

# **Operating Instructions**

# **Control MIKE 3 Clean Control for MEIKO dishwashers**

## **B-Tronic / K-Tronic / BA**





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#### 1 Short operating instructions



Open the stop valve in the water pipe.



Switch on the power supply from the building.

Membrane key- pad	Meaning	Display
	Starting condition: Machine off!	Machi ne of f 05, 02, 07
	The machine's wash-tanks are filled and heated by pressing the "Filling / Heating" key	Filling 05. 02. 07
	If the option "Autofill" (time switch) has been set in the machine, the display will show, for example: 03.01.07 8:00.  This indicates that the machine will be automatically filled on Wednesday 03.01.07 at 8:00 a.m.  The current date and time is shown for reference in the 4 <sup>th</sup> line.	Aut of il I M 03. 01. 07 8: 00 Di 02. 01. 07 17: 02
	If the machine has to be used on one occasion at a time other than the one which has been set (the filling time), the machine can be filled <b>immediately</b> by pressing the "Filling / Heating" key The display will show:	Filli na 02. 01. 07
	The tank heating elements switch on as soon as the minimum water level has been reached.	Filling / Heating WT1 45°C KSP1 80°C VA 35°C TR 60°C
	As soon as all the tanks are full, the display shows:	Heating WT1 45°C KSP1 80°C VA 35°C TR 60°C
	The machine is "ready for operation" as soon as the required tank temperature is reached.	Ready for operation WT1 65°C KSP1 82°C VA 45°C TR 60°C



Washing is started by pressing the "Wash" key.

Operation
WT1 65°C KSP1 82°C
VA 45°C TR 60°C

The programme (I - II - III) can be selected.





Washing is interrupted by pressing the "Pause Wash" key.

The display shows:

Ready for operation WT1 65°C KSP1 82°C VA 45°C TR 60°C



The machine is switched off by pressing the "Machine Off" key.

Machine of f



The tanks are pumped out by pressing the "Draining" key.

Draining



Close the stop valve in the water pipe.



Switch the power supply from the building off.

Clean the machine. See the "Cleaning" chapter in the machine's Operating Instructions.



#### 2 General

The Operating Instructions are part of the scope of delivery of the control and must be kept in a place which is available to the machine's operating and maintenance staff at all times.

These Operating Instructions are valid from version <u>V2.0</u>.

Operation and maintenance may only be entrusted to staff who have previously familiarised themselves with these Operating Instructions. The manufacturer's warranty obligations are rendered null and void if the machine is improperly used.

Observe the Safety Instructions in the machine's Operating Instructions and in these Operating Instructions.

We reserve the right to make changes as part of the development process. No claims of any nature whatsoever may be derived from these Operating Instructions.

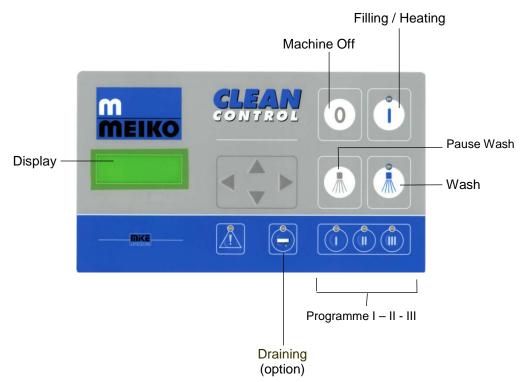
The user must read the Operating Instructions before the first time the machine is used so that he / she is familiar with the main operating functions.

# 3 Description of the MIKE 3 Clean Control electronic system

The multi-functional "MIKE 3 Clean Control" system is a programmable micro-processor system for the purpose of controlling and monitoring the operational and hygiene safety of MEIKO conveyor and basket transport dishwashing machines.

The electronic system is operated by a 24 V low safety voltage.

#### 3.1 Description of the membrane key-pad, operation



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#### 3.2 Operation

If the machine has been prepared for operation as described in the Operating Instructions for the machine, it may be switched on. All the steps necessary to prepare it for operation are described below.



Open the stop valve on the water pipe.



Switch on the main power supply from the building.

The starting point is the machine when it is switched off. The display shows:

Machi ne of f 05.02.07

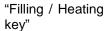
All the operating steps described below <u>may</u> be available. However, not every machine has every operating step.

#### 3.2.1 Filling / Heating



The machine's wash-tanks are filled and heated by pressing the "Filling / Heating" key

All doors and drains must be closed before the machine will fill and heat. Any open doors are indicated in the display.



The LED of "Filling / Heating key" will flash.

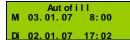


The display will show:

The display indicates the stage the process has reached.

Filling 02. 01. 07

If the option "Autofill" (time switch) has been set in the machine, the display will show, for example: 03.01.07 8:00. This indicates that the machine will be automatically filled on Wednesday 03.01.07 at 8:00 a.m. The current date and time is shown for reference in the 4<sup>th</sup> line.



If the machine has to be operated on one occasion at a time other than the one which has been set (the filling time), the machine can be filled **immediately** by pressing the "Fill-Heat" key once again.

Filling

The display shows:

Filling / Heating
WT1 45°C KSP1 80°C

The tank heating elements switch on as soon as the minimum water level has been reached. The display shows:

is al-

(Exception: the temperature of the water entering the machine is already at the temperature for filling the wash tank which is programmed into the electronic system.)

As soon as all the tanks are full, the display shows:

Heat i ng WT1 45° C KSP1 80° C VA 35° C TR 60° C



The display shows "Heating" until the programmed tank temperature has been reached.

After this stage the display shows: The LED of the "Filling / Heating key" is now permanently illuminated.

Ready for operation WT1 65°C KSP1 82°C

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#### 3.2.2 Setting "Autofill" (time switch)

If the option "Autofill" (time switch) has been set, the display shows:

Aut of i I I
M 03. 01. 07 8: 00
Di 02. 01. 07 17: 02

#### 3.2.3 Washing



"Wash" key

Washing is started by pressing the "Wash" key.

The LED of the "Wash" key is now permanently illuminated.



The display shows:

If the conveyor end switch is activated by washware, the display shows

The machine automatically restarts when the washware is removed.

The display shows:



Conveyor end switch WT1 65°C KSP1 82°C VA 45°C TR 60°C

Operation
WT1 65°C KSP1 82°C
VA 45°C TR 60°C

#### 3.2.4 Washing interruption



"Pause Wash" key Washing is interrupted by pressing the "Pause Wash" key.

All functions, with the exception of the tank heating, are switched off.

(Individual components may continue running.)

The machine remains ready for operation.

The display shows:

Ready for operation WT1 65°C KSP1 82°C VA 45°C TR 60°C

#### 3.2.5 Programme selection



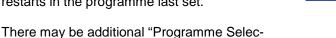
When the machine is first switched on, it always starts in programme I.

"Programme Selection" keys

Different programmes can be selected by pressing"Programme Selection" key I, II or III.

The programme selected is indicated by the corresponding LED being permanently illuminated.

After washing has been interrupted, the machine restarts in the programme last set.



tion" keys at the feeding section of the machine.

It is possible to change to a different programme

It is possible to change to a different programme (I-II-III) while the machine is running.





#### 3.2.6 Machine Off



The machine is switched off by pressing the "Machine Off" key.

The display shows:

Machine of f 05. 02. 07

"Machine Off" key

#### 3.2.7 Draining (option)



MEIKO offers an automatic draining function as an option.

If the machine is in the "Machine Off" status, all tanks can be drained by **pressing** the "Draining"

The display shows:

Drai ni na



The "Draining" LED ist permanently illuminated.

#### 3.2.7.1 Draining with draining VA option



MEIKO offers an automatic draining of the prewash (VA) zone as an additional option.

If the machine is in the "Machine Off" status, the VA tank can be drained by pressing the "Draining" key once.

The display shows:

The "Draining" LED ist permanently illuminated.

The other tanks are also drained by the wash-water pump by pressing the "Draining" key once <u>again.</u>

The display shows:

Draining VA



Drai ni ng

The "Draining" LED ist permanently illuminated.



#### 3.2.7.2 Draining interruption

Draining can be interrupted by pressing the "Machine Off" key.





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#### 3.2.8 Impulse switching

If the machine is equipped with impulse switching, the first cycle runs after pressing the "Wash" key.

If, at a later time, no new wash-ware is in the machine, the machine is switched off except for the tank heating

In the case of basket transport machines, the conveyor continues to run.

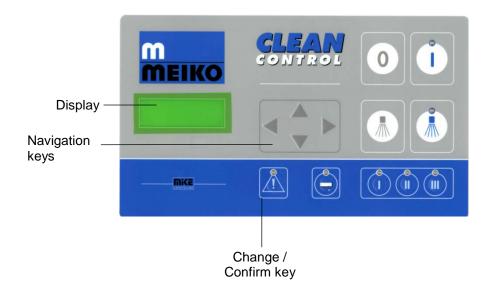
The display shows "Cycle pause":

Cycle pause

The machine can be re-started by pressing the key at the feeding section of the machine

The basket transport machine re-starts automatically when a new basket is loaded into the machine.

#### 4 Description of the membrane keypad, navigation





#### **Navigation for information exchange**

It is possible to read off temperatures, operating times, consumptions in every operating condition in the control's navigation level (version from V2.0); it is also possible to read, amend and log parameters.

4 arrow key and 1 amend / confirm key are provided.

These have the following functions:

or	Entry to the information exchange dialogue
or V	Browse parameter list, Change value (up / down) It is possible to switch to a fast forward / back mode by pressing the key for a longer period (1 second or more) i.e. the list of values is scrolled through automatically until the key is released.
	Switch to relevant sub-menu (selection)
<	<ul> <li>Quit current sub-menu</li> <li>Process interruption in the change mode</li> </ul>
	( you will now be asked if you want to reject the change you have just made without saving it).
	<ul> <li>Switch between view mode &lt;-&gt; change mode         This means start the capability of changing the value by using the arrow keys or</li> <li>Save / accept setting.</li> </ul>
	The red LED flashes to indicate a malfunction or warning. The message appears in the display.

#### **Further general points:**

- When in change mode, the current parameter value is displayed in slowly flashing figures to avoid misunderstandings.
   The figure can now be changed by using the arrow keys or .
- If a key is not pressed for 4 minutes, the normal operating condition display appears.



#### Navigation example: reading the tank temperature

Note: only the options actually available in your machine will be displayed.

The starting point is the operating condition display e.g.



Press the arrow key; the display will then show:

I nf or mat i on

Press the arrow key again to go to the individual sections of the information output. The display will then show:

\* INFORMATION \* Temperatures

Press the arrow key once again and the following will appear in the display:

\* INFORMATION \* Temperature VA 45°C

Pressing the arrow key again will make the following appear in the display:

\* INFORMATION \*
Temper at ure WT...
66°C

Return to the previous sub-menu by pressing the arrow key. The following will appear in the display:

\* I NFORMATI ON \* Temper at ur es

Press the arrow key again and the following will appear in the display:

I NFORMATI ON

Pressing the arrow key again will make the operating conditions appear in the display.

Operation WT1 65°C KSP1 82°C VA 45°C TR 60°C

To change the direction of navigation in the sub-menu, press the or arrow keys.

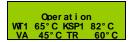


#### 4.1 Information output

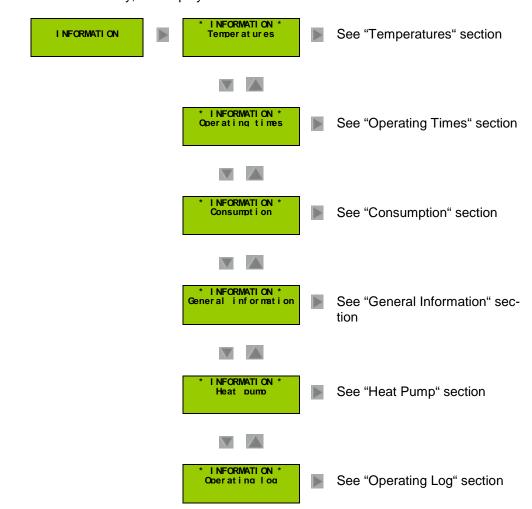
#### 4.1.1 Overview of information output

Note: only the options actually available in your machine will be displayed.

The starting point is the operating condition display e.g.

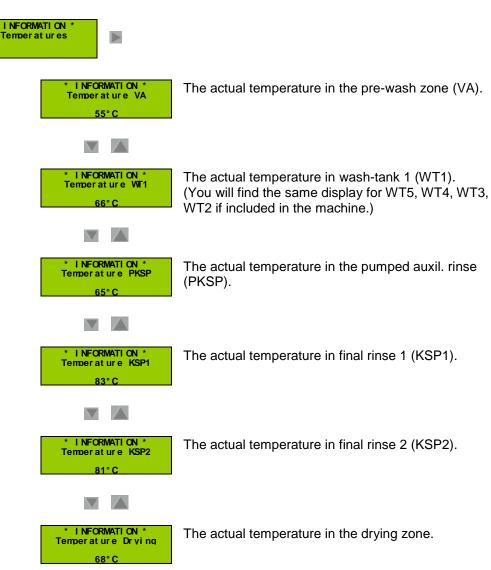


Press the arrow key; the display will then show:



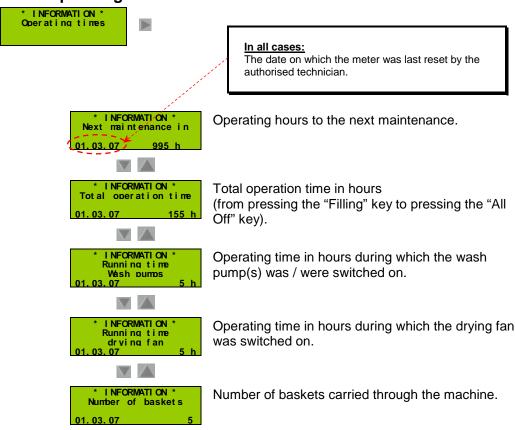


#### 4.1.2 Temperatures

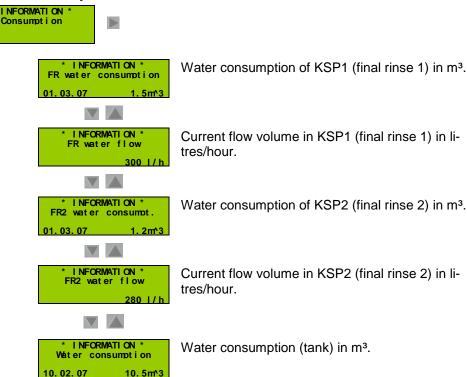




#### 4.1.3 Operating times

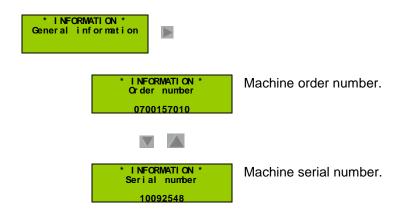


#### 4.1.4 Consumption



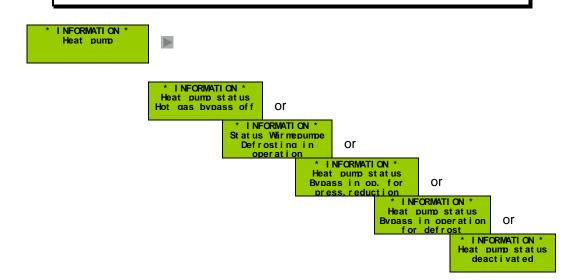


#### 4.1.5 General information



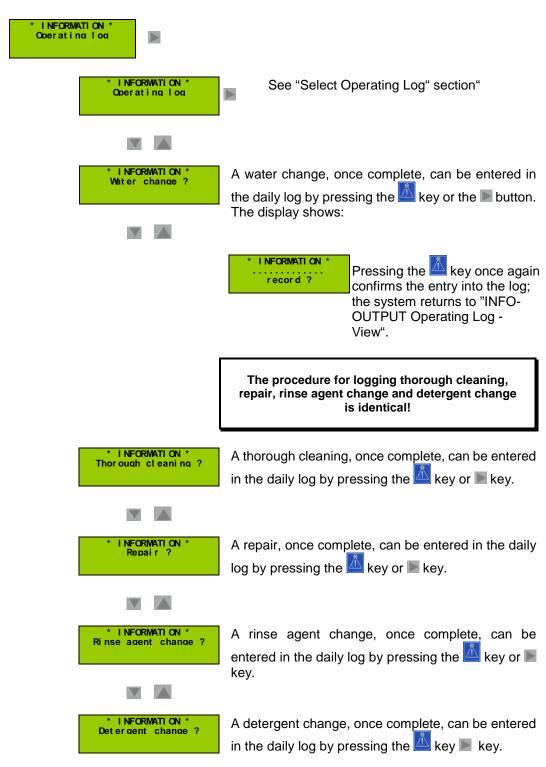
#### 4.1.6 Heat pump

The display message output depends on the following inputs: low pressure switch de-frosting and high pressure switch-output control.



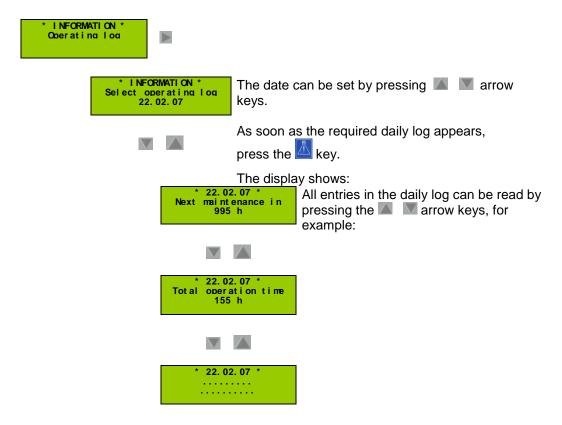


#### 4.1.7 Operating log





#### 4.1.8 Select operating log



#### Note:

The number of daily logs that can be selected is limited. Older entries are overwritten by more recent entries.



#### 4.2 Parameterisation

#### 4.2.1 Entry to the parameterisation level

The starting point is the operating condition display e.g.



Press the arrow key and the following will appear in the display:



The cursor will be seen on the first figure (0 appears and flashes).

Enter the required code (see below).

The 1st figure of the required value is set by means of the arrow key or the **■** arrow key to move to the next figure.

After entering all the necessary figures, the entry using the code is concluded by pressing the key. The process can be interrupted by pressing .

In the parameterisation level it is possible to

- view (code 10000)
- o change (code 10001)

process parameters. Access is only possible by entering these codes:

Enter code 10000 and confirm by pressing the  $\triangle$  key = viewing only (it is <u>not</u> possible to change parameters)

The key has no other function in this level.

Enter code 10001 and confirm by pressing the key = viewing and changing is possible.



#### 4.2.2 Parameterisation using the example of temperatures in °F / °C

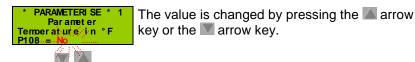
The starting point is the input of the code 10001 and confirmation by pressing the Akey.



PARAMETERI SE

The first parameter in the list appears with its current value.

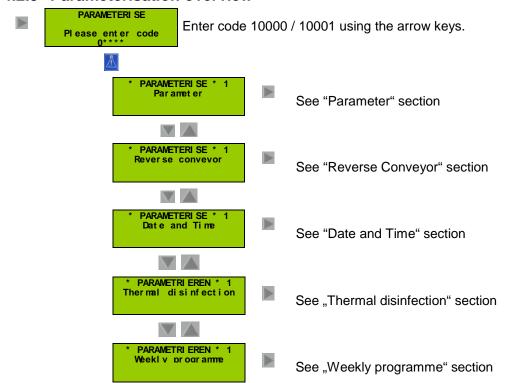
- Press the arrow key or the arrow key to scroll through the list.
- The flashing value P108 can be parameterised by pressing the key or the key.



The correct value is accepted / saved by pressing the A key.

If you have already changed a value but do not want to save it, the process is interrupted by pressing the arrow key and then press the key. If the key is not pressed and another arrow key e.g. - - - is pressed instead, the flashing value can be changed using the - marrow keys.

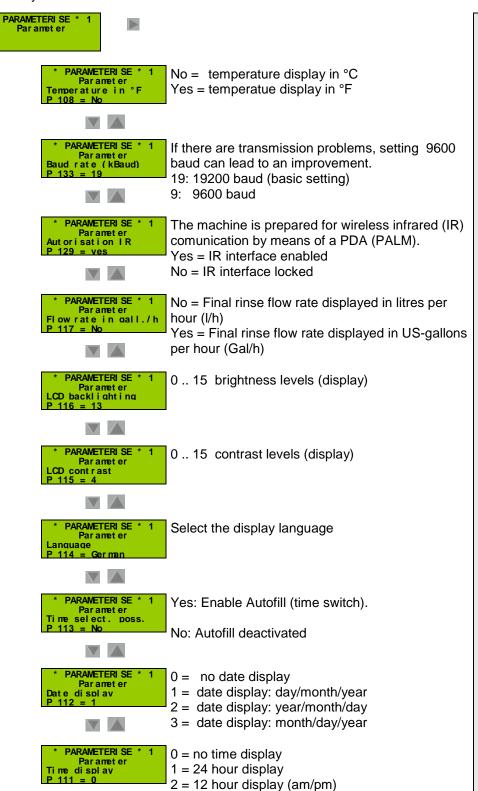
#### 4.2.3 Parameterisation overview





#### 4.2.3.1 Parameters

The starting point is the input of the codes: 10000 / 10001 and confirmation by pressing the key.





#### 4.2.3.2 Reverse conveyor

IMPORTANT! Only trained persons are authorised to operate the "Reverse Conveyor"function





Pressing the key will make the conveyor run backwards until the key is released.

NEW: As of Eprom version V2.3 reversing is limited per actuation to approx. 1.5 seconds.

Only by repeatedly pressing the key can a deadlock be gradually resolved.

#### Before reversing the conveyor, check and ensure that

- Only authorised and trained persons are in the machine's working area.
- No-one can be injured by reversing the conveyor.
- All washware was removed from the feeding area and the 1st wash tank.

#### **IMPORTANT**

The overload switch is not active.

#### 4.2.3.3 Date and time



The figure / day can be changed by pressing the M or M arrow keys.





PARAMETERI SE \* 1 Date and time

The setting is accepted and the change mode is left by pressing the key.

#### Interrupt

It is possible to interrupt the process at any time by pressing the key.

There is NO automatic adjustment for winter and summer time.

#### 4.2.3.4 Thermal disinfection (from Eprom version V2.1)



Yes: In spite of a thermal disinfection temperature which is too low, the drive continues to work.

## **4.2.3.5** Weekly programme (weekly programming for automatic filling) (from Eprom version V2.1)

The automatic filling which was known in the past can be specified in even more detail from version 2.1 onwards. (Typical application – 3 shift operation).

Up to 3 times can be programmed on each weekday. In order to enable the appropriate time, the time must be activated in the  $4^{th}$  line.

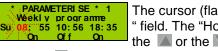
Only times which have been activated (setting "ON") will be considered when "Automatic filling" is switched on.

If "Filling/Heating" is now selected, the next possible time is calculated and displayed as a suggestion. This also can be the time for the current day (but not yet reached) or the time on the day after tomorrow because the next day has been hidden. If no time is activated or enabled, the following day and the most recently selected time are displayed as a suggestion (as before). In principle, the time suggested can still be modified, as before. When the "Power Off/On" button is pressed, the settings are retained.



Day of the week and starting times are displayed.

/ It is possible to change the weekday and starting times..



The cursor (flashing) appears in the "Hour" field. The "Hour" can be changed by using the or the arrow key.





The cursor (flashing) appears in the "Minute" field. The "Minute" can be changed by using the or the arrow key.

The setting is accepted and the change mode is left by pressing the key.

\* PARAMETERI SE \* 1 Weekl v programme So 08: 37 10: 56 18: 35 On Off On



Pressing the arrow key to move to the next Day of the Week.

\* PARAMETERI SE \* 1 Weekl v programme Mb 07:36 11:56 17:59 On On On





#### 5 Error messages

#### 5.1 Error messages - washing not possible

Text in the display	Description
Error number 101 Emergency stop act.	Emergency stop switch has been pressed.
Error number 201 First fill error	Water level not reached when the tank was filled for the first time; Float soiled Stand pipe was not inserted
	Dirt trap blocked Water flow from the building too low
Error number 202 Refill error	Water level in wash tank not reached on refilling; Float soiled Stand pipe not inserted Dirt trap blocked Water flow from the building too low
Error number 701 Conveyor overload	Conveyor running sluggishly Washware jammed in the conveyor

In such a case the malfunction must be promptly rectified. To continue working, the machine must be restarted by pressing the "Filling / Heating" key.

#### 5.2 Error messages – limited washing capability

# Text im Display Description Inf o- Nr. 110 Maintenance needed Close door; Insert cleaning flaps Inf o- Nr. 112 Wrong pass-word Correct entry code

If other error numbers / info numbers appear in the display, call the service technician!!!

#### 6 Control version

To learn the version of the MIKE 3 Clean Control in your machine, switch off the electricity supply briefly at the main switch and then switch on again.



When the system initialises, all the LEDs in the membrane key-pad will flash briefly.

The display will show:

In this case the current version is: <u>V2.0</u>.







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