

MultiController E 0-100% 24V and 230V 4-Step Regulation

MultiController version 2.5 and 2.6



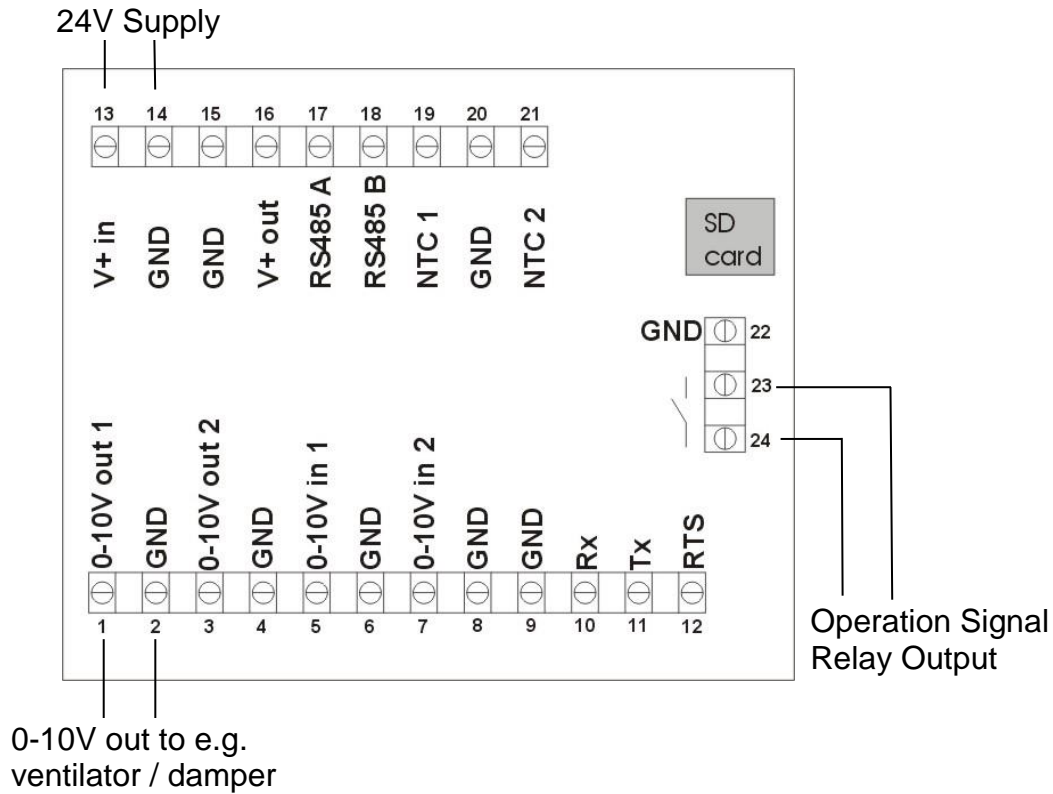
If the MultiController 0-100% is not to function as a steeples controller it is possible to set it up to function as a 4-Step regulator instead. Each step is adjusted individually between 0-100, thereby determining which percentage is lowest and highest possible, when controller is 'ON'. Shift between the steps using arrow up / down. It is also possible to choose if regulator should always start on lowest / highest or latest step after having been turned 'OFF'

Note: This quick-guide gives the simplest set-up of MultiController 0-100% as 4-Step Regulator. If a combination of more functions is desirable please refer to the Manual for MultiController 0-100%, included with product or to be downloaded from lscontrol.dk.

1. Basic Set-Up to 4-Step Regulator

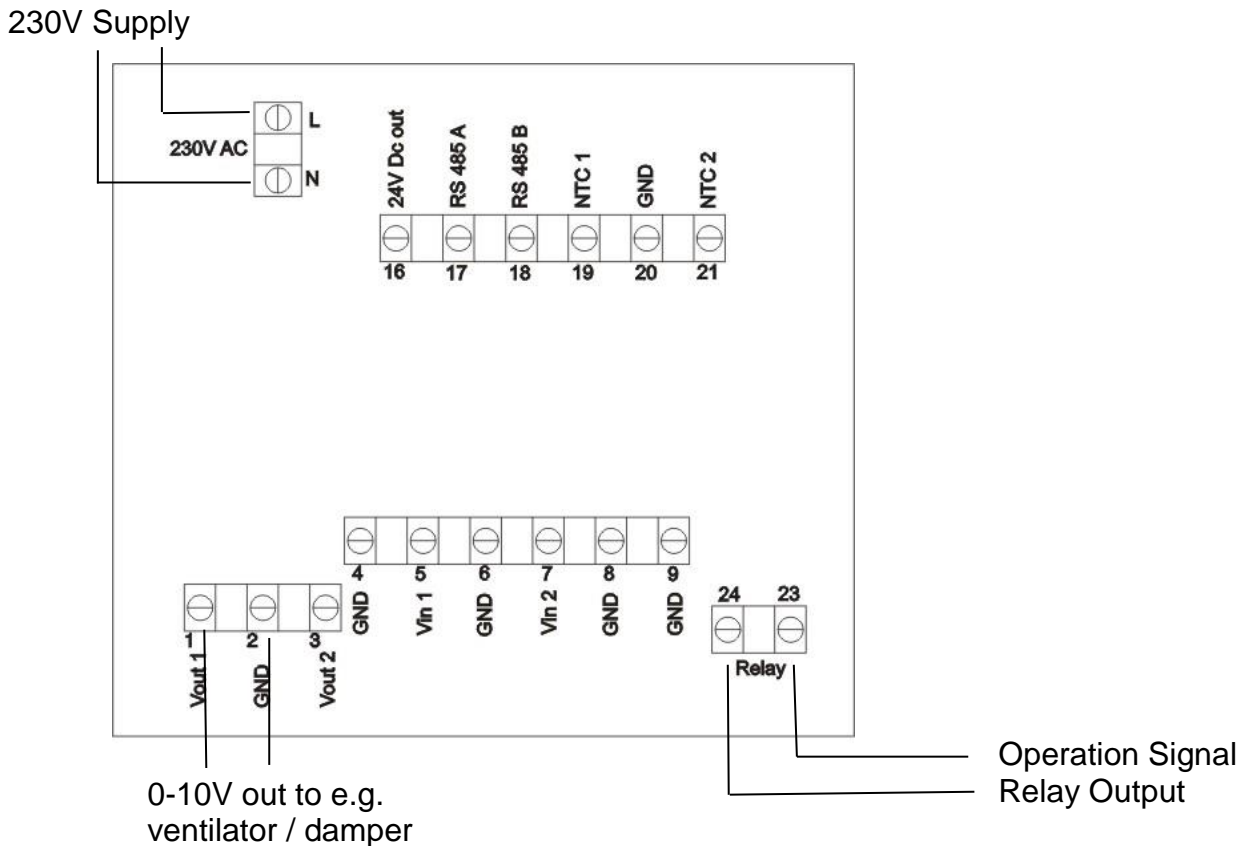
When MultiController is connected to supply for the first time the function must be chosen. First language is chosen, thereafter set-up is chosen. (01-06 – refer to complete manual for all options). If MultiController is to be used as a 4-Step Regulator quick set-up 05 must be chosen.

Connection of 24V model



Terminal Overview




Terminal No.	Description	Comment
1 and 2 (Vout1)	0-10V output 1	Load max 10mA
3 and 4 (Vout2)	Not used for 4-Step Regulation	
5 and 6	Not used	
7 and 8	Not used for 4-Step Regulation	
13 and 14	Connection of Supply Voltage	15-30VDC or 24VAC
15 and 16	Supply Voltage Continuation	As terminal 13 and 14
15, 17 and 18	RS 485 Modbus	See manual if needed
19	Not used	
21 and 20	Not used for 4-Step Regulation	
2,4,6,8,9,14,15, 20 and 22	0V, GND	
23 and 24	Potential free relay	24VDC NO, 3A AC1

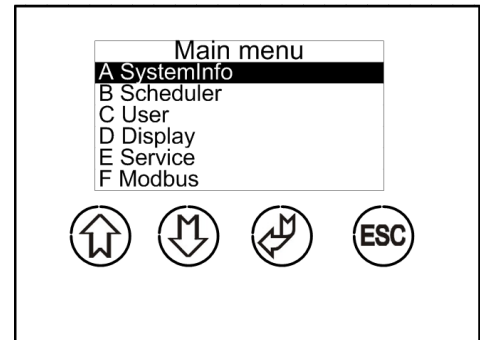
Connection of 230V model**Terminal Overview**

Terminal No.	Description	Comment
L and N	Connection of Supply Voltage	230V AC $\pm 10\%$
1 and 2 (Vout1)	0-10V output 1	Load max 10mA
3 and 4 (Vout2)	Not used for 4-Step Regulation	
5 and 6	Not used	
7 and 8	Not used for 4-Step Regulation	
16 and 9	24V output voltage	+24V DC max. 100mA
17 and 18	RS 485 Modbus	See manual if needed
19	Not used	
21-20	Not used for 4-Step Regulation	
2,4,6,8,9,20	0V / GND	
23 and 24	Potential free relay	250VAC, 5A-AC1





2. User interface

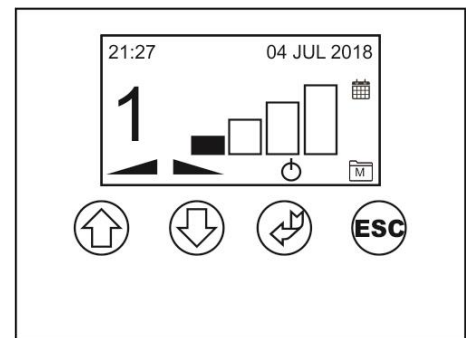
The display is operated by push buttons. The general function of each button is shown below.

Button	Functionality
	Choose / Enter
	Adjust up /one step up
	Adjust down / one step down
ESC	Escape



Shortcuts are available in the main window. They are indicated by an icon above the button.

Icon	Functionality
	ON/OFF.
	One step up
	One step down
	Go to Menu



3. Setting of Menu Points:

a. Service Menu (E-Menu)

Access Code is 5550

E04: Adjustment of start level. The manual start level can be set at 3 different start values. If E4=1, the regulator starts at highest step, E4=2 regulator starts at lowest step and E4=3 The regulator starts at the step the controller was set at when it was last turned off.

E55: Level for step 1, in percentage.

E56: Level for step 2, in percentage.

E57: Level for step 3, in percentage.

E58: Level for step 4, in percentage.

4. Set Point Overview

Name	Factory Setting	Min.	Max.	Unit
E4 OutputStart (Min, Max, Last Choice)	3 (last choice)	2 (minimum)	1 (maximum)	
E55 Step 1 level	25	0	100	%
E56 Step 2 level	50	0	100	%
E57 Step 3 level	75	0	100	%
E58 Step 4 level	100	0	100	%

5. Technical Data

	24V model	230V model
Supply Voltage	15-30VDC or 24VAC \pm 15%	230V AC \pm 10%
Mains	Max 1A	13A
Power Consumption	Max 2,4W	Max <1W
Enclosure	IP 40 / IP 54	
Dimension (h x w x d)	LSBOX85: 42x87x87 mm IP 54 box: 120x122x56 mm	
Operation Temperature	0 - 50 °C	
Relay	3A AC1, 24VDC NO	5A-AC1, 250VAC NO, 150W / 1150VA.
0-10VDC input1 (Vin1)	7k Ohm input impedance	
0-10VDC input2 (Vin2)	7k Ohm input impedance	
0-10VDC udgang1 (Vout1)	0-10,0V DC Max 10mA	
0-10VDC output2 (Vout2)	0-10,0V DC Max 10mA	
RS-485	Chanel A and B	
SD Card Reader	MicroSD, must include LSC firmware	
Jumper	120 Ohms termination RS-485	

6. Applied Standards

EN 61000-6-1 and EN 61000-6-3 Electromagnetic Compatibility (EMC)
EN-60335-1 The Low Voltage Directive

This product complies with the RoHS directive, Directive 2011/65/EU

Drawing: QuickGuide_ MC-0-100_Set-up5_4-Step-Reg_UK

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Rev.: 2.6

Software Version: Program 2.6 Sub 10

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