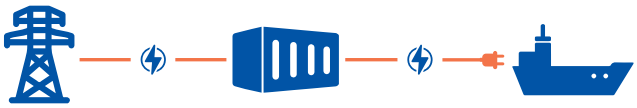
B-shore

ENSURING A SAFE AND RELIABLE SHORE POWER CONNECTION ANYWHERE IN THE WORLD

DAMEN

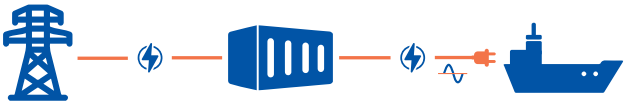
Flexible, class-approved shore connection products

**Connecting a vessel to shore power has many advantages, but what if the facility doesn't match the exact electrical power requirements of your vessel?
This problem led Damen, together with MC Energy, to develop the B-Shore power converter – a class-approved solution to match any shore facility to your vessel and ensure a connection to the shore power anytime, anywhere.
Our unique solution can be fastened on deck or installed at your home port.**



Shore voltage variations

The B-Shore power converter supports multiple voltage inputs and outputs. Simply by connecting the device to the available grid supply, the vessel has a safe electrical power supply. No high inrush currents, no hull damage, and worry-free power with optional battery energy storage through the ES-ready connector.



Regional power frequency differences

By using the B-Shore Static (B-Shore S) converter system, the difference in voltage level is solved but the different grid frequency, too. All features on the B-Shore power converter are available on the B-Shore Static converter as well.

Protecting your electrical system

The B-Shore Static range also protects your electrical system from drops in voltage level or frequency, which could over time severely damage equipment on board. By using the ES-ready option, it is easy to connect a battery energy storage facility to the B-Shore unit and keep all the critical applications up and running.

Sailing in 50Hz or 60Hz regions

The B-Shore product range supports multiple voltage inputs and outputs. But a more sophisticated solution is needed when shore power is mandatory. The B-shore S product range is ideal when it comes to establishing a reliable shore connection wherever your vessel is operating. And this includes the 60Hz grid frequency, commonly used in countries in the Americas.

Added value

- Converts voltage within a range of 380V – 480V;
- Changes frequency within a range of 50Hz – 60Hz;
- Balances an unstable shore power grid;
- Separates ship from shore and therefore eliminates risk of galvanic corrosion;
- Generator fuel savings.

Advantages

- Multiple connection voltages for worldwide grid coverage;
- Contributes to lowering emission footprint;
- Generator fuel savings;
- No hull damage thanks to galvanic isolation of both shore and ship's electrical system;
- Balances unstable shore power grid.

Available options

Four models are available (B-Shore 63A, B-Shore 125A and the B-Shore S 63A/125A). The B-Shore Static (S) models are Energy Storage (ES) ready.

- Parallel operation;
- Battery pack connection;
- Remote access;
- Grid balancing;
- Touchscreen control;
- Back-up power.

Swift delivery

Delivery available worldwide. Upon request we can offer a trial period with one of our stock containers.

Navigating to zero

Using the B-shore power converter instead of generators, contributes to lowering the emissions of your fleet. It also results in lower fuel consumption, less machine wear, less oil refreshments and less maintenance. A benefit to both your business and the environment.

"Benefits wherever your vessels operate in the world"

SPECIFICATIONS

B-Shore S model

	B-Shore S 63	B-Shore S 125
Input voltage range	3x 400V – 440V – 480V 50/60Hz	3x 400V – 440V – 480V 50/60Hz
Pre-selected output voltage	3x 400V – 440V – 480V	3x 400V – 440V – 480V
Frequency conversion	Yes (50 – 60Hz v.v.)	Yes (50 – 60Hz v.v.)
Rated output power	44kVA (@3x400V)	87kVA (@3x400V)
Galvanic isolation	Yes	Yes
Protection degree	IP54*	IP54*
Colour	RAL6037	RAL6037
HMI (Touch screen)	Yes	Yes
Enforced corrosion protection (diode)	Yes	Yes
Cooling	AF (forced cooled)	AF (forced cooled)
Anti condensation heating	Yes	Yes
3x Inom power boost	Yes	Yes
Anti vibration dampers	Yes	Yes
Lifting lugs	Yes	Yes
Rating plate	Yes	Yes
Suitable for ship application	Yes	Yes

Possible upgrades & expansions

Skid mounting + twist locks	Optional	Optional
Colour change to different RAL	Optional	Optional
Weak grid / ES prepared	Optional	Optional
Modbus communication	Optional	Optional
Parallel operation	Optional	Optional
Power quality measurement	Optional	Optional
Remote access	Optional	Optional
BV approval	Yes	Yes
Backup battery power	Optional	Optional

SPECIFICATIONS

B-Shore model

	B-Shore 63	B-Shore 125
Nominal input voltage	3x 400V 50/60Hz	3x 400V 50/60Hz
Input tappings	3x 380V - 440V – 480V	3x 380V - 440V – 480V
Nominal output voltage	3x 400V 50/60Hz	3x 400V 50/60Hz
Output tappings	3x 380V - 440V – 480V	3x 380V - 440V – 480V
Rated output power	44kVA (@3x400V)	87kVA (@3x400V)
Vector group	Dyn11	Dyn11
Galvanic isolated	Yes	Yes
Protection degree	IP54*	IP54*
Colour	RAL6037	RAL6037
Enforced corrosion protection (diode)	Yes	Yes
Anti condensation heating	Yes	Yes
Anti vibration dampers	Yes	Yes
Lifting lugs	Yes	Yes
Rating plate	Yes	Yes
Suitable for ship application	Yes	Yes

Possible upgrades & expansions

Pre-magnetizing (linrush <1x Inom)	Optional	Optional
Colour change to different RAL	Optional	Optional
BV approval	Optional	Optional

All systems are compliant with the following standards & directives: IEC-60364, Low voltage directive 2014/35/EU, IEC60076, EMC directive 2014/30/EU, RoHS2
Please note that not all options are available or integrated in the selected model. Please consult your authorized dealer for detailed information about the availability and combination of different options. The above stated specifications may vary from the model you have purchased.
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*Upgrade possible to IP55 with additional mist eliminator.

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