

Generating Set Range - Specifications

2, 3 or 4 cylinders with high inertia flywheel for smooth running at low rpm.

Heater plugs for cold starting below 5°C, fuel filter, **MECHANICAL** fuel lift pump, **MECHANICAL** fuel injection pump and **MECHANICAL** engine governing* ensures steadfast performance regardless of ambient conditions.

QUIET GEAR DRIVEN CAMSHAFT for maximum engine reliability and reduced servicing, as no timing chains or toothed belts have to be replaced.

Subject to criteria, Kubota based engines accommodate installation angles up to 15° maximum when static and 25° when heeling.

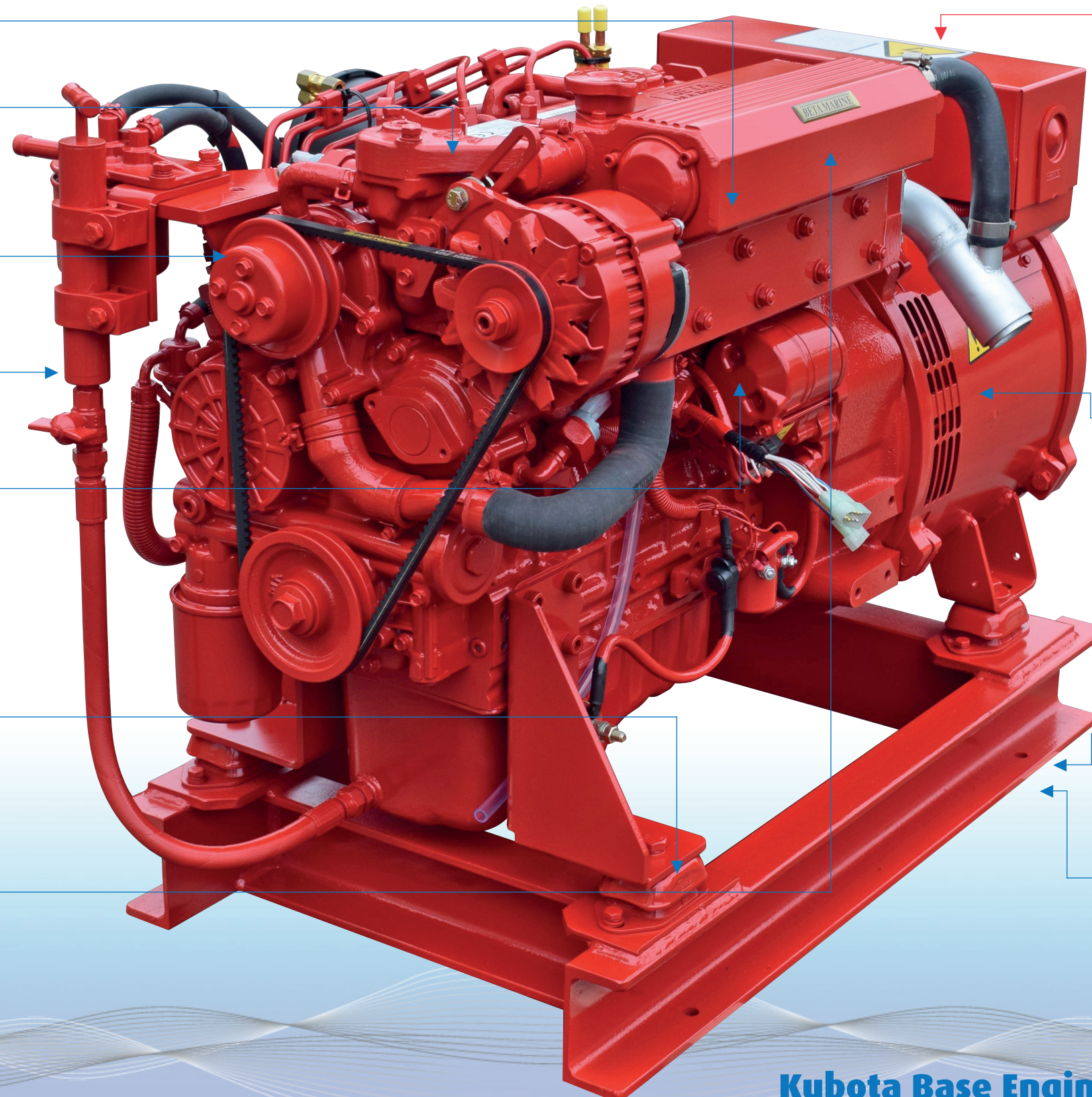
All BetaSet-BetaGen models are 12 volt electric start as standard, models up to the BetaSet-BetaGen 21 are equipped with a 45 amp battery charging alternator, the BetaSet-BetaGen 26 though to the BetaSet-BetaGen 49 are equipped with a 70 amp insulated return battery charging alternator. Optional 24 volt electric start is available for selected models.

The engine and generator alternator are close coupled together and mounted on steel feet with marine failsafe anti-vibration mountings ensuring isolation. Base frames are an optional extra for all BetaSet models.

Available as **HEAT EXCHANGER, KEEL** or **RADIATOR COOLED**, all BetaSet-BetaGen models are naturally aspirated except the BetaSet-BetaGen 40T IIIA & 49T IIIA which are turbocharged.

*The BetaSet-BetaGen 40T IIIA & 49T IIIA are mechanically governed with an electronic actuator.

Images Are For Illustration Purposes & Not Necessarily Representative.



Complete with either "PSM720" or "EPM72" Control Module & 3m of interconnection cable. Please refer to relevant generating set or control panel pages.

The marine rated generating set alternator operates at 0.8pf, with either 50 Hz or 60 Hz frequency and has a ventilated drip proof enclosure with IP 22 protection & single bearing construction. The generator is self-regulating, self-excited and is complete with terminal box and automatic voltage regulator. Suitable for operation in engine room temperatures of up to 45°C. Standard 50 Hz voltage is 230v single phase, 400v 3 phase, or standard 60 Hz is 120v single phase, 208v 3 phase, other voltages are available upon request.

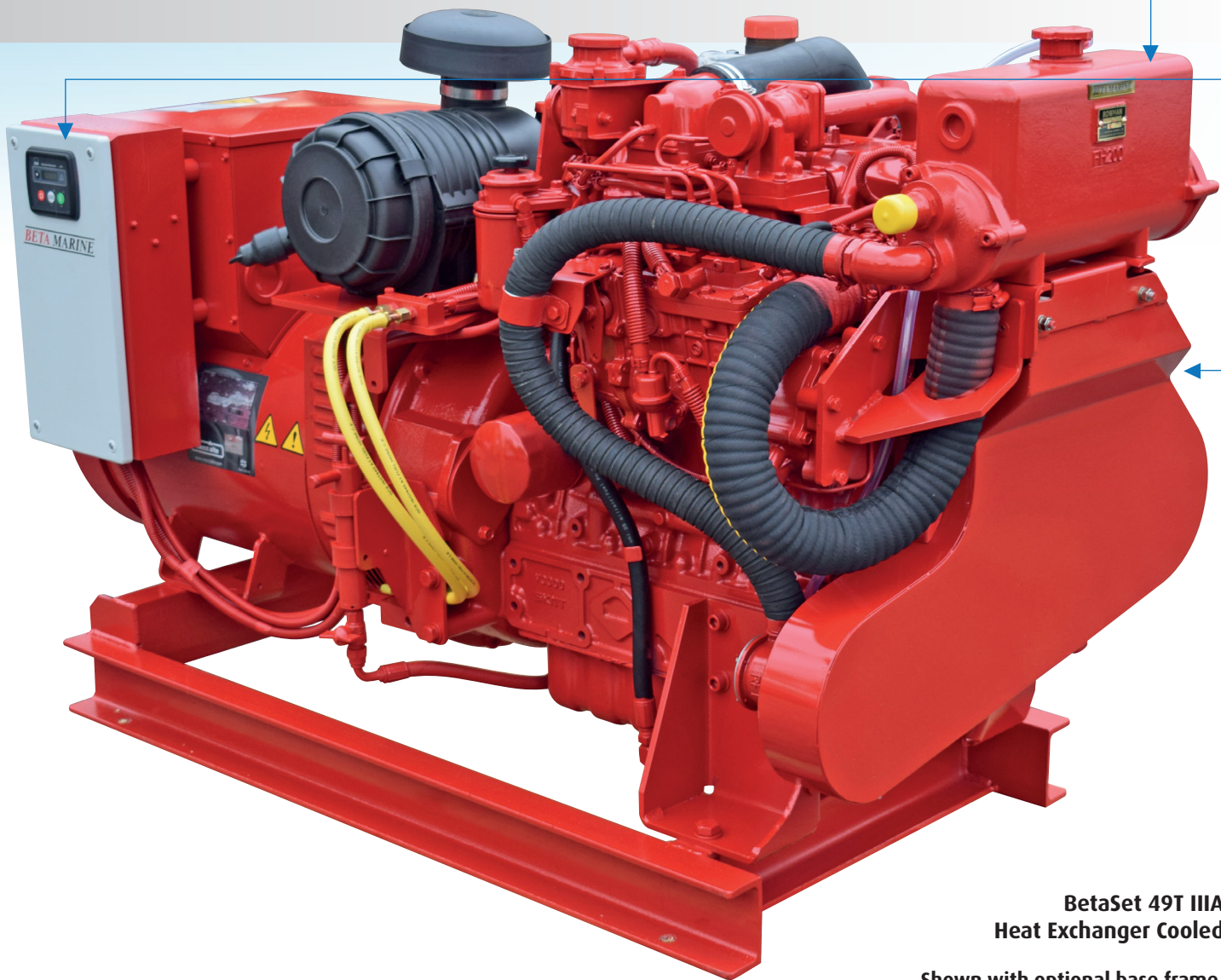
Kubota three vortex combustion (E-TVCS) with indirect injection for quiet running, low emissions and excellent fuel consumption – All BetaSet-BetaGen variants except the BetaSet-BetaGen 40T IIIA & 49T IIIA.

Kubota centre direct injection (E-CDIS) for quiet running, low emissions and excellent fuel consumption – BetaSet-BetaGen 40T IIIA & 49T IIIA.

Kubota Base Engine

BetaSet-BetaGen 49T IIIA

Available With Heat Exchanger, Keel Or Radiator Cooling



BetaSet 49T IIIA
Heat Exchanger Cooled

Shown with optional base frame,
forward end DC alternator guard
and mounted control panel

Kubota Base Engine

| 4-Pole AC Alternator | 1 Phase, 50Hz 1,500 rpm 0.8PF | 3 Phase, 50Hz 1,500 rpm 0.8PF | 1 Phase, 60Hz 1,800 rpm 0.8PF | 3 Phase, 60Hz 1,800 rpm 0.8PF |
|-------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| Max. Output | 45.0 kVA | 48.0 kVA | 52.8 kVA | 58.0 kVA |
| Typical Load | 142 A* | 49 A** | 320 A*** | 119 A**** |
| Cylinders | 4 | 4 | 4 | 4 |
| Cubic Capacity | 3,769 cc | 3,769 cc | 3,769 cc | 3,769 cc |
| Fuel^ | 10.4 Lt/Hr | 10.3 Lt/Hr | 11.8 Lt/Hr | 12.3 Lt/Hr |

* Typical Maximum Amps at 230v based on kW Electrical Load.
** Typical Maximum Amps at 415v based on kW Electrical Load.
*** Typical Maximum Amps at 120v based on kW Electrical Load.
**** Typical Maximum Amps at 208v based on kW Electrical Load.

All kVA continuous output ratings are Marine Class F temperature rises.
^ Approximate Fuel Consumption.



Cooling Options

| | | | |
|-----------------------|------|-----------------|------|
| Heat Exchanger Cooled | Std. | Radiator Cooled | Opt. |
| Keel Cooled | Std. | | |



Control Module Options

| | | | |
|--|------|-------------------------------------|------|
| EPM72 Start & Stop Protection Module | Std. | DSE7310 Auto Start Control Module | |
| RSM72 Local & LPM72 Remote Control Module | Opt. | & DSE2510 Auto Start Display Module | Opt. |
| DSE3110 Manual & Auto Start Control Module | Opt. | | |



Engine Electrical Options

| | | | |
|---|------|---|------|
| 70 Amp, 12 Volt Insulated Return Alternator | Std. | 55 Amp, 24 Volt Electric Start & Alternator | Opt. |
|---|------|---|------|

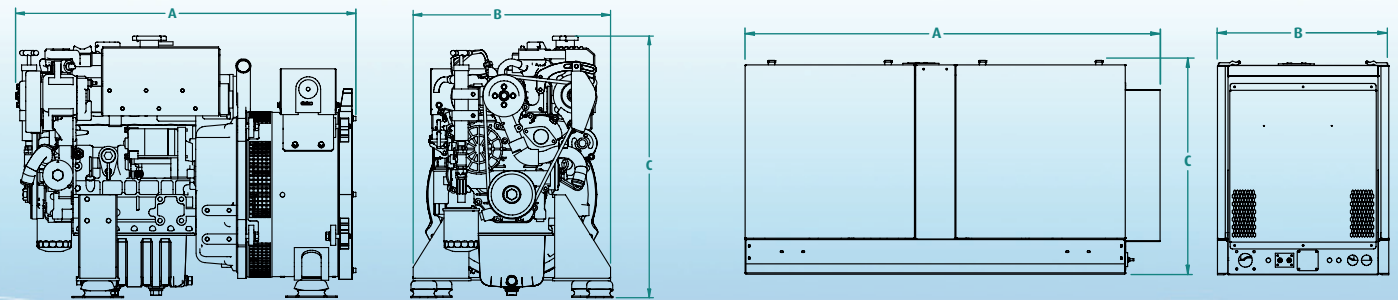


BetaGen 49T IIIA
Keel Cooled



Dimensions & Weight

Images Below Are For Illustrating Dimensions & Not Necessarily Representative



| | A | B | C | Weight |
|-----------------|-----|----|----|--------|
| BetaSet 49 IIIA | 146 | 67 | 86 | 735Kg |

| | A | B | C | Weight |
|-----------------|-----|----|----|--------|
| BetaGen 49 IIIA | 180 | 74 | 91 | 950Kg |

These are typical dimensions: visit our website for all BetaSet-BetaGen option drawings or contact Beta Marine direct