

MULTICOM[®]ECO



**Installation and Operation Guide
for MULTICOM eco
EN 12566 - 3**

Introduction

With the MULTICOM eco, we focussed on developing a control unit that meets future demands.

Further developments in engineering and rising legal requirements can be achieved without problems by updates

The most important features of the MULTICOM eco:

- Text display
- Three key handling
- Comprehensive and simple menu navigation
- Self test of the control unit
- Password protection
- Digital operation journal
- Optical and acoustic alarms
- Floating distance contact for external alarm devices

The function of the control unit depends on the inserted software. The unit saves all parameters on an internal EEPROM. Thus, these parameters are being preserved in case of an alternating current dump.

The unit has a double-spaced LCD display with 16 signs each. The unit is operated by three keys. A blinking green LED signalises operation, a red LED signalises disturbances. After achieving normal voltage, the unit undergoes a self test of the program memory. If this test is executed successfully, the unit starts the main program.

The device features a floating distance alarm relay for the connection of an external alarm device. It is also equipped with an acoustical alarm device.

The egressions are combined with a protection fused and get controlled with a combined transformer.

The Multicom eco are serial appointed with a fuse F1 = 3,15 AT. Please use maximal a fuse 6,,3 AT.

The total connected load from the pumps/valves should not be overtravel 2.500 VA.

Security advice

This guide is valid for the MULTICOM control unit for ZONS eco.

It contains important advice and safety regulations. It is written for both the installer and the operator. Please, read this guide carefully before installing and commissioning the plant.

All safety regulations must be respected.

The control unit may only be connected and operated by authorised staff!

Before opening the control unit, turn off the power!

Only open the lower cover, not the upper enclosure!

Further information and instruction can be inquire by the producer.

In case of disregarding the Producer from the Multicom eco assume no responsibility.

Installation and commissioning

The condition for installation and handling of the control unit is only authorised by appointed staff.

The control unit is intended for wall installation.

Install the control unit in a designated place that is roofed over and always accessible.

Do not turn the power on until the installation is complete!

The measures for the installation wholes are indicated on the back of the control unit.

With the enclosed boring template, specify and flag 4 boreholes.



Boring 6 mm holes
and take the enclosed 6 mm dowel.



Before you arm the Multicom eco open it.
Assure that not any particles from the equipment
will be damaged



Arm the control box, with the enclosed
screws on the designated area (4,0 x45 mm)



After attachment close the Multicom eco and attach the plug of the ZONS eco Cable to the plug in the control unit and screw the plug



If all operations made on the sewage treatment plant , the construction can be conected on the network.



At the end take all required settings and start up.

Before commissing and turning on power, make sure that

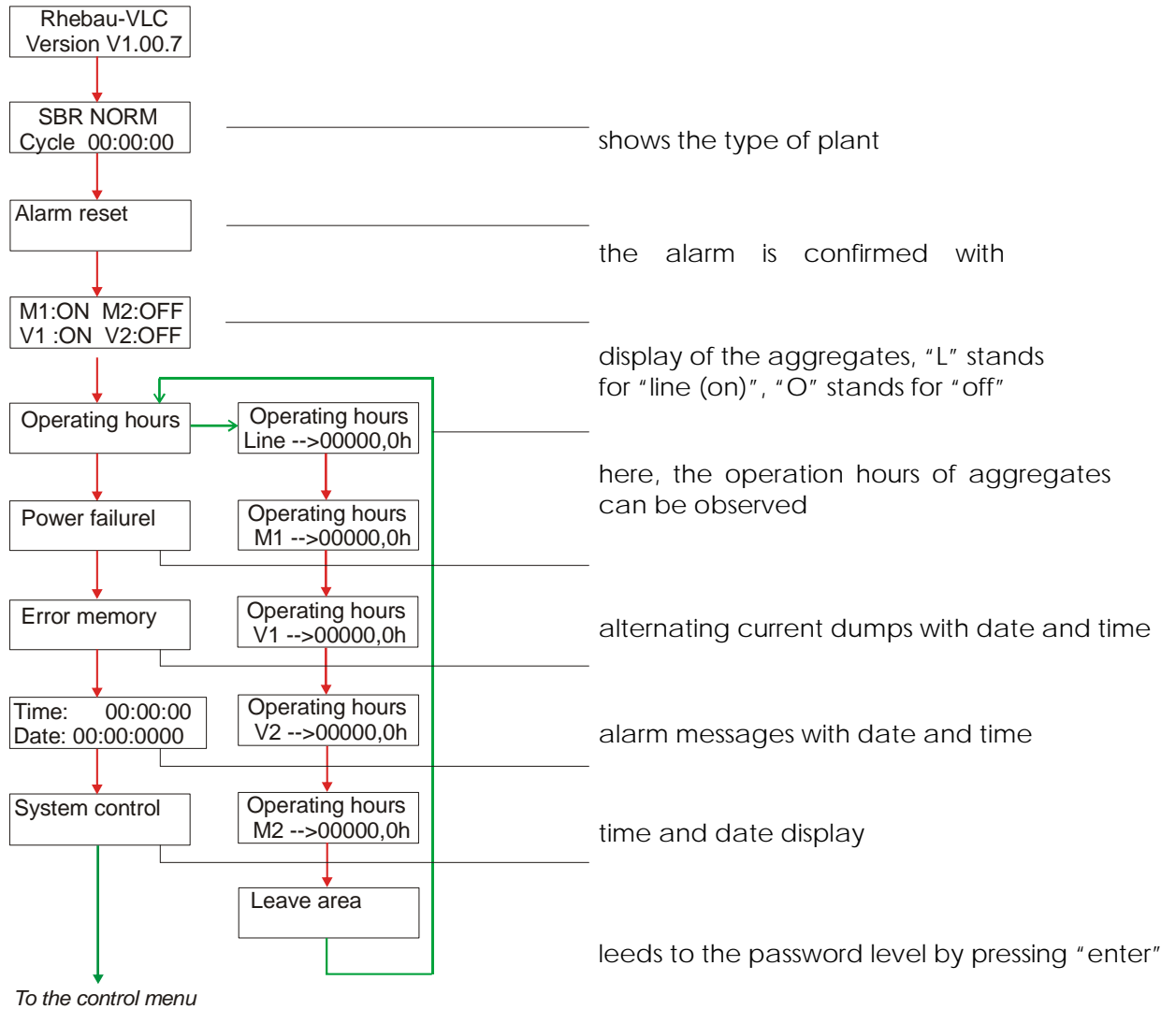
- the unit doesn't show any visible damage
- The technical equipment is installed correctly
- All connections are made correctly
- The power supply meets all regulations in force
- The unit is closed properly

All safety regulations in force have to be respected!

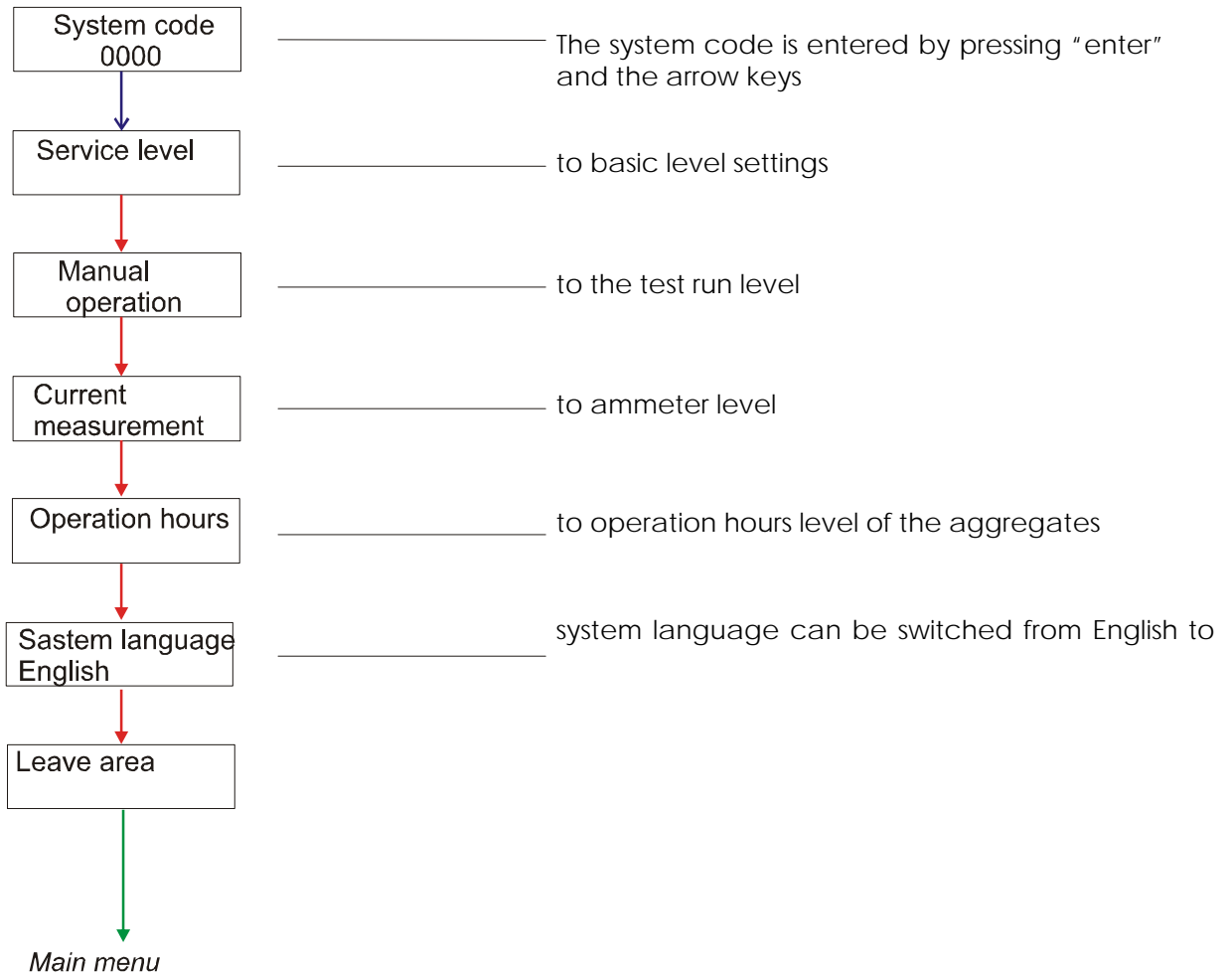
Adjust the parameters (see Guide for Operation and Maintenance)

The menu navigation and input of the parameters is done by the enter key and the arrow keys. In the setting levels listed below, the red arrows stand for the arrow keys and the green arrows stand for the enter key. Every input must be confirmed by pressing "enter".

Main menu

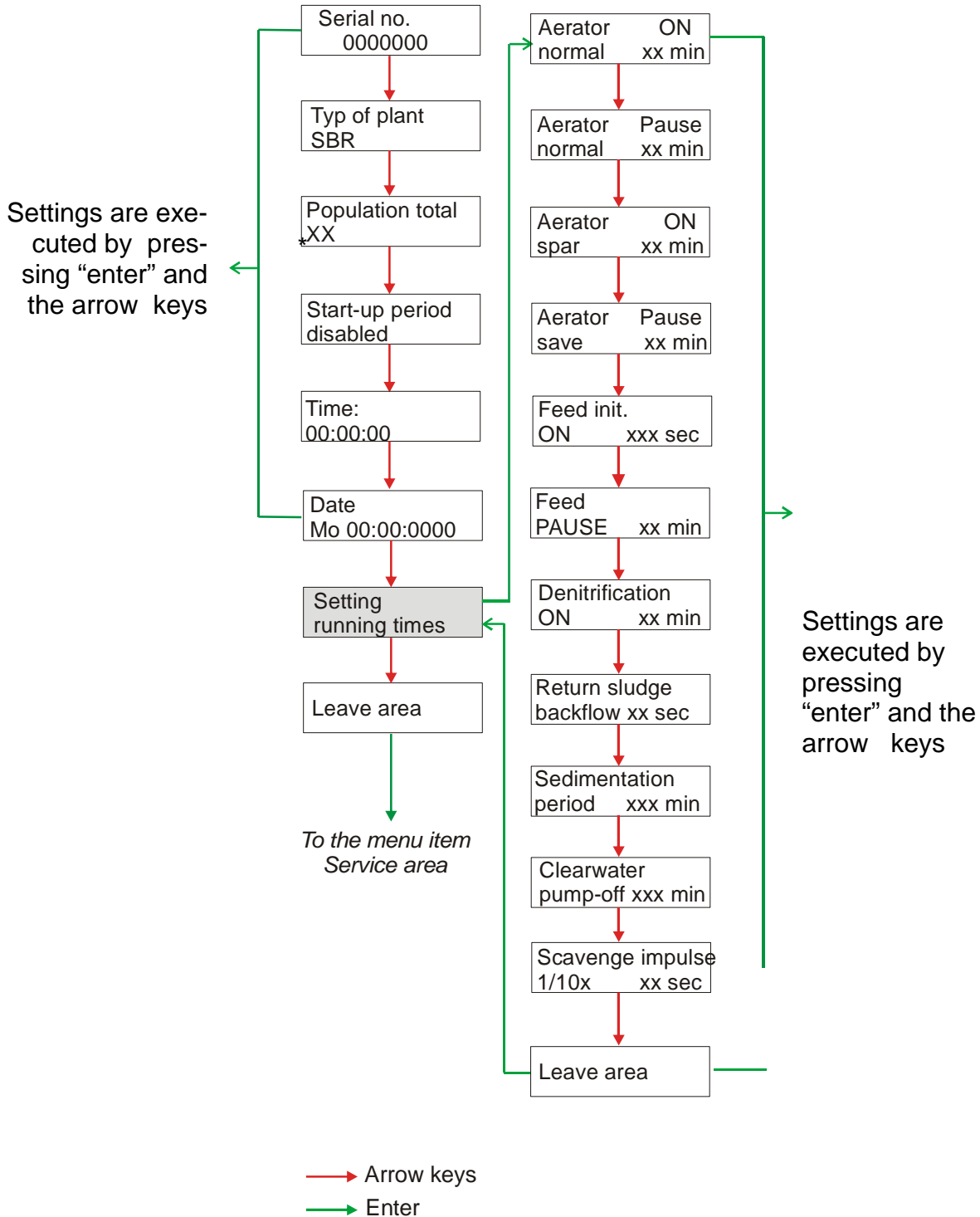


System menu



→ Arrow keys
→ Enter

Service level

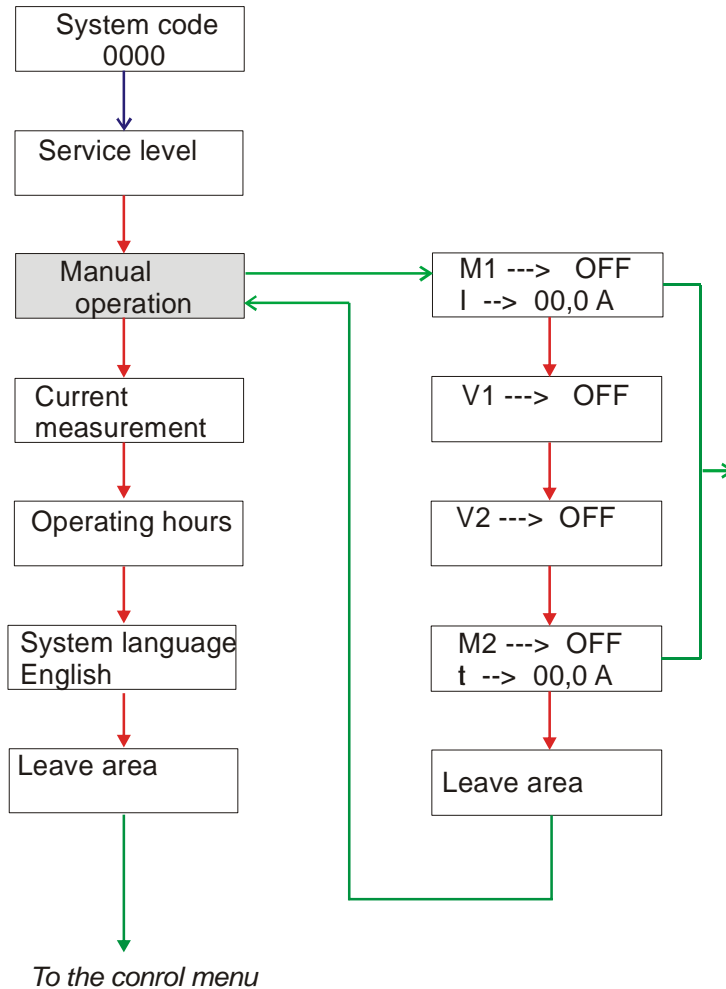


* start-up period enabled:
The surplus sludge backflow is disabled, regardless of the settings. Three months after commissioning, the start-up period is disabled automatically

* start-up period disabled:
The surplus sludge backflow is activated.

Test run level

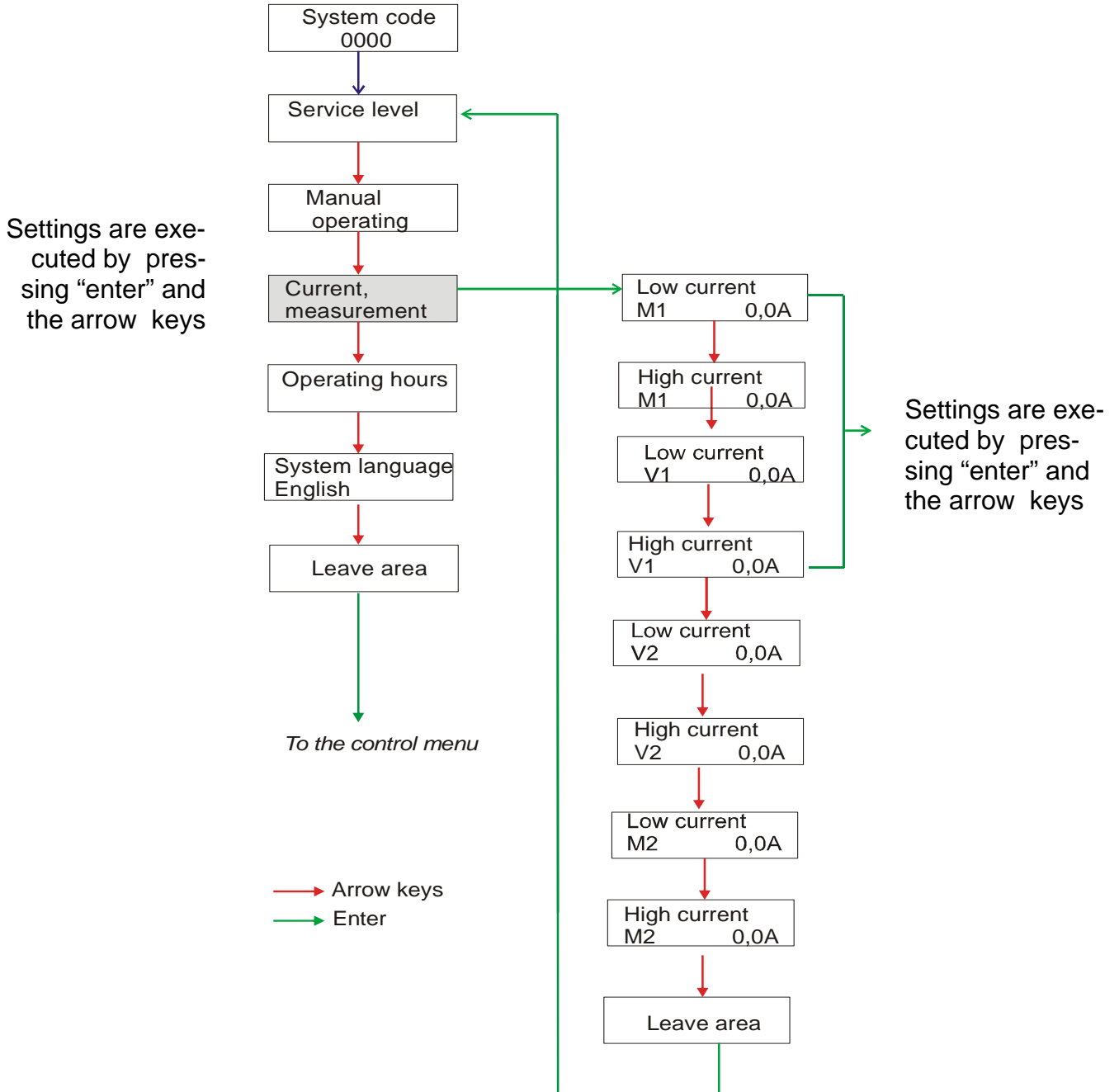
Settings are executed by pressing "enter" and the arrow keys



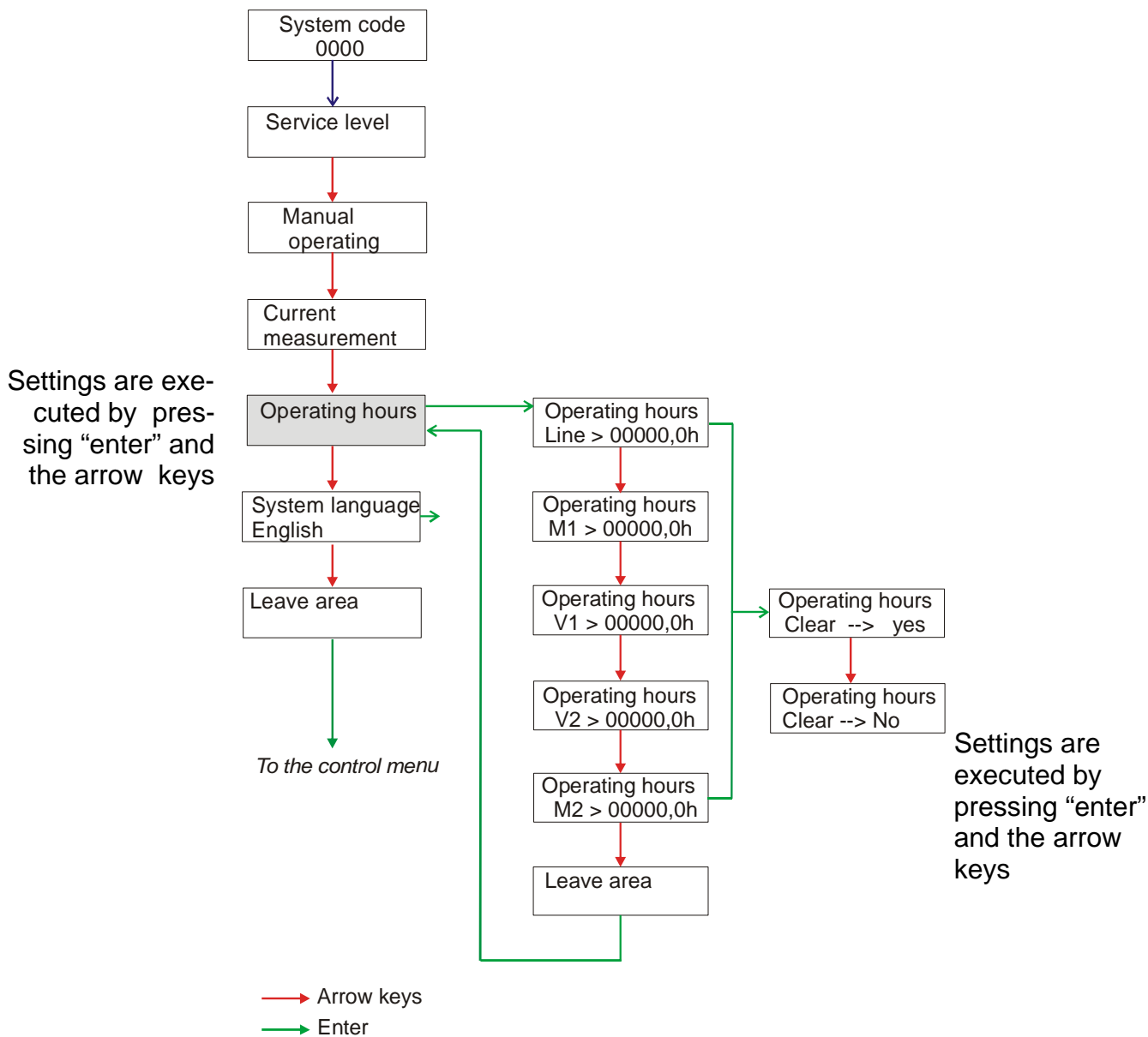
Settings are executed by pressing "enter" and the arrow keys

→ Arrow keys
→ Enter

Ammeter level



Operating hours level



Specifications

Case	Synthetic material, light grey
Installation	Wall installation on three screws
Mechanical rating	IP 54
Mains connection	230 V ~ 50 Hz + 10% 1,5 m Mains connection conductor with Shockproof plug
Aggregates	230 V /50 Hz M1, M2, P < 0,75 kW V1, V2 < 0,1 Kw
Maximum installed power	2500 VA
Area of ammeter min.	0,25 5 A
Max.	0,05 1 A + 10%
Temperature rise guard of the pumps:	about thermostat relay at the motor In chain with the motor
Current consumption	typ. 5 VA
Required fuse	16 A G
Entries	In1, In2 Contact voltage 24 V Contact current 1 mA (typ.)
Alarm relays	Maximum contact voltage 230 V~ Maximum contact current 5A; Ac1 Internal buzzer typ. 70 dB (A) Displays 2x 16 LCD display 1x LED green 1x LED red
Handling	Three key handling
Temperature range	-10°C to 50°C (14°F to 122°F)
Humidity:	0-90% RH, non-condensing
Dimensions:	200 x 120 x 58 mm

CE Labelling



The control unit complies with the EU directives for CE labelling.

Type of device	MULTICOM eco Control unit for automatic control of small biological wastewater treatment plants according to DIN 4261
Directives	EMV directives 89/336/EWG Low voltage directive 73/23/EWG
Applied harmonised norms Norms:	EMVG EN 50081-1 EN 50082-1 EN 61000-3-2 Low voltage directive EN 60204-1
Manufacturer	Scharco Elektronik GmbH & Co. KG Tilsiter Straße 8 D-42277 Wuppertal