

VOTRONIC

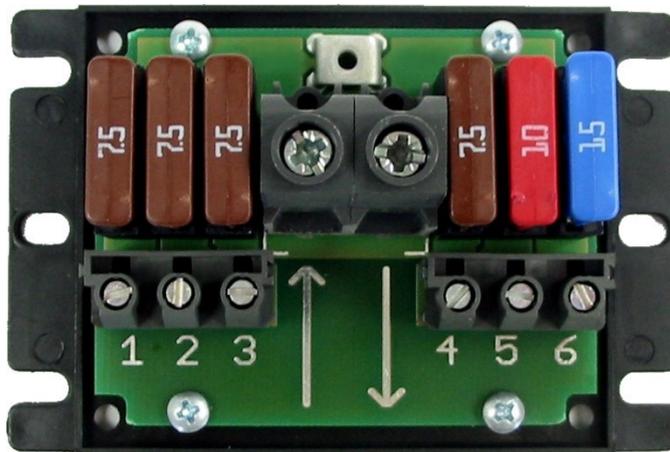
Installation and Operating Manual

Plus Distributor 6	With Upper Housing	12 V / 24 V	No. 3203
Minus Distributor 12	With Upper Housing	12 V / 24 V	No. 3208

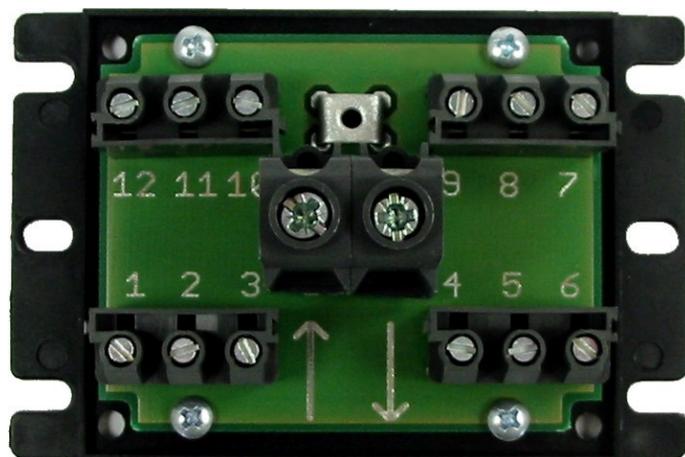
The Votronic Plus Distributor 6 and Minus Distributor 12 are designed for the correct wire connection of 12 V and 24 V electric circuits in caravans, campers, boats and intervention vehicles.



Please read the Safety Regulations, mounting instructions and operating manual completely prior to starting connection and start-up.



Plus Distributor 6 (Interior view)



Minus Distributor 12 (Interior view)

Plus Distributor 6

Distribution and protection of separate electric circuits on the plus side of the battery.

Efficient plus distributor with 6 fuse-protected outputs.

From one of the large collective terminal screws a cable is led to the positive pole of the battery over the shortest possible distance (see connection plan).

The different consumers have to be connected to the smaller distributor terminal screws.

The standard delivery includes car flat plug fuses with the current intensities 15 A, 10 A, 7.5 A, 7.5 A, 7.5 A and 7.5 A.

The individual fuse holders are suitable for car fuses up to **max. 20 A**, but the total charge by the consumers (total of the connected current rates) must not exceed the maximum total current rate.

For smaller consumers, application of fuses with smaller current intensities, such as 1 A, 3 A, 5 A, or the like are also possible and recommended.

Terminal Screws	Cable Cross-Sections	Admissible Current Rates	Fuse Rate
2 Large Terminals Plus Side	6 mm ²	max. 36 A Total Current	--
	10 mm ²	max. 50 A Total Current	--
	16 mm ²	max. 50 A Total Current	--
6 Small Terminals Consumer Side No. 1-6	1 mm ²	max. 6 A	max. 5 A
	1.5 mm ²	max. 10 A	max. 10 A
	2.5 mm ²	max. 15 A	max. 15 A
	4 mm ²	max. 20 A	max. 20 A



The total value of all consumer current rates must not exceed the maximum admissible current rate of the large collective terminals including the connected connection cables!

Minus Distributor 12

Distribution / Junction of separate electric circuits on the minus side of the battery.

Arrangement to the minus distribution (ground distribution), particularly in case of insulating vehicle bodies. The two solid terminal screws in the middle also allow distribution of powerful ground cables or double earthing.

From one of the large terminal screws a cable is led to the vehicle ground or the negative pole of the battery over the shortest possible distance.

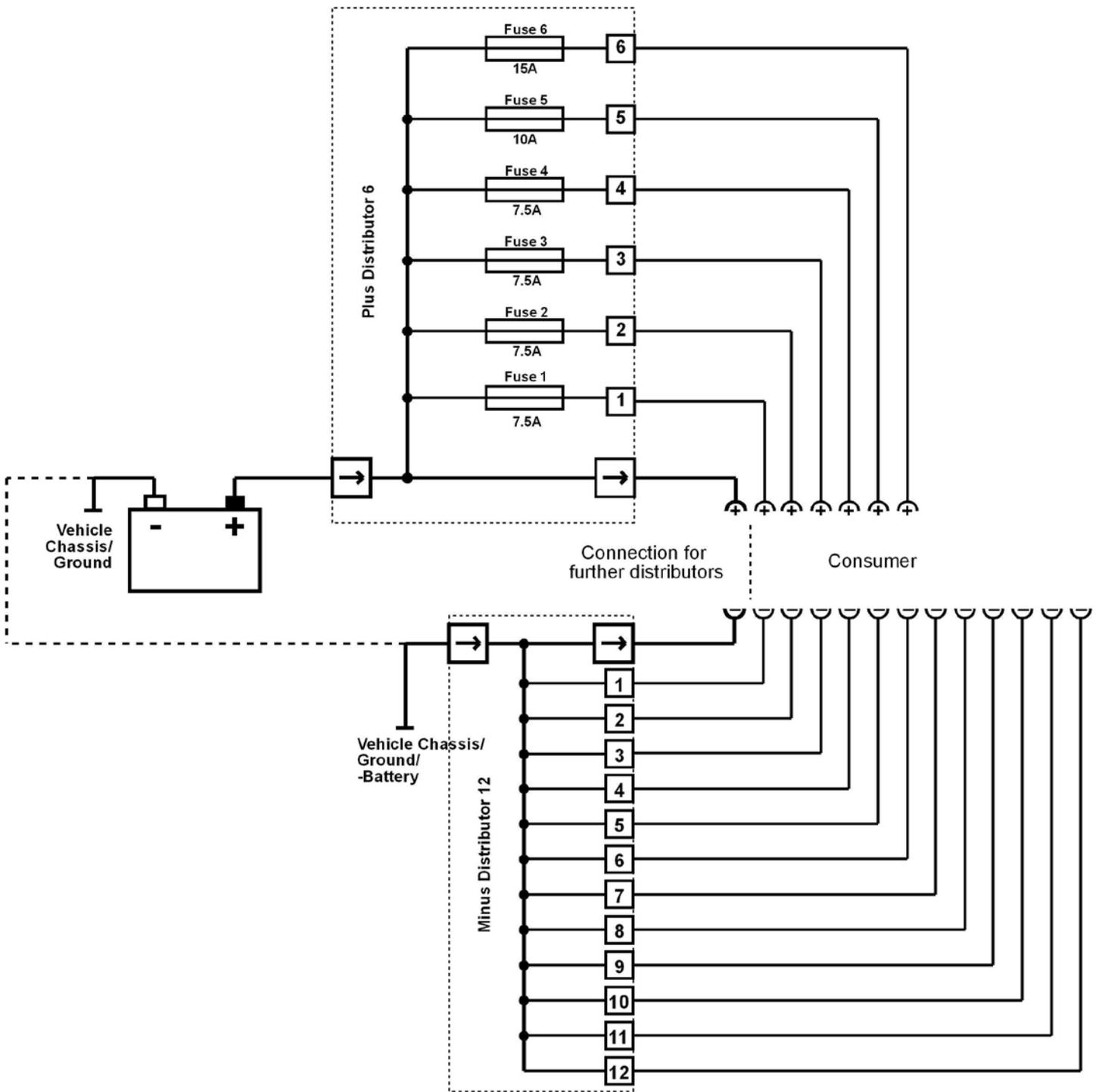
The different consumers have to be connected to the smaller terminal screws.

Terminal Screws	Cable Cross-Sections	Admissible Current Rates
2 Large Terminals Ground Side	6 mm ²	max. 36 A Total Current
	10 mm ²	max. 50 A Total Current
	16 mm ²	max. 50 A Total Current
12 Small Terminals Consumer Side No. 1-12	1 mm ²	max. 6 A
	1.5 mm ²	max. 10 A
	2.5 mm ²	max. 15 A
	4 mm ²	max. 20 A



The total value of all consumer current rates must not exceed the maximum admissible current rate of the large terminals including the connected connection cables!

Connection Plan:



Note: Depending on the mounting situation, the Minus Distributor 12 can be connected directly to the vehicle ground. In case of insulating vehicle bodies it can be connected directly to the negative pole of the battery.



Safety Regulations:

Appropriate Application:

Application of the distributors is restricted to electric circuits with 12 Volts or 24 Volts board mains supply. Appropriate application is restricted to:

1. Consideration of the total current load and the required cable cross-sections.
2. Technically faultless condition.
3. Installation in a well-ventilated room, protected from rain, humidity, dust, aggressive battery gas, as well as in an environment being free from condensation water.
4. **Never use the unit at locations where the risk of gas or dust explosion exists!**
 - Open-air operation of the unit is not allowed.
 - Cables are always to be laid in such a way that damage is excluded. Observe to fasten them tightly. Never lay 12 V (24 V) cables and 230 V mains supply cables into the same cable conduit (empty conduit).
 - Check live cables or leads periodically for insulation faults, points of break or loosened connections. Occurring defects must be remedied immediately.
 - If the non-commercial end-user is not able to recognize the characteristic values being valid for a unit or the regulations to be observed, a specialist is always to be consulted.
 - The user/buyer is obliged to observe any construction and safety regulations.
 - Keep children away from batteries and connections.
 - Observe the safety regulations of the battery manufacturer.
 - Non-observance may result in injury or material damage.
 - The warranty period is 36 months from the purchase date (against presentation of the sales slip or invoice).
 - The warranty will be void in case of any inappropriate utilisation of the unit, if it is used beyond the technical specification, in case of improper operation or external intervention. We do not assume any liability for any damage resulting hereof. The liability exclusion is extended to any service being executed by third, which has not been ordered by us in writing. Service is to be effected exclusively by VOTRONIC, Lauterbach/GERMANY.



Declaration of Conformity:

In accordance with the provisions of the statutory requirements and the relevant directives, Electrical Equipment (Safety) Regulations 2016, Electromagnetic Compatibility Regulations 2016, The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 this product complies with the following standards or normative documents:

EN55014-1; BS EN61000-6-1; BS EN61000-4-2; BS EN61000-4-3; BS EN61000-4-4; BS EN62368-1; BS EN60335-2-29; BS EN50498, BS EN IEC 63000.



Declaration of Conformity:

In accordance with the provisions of Directives 2014/35/EU, 2014/30/EU, 2009/19/EC, this product complies with the following standards or normative documents:

EN55014-1; EN61000-6-1; EN61000-4-2; EN61000-4-3; EN61000-4-4; EN62368-1; EN50498.



The product must not be disposed of in the household waste.



The product is RoHS compliant. It complies with the directive 2015/863/EU for Reduction of Hazardous Substances in electrical and electronic equipment.

Quality Management System
DIN EN ISO 9001



Recycling:

At the end of its useful life, you can send us this device for professional disposal: You can find more information about this on our website at www.votronic.de/recycling

Delivery Scope Plus Distributor 6:

1 Distributor
1 Installation and Operating Manual

Delivery Scope Plus Distributor 12:

1 Distributor
1 Installation and Operating Manual

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