

2.6 RMCi Overview

2.6.1 RMCi Types



Fig. 17: RMCi1



Fig. 18: RMCi6, RMCi7, RMCi8

2.6.2 RMCi Address Select



Attention! If you connect two or more RMCs of the same type (e.g. 2 x RMC7) to the EDC, the addresses of these RMCs must be different. Follow the next steps to change the RMC address.

- Switch off the EDC.
- Hold the LINK key  pressed and switch on the EDC.
- Now you see a headline with the current RMC address.
- Press the LINK key several times to change the RMC address (0...3).
- Switch off and on the EDC again.

2.6.3 RMCi Brightness Select



Attention! The life time of the yellow OLED of the RMCi6 and RMCi7 display is limited and depends on the brightness setting and the ambient temperature. Lower brightness values and lower ambient temperature lead to a longer life time. For systems running 24h a day or at higher temperatures we recommend setting the brightness to the lowest value at which the display is still readable.

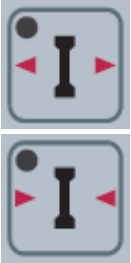
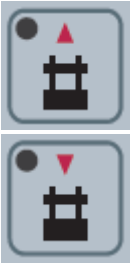
- Switch off the EDCi.
- Hold the LINK key  pressed and switch on the EDCi.
- Now you see a headline with the current RMCi address.
- Press the DigiPoti key to toggle between RMCi address and brightness adjustment.
- Now you see a headline with the current brightness setting.
- Press the LINK key several times to change the brightness (10%...100%).
- Switch off and on the EDCi again.

Starting from EdcApp 9149.004 we provide a screen saver that extends the display life time a lot. The screen saver sets the display to the lowest brightness (10%) if there is no key or DigiPoti input for more than one hour. Any keyboard or DigiPoti input stops the screen saver and the display returns to normal operation mode.

2.6.4 RMCi Key Functions

Table 7: RMCi Key functions

Key	Comment	Function
	ON	Switch drive on. LED is flashing. After drive amplifier is on, LED is also on.
 + 	OFF	Press Digipoti and ON key to switch drive off. LED is off.
	UP	Moves crosshead up. LED is on during movement in this direction.
	HALT	Halts movement of crosshead. In standalone mode the key stops the running test. Test results are shown.
	DOWN	Moves crosshead down. LED is on during movement in this direction.
	POS MODE	Change operational mode of Digipoti from speed to position control mode. Both direction LEDs are on.
	Turn	In speed control mode: increase / decrease speed. In position control mode: increase / decrease position.
 + 	High / Low Pressure	Press Digipoti and POS MODE key to activate / deactivate high pressure. This function must be enabled and configured in the EDC setup. LED is on if high pressure is active.

	Close / Open Grips	These four keys operate hydraulic / pneumatic grips. This function must be enabled and configured in the EDC setup. LEDs are controlled by an external device.
	Close / Open Extensometer	These two keys operate automatic extensometer arms. This function must be enabled and configured in the EDC setup. LEDs are controlled by an external device.
	Move Fixed XHead	These two keys operate adjustment of a fixed crosshead. This function must be enabled and configured in the EDC setup. LEDs are on if crosshead is moving.
	START HALT CONTINUE	Start test (LED on). Halt running test (LED flashing). Continue test (LED on). Function depends on the standalone or PC application.
	RETURN	Return to start position. Function depends on the standalone or PC application.
	LINK	Link key. Function depends on the EDC general data setup parameter RMC Active Mode. If two or more RMC are connected, you can set the behavior of the active RMC. <i>MULTI</i> - All connected RMCs are active. All link LEDs are on. <i>SINGLE</i> - Only one active RMC is allowed. One link LED is on. - All other RMC keys are disabled (Estop is always active). - Press link key of the active RMC to switch to another RMC. - Now all RMC link LEDs are blinking. - Press the RMC link key of the new RMC.

	F1...F3	Function keys are only used in PC Control. Function depends on the PC application. Build in EDCi standalone tests don't use these keys.
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2.6.5 RMCi1/RMCi8 Key and Touch Functions

If you want to use the EDCi build in standalone tests, you have to use an RMCi1/RMCi8 with touch display. With the RMCi1/RMCi8 you can edit the test parameters and you get the test results on the display.

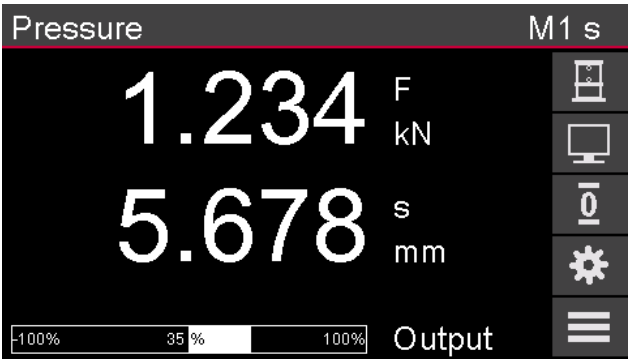
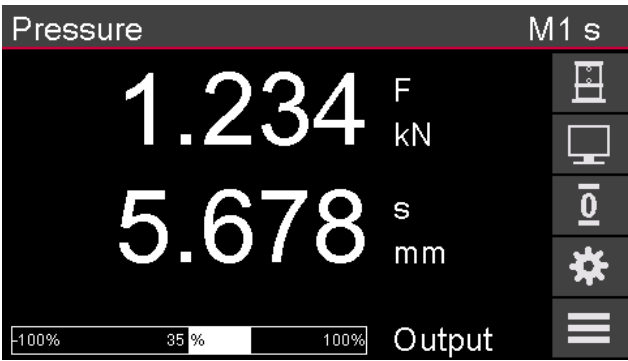
An additional RMCi6 or RMCi7 shows only the current load and position readings.

The following tables on the next pages show the touch display handling.

Table 8: RMCi1/RMCi8 general handling in menus

Key	Comment	Function
	Touch	ENTER function in menus or selects a menu item.
	Swipe	Moves cursor up/down or selects a choice in parameter menus.
	Turn	Moves cursor up/down or selects a choice in parameter menus.
	Press	ENTER function in menus or selects a menu item.

Table 9: RMCi1/RMCi8 Main display and menus

Display	Function
	<u>Main Display Buttons</u> ◀ Machine menu. ◀ Display mode (for future use). ◀ Tare menu. ◀ Test settings. ◀ Main menu.
	<u>Main Display Readings</u> The headline shows the test name, machine number and current control sensor. Depending on the selected test you see the sensor readings and additional info like the output.

Main Menu M1 s PC Control × Pressure Bending Brasilian Circle Bending Creep Test User Setup ▶ ✓	Main Menu ◀ CANCEL: return to previous menu. Select PC Control for USB/LAN communication. Select a standalone test. Edit user setup parameter. Show EDC info menu. ◀ ENTER: confirm selection.
Machine Menu M1 s × Tension 1.0 ms M1 M2 M3 M4 M5 M6 M7 M8 ✓	Machine Menu ◀ CANCEL: return to previous menu. Select machine. ◀ ENTER: initialize selected machine.
Tare Menu M1 s × s F e S3 S4 S5 S6 S7 S8 S9 S10 S11 S12 S13 S14 S15 ✓	Tare Menu ◀ CANCEL: return to previous menu. Set/Reset sensor tare. ◀ ENTER: confirm new sensor tare.

Table 10: RMCi1/RMCi8 PC Control menu

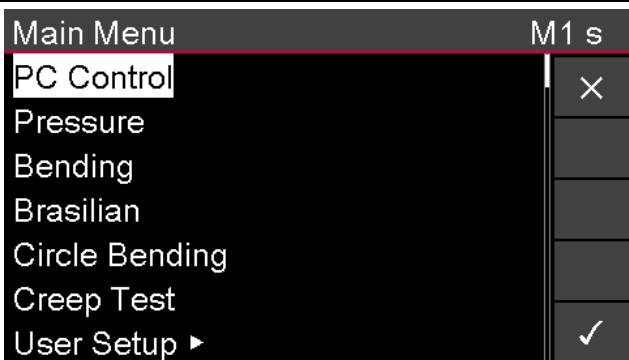
Display	Function
	<u>Main Menu</u> ◀ CANCEL: return to previous menu. Select PC Control for USB/LAN communication. ◀ ENTER: confirm selection.
	<u>PC Control Offline</u> ◀ PC Control settings. ◀ Main menu.
	<u>PC Control Online</u> ◀ Function keys for PC application.

Table 11: RMCi1/RMCi8 test settings menu

Pressure

M1 s

Test

Load

X

Direction

DOWN

vTest

1.00

kN/s

FvTest2

0.00

kN

vTest2

0.00

kN/s

FvTest3

0.00

kN

vTest3

0.00

kN/s

✓

Test Settings Menu

◀ CANCEL: return to previous menu.

◀ ENTER: edit parameter.

Pressure

M1 s

vTest

1.00

kN/s

X

7

8

9

⊗

4

5

6

1

2

3

±

0

.

✓

Edit Value

◀ CANCEL: return to previous menu.

◀ DELETE: delete input.

◀ ENTER: confirm changed parameter.

Pressure

M1 s

Text

ABCD_1234

X

1

2

3

4

5

6

7

8

9

0

⊗

q

w

e

r

t

y

u

i

o

p

#

a

s

d

f

g

h

j

k

l

+

↑

_

z

x

c

v

b

n

m

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-

✓

Edit Text

◀ CANCEL: return to previous menu.

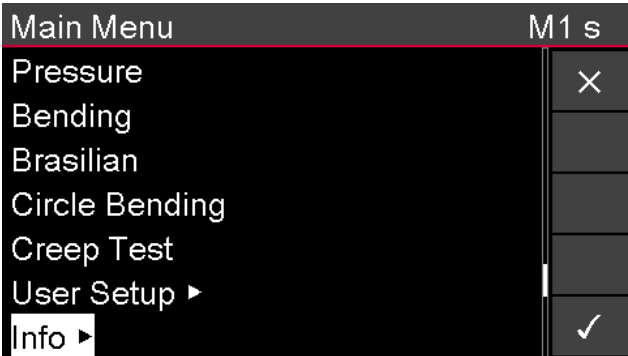
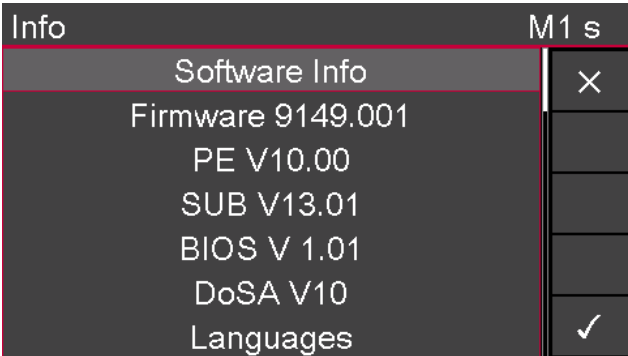
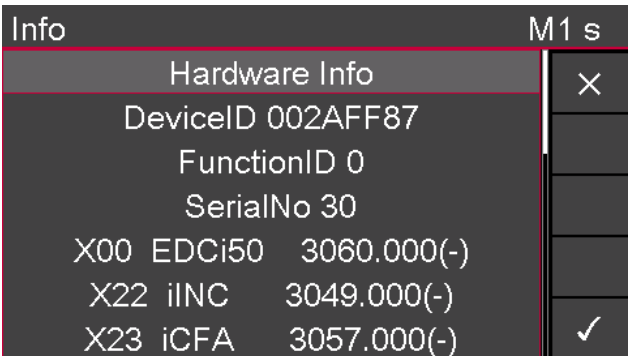
◀ DELETE: delete input.

◀ SYMBOLS: show special symbols.

◀ SHIFT: change lower/capital characters.

◀ ENTER: confirm changed parameter.

Table 12: RMCi1/RMCi8 info menu

Display	Function
	<u>Main Menu</u> ◀ CANCEL: return to previous menu. ◀ ENTER: show info sub menu.
	<u>Info Menu</u> ◀ CANCEL: return to previous menu. ◀ ENTER: show info.
	<u>Software Info</u> ◀ CANCEL: return to previous menu. ◀ ENTER: confirm.
	<u>Hardware Info</u> ◀ CANCEL: return to previous menu. ◀ ENTER: confirm.

Info M1 s Drive Info DC16P 2356.003 Nominal U 48V Nominal I 3.3A MaxDither 500Hz MaxI2t 0.2s ✕ ✓	Drive Info ◀ CANCEL: return to previous menu. ◀ ENTER: confirm.
Info M1 s Flash Disk Info Total 7152 kB Free 6468 kB Used 684 kB Files 25 ✕ ✓	Flash Disk Info ◀ CANCEL: return to previous menu. ◀ ENTER: confirm.
Info M1 s Position Info Nominal 24000 Rev Offset 0 Rev Scale 1 Parts 1.66063e-008 Init 1 Linearisation Points 0 ✕ ✓	Sensor Info ◀ CANCEL: return to previous menu. ◀ ENTER: confirm.