

### EASY-SERVICE PROGRAM

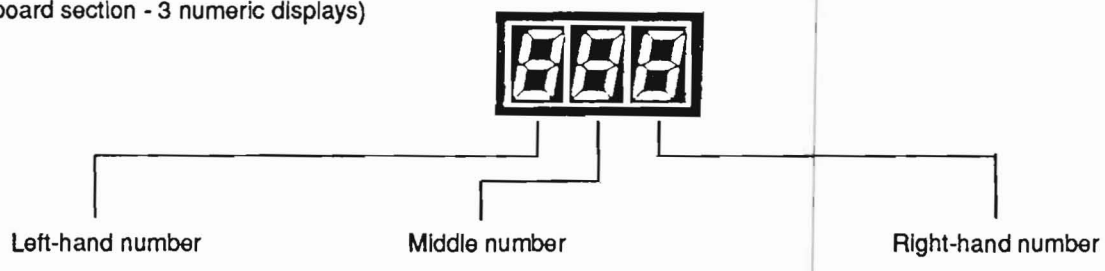
A key switch (ACCESSORY/order-no. 8.8966.0067) is required as an auxiliary tool. Connect the three-pin plug on the CPU board 14.GS1/ST18.

Structure of the easy-service program:

- The first switch pulse enters the service program and moves to the 1st level = function mode. Watch the three-digit numeric display in the control panel.
- > Left-hand digit = 1. level = function mode
  - The numbers 0...6 which correspond to a function mode are displayed **consecutively**. Press the key at the required function mode which turns into a static display. At the same time the service program moves to the
- > Middle digit = 2. level = component
  - The numbers 0...4 which are assigned to the component to be tested are displayed **consecutively**. Press the key for the respective component which turns into a static display. At the same time the service program moves to the
- > Right-hand digit = 3. level = test level
  - On this level every switch/test function must be selected **STEP BY STEP**. On the third level up to eight steps can be checked (if occupied). **When the key is pressed the number on the third level always increments by 1 and the corresponding component is switched on.** The following keystroke turns this component off the next one on.
  - If functions including the bit/temperature/ADC displays are selected, then the **POSITION** in the **SERVICE PROGRAM** and the **RESULT** of the **COMPONENT** to be tested will be displayed in turns.

Exit from the service program is possible on any LEVEL by PRESSING THE KEY when a "ZERO" is displayed.

### STRUCTURE LAYOUT (Keyboard section - 3 numeric displays)



Functional group:	Component:	Switch/test level:
1 = INPUTS	1 = Levels/temperatures service key 2 = Code switch 14.GS1/S1 3 = FAT/dryer step switch	1-8 Status display
2 = OUTPUTS	1-3= Consumer groups	1-8 Individual consumers
3 = AD CONVERTER	1/2= ADC alignment	Display of real value
4 = CLEAN (maintenance)	1 = Cleaning mode	Mode activation
5 = ACTUAL/NOMINAL VALUE (analog/digital)	1-3= Dev/fix ACT./NOM.value	Status/real value display
6 = REPLENISHMENT TIME BASE INIT VERSION software	4 = Dryer step sw. 11.GS1/S1 1-3= Replenishment time/ version/BASE INIT	Mode activation

**SERVICE PROGRAM**

POSITION		COMPONENT	RESULT bit / text			Component number	Connection at ..		
L-H display	Middle display	R-H display	Alternating display:						
			L-H display	Middle display	R-H display				
<b>INPUTS:</b>									
1	1	1	Level dev/fix	0	-	1	Level OK	40.E1/E3	St2/33
				0	-	0	Level not OK		
1	1	2	Level IW/MW	0	-	1	Level OK	9.E1/E4	St3/32
				0	-	0	Level not OK		
1	1	3	Level disp. tanks	0	-	1	Disp. tank full	-	St9
				0	-	0	Disp. tank empty		
1	1	4	Level repl. tank	0	-	1	Repl. tanks full	-	St4
				0	-	0	Repl. tanks empty		
1	1	6	free	0					
1	1	8	Service switch	0	-	0	Service sw. ON	-	St18
				0	-	1	Service sw. OFF		
1	1	0	Exit service prog.						
<b>Code switches 14.GS1/S1</b>									
1	2	1	Process 2/8/10 min	0	-	1	Code sw. S1.1 ON	-	-
				0	-	0	Code sw. S1.1 OFF		
1	2	2	Process 2/8/10 min	0	-	1	Code sw. S1.2 ON	-	-
				0	-	0	Code sw. S1.2 OFF		
1	2	3	Repl. time dev/fix	0	-	1	Code sw. S1.3 ON	-	-
				0	-	0	Code sw. S1.3 OFF		
1	2	4	Repl. time dev/fix	0	-	1	Code sw. S1.4 ON	-	-
				0	-	0	Code sw. S1.4 OFF		
1	2	5	Water supply time	0	-	1	Code sw. S1.5 ON	-	-
				0	-	0	Code sw. S1.5 OFF		
1	2	6	Water supply time	0	-	1	Code sw. S1.6 ON	-	-
				0	-	0	Code sw. S1.6 OFF		
1	2	7	I/O bus coded ?						
			YES!	0	-	1	Code sw. S1.7 ON	-	-
			NO!	0	-	0	Code sw. S1.7 OFF		
1	2	8	Mot. standby coded?						
			YES!	0	-	1	Code sw. S1.8 ON	-	-
			NO!	0	-	0	Code sw. S1.8 OFF		
1	2	0	Exit service prog.						
1	3	1	FAT roller1 from the	0	-	1	Turn roller	8.S4	BU13/9
				0	-	0	display changes!		
1	3	2	FAT roller2 from the	0	-	1	Turn roller	8.S5	BU13/7
				0	-	0	display changes!		
1	3	3	FAT roller3 from the right	0	-	1	Turn roller	8.S6	BU13/5
				0	-	0	display changes!		
1	3	4	FAT roller4 from the right	0	-	1	Turn roller	8.S7	BU13/3
				0	-	0	display changes!		
1	3	5	FAT roller5 from the	0	-	1	Turn roller	8.S8	BU13/1
				0	-	0	display changes!		

IW = Intermediate wash  
 MW = Main wash  
 FAT = Film area detection  
 FAT rollers counted from the right.

No change means defective component.

POSITION			COMPONENT	Alternating display:							
L-H display	Middle display	R-H display									
<b>INPUTS</b>				<----- dryer steps -----> / every BIT in 1 2 3 4 5 6 / right-hand display							
			(hexadecimal switch)								
1	3	6	Dryer step switch D0>	0	1	0	1	0	1	BIT display	Switch in control panel 10.
1	3	7	Dryer step switch D1>	0	0	1	1	0	0	BIT display	
1	3	8	Dryer step switch D2>	0	0	0	0	1	1	BIT display	
1	3	0	Exit service program								
<b>OUTPUTS</b>										Component number	Connection at ...
2	1	1	Fixer heater ON	Triac bd. D1.1 ON		1.Hz2		15.GS1/St13			
2	1	2	D/F/MW circ. pump ON	Triac bd. D1.2 ON		1.M2		15.GS1/St8			
			IW circ. pumps ON	Triac bd. D1.2 ON		1.M7		15.GS1/St15			
2	1	3	IR radiator TR1 ON	Triac bd. D1.3 ON		3.Hz3/3.Hz4		15.GS1/St5/St6			
			Tangential blower ON	Triac bd. D1.4 ON		5.M3/M4/M5/M6		15.GS1/St4/3/9/1			
2	1	4	Tangential blower ON	Triac bd. D1.4 ON		5.M3/M4/M5/M6		15.GS1/St4/3/9/1			
2	1	5	IR radiator TR2 ON	Triac bd. D2.5 ON		3.Hz5/3.Hz6		15.GS1/St1/St2			
			Tangential blower ON	Triac bd. D1.4 ON							
2	1	6	Dev. heater ON	Triac bd. D2.6 ON		1.Hz1		15.GS1/St12			
			D/F/MW/IW circ. pump ON	Triac bd. D1.2 ON		1.M2/1.M7		15.GS1/St8/St15			
2	1	7	Repl. pump D/F ON	Triac bd. D2.7 ON		1.M8		6.GS1/St10			
2	1	8	Anti-algae MG IW/MW ON	Triac bd. D2.8 ON		30.MG1/2		6.GS1/St3/St4			
2	1	0	Exit service program								
<b>ACCESSORIES</b>											
2	2	1	Pump/filter	Available upon request.							
2	2	2	Chiller	Available upon request.							
2	2	3	READY	Not for the service.							
2	2	4	not connected								
2	2	5	Solenoid valve 24 V (UL)	Standard feature in UL machines.							
2	2	6	Anti-algae agent replenishment	Parts/diagram upon request.							
2	2	0	Exit service program								
2	3	1	not connected								
2	3	2	Buzzer	42.H1		14.GS1/St6					
2	3	3	Motor standby (jog cycle)	1.M1-50.GS1-6.GS1		see general diagram					
2	3	0	Exit service program								

				RESULT			
				L-H display	Middle display	R-H display	bit / text
<b>AD CONVERTER alignment</b>							
3	1	X	0.01 - display	0	0	1	with 0.01 = NOM. display/setting
				x	x	x	not 0.01 Adjustment with R57 on 21.GS1
3	2	X	52.9 - display	5	2	9	with 52.9 = NOM. display/setting
				x	x	x	not 52.9 Adjustment with R60 on 21.GS1
3		0		0	Exit service program		

CLEAN: Only executed if all levels are OK when switched on!

4	1	X	D/F/MW/IW circ. pump D/F heaters ON
4	0	X	Exit service program

X = varying displays or no displays, TR\_ = e.g. dryer 1

POSITION			COMPONENT	RESULT bit / text		
			Alternating display:			
L-H display	Middle display	R-H display	L-H display	Middle display	R-H display	
<b>ACTUAL/NOMINAL VALUES</b>						
5	1	X	D temp. ACT. value	x	x	0 Act. temp. in display e.g. between 25°-40°C
5	2	X	F temp. ACT. value	x	x	0 Act. temp. in display e.g. between 25°-40°C
5	3	X	D temp. NOM. value	x	x	0 Act. temp. in display e.g. of 25°-40°C
5	4	X	Dryer step switch	0	0	0 Dryer step 1 on control panel switch
				0	0	1 Dryer step 2
				0	0	2 Dryer step 3
			No changing display	0	0	3 Dryer step 4
				0	0	4 Dryer step 5
				0	0	5 Dryer step 6
5	0	X	Exit service prog.			
<b>REPLENISHMENT TIME - BASE INIT - SOFTWARE VERSION</b>						
6	1	X	Repl. pump 30 s ON 12.MG1/2 30 s ON			(Calculation repl. amount x 2 = one minute)
6	2	X	Software version	1	0	5 Software version, e.g. V (1)105 = V 1105
6	3	X	BASE INIT (general reset)			4 s of initialization time are following, then a complete film cycle is initiated.
6	0	X	Exit from service prog.			