



Beta Marine are an ISO Quality Assured Firm. Since 1987, we have been continually improving our Quality Procedures, whilst being monitored annually by ISO Quality Services Ltd.

BETA MARINE

Marine Generating Sets

Engine Data Sheet - BetaSet-BetaGen 4/2

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.

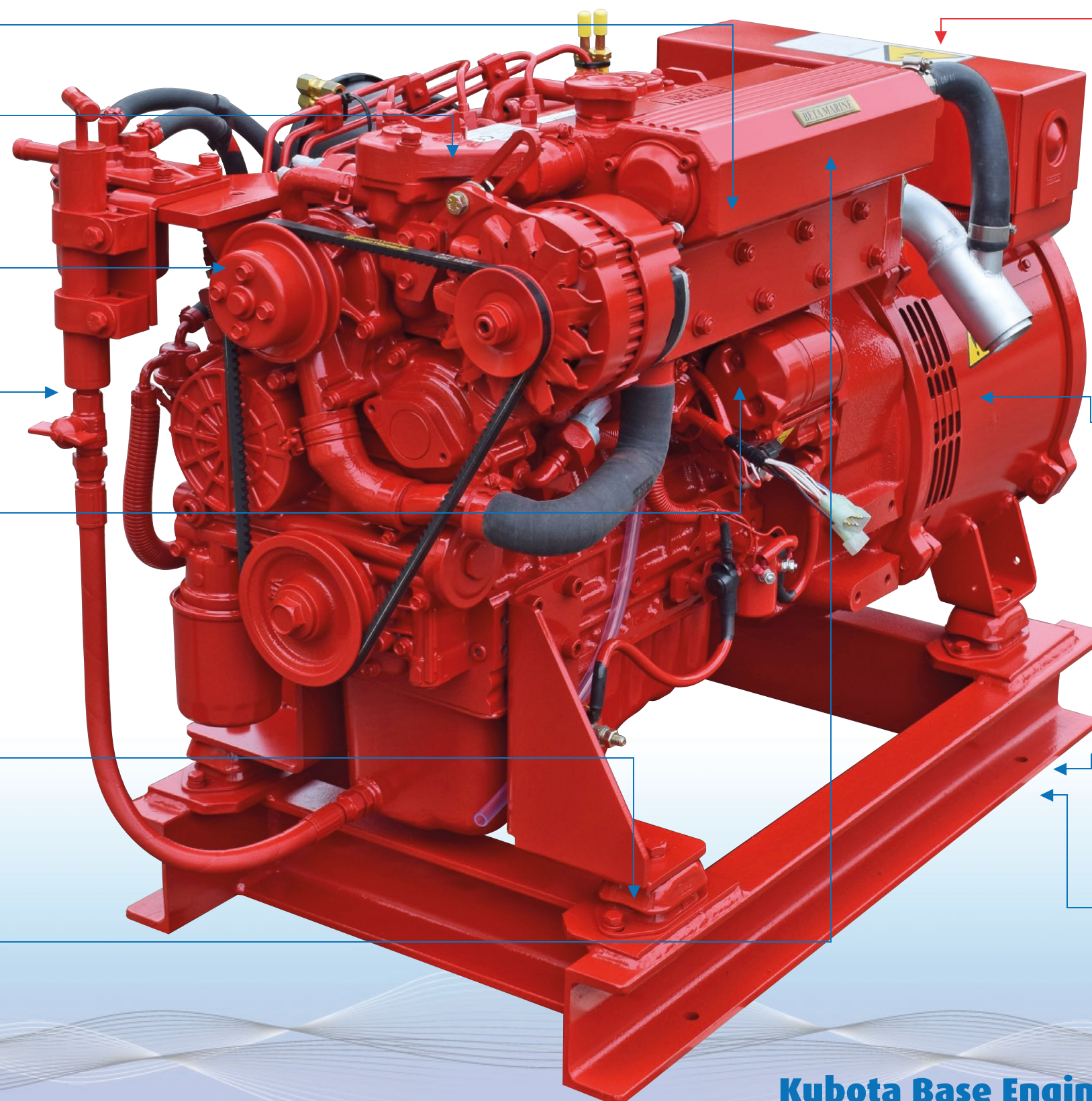
All BetaSet-BetaGen models are 12 volt electric start as standard, models up to the BetaSet-BetaGen 21 are equipped with a 45 amp battery charging alternator, the BetaSet-BetaGen 26 though to the BetaSet-BetaGen 49 are equipped with a 70 amp insulated return battery charging alternator. Optional 24 volt 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 40 & 49 Stage IIIA which are turbocharged.

*Electronically assisted on the BetaSet-BetaGen 40, 49 & 40, 49 Stage IIIA.

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.

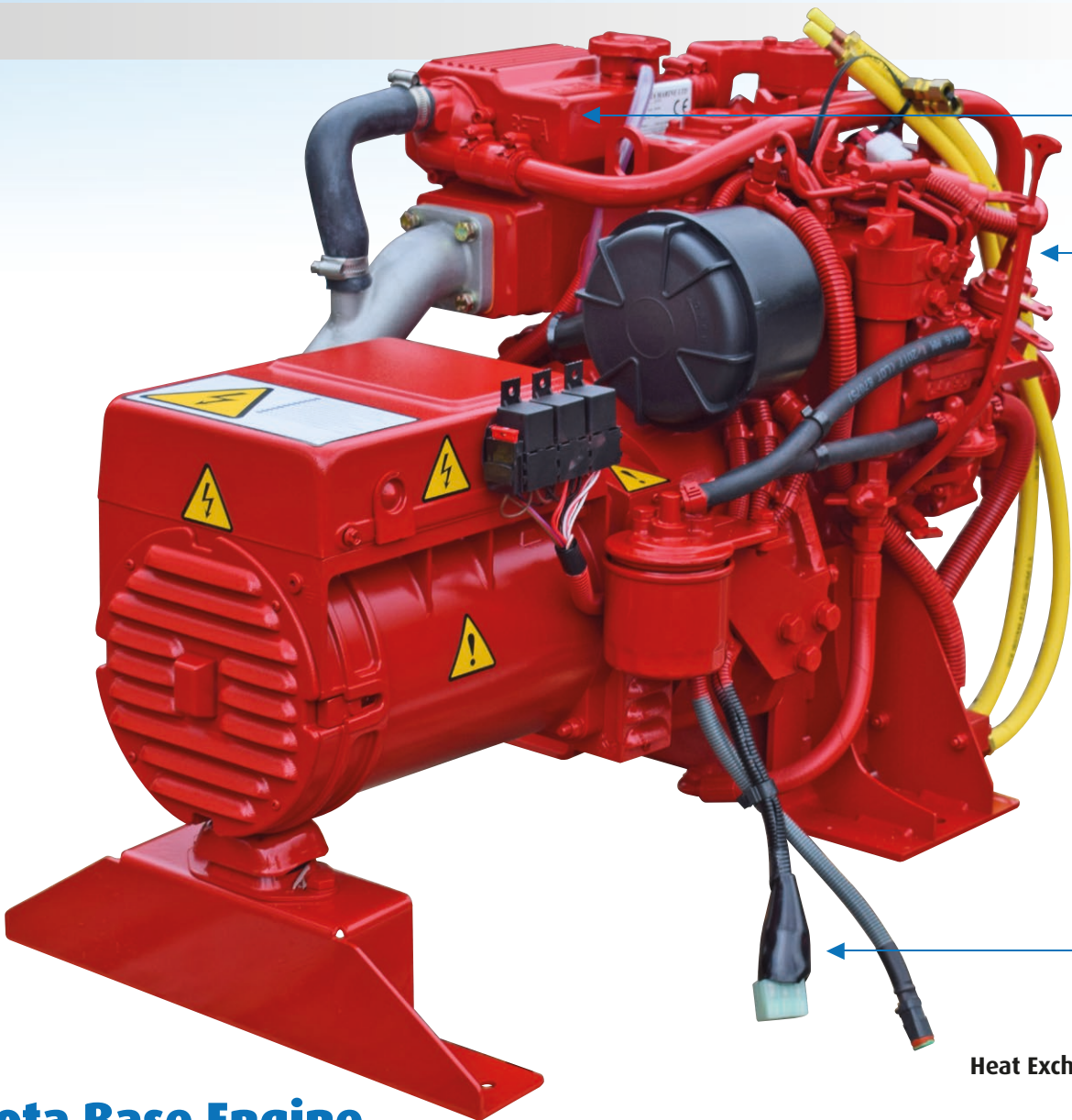
Kubota three vortex combustion (E-TVCS) with indirect injection for quiet running, low emissions and excellent fuel consumption – All BetaSet-BetaGen variants except the BetaSet-BetaGen 40 & 49 Stage IIIA.

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

Kubota Base Engine

BetaSet-BetaGen 4/2

Available With Heat Exchanger, Keel Or Radiator Cooling



BetaGen 4/2
Heat Exchanger Cooled

Kubota Base Engine

	2-Pole AC Alternator	1 Phase, 50Hz 3,000 rpm	1 Phase, 60Hz 3,600 rpm
Max. Output		4.0 kVA	4.5 kVA
Typical Load		17.4 A *	37.5 A ***
Cylinders		2	2
Cubic Capacity		479 cc	479 cc
Fuel ^		1.4 Lt/Hr	1.7 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.

The BetaSet-BetaGen 4/2 are
unity power factor machines



Cooling Options

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



Control Module Options

PSM720 Start & Stop Protection Module	Std.	DSE3110 Manual & Auto Start Control Module	Opt.
EPM72 Start & Stop Protection Module	Opt.*	DSE7310 Auto Start Control Module	
RSM72 Local & LPM72 Remote Control Module	Opt.	& DSE2510 Auto Start Display Module	Opt.

*Only when a 70 Amp, 12 Volt Insulated Return Alternator is specified.



Engine Electrical Options

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

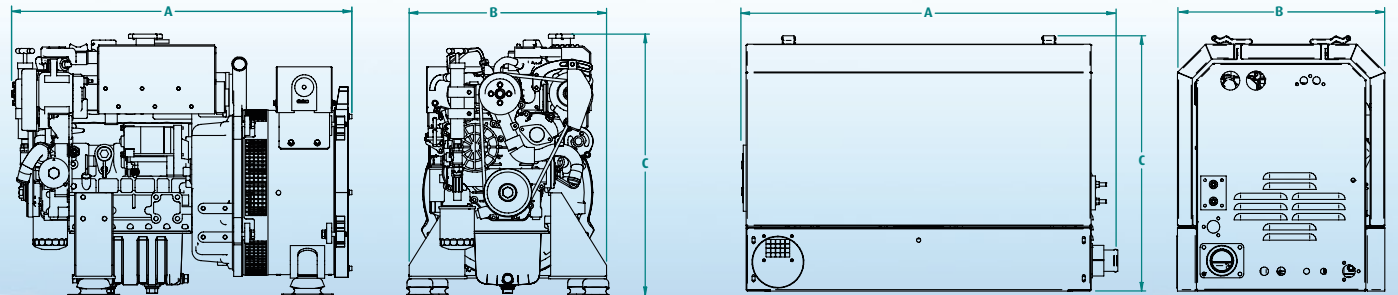


BetaGen 4/2
Heat Exchanger Cooled



Dimensions & Weight

Images Below Are For Illustrating Dimensions & Not Necessarily Representative



	A	B	C	Weight
BetaSet 4/2	76	44	58	116Kg

	A	B	C	Weight
BetaGen 4/2	80	49	59	160Kg

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