

When you wish to stay connected

Whether you are looking for a safe connection with the electricity grid or would like to automatically select the right energy source, Mastervolt has the solution. With our extensive range of high quality grid connections, cables, isolating transformers and transfer systems, a seamless power supply is guaranteed.

MASTERVOLT



AC TRANSFER SYSTEMS

A Mastervolt transfer system regulates the power supply from various energy sources and automatically selects the right source at the right time.

134 MASS SYSTEMSWITCH

Complete system solution up to 16 kW, with automatic transfer system to prevent damage to your inverter. MasterBus compatible and also suitable for systems from other brands.

134 MASTERSWITCH

The Masterswitch has two AC inputs and one or two outputs up to 25 kW. Model with automatic fuse available.

ISOLATION TRANSFORMERS

Professional galvanic isolation prevents corrosion of metal parts and enhances safety. Mastervolt's isolation transformers help protect your valuable investment and provide solid earthing.

138 MASS GI

Lightweight and highly compact with a high yield and low heat generation. With Soft Start function and parallel switching for higher capacities.

138 IVET

High-quality isolation transformers for built-in installation, suitable for capacities from 2.5 kW to 22 kW. Also available with Soft Start and automatic transfer system.

RECOMMENDED FOR:



RECOMMENDED FOR:



RECOMMENDED FOR:



RECOMMENDED FOR:



Connect



POWER CABLES AND ADAPTERS

Mastervolt provides a comprehensive range of products for high-quality connections to the grid with a focus on safety, reliability and ease of installation.

141 POWER CABLES, EXTENSION CABLES

Wear-proof, UV-proof and equipped with integrated plugs. The power cables feature integrated LED power indicators. Available in lengths of 15 and 25 metres.

141 GRID CONNECTIONS

Mastervolt's stylish and easy-to-install stainless steel grid connections are available for 16 A/230 V and 32 A/230 V.

141 ACCESSORIES

Mastervolt offers various accessories to complement your cables, including plug adapters and splitters, with or without power indicators. The 16 A power cables are supplied in a stylish bag with leather handles (also available separately).

RECOMMENDED FOR:



RECOMMENDED FOR:



RECOMMENDED FOR:



Mastervolt Transfer Systems: Manages AC Power Sources

A Mastervolt transfer system forms the heart of your AC system and regulates the power supply from the electricity grid, generator or inverter. It also automatically selects the right energy source at the right time.

Mass Systemswitch: The complete system solution

The Mass Systemswitch automatically transfers three available AC power sources to the right outputs. As well as providing more comfort on board, the automatic transfer also has a safety function: the transfer relay prevents short-circuiting between the various AC sources. The Mass Systemswitch 10 and 16 each have four outputs: 'generator only', 'power', 'shortbreak' and 'inverter only', while the Mass Systemswitch 6 has three outputs: 'power', 'shortbreak' and 'inverter only'.

- Three AC inputs; for example inverter, grid power and generator.
- Three or four outlets to AC power groups.
- Automatic switching.
- Power transfer from 4.5 kW to 16 kW, input/output from 25 to 63 A.
- Information source for central energy management via MasterBus network.
- MasterBus compatible.

Masterswitch: The simple solution

Masterswitch offers you the choice of two energy sources, such as the inverter or grid power, with one of the inputs always having priority. The Masterswitch is available in multiple capacities, and all models are suitable for use with a generator by means of an adjustable transfer delay.

- Two AC inputs; for example grid power and inverter.
- Adjustable transfer delay for generators.
- One outlet to AC power group.
- Automatic switching.
- Power transfer up to 25 kW, input/output from 20 to 125 A.

QUOTE

"When we evaluate a potential supplier for one of our custom built yachts, we value technical excellence, innovation capabilities, reliable solutions and world class global service capabilities. After working with Mastervolt for more than 20 years, we at Baltic Yachts are confident about Mastervolt's ability to deliver on all these points."

**OLAV AHLÖ, PURCHASER ELECTRICAL EQUIPMENT
BALTIC YACHTS OY AB LTD., FINLAND**





Smart Electronics

The intelligent electronics control the switching to ensure an optimal energy management. Its double pole relay is durable and extremely safe.

LED indications on Systemswitch



Read-out of the basic functions on the display, including indication of available power source, generator, grid power or inverter and 'load on inverter' function.

Central Energy Management



The EasyView 5 with intuitive controls and color touchscreen shows key system information at a glance. Provided with a multi-language menu, the home button gives easy access to your favorite pages. System alerts and alarms are tracked through the logbook feature.



Suitable for MasterBus



As the Mass Systems switch is suitable for MasterBus, all information can also be read-out on, for instance, a EasyView display, including the status of the charge current and the inverter.



Specifications AC Transfer Systems



	Mass Systems switch 16 kW	Masterswitch 5 kW	Masterswitch 3 kW	Masterswitch 10 kW
Product code 230 V	55008205	55006010		55006015
Product code 120 V			55106000	
GENERAL SPECIFICATIONS				
Nominal input voltage	230 V (50/60 Hz)	230 V (50/60 Hz)	120 V (60/50 Hz)	230 V (50/60 Hz)
Input voltage range	200-250 V AC	200-250 V AC	100-125 V AC	200-250 V AC
Number of inputs	3	2	2	2
Number of outputs	4	1	1	1
Dimensions, hxxwxd	340 x 261 x 144 mm 13.4 x 10.3 x 5.7 inch	200 x 110 x 115 mm 7.9 x 4.3 x 4.5 inch	200 x 110 x 115 mm 7.9 x 4.3 x 4.5 inch	200 x 110 x 115 mm 7.9 x 4.3 x 4.5 inch
Weight	5 kg / 11 lb	1.2 kg / 2.6 lb	1.2 kg / 2.6 lb	1.3 kg / 2.9 lb
TECHNICAL SPECIFICATIONS				
Connection for remote control	yes	no	no	no
MasterBus compatible	yes	no	no	no
LED indication on cabinet	indication voltage sources present and 'load on inverter' mode	no	no	no
Nominal input current generator	63 A	20 A	25 A	40 A
Nominal input current grid	40 A	20 A	25 A	40 A
Nominal input current inverter	25 A	n.a.	n.a.	n.a.
Earth leakage switch	no	n.a.	n.a.	n.a.
Generator input switch	continuous monitoring of voltage and frequency	no	no	no
Time delay generator input	0-10 sec (adjustable)	0-10 sec (adjustable)	0-10 sec (adjustable)	0-10 sec (adjustable)
Nominal current shortbreak output	25 A	n.a.	n.a.	n.a.
Nominal current power output	40 A	20 A	20 A	40 A
Nominal current generator output	63 A	n.a.	25 A	n.a.
Automatic circuit breakers	no, system dependent	no, system dependent	no, system dependent	no, system dependent
Power consumption (AC all inputs)	33 W	7 W	7 W	7 W
Power consumption (only inverter power)	<1 W	0 W	0 W	0 W
Temperature range (specified)	-5 °C to 60 °C / 23 °F to 140 °F			
Temperature range (allowed)	-25 °C to 70 °C / -13 °F to 158 °F (may not meet the specified tolerancies)			
Temperature range (storage/non operating)	-60 °C to 80 °C / -76 °F to 176 °F			
Relative humidity	max. 95 %, non condensing			
Transfer time	switch on 12-22 ms / switch off 4-19 ms			
Frequency watch	yes	no	no	no
Cable size	0.5-10 mm ² / AWG 20-7, remote control: 0.14-2.5 mm ² / AWG 26-13	0.5-10 mm ² / AWG 20-7	0.5-10 mm ² / AWG 20-7	0.5-10 mm ² / AWG 20-7
Protection degree	IP23	IP55	IP55	IP55

Advantages of the Mastervolt transfer system

- Activating and selecting 230 V sources: Grid power, inverter and generator (adjustable to amperage of grid power, for instance 6 A).
- Prevents parallel connection between inverter and other 230 V sources, avoiding damage to the inverter.
- Fully compatible with Mastervolt systems, and suitable for installations from other brands, other generators and/or inverters.

CHECK THE MASTERVOLT SITE FOR
 INTERESTING REAL-LIFE SYSTEMS:
MASTERVOLT.COM/REFERENCES
 AND
 EXTENDED *TECHNICAL BACKGROUND*
 ON OUR PRODUCTS:
MASTERVOLT.COM/TECHNICAL-BACKGROUND

TRANSFER SYSTEMS
 MASS SYSTEMSWITCH
 MASTERSWITCH



**Masterswitch
7 kW**

**Masterswitch
25 kW**

55003500

55106100

120 V (60/50 Hz)	230 V (50/60 Hz)
100-125 V AC	200-250 V AC
2	2
1	1
200 x 154 x 148 mm 7.9 x 6.1 x 5.8 inch	291 x 241 x 168 mm 11.5 x 9.5 x 6.6 inch
2.5 kg / 5.5 lb	3.8 kg / 8.4 lb
no	no
no	no
no	no
60 A	125 A
60 A	125 A
n.a.	n.a.
n.a.	n.a.
no	no
0-10 sec (adjustable)	0-10 sec (adjustable)
n.a.	n.a.
40 A	125 A
60 A	n.a.
no, system dependent	no, system dependent
7 W	26 W
0 W	0 W
-5 °C to 60 °C / 23 °F to 140 °F	
-25 °C to 70 °C / -13 °F to 158 °F (may not meet the specified tolerances)	
-60 °C to 80 °C / -76 °F to 176 °F	
max. 95 %, non condensing	
switch on 12-22 ms / switch off 4-19 ms	
no	no
0.5-10 mm ² / AWG 20-7	4-50 mm ² / AWG 10-1/0
IP55	IP55



A safe connection between grid power and your onboard network

A safe connection between vessel and shore installation is an essential part of your electrical system. A galvanic electrical isolation between shore power and the on board power prevents any electrical corrosion of metal parts while keeping you earthed.

Both the unique HF technology-based Mass GI and the reliable 50 Hz transformer-based IVET series offer you complete protection against galvanic corrosion.

Select the right transformer for your system:

Lightweight Mass GI Transformer

The Mass GI is supplied with the latest high-frequency switching technology as well as Soft Start for peak loads when connecting to the grid.

- Ultra modern high-frequency electronic switch technology.
- Lightweight and compact.
- Integrated Soft Start function.
- Connect to voltages from 90 to 255 V and from 45 to 65 Hz.
- Units can be parallel coupled for higher capacity.
- Higher efficiency, limited heat development.

IVET Heavy-duty Series

High-output E-core isolation transformer without casing, for self installation. The product is multi tap, meaning you can handle 120/230/240 V going in and out.

- High-quality isolation transformers without casing for self installation (casing is optional).
- Optional Soft Start, in synthetic casing.
- Capacities of 2.5 kW to 22 kW.

QUOTE

"At the request of the owners, this Lemsteraak has been kept as green as possible. That's why we opted for a full hybrid vessel with a relatively light engine. Mastervolt's Lithium Ion batteries fit this solution perfectly thanks to their low weight and high power. The electric system, with electrically operated winches and sails, is based entirely on CZone MasterBus so that all components can easily be switched, linked and monitored."

**CHRIS BEUKER, CHRIS BEUKER MARITIEM
GRONINGEN, THE NETHERLANDS**





Soft Start for the IVET heavy-duty series

The Soft Start automatic switch suppresses the inrush current from the transformer and prevents the fuse from blowing. Mastervolt recommends to install the IVET heavy-duty isolation transformer with Soft Start.

Automatically adjust the grid power



Mastervolt supplies three automatic switching systems for capacities of 6, 9 and 13 kW that - combined with an IVET transformer - adjust grid power to the onboard system. As a result, a 230 V/50 Hz system can easily function with an American or Caribbean AC connection. Do ensure that the frequency on board (50 or 60 Hz) is the same as the frequency of the incoming current.

Modern transformer technology: Light, silent, reliable and easy

The Mass GI is supplied with the latest high-frequency switching technology as well as Soft Start for peak loads when connecting to the grid. LED lights on the casing indicate load and overload. The transformer can be remotely monitored via a MasterBus compatible display (EasyView 5). The Mass GI is 75 % lighter and 60 % smaller compared to low frequency transformers.

Higher capacity via parallel switching

Parallel switching of the Mass GI units increases the AC power capacity. Two 16 A/3.5 kW units ensures 32 A/7 kW, four units give 64 A/14 kW.

Install anywhere

With its robust aluminium casing, the Mass GI isolation transformer can be fitted in any position on wall or floor. No rubber mountings are necessary because the unit does not vibrate or hum. The Mass GI also features professional connections with strain relief cable glands.

MASTER TIP

- Determine AC power and onboard current: 230 V, 120 V or both?
- Determine the capacity: maximum load with onboard power usage = amount of amps and kW.



Specifications Isolation Transformers



Mass GI 3.5

Mass GI 7

IVET 3.5

IVET 4.5

IVET 6

Product code	88000355	88000705	85000350	85000450	8500060
Product code with casing					
INPUT					
Input voltage	90-255 V	90-255 V	110/220/240 V	110/220/240 V	110/220/240 V
Input frequency	45-65 Hz	45-65 Hz	45-65 Hz	45-65 Hz	45-65 Hz
Nominal input current at 230 V	16 A	32 A	16 A	20 A	26 A
No-load consumption	22 W	44 W	< 10 W	< 10 W	< 10 W
Earth leakage protection	no	no	no	no	no
OUTPUT					
Output voltage (± 5 %)	90-255 V	90-255 V	120/220/240 V	120/220/240 V	120/220/240 V
Output frequency	45-65 Hz	45-65 Hz	45-65 Hz	45-65 Hz	45-65 Hz
Soft Start	yes	yes	option	option	option
Switch off behaviour breaker	B-characteristic	B-characteristic	n.a.	n.a.	n.a.
Efficiency	> 93 %	> 93 %	> 93 %	> 93 %	> 93 %
GENERAL SPECIFICATIONS					
Power	3500 W (up to 4 units parallel = 14 kW)	7000 W	3500 W	4500 W	6000 W
Technology	high frequency	high frequency	E-core	E-core	E-core
Dimensions, hwxwd	340 x 261 x 144 mm 13.4 x 10.3 x 5.7 inch	340 x 261 x 250 mm 13.4 x 10.3 x 9.8 inch	330 x 200 x 185 mm 13 x 7.9 x 7.3 inch	330 x 240 x 185 mm 13 x 9.4 x 7.3 inch	380 x 240 x 215 mm 15 x 9.5 x 8.5 inch
Weight	6 kg / 13.2 lb	10 kg / 22 lb	30 kg / 66.1 lb	35 kg / 77.2 lb	49 kg / 108 lb
Approvals	CE, ABYC	CE, ABYC	CE, ABYC	CE, ABYC	CE, ABYC
Ambient temperature	0 °C to 40 °C, derating power > 40 °C	0 °C to 40 °C, derating power > 40 °C	0 °C to 40 °C, derating power > 40 °C	0 °C to 40 °C, derating power > 40 °C	0 °C to 40 °C, derating power > 40 °C
Switch off at	80 °C	80 °C	n.a.	n.a.	n.a.
Cooling	variofan	variofan	natural cooling	natural cooling	natural cooling
Operating humidity	max. 95 %	max. 95 %	max. 95 %	max. 95 %	max. 95 %
Protection degree	IP23	IP23	IP00	IP00	IP00
MasterBus compatible	yes	yes	no	no	no

ACCESSORIES	EasyView 5 77010310	option	option	n.a.	n.a.	n.a.
	<i>Waterproof system monitor with 'daylight readable' colour display and intuitive multi-language touchscreen to show the key system information at a glance. There is also a logbook feature for warnings and alarms, along with a buzzer and alarm notifications. The home button gives access to favorite pages.</i>					
	Soft Start 13 kW 55003300	included	included	option	option	option
<i>Automatic switch that suppresses the inrush current from the isolation transformer to prevent the shore power fuse from blowing.</i>						
	Soft Start 22 kW 55003400	included	included	n.a.	n.a.	n.a.
<i>Automatic switch that suppresses the inrush current from the isolation transformer to prevent the shore power fuse from blowing.</i>						

Specifications Transfer systems with Soft Start and automatic detection of the input voltage



6 kW

9 kW

13 kW

**Soft Start
13 kW**

**Soft Start
22 kW**

Product code	55010600	55010900	55011300	55003300	55003400
Voltage	120/230 V	120/230 V	120/230 V	230 V	230 V
Power	6 kW	9 kW	13 kW	2.5-13 kW	13-22 kW
Max. input current	60 A at 120 V 30 A at 230 V	80 A at 120 V 40 A at 230 V	130 A at 120 V 70 A at 230 V	n.a.	n.a.
Dimensions, hwxwd	400 x 300 x 210 mm 15.7 x 11.8 x 8.3 inch	400 x 300 x 210 mm 15.7 x 11.8 x 8.3 inch	400 x 300 x 210 mm 15.7 x 11.8 x 8.3 inch	200 x 180 x 115 mm 7.9 x 7.1 x 4.5 inch	200 x 180 x 115 mm 7.9 x 7.1 x 4.5 inch
Weight	12 kg / 26.5 lb	12.5 kg / 27.6 lb	13 kg / 28.7 lb	1.2 kg / 2.6 lb	1.5 kg / 3.3 lb

				
IVET 8	IVET 10	IVET 13	IVET 18	IVET 22
85000800	85001000 86001000	85001300	85001800	85002200
110/220/240 V	110/220/240 V	110/220/240 V	110/220/240 V	110/220/240 V
45-65 Hz	45-65 Hz	45-65 Hz	45-65 Hz	45-65 Hz
35 A	44 A	57 A	78 A	96 A
< 10 W	< 10 W	< 10 W	< 10 W	< 10 W
no	no	no	no	no
120/220/240 V	120/220/240 V	120/220/240 V	120/220/240 V	120/220/240 V
45-65 Hz	45-65 Hz	45-65 Hz	45-65 Hz	45-65 Hz
option	option	option	option	option
n.a.	n.a.	n.a.	n.a.	n.a.
> 93 %	> 93 %	> 93 %	> 93 %	> 93 %
8000 W	10 kW	13 kW	18 kW	22 kW
E-core	E-core	E-core	E-core	E-core
430 x 280 x 210 mm 16.9 x 11 x 8.3 inch	430 x 280 x 240 mm 16.9 x 11 x 9.5 inch	490 x 320 x 230 mm 19.3 x 12.6 x 9 inch	490 x 320 x 260 mm 19.3 x 12.6 x 10.2 inch	490 x 320 x 290 mm 19.3 x 12.6 x 11.4 inch
59 kg / 130 lb	75 kg / 165.4 lb	90 kg / 198.4 lb	110 kg / 242.5 lb	130 kg / 286.6 lb
CE, ABYC	CE, ABYC	CE, ABYC	CE, ABYC	CE, ABYC
0 °C to 40 °C, derating power > 40 °C	0-40 °C, derating power > 40 °C	0 °C to 40 °C, derating power > 40 °C	0 °C to 40 °C, derating power > 40 °C	0 °C to 40 °C, derating power > 40 °C
n.a.	n.a.	n.a.	n.a.	n.a.
natural cooling	natural cooling	natural cooling	natural cooling	natural cooling
max. 95 %	max. 95 %	max. 95 %	max. 95 %	max. 95 %
IP00	IP00	IP00	IP00	IP00
no	no	no	no	no
n.a.	n.a.	n.a.	n.a.	n.a.
option	option	option	n.a.	n.a.
n.a.	n.a.	option	option	option

CHECK THE MASTERVOLT SITE FOR
 INTERESTING REAL-LIFE SYSTEMS:
MASTERVOLT.COM/REFERENCES
 AND
 EXTENDED TECHNICAL BACKGROUND
 ON OUR PRODUCTS:
MASTERVOLT.COM/TECHNICAL-BACKGROUND



In addition to Mastervolt isolation transformers, we also supply ProMariner galvanic isolators, the ProSafe series.

For more information, please consult the ProMariner product catalogue and website.

ProMariner™
 PROMARINER.COM



Electrical Cables and Adapters: Your life line to the grid

A safe and carefree power connection is your ticket to a comfortable and smooth onboard experience during your stay. The 230 V grid is the source to run your appliances and charge the batteries. Mastervolt offers you everything you need for a high quality grid connection, with safety, security and performance given the highest priority.

Practical tips

- Based on the maximum load for onboard power consumption, choose either a 16 A or a 32 A connection.
- For high loads choose multiple parallel connections to the grid.
- Choose the appropriate connection: Standard is an earthed two-pole plug or the more familiar blue CEE three-pole plug.

You need:

- Cable between the grid and application: Industrial, electric triple-core cable with European colour coding (brown, blue, yellow/green) with a thick synthetic sheath.
- An onboard connection: Perfectly protected easy lock system for grid power plug.
- Required safety measures.
- Shore Fix fuse/earth leakage circuit breaker; basic fuse between AC plug and onboard system (product code 124001000).
- High or low frequent isolation transformer (page 132). The safest solution for complete isolation of your network and the grid; prevents corrosion via electrolysis.



QUOTE

"Mastervolt's level of quality, innovation and design impressed us immediately. Our sales associates embraced the brand and the products began to gain recognition throughout the US marine industry. The Sales & Engineering Teams are 'Best in Class' and continue to produce 'Best in Class' products which my team is proud to sell."

**KEVIN OSBORN, VICE PRESIDENT
WEST MARINE / PORT SUPPLY, USA**



■ 16 A models



Power Cable

Product code 15 m 121160150
Product code 25 m 121160250

- UV-proof and wear-proof
- Moulded plugs
- Integrated LED power indicator
- 2.5 mm²
- Delivered in sturdy canvas bag with leather handles.



Extension Cable

Product code 15 m 121160151
Product code 25 m 121160251

- UV-proof and wear-proof
- Moulded plugs
- Integrated LED power indicator
- 2.5 mm²



RVS Inlet

Product code 121160000

- 230 V



Adapter CEE 7/7 - CEE

Product code 121160900

- From CEE-7/7 to CEE plug
- UV-proof and wear-proof
- Integrated LED power indicator



Adapter CEE - CEE 7/7

Product code 121160910

- From CEE to CEE-7/7 plug
- UV-proof and wear-proof



Splitter for CEE Plug

Product code 121160920

- UV-proof and wear-proof
- Integrated LED power indicator

■ 32 A model



RVS Inlet

Product code 121320000

- 230 V

■ 25 A model



Power Cable

Product code 25 m 121320250

- UV-proof and wear-proof
- Moulded plugs
- Integrated LED power indicator
- 4 mm²

ACCESSORIE



Mastervolt carrying case
121160930
Sturdy canvas bag with leather handles.



In addition to Mastervolt cables, we also offer an extensive range of Ancor cables.

For more information, please consult the Ancor product catalogue and website.

ANCOR

ANCORPRODUCTS.COM



In addition to the Mastervolt power connections, we also supply the complete Maringo product range.

For more information, please consult the Maringo product catalogue and website.

MARINCO

MARINCO.COM