output Range: 12.5kVA to 30.0kVA



### Heavy-duty power generation

A heavy-duty 4-pole series powered by Kubota 03 and V3 series diesel engines.

Many features have been added to make the KJ Series much quieter, more efficient, and safer to use anywhere, any time.

KJ series Prime output (kVA)

| KJ-S130VX | 12.5 |  |  |  |  |  |  |
|-----------|------|--|--|--|--|--|--|
| KJ-S240   | 24.0 |  |  |  |  |  |  |
| KJ-T130DX | 12.5 |  |  |  |  |  |  |
| KJ-T180VX | 18.0 |  |  |  |  |  |  |
| KJ-T300   | 30.0 |  |  |  |  |  |  |

### **SO** SERIES

- 4-Pole Single-Phase & Three-Phase
- Output Range: 11.2 to 30.0kVA



# Satisfied with Quiets? Meet the Super Quiet series!

Kubota's largest yet super quiet, heavy-duty type 4-pole generator series.

The special enclosure with noise absorbing duct, over-sized muffler, extra long air cleaner hose, and quieter cooling fan all add up to its super quiet performance [61-64 dB at 7m (23 feet)] at full load.

● SQ series Prime output (kVA)

| SQ-1120 | 11.2 |
|---------|------|
| SQ-1150 | 15.0 |
| SQ-3140 | 14.0 |
| SQ-3200 | 20.0 |
| SQ-3300 | 30.0 |

J108 / J112 / J310

### Easy to use anywhere for longer periods of time



### 1. Easy Maintenance

### **Easy One-Side Maintenance**

All gauges and filters (except for Z482 and D722's oil filter) are conveniently situated to enhance and simplify daily maintenance.



### 2. Safety

### **Safety Measures**

Automatically shuts the engine down if the water temperature is excessive or the oil pressure drops below a safe level, and when the fanbelt breaks.\*

\* Fanbelt accident prevention is only applicable to generators using D1005 and V1305 engines.



### **Removable Cover for Output Terminals**

Protective covers are attached on all output terminals to prevent electric shocks.

The number of safety covers has also been increased to prevent entangling accidents.





### 3. Operator Friendly

### **Transportability**

One-point lifting eye makes it easy to transport all J series generator.

Special forklift openings are provided in the base of the machine.



### **Longer Continuous Operation**

Large-capacity fuel tank enables longer continuous operation on a single tank.

### 4. ATS

# Access Terminals for ATS Make Wiring Easy

Access terminals for Automatic Transfer Switches (ATS) are located behind the control panel.





Prime Output: (Single Phase) 5.5 to 8.0kVA **GL** 6000 / **GL** 9000

### LOWBOY II saves space and the environment.



### 1. Compact Design

2. Easy Maintenance

**Easy One-Side Maintenance** 

### **Low Profile and More Compact**

The LOWBOY II series is designed to have the minimum possible height while using vertical diesel engines. This is achieved by direct coupling of the engine crankshaft with the cooling fan. Since they require less space for

operation, the range of possible applications has been greatly increased.

located on one side.

**Safety Measures** 

3. Safety



Large swing-up side panels enables quick and easy engine

maintenance. Oil gauge, oil filter, oil replenishment port, fuel

inspection and maintenance. Engine oil and coolant drain

extensions are provided to ease regularly scheduled

filter, water reserve tank, battery and air cleaner are all



### Transportability

prevent overcurrent damages.

4. Operator Friendly

One-point lifting eye makes it easy to transport all GL series generators. Special forklift openings are provided in the base of the machine.

In addition to the overall circuit protector, each receptacle

also has a circuit protector that will shut the engine down to

**Double Circuit Protectors** 

### **Longer Continuous Operation**

Large-capacity fuel tank (28L; 7.4gal) enables longer continuous operation on a single tank.

### 5. Quiet

### **Lower Noise Levels**

Four separate features help reduce overall noise levels. First, the large-capacity radiator successfully reduces fanrelated noise by direct coupling to the crankshaft with a slower-speed fan.

Second, the large-capacity, built-in muffler helps reduce exhaust-related noise. Third, the longer air-cleaner hose reduces air-suction-related noise.

Fourth, the ideally placed inlet vent and its improved design

reduce noise coming from the enclosure's opening.

| Model  | Sound level during Rated<br>Output at 7m (23 ft.) [dB(A)] |  |  |  |  |  |  |
|--------|---|--|--|--|--|--|--|
| GL6000 | 65.0  |  |  |  |  |  |  |
| GL9000 | 67.0  |  |  |  |  |  |  |

### **Removable Cover for Output Terminal**

is excessive or the oil pressure drops below a safe level.

Automatically shuts the engine down if the water temperature

Equipped with a starter safety relay to prevent the starter from

Output Terminal is equipped with an output connection cover that will stop the engine immediately when it is opened during operation.

engaging after the engine starts up.





### 6. ATS

# Access Terminals for ATS Make Wiring Easy

Access terminals for Automatic Transfer Switches (ATS) are located behind the control panel.



# **KJ** SERIES

# Heavy-duty power generation.



### 1. Easy Maintenance

### **Easy One-Side Maintenance**

Extra-large swing-up panel makes engine inspection and maintenance quick and easy.

Engine oil and coolant drain extensions are provided to ease regularly scheduled maintenance.

Oil gauge, oil filter, oil replenishment port, fuel filter, water reserve tank, battery and air cleaner are all located on one side



### 2. Safety

### **Safety Measures**

Automatic shutdown of the engine if abnormal condition (abnormal oil pressure or water temperature, broken fan belt).



### 4. Quiet

### **Reduced Sound and Vibration**

Kubota's inherent low-sound design, a sound-attenuated enclosure which effectively reduces all sound including that of the muffler, and the original E-TVCS combustion system substantially reduces the sound levels.

Integral vibrations are also reduced by inserting rubber pads in critical areas.

| Model    | Sound level during Rated<br>Output at 7m (23 ft.) [dB(A)] |
|----------|---|
| J-S130VX | 75.0  |
| J-S240   | 73.0  |
| J-T130DX | 73.0  |
| J-T180VX | 75.0  |
| J-T300   | 73.0  |



### 5. ATS (for KJ-S240 / KJ-T300 only)

# Access Terminals for ATS Make Wiring Easy

Access terminals for Automatic Transfer Switches (ATS) are located behind the lower control panel.



### 3. Operator Friendly

### **Transportability**

Twin-point lifting eyes make it easy to transport all KJ Series generators.

# **SQ** SERIES

Prime Output: (Single Phase) 11.2 to 30.0kVA (Three Phase) 14.0 to 30.0kVA

SQ-1120 / SQ-1150 / SQ-3140 / SQ-3200 / SQ-3300

# Satisfied with Quiet? Meet the Super Quiet series!



### 1. Super Quiet

### **Over-Sized Muffler**

Sound levels have been lowered by an over-sized muffler.

### Second Muffler (for SQ-3300 only)

A special 2-stage muffler system is used in generators powered by the V3300 to reduce noise even further.

| SQ-1120     61.0       SQ-1150     63.0       SQ-3140     61.0       SQ-3200     63.0       SQ-3300     64.0 | Model   | Sound level during Rated Output at 7m (23 ft.) [dB(A)] |
|--|---------|--|
| <b>SQ-3140</b> 61.0 <b>SQ-3200</b> 63.0  | SQ-1120 | 61.0   |
| <b>SQ-3200</b> 63.0  | SQ-1150 | 63.0   |
| 33.0   | SQ-3140 | 61.0   |
| <b>SQ-3300</b> 64.0  | SQ-3200 | 63.0   |
|  | SQ-3300 | 64.0   |



### 2. Easy Maintenance

### **Easy One-Side Maintenance**

Engine oil and coolant drain extensions are provided to ease regularly scheduled maintenance.

Oil gauge, oil filter, oil replenishment port, fuel filter, water reserve tank, battery and air cleaner are all located on one side for quick inspection and maintenance.



### 3. Safety

### **Safety Measures**

Automatic shutdown of the engine if abnormal condition (abnormal oil pressure or water

temperature,

excessive speed, broken fan belt) or if load center doors are opened during operation.



### 3. Safety

### **Locking Control Panel Door**

Shields instrument panel from the elements and permits observation of all key functions without opening the door.



### 4. Operator Friendly

### **Transportability**

One-point lifting eye makes it easy to transport all SQ series generators.

Special forklift openings are located on the base of the machine.





### **Longer Continuous Operation**

Large-capacity fuel tank enables longer continuous operation on a single tank.

### 5. ATS

# Access Terminals for ATS Make Wiring Easy

Access terminals for Automatic Transfer Switches (ATS) are located behind the left side of load center doors.

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# **SPECIFICATIONS**









| MODEL  |               | Unit         | J108                       | J112  | J310                       | MODEL                                    |   | Unit         | GL6000                          | GL9000                          |  |  |
|--|---------------|--------------|----------------------------|---|----------------------------|--|---|--------------|---------------------------------|---------------------------------|--|--|
| Туре   |               | _            |                            | Revolving field, AC generator   |                            | Туре                                     |   | _            | Rotating field singl            | e-phase AC generator            |  |  |
| Frequency  |               | Hz           |                            | 50  |                            | Frequency                                |   | Hz           |                                 | 50                              |  |  |
| Standby Output   |               | kVA (kW)     | 8.8 (8.8)                  | 13.2 (13.2)   | 11.0 (8.8)                 | Standby Output                           |   | kVA (kW)     | 6.0 (6.0)                       | 8.8 (8.8)                       |  |  |
| Prime Output   |               | kVA (kW)     | 8.0 (8.0)                  | 12.0 (12.0)   | 10.0 (8.0)                 | Prime Output                             |   | kVA (kW)     | 5.5 (5.5)                       | 8.0 (8.0)                       |  |  |
| Voltage - Single F   | Phase         | V            | 2                          | 240   | _                          | Voltage - Single P                       | hase  | V            |                                 | 240                             |  |  |
| Voltage - Three F<br>(Rated voltage lin  |               | v            |                            | _   | 415                        | Voltage - Three P<br>(Rated voltage line |   | V            |                                 | _                               |  |  |
| Voltage - Three F<br>(Rated voltage lin  |               | V            |                            | _   | 240                        | Voltage - Three P<br>(Rated voltage line |   | V            |                                 | -                               |  |  |
| Armature Connec  | ction         | _            | Si                         | ngle  | Star                       | Armature Connec                          | tion  | _            | S                               | ingle                           |  |  |
| Phase / Wire   |               | _            |                            | 1/2   | 3/4                        | Phase / Wire                             |   | _            |                                 | 1/2                             |  |  |
| Power Factor   |               | _            |                            | 1.0   | 0.8                        | Power Factor                             |   | _            |                                 | 1.0                             |  |  |
| No. of Poles   |               | _            |                            | 2   |                            | No. of Poles                             |   | _            | 2                               |                                 |  |  |
| Insulation   |               | Class        |                            | Rotor coil; class F, Stator coil; class B   |                            | Insulation                               |   | Class        | Rotor coil; class I             | F, Stator coil; class B         |  |  |
| Voltage Regulation   | on            | %            | 6.0 (No load to full load) | 7.0 (No load to full load)  | 6.0 (No load to full load) | Voltage Regulatio                        | n   | %            | 5.0 (No loa                     | ad to full load)                |  |  |
| Type of Coupling   | ,             | _            |                            | Direct coupled  |                            | Type of Coupling                         |   | _            | Direc                           | t coupled                       |  |  |
| AMPS   |               |              |                            |   |                            | AMPS                                     |   |              |                                 |                                 |  |  |
| Single Phase 240   | 0V            | А            | 33.3                       | 50.0  | _                          | Single Phase 240                         | v   | А            | 22.9                            | 33.3                            |  |  |
| Three Phase 415  | 5V            | Α            |                            | _   | 13.9                       | Three Phase 415                          | V   | А            |                                 | _                               |  |  |
| Three Phase 240  | 0V            | Α            |                            | _   | 8.3 x 3                    | Three Phase 240                          | V   | А            |                                 | _                               |  |  |
| NO. OF RECE  | PTACLES       |              |                            |   |                            | NO. OF RECE                              | PTACLES                                       |              |                                 |                                 |  |  |
| 250V.15A   |               | _            |                            | N/A   |                            | 250V.15A                                 |   | _            | 2                               | 3                               |  |  |
| TERMINAL   |               |              |                            |   |                            | TERMINAL                                 |   |              |                                 |                                 |  |  |
| Terminal   |               | _            |                            | Available   |                            | Terminal                                 |   | _            |                                 | N/A                             |  |  |
| DIESEL ENGI  | NE            |              |                            |   |                            | DIESEL ENGIN                             | lE  |              |                                 |                                 |  |  |
| Туре   |               | _            | V                          | ertical, water-cooled, 4-cycle diesel engi  | ine                        | Туре                                     |   | _            | Vertical, water-coole           | d, 4-cycle diesel engine        |  |  |
| Model  |               | _            | D722                       | D1005   | D722                       | Model                                    |   | _            | Z482                            | D722                            |  |  |
| No. of Cylinders   |               | _            |                            | 3   |                            | No. of Cylinders                         |   | _            | 2                               | 3                               |  |  |
| Bore x Stroke  |               | mm (in.)     | 67.0 x 68.0 (2.6 x 2.7)    | 76.0 x 73.6 (2.99 x 2.90)   | 67.0 x 68.0 (2.60 x 2.70)  | Bore x Stroke                            |   | mm (in.)     | 67.0 x 68.0                     | 0 (2.60 x 2.70)                 |  |  |
| Displacement   |               | LL (cu. in.) | 0.719 (43.9)               | 1.001 (61.1)  | 0.719 (43.9)               | Displacement                             |   | LL (cu. in.) | 0.479 (29.2)                    | 0.719 (43.9)                    |  |  |
| Engine Speed   |               | rpm          |                            | 3000  |                            | Engine Speed                             |   | rpm          | 3                               | 8000                            |  |  |
| Continuous Rated   | d Output      | kW (HP)      | 10.4 (14.0)                | 14.4 (19.3)   | 10.4 (14.0)                | Continuous Rated                         | Output  | kW (HP)      | 6.9 (9.3)                       | 10.3 (13.8)                     |  |  |
| Lubricant (API cla   | assification) | _            |                            | Above CD grade  |                            | Lubricant (API cla                       | ssification)                                  | _            | Above                           | CD grade                        |  |  |
| Oil Capacity   | ,             | L (qts.)     | 3.4 (3.60)                 | 4.3 (4.54)  | 3.4 (3.60)                 | Oil Capacity                             | ,   | L (qts.)     | 2.2 (2.32)                      | 3.4 (3.60)                      |  |  |
| Coolant Capacity   | ,             | L (qts.)     | 3.0 (3.17)                 | 3.3 (3.49)  | 3.0 (3.17)                 | Coolant Capacity                         |   | L (qts.)     | 3.7 (3.92)                      | 4.1 (4.35)                      |  |  |
| Starting System  |               | _            |                            | Electric - 12 volt DC   | ,                          | Starting System                          |   |              | , ,                             | - 12 volt DC                    |  |  |
| SET  |               |              |                            |   |                            | SET                                      |   |              |                                 |                                 |  |  |
| Fuel   |               | _            |                            | Diesel fuel No.2 (ASTM D975)  |                            | Fuel                                     |   | _            | Diesel fuel No                  | D.2 (ASTM D975)                 |  |  |
|  | at Full Load  |              | 3.1 (0.8)                  | 4.6 (1.2)   | 3.1 (0.8)                  |  | at Full Load                                  |              | 2.2 (0.58)                      | 3.2 (0.85)                      |  |  |
| -<br>Fuel  | at 3/4 Load   |              | 2.5 (0.7)                  | 3.7 (1.0)   | 2.4 (0.6)                  | Fuel                                     | at 3/4 Load                                   |              | 1.8 (0.48)                      | 2.5 (0.67)                      |  |  |
| -uei<br>Consumption  | at 1/2 Load   | , , ,        | 2.1 (0.5)                  | 3.0 (0.8)   | 2.0 (0.5)                  |  | at 1/2 Load                                   | , ,          | 1.5 (0.39)                      | 2.1 (0.55)                      |  |  |
|  | at 1/4 Load   | , , ,        | 1.6 (0.4)                  | 2.4 (0.6)   | 1.6 (0.4)                  |  | at 1/4 Load                                   |              | 1.2 (0.31)                      | 1.8 (0.47)                      |  |  |
| Fuel Tank Capac  |               | L (gal.)     | 37.0 (9.8)                 | 79.0 (20.9)   | 37.0 (9.8)                 | Fuel Tank Capaci                         |   | L (gal.)     |                                 | 0 (7.4)                         |  |  |
| asi rain oupao   | at Full Load  | h L (gai.)   | 11.8                       | 17.0  | 12.1                       | . doi rain oapaoi                        | at Full Load                                  |              | 12.0                            | 8.5                             |  |  |
| Continue   | at 3/4 Load   | h            | 14.7                       | 21.2  | 15.2                       | Continue                                 | at 3/4 Load                                   |              | 15.6                            | 11.2                            |  |  |
| Continuous Operation Hours   |               | h            | 18.0                       | 26.1  | 18.6                       | Continuous Operation Hours               | at 1/2 Load                                   |              | 18.7                            | 13.3                            |  |  |
|  | at 1/4 Load   | h            | 23.1                       | 33.5  | 23.9                       |  | at 1/4 Load                                   |              | 23.3                            | 15.6                            |  |  |
| Battery (Ah/5h)  | at 1/4 LUau   | _            | 12V (36Ah)                 | 12V (55Ah)  | 12V (36Ah)                 | Battery (Ah/5h)                          | at 1/7 LUAU                                   |              | 25.5<br>12V (28Ah)              | 12V (36Ah)                      |  |  |
|  |               |              | 995 x 593 x 860            | 12V (55AH)<br>1215 x 611 x 922  | 995 x 593 x 860            | • • • •                                  |   |              | 12V (28AII)<br>1066 x 618 x 698 | 12V (36AII)<br>1281 x 618 x 698 |  |  |
| Dimensions<br>L x W x H  | -             | mm<br>(in.)  |                            |   |                            | Dimensions<br>L x W x H                  |   | mm<br>(in )  |                                 |                                 |  |  |
|  |               | (in.)        | (39.2 x 23.3 x 33.8)       | (47.8 x 24.1 x 36.3)  | (39.2 x 23.3 x 33.8)       |  | h.  | (in.)        | (42.0 x 24.3 x 27.5)            | (50.4 x 24.3 x 27.5)            |  |  |
|  |               | kg (lbs.)    | 255 (562)                  | 340 (750)   | 255 (562)                  | Approx. Net Weig                         |   | kg (lbs.)    | 235 (518)                       | 295 (650)                       |  |  |
| Sound Level (Full Load at 7m [23 ft.])   |               | dB (A)       | 75                         | 76.5  | 75                         | Sound Level (Full Load                   | Sound Level (Full Load at 7m [23 ft.]) dB (A) |              | 65                              | 67                              |  |  |
| Emergency Stop System – In case of abnormal: In case of abnormal: Oil pressure, water temperature water temperature, fan belt broken Oil pressure, water temperature |               |              |                            | Emergency Stop System – In case of abnormal: Oil pressure, water temperature, or when the access terminal cover is opened |                            |  |   |              |                                 |                                 |  |  |

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## **SPECIFICATIONS**













| MODEL                                |                | 11.22          | K I 0400VV   | 14 1 0040   | I/ I T400DV                              | K I T400V/V                              | I/ I T000   | MODEL                             |                    |              | 00.4400  | 00.4450                                  | 00.0440                                  | 00.0000                                  | 00 0000                                  |  |
|--------------------------------------|----------------|----------------|--|---|--|--|---|-----------------------------------|--------------------|--------------|--|--|--|--|--|--|
| MODEL                                |                | Unit           | KJ-S130VX  | KJ-S240   | KJ-T130DX                                | KJ-T180VX                                | KJ-T300   | MODEL                             |                    | Unit         | SQ-1120  | SQ-1150                                  | SQ-3140                                  | SQ-3200                                  | SQ-3300                                  |  |
| Туре                                 |                | _              |  | Revolvir  | ng field, brushless AC g                 | enerator                                 |   | Type                              | 7.                 |              | Revolving field, brushless AC generator  |  |  |  |  |  |
| Frequency                            |                | Hz             |  | ı   | 50                                       |  |   | Frequency                         |                    | Hz           |  |  | 50                                       | ı  |  |  |
| Standby Output                       |                | kVA (kW)       | 13.8 (13.8)  | 26.4 (26.4)   | 13.8 (11.0)                              | 19.8 (15.8)                              | 33.0 (26.4)   | Standby Output                    |                    | kVA (kW)     | 11.8 (11.8)  | 16.0 (16.0)                              | 15.4 (12.3)                              | 22.0 (17.6)                              | 33.0 (26.4)                              |  |
| Prime Output                         |                | kVA (kW)       | 12.5 (12.5)  | 24.0 (24.0)   | 12.5 (10.0)                              | 18.0 (14.4)                              | 30.0 (24.0)   | Prime Output                      |                    | kVA (kW)     | 11.2 (11.2)  | 15.0 (15.0)                              | 14.0 (11.2)                              | 20.0 (16.0)                              | 30.0 (24.0)                              |  |
| Voltage - Single                     | Phase          | V              | 240  | 240   | -  | _  | -   | Voltage - Single                  | Phase              | V            | 240  | 240                                      | _  | _  | _  |  |
| Voltage - Three<br>(Rated voltage li |                | V              | -  | _   | 415                                      | 415                                      | 415   | Voltage - Three<br>(Rated voltage |                    | V            | _  | _  | 415                                      | 415                                      | 415                                      |  |
| Voltage - Three<br>(Rated voltage li |                | V              | -  | _   | 240                                      | 240                                      | 240   | Voltage - Three<br>(Rated voltage |                    | V            | _  | _  | 240                                      | 240                                      | 240                                      |  |
| Armature Conne                       | ection         | _              | Series   | Series  | Star                                     | Star                                     | Star with neutral   | Armature Conn                     | ection             | _            | Series   | Series                                   | Star                                     | Star                                     | Star                                     |  |
| Phase / Wire                         |                | _              | 1/4  | 1/4   | 3/12                                     | 3/12                                     | 3/12  | Phase / Wire                      |                    | _            | 1/4  | 1/4                                      | 3/12                                     | 3/12                                     | 3/12                                     |  |
| Power Factor                         |                | _              | 1.0  | 1.0   | 0.8                                      | 0.8                                      | 0.8   | Power Factor                      |                    | _            | 1.0  | 1.0                                      | 0.8                                      | 0.8                                      | 0.8                                      |  |
| No. of Poles                         |                | _              |  |   | 4  |  |   | No. of Poles                      |                    | _            |  |  | 4  |  |  |  |
| Insulation                           |                | Class          |  |   | Н  |  |   | Insulation                        |                    | Class        |  |  | Н  |  |  |  |
| Voltage Regulat                      | tion           | %              |  | ;   | 3.5 (No load to full load                | )  |   | Voltage Regula                    | tion               | %            |  |  | 1.5 (No load to full load                | )  |  |  |
| Type of Coupling                     | g              | _              |  |   | Direct coupled                           |  |   | Type of Couplin                   | ıg                 | _            |  |  | Direct coupled                           |  |  |  |
| AMPS                                 |                |                |  |   |  |  |   | AMPS                              |                    |              |  |  |  |  |  |  |
| Single Phase 24                      | 10V            | Α              | 52.1   | 100.0   | _  | _  | _   | Single Phase 24                   | 40V                | Α            | 46.7   | 62.5                                     | _  | _  | _  |  |
| Three Phase 41                       | 15V            | Α              | _  | _   | 17.4                                     | 25.0                                     | 41.7  | Three Phase 4                     | 15V                | A            | _  | _  | 19.5                                     | 27.8                                     | 41.7                                     |  |
| Three Phase 24                       |                | Α              | _  | _   | 17.4                                     | 25.0                                     | _   | Three Phase 24                    | 40V                | Α            | _  | _  | 46.7                                     | 18.1                                     | 27.1                                     |  |
| NO. OF RECI                          |                | , ·            |  |   | 17.1                                     | 20.0                                     |   |                                   |                    |              |  |  | 1017                                     | 10.1                                     | 2711                                     |  |
| 56S0315                              | LITAGEES       | _              | 4  | _   | 3  | 3  | _   | 56S0315                           | NO. OF RECEPTACLES |              |  |  | N/A                                      |  |  |  |
| 56S0532                              |                |                | _  |   | 1  | 1  | _   | 56S0532                           |                    |              |  |  | N/A                                      |  |  |  |
|                                      |                | _              | _  | _   |  | '  | _   |                                   |                    | _            |  |  | IN/A                                     |  |  |  |
| TERMINAL                             |                | _              | 21/2   | A 11.11   |  |  | /^  | A Tab Is                          | TERMINAL           |              | _  |  |  | A 'I a la la                             |  |  |
|                                      | Terminal       |                | N/A  | Available   | N  | /A<br>I                                  | Available   | Terminal                          |                    |              |  |  | Available                                |  |  |  |
| DIESEL ENG                           | INE            |                |  |   |  |  |   | DIESEL ENGINE                     |                    |              |  |  |  |  |  |  |
| Туре                                 |                | _              |  | 1   | ater-cooled, 4-cycle die                 | 1  | 1   | Туре                              |                    | _            |  | I .                                      | rater-cooled, 4-cycle die                | 1  |  |  |
| Model                                |                | _              | V2203  | V3300   | D1703                                    | V2203                                    | V3300   | Model                             |                    | _            | D1703  | V2203                                    | D1703                                    | V2203                                    | V3300                                    |  |
| No. of Cylinders                     | 3              | _              | 4  | 4   | 3  | 4  | 4   | No. of Cylinders                  | 5                  | _            | 3  | 4  | 3  | 4  | 4  |  |
| Bore x Stroke                        |                | mm (in.)       | 87.0 x 92.4 (3.43 x 3.64)                            | 98.0 x 110.0 (3.86 x 4.33)  | 87.0 x 92.4 (3.43 x 3.64)                | 87.0 x 92.4 (3.43 x 3.64)                | 98.0 x 110.0 (3.86 x 4.33)  | Bore x Stroke                     |                    | mm (in.)     | 87.0 x 92.4 (3.43 x 3.64)  | 87.0 x 92.4 (3.43 x 3.64)                | 87.0 x 92.4 (3.43 x 3.64)                | 87.0 x 92.4 (3.43 x 3.64)                | 98.0 x 110.0 (3.86 x 4.33)               |  |
| Displacement                         |                | LL (cu. in.)   | 2.197 (134.1)  | 3.318 (202.5)   | 1.647 (100.5)                            | 2.197 (134.1)                            | 3.318 (202.5)   | Displacement                      |                    | LL (cu. in.) | 1.647 (100.5)  | 2.197 (134.1)                            | 1.647 (100.5)                            | 2.197 (134.1)                            | 3.318 (202.5)                            |  |
| Engine Speed                         |                | rpm            |  |   | 1500                                     |  |   | Engine Speed                      |                    | rpm          |  |  | 1500                                     |  |  |  |
| Continuous Rate                      | ed Output      | kW (HP)        | 16.9 (22.7)  | 26.8 (35.9)   | 12.7 (17.0)                              | 16.9 (22.7)                              | 26.8 (35.9)   | Continuous Rat                    | ed Output          | kW (HP)      | 13.6 (18.2)  | 18.4 (24.7)                              | 13.6 (18.2)                              | 18.4 (24.7)                              | 26.8 (35.9)                              |  |
| Lubricant (API c                     | lassification) | _              | Above CD grade                                       | Above CF grade  | Above C                                  | D grade                                  | Above CF grade  | Lubricant (API o                  | classification)    | _            |  |  | Above CD grade                           |  |  |  |
| Oil Capacity                         |                | L (qts.)       | 8.7 (9.2)  | 13.2 (13.9)   | 6.3 (6.7)                                | 8.7 (9.2)                                | 13.2 (13.9)   | Oil Capacity                      |                    | L (qts.)     | 5.6 (5.9)  | 7.6 (8.0)                                | 5.6 (5.9)                                | 7.6 (8.0)                                | 13.2 (13.9)                              |  |
| Coolant Capacit                      | ty             | L (qts.)       | 7.9 (8.4)  | 8.2 (8.7)   | 6.9 (7.3)                                | 7.9 (8.4)                                | 8.2 (8.7)   | Coolant Capaci                    | ty                 | L (qts.)     | 5.5 (5.8)  | 6.3 (6.7)                                | 5.5 (5.8)                                | 6.3 (6.7)                                | 8.2 (8.7)                                |  |
| Starting System                      |                | _              |  |   | Electric - 12 volt DC                    |  |   | Starting System                   | 1                  | _            |  |  | Electric - 12 volt DC                    |  |  |  |
| SET                                  |                |                |  |   |  |  |   | SET                               |                    |              |  |  |  |  |  |  |
| Fuel                                 |                | _              |  | Die   | ı<br>sel fuel No.2 (ASTM D9              | )<br>975)                                | •   | Fuel                              |                    | _            |  | Die                                      | sel fuel No.2 (ASTM D                    | 975)                                     |  |  |
|                                      | at Full Load   | L/h (gal./h)   | 5.3 (1.4)  | 7.7 (2.0)   | 4.0 (1.1)                                | 5.3 (1.4)                                | 7.7 (2.0)   |                                   | at Full Load       | L/h (gal./h) | 3.9 (1.0)  | 5.5 (1.5)                                | 3.8 (1.0)                                | 5.3 (1.4)                                | 7.7 (2.0)                                |  |
| Fuel                                 | at 3/4 Load    |                | 4.6 (1.2)  | 5.9 (1.6)   | 3.2 (0.8)                                | 4.6 (1.2)                                | 5.9 (1.6)   | Fuel                              | at 3/4 Load        |              | 3.0 (0.8)  | 4.1 (1.1)                                | 2.9 (0.8)                                | 4.0 (1.1)                                | 5.9 (1.6)                                |  |
| Consumption                          | at 1/2 Load    |                | 3.4 (0.9)  | 4.3 (1.1)   | 2.5 (0.7)                                | 3.4 (0.9)                                | 4.3 (1.1)   | Consumption                       | at 1/2 Load        |              | 2.3 (0.6)  | 3.1 (0.8)                                | 2.2 (0.6)                                | 3.1 (0.8)                                | 4.3 (1.1)                                |  |
|                                      | at 1/4 Load    | , ,            | 2.3 (0.6)  | 3.2 (0.8)   | 1.6 (0.4)                                | 2.3 (0.6)                                | 3.2 (0.8)   |                                   | at 1/4 Load        |              | 1.6 (0.4)  | 2.3 (0.6)                                | 1.6 (0.4)                                | 2.1 (0.6)                                | 3.2 (0.8)                                |  |
| Fuel Tank Capa                       |                | L/II (gal./II) | 37.0 (9.8)   | 68.0 (18.0)   | 37.0 (9.8)                               | 37.0 (9.8)                               | 68.0 (18.0)   | Fuel Tank Capa                    |                    | L (gal.)     | 62.0 (16.4)  | 62.0 (16.4)                              | 62.0 (16.4)                              | 62.0 (16.4)                              | 68.0 (18.0)                              |  |
| Tuel Talik Capa                      | at Full Load   | L (gai.)       | 7.0  | 8.8   | 9.3                                      | 7.0                                      | 8.8   | i dei Talik Capa                  | at Full Load       |              | 15.9   | 11.3                                     | 16.3                                     | 11.7                                     | 8.8                                      |  |
|                                      |                |                |  |   |  |  |   |                                   |                    |              |  |  |  |  |  |  |
| Continuous Operation Hours           | at 3/4 Load    | h              | 8.0  | 11.5  | 11.6                                     | 8.0                                      | 11.5  | Continuous<br>Operation Hour      | at 3/4 Load        |              | 20.7   | 15.1                                     | 21.4                                     | 15.5                                     | 11.5                                     |  |
| Operation Flours                     |                | h              | 10.9   | 15.8  | 14.8                                     | 10.9                                     | 15.8  | Operation noun                    |                    |              | 27.0   | 20.0                                     | 28.2                                     | 20.0                                     | 15.8                                     |  |
| 5 " "                                | at 1/4 Load    | h              | 16.1   | 21.3  | 23.1                                     | 16.1                                     | 21.3  |                                   | at 1/4 Load        |              | 38.8   | 27.0                                     | 38.8                                     | 29.5                                     | 21.3                                     |  |
| Battery (Ah/5h)                      |                | _              | 12V (64Ah)   | 12V (92Ah)  | 12V (64Ah)                               | 12V (64Ah)                               | 12V (92Ah)  | Battery (Ah/5h)                   |                    | _            | 12V (55Ah)   | 12V (55Ah)                               | 12V (55Ah)                               | 12V (55Ah)                               | 12V (92Ah)                               |  |
| Dimensions<br>L x W x H              |                | mm<br>(in.)    | 1488 x 650 x 971<br>(57.0 x 25.6 x 38.2)             | 1730 x 805 x 1046<br>(68.1 x 32.7 x 41.2)                             | 1393 x 650 x 971<br>(54.8 x 25.6 x 38.2) | 1488 x 650 x 971<br>(57.0 x 25.6 x 38.2) | 1730 x 805 x 1046<br>(68.1 x 32.7 x 41.2)                             | Dimensions<br>L x W x H           |                    | (in.)        | 1675 x 780 x 970<br>(65.9 x 30.7 x 38.2)   | 1675 x 780 x 970<br>(65.9 x 30.7 x 38.2) | 1675 x 780 x 970<br>(65.9 x 30.7 x 38.2) | 1675 x 780 x 970<br>(65.9 x 30.7 x 38.2) | 1935 x 860 x 995<br>(76.2 x 33.9 x 39.2) |  |
| Approx. Net Wei                      | ight           | kg (lbs.)      | 505 (1113)   | 710 (1565)  | 450 (992)                                | 505 (1113)                               | 710 (1565)  | Approx. Net We                    | eight              | kg (lbs.)    | 640 (1411)   | 730 (1609)                               | 640 (1411)                               | 730 (1609)                               | 880 (1940)                               |  |
| Sound Level (Full Lo                 | -              | dB (A)         | 75   | 73  | 73                                       | 75                                       | 73  | Sound Level (Full L               | •                  | dB (A)       | 61   | 63                                       | 61                                       | 63                                       | 64                                       |  |
| Emergency Stop                       | ,              | _              | In case of abnomal oil pressure or water temperature | In case of abnormal: Oil pressure, water temperature, fan belt broken | In case of abnom                         |  | In case of abnormal: Oil pressure, water temperature, fan belt broken | Emergency Sto                     |                    | _            | In case of abnormal: Oil pressure, water temperature, fan belt broken when the side cover and door open with running |  |  |  |  |  |