Whirlpool

Service Manual

Washing machine
Toploader
AWT 5088/3

Model AWT 5088/3
Version 8561 508 10280

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Family	SC1

This documentation is only intended for qualified technicians who are aware of the respective safety regulations.

Date: 13.12.2002
Subject to modification
Document-No.: 4812 712 17827

Technical data

Dimensions

Height	85	cm
Width	40	cm
Depth	60	cm

Weight

Net weight	~63	kg
With package	~66	kg

Main Connection

Voltage	230	V ± 10%
Frequency	50	Hz
Power consumption	~2.3	kW
Fuse rating	10	A

Drum

Volume	42	l
Wash spin	52	rpm
Ramp speed	95	rpm
Speed spinning max.	960	rpm

Capacity of dry laundry

Cotton	5	kg
Cotton short	3	kg
Easy care	2	kg
Daily mixed	3	kg
Easy care short	1.5	kg
Delicate	1.5	kg
Wool	1	kg
Handwash/Silk	1	kg

Pressostat

Kind of switch	2-level pressoswitch with overflow contact	
Type	A2-738	
Nominal voltage	230	V

Water Level

Foam level (11 - 12, 14)		
Switching point	32 ± 5	mmWc
Switching back point	15 ± 5	mmWc
Level 1 (21 - 22, 24)		
Switching point	65 ± 5	mmWc
Switching back point	40 ± 5	mmWc
Overflow (21 - 26)	300 ± 20	mmWc
Water level based to drum	60 ± 10	mm

Nominal currents

Contacts		
21 - 22	0.5 - 1	mA
21 - 24	16 (4)	A
21 - 26	1 (1)	A

Door lock

Kind of switch	Switch with PTC heater of Bimetal	
Type	BP P/5	
Nominal voltage	230	V
Nominal current:		
Contact 4 - 5	16 (4)	A
Lock time	≤6”	
Unlock time	≤180”	

Heating element

Kind of heating	Tubular heating element with NTC - sensor	
Nominal voltage	230 +10%, -15%	V
Nominal power	2050	W ± 5%
Resistance (20 ˚C)	23.9	Ω ± 5%
Thermo-fuse (switch OFF temperature)	152	˚C
Leakage current (<99 ˚C)	<0.8	mA

NTC sensor

Class of protection	II	
Resistance NTC :		
0˚C	35.9	kΩ ± 5.8%
30˚C	9.8	kΩ ± 3.7%
40˚C	6.6	kΩ ± 3.1%
50˚C	4.6	kΩ ± 2.6%
60˚C	3.2	kΩ ± 2.0%
70˚C	2.3	kΩ ± 2.5%
95˚C	1.1	kΩ ± 3.7%

Inlet valve

Kind of valve	1-way valve for cold water	
Water temperature	<60	˚C
Rated flow >1 bar	8	l/min ± 10%
Pressure range	0,2 - 10	bar
Nominal voltage	220 - 240	V
Frequency	50	Hz
Nominal current	40	mA
Nominal power	8.8	VA ± 10%
Nominal resistance	3.8	kΩ ± 10%

Technical data

Drain pump (synchronous)

Nominal Voltage		230	V
Nominal/max. current		0.3/0.5	A
Nominal power		34	W
Frequency		50	Hz
Resistor (coil) (20 ˚C)		162	Ω
Motor protection		Thermal-fuse	
Capacity (0.55 - 1.0 m)		14 ± 2	l/min
Position of draining hose outlet	min.	0.55	m
	max.	1.0	m

Program timer

Type	SC1 - 3337
Timer basic	4619 730 89353
Timer programmed	4619 753 00161
Nominal voltage	230 V
Frequency	50 Hz

Program

Positions 32

	Cotton-/ coloured	Easy care	Deli-cate	Wool	Silk
Pre wash	02 - 06	03 - 06	04 - 06	-	-
Main wash	07 - 21	12 - 21	14 - 21	17 - 21	18 - 21
Rinse	22 - 28	22 - 28	22 - 28	22 - 28	22 - 28
Spin	29 - 31	29 - 31	29 - 31	29 - 31	29 - 31
Stop	32	32	32	32	32

Motor

Type	MCA 45/64 - 148/ ALB 1
Belt ratio	i = 1:15.9

Resistance contacts (20 ˚C)

Stator (full field)	1.80	Ω ± 7%
Rotor	2.00	Ω ± 7%
Tachogenerator	67.80	Ω ± 7%

Input power (at 230 V AC)

Washing	220	W ± 7%
Rinsing	315	W ± 7%
Spinning	405	W ± 10%

Radio interference supression

Rated voltage	90 - 250 V
Rated current	16 A
Frequency	50/60 HZ
Nominal capacity	470 nF X1 + 2 x 22 nF Y

Main switch

Type	1DLF1006	
Nominal voltage	250	V
Nominal current	16 (5)	A
Poles	2	
Functionality	Normally opened	
Connection in RAST 5	6.3	pins
Connection lamp	2.8	pins

Pilot lamp

Nominal voltage 230 V

Option switch

Nominal voltage	5	V DC
Nominal current	1	mA
Poles	1	
Functionality	Normally opened	
Connection	RAST 2.5	

Temperature/spin speed selector

Positions		7	
Nominal voltage		5	V DC
Nominal current		1	mA
Poles		1	
Connection		RAST 2.5	
Value of resistors ± 5%:			
5 - 6	Position 1	<10	Ω
	Position 2	0.68	kΩ
	Position 3	1.10	kΩ
	Position 4	1.80	kΩ
	Position 5	2.70	kΩ
	Position 6	3.60	kΩ
	Position 7	4.70	kΩ

Push button switch

ON/OFF	SM
Rapid	OPT. 1
Rinse intensive	OPT. 2
Rinse stop	OPT. 3

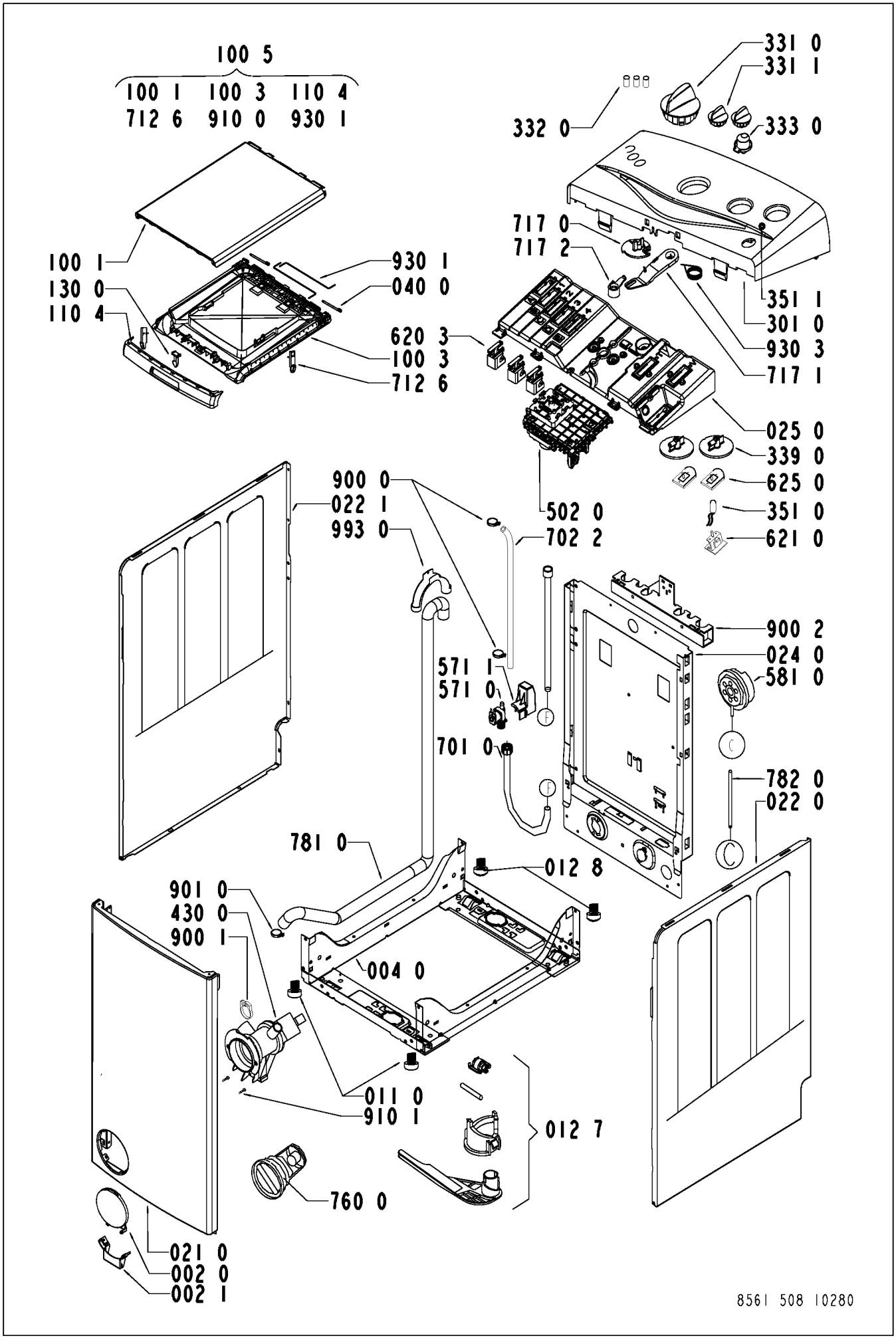
Spare part list

Model **AWT 5088/3**
Service No. **856150810280**
Version **856150810280**

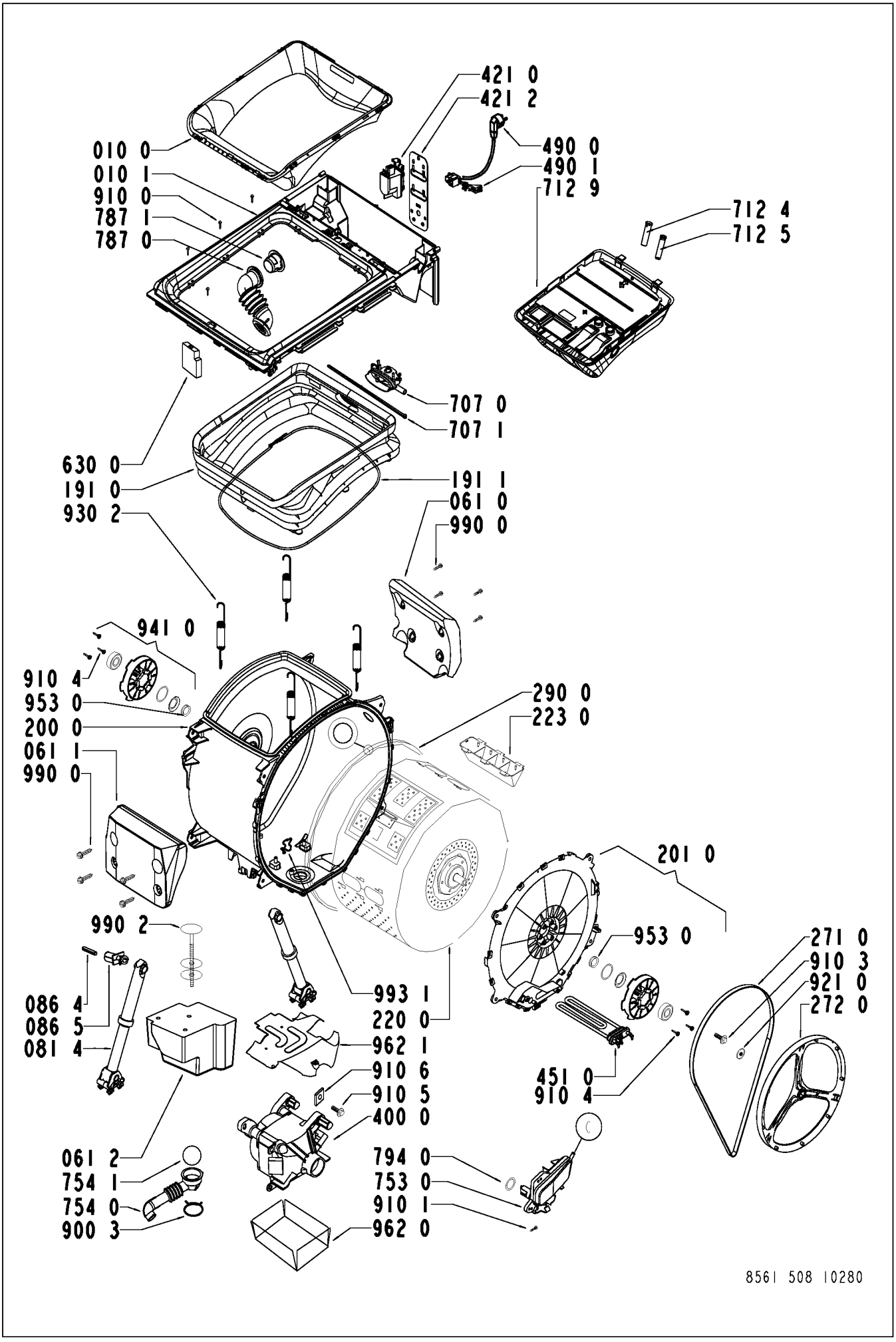
Pos. No.	12NC Code	Description
002 0	**4812 459 38027**	Flap round
002 1	**4812 459 38028**	Hinge Flap
004 0	**4812 440 19625**	Drip tray assy
010 0	**4812 459 48056**	Door frame inner
010 1	**4812 440 10599**	Frame Top RFI
011 0	**4812 462 48054**	Foot
012 7	**4812 310 18497**	Trolley kit front
012 8	**4812 528 78046**	Foot adjustable rear
021 0	**4812 440 19626**	Front,panel
022 0	**4812 440 19628**	Side panel right
022 1	**4812 440 19629**	Side panel left
024 0	**4812 440 19631**	Rear panel
025 0	**4812 440 19582**	Support Control panel
040 0	**4812 417 18815**	Hinge bolt
061 0	**4812 466 88489**	Counter weight
061 1	**4812 466 88491**	Counter weight front
061 2	**4812 466 88492**	Counter weight bottom
081 4	**4812 529 18043**	Shock absorber
086 4	**4812 529 18045**	Pin f. Shock absorber
086 5	**4812 529 18052**	Damper f. Shock absorber
100 1	**4812 440 19634**	Lid outer
100 3	**4812 440 19635**	Lid inner
100 5	**4812 440 19636**	Lid assembly
110 4	**4812 440 19553**	Handle cpl.
130 0	**4812 417 18849**	Hook f. Door
191 0	**4812 466 68596**	Door bellow
191 1	**4812 492 98014**	Strap f. bellow
200 0	**4812 418 18242**	Tub 4fix points
201 0	**4812 440 19644**	Cover cpl.
220 0	**4812 418 18243**	Drum
223 0	**4819 418 49713**	Drum lifter
271 0	**4812 358 18161**	Belt
272 0	**4812 528 88083**	Pulley 298 mm
290 0	**4812 532 68078**	Gasket
301 0	**4812 452 11655**	Control panel AWT 5088/3
331 0	**4812 412 58818**	Knob Timer
331 1	**4812 412 58817**	Knob Options
332 0	**4812 410 28583**	Button Options
333 0	**4812 410 28611**	Button on/off
339 0	**4812 413 18241**	Adapter
351 0	**4812 124 98001**	Lamp mains
351 1	**4812 124 18001**	Cover pilot lamp
400 0	**4812 361 58364**	Motor MCA 45/64-148/ALB1
421 0	**4812 121 18142**	Interf.filter 1,00 µ F
421 2	**4812 404 38679**	Holder RFI
430 0	**4812 360 18529**	Pump,draining
451 0	**4812 259 28835**	Heating element 2050 W, 230 V
490 0	**4819 321 18136**	Cable,mains 2m SA
490 1	**4812 321 28367**	Strain relief
502 0	**4812 282 19378**	Timer SC1 884/45/3337
571 0	**4812 281 28393**	Valve,magnet
571 1	**4812 281 18049**	Cover f. valve
581 0	**4812 271 28509**	Pressostat
620 3	**4819 410 28998**	Switch options
621 0	**4812 276 18276**	Switch ON/OFF

Pos. No.	12NC Code	Description
625 0	**4812 413 48279**	Selector,switch Temp./Spin
630 0	**4812 271 38373**	Door lock hybrid
701 0	**4819 530 29034**	Hose, inlet
702 2	**4812 530 28871**	Hose VALVE-DISPENSER
707 0	**4812 526 48122**	Nozzle box cold cpl.
707 1	**4812 526 48049**	Clamp f. nozzle box
712 4	**4812 418 68162**	Siphon f. softener
712 5	**4812 418 68163**	Siphon f. bleach
712 6	**4812 418 68164**	Clip SOAP DISPENSER
712 9	**4812 418 68186**	Soap dispenser cpl. 4
717 0	**4812 321 18154**	Cam SC1 plastic support
717 1	**4812 321 38023**	Lever SC1
717 2	**4812 323 18021**	Lever adjustment (metal)
753 0	**4812 418 68187**	Chamber,air
754 0	**4812 530 28938**	Drainhose
754 1	**4812 530 28832**	Lock eco
760 0	**4812 480 58089**	Filter set pump
781 0	**4812 530 28953**	Hose,draining
782 0	**4812 530 28941**	Hose Pressostat
787 0	**4812 530 28942**	Hose Air Exaust
787 1	**4812 530 28943**	Hose Cover
794 0	**4812 530 58098**	Gasket Airtrap
900 0	**4819 401 18686**	Clamp,hose
900 1	**4812 401 18431**	Clamp to pump
900 2	**4812 401 18461**	Support cable/hose
900 3	**4819 401 18529**	Clamp,hose
901 0	**4812 401 18462**	Clamp,hose drain hose
910 0	**4812 502 48347**	Screw,selftap 3,5x14SS
910 1	**4812 502 38151**	Screw 4x14
910 3	**4812 502 18404**	Screw
910 4	**4812 502 18423**	Screw PT 7x15
910 5	**4812 502 18401**	Screw M8X 35
910 6	**4812 502 18399**	Nut Push in M 8
921 0	**4812 400 18047**	Washer
930 1	**4812 492 48171**	Torsions spring
930 2	**4812 492 48162**	Spring
930 3	**4812 323 18019**	Spring f. lever
941 0	**4812 310 18578**	Bearing Kit
953 0	**4812 325 68001**	Shaft seal
962 0	**4812 440 98142**	Cover for Motor AC
962 1	**4812 440 98143**	Cover for Motor
990 0	**4812 310 18504**	Fixing mat.set front counter
990 2	**4812 310 18506**	Fixing mat.set bottom
993 0	**4819 530 29028**	Bow
993 1	**4812 290 18025**	Clamp heatingelement

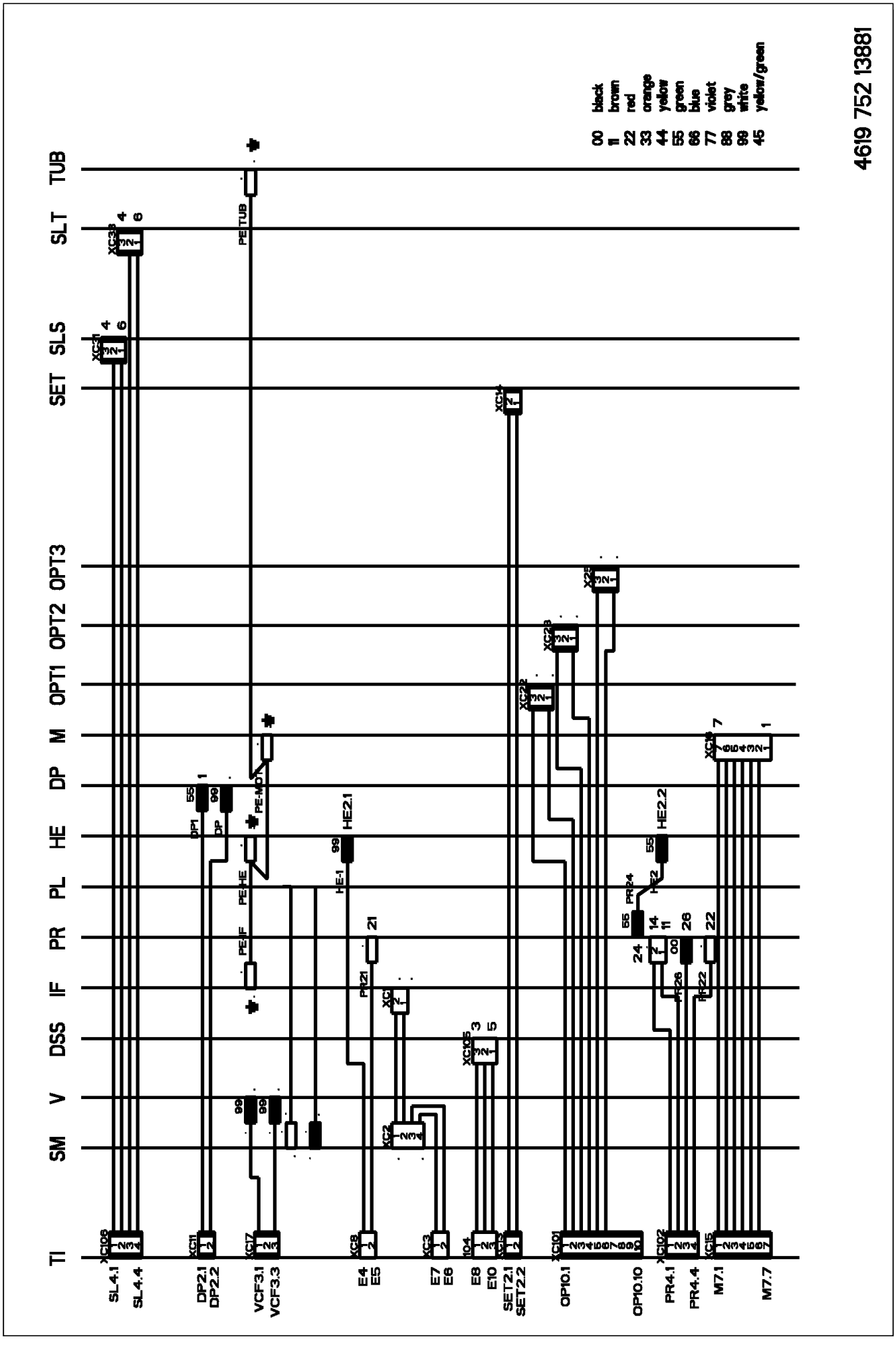
Exploded view



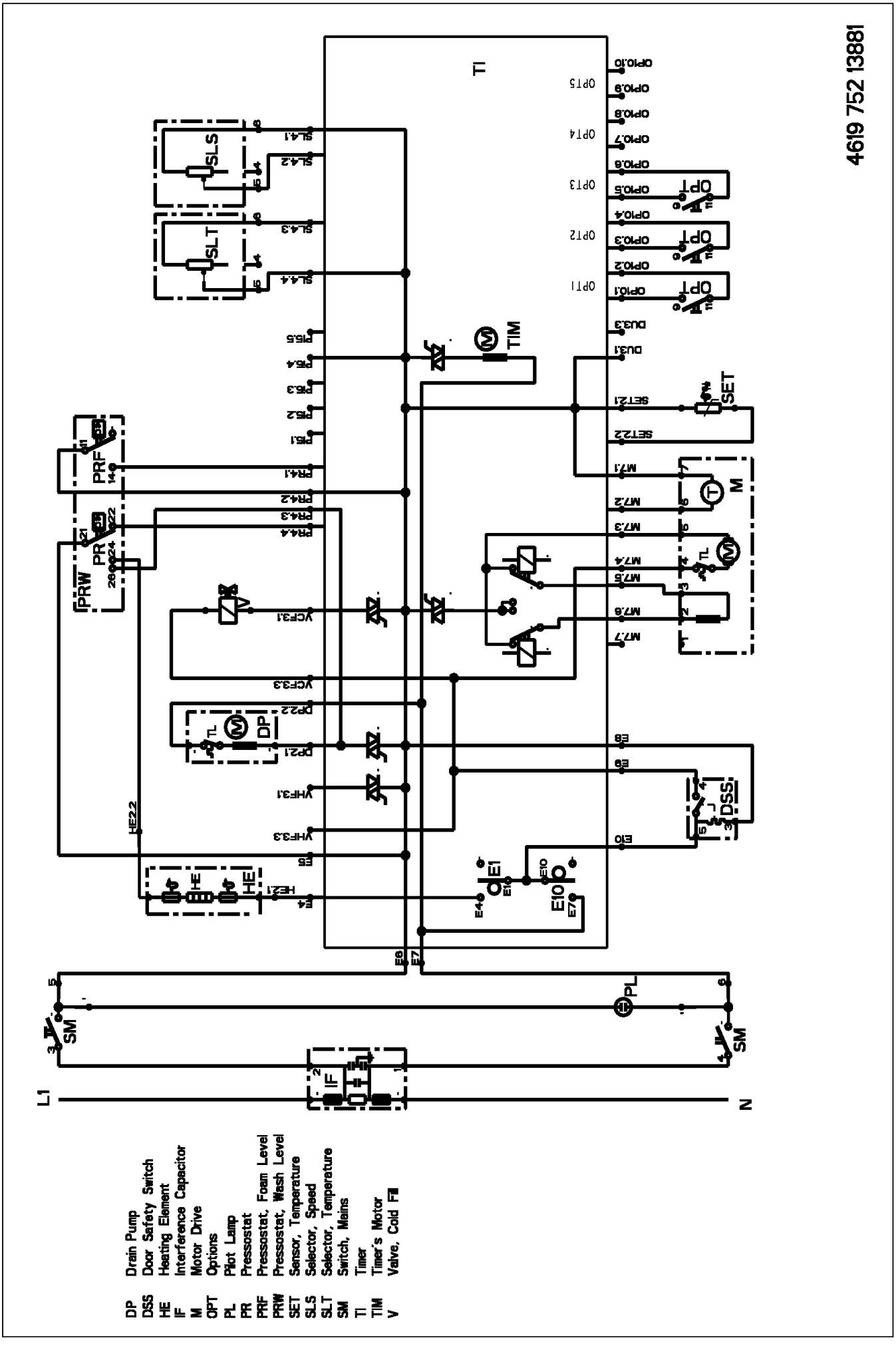
Exploded view



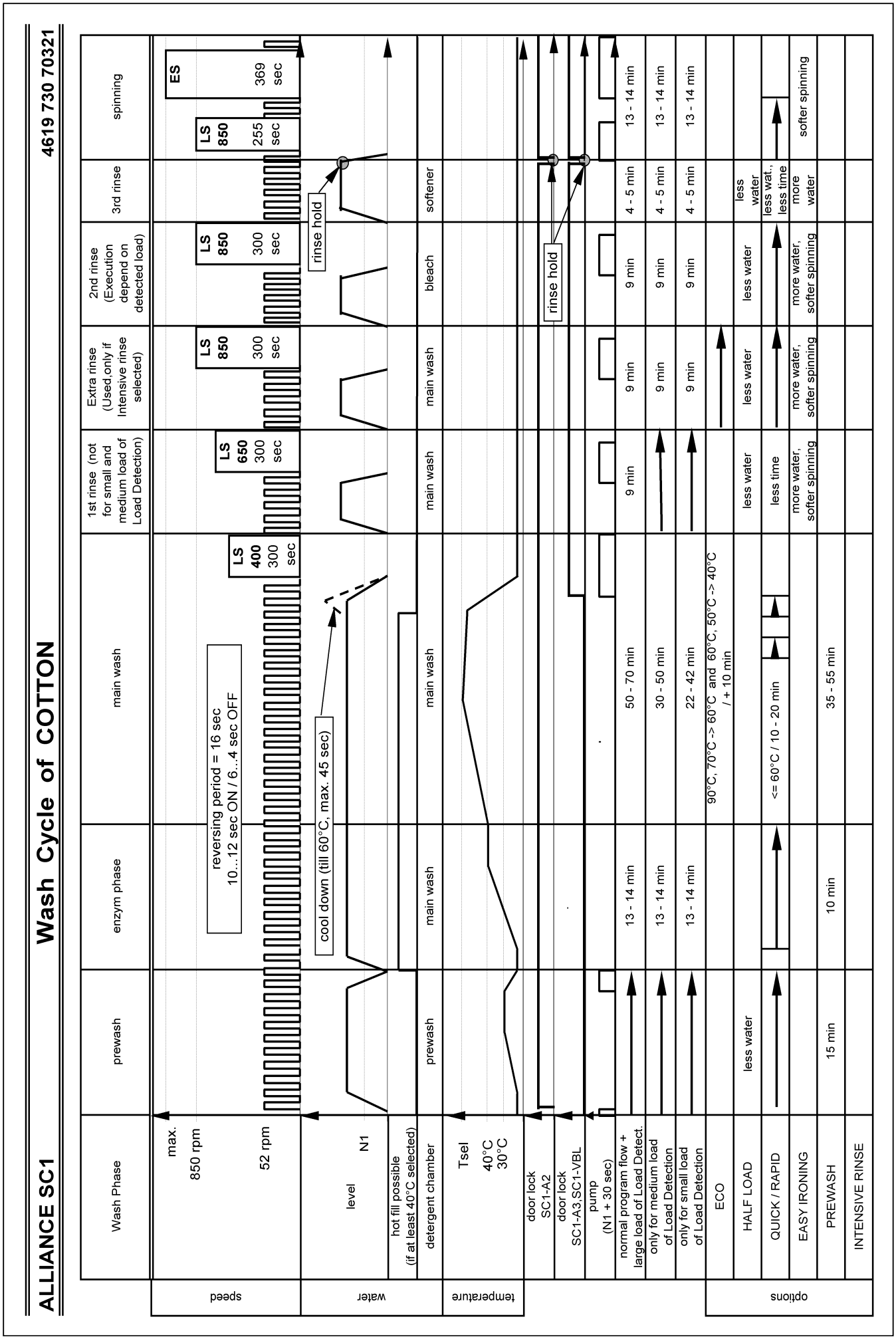
Wiring diagram



Circuit diagram



Program chart



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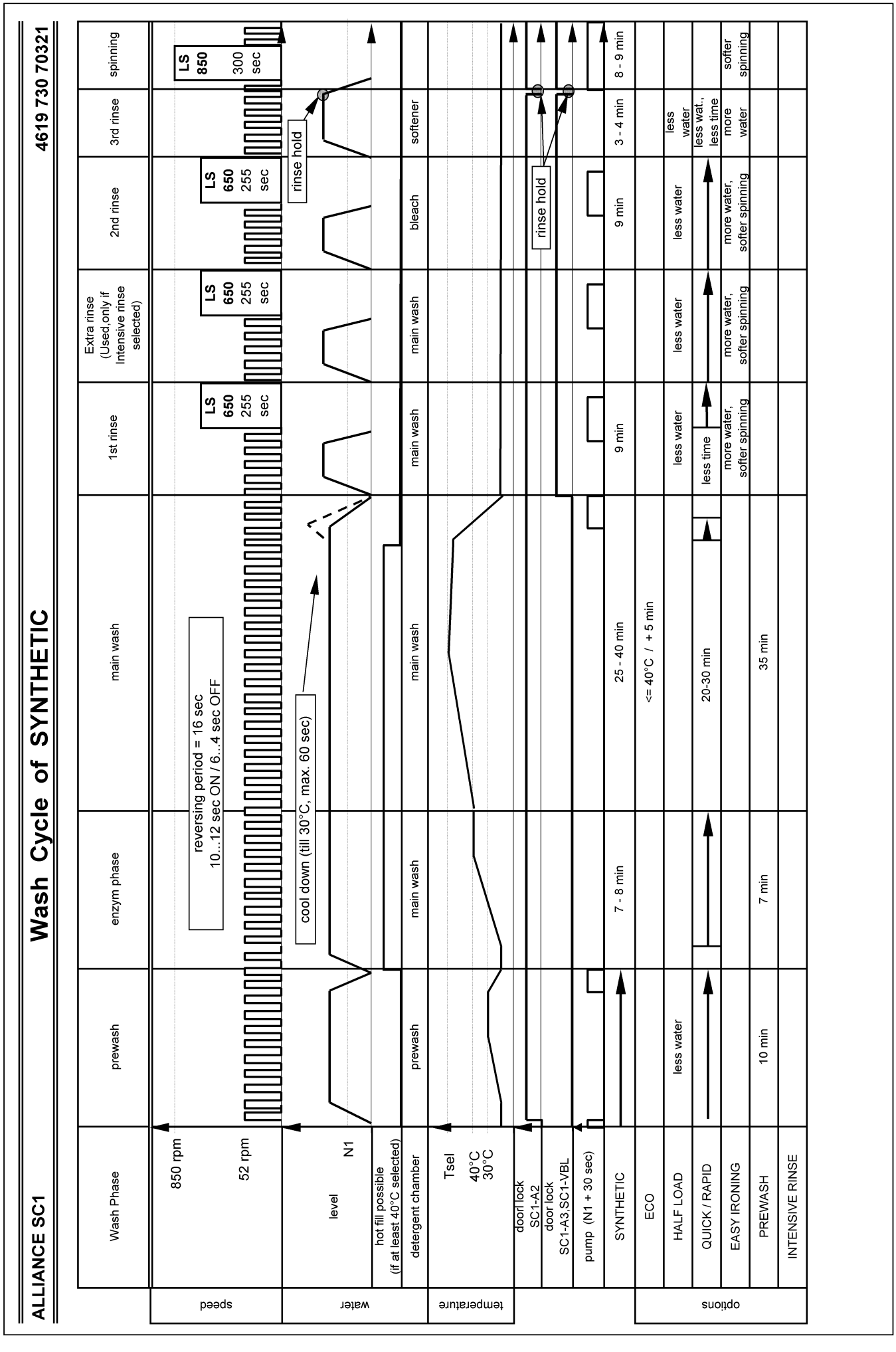

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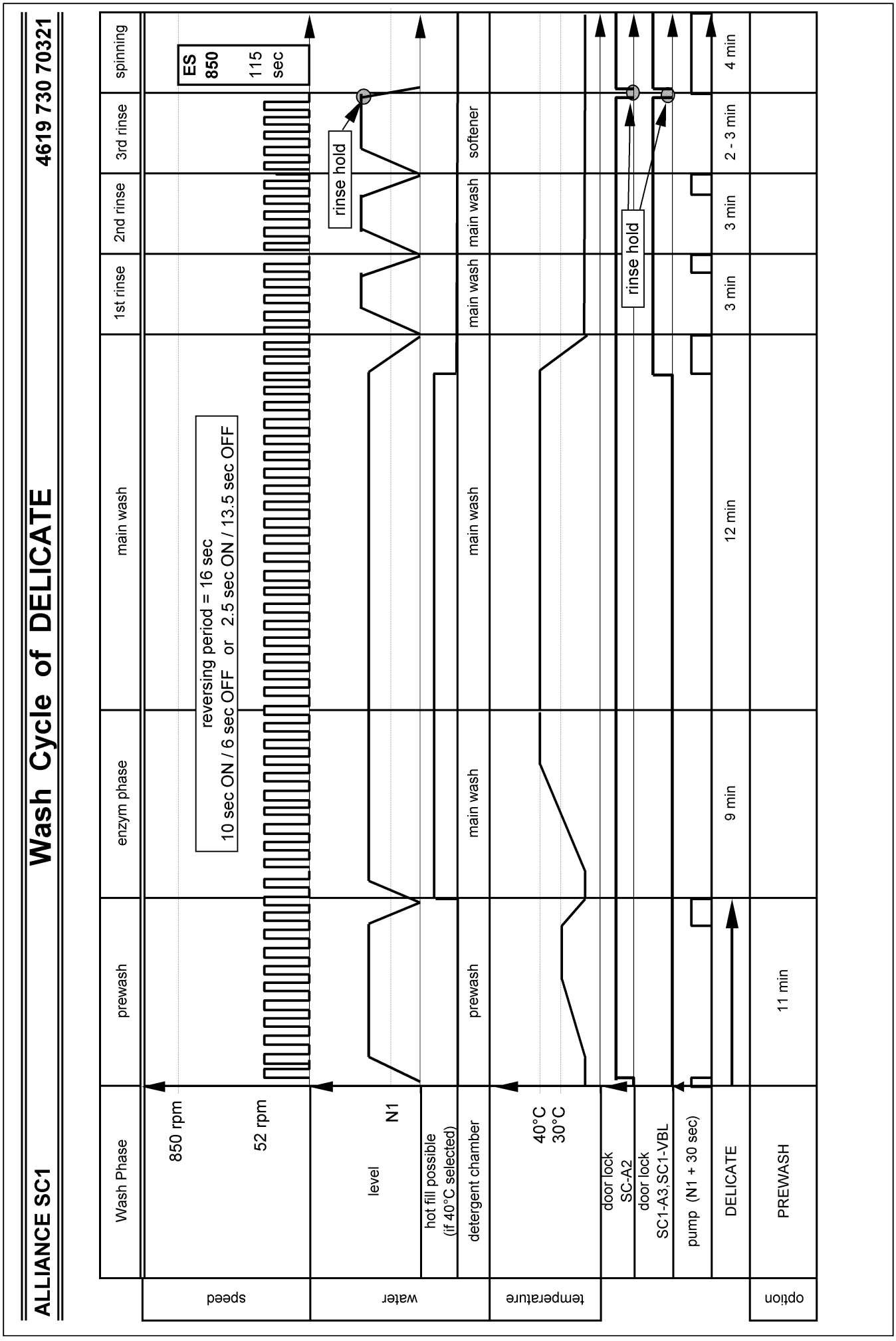

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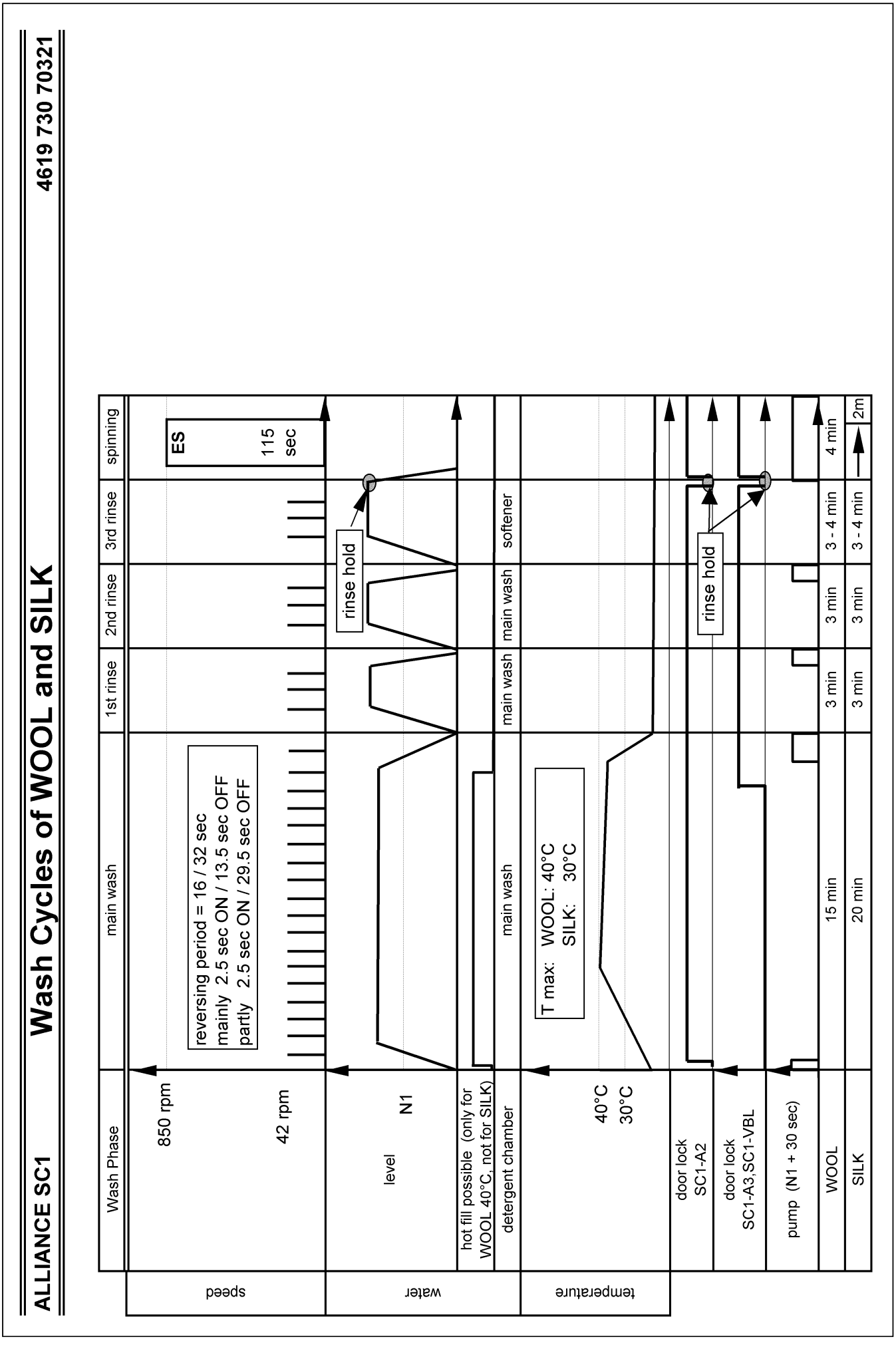
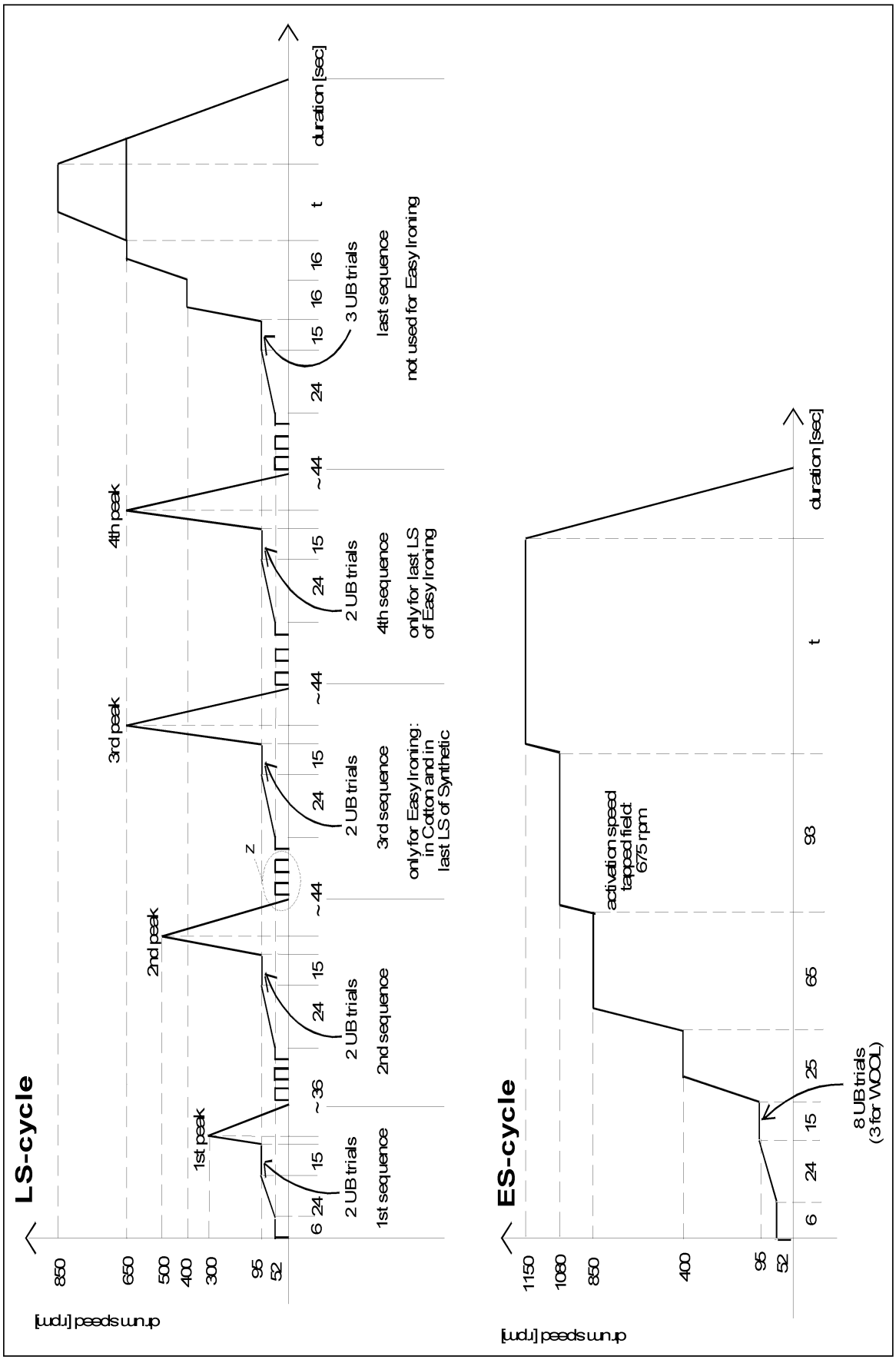


Program chart

ALLIANCE SC1 **4619 730 70321**

Spinning Profiles



Text/Legend

SC1 Test flow

1. Before start: **Attention! Use Testprogram only without laundry!**

2. Before start: All options must be pushed. Spin and temper. Selector to max. pos.

3. Select program: DRAIN

4. Start of test program: switch on the appliance,
push 1 st option button 4 times (within 10 sec),
push START button (if available)
(1st option button = at left side of option buttons, 2nd option button = next one, etc.)

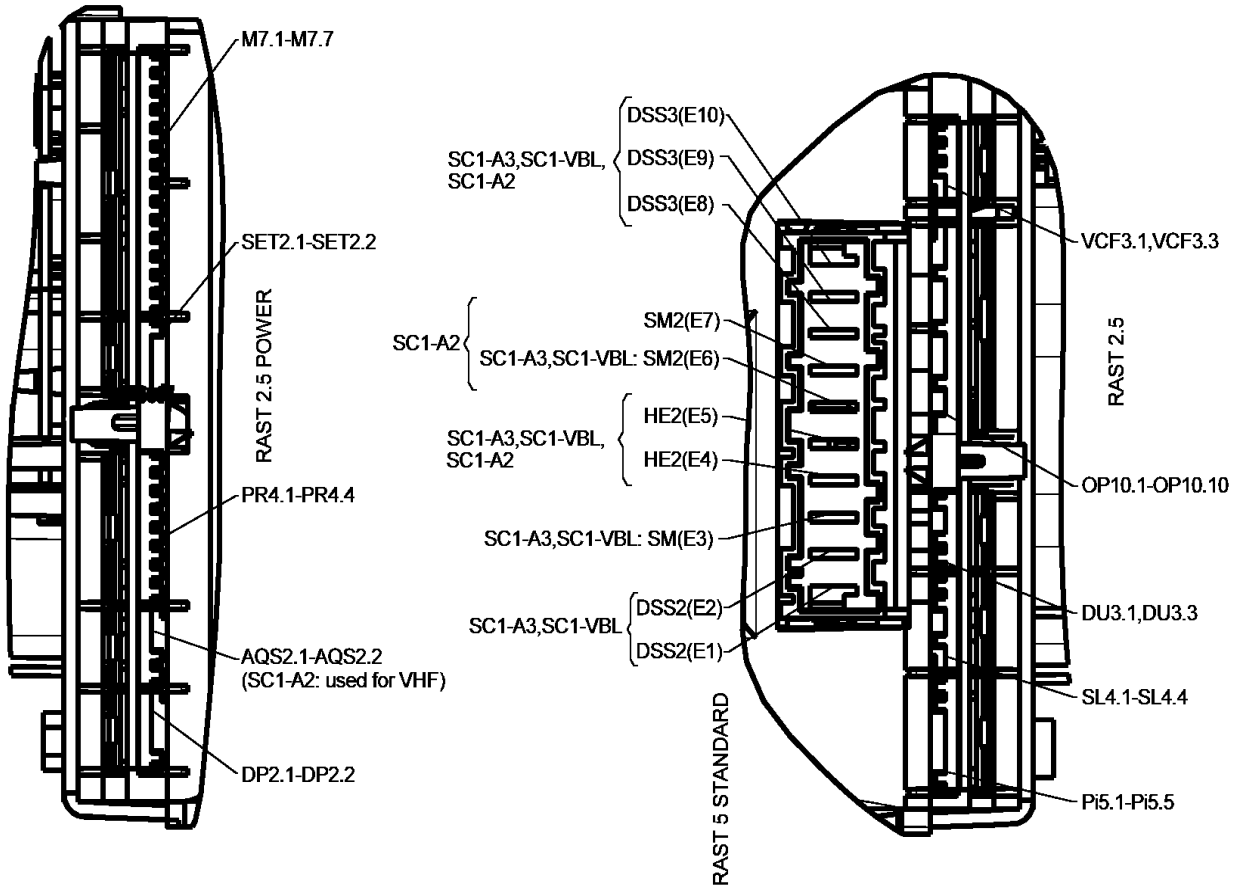
5. Stop of test program:
- Stop, if timer reaches position 30.
- Stop, turn program knob into off-position.
- No stop by switch off and no stop by cut mains supply is (recognized as mains failure).

• = program start	Timer position	door lock	inlet outlet	T max	duration (note1)	rhythm	LED test of VBL modules (1st LED at left side)					Advance condition	advance by push and release an option button	advance, if move temper. Selector	advance, if move speed selector	checked
• D	31	open				nm						↓				1st push button
	2	open	fill		6'	nm	x	x	x	x	x		1st option			fill, N1
	4	open	(hot) fill			RR	x	x	x	x	x		1st or 2nd option			time fill, 2nd push button
	7	open				nm	x	x	x	x	x		1st or 3rd option			NTC, 3rd push button
	10	open		90°C	55'	Ng		x	x	x	x		1st option	to cold		heating, selector
	12	open	pump		6'	Sg1			x	x	x		1st option			pump, N1
	16	open	pump			Sg2			x	x	x		1st or 4th option			pump, 4th push button
	19	lock	pump			0-95 rpm				x	x		1st option			motor triac
						selected speed				x	x		1st option		to min. speed	spinning, selector
	22	lock				RL					x		1st option			drum up sensor
	25	lock				Ng					x	↓ if 5th opt. is not present	5th option			5th push button
	26-29	lock										↓				
	30	lock										Stop				

Note 1: When the "duration" is reached, the SC1 goes into safety routine.

Reaction to failure: SC1 goes into safety routine
- drain to level 1+30 sec. (time out for draining = 6 minutes)
- stop motor (relais in safety position)
- stop valve
- go out of heating step, if time out reached

Text/Legend



AQS	AQUASTOP SWITCH
DP	PUMP
DSS	DOOR SWITCH
DU	DRUM UP
HE	HEATING ELEMENT
M	MOTOR
OP	OPTIONS
PR	PRESSOSTAT
Pi	CUIO
SET	NTC
SM	MAIN SWITCH
SL	SPIN SPEED- / TEMPERATURE SELECTOR
VCF	VALVE (COLD WATER)
VHF	VALVE (HOT WATER)