

Your needs . . .



**. . . our tailored solutions
delivering reliability and peace of mind**

28 to 1150kVA

Bespoke Generating Set Range

Why Beta Marine?

Your needs . . .

- Our company has built its renowned reputation on over 30 years of customer centred focus, listening to maritime propulsion or power needs and providing value solutions. Proving our support & product at pre-purchase, during installation be it a new build or re-power and post-purchase with the delivery of an after sales service both nationally and internationally that is second to none.
- We value our employees equally as highly as our customers, are extremely proud of the retained bank of skills, experience and loyalty that we have built and have available in place today, which enables us to excel at providing maritime solutions to fit bespoke needs.
- Our company strives to continue to build our reputation with all our customers be they end users, dealers, international distributors or boat builders and our mission is simply to capture, retain and service your valued custom throughout our products natural life cycle.
- The combined experience of our dedicated generating set team, national & international dealer network, supported by state of the art computer aided design we have planned, installed and provided power for thousands of recreational craft & commercial vessels and sit comfortably & confidently that we can support your unique needs and exceed your expectation.

. . . our tailored solutions delivering reliability and peace of mind



Image courtesy of MBNA Thames Clipper



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.



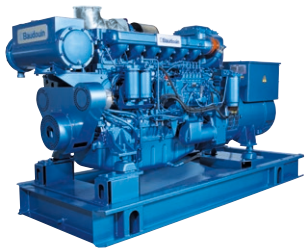
**ISO
9001**

Quality
Management
Certification

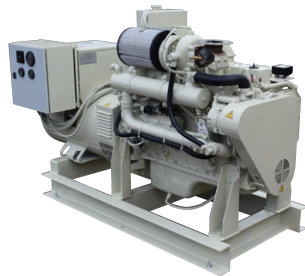
Our Product Specialities Are:

Bespoke Marine Generating Sets 28 to 1150 kVA

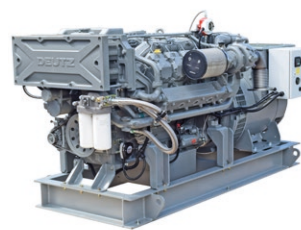
Based on auxiliary diesel engines by:



Baudouin Marine
50 to 1090 kVA



Cummins
85 to 1150 kVA



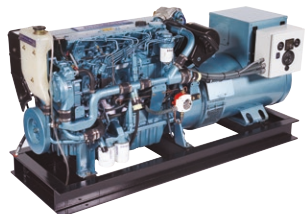
Deutz
88 to 490 kVA



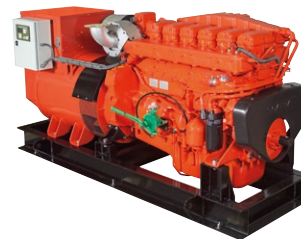
Perkins
28 to 135 kVA



Perkins Marine
35 to 120 kVA



Perkins (E70)
124 to 250 kVA



Scania
200 to 760 kVA



Volvo
88 to 558 kVA

For Kubota based generating sets 4 to 58kVA

Please refer to our BetaSet-BetaGen 7 to 49 Sales Brochure, Publication Ref: SB 221-05164 or visit our website.

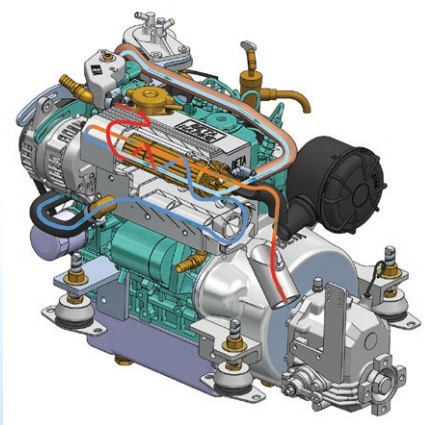
Specialists in Bespoke Acoustic Enclosures

Bespoke enclosures are manufactured from 'Zintec' steel and finished in off white 'powder coated' paint to complement the generating set colour. The panel frame is bolted together for rigidity and strength. It is lined with high quality 38mm flame retardant acoustic foam material (including a 4mm polymeric barrier), held in place with high temperature silicon adhesive. Complete with full tray base frame, drain plug and lifting lugs.

Quick release "service" panels facilitate easy, simple and unobstructed access to the engine, AC alternator and ancillaries. Acoustic attenuating ducts provide air flow in and out of enclosure forced by an electric ventilation fan which is powered direct from the AC alternator terminals. Blank gland plates are provided for electrical connections.

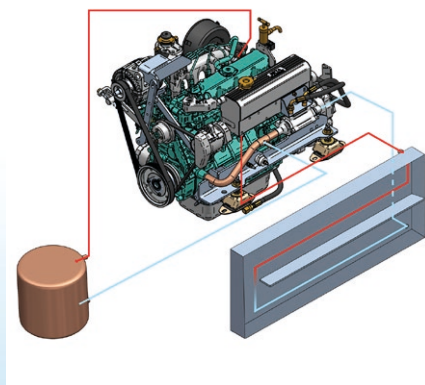


Cooling Methods Offered



Heat Exchanger Cooled

Complete with integral heat exchanger, fresh & sea water pumps and dry exhaust outlet.



Keel Cooled

Complete with fresh water pump ready for use with the vessels keel cooler and dry exhaust outlet.



Radiator Cooled

Self-contained and mounted on the generating set with engine driven fan and dry exhaust outlet.

Bespoke wet exhaust systems are available upon request. Please contact one of our specialist generating set team by telephone, website or email.

Specialists in Classification

Beta Marine can manufacture marine generating sets with or without Classification Society requirements, including but not limited to the following Societies:



ABS Europe Division
www.eagle.org



Bureau Veritas
www.bureauveritas.co.uk



China Classification Society
www.ccs.org.cn



Class NK
www.classnk.or.jp



Det Norske Veritas UK
www.dnv.co.uk



European Maritime Safety
www.emsa.europa.eu



Germanischer Lloyd AG
www.gl-group.com



IACS Limited
www.iacs.org.uk



International Maritime
www.imo.org



Lloyds Register
www.lr.org



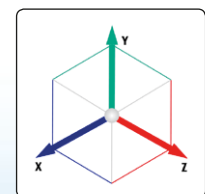
RINA S.p.A
www.rina.org



Russian Maritime Register
www.rs-head.spb.ru

Torsional Vibration Analysis & Classification Society Surveys

Are available for classification society specification when required. Including any necessary additional drawings, approved shafts and class tests witnessed by a classification surveyor.



AC Alternators

Beta Marine offer 50Hz & 60Hz, single bearing AC alternators, double bearing AC alternators with flexible couplings manufactured by:

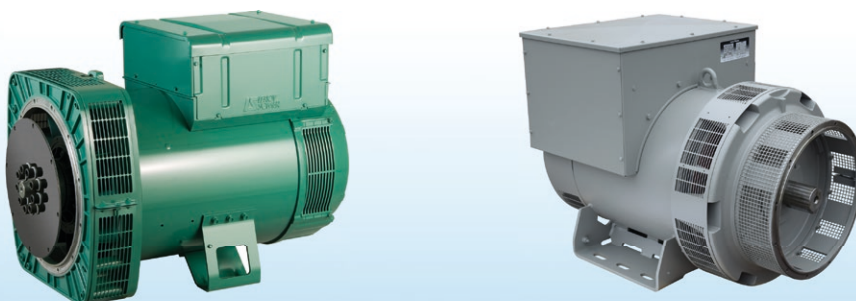
Mecc Alte



Newage Stamford



Leroy Somer



Local Control Panels

Basic Local Control Panel

Generating set mounted and dependant on generating set specification/additional requirements houses the control module and any additional monitoring gauges and or alarms. Included but not limited to: independent engine tachometer/hrs run meter, oil pressure gauge, coolant temperature gauge.



Automatic Local Control Panel

This panel will include a mounted ComAp IntelliDrive - ICU local automatic engine control module, options include provision for integration to the vessels remote emergency stop and or a local emergency stop.



Automatic Control Panel With Generating Set Controller

For remote control and parallel operation with inputs for speed adjustment and for AC voltage and amps. Sensing for volts and amps is via fuses and current transformer's installed in the AC alternator terminal box. Based on marine approved ComAp IntelliGen management system, programming, set up and testing is included.

NB: The illustrated AC output switching/switchboard panels are not included.



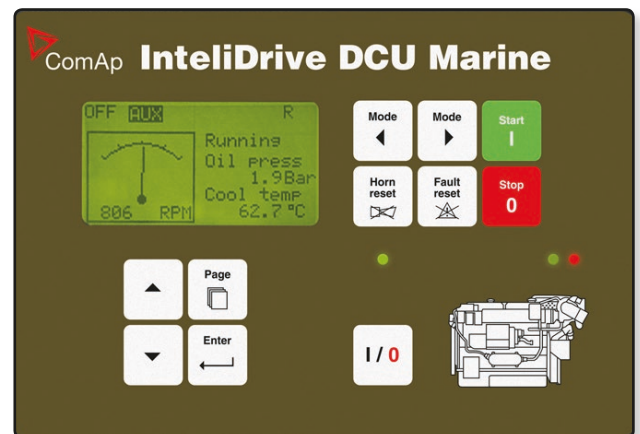
Beta Marine specialise in bespoke customer specification, for support please contact one of our specialist generating set team by telephone, website or email.

Control Modules

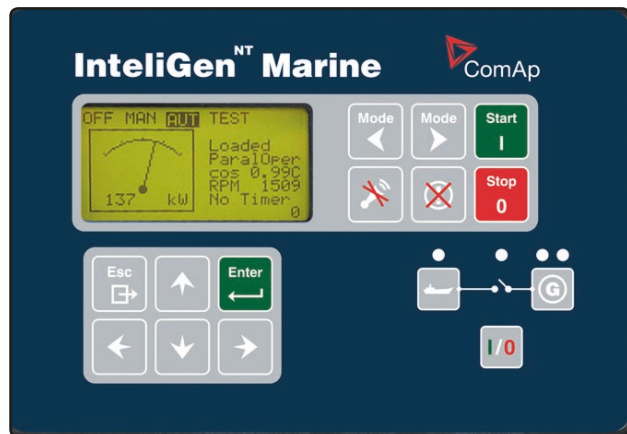
Beta Marine offer the following control modules, options available will vary depending on generating set and vessels requirements. For further information please visit the Beta Marine website.



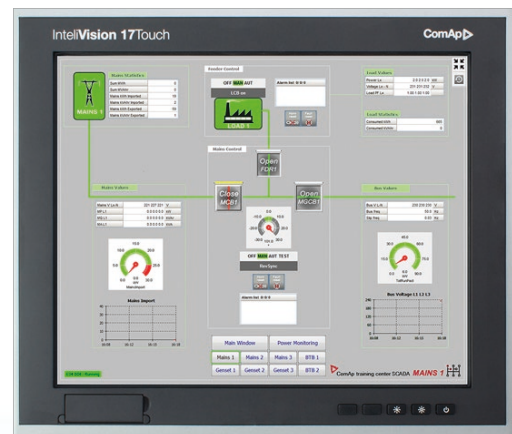
EPM72 Key Switch Start & Stop Protection Module



ComAp IntelliDrive DCU Marine Engine Control Module



ComAp IntelliGen^{NT} Marine Generator Control Module



ComAp IntelliVision 17Touch Marine Display Unit

Output Options

Auto Stand By

In this application each generating set is sized to carry the full electrical load of the vessel. Each generating is arranged for automatic stand by to each other with their outputs controlled through a change over contactor. Failure of the selected running generator set would automatically initiate the starting of the second generating set which when running, would take over the electrical load.

The electrical load black out would be milliseconds should the change over be controlled by a pre-alarm on the running generating set or initiated by the operator.

In this application the use of a stand by emergency/essential services set may be obviated. However, if the machinery has to be built to classification, the relevant classification society rules will dictate the final requirement that will need to be met.

Auto Stand By With Parallel Operation

In this application the arrangement is the same as Auto Stand By (above) but the change over contactor is replaced by independent contactors or motorised circuit breakers. In the event of sudden failure of the running generator set the operation procedure would also be the same as Auto Stand By.

However, under controlled shutdown of the running generator the second generating set could be run up either manually or automatically and paralleled with the outgoing generating set enabling a smooth take over of the load before the outgoing set is shut down.

Full Parallel Operation

In this application both generating sets power the load either continuously or dependent upon demand, the arrangement can be manually or automatically operated. It is common for the vessels switchboard to incorporate a load shedding arrangement so that in the event of a failure of one of the main generating sets that all essential services loads would be maintained by the other generating set.

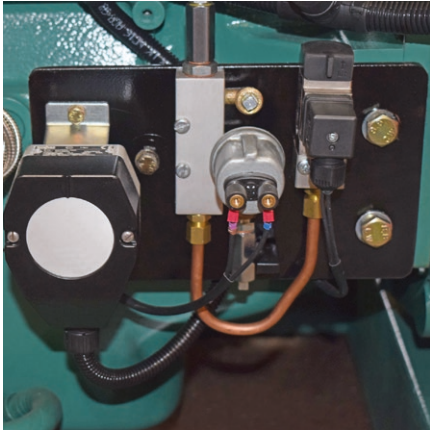
In this arrangement the installation of an emergency/essential services generating set is recommended.

Bespoke Arrangements

The above options can be modified and adjusted for bespoke vessel operational needs. There may be more or less generating sets to suit these needs with bespoke control, appropriate for the final arrangement.

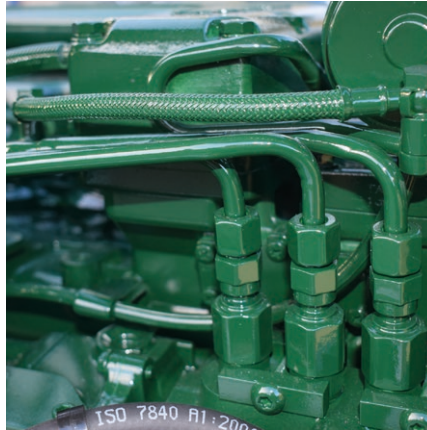
Many requirements are dictated by any relevant classification society class rules which are set to ensure the safety of both the crew and the vessel. These rules will embody SOLAS (Safety Of Life At Sea) as issued by the IMO (International Maritime Organisation).

Regulatory Options



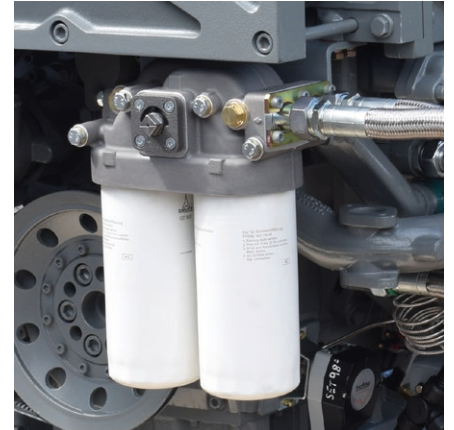
Alarm Sensors & Switches

Engine sensors are available to meet UMS, EO, AUT-MS requirements including lube oil temperature, coolant level and 'type' approved protection switches for lubrication oil pressure and coolant temperature.



Double Skinned (Sheathed) Fuel Injector Pipes & Alarm

In the event of an engine fuel injection inner pipe failure, fuel is leaked into the outer pipe which then feeds back to the fuel tank via a float chamber which activates an engine alarm, required for class unless the engine has unit injectors as standard.



Duplex Change Over Type Engine Oil Filters

Required for most classification societies. This filter replaces or is additional to the standard engine oil filter.

Engine Start Options & Accessories



Air Motor Start

In lieu of standard electric start.



Hydraulic Start System

In lieu of standard electric start or as an additional second means of start.



Spring Start

In lieu of standard electric start or as an additional second means of start.

Electrical Accessories

Circuit Breaker (MCCB)

With external power socket and IP56 protection.

Illustrated is a generating set base frame mounted MCCB pre-wired to the AC alternator terminal box. Available ratings will be dictated by the generating set output.



Installation Accessories

Beta Marine offer a comprehensive range of accessories to support your installation with solutions available to cover all needs such as; engine fresh and seawater management, additional or remote, lubrication, filtration, dry or wet exhaust components.



For our full range of bespoke generating set regulatory, engine, electrical and installation options please visit our [website](#).

Beta Marine specialise in bespoke customer specification, for support please contact one of our specialist generating set team by telephone, website or email.



BETA MARINE

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