






























- The parameters in this mode can be used only when the “security” parameter (protect mode) is set to “0” to “4”.
- This mode contains the parameters that you use for programming.
- To select this mode, press the  key for 1 second minimum. The display changes to the menu display. If you select [PrLn] using the  and  keys, and then press the  key for 1 second minimum, the controller enters the program mode.
- To select parameters in this mode, press the  key. To change parameter settings, use the  or  keys.
- The following table shows the parameters supported in this mode and the page where the parameter is described.

Symbol	Parameter Name	See
	Pattern No.	Section 5-4
	Number of steps	Below
	Step 0 SP or Target SP 0	Below
	Ramp rate 0	Below
	Step 0 time or Soak time 0	Below
	Step 7 SP or Target SP7	Below
	Ramp rate 7	Below
	Step 7 time or Soak time 7	Below
	Step 8 SP	Below
	Step 8 time	Below
	Step 15 SP	Below
	Step 15 time	Below
	Pattern execution count	Below
	Alarm value 1	Below
	Alarm value 2	Below
	Alarm value 3	Below
	Time signal 1 enabled step	Below
	Time signal 1 ON time	Below
	Time signal 1 OFF time	Below
	Time signal 2 enabled step	Below
	Time signal 2 ON time	Below
	Time signal 2 OFF time	Below

*1 This parameter is described as a level 0 mode parameter. For details, see Section 5-4 Level 0 Mode.

5-no

Number of steps



Function

- Specifies the number of steps in the current pattern.



Comment

Setting Range	Unit	Default
1 to 16	None	8



See

- Related description
3–5 Setting Patterns
- Related parameter
All parameters in the program mode

SP0

Step 0 time (Step time)

Target SP 0 (Rate of rise programming)

Conditions of Use

Within the number of steps.

to

SP7

Step 7 SP (Step time)

Target SP 7 (Rate of rise programming)

SP8

Step 8 SP (Step time)

to

SP 15

Step 15 SP (Step time)



Function

- Sets the SP of steps 0 to 15 when the step time is set.
- Sets target SP 0 to 7 when the rate of rise programming is set.
- During temperature input, the decimal point position is dependent on the currently selected sensor, and during analog input on the results of scaling.



Comment

Setting Range	Unit	Default
SP lower limit to SP upper limit	EU	0



See

- Related description
3–5 Setting Patterns
- 4–3 Ramp Rise Rate Setup Program
- Related parameters
All parameters in the program mode
“Input type” “Scaling upper limit” “Scaling lower limit” “Decimal point” (setup mode)

Pr0

Ramp rate 0

to

Pr7

Pr7

Ramp rate 7

Conditions of Use

Within the number of steps only in the rate of rise programming.



Function

- Sets the degree of change per time unit of ramp rate in the step time ramp step.



Comment

Setting Range	Unit	Default
0 to 9999	EU/Time unit of ramp rate	0

0: The ramp step is skipped.



See

- Related description
4–3 Ramp Rise Rate Setup Program
- Related parameters
All parameters in the program mode
“Step time/Rate of rise programming” “Time unit of ramp rate” (expansion mode)

tL0

Step 0 time (Step time)

Soak time 0 (Rate of rise programming)

to

tL7

tL8

Step 8 time (Step time)

to

tL15

tL15

Step 15 time (Step time)

Conditions of Use

Within the number of steps.



Function

- Sets the time of steps 0 to 15 when the step time is set.
- Sets soak steps 0 to 7 when the rate of rise programming is set.



Comment

Setting Range	Unit	Default
0.00 to 99.59	Program time unit	0.00



See

- Related description
3-5 Setting Patterns
4-3 Ramp Rise Rate Setup Program
- Related parameters
All parameters in the program mode
“Step time/Rate of rise programming” “Program time unit” “Time unit of ramp rate” (expansion mode)

PL

Pattern execution count



Function

- Repeatedly executes the current pattern for the preset number of times.
- The count during pattern execution can be monitored in the “pattern execution count monitor” (level 0 mode).



Comment

Setting Range	Unit	Default
0 to 9999	Time	1

0: The pattern is not executed



See

- Related description
4–4 Program Operation/Pattern operation
- Related parameters
All parameters in the program mode

AL - 1

Alarm value 1

AL - 2

Alarm value 2

AL - 3

Alarm value 3

Conditions of Use

Alarms must be assigned as outputs. For example, if alarm outputs 1 and 2 only are assigned as outputs, the “alarm value 3” parameter cannot be used.



Function

- This parameter is used for monitoring or setting the alarm values of alarm outputs 1 to 3.
- During temperature input, the decimal point position is dependent on the currently selected sensor, and during analog input on the results of scaling.



Comment

Setting Range	Unit	Default
-1999 to 9999	EU	0



See

- Related description
3–4 Setting Alarm Type
3–5 Setting Patterns/Alarm value
- Related parameters
“Input type” “Scaling upper limit” “Scaling lower limit” “Decimal point” “Con-

trol output 1 assignment" "Control output 2 assignment" "Auxiliary output 1 assignment" "Auxiliary output 2 assignment" "Alarm 1 type" "Alarm 2 type" "Alarm 3 type" "Alarm 1 open in alarm" "Alarm 2 open in alarm" "Alarm 3 open in alarm" (setup mode)
"Alarm 1 hysteresis" "Alarm 2 hysteresis" "Alarm 3 hysteresis" (level 2 mode)

t5 15**Time signal 1 enabled step****t525****Time signal 2 enabled step**

Conditions of Use

Each of the time signals must be assigned as outputs.



Function



Comment



See

- Sets the step in which the time signal is used.

Setting Range	Unit	Default
0 to 15	None	0

- Related description
4–6 Program output
- Related parameters
“Time signal 1 ON time” “Time signal 1 OFF time” “Time signal 2 ON time”
“Time signal 2 OFF time” (program mode)

on1**Time signal 1 ON time****on2****Time signal 2 ON time**

Conditions of Use

Each of the time signals must be assigned as outputs.



Function



Comment



See

- Sets the ON time of the time signal.

Setting Range	Unit	Default
0.00 to 99.59	*1	0.00

*1 Program time unit

- Related description
4–6 Program Output
- Related parameters
“Time signal 1 enabled step” “Time signal 2 enabled step” “Time signal 1 OFF

time” “Time signal 2 OFF time” (program mode)
“Program time unit” (expansion mode)

OF 1

Time signal 1 OFF time

OF 2

Time signal 2 OFF time

Conditions of Use

Each of the time signals must be assigned as outputs.



Function

- Sets the OFF time of the time signal.



Comment

Setting Range	Unit	Default
0.00 to 99.59	Program time unit	0.00



See

- Related description
4–6 Program output
- Related parameters
“Time signal 1 enabled step” “Time signal 2 enabled step” “Time signal 1 ON time” “Time signal 2 ON time” (program mode)
“Program time unit” (expansion mode)