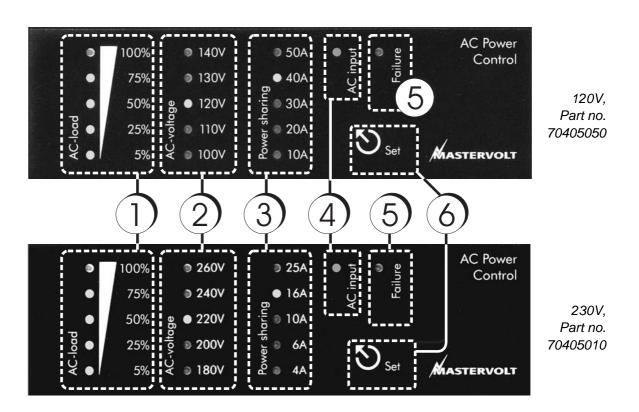
MASTERVOLT

USERS MANUAL

Remote APC

120V / 230V

AC POWER CONTROL





REMOTE APC ENGLISH

PRODUCT DESCRIPTION

The APC is designed to read out the actual AC status of the Mass Combi and to limit the input current to prevent the external AC fuse from an overload situation. A remote connection cable (6m) is included with the delivery.

SAFETY REGULATIONS AND MEASURES

- 1. Install the Remote APC according to the stated instructions.
- 2. Only allow changes in your electrical system to be carried out by qualified electricians.
- 3. Connections and safety features must be executed according to the locally applicable regulations.
- 4. Do not work on the Mass Combi and/or the electrical installation if it is still connected to the external AC or DC.

GUARANTEE TERMS

Mastervolt guarantees that the Remote APC has been built according to the legally applicable standards and stipulations. If you fail to act in accordance with the regulations, instructions and stipulations of this user's manual, damage can occur and/or the unit will not fulfill the specifications. This may mean that the guarantee will become null and void.

The standard period is 2 years.

LIABILITY

Mastervolt cannot be held liable for:

- Consequential damage resulting from the use of the Remote APC.
- Possible errors in the included manual and the consequences of these.
- Use that is inconsistent with the purpose of the product.

INSTALLATION

(see also the user's manual of the Mass Combi)

- 1. Switch off the Mass Combi and disconnect the external AC power. Then remove the DC fuses.
- Make a cut out using the outline drawings of Figure
 For good visibility avoid installing the panel in direct sunlight.
- Open the connection compartment of the Mass Combi. Refer to the user's manual of the Mass Combi.
- Connect the communication cable between the QRS232 input of the Mass Combi and the Remote APC (Figure 2).
- Close the connection compartment of the Mass Combi.

OPERATION (See page 1)

1. The *AC-load* gauge indicates the actual **AC load** used relatively to the maximum available AC power.

Example: Power sharing value is set at 10A. The 100% indicator corresponds with 2200W (10Ax220V). If you only use 1100W (5A) the *AC-load* gauge indicates 50%.

If the external AC power is unavailable then the AC-load gauge shows the inverter AC load.

Charger mode: Displays the DC charge current as a percentage of the maximum current

Inverter mode: Displays the AC power as a percentage of the maximum power

- 2. Displays the the AC-voltage of the active AC source.
- **3.** The **Power sharing/ Generator-mains support** LEDs indicate the input current limit. This is used for setting the Mass Combi AC-input current to prevent the external input fuse from tripping (see Mass Combi manual). NOTE: No LEDs illuminating represent the option "Power Sharing disabled".

Power Sharing/ Generator-mains support must be switched on at the Mass Combi to enable remote control by the APC.

- **4.** With an external AC source available the **AC input** indicator illuminates. When it blinks slowly the power support function is active.
- **5.** The **Failure LED** illuminates red when failure is detected. See table 1. The cause of failure is explained in the user manual of the Mass Combi.
- **6. Set**: easy programming in three steps to adjust the power sharing / power support level:
- Hold Set pressed until the power sharing LED starts to blink.
- 2. Now press Set repeatedly to scroll along set points.
- Once you chose the desired value, don't press the button for three seconds. The value is stored then and the LED stops blinking (with "Power sharing disabled" selected, no LEDs blink).

Remark: The Masterlink APC can never be adjusted to a level that is higher than set by the DIP switches of the Mass Combi. Example: If the DIP switches of the Mass Combi are adjusted to 6 Amps, scrolling between Disabled, 4 amps and 6 amps is possible only.

Table 1 Failure codes

AC-input	Failure	100%	Status
LED	LED	LED	
Off			No external AC present.
Slow blink			External AC is available, but not transferred to charger and short break
			output because either AC-input voltage is being sampled before transfer or
			Power support function activated.
	On		Inverter error.
Slow blink	Slow blink		External AC voltage or frequency is out of range. (U<180V or U>253V,
			f<45Hz or f>55Hz). No transfer from Shore input to charger and short break
			output.
On	Fast blink		External AC is available. However, not transferred to charger and short break
			output because the short break fuse tripped.
On	Fast blink	Fast blink	AC-input in overload.
	Fast blink	Fast blink	Inverter is in overload and will switch off is load is not reduced.
On	Off		External AC is present.
	Off		No failure detected

