

Service Manual

Washing machine

Frontloader

FL 5085

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| | Family | SC1 |

Technical data

Dimensions

| | | |
|--------|------|----|
| Height | 85 | cm |
| Width | 59.5 | cm |
| Depth | 54 | cm |

Weight

| | | |
|--------------|-----|----|
| Net weight | ~67 | kg |
| With package | ~71 | 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 | 54 | rpm |
| Ramp speed | 95 | rpm |
| Speed spinning max. | 840 | rpm |

Capacity of dry laundry

| | | |
|-----------------|-----|----|
| Cotton/coloured | 5 | kg |
| Cotton rapid | 3 | kg |
| Cotton short | 3 | 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 |
| Handwash/Silk | 1 | kg |

Pressostat

| | | |
|-----------------|--|---|
| Kind of switch | 1-level pressoswitch with overflow contact | |
| Type | B1-205 | |
| Nominal voltage | 230 | V |

Water Level

| | | |
|---------------------------|----------|------|
| Level 1 (11 - 12, 14) | | |
| Switching point | 50 ± 5 | mmWc |
| Switching back point | 30 ± 5 | mmWc |
| Overflow (11 - 16) | 300 ± 20 | mmWc |
| Water level based to drum | 80 ± 10 | mm |

Nominal currents

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

Door lock

| | | |
|------------------|--|---|
| Kind of switch | Blocking limit switch with PTC heater of Bimetal | |
| Type | BP P/5 - R | |
| 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 with Rast 2.5 electrical connection | |
| Water temperature | <60 | °C |
| Rated flow >1 bar | 8 | l/min ± 15% |
| Pressure range | 0,2 - 10 | bar |
| Nominal voltage | 220 - 240 | V |
| Frequency | 50 | Hz |
| Nominal current | 35 | mA |
| Nominal power | 7.7 | W ± 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 | 35 | W |
| Frequency | 50 | Hz |
| Resistor (coil) (20 °C) | 162 | Ω |
| Motor protection | Thermal-fuse | |
| Capacity (0.55 - 1.0 m) | 20 ± 2 | l/min |
| Position of draining hose outlet | min. 0.55 | m |
| | max. 1.0 | m |

Program timer

| | | |
|------------------|----------------|----|
| Type | SC1 - 3330 | |
| Timer basic | 4619 710 67586 | |
| Timer programmed | 4619 753 00211 | |
| Nominal voltage | 230 | V |
| Frequency | 50 | Hz |

Program

Positions 32

| | 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 |

Motor

| | | |
|------------|---------------------------|--|
| Type | MCA 45/64 - 148/ TAT 1 | |
| Belt ratio | i = 1:15.91 | |

Resistance contacts (20 °C)

| | | |
|-----------------------|-------|------------------|
| Stator (full field) | 2.07 | $\Omega \pm 7\%$ |
| Stator (tapped field) | 1.32 | $\Omega \pm 7\%$ |
| Rotor | 2.00 | $\Omega \pm 7\%$ |
| Tachogenerator | 67.80 | $\Omega \pm 7\%$ |

Input power (at 230 V AC)

| | | |
|----------|-----|---------|
| Washing | 250 | W ± 7% |
| Rinsing | 310 | W ± 7% |
| Spinning | 380 | 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 k Ω |
| | Position 3 | 1.10 k Ω |
| | Position 4 | 1.80 k Ω |
| | Position 5 | 2.70 k Ω |
| | Position 6 | 3.60 k Ω |
| | Position 7 | 4.70 k Ω |

Push button switch

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

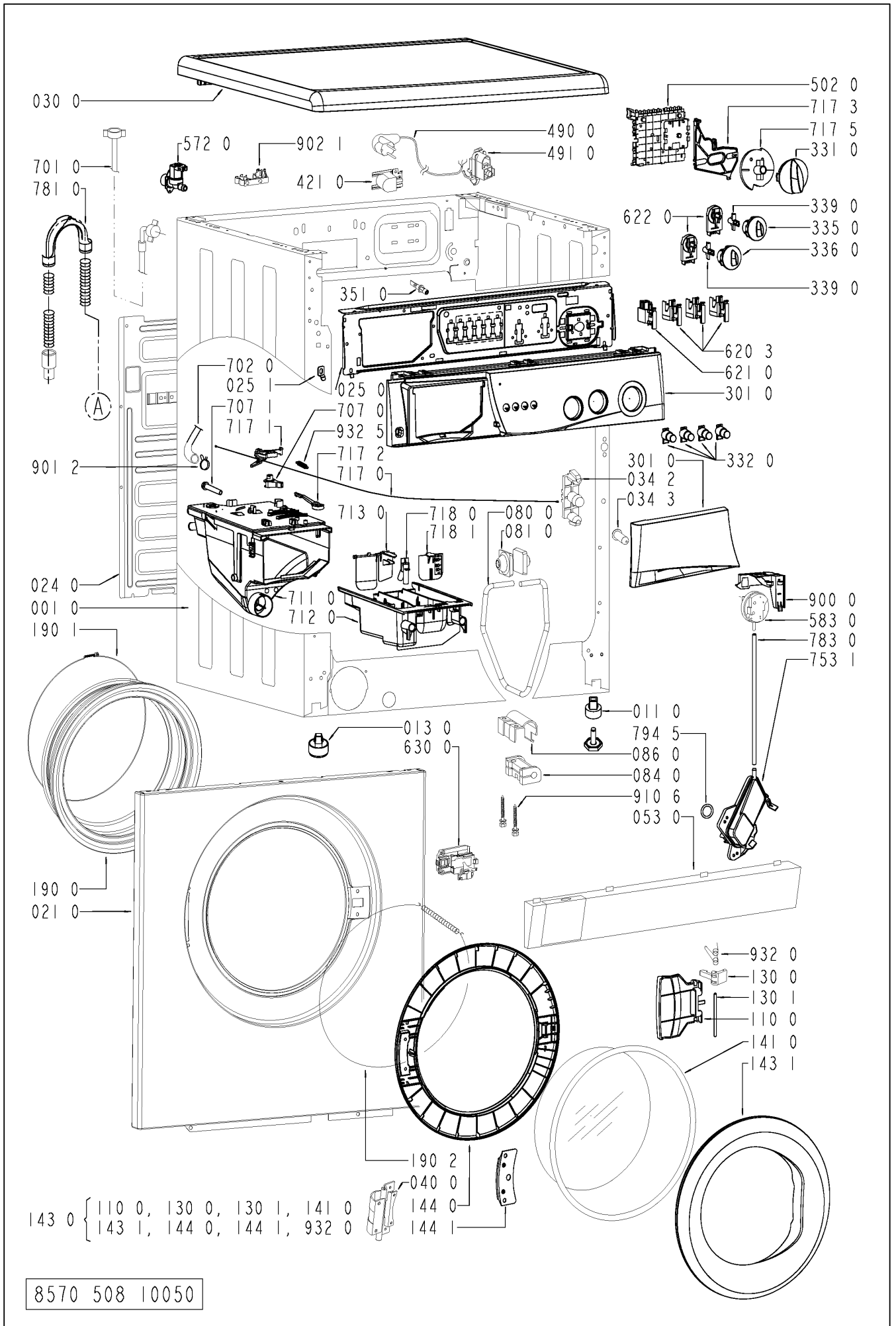
Spare part list

Model FL 5085
Service No. 857050810050
Version 857050810050

| Pos. No. | 12NC Code | Description |
|----------|-----------------------|------------------------------|
| 001 0 | 4812 440 10328 | Cabinet + feet TATRY |
| 011 0 | 4812 462 48077 | Foot adjustable |
| 013 0 | 4812 462 48078 | Foot fix |
| 021 0 | 4812 440 19481 | Front,panel |
| 024 0 | 4819 440 19897 | Panel, rear |
| 025 0 | 4812 404 38636 | Support control board VBL |
| 025 1 | 4812 452 19849 | Holder Frontpanel |
| 030 0 | 4812 440 10481 | Table top WH VBL |
| 034 2 | 4819 492 68458 | Fastener |
| 034 3 | 4819 532 68243 | Bushing |
| 040 0 | 4819 417 19232 | Hinge |
| 053 0 | 4819 440 19901 | Plinth |
| 061 0 | 4819 466 89453 | Counter weight ,top |
| 061 1 | 4819 466 89454 | Counter weight ,bottom |
| 080 0 | 4812 492 38386 | Spring,suspens. |
| 081 0 | 4812 466 48093 | Friction plate |
| 083 1 | 4819 462 38925 | Friction plate |
| 084 0 | 4819 462 48049 | Silent bloc |
| 086 0 | 4819 401 18607 | Clamp bushing |
| 110 0 | 4819 498 78444 | Handle |
| 130 0 | 4819 417 38117 | Lock |
| 130 1 | 4819 535 38062 | Shaft Hooh |
| 141 0 | 4819 450 69519 | Door glass |
| 143 0 | 4812 440 10652 | Door cpl. WH VBL |
| 143 1 | 4812 440 10483 | Glassdoor frame WH VBL |
| 144 0 | 4819 532 28288 | Frame,door glas |
| 144 1 | 4819 466 89077 | Plate door frame |
| 190 0 | 4819 468 18344 | Door bellow |
| 190 1 | 4819 492 38119 | Strap porthole seal |
| 190 2 | 4819 492 68515 | Strap porthole seal |
| 200 0 | 4812 418 18411 | Tub |
| 201 0 | 4812 464 48165 | Bottom Tub cpl. |
| 201 1 | 4819 532 88052 | Ring |
| 201 2 | 4812 464 48166 | Bottom Tub |
| 210 0 | 4812 535 78064 | Crosspiece,drum |
| 220 0 | 4812 418 18412 | Drum |
| 220 1 | 4812 418 18413 | Drum cpl. |
| 228 0 | 4812 418 18212 | Plate |
| 271 0 | 4812 358 18158 | Belt |
| 272 0 | 4812 528 88102 | Pulley |
| 292 0 | 4819 466 69797 | Gasket |
| 301 0 | 4812 452 11711 | Control panel FL 5085 |
| 331 0 | 4812 414 58175 | Knob,timer VBL |
| 332 0 | 4812 513 18118 | Push button WH VBL |
| 335 0 | 4812 414 58176 | Knob thermostat WH VBL |
| 336 0 | 4812 414 58178 | Knob,potentiom. |
| 339 0 | 4812 233 18006 | Adapter f. Knob |
| 351 0 | 4812 124 98001 | Lamp mains |
| 401 0 | 4812 361 58358 | Motor MCA 45/64, 800 |
| 421 0 | 4812 121 18142 | Interf.filter 1,00 µ F |
| 430 0 | 4812 360 18527 | Pump,draining with Protector |
| 451 0 | 4812 259 28835 | Heating element 230 V |
| 490 0 | 4819 321 18136 | Cable,mains 2m SA |
| 491 0 | 4812 321 28367 | Strain relief |
| 502 0 | 4812 282 19333 | Timer SC1 progr. 825 MP 3330 |

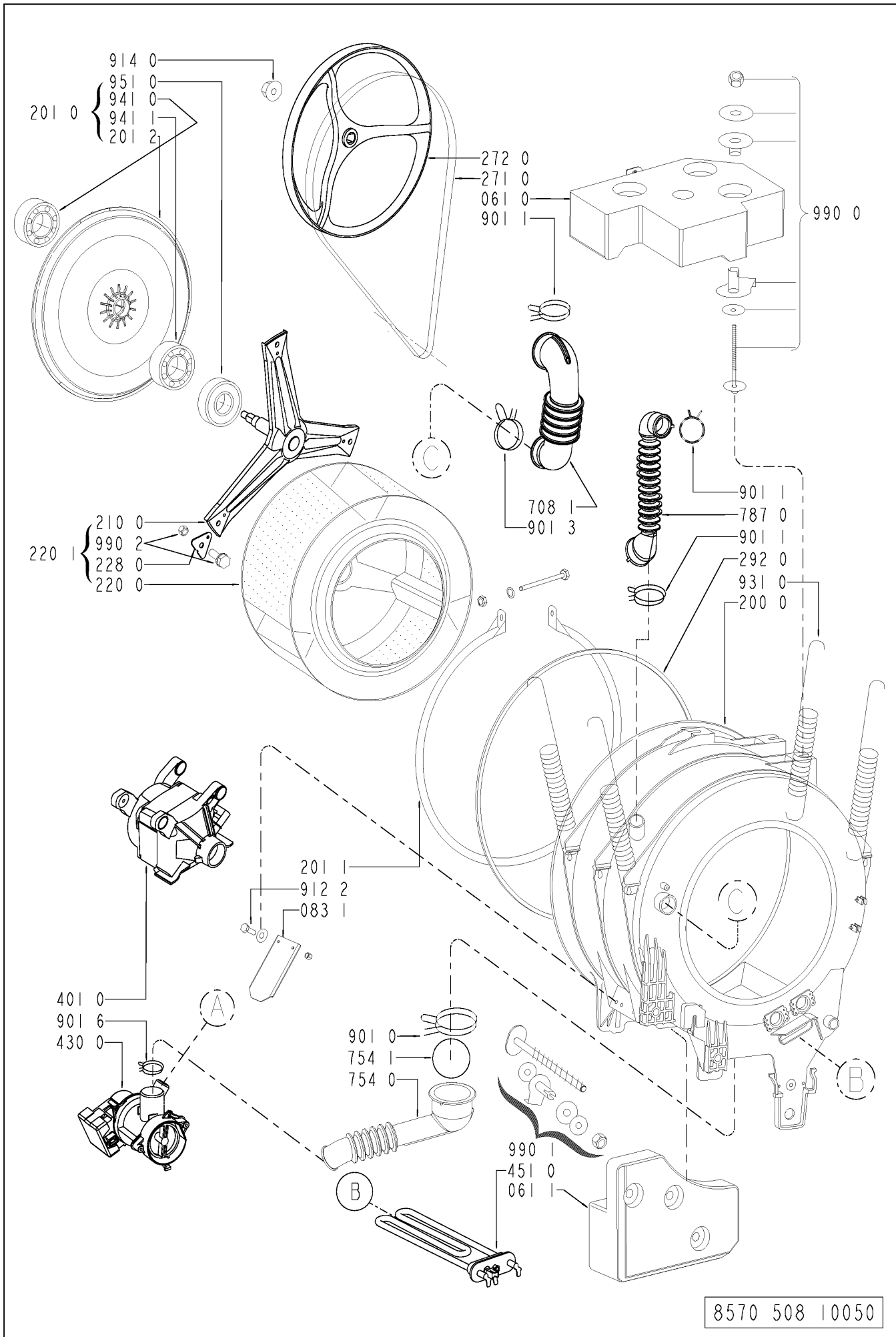
| Pos. No. | 12NC Code | Description |
|----------|-----------------------|-----------------------------|
| 572 0 | 4812 271 28506 | Valve,magnet single |
| 583 0 | 4812 271 28507 | Pressostat |
| 620 3 | 4819 410 28998 | Switch options |
| 621 0 | 4812 276 18276 | Switch ON/OFF |
| 622 0 | 4812 413 48279 | Selector,switch Temp./Spin |
| 630 0 | 4819 276 18416 | Door lock |
| 701 0 | 4819 530 29034 | Hose, inlet |
| 702 0 | 4812 530 29128 | Hose dispenser/valve |
| 707 0 | 4812 526 48033 | Nozzle Distribution 4 |
| 707 1 | 4812 526 48028 | Nozzle |
| 708 1 | 4812 530 48358 | Bend dispenser/tub |
| 711 0 | 4812 418 68245 | Detergent disp. |
| 712 0 | 4812 418 68246 | Drawer VBL |
| 713 0 | 4812 418 88028 | Flap Detergent Cont. |
| 717 0 | 4812 321 38022 | Bowden cable |
| 717 1 | 4812 321 38013 | Lever , Nozzle |
| 717 2 | 4812 321 38012 | Holder,adjust. |
| 717 3 | 4812 278 88018 | Slide |
| 717 5 | 4812 233 18003 | Cam 4 C. incl. adapter WH |
| 718 0 | 4812 526 48051 | Siphon |
| 718 1 | 4812 418 88024 | Accessory |
| 753 1 | 4819 418 68234 | Chamber,air |
| 754 0 | 4819 526 48255 | Drainhose inner Tub/Pump |
| 754 1 | 4812 530 28832 | Lock eco |
| 781 0 | 4819 530 29035 | Hose,draining |
| 783 0 | 4819 530 29036 | Hose pressostat |
| 787 0 | 4812 530 29129 | Steam hose |
| 794 5 | 4812 530 58098 | Gasket Airtrap |
| 900 0 | 4812 255 18205 | Holder Pressostat |
| 901 0 | 4819 401 18529 | Clamp,hose |
| 901 1 | 4819 401 18174 | Clamp,hose 25-45 mm |
| 901 2 | 4812 401 18501 | Clamp,hose 19.2 mm |
| 901 3 | 4819 401 18882 | Clamp |
| 901 6 | 4819 401 18436 | Clamp,hose |
| 902 1 | 4812 255 18204 | Holder Hose outlet |
| 910 6 | 4819 502 38005 | Screw |
| 912 2 | 4819 310 38685 | Set screw |
| 914 0 | 4812 505 18371 | Nut M 12 |
| 931 0 | 4819 492 38138 | Spring,suspens. |
| 932 0 | 4819 492 68666 | Spring |
| 932 5 | 4812 492 38359 | Spring , Nozzle |
| 941 0 | 4819 903 00802 | Bearing,ball 6204-2ZR |
| 941 1 | 4812 520 28001 | Bearing,ball 6205 2Z C3 |
| 951 0 | 4812 530 58097 | Shaft seal 800-1000 |
| 990 0 | 4819 310 39124 | Mounting kit ,weight top |
| 990 1 | 4819 310 38684 | Mounting kit ,weight bottom |
| 990 2 | 4819 310 39099 | Accessories CROSSPIECE |

Exploded view

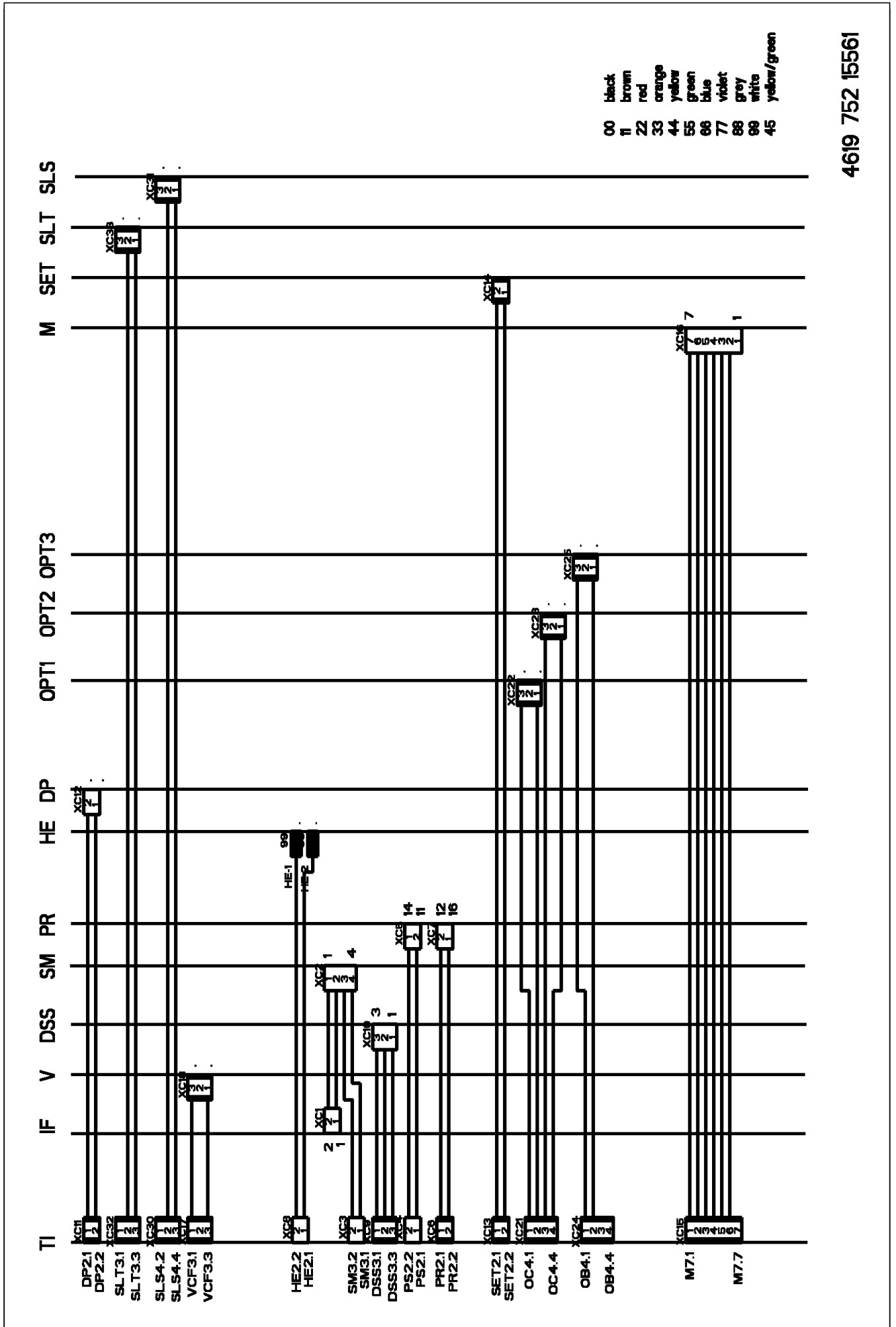


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Exploded view

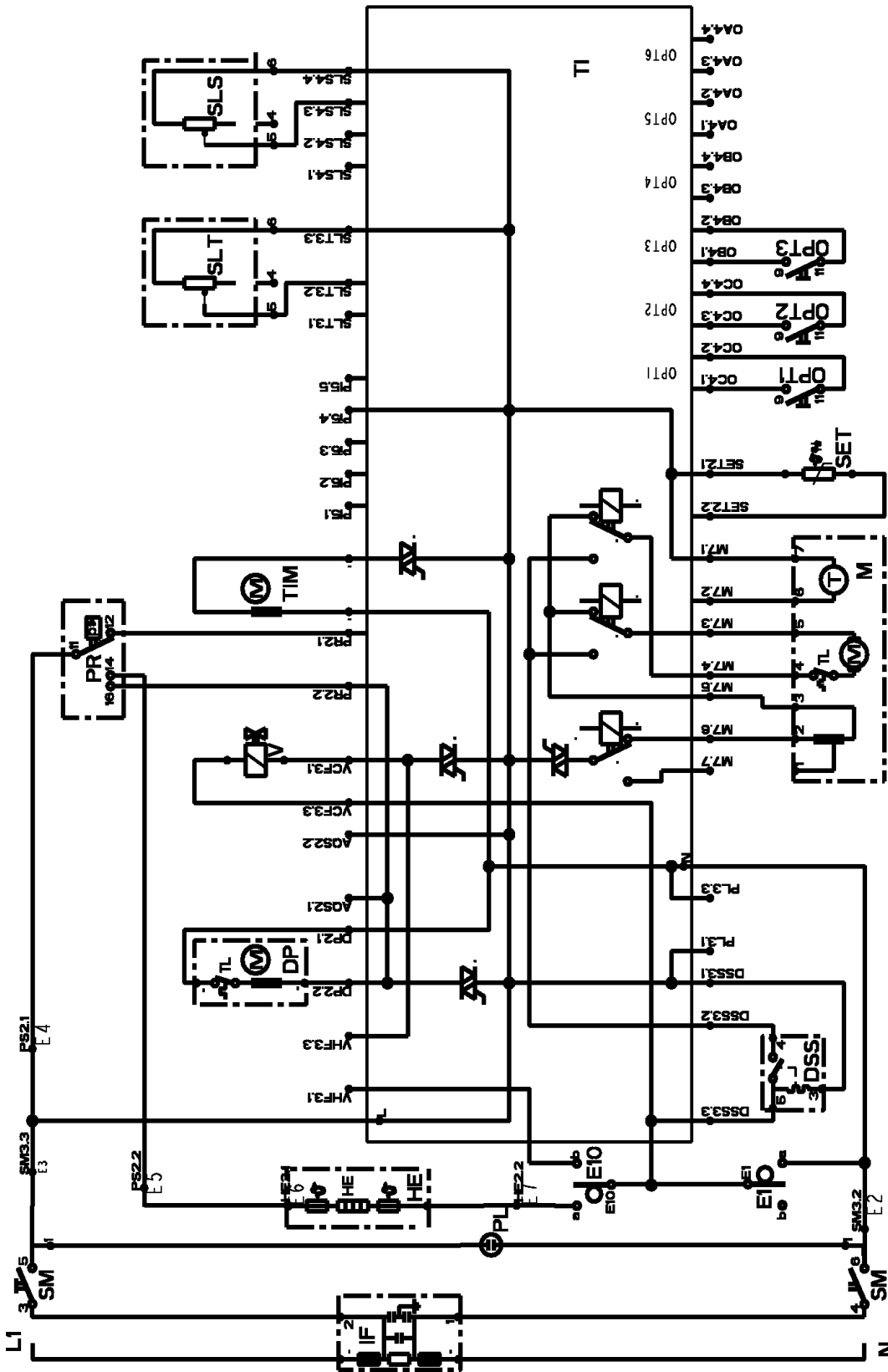


Wiring diagram



Circuit diagram

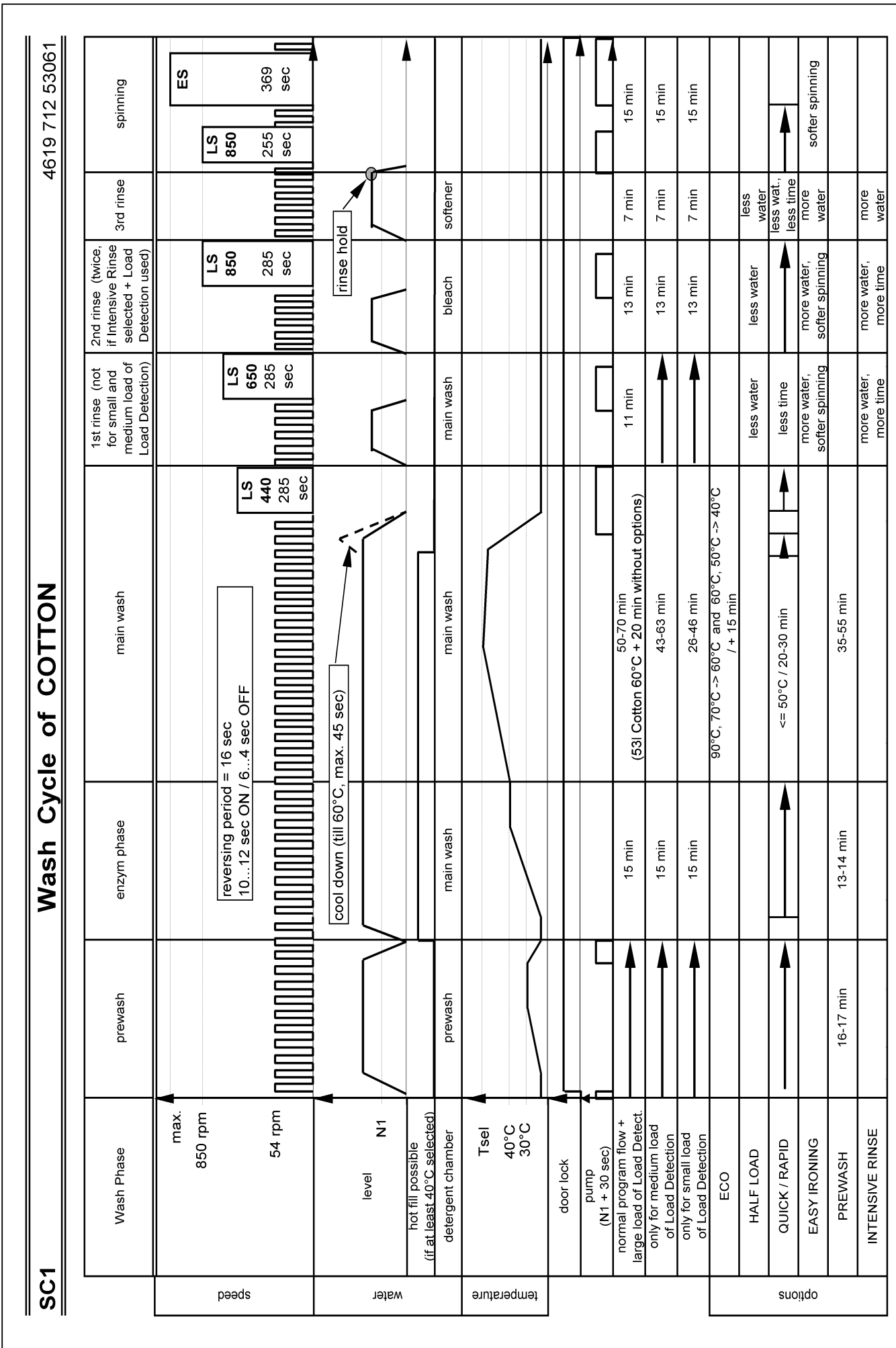
4619 752 15561



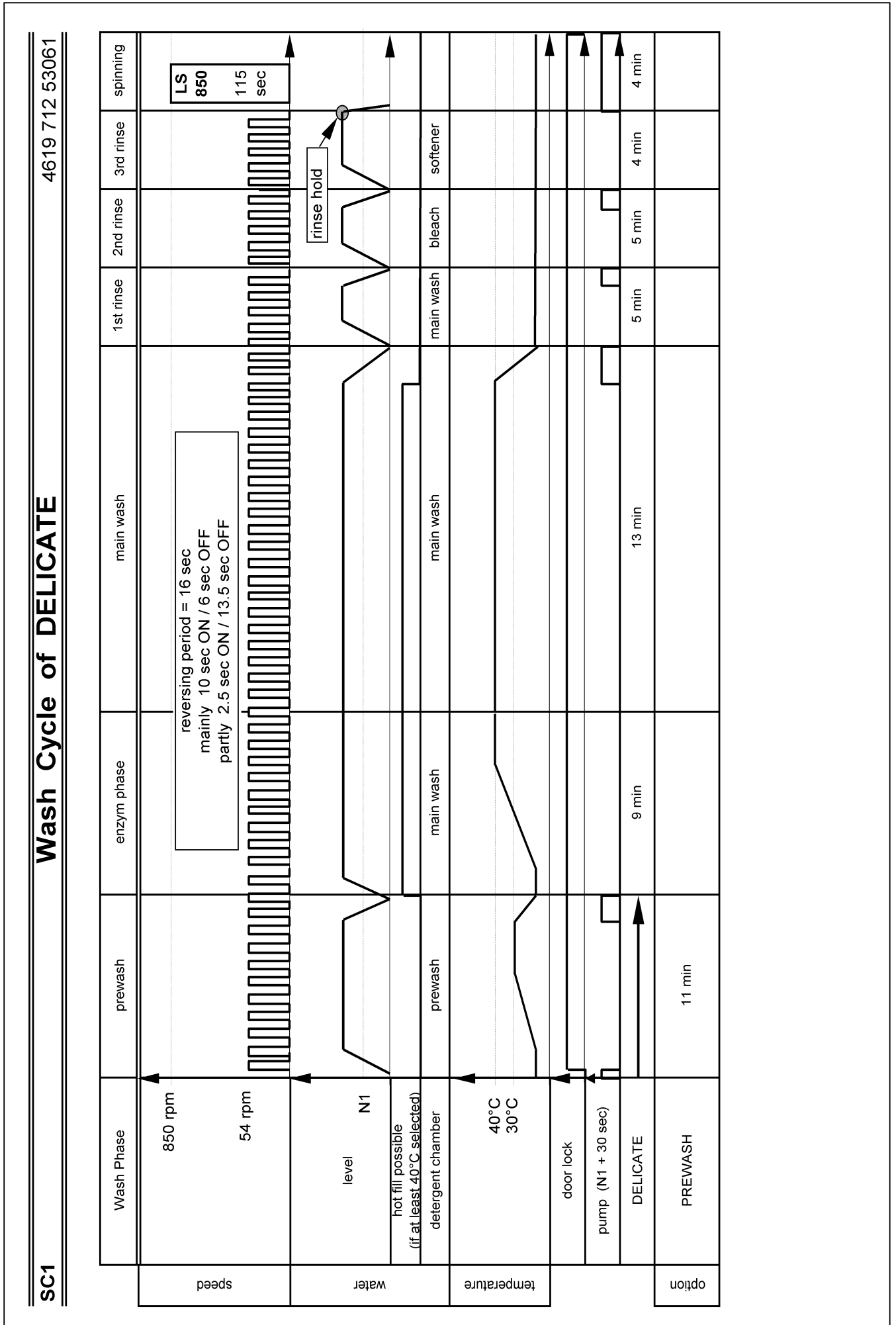
- DP Drain Pump
- DSS Door Safety Switch
- HE Heating Element
- IF Interference Capacitor
- M Motor Drive
- OPT Options
- PR Pressostat
- SET Sensor, Temperature Selector, Speed Selector, Temperature Switch, Mains
- SM Switch, Mains
- TI Timer
- TIM Timer Motor
- V Valve

OPTIONAL FEATURES:
 PL Pilot Lamp

Program chart



Program chart

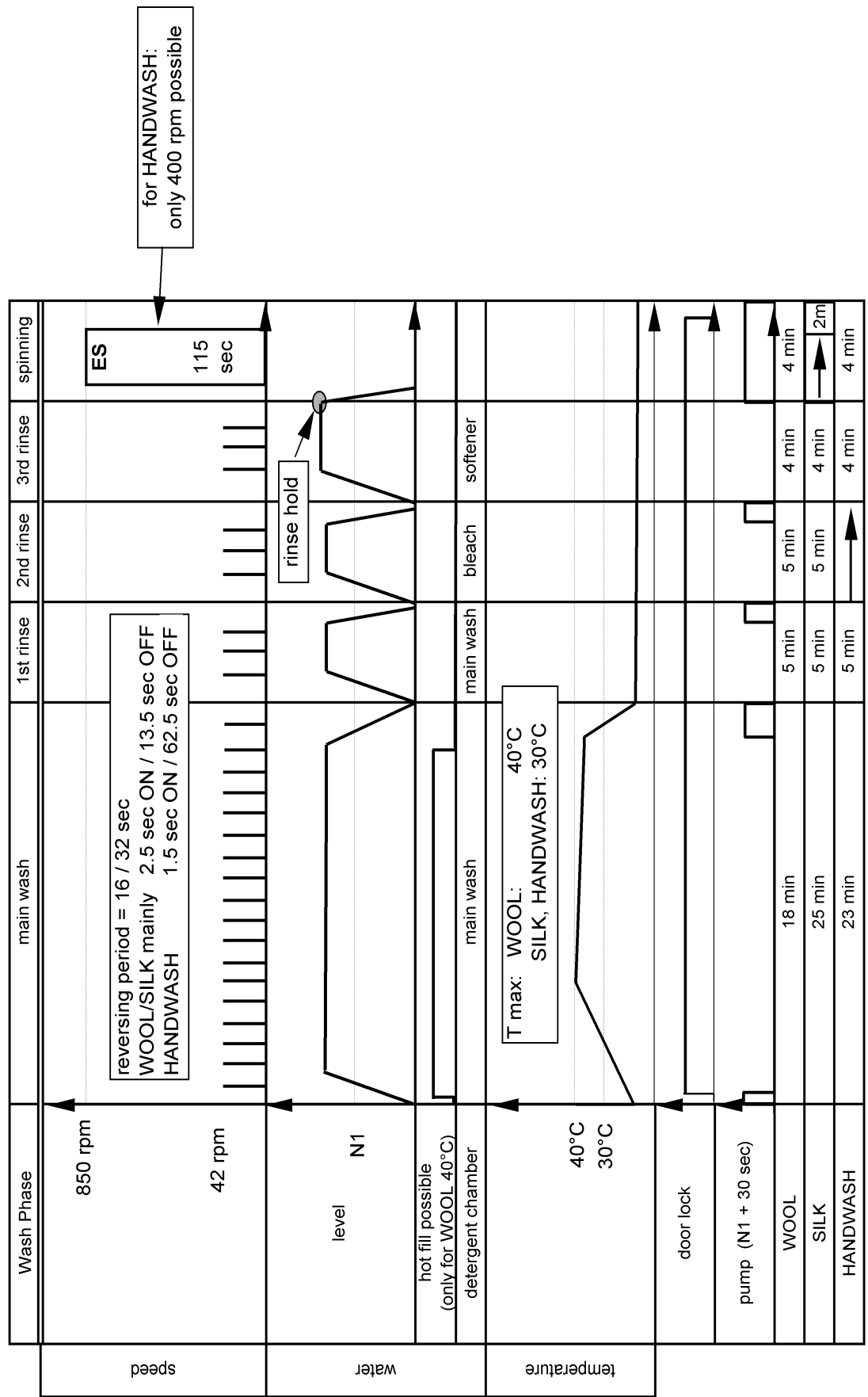


Program chart

4619 712 53061

Wash Cycles of WOOL, SILK and HANDWASH

SC1

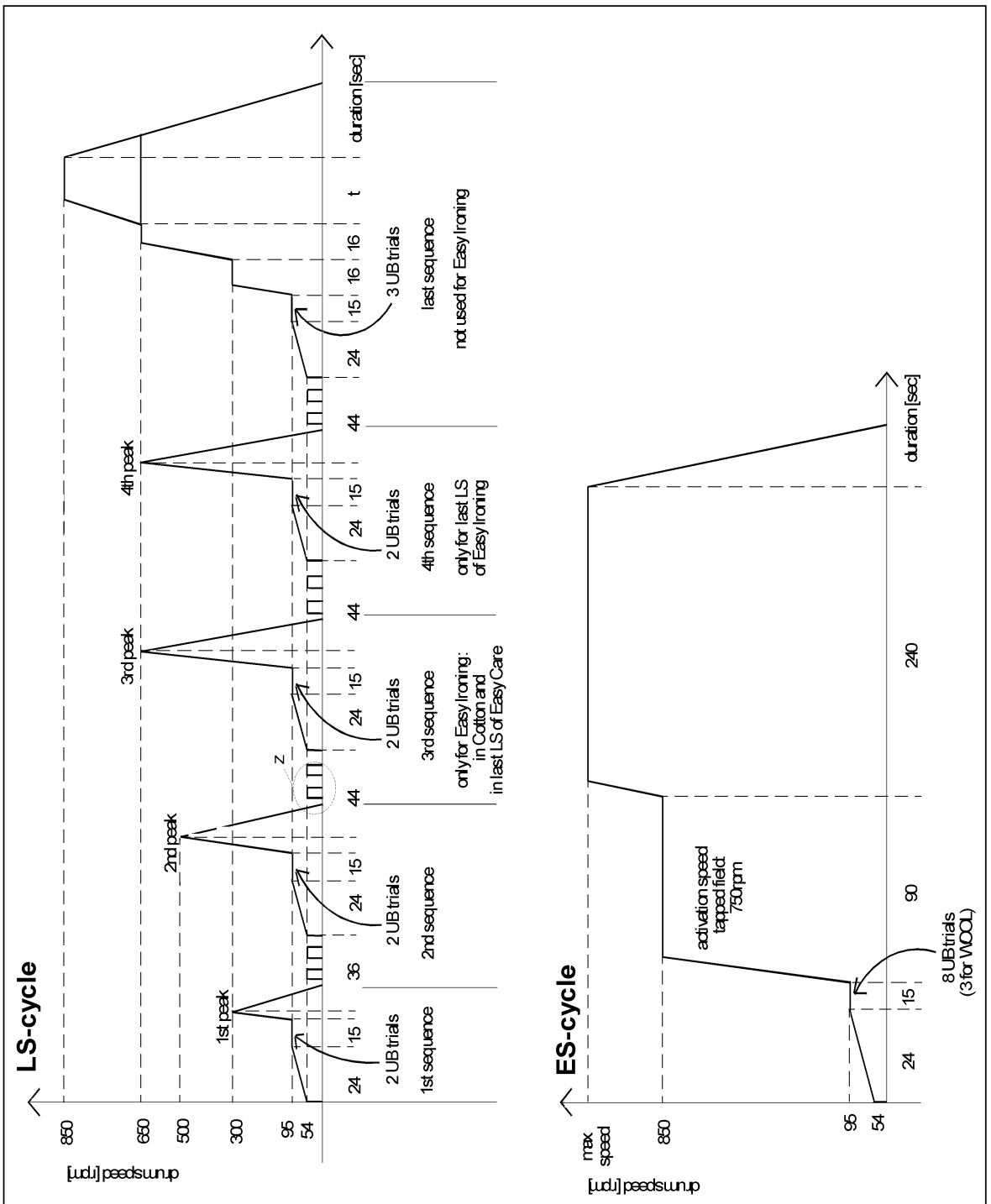


Program chart

4619 712 53061

Spinning Profiles

SC1



Text/Legend

TEST PROGRAM FLOW SC1

1. Before start: **Attention! Use Testprogram only without laundry!**
2. Before start: All options must be pushed.
3. Select program: DRAIN
4. Start of test program: push start button,
 wait (1-2 sec.), till pump is running,
 push 1st option button 4 times (within max. 10 sec.).
 (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.
6. After test program: Move the knob into position off.

| • = pro-gram start | timer position | door lock | detergent box | inlet outlet | T max | duration | rhythm drum | Advance by option button | checked |
|--------------------|----------------|-----------|---------------|--------------|----------|----------|-------------|--------------------------------|--|
| • D | 31 | locked | - | | | | | | 1 st push button |
| | 3 | locked | prewash | (hot) fill | hot fill | 60" | nm | release 2 nd option | PW fill, hot fill, 2 nd push button |
| | 4 | locked | | fill | | 60" | nm | release 3 rd option | 3 rd push button |
| | 5 | locked | | fill | | 60" | nm | release 4 th option | 4 th push button |
| | 6 | locked | mainwash | fill | | 60" | nm | release 5 th option | 5 th push button |
| | 7 | locked | | fill | | 60" | nm | release 6 th option | 6 th push button |
| | 8 | locked | | (hot) fill | hot fill | 6' | Sg1 | push/release an option | mainwash fill, hot fill, N1 |
| | 16 | locked | | fill | 90°C | 60" | Sg1 | push/release an option | |
| | 20 | locked | | (fill) | 90°C | 55' | Sg1 | push/release an option | heating, NTC, selector, leakage |
| | 23 | locked | * bleach | fill | | 60" | RR | push/release an option | bleach fill |
| | 27 | locked | softener | fill | | 60" | RL | push/release an option | softener fill |
| | 28 | locked | - | pump | | | Sg1 | | pump, N1 |
| | 29 | locked | | pump | | 4" | 0 - 95 rpm | | pump |
| | | | | pump | | 300" | sel. speed | push/release an option | motor, selector |
| | 30 | | | | | - | | | |

* 4 chamber detergent dispenser „bleach“ compartment
 3 chamber detergent dispenser „main wash“ compartment

- 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

