Input and output signal parametrisation, special parameter

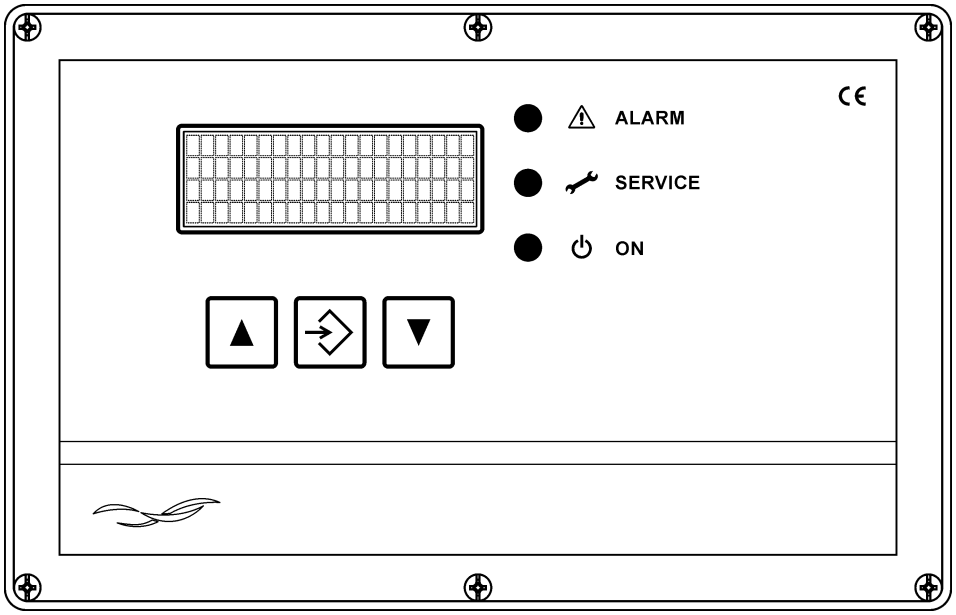
Appendix 7

to

Operating and installation instructions

R-IMC-BUS
Filter control system

RM-310 C / RM-310 CT

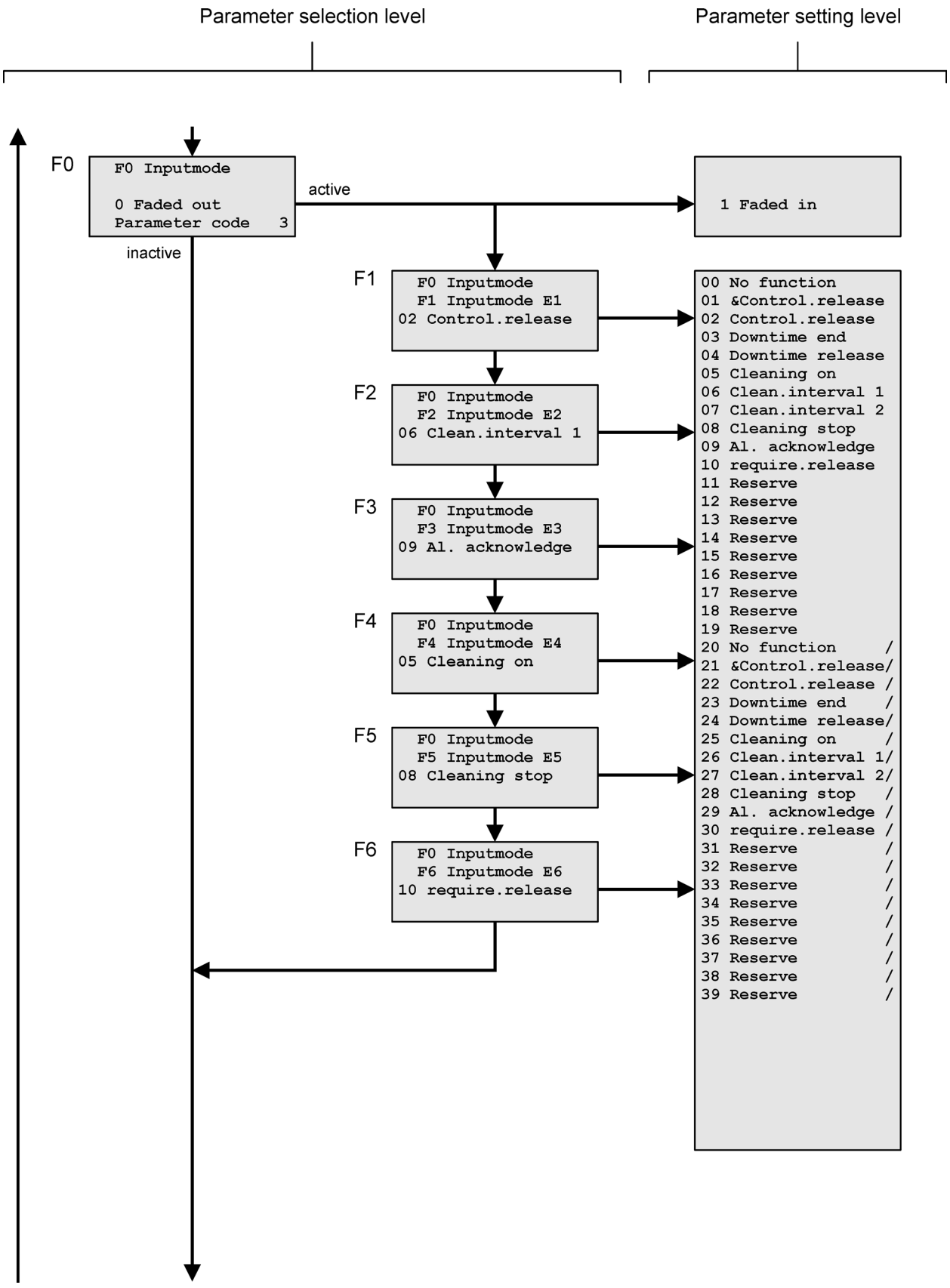


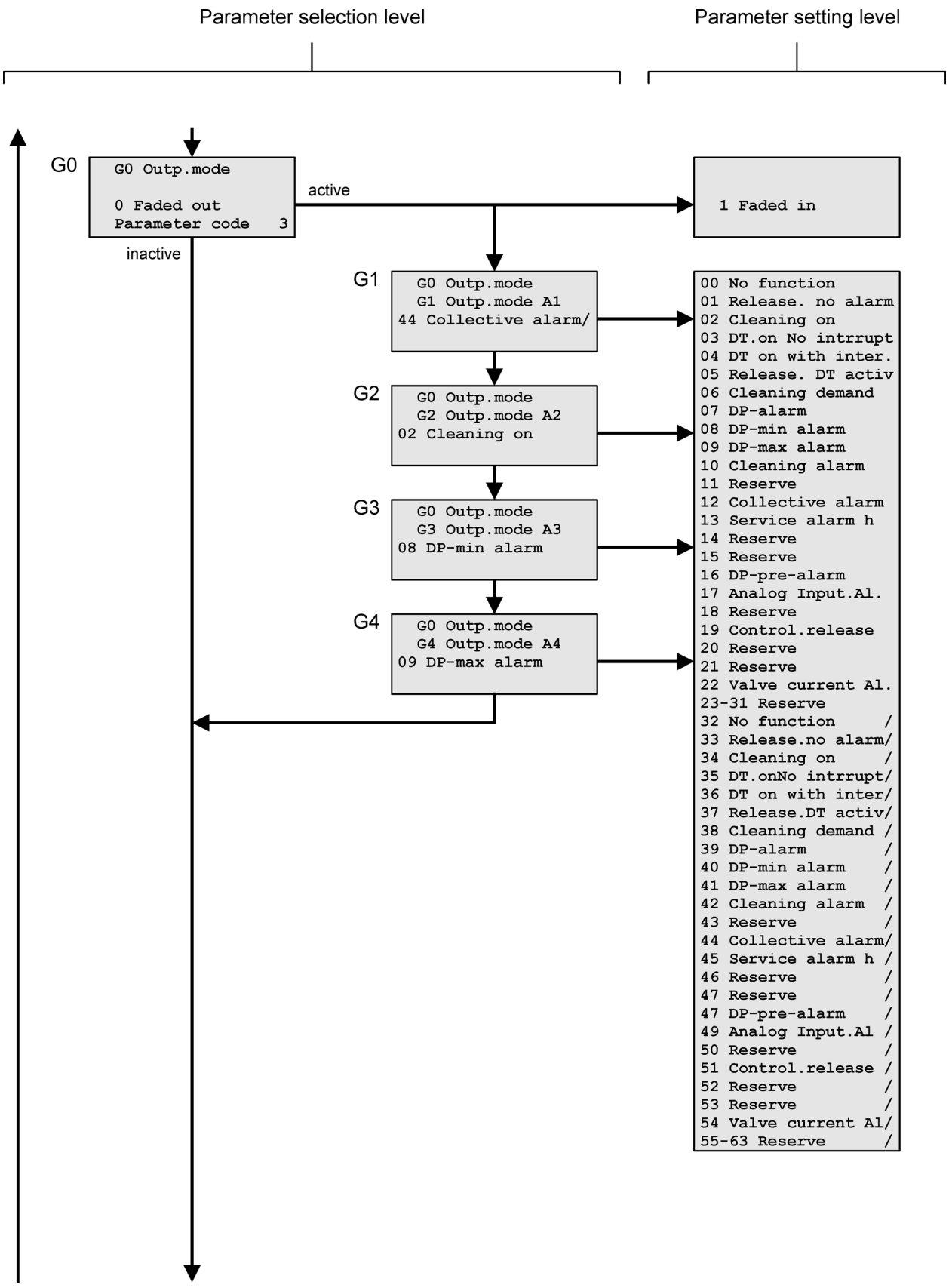
Contents

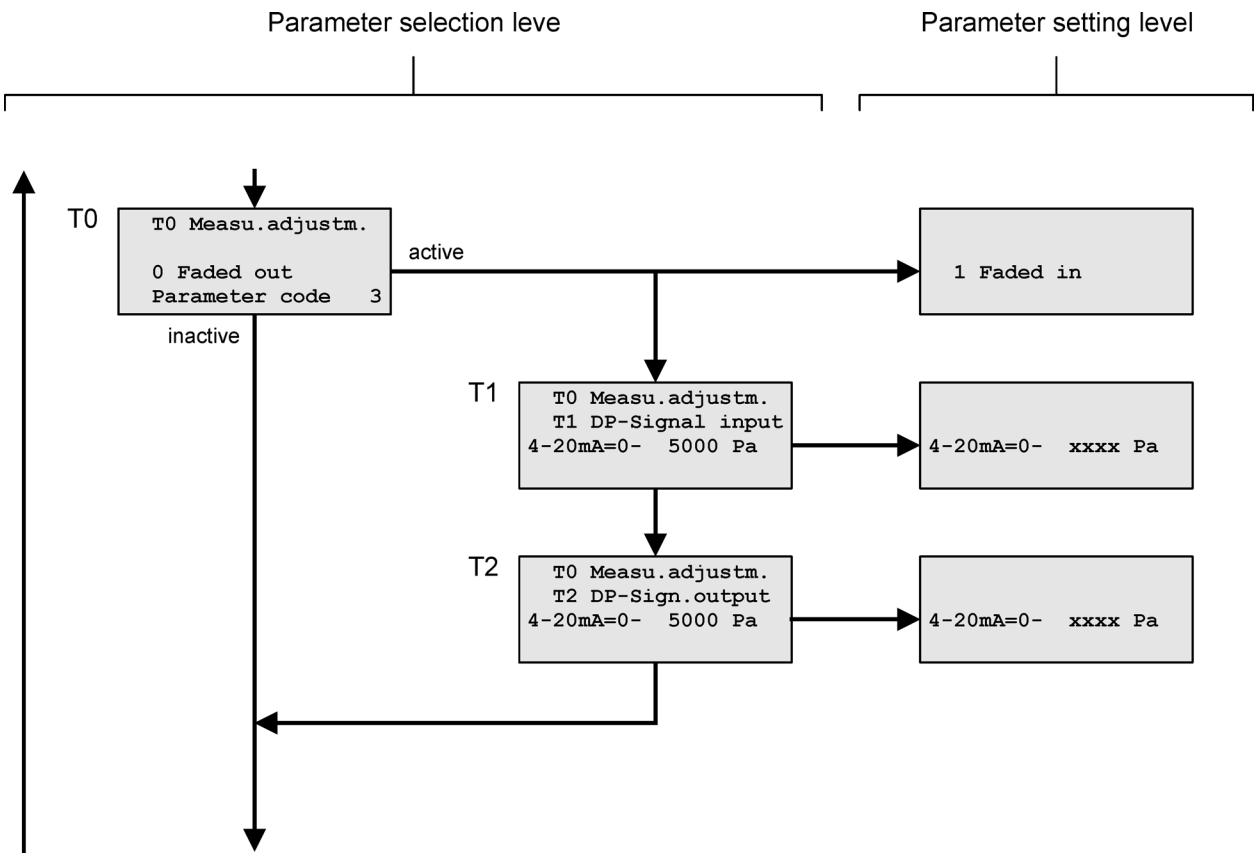
Symbol explanation

Important note

1 Overview of menu navigation




Parameter selection level
Parameter setting level
G0
G0 Outp.mode
0 Faded out
Parameter code 3
active
1 Faded in
inactive
G1
G0 Outp.mode
G1 Outp.mode A1
44 Collective alarm/
G2
G0 Outp.mode
G2 Outp.mode A2
02 Cleaning on
G3
G0 Outp.mode
G3 Outp.mode A3
08 DP-min alarm
G4
G0 Outp.mode
G4 Outp.mode A4
09 DP-max alarm
00 No function
01 Release. no alarm
02 Cleaning on
03 DT.on No intrrupt
04 DT on with inter.
05 Release. DT activ
06 Cleaning demand
07 DP-alarm
08 DP-min alarm
09 DP-max alarm
10 Cleaning alarm
11 Reserve
12 Collective alarm
13 Service alarm h
14 Reserve
15 Reserve
16 DP-pre-alarm
17 Analog Input.Al.
18 Reserve
19 Control.release
20 Reserve
21 Reserve
22 Valve current Al.
23-31 Reserve
32 No function /
33 Release.no alarm/
34 Cleaning on /
35 DT.onNo intrrupt/
36 DT on with inter/
37 Release.DT activ/
38 Cleaning demand /
39 DP-alarm /
40 DP-min alarm /
41 DP-max alarm /
42 Cleaning alarm /
43 Reserve /
44 Collective alarm/
45 Service alarm h /
46 Reserve /
47 Reserve /
47 DP-pre-alarm /
49 Analog Input.Al /
50 Reserve /
51 Control.release /
52 Reserve /
53 Reserve /
54 Valve current Al/
55-63 Reserve /


Parameter selection leve
Parameter setting level
T0
T0 Measu.adjustm.
0 Faded out
Parameter code 3
active
inactive
1 Faded in
T1
T0 Measu.adjustm.
T1 DP-Signal input
4-20mA=0- 5000 Pa
4-20mA=0- xxxx Pa
T2
T0 Measu.adjustm.
T2 DP-Sign.output
4-20mA=0- 5000 Pa
4-20mA=0- xxxx Pa

2 Parameter list

Parameter	Code 🔒	Text in display, line 1	Meaning	Factory setting	Setting range
Parameter group F0-F6 "Input mode"					
F0	3	F0 Inputmode	Digital input functions	0	0 … 1
F1	–	F1 Inputmode E1	Input E1	2	0 … 39
F2	–	F2 Inputmode E2	Input E2	6	0 … 39
F3	–	F3 Inputmode E3	Input E3	9	0 … 39
F4	–	F4 Inputmode E4	Input E4	5	0 … 39
F5	–	F5 Inputmode E5	Input E5	8	0 … 39
F6	–	F6 Inputmode E6	Input E6	10	0 … 39
Parameter group G0-G4 "Outp.mode"					
G0	3	G0 Outp.mode	Relay output functions	0	0 … 1
G1	–	G1 Outp.mode A1	Output A1	44	0 … 63
G2	–	G2 Outp.mode A2	Output A2	2	0 … 63
G3	–	G3 Outp.mode A3	Output A3	8	0 … 63
G4	–	G4 Outp.mode A4	Output A4	9	0 … 63
Parameter group T0-T2 "Measurement range adjustment"					
T0	3	T0 Measu.adjustm.	Measuring range functions	0	0 … 1
T1	–	T1 DP-Signal input	Differential pressure, signal input (only RM-310 C)	5000 Pa	500 Pa … 35000 Pa
T2	–	T2 DP-Sign.output	Differential pressure, signal output (only RM-310 CT)	5000 Pa	500 Pa … 35000 Pa

🔒 Parameter code 3 = 4711

3 Parameter description and explanation of function

Parameter group F0-F6 "Input mode"

Parameters F1-F6 can be faded in or out with parameter F0.

F0 =	Text in display, line 3	Meaning
0	`0 Faded out`	Parameters F1-F6 are faded out and are skipped
1	`1 Faded in`	Parameters F1-F6 are faded in and are displayed

The function of inputs E1 to E6 can be set via parameters F1-F6.

Fn =	Text in display, line 3	Meaning
0/20	`n No Function`	No function
1/21	`n &Ctrl.Release.`	AND operation for control release
2/22	`n Ctrl.Release`	The control is released and switches from stand-by to normal operation.
3/23	`n Downtime end`	Stop downtime immediately and clear
4/24	`n Downtime release`	Downtime only when released otherwise interrupt downtime
5/25	`n Cleaning on`	Continuous cleaning on by external **Even if no cleaning release was granted.**
6/26	`n Clean.interval 1`	If cleaning is on, cleaning is done only with interval 1
7/27	`n Clean.interval 2`	If cleaning is on, cleaning is done only with interval 2 Priority before Fn = 6
8/28	`n Cleaning stop`	Cleaning final stop Priority before Fn = 6, 7
9/29	`n Al. acknowledge`	Alarm acknowledgement
10/30	`n require.release`	Confirmation of release requirement Cleaning on when cleaning was requested by RM-310. (see parameter Gn = 6/38)
11-19 and 31-39	`n Reserve`	Reserve parameter (without function)

i If the parameter value is smaller than 20, the input function responds to a 1-signal.

If the parameter value is greater than 19, the input function negates and responds to a 0-signal. This is marked in the text display by "/".

Parameter group G0-G4 "Outp.mode"

Parameters G1-G4 can be faded in or out with parameter G0.

G0 =	Text in display, line 3	Meaning
0	0 Faded out	Parameters G1-G4 are faded out and skipped.
1	1 Faded in	Parameters G1-G4 are faded in and are displayed

The function of the relay outputs A1 to A4 can be set via parameters G1-G4.

Gn =	Text in display, line 3	Meaning
0/32	n No function	No function
1/33	n Release.no alarm	Control released and no alarm
2/34	n Cleaning on	Cleaning enabled
3/35	n DT.on No intrrupt	Downtime active and not interrupted via input function
4/36	n DT with inter.	Downtime active, even if downtime interrupt
5/37	n Release. DT activ	Control release occurred or downtime active
6/38	n Cleaning demand	DP > DP-Start = 1 DP < (DP-Start - DP-Hysteresis) = 0
7/39	n DP-Alarm	Differential pressure Min. or Pre-Alarm or Max. Alarm
8/40	n DP-Alarm min	Differential pressure Min. Alarm
9/41	n DP-Alarm max	Differential pressure Max. Alarm
10/42	n Cleaning alarm	Cleaning Alarm
11/43	n Reserve	Reserve parameter (without function)
12/44	n Collective alarm	Group alarm
13/45	n Service Alarm h	The service operating hours have expired
14/46	n Reserve	Reserve parameter (without function)
15/47	n Reserve	Reserve parameter (without function)
16/48	n DP Pre-alarm	DP pre-alarm switching point reached
17/49	n Analog Input.Al.	Alarm output "Sensor Alarm" and 4-20 mA analogue inputs
18/50	n Clean.Press.valve	Cleaning pressure controller pressure control output potential-free
19/51	n Control.release	Control released
20/52	n Reserve	Reserve parameter (without function)
21/53	n Reserve	Reserve parameter (without function)
22/54	n Valve current al.	Valve current alarm
23-31 and 55-63	n Reserve	Reserve parameter (without function)

If the parameter value is smaller than 32 output signal 1 is active.

If the parameter value is smaller than 32 output signal 0 is active. This is marked in the text display by "/".

Parameter group T0-T2 "Measurement range adjustment"

T0 =	Text in display, line 3	Meaning
0	0 Faded out	Parameters T1-T2 are faded out and are skipped.
1	1 Faded in	Parameters T1-T2 are faded in and are displayed.

T1 =	Text in display, line 3	Meaning
0-500 Pa to 0-35000 Pa	4-20mA = 0-#### Pa	The measurement range of the signal input (terminals 15, 16) is 0-#### Pa only RM-310 C

T2 =	Text in display, line 3	Meaning
0-500 Pa to 0-35000 Pa	4-20mA = 0-#### Pa	The measurement range of the signal output (terminals 15, 16) is 0-#### Pa only RM-310 CT