



# Service Manual

Washing machine

Frontloader

AWM 8125

<b>Model Version</b>		<b>Page</b>
AWM 8125 8570 812 63000		
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	Family	SC1

## Technical data

### Dimensions

Height	85	cm
Width	59.5	cm
Depth	59	cm

### Weight

Without packing	73	kg
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### Main Connection

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

### Drum

Volume	53	l
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### Capacity of dry laundry

Cotton/coloured	6	kg
Cotton rapid	3	kg
Cotton short	6	kg
Easy care	2.5	kg
Easy care rapid	1.5	kg
Easy care short	2.5	kg
Delicate	1.5	kg
Wool	1	kg

### Water Level

Level 1		
Switching point	55± 5	mmWc
Switching back point	35± 5	mmWc

Overflow	280 ± 20	mmWc
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### Water level inside the drum

(only switching level inside the drum)

Level 1	25- 39	mm
Overflow	267- 306	mm

### Nominal currents

Contacts		
11 - 12	4 (4)	A
11 - 14	16 (4)	A
11 - 16	1 (1)	A

Contact system		
11 - 12 - 14	spring contact	
11 - 16	sliding contact	
Damping system	no	

### Door lock

Lock time (20 °C)	3" - 6"
Unlock time	60" - 90"
Nominal voltage	230 V
Nominal current:	
Contact 4 - 5	16 (4) A

### Heating element

Kind of heating	Tubular heating element with NTC - sensor	
Nominal Voltage	230	V
Nominal power	2050	W
resistance R 25	22 - 28	Ω
Resistance NTC :		
0°C	35.9	kΩ
30°C	9.8	kΩ
40°C	6.6	kΩ
50°C	4.6	kΩ
60°C	3.2	kΩ
70°C	2.3	kΩ
95°C	1.1	kΩ

### Inlet valve

Water temperature max.	60	°C
Rated flow <1 bar	8	l/min
Pressure range	0,5 - 10	bar
Nominal voltage	220 / 240	V
Frequency	50	Hz
Starting voltage:		
< 6 bar	160	V
6 - 10 bar	170	V
Nominal current	35	mA
Nominal power	6	VA
Nominal (20 °C)	3.4 - 4.5	kΩ

### Drain pump (synchronous)

Nominal Voltage	230	V
Nominal current	0,3	A
Nominal power	34	W
Frequency	50	Hz
Resistor (coil)	155	Ω ± 7%
Motor protection	170	°C
Capacity(1,25m height)	14 ± 2	l/min

## Technical data

### Program timer

Type	SC1
Timer basic	4619 712 52201
Timer programmed	4619 744 80671
Nominal voltage	230 V
Frequency	50 Hz

### Connector

OA4.1 - OA4.2	5. Option
OA4.3 - OA4.4	6. Option
OB4.1 - OB4.2	3. Option
OB4.3 - OB4.4	4. Option
OC4.1 - OC4.2	1. Option
OC4.3 - OC4.4	2. Option
SLT3.1 - SLT3.3	Temp.selector
SLS4.1 - SLS4.4	Spin speed selector
VCF3.1 - VCF3.3	Valve (cold water)
VHF3.1 - VHF3.3	Valve (hot water)
Pi5.1 =	negative supply
Pi5.2 =	data
Pi5.3 =	clock
Pi5.4 =	positive supply
Pi 5.5 =	negative supply
PL3.1 - PL3.3	Pilot lamp

### Connector

M7.1 - M7.7	Motor
DP2.1 - DP2.2	Pump
AQS2.1 - AQS2.2	Aquastopswitch
SET2.1 - SET2.2	NTC
DSS3.1 - DSS3.3	Door switch
PR2.1 - PR2.2	Pressostat
Single connector	
HE2.1 - HE2.2	Heating element
PS2.1 - PS2.2	Pressostat
SM2.1 - SM2.2	mains switch (3 fold connector)

### Program 32 positions

	Cotton-/coloured	Easy care	Delicate	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

Ambient temperature	up to 70 °C
Storage temperature	up to 85 °C
Wash speed	54 rpm
Ramp speed	95 rpm
Spin speed	1200 rpm

### Resistance (at the selector) :

1160 rpm	4.7 kΩ
960 rpm	3.6 kΩ
780 rpm	2.7 kΩ
580 rpm	1.8 kΩ
440 rpm	1.1 kΩ
95 rpm	0.68 kΩ
0	0

### Without resistor on push button switch

released	1160 rpm
pushed	580 rpm

### Output

Motor	M7.6 - DSS 3.2	>40 V
Aquastop	AQ2.2 -DSS 3.2	230 V
in pump step	AQ2.1 -DSS 3.2	230 V
NTC		not measurable
Pump	DP2.1 -DP2.2	230 V
Doorlock	DSS3.1 -DSS 3.3	230 V
Pressostat	E4 - E2	230 V
- empty	PR2.1 - E2	230 V
- full	PR2.2 - E2	230 V
Valve (Rast 2,5)	V2.1 - V2.2	>170 V
Options		not measurable
Display module	Pi5.1 - Pi5.4	5 V
	Pi5.4 - Pi5.5	12 V

### Motor

Type	MCA 61/ 64 - 148 t.f. WHE 0
Belt ratio	i = 1: 13.3

### Resistance contacts

6 - 7	68.7	Ω ± 7%
4 - 5	1.78	Ω ± 7%
2 - 3	1.68	Ω ± 7%
1 - 3	0.99	Ω ± 7%

## Technical data

### Radio interference supression

Type	ISKRA - KPB 7325
Nominal voltage	230 V
Nominal capacity	250nFX1 + 2 x 22 nFY2± 20%
Derivation current	≥ 4.15 mA(2x2.075mA) at 250V 50Hz
Nominal resistance	1± 5% MΩ

### Push button switch

Switch start	SST
Switch start delay	STD
Switch +	ST+
Switch -	ST -
Switch easy ironing	SEI
Switch pre wash	SPW
Switch rinse intensive	SRI
Switch rinse stop	SRS
Switch spin reduction	SSR

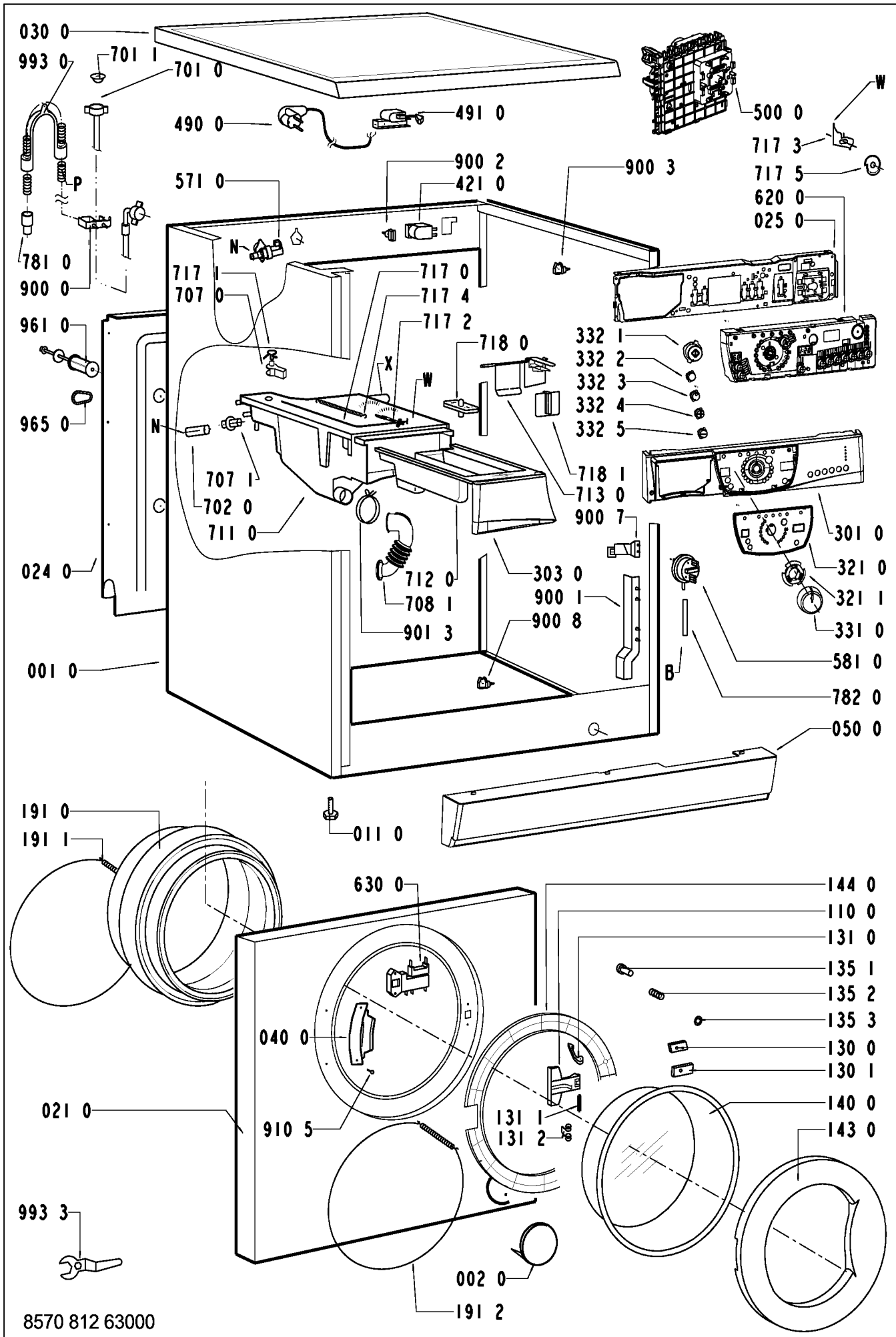
## Spare part list

Model **AWM 8125**  
Service No. **857081263000**  
Version **857081263000**

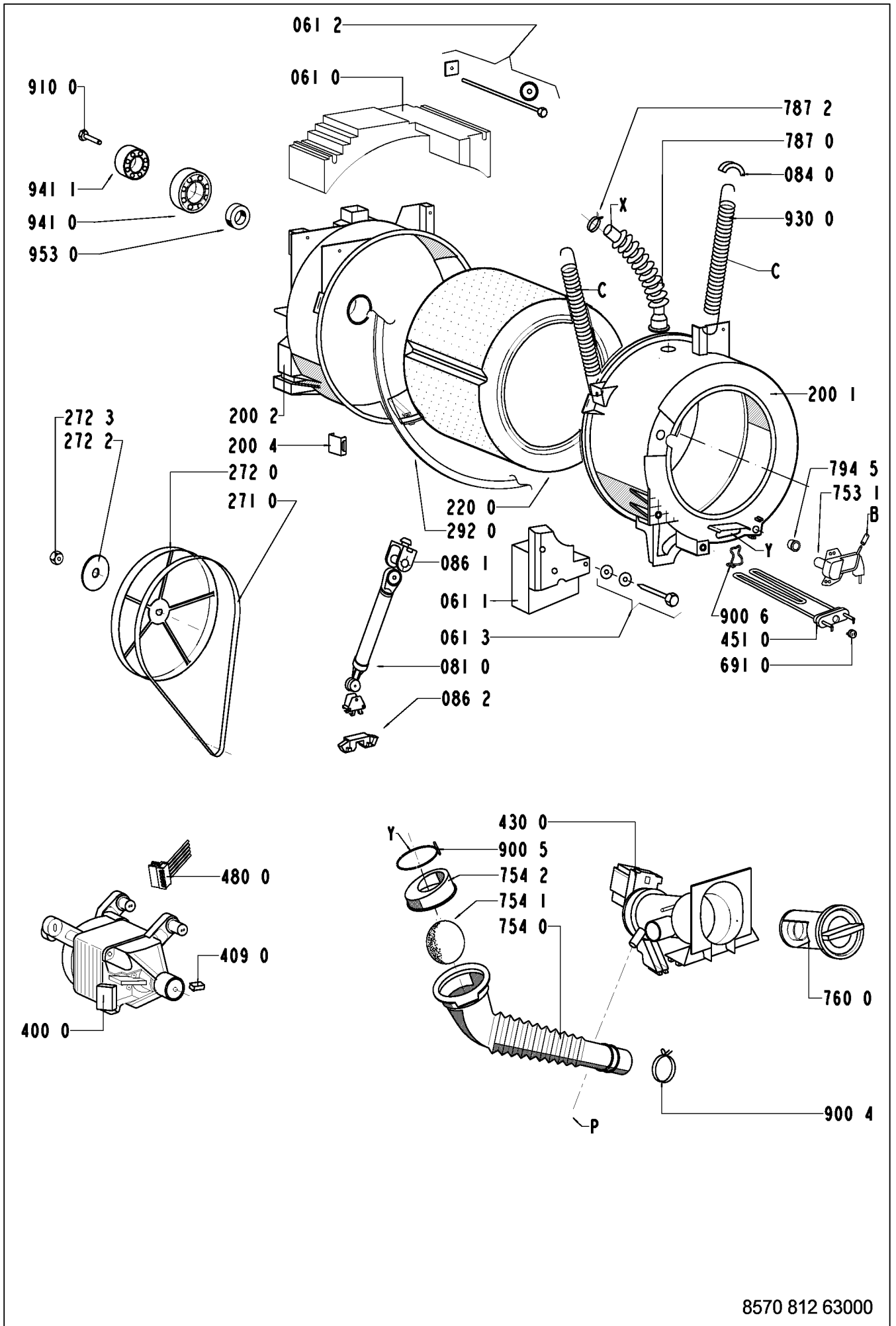
Pos. No.	12NC Code	Description
001 0	<b>4819 440 19716</b>	Cabinet
002 0	<b>4812 440 19343</b>	Flap
011 0	<b>4819 462 48472</b>	Foot
021 0	<b>4812 440 19818</b>	Front
024 0	<b>4812 440 18998</b>	Panel, rear
025 0	<b>4812 404 38551</b>	Support control board VBL WH
030 0	<b>4812 310 18586</b>	Table top VBL WH
040 0	<b>4812 417 18787</b>	Hinge
050 0	<b>4812 440 10406</b>	Pedestal VBL, 53 l.
061 0	<b>4812 466 88458</b>	Counter weight upper
061 1	<b>4812 466 88459</b>	Counter weight front
061 2	<b>4819 310 39227</b>	Mounting kit Weight top
061 3	<b>4819 310 39228</b>	Mounting kit Weight bottom
081 0	<b>4812 529 18038</b>	Shock absorber until 1200
084 0	<b>4812 466 58001</b>	Silent bloc
086 2	<b>4812 401 18412</b>	Stopper
110 0	<b>4812 498 18139</b>	Handle,door white
130 0	<b>4812 417 28047</b>	Plate Door lock
130 1	<b>4812 417 28048</b>	Plate Doorlock Lower
131 0	<b>4812 417 28046</b>	Lock Door
131 1	<b>4812 417 28045</b>	Pin Door Lock
131 2	<b>4812 492 58022</b>	Spring Door Lock
135 1	<b>4812 498 18137</b>	Knob Door safety
135 2	<b>4812 491 48004</b>	Spring
135 3	<b>4812 290 68153</b>	Holder,adjust. Door Safety
140 0	<b>4812 450 68219</b>	Door glass
143 0	<b>4812 440 19782</b>	Glassdoor frame VBL WH
144 0	<b>4812 440 19589</b>	Frame,door glas DE-WT
191 0	<b>4812 460 68532</b>	Door bellow WH grease resistance
191 1	<b>4812 492 18017</b>	Strap
191 2	<b>4819 530 58059</b>	Ring
200 1	<b>4812 418 18283</b>	Tub 53l front
200 2	<b>4812 418 18305</b>	Tub 53l rear
200 4	<b>4812 290 88054</b>	Clamp for tub WH
220 0	<b>4812 418 18288</b>	Drum 53l, 1200
271 0	<b>4819 358 18152</b>	Belt
272 0	<b>4812 528 58027</b>	Pulley DIAM.298
272 2	<b>4812 532 18024</b>	Washer
272 3	<b>4812 505 18371</b>	Nut M 12
292 0	<b>4812 530 58101</b>	Gasket Tub
301 0	<b>4812 452 10964</b>	Control panel AWM 8125
303 0	<b>4812 498 78095</b>	Handle
321 0	<b>4812 453 19986</b>	Insert panel
321 1	<b>4812 532 98011</b>	Fastener f. Inlay
331 0	<b>4812 414 58111</b>	Knob,timer VBL cpl.
332 1	<b>4812 513 18097</b>	Push button Start VBL WH
332 2	<b>4812 513 18099</b>	Push button option VBL WH
332 3	<b>4812 513 18098</b>	Push button spin speed VBL WH
332 4	<b>4812 513 18101</b>	Push button plus VBL WH
332 5	<b>4812 513 18102</b>	Push button minus VBL WH
400 0	<b>4812 361 58172</b>	Motor 1200 MCA 61
409 0	<b>4812 362 48004</b>	Brush,carbon motor CESET
421 0	<b>4812 121 18142</b>	Interf.filter 1,00 µ F
430 0	<b>4812 310 18458</b>	Pump SERVICE SET
451 0	<b>4812 259 28759</b>	Heating element

Pos. No.	12NC Code	Description
490 0	<b>4819 321 18136</b>	Cable,mains 2m SA
491 0	<b>4812 321 28367</b>	Strain relief
500 0	<b>4812 282 18868</b>	Timer SC1 (EI,PW,IR,RH)
571 0	<b>4812 271 28375</b>	Valve,magnet Single
581 0	<b>4812 276 18327</b>	Pressostat 55/35
620 0	<b>4812 239 58002</b>	Module "A" C/DS
630 0	<b>4812 280 58026</b>	Door lock 3 TABS
691 0	<b>4812 282 18702</b>	Sensor NTC (SC1)
701 0	<b>4819 530 28848</b>	Hose, inlet
701 1	<b>4819 466 69704</b>	Gasket and filter
702 0	<b>4819 530 29019</b>	Hose intern
707 0	<b>4812 526 48033</b>	Nozzle Distribution 4
707 1	<b>4812 526 48028</b>	Nozzle
708 1	<b>4812 530 48143</b>	Bend
711 0	<b>4812 418 88055</b>	Detergent disp. 4 ch. 53 l
712 0	<b>4812 418 79703</b>	Drawer 4 VBL ASS
713 0	<b>4812 418 88028</b>	Flap Detergent Cont.
717 0	<b>4812 418 78925</b>	Bowden cable
717 1	<b>4812 321 38013</b>	Lever , Nozzle
717 2	<b>4812 321 38012</b>	Holder,adjust.
717 3	<b>4812 278 88017</b>	Slide
717 4	<b>4812 492 38359</b>	Spring , Nozzle
717 5	<b>4812 282 18806</b>	Cam 4 C. SC1/VBL/WH
718 0	<b>4812 526 48051</b>	Siphon
718 1	<b>4812 418 88024</b>	Accessory
753 1	<b>4819 418 68234</b>	Chamber,air
754 0	<b>4812 530 28826</b>	Drainhose
754 1	<b>4812 530 28832</b>	Lock eco
754 2	<b>4812 530 28829</b>	Flange eco
760 0	<b>4812 480 58105</b>	Filter set pump
781 0	<b>4819 530 28847</b>	Hose,draining
782 0	<b>4812 530 28827</b>	Hose Pressostat
787 0	<b>4812 530 28813</b>	Steam hose
787 2	<b>4819 401 18868</b>	Clamp,hose 26,8 mm
794 5	<b>4812 530 58095</b>	Gasket Air trap
900 0	<b>4812 255 18204</b>	Holder Hose outlet
900 1	<b>4812 290 88049</b>	Bracket
900 2	<b>4812 290 88077</b>	Cable clamp
900 3	<b>4812 401 18446</b>	Cable clamp
900 4	<b>4819 401 18872</b>	Clamp,hose
900 5	<b>4819 401 18529</b>	Clamp,hose
900 6	<b>4812 401 18444</b>	Support Heatingelement
900 7	<b>4812 256 98031</b>	Holder pressostat
900 8	<b>4819 401 18823</b>	Clamp
901 3	<b>4812 401 18414</b>	Clamp,hose
910 0	<b>4812 502 18383</b>	Screw Torx T40 M 8X 25
910 5	<b>4812 502 18516</b>	Screw 4,2 x 13
930 0	<b>4819 492 38139</b>	Spring Suspension
941 0	<b>4812 520 28004</b>	Bearing,ball 6206
941 1	<b>4812 520 28072</b>	Bearing,ball 6303
953 0	<b>4812 530 58099</b>	Shaft seal 1200
961 0	<b>4819 532 68829</b>	Spacer
965 0	<b>4812 466 68545</b>	Cover BK/WH
993 0	<b>4819 530 29028</b>	Bow
993 3	<b>4812 395 58004</b>	Tool

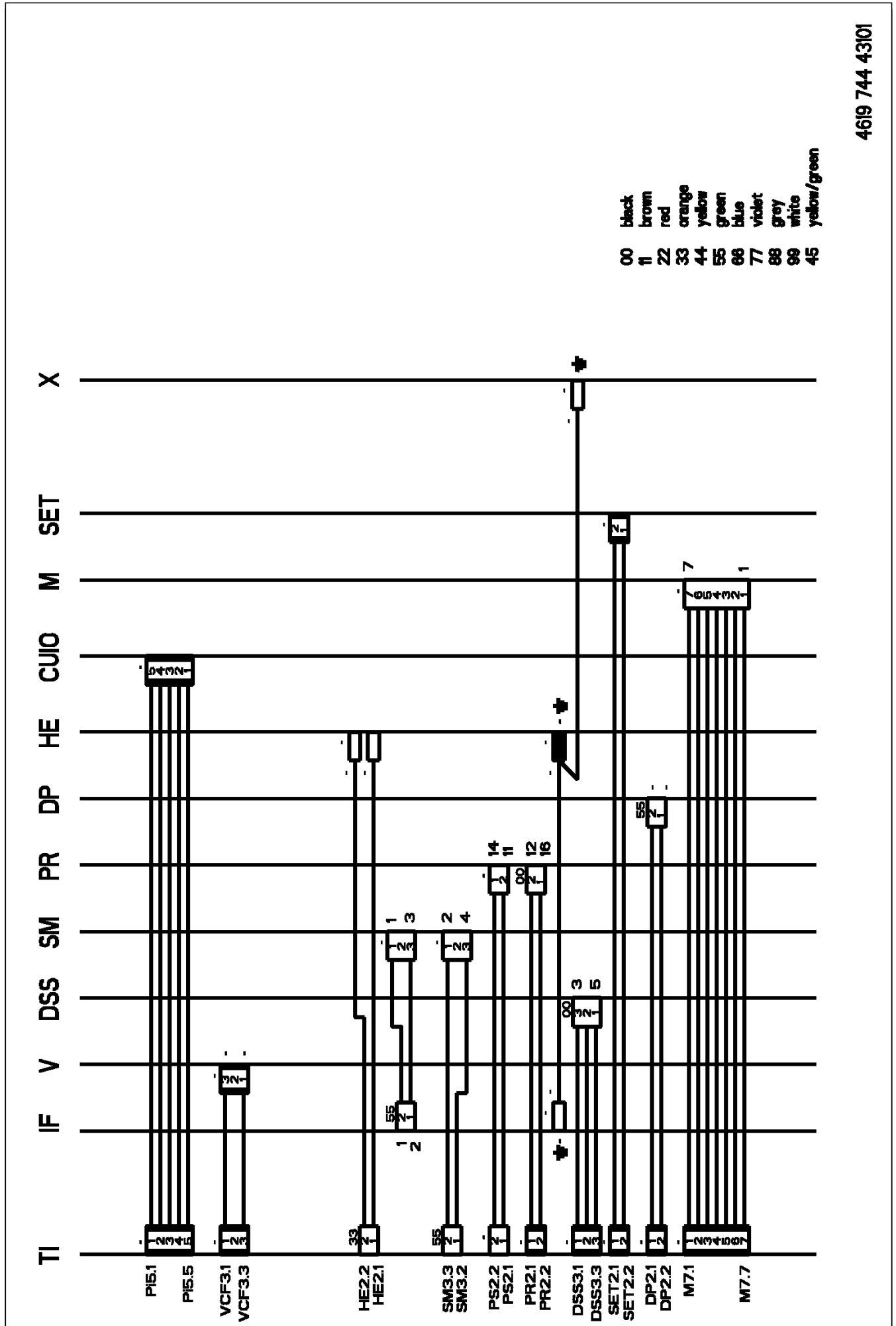
**Exploded view**



## Exploded view

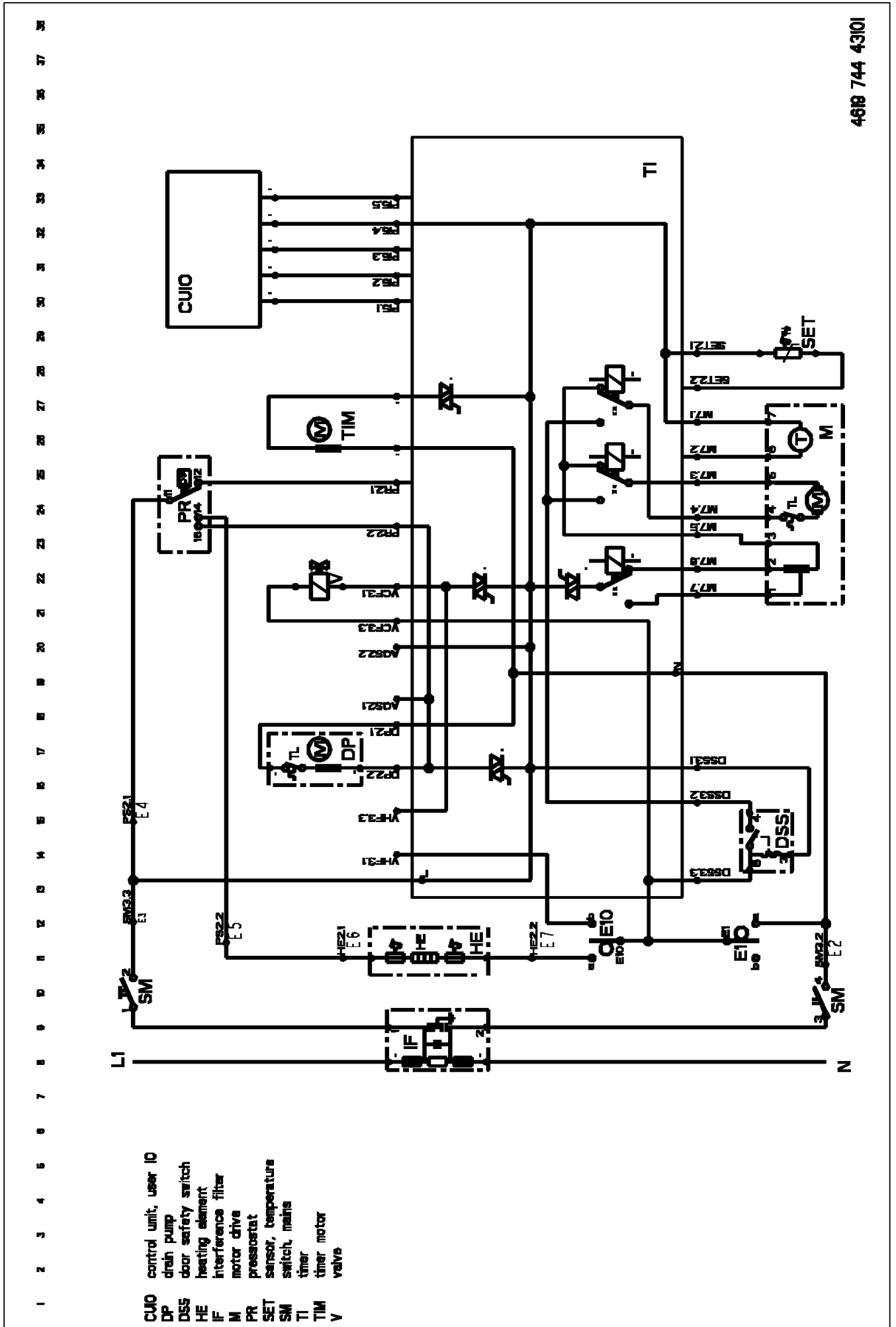


Wiring diagram





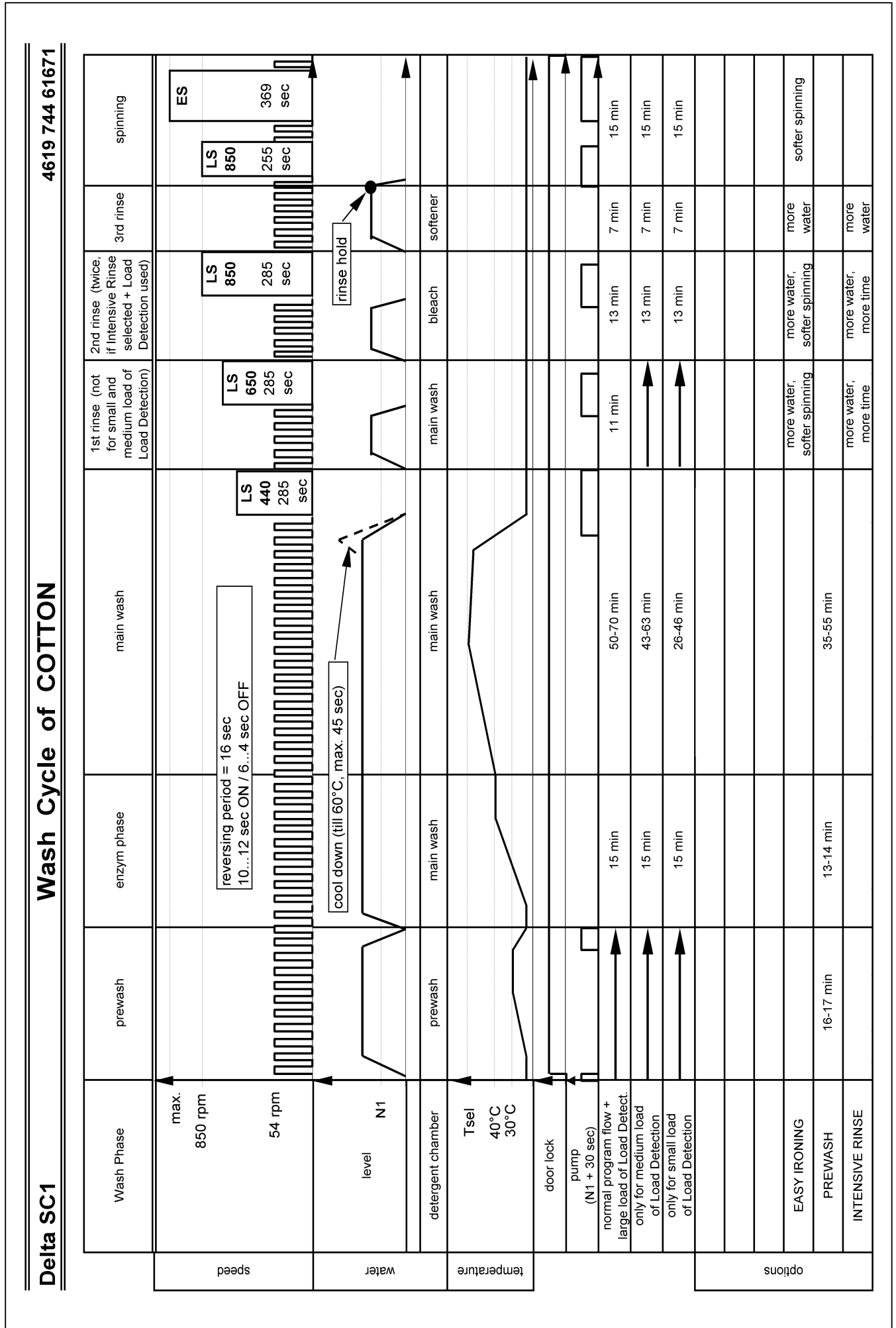
Circuit diagram



- 1
  - 2
  - 3
  - 4
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  - 25
  - 26
  - 27
  - 28
  - 29
  - 30
  - 31
  - 32
  - 33
  - 34
  - 35
  - 36
  - 37
  - 38
- CUJO control unit, user IO
  - DP drain pump
  - DSS door safety switch
  - HE heating element
  - IF interference filter
  - M motor drive
  - PR pressostat
  - SET sensor, temperature switch, mains
  - SM switch, mains
  - TI timer
  - TIM timer motor
  - V valve

4618 744 43101

**Program chart**

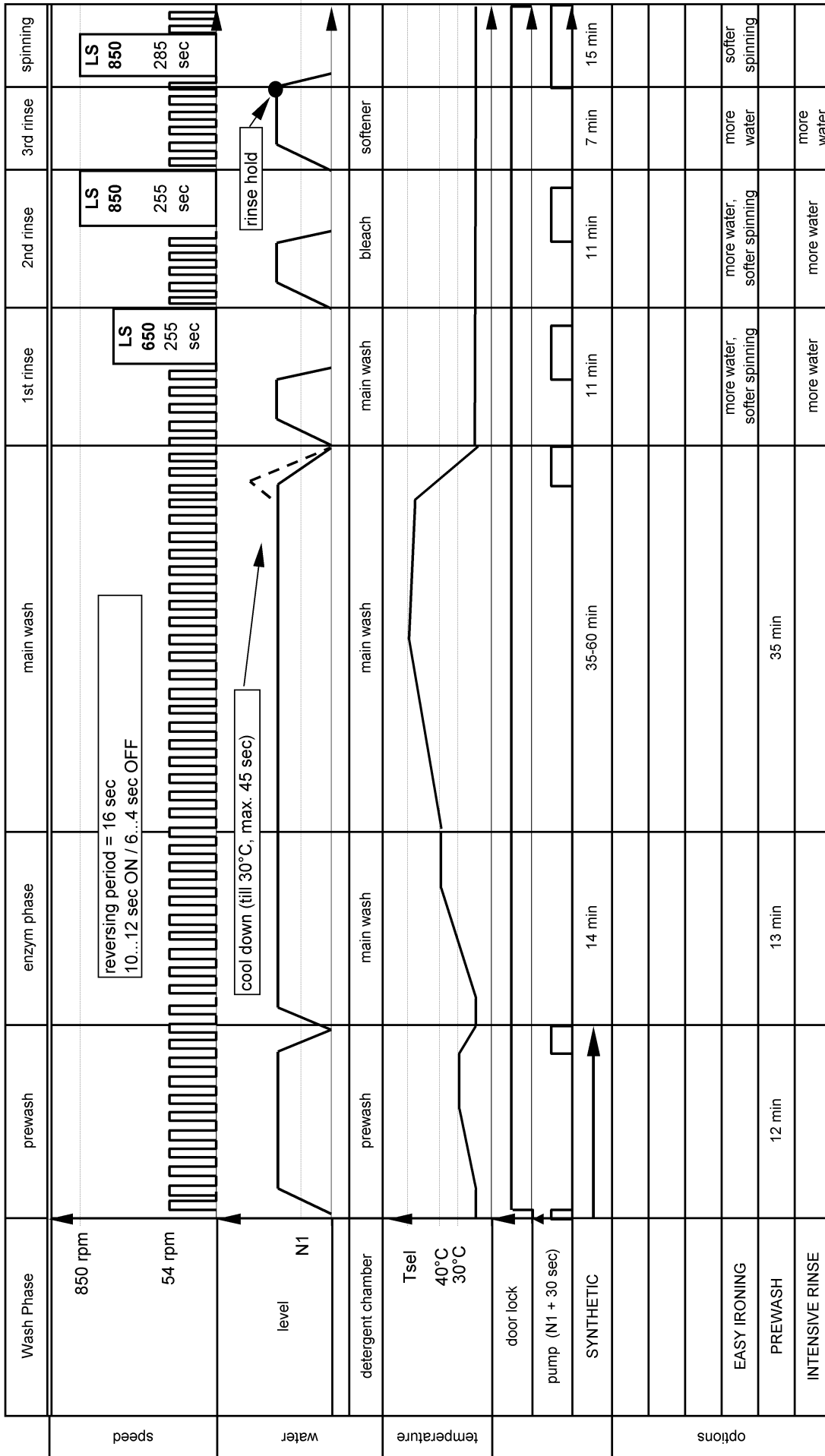


**Program chart**

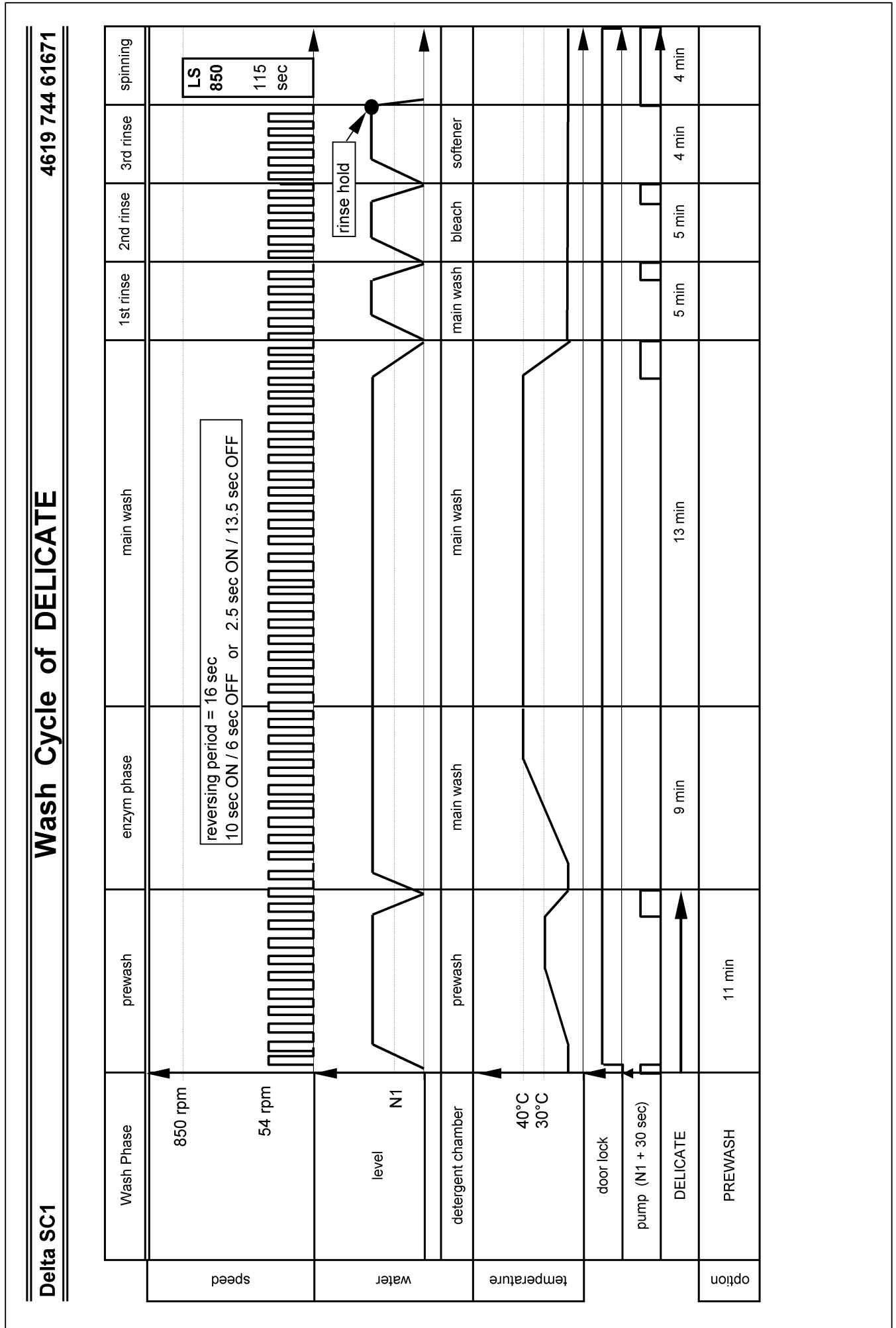
4619 744 61671

**Wash Cycle of SYNTHETIC**

Delta SC1



**Program chart**

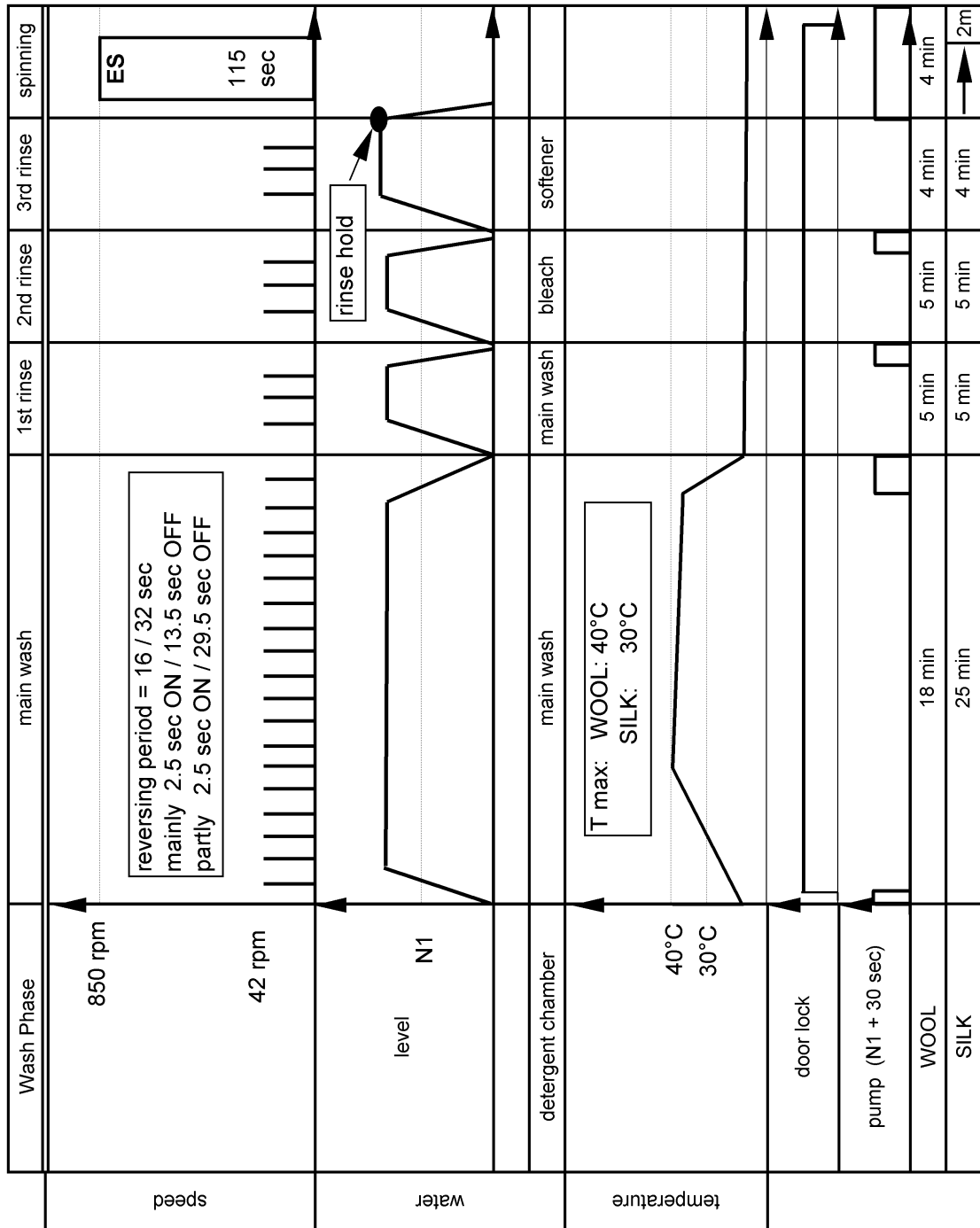


Program chart

4619 744 61671

**Wash Cycles of WOOL and SILK**

Delta SC1



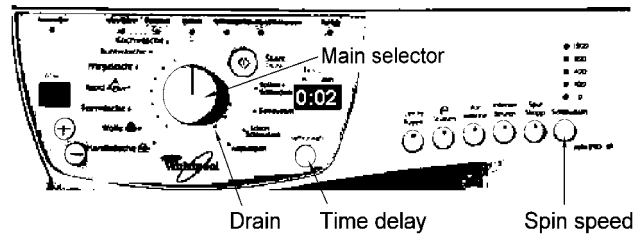


**Text/Legend**

**Whirlpool SC1 VBL Version A and B test flow**

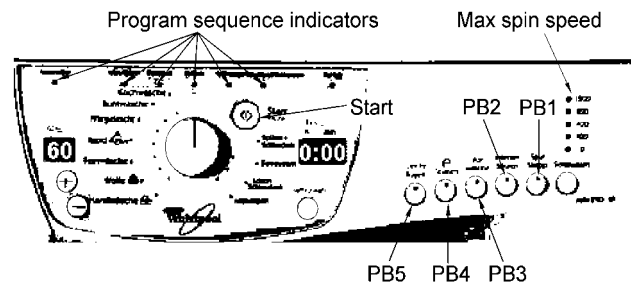
1. **Attention : Use test program without laundry !!**

2. **Selecting the program :**  
Select the Drain program by turning the main selector. Wait until the display shows 0:02 and till the pump has stopped



3. **Start of test program :**  
Press PB1 twice, then PB2 twice and then the start button.

Indication of entering the test program:  
- temperature display = 60°C  
- delay start display = 0:00  
- speed LED max = ON  
- LED of PB1 and PB2 = ON



4. **Stopping the test program :** Stop by moving the main selector into any other position.  
- note - no stop of test program by main interruption.

**Testprogram for Whirlpool SC 1 timer VBL version A or B (Central program selector).**

Position of timer	Program sequence LED's							Detergent box	Inlet / Outlet	Max temp.	Duration (" = sec) (' = min)	Movement of drum	Advance condition	Advance by option button (Press slowly twice)	Checking
	Pre-wash	Main-wash	Rinse	Rinse hold	Spinning	Aqua-stop									
-	X	X	X	X	X			-				no movement		PB 3	PB 1, PB 2
6	X	X	X	X	X	X		pre wash	fill		60"	no movement		PB 3	PB 3
8								(hot) fill	hot fill		60"	no movement		PB 4 **, PB 1	PB 4, mainwash fill, hot fill N1
16		X	X	X	X			main wash	fill		6'	gentle wash	N 1		
18									fill			60"	gentle wash	60"	PB 1
20								(fill)	90°C		55'	gentle wash	till 90°C - time unknown	PB 1	heating, NTC leakage
23			X	X	X			bleach *				turns right	3"		
27								softener	fill			turns right	60"	PB 5 ** or PB 1	PB 5, bleach fill
28				X	X			-	pump		6'	gentle wash	N 1	PB 1	pump, N1
29					X			-	pump			0 - 95 rpm	4", N 1		pump
5								-	pump			select. Speed	300", N 1	PB 1	motor - spinning
								-				no movement	∞		

\*\* if PB 4 / PB 5 / PB 6 are present they must be used to advance to next step - if not present - use PB1 instead.

\* 4 chamber detergent dispenser "bleach compartment"  
3 chamber detergent dispenser "main wash" compartment

**Reaction to failure:** Timer 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 is reached

**Text/Legend**

**Table of failures:**

Failure Identifier	Indication	Detected failure	To be checked
1	FH	No water inlet	Water Tap / Valve / Flowmeter / Pressostat
2	FA	Aquastop failure	Aquastop switch
3	FP	Drain failure	Drain pump / Pressostat
4		<b>Not active</b>	
5	F05	NTC failure (SC / OC)	NTC
6	F06	Tachometer failure (no motor movement detected)	Motor / Tachometer
7	F07	Triac short circuit detection	Control unit, Motor
8		<b>Not active</b>	
9	F09	Overflow failure	Pressostat
10		<b>Not active</b>	
11	F11	Communication failure	Control unit, I2C bus
12		<b>Not active</b>	
13		<b>Not active</b>	
14	F14	EEPROM failure	Control unit
15		<b>Not active</b>	
16	F16	Control failure	Control unit
17		<b>Not active</b>	
18	F18	Control failure	Control unit
19		<b>Not active</b>	
20	F20	Control failure	Control unit
21	F21	Control failure	Control unit

**Display of failures on the speed LED's (flashing):**

Errors	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	F:H	F:A	F:P	F:4	F:5	F:6	F:7	F:8	F:9	F:10	F:11	F:12	F:13	F:14	F:15
Speed Leds	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	○	○	○	○	○	○	○	○	●	○	●	○	○	●	○
	○	○	○	○	●	●	●	○	○	○	○	○	○	●	○
	○	●	●	○	○	●	●	○	○	○	○	○	○	○	○
	●	○	●	○	●	○	●	○	●	○	○	○	○	○	○

Errors	16	17	18	19	20	21
	F:16	F:17	F:18	F:19	F:20	F:21
Speed Leds	●	○	●	○	●	●
	○	○	○	○	○	○
	○	○	○	○	●	●
	○	○	●	○	○	○
	○	○	○	○	○	●



## Text/Legend

