Service settings for the PID-temperature regulation
ECM Controvento

Through the service modus of the PID-display, you have the possibility to customize the parameters of the attached table according to your customer's wishes.

Setup

To set up the requested parameters, please proceed as follows:

1. Press + and - simultaneously while the machine is switched off and switch the machine on. Release the keys only after "F.01" is being displayed. The temperature of either boiler is not important for programming, as both boilers are inactive during programming.

2. Press - to select the different parameter which are displayed in order. As soon as you have reached "E3" and have again pressed - you will start with "F.01" once more.

3. Press + in order to progress to the submenu of the currently selected parameter.

4. Quickly press + to increase and - to decrease the desired value.

5. After the set-up of the desired value please wait a short amount of time until the initially selected parameter (e.g. "F.01") appears again.

6. To change another parameter, start over with step 2 again.

7. Turn off the machine once you have finished programming.

8. Wait at least 10 seconds before switching the machine on again

9. The programmed values are now saved. Both boilers are activated (successively).

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Service settings

Parameter	Display	Function	Explanation
F.01	°F	Temperature in degrees Fahrenheit	
	°C	Temperature in degrees Celsius	
F.02	2	Activation of the boiler heater brew group	Only the brew group is heated
	3	Activation of the steam/hot water boiler	Only the steam/hot water boiler is heated
	4	Not assigned	
	5	Activation of the heaters for both boilers	Both boilers are heated => high wattage!
	6	Not assigned	
	7	Activation of the heaters for both boilers, whereby the brew group boiler is preferred	Steam/hot water boiler will be heated only after the temperature of the brew group boiler is reached => both boilers are never heated simultaneously => safes energy
P.	X.X	Value of the consistent, proportional control	Please do not change recommended settings!
I.	X.XX	Value of the consistent, integral control	Please do not change recommended settings!
d.	XX.X	Value of the consistent, derivative control	Please do not change recommended settings!
t1	XX	Desired value in the brew group boiler	Desired temperature value at the measuring point
t2	XX	Desired value in the brew steam/hot water boiler	Desired temperature value at the measuring point
t3		Not assigned	
E1	X	Temperature difference measuring point to the display	
E2	X	Temperature difference measuring point to the display	
E3		Not assigned	

Recommended settings

Parameter	Display	Function	Explanation
F.01	°C	Temperature in degrees Celsius	
F.02	7	Activation of both heaters, whereby the brew group boiler is preferred	Steam/hot water boiler will be heated only after the temperature of the brew group boiler is reached => both boilers are never heated simultaneously => safes energy
P.	2.5	Value of the consistent, proportional control	Please do not change recommended settings!
I.	0.02	Value of the consistent, integral control	Please do not change recommended settings!
d.	8	Value of the consistent, derivative control	Please do not change recommended settings!
t1	93	Desired value in the brew group boiler	Desired temperature value at the measuring point
t2	124	Desired value in the brew steam/hot water boiler	Desired temperature value at the measuring point
t3		Not assigned	
E1	14	Temperature difference measuring point to the display	
E2	0	Temperature difference measuring point to the display	
E3		Not assigned	

Errors

Display	Error Source	Explanation
A1	Sensor boiler brew group	Disconnection, sensor has no contact
A2	Sensor boiler brew group	Temperature safeguard (150°C) triggeres, electrical short
A3	Sensor boiler steam/hot water	Disconnection, sensor has no contact
A4	Sensor boiler steam/hot water	Temperature safeguard (150°C) triggeres, electrical short
A5	Not assigned	
A6	Not assigned	