



TRANSFLUID®
industrial & marine

frontier
POWERPRODUCTS

www.frontierpower.com

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Bellmarine®
powered by Transfluid



drive with us

Complete System shopping list:

- Propulsion system: _____

- Regeneration function (charging during sailing) YES / NO

- Help and configuration on distance interface: YES / NO

- Display: ☐ E2 ☐ E4 ☐ E7 ☐ TF1 ☐ Axiom7 ☐ Axiom9
 Cable length standard 5 meter
 Optional ☐ Standard ☐ 10 meter ☐ 15 meter ☐ 20 meter

- Throttle type ☐ Bellcontroll ... ☐ TF Controll ...

- Cooling ☐ Fresh water ☐ Heat exchange
☐ Closed loop ☐ None

- Propellershaft system Ø25mm Ecoline < max 7.5 kW YES / NO

- Prop-shaft coupler: ☐ Ø25mm ☐ Ø30mm ☐ None

- Acuty, high accurate battery condition monitoring: YES / NO

- Battery charger: _____

- Shore power set: ☐ 15m ☐ 25m ☐ None

- Other / remarks: _____

►e-motion in propulsion!

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Electric boating starts at Bellmarine.

In the world of electric propulsion systems Bellmarine is the standard. Years of experience, quality, innovation and durability are a guarantee for pure boating pleasure.

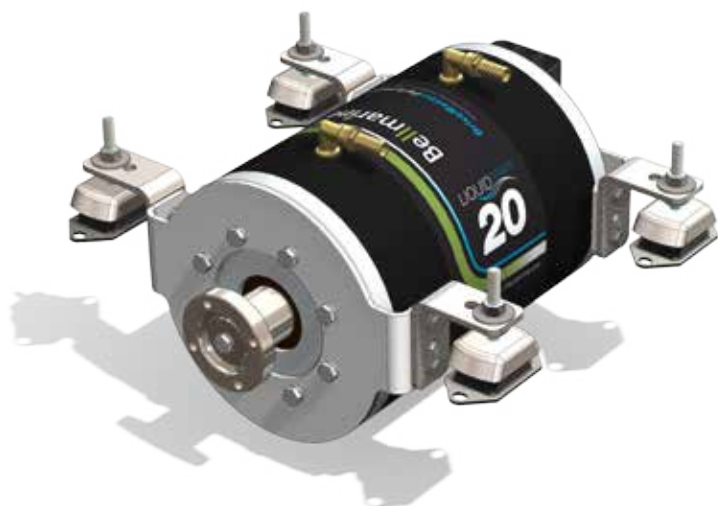
Perfection in every detail

All parts installed below decks have to be of the highest quality; Moisture and salt will take their toll and have effect on the durability of your drive system. Only the best materials are suitable and each have been carefully selected by Bellmarine.

E-motion in propulsion

The Bellmarine systems are developed and produced in the Netherlands. With over 3,000 electric propulsion systems in use Bellmarine has set the standard.

You are assured the highest quality and service. Also the price of a complete system will be a pleasant surprise.



DriveMaster Ecoline

Air-Cooled

Motor – Air cooled complete closed IP66
Controller Air cooled

Complete including:

Motor + Controller, integrated thrust bearing, stainless steel adjustable motor support.

- Motor + controller water resistant IP66
- Additional power boost 8 seconds
- IFO vector control (superior dynamic response, higher operational efficiency and maximum torque)
- NMEA2000 compatible
- Hybrid function available
- Includes main switch and main fuse
- Quick install / easy connect / plug and play



Art. no:	DESCRIPTION	MOTOR	V	kW	rpm	TORQUE
101488	DriveMaster Ecoline 2.0	AC-30	24	2.0	1450	13 Nm
101489	DriveMaster Ecoline 3.0	AC-30	48	3.0	1450	20 Nm
101529	DriveMaster Ecoline 6.0	AC-50	48	6.0	1450	40 Nm



• Every Bellmarine system is supplied with a main battery fuse and main switch.



• Display options, throttle choices and more

DriveMaster Ultimate 48/96 Volt

Liquid-Cooled

Motor – Liquid cooled complete closed IP66
Controller liquid cooled

Complete including:

Motor + Controller, integrated thrust bearing, stainless steel motor supports and integrated DC-DC converter for onboard 12V power. (13.8V 300 watt at 48 V / 450 Watt at 96V)

- Motor + controller water resistant (IP66)
- IFO vector control (superior dynamic response, higher operational efficiency and maximum torque)
- Integrated DC-DC converter 48/96V > 13.8 Volt
- Additional power boost 8 seconds
- NMEA2000 compatible
- Hybrid function available
- Includes main switch and main fuse
- Quick install / easy connect / plug and play



• Every Bellmarine system is supplied with a main fuse and main switch
96 Volt systems will be supplied with high voltage main battery fuse and main switch

Art. no:	DESCRIPTION	MOTOR	V	kW	rpm	TORQUE
101607	DriveMaster Ultimate 1.5	AC-10	48	1.5	1450	10 Nm
101608	DriveMaster Ultimate 3.0	AC-30	48	3.0	1450	20 Nm
100854	DriveMaster Ultimate 5.0	AC-30	48	5.0	1450	33 Nm
100808	DriveMaster Ultimate 10	AC-50	48	10	1450	66 Nm
100809	DriveMaster Ultimate 15 (S2-30" / S1 12kW)	AC-50	48	15	1450	99 Nm
100810	DriveMaster Ultimate 15	AC-60	48	15	1450	99 Nm
100812	DriveMaster Ultimate 20 (S2-30" / S1 16 kW)	AC-60	96	20	1450	132 Nm
101610	DriveMaster Ultimate 20	AC-80	48	20	1450	132 Nm
100811	DriveMaster Ultimate 25	AC-80	96	25	1450	165 Nm

• Display options, throttle choices and more



DriveMaster Ultimate 144 Volt

Liquid-Cooled

Complete including:

Motor + stainless steel motor mounting bracket. Controller with isolated 12V logic, integrated precharge relays and main power relays, integrated DC-DC converter for Start up and onboard 12V power.

Motor + controller water resistant IP66

Integrated DC-DC converter 144 > 13.8V 450 Watt (start up circuit 12V Logic)

- Motor + controller water resistant (IP66)
- IFO vector control (superior dynamic response, higher operational efficiency and maximum torque)
- Integrated DC-DC converter 144. 13.8V 450 Watt
- Additional power boost 8 seconds
- NMEA2000 compatible
- Hybrid function available
- Includes main switch and main fuse
- Quick install / easy connect / plug and play



Art. no:	DESCRIPTION	MOTOR	V	kW	rpm	TORQUE
101503	DriveMaster Ultimated 25 (S2-25" / S1 16 kW)	AC-60	144	25	2500	95 Nm
101288	DriveMaster Ultimated 35 (S2-15" / S1 16 kW)	AC-60	144	35	3500	95 Nm
101585	DriveMaster Ultimated 25	AC-80	144	25	1450	164 Nm
101642	DriveMaster Ultimated 35	AC-80-L	144	35	1450	230 Nm
101580	DriveMaster Ultimated 50 (S2-15" / S1 35 kW)	AC-80-L	144	50	1850	258 Nm

- Every Bellmarine system is delivered complete with a high voltage main fuse and main battery switch.



- Display options, throttle choices and more



TorqueMaster Pro

Air-Cooled or Liquid-Cooled

Geared propeller shaft systems
20 kW / 25 kW / 30 kW / 40kW



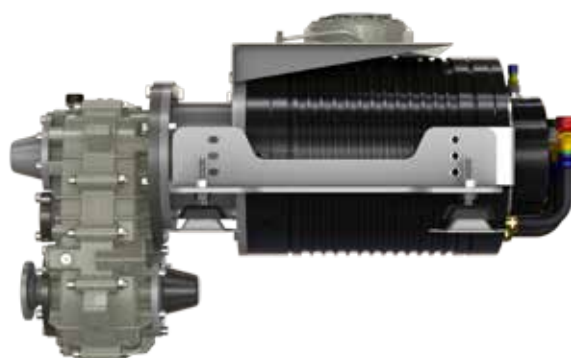
- Motor + controller water resistant (IP66)
- IFO vector control (superior dynamic response, higher operational efficiency and maximum torque)
- Integrated DC-DC converter 48/96/144V > 13.8 Volt
- Additional power boost 8 seconds
- NMEA2000 compatible
- Hybrid function available
- Includes main switch and main fuse
- Quick install / easy connect / plug and play



Specifications:

Art. no:	DESCRIPTION	MOTOR	V	kW	rpm	TORQUE
101740	TorqueMaster Pro 20	AC-80	48	20	800	239 Nm
101716	TorqueMaster Pro 25	AC-80	96	25	800	299 Nm
101717	TorqueMaster Pro 30	AC-80	144	30	800	358 Nm
101718	TorqueMaster Pro 40	AC-80-L	144	40	950	402 Nm

• Display options, throttle choices and more



DriveMaster Modular 48/96/144 Volt

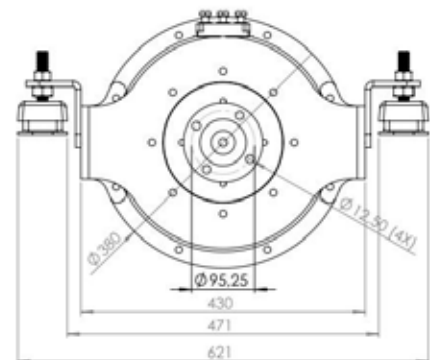
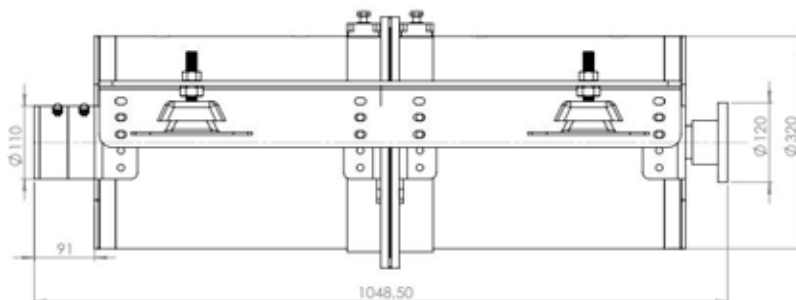
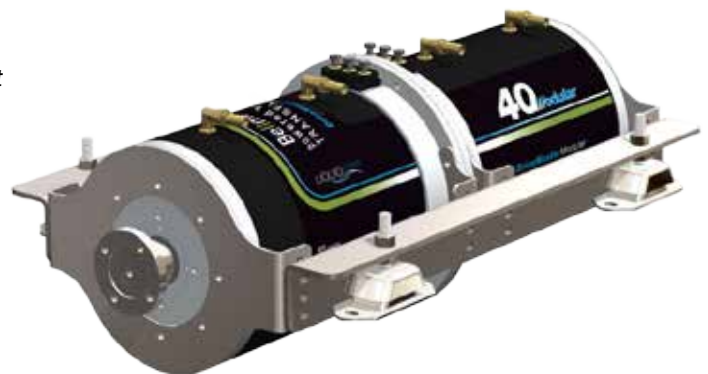
Liquid-Cooled

Motor – Liquid cooled complete closed IP66
Controller liquid cooled

Modular drive system complete including:

2 x Motor + 2 x Controller, rotation sensor IP68 and temp sensor.
Including stainless steel motor mounting brackett
Controller and motor in master / slave configuration.
Integrated DC-DC converter 144 > 13.8Volt 450 Watt (start up circuit 12V logic)

- Motor + 2x controller water resistant (IP66)
- IFO vector control (superior dynamic response, higher operational efficiency and maximum torque)
- Additional power boost 8 seconds
- Integrated DC-DC converter 48 / 96 / 144 > 13.8Volt 450 Watt (start up circuit 12V logic 144 V versions)
- NMEA2000 compatible
- Hybrid function available
- Includes 2x main switch and 2x main fuse
- Quick install / easy connect / plug and play



Art. no:	DESCRIPTION	MOTOR	V	kW	rpm	TORQUE
101485	DriveMaster Modular 40 *30 kW continuously–limited by controller	N80-2	96	40	1450	264 Nm
101478	DriveMaster Modular 50	N80-2	144	50	1450	329 Nm

• Every Bellmarine modular system is delivered complete with 2x high voltage main battery fuse and main switch.



SailMaster Ecoline 48 Volt

Air-Cooled

Motor – Air cooled complete closed IP66
Controller air cooled

Complete including:

Motor + Controller, Yanmar SD25 Sail drive leg with 2:1 reduction, stainless steel motor support brackets.

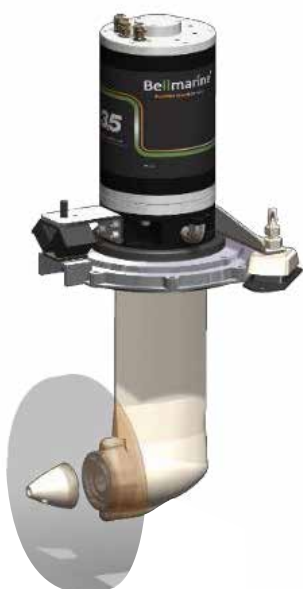
Motor complete closed IP66 and maintenance free, the plug and play motor controller is air-cooled.

- Motor + controller water resistant (IP66)
- IFO vector control (superior dynamic response, higher operational efficiency and maximum torque)
- Additional power boost 8 seconds
- Oil level spy glass
- Oil refill inlet
- NMEA2000 compatible
- Hybrid function available
- Suitable to use with fixed or folding propellers
- Includes main switch and main fuse
- Quick install / easy connect / plug and play



Art. no:	DESCRIPTION	MOTOR	V	kW	rpm
101492	SailMaster Ecoline 3.5	AC-30	48	3.5	850
101611	SailMaster Ecoline 6.0	AC-50	48	6.0	850

- Supplied without propeller.
- Every Bellmarine system will be delivered with a battery main fuse and main switch.
- Display options, throttle choices and more



SailMaster Ultimate 48/96 Volt

Liquid-Cooled

Motor – Liquid cooled complete closed IP66
Controller liquid cooled

Complete including:

Motor + Controller, Yanmar SD25 sail drive leg with 2:1 reduction, stainless steel motor support brackets.

The SailMaster Ultimate versions are standard equipped with an integrated DC-DC converter in the motor controller, to provide you with 12Volt DC onboard power.

- Motor + controller water resistant (IP66)
- IFO vector control (superior dynamic response, higher operational efficiency and maximum torque)
- Additional power boost 8 seconds
- Compact dimensions
- Oil level spy glass
- Oil refill inlet
- Integrated DC-DC converter
- NMEA2000 compatible
- Hybrid / regeneration function available
- Suitable to use with fixed or folding propellers
- Includes main switch and main fuse
- Quick install / easy connect / plug and play

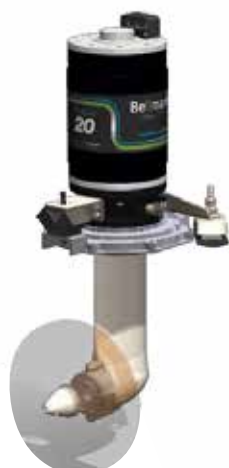


Art. no:	DESCRIPTION	MOTOR	V	kW	rpm
	Liquid cooled				
100882	Sailmaster Ultimate 5.0	AC-30	48	5	850
101474	Sailmaster Ultimate 10	AC-50	48	10	850
101475	Sailmaster Ultimate 15	AC-50	48	15	850
101476	Sailmaster Ultimate 20	AC-50	96	20	1500

• Supplied without propeller.

• Every Bellmarine system is delivered with a battery main fuse and main switch. 96 Volt systems will be supplied with high voltage main fuse and main switch set

• Display options, throttle choices and more



OutboardMaster Pro

Air-Cooled or Liquid-Cooled

Motor - Liquid or Air cooled fully closed IP66
Controller liquid or with forced air cooling

Specially developed electric outboard for applications where maneuverability and robustness is crucial.

Supplied complete including; Electric motor + Yanmar Sail drive leg with gear reduction of 2:1, Motor controller, stainless steel mounting brackets and tiller arm (for use with hydraulic steering system).

- *Supplied without propeller.*

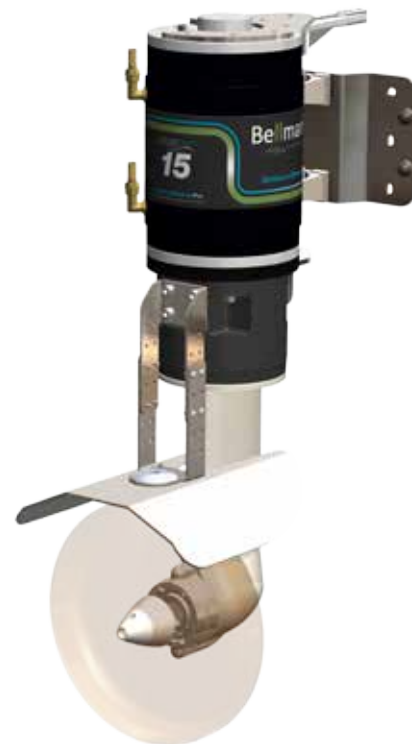
The OutboardMaster is available in two versions:

- *Ecoline - Air Cooled*
- *Ultimate - Liquid Cooled*

The liquid cooled OutboardMaster Pro version has an integrated DC-DC converter integrated in the motor controller for cooling pump and other 12V equipment.

Complete including: Motor + Controller, integrated thrust bearing.

- *Motor + controller water resistant (IP66)*
- *IFO vector control (superior dynamic response, higher operational efficiency and maximum torque)*
- *Additional power boost 8 seconds*
- *Integrated DC-DC converter > ultimate versions*
- *NMEA2000 compatible*
- *Includes main switch and main fuse*
- *Quick install / easy connect / plug and play*



Art. no:	DESCRIPTION	MOTOR	V	kW	rpm
	Air-Cooled				
101500	OutboardMaster Pro Ecoline 6	AC-50	48	6	850
Art. no:	DESCRIPTION	MOTOR	V	kW	rpm
	Liquid-Cooled				
101469	OutboardMaster Pro Ultimate 10	AC-50	48	10	850
101470	OutboardMaster Pro Ultimate 15	AC-50	48	15	850
101471	OutboardMaster Pro Ultimate 20	AC-50	96	20	1500
	Optional				
101472	Anti ventilation / cavitation plate (Stainless steel, incl. anode)				

- Supplied without propeller.

- Every Bellmarine system is delivered with a battery main fuse and main switch. 96 Volt systems will be supplied with high voltage main fuse and main switch set

- Display options, throttle choices and more



SternMaster

Air-cooled or Liquid-cooled

Complete including:

Motor + Controller, Mercury Stern Drive ALPHA ONE with 2:1 reduction, stainless steel motor support brackets.

- Motor + controller water resistant (IP66)
- Elastic coupling connection
- Compact dimensions
- Integrated DC-DC converter
- Includes main switch and main fuse
- Quick install / easy connect / plug and play



Art. no:	DESCRIPTION	Vdc max	kW max	rpm output
330020	SternMaster 20A	100	20	1500
330026	SternMaster 20W	100	26	1500
330035	SternMaster 35A	300	35	1500
330042	SternMaster 35W	300	42	1500
330050	SternMaster 50A	300	50	1500
330065	SternMaster 50W	300	65	1500
330075	SternMaster 75A	300	75	1500
330097	SternMaster 75W	300	97	1500

- For liquid cooling accessories, throttle lever and accessories see p.18
- For battery see p. 25 or apply Transfluid

■ W= Liquid cooled
■ A= Air cooled

ShaftMaster

Air-cooled or Liquid-cooled

Complete including:

Motor + Controller, Revertomatic marine gear (ratios: 1.04-1.45-1.88-2.25) with thrust bearing with liquid/oil - cooler.

- Motor + controller water resistant (IP66)
- Compact dimensions
- Integrated DC-DC converter
- Includes main switch and main fuse
- Quick install / easy connect / plug and play



Art. no:	DESCRIPTION	Vdc max	kW max	rpm output
230035	ShaftMaster 35A	300	35	2850 2050 1550 1300
230042	ShaftMaster 35W	300	42	2850 2050 1550 1300
230050	ShaftMaster 50A	300	50	2850 2050 1550 1300
230065	ShaftMaster 50W	300	65	2850 2050 1550 1300
230075	ShaftMaster 75A	300	75	2850 2050 1550 1300
230100	ShaftMaster 75W	300	100	2850 2050 1550 1300
230130	ShaftMaster 130W	400	130	2850 2050 1550 1300

- For liquid cooling accessories, throttle lever and accessories see p.18
- For battery see p. 25 or apply Transfluid

■ W= Liquid cooled
■ A= Air cooled

Accessories

Multifunctional Displays: Bell- (Ray)marine NMEA2000

Bellmarine designed hard- and software which easily combine with the powerful range of nautical products of Raymarine.

The Axiom multifunction displays deliver the speed and simplicity of the Lighthouse III user interface, which ensures smooth operation of the touchscreen.

Now it is possible to integrate your electric propulsion 1 or 2 Bellmarine motor system information into your complete boat system and have everything on one well-arranged screen including GPS speedometer and chart plotter.

With the standard integrated Wi-Fi function, you will always have an extra screen on your tablet or smartphone.



Raymarine

Raymarine display – Axiom 7 & 9

Your system is supplied complete with special motor controller software.

The display of your choice is supplied with the Actisense NMEA 2000® backbone in a single device and is pre assembled with the Bellmarine monitoring and control cable set.

- **Every display / cable set is supplied with the Actisense and contact key**
The standard length of the cable set = 5 meter.
- Longer cables on request, see page 15



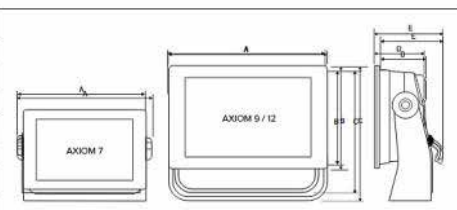
• Actisense NMEA2000 **A2K-SBN 4**
WAY SMALL BOAT NETWORK

Art. no:	MODEL	DESCRIPTION
101516	Axiom 7 Bellmarine	7" Multi functional display incl. integrated Wi-Fi incl. A2K-SBN4
101517	Axiom 9 Bellmarine	9" Multi functional display incl. integrated Wi-Fi incl. A2K-SBN4
101583	Flush mount Cover-7	Axiom 7 sun cover
101623	Flush mount Cover-9	Axiom 9 sun cover

Axiom Key Features



AFMETINGEN					
	AXIOM 7		AXIOM 9		AXIOM 12
	mm	Inch	mm	Inch	mm
A	250,4	9,86	265,03	10,43	314
B	133	5,24	157,78	6,21	217
C	162,5	6,4	187,8	7,39	226,8
D	76,4	3,0	74,9	2,96	79,3
E	218	8,59	177	6,97	183



Accessories

Display's

For every DriveMaster and SailMaster system a display and cable set is needed for monitoring and control of the controller. The display options range from a simple E2 LCD display to our multi functional display's



Art. no:	DESCRIPTION	
E2	Simple round display with battery status indication and motor rpm	
E4	Monochrome display with battery status indication, motor power, motor rpm, mode selection and Eco meter	
E7	Color display with battery status indication, motor power, motor rpm, motor temperature, controller temperature, eco meter, battery amps, battery voltage and mode selection. With Acuity also detailed and historic battery information is visible.	
TF1	Color display with battery status indication, motor power, motor rpm, motor temperature, controller temperature, eco meter, battery amps, battery voltage and mode selection. With Acuity also detailed and historic battery information is visible.	

Display's

Complete set including: cable set length 5 meters, moulded 12 pin connector with gold plated contacts, and 3 position contact key.

Art. no:	DESCRIPTION	
100831	E2-Mini LCD	Incl. cable set for monitoring and control, Ø51mm
100794	E4-LCD	Incl. cable set for monitoring and control
100795	E7- Full color	Incl. cable set for monitoring and control
100796	TF1 - Full color	Incl. cable set for monitoring and control
101520	Extra cable length +5m ¹	Optional: cable set total length 10 meter
101581	Extra cable length +10m ¹	Optional: cable set total length 15 meter
101521	Extra cable length +15m ¹	Optional: cable set total length 20 meter

Regeneration function

Software for Drivemaster Ultimate and Ecoline systems is ideal for recharging your batteries during sailing.

Art. no:	DESCRIPTION
101640	Regeneration / during sailing Includes custom cable set and motorcontroller setup
100332	Help and Configuration on Distance interface: Diagnose or configurate your Bellmarine system on distance: USB / PLC interface OEM 1314k-4401 v4.3.3 pc program station.

Accessories

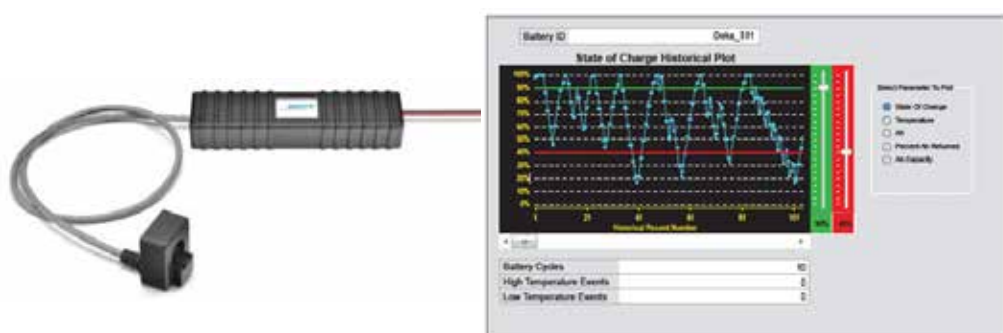
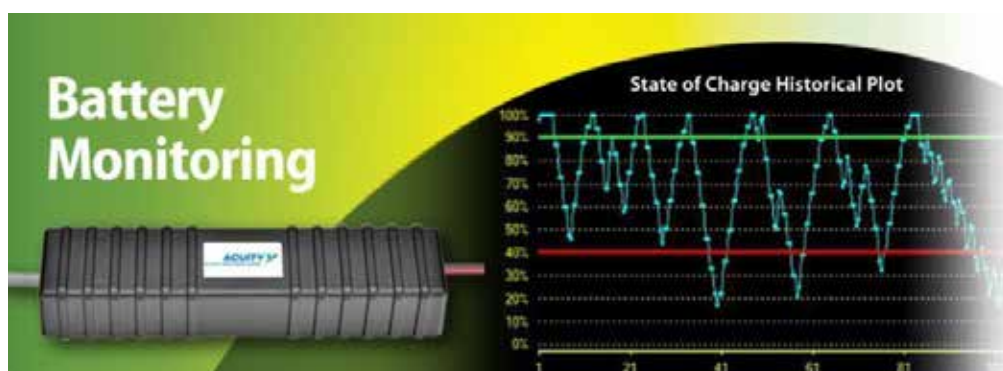
ACUITY - Battery condition monitoring system

All our Ultimate and Ecoline propulsion systems can be enhanced with a "state of art" battery condition monitoring system.

ACUITY constantly measures and logs the precise condition of your battery. This detailed information will be displayed on your display, including the multifunctional displays from Raymarine.

With a E7 display it's even possible to display the historic discharge and charge information on different screens. Also the historic data can be downloaded to a PC with a USB interface.

With the special Acuity E2 display all the battery data can be made visible without turning on your propulsion system.



Acuity accurate battery management

Art. no:	MODEL	
101466	Acuity 24–48 VDC	Standalone unit
101542	Acuity 72–144 VDC	Standalone unit
101559	Acuity USB Interface + Software	Configuration and monitoring PLC software and interface
101613	E2- Acuity Display	Always- On display, Ø52 mm. Displays the following data in a loop: Battery Voltage / Current / Temp / Total Discharged / Total Charged / Capacity in %

Accessories

Liquid Cooling

Water cooling accessories for all Ultimate systems.

Depending on the location of sailing there are two version of water cooling the motor and controller. The controller and motor are not salt water resistant, so when there is a possibility you will be sailing in salt water we advise you to choose for the closed loop cooling system instead of cooling with external water.



Cooling: Fresh water

Art. no:	DESCRIPTION	
100798	Self priming pump	Includes hose barbs and system connector
100799	Install / Connection kit	Includes 2 x hull fittings, 1 x ball valve, bronze water strainer, 5 meters hose, hose barbs and SS hose clamps.

Cooling: Heat exchange cooling

Art. no:	DESCRIPTION	SIZE	POWER ADVISE
101446	Cooling System with heat exchanger	S	Up to 5 kW
101447		M	5-10 kW
101448		L	15-20 kW
101449		XL	20+ kW

Cooling: Keel cooling/closed loop

Art. no:	DESCRIPTION	
101531	Circulation pump	Circulation pump 12V 1.9A 16mm 20l/min brushless DC, extra heavy-duty construction motors designed for continuous operation connection between motor and pump part magnetically driven.
100766	Expansion vessel	1.5 Liter, Includes stainless steel mounting bracket



Accessories

Bellcontrol Throttle

- Water resistant (IP67)
- Electronic hall-sensor technology 0-5 Volt.

Maneuvering in **Style...**

Side mounting

Art. no:	DESCRIPTION	TYPE	SIDE MOUNT
101422	Bellcontrol Casual	C01	Black delrin with stainless handle, side mount, IP67 b (contactless hall effect sensor, 0-5V output)
101551	Bellcontrol Tangle free	C02	Black delrin with black delrin knop, side mount, IP67 (contactless hall effect sensor, 0-5V output)
101630	Bellcontrol Tangle free	C03	Stainless Steel version, side mount, IP67 (contactless hall effect sensor, 0-5V output) tangle free.
101423	Bellcontrol Casual - SS	S11	Stainless Steel version, side mount, IP67 (contactless hall effect sensor, 0-5V output)
101424	Bellcontrol Sport	S12	Black delrin / sport version, side mount, IP67 (contactless hall effect sensor, 0-5V output)
101425	Bellcontrol Sport - SS	S13	Stainless Steel / sport version, side mount, IP67 (contactless hall effect sensor, 0-5V output)
			Control Master replacements
101426	Bellcontrol	C00	Black delrin with stainless handle, side mount, IP67 (contactless hall effect sensor, 0-5V output) Special replacement for Control Master casual
101427	Bellcontrol	S00	Black delrin / sport version, side mount, IP67 (contactless hall effect sensor, 0-5V output) Special replacement for Control Master Sport



C01



S11



C03



C02



S12



S13

Accessories

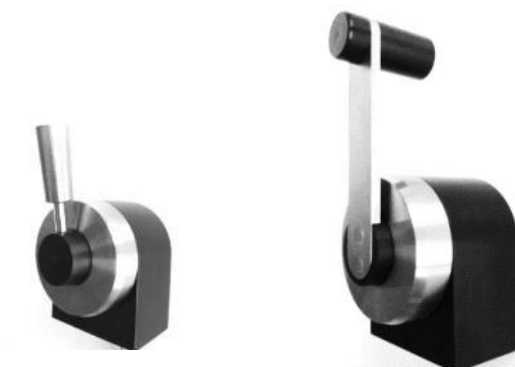
Bellcontrol Throttle

- Water resistant (IP67)
- Electronic hall-sensor technology 0-5 Volt.

Maneuvering in **Style...**

Top mounting single

Art. no:	DESCRIPTION	TYPE	TOP MOUNT
101428	Bellcontrol Casual	TC1-01	Black delrin with stainless handle, top mount, IP67 (contactless hall effect sensor, 0-5V output)
101429	Bellcontrol Casual - SS	TC1-11	Stainless Steel version with black delrin base, top mount, IP67 (contactless hall effect sensor, 0-5V output)
101430	Bellcontrol Casual - Sport	TC1-12	Black Delrin / sport version, top mount, IP67 (contactless hall effect sensor, 0-5V output)
101431	Bellcontrol Sport - SS	TC1-13	Stainless Steel / Sport version with black delrin base, top mount, IP67 (contactless hall effect sensor, 0-5V output)



Maneuvering in **Style...**

Top mounting dual

Art. no:	DESCRIPTION	TYPE	TOP MOUNT - DUAL CONTROL
101432	Bellcontrol Casual	TC2-01	Black delrin with stainless handles, dual joystick top mount, IP67 (contactless hall effect sensor, 2x 0-5V output)
101433	Bellcontrol Casual - SS	TC2-11	Stainless Steel version with black delrin base, dual joystick top mount, IP67 (contactless hall effect sensor, 2x 0-5V output)
101434	Bellcontrol Casual - Sport	TC2-12	Black delrin / sport version, dual joystick top mount, IP67 (contactless hall effect sensor, 2x 0-5V output)
101435	Bellcontrol Sport - SS	TC2-13	Stainless Steel / sport version with black Delrin base, dual joystick top mount, IP67 (contactless hall effect sensor, 2x 0-5V output)

Accessories

TFcontrol Throttle



Art. no:	DESCRIPTION	TYPE	TOP MOUNT
2195AC	Single station for single engine (Including 5mt cable)	TFC1-11	Stainless handle, top mount, IP67 (0-5V output)
2195AB	Single station for twin engine (Including 5mt cable)	TFC2-11	Stainless handle, top mount, IP67 (0-5V output)

Battery Chargers

AXIgo & Flexis Battery chargers

The perfect charger for all battery banks.

The AxiGo charger has a special shore power selection switch to adjust for the available current of the shore power connection. Selection can be between 16, 10 or 6A, this will make sure the battery can always be charged.

The Flexis chargers are fully programmable via USB so every type of lead and lithium battery can be fully charged.

- Remote status led connections
- Remote stop charge connection
- Battery room ventilation control
- CAN BUS communication



Art. no:	TYPE	BATTERY VOLTAGE	CHARGE CURRENT	AC VOLTAGE	AC CURRENT	CASE
100730	AXIgo 48E60	48V	60A	230V	16/10/6*A	M**
101624	Flexis 48D100	48V	100A	3 x 400V	10A	FF130
101625	Flexis 48D150	48V	150A	3 x 400V	16A	FF130
101626	Flexis 48D200	48V	200A	3 x 400V	20A	FF250
101145	Flexis 80E25	96V	25A	230V	16A	FF130
101514	Flexis 80E50	96V	50A	3 x 400V	10A	FF130
101627	Flexis 80D100	96V	100A	3 x 400V	20A	FF250
101481	Flexis 80D150	96V	150A	3 x 400V	32A	FF330
101628	Flexis 80D200	96V	200A	3 x 400V	40A	FF550
101631	Flexis 144D100	144V	100A	3 x 400V	32A	FF250
101605	Flexis 144D150	144V	150A	3 x 400V	48A	FF330
101505	Flexis 144D200	144V	200A	3 x 400V	64A	FF550

- Adjusted with selection switch, battery charge current will be adjusted accordingly
- Other models, specifications and prices on request
- IP54 Case possible for Flexis series on request (IP20)

COOLMAX SRX MAXIMIZER

Solar MPPT

The COOLMAX SRX is a high efficiency, buck only, common positive Maximum Power Point Tracker (MPPT). It is the latest development in the MAXIMIZER range, which was pioneered by AERL in 1985. The COOLMAX SRX blends the famously reliable AERL power stage with easy to use digital features such as system performance logging, fully configurable alarms and remote system monitoring and control.

The COOLMAX SRX employs a maximum power point tracking strategy which has been proven to be highly robust, resistant to local extremes, and results in power losses of less than 0.5% over the whole operating temperature range of a PV Array.

Some of the device's main features and benefits include:

- Increase PV output by up to 35%
- Super high peak efficiencies > 99%
- Greater power advantage and MPPT response
- Common positive wiring configuration
- Advanced colour touch screen LCD display
- RS485 - USB communications
- High power density –1kW/l & 1.5kW/kg



Art. no:	TYPE	NOMINAL BATT VOLTAGE	CHARGE CURRENT	POWER	EFFICIENCY
101490	Coolmax SRX 96	96V	45A	4500W	98.5%
101491	Coolmax SRX 144	144V	45A	4500W	98.5%

DC-DC converters

All system

Features

Isolated switching regulator:
Output power 300W / 450W max.
Encapsulated IP65
Vibration resistant
Short circuit protection

Compact design
On / Off Key switch input
Wide input range
Contact cooling

Connector Molex Mini-Fit Sr. 42816 over temperature protected



Art. no:	TYPE	NOMINAL BATT VOLTAGE	CHARGE CURRENT	POWER
100659	DC4812300	36/48V	13.8V	300W
101632	DC4824300	36/48V	26V	300W
100494	DC4812450	36/48V	13.8V	450W
101633	DC9612450	96V	13.8V	450W
101318	DC9624450	96V	26V	450W
101634	DC4824450	36/48V	26V	450W
101635	DC14412450	144V	13.8V	450W
101636	DC14424450	144V	26V	450W

Inverter 230 Volt

Pure sinwave inverter 3500W

Pure sinewave output provides the ideal power source for modern electronics. Short-circuit proof robust design that protects itself against AC shorts. Sophisticated circuitry provides protection against overload, short circuit and over temperature. Adjustable under volts detection also protects the battery against excessive discharge.

Auto-start circuitry automatically switches the inverter ON and OFF with applied appliances. The auto-start is an important feature as it maximizes valuable battery capacity. Sensitivity of the auto-start can be easily adjusted to either start small appliances or run continuously.

Some of the device's main features and benefits include:

- Ruggedisation enhanced inverter protection to withstand high vibration and movement. A must-have for all mobile and marine applications.
- RCD Protection Fit an RCD (Residual Current Device) to the inverter to protect the end users from dangerous appliance faults. An extra level of safety important in mobile applications and emergency services.



Internal Automatic Transfer Switch (optional)

Allows the inverter to be connected to a secondary power source (eg. Generator, Grid); and automatically switch the output between the inverter and secondary power source accordingly.

- **Peak Efficiency 94%**

Art. no:	TYPE	NOMINAL BATT VOLTAGE	CONTINUOUS POWER	SURGE 5 sec	½ hr RATING
101511	LS-3596	96V	3500W	10.000W	4100W
101639	LS-35125	144V	3500W	3500W	4100W

Propeller shaft

Motor - Propeller Shaft Couplings



Art. no:	DESCRIPTION	
101219	Motor - shaft clamping coupler Ø 25 mm	To use in combination with propeller shaft Ø 25 mm. (produced in Stainless Steel)
101220	Motor - shaft clamping coupler Ø 30 mm	To use in combination with propeller shaft Ø 30 mm. (produced in Stainless Steel)

Ecoline Propeller Shaft system for electric propulsion*

Art. no:	DESCRIPTION	UP TO MAX 8 KW MOTOR POWER
100427	Ecoline system 1.5	Shaft Ø 25 mm. length 1,5 meter (can be shortened) produced in Stainless Steel 316 Including, special low friction water lubricated shaft bearings

* Ecoline shafts systems are supplied without Ø 25 mm motor / shaft clamping coupler and propeller.



Bow Adjust Control

Universal Proportional Bow Thruster Motor Controller

Bow Adjust Control is a universal proportional motor controller for every type of Bow thruster, it gives you the perfect control of your boat.

Also perfect for any 48V propulsion system since no additional battery bank and charger is required.

Complete including.:

1x Control panel B01 + cable and connection materials



Art. no:	DESCRIPTION		P-Max 12V	P-Max 24V
100855	BowAdjust 12/24V 375A	BowAdjust motor controller. In 48V > 12V Out- 12 or 24 Volt 375A	4.5 kW	9.0 kW
100856	BowAdjust 12/24V 750A	BowAdjust motor controller. In 48V > 12V Out- 12 or 24 Volt 750A	9.0 kW	18.0 kW

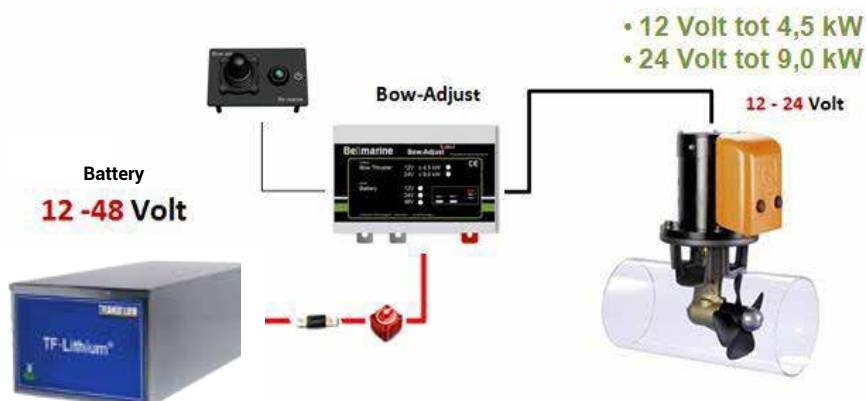
• If 2 controllers are ordered (Bow and Stern) a dual control panel can be supplied.



Additional Control Panels

• Each panel is supplied with 10 meters connection cable

Art. no:	DESCRIPTION	TYPE	
101553	Additional control panel	B-01	Single control panel for controlling a bow thruster from an additional location standard version (180 degrees adjustment)
101554	Additional control panel	B-02	Single control panel for controlling a bow thruster from an additional location finger tip version
101067	Additional dual control panel	C-20	Dual control panel for controlling a Bow and Stern thruster from a additional location
101068	Switch box double control		Automatic switch box to switch between the 2 control panels. Including 10 meters connection cables.



Battery LiFePO4

Based on lithium iron phosphate cells (LiFePO4), a technology that is safe and has the best performance/cost ratio, with integrated BMS to maintain the cells always equalized and efficient. Box is stainless steel IP66.

Long lifespan

- More than 4,000 cycles

The lifespan is 3 times longer than traditional batteries, making the cost per cycle lower. Maintenance-free, planned service is avoided, having no need of topping up or periodical checks. The conditions of the battery can be easily verified thanks to integrated diagnosis systems. No gas emissions during charge and discharge, so no special charging rooms are required. They may be charged at any place with maximum safety.

Suited for every application

Having no gas emissions, these batteries are suited also for marine and many industrial applications.

General Specifications

Capacity Ah	Contin. discharge A	Pulse discharger A	Continuous charge A	Pulse charge A	Operating Temperature °C	Box Material	Protection Class
100	100	200	50	100	0/60 (20/60 optional)	SS316	IP66
200	200	400	100	200			
300	300	600	150	300			
400	400	800	200	400			
600	600	1200	300	600			
800	800	1600	400	800			

51.2V

Energy kWh	Architecture	Dimension Single Box	Number Of Box	Total Weight
5.1	Single Element	300x788 h300	1	75 kg
10.3	Single Element	388x700 h330	1	125 kg
15.4	Single Element	610x950 h300	1	190 kg
20.5	Single Element	780x700 h330	1	246 kg
30.8	Parallel Element	388x700 h330	3	370 kg
41	Parallel Element	388x700 h330	4	430 kg



96V

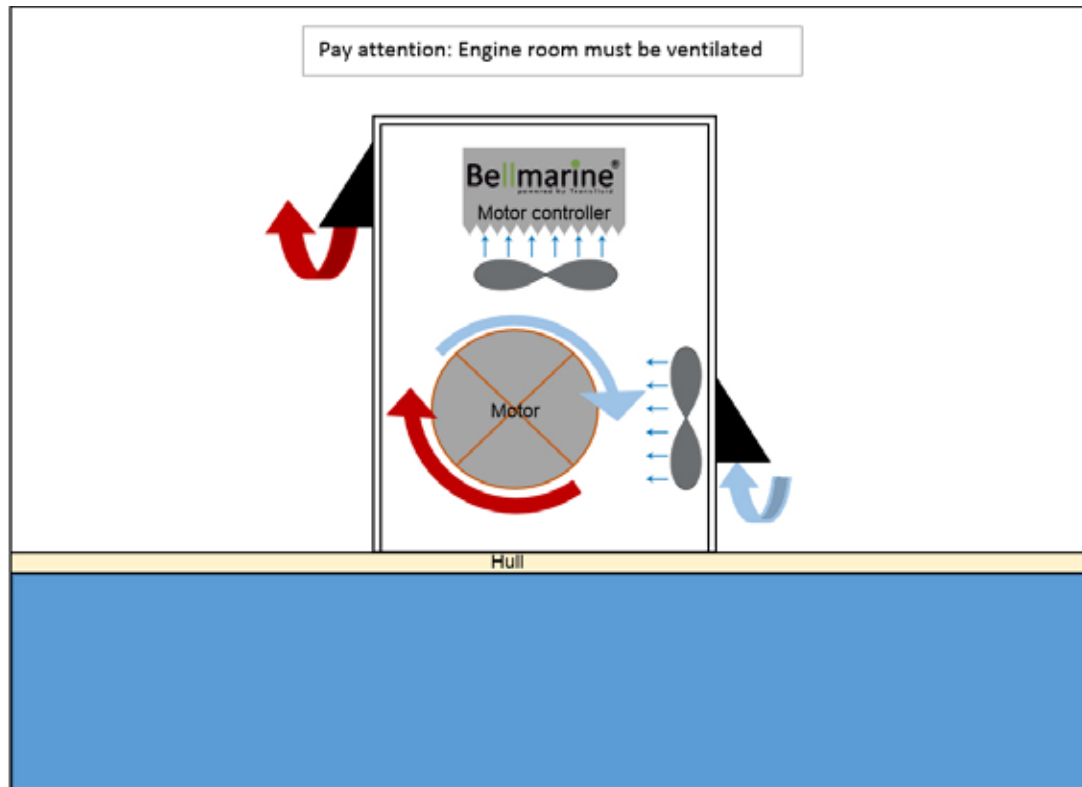
Energy kWh	Architecture	Dimension Single Box	Number Of Box	Total Weight
9.6	Single Element	470x850 h275	1	130 kg
19.2	Single Element	585x900 h355	1	220 kg
28.8	Parallel Element	470x850 h275	3	390 kg
38.4	Parallel Element	585x900 h355	2	440 kg
57.6	Parallel Element	585x900 h355	3	660 kg
76.8	Parallel Element	585x900 h355	4	880 kg

153.6V

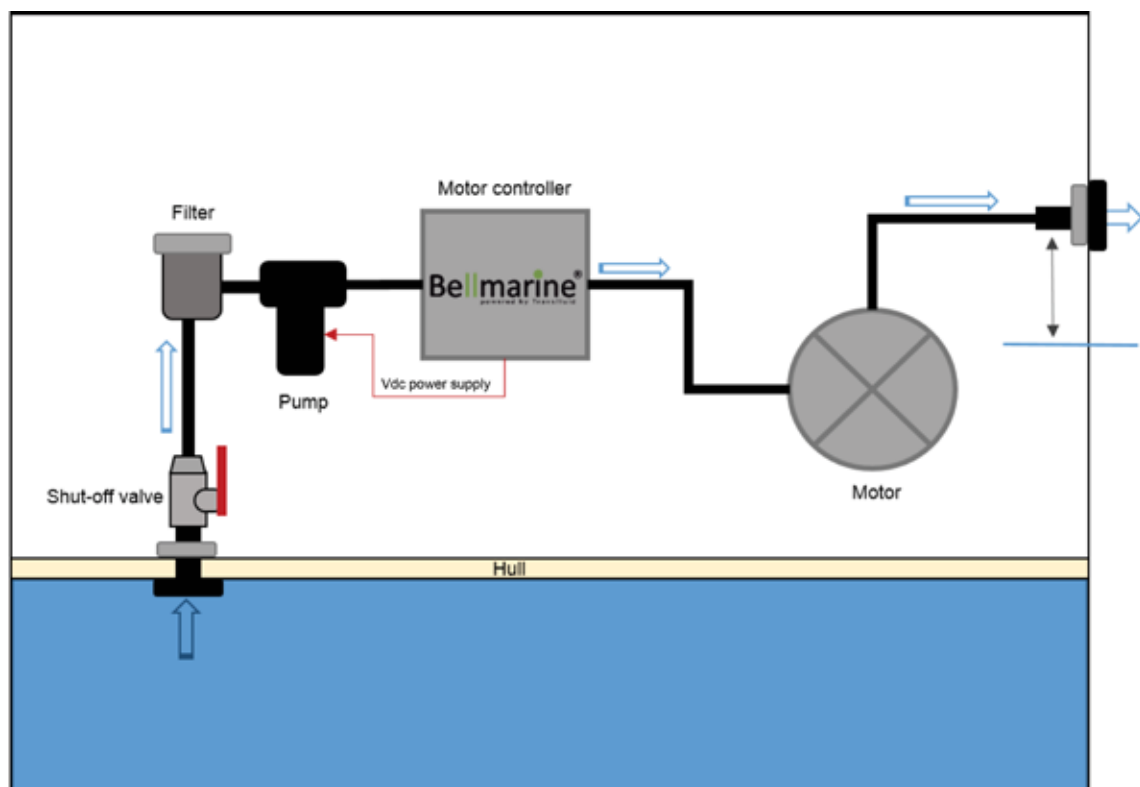
Energy kWh	Architecture	Dimension Single Box	Number Of Box	Total Weight
15.4	Single Element	650x900 h300	1	190 kg
30.8	Series Element	388x700 h330	3	375 kg
46.1	Series Element	610x950 h300	3	570 kg
61.4	Series Element	780x700 h330	3	738 kg
92.2	Series+Parallel Element	610x950 h300	6	1140 kg
122.9	Series+Parallel Element	780x700 h330	6	1476 kg

- in case of Transfluid batteries choice, it is mandatory to install the control levers on page 21
- for 288 V and 356 V battery pack, contact Transfluid

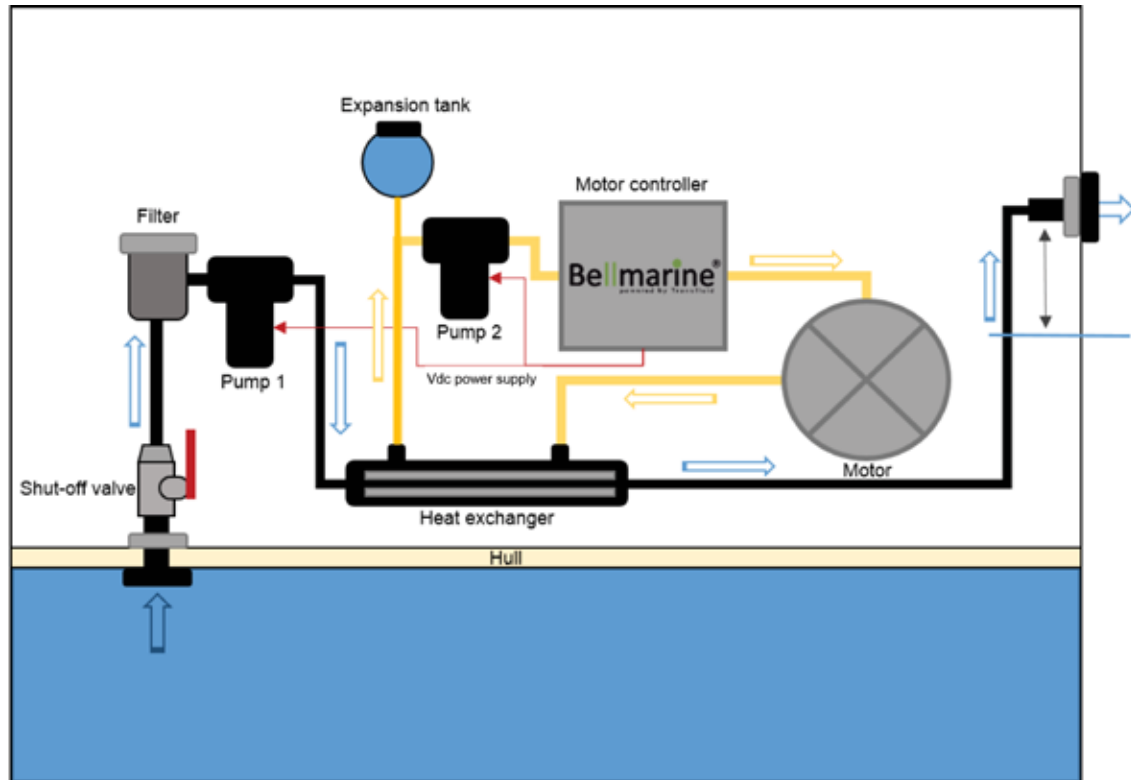
Example System Air-cooled:



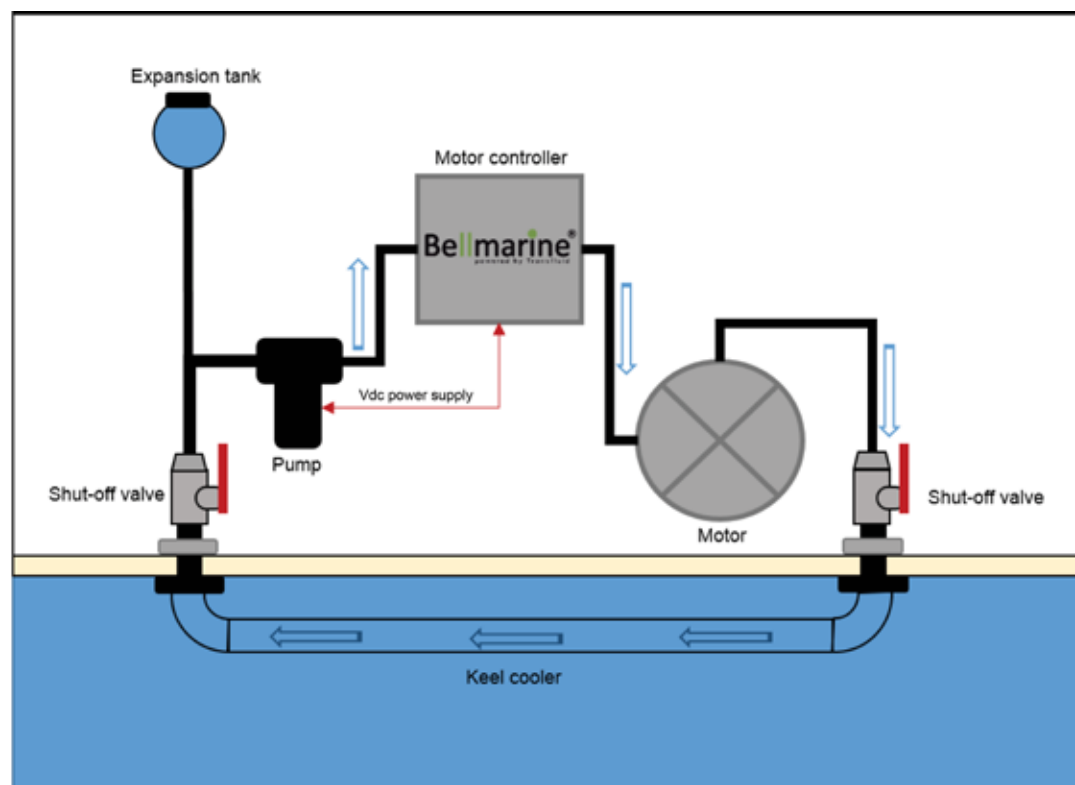
Example System Fresh Water-Cooled:



Closed Loop Liquid-Cooled:



Keel-Cooling Liquid-Cooled:



Bellmarine®

powered by Transfluid



Electric Boating starts at Bellmarine

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