

CYLINDA

Service Information

Washing machine Toploader

TT 150

8584 150 19010

Last Modification: 01/21/12

Creation Date: 10/29/11

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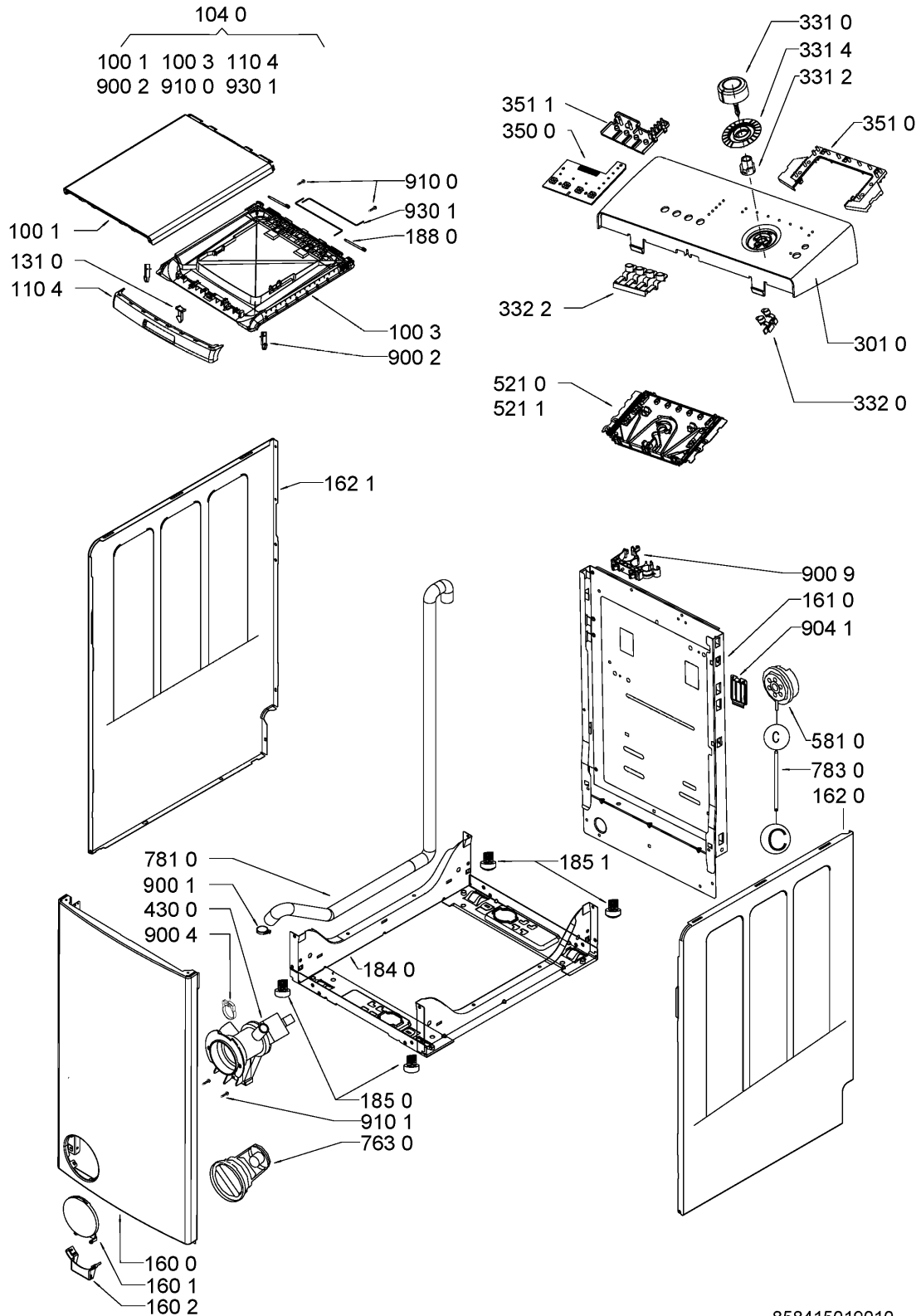
This document is only intended for qualified technicians who are aware of the respective safety regulations.
Subject to modifications

Spare Part List

Pos	12NC	Description
1001	4812 440 10842	Lid outer GW
1003	4810 730 84355	Lid inner
1040	4812 440 10892	Lid assembly LA/IG GW
1104	4812 498 18252	Handle cpl. LA GW
1300	4801 111 04601	Door lock
1310	4812 417 19193	Door latch GW
1600	4812 440 10837	Front panel LA/IG/RA GW
1601	4812 459 38056	Flap flat LA/IG/RA GW
1602	4812 459 38058	Hinge flap GW
1610	4801 101 00103	Rear panel
1620	4812 440 10839	Side panel right GW
1621	4812 440 10841	Side panel left GW
1810	4812 529 18043	Shock absorber
1811	4801 101 00803	Pin shock absorber
1820	4812 466 88995	Counter weight rear, 5 pts
1821	4812 466 88996	Counter weight front
1822	4812 466 88492	Counter weight bottom
1823	4812 310 18506	Fixing mat.set bottom
1840	4812 440 19625	Drip tray assy
1850	4812 462 48054	Foot
1851	4812 528 78046	Foot adjustable rear
1870	4812 440 11637	Frame Top+nozzle box KIT
1871	4810 750 23762	Frame inner
1880	4812 417 19155	Hinge bolt lid GW
1910	4812 466 68596	door bellow
1911	4801 111 00817	Strap f. Doorbellow
2000	4801 111 04402	Tub kit
2001	4801 111 04401	Cover f. tub LR/4fix
2200	4801 111 02218	Drum LR 210/M8, kit
2211	4812 310 18843	Kit latch f.drum
2230	4801 101 00104	Drum lifter low
2710	4812 358 18204	Belt PV 1207 J4 EL
2720	4812 528 88083	Pulley 298 mm
2900	4812 532 68078	Gasket
3010	4810 104 58977	Control panel
3310	4812 414 58316	Knob timer
3312	4812 414 58307	Spring Knob timer
3314	4812 414 58327	Ring Knob timer
3320	4812 410 29517	Push button START/RESET
3322	4812 410 29516	Push button 4 Opt.
3500	4812 239 58046	Module E3/4 Opt.
3510	4812 134 18085	Light guide
3511	4812 134 18086	Light guide 4OPTS+SPIN VB
4000	4801 111 03472	Motor MCA 38/ALB4
4001	4812 440 98142	Cover for Motor AC
4210	4812 121 18285	Interf.filter
4212	4812 404 38679	Holder RFI
4300	4801 111 04693	Pump,draining RC006100
4510	4812 259 28823	Heating element 240 V + NTC
4900	4819 321 18136	Cable mains 2m SA

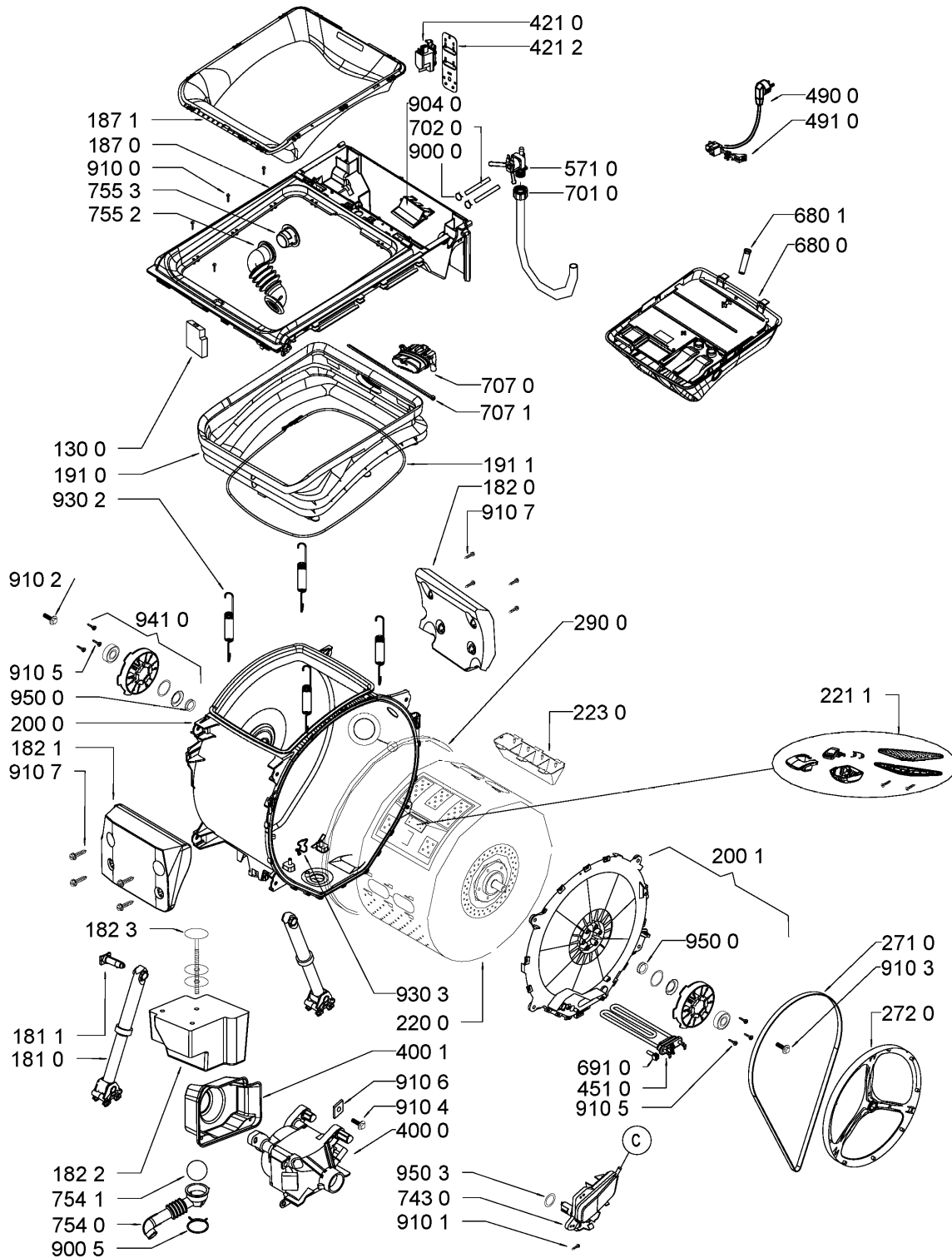
Pos	12NC	Description
4910	4812 321 28367	Strain relief
5210	4810 104 42704	Control unit WAVE, programmed
5211	4810 104 16021	Control unit WAVE, K1(K1) TF/-,basic
5710	4812 281 28468	Valve magnet 1 inlet, 2 outlets
5810	4812 271 28554	Pressostat
6800	4810 752 58622	Soap dispenser cpl. 3ch.
6801	4812 418 68302	Siphon f. softener
6910	4812 282 19485	Sensor NTC
7010	4819 530 28928	Hose inlet, hot, 2m
7020	4812 530 29453	Hose valve-dispenser
7070	4812 526 48244	Nozzle box cold cpl.
7071	4812 526 48049	Clamp f. nozzle box
7430	4812 418 68187	Chamber,air
7540	4812 530 28938	Drainhose
7541	4812 530 28832	Lock eco
7552	4812 530 29309	Hose Air Exhaust
7553	4812 530 29311	Cover of hose
7630	4812 480 58403	Filter
7810	4819 530 29035	Hose draining
7830	4812 530 28941	Hose Pressostat
9000	4819 401 18686	Clamp hose
9001	4819 401 18872	Clamp hose
9002	4812 418 68164	Clip soap dispenser
9004	4812 401 18431	Clamp to pump
9005	4819 401 18529	Clamp hose
9009	4812 255 18304	Holder hose
9040	4812 281 18069	Cover for top frame
9041	4812 462 79974	Cap Transport blocking
9100	4812 502 48347	Screw,selftap 3,5x14
9101	4812 502 38151	Screw 4x14
9102	4801 101 00801	Screw M8x18
9103	4812 502 18817	Screw pulley M8x23 Eureka
9104	4812 502 18816	Screw P8x50
9105	4812 502 18423	Screw PT 7x15
9106	4801 111 02619	Nut M8
9107	4812 310 19224	Fixing mat.set Counter weight
9301	4812 492 48171	Torsions spring
9302	4812 492 48162	Spring
9303	4812 290 18025	Clamp heating element
9410	4812 310 19144	Bearing kit ALL 1100
9500	4810 730 85033	Shaft seal V22, NBR562
9503	4810 103 95017	Gasket airtrap

Exploded View



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Exploded View



858415019010

Technical Data

Dimensions + Weight

Product dimensions	
Height	85 cm
Width	40 cm
Depth	60 cm
Weight	
net	63 kg

Electrical base data

Voltage	230 V \pm 10 %
Frequency	50 Hz
Fuse	10 A
Power Consumption	~2.3 kW

Drum data

Volume	42 l
Wash speed	52 rpm
Spinning	
max.	1000 rpm

Door lock

Kind of switch	Switch with PTC heater of bimetal
Nominal voltage	230 V +10 %, -15 %
Locking time	< 6 s
Unlock time	40 - 220 s

Pressostat

Level1	11 - 12/14
Overflow	11 - 16

Inlet valve

Nominal voltage	220 - 240 V / 50 Hz
Rated flow	(1.5 - 5 bar) 8 l/min
Pressure range	0.3 - 10 bar
Nominal resistance	(20 °C) 3.8 k Ω

Drain pump

Nominal voltage	220 - 240 V / 50 Hz
Total power	26 W
Resistor (coil)	224 Ω
Capacity	19 \pm 2 l/min
Position of draining hose outlet	0.9 - 1.25 m

Heating element

Nominal voltage	240 V +10%, -15%
Total power	2050 W
Resistance (20 °C)	28.09/26.0 Ω ± 5%
Leakage current	< 0.8 mA
NTC sensor	
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

Motor

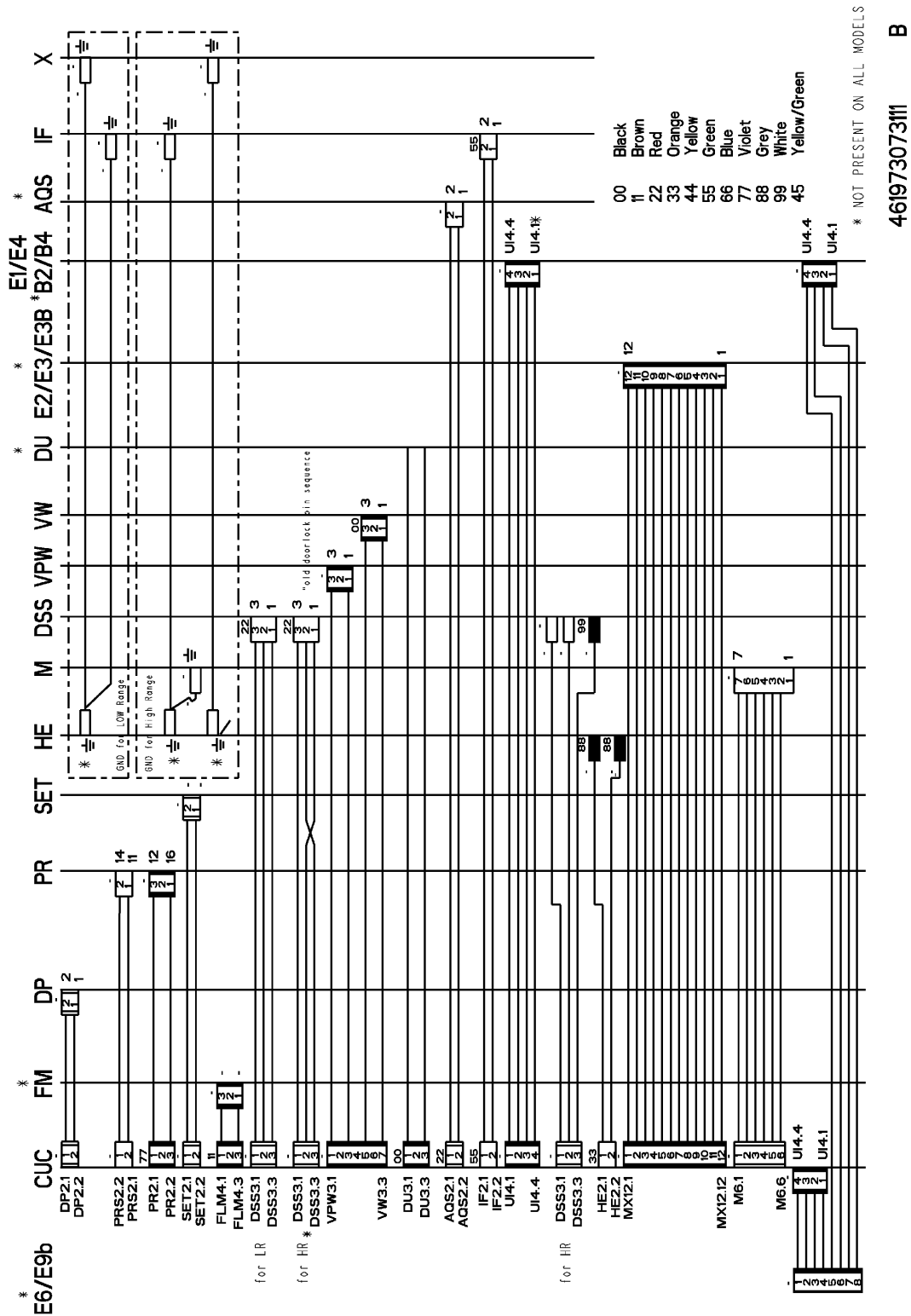
Resistance contacts	(20 °C)
Stator (full field)	2.48 Ω
Rotor	2.46 Ω
Tacho generator	68.70 Ω

Control unit

Type	WAVE
Nominal voltage	230 V - 240 V
Frequency	50 Hz
Output control unit	

Motor	M7.6 - DSS3.2	>40 V
Aquastop	AQ2.2 - DSS3.2	230 V
In pump step	AQ2.1 - DSS3.3	230 V
NTC	Not measurable	—
Pump	DP2.1 - DP2.2	230 V
Doorlock	DSS3.1 - DSS3.3	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	—

Wiring Diagram

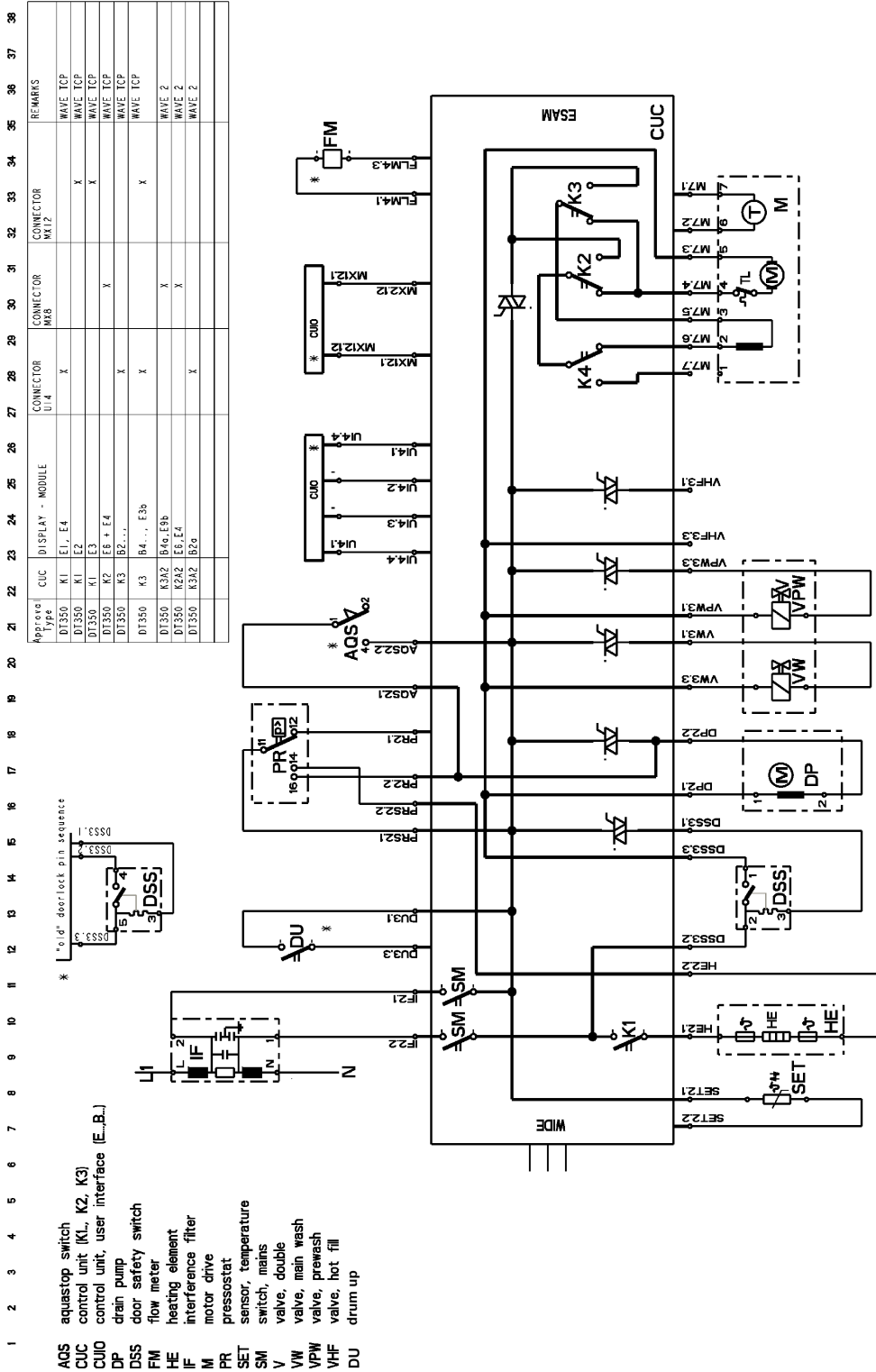


461973073111 B

Legend

00	black
11	brown
22	red
33	orange
44	yellow
55	green
66	blue
77	violet
88	grey
99	white
45	yellow/green

Circuit Diagram



* NOT PRESENT ON ALL MODELS
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Legend

AQS	aquastop switch
CUC	control unit (K1, K2, K3)
CUIO	control unit, user interface (E..., B...)
DP	drain pump
DSS	door safety switch
DU	drum up
FM	flow meter
HE	heating element
IF	interference filter
M	motor drive
PR	pressostat
SET	sensor, temperature
SM	switch, mains
V	valve, double
VW	valve, main wash
VPW	valve, prewash
VHF	valve, hot fill

Program Chart

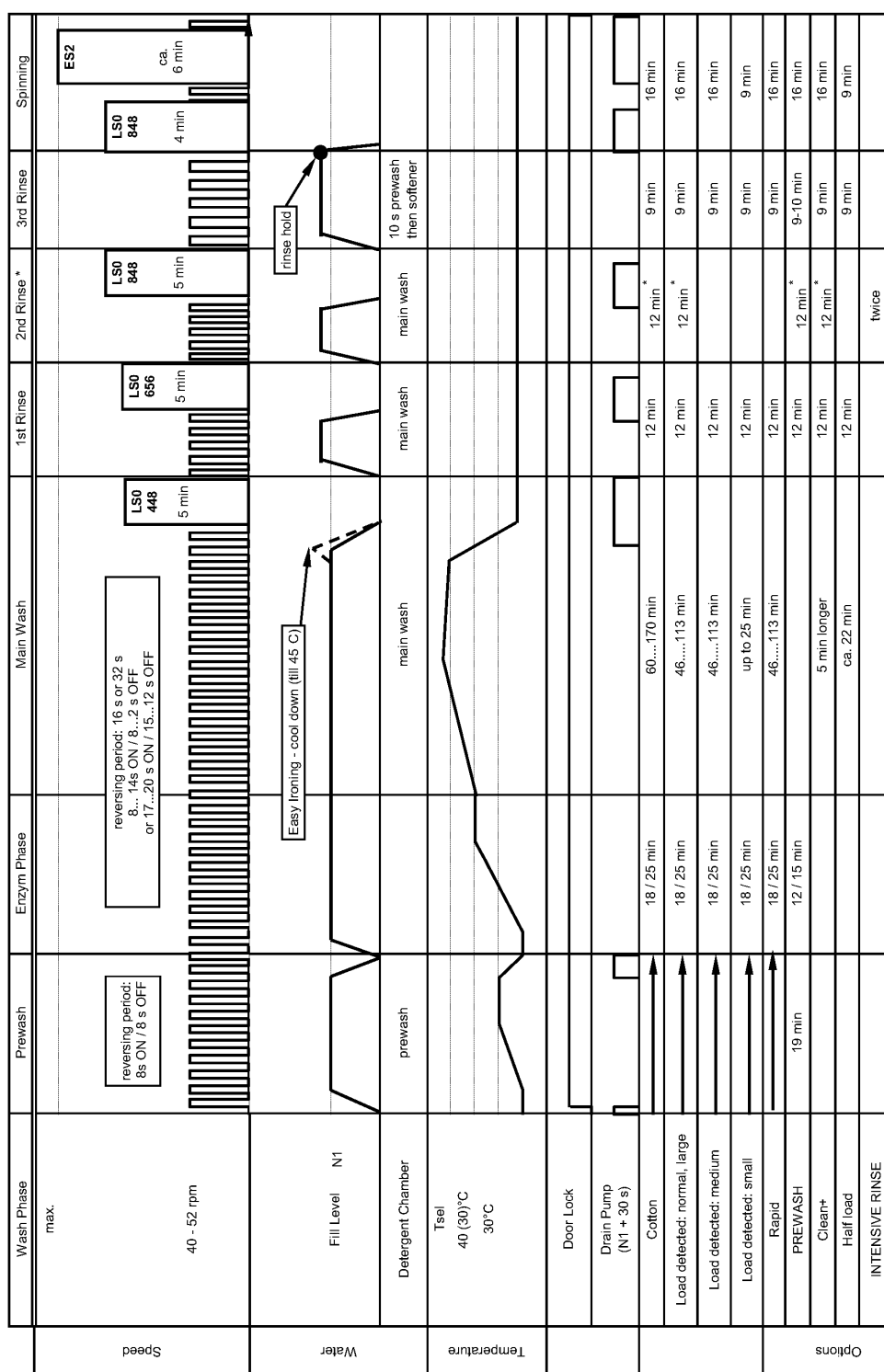
Alliance Wave 42 PP		Wash Cycle - COTTON 95°C						W10425265
	Wash Phase max.	Prewash	Erzzym Phase	Main Wash	1st Rinse	2nd Rinse *	3rd Rinse	Spinning
Speed	40 - 52 rpm	reversing period: 8s ON / 8 s OFF	reversing period: 10...14 s ON / 6...2 s OFF	LS0 448 5 min	LS0 656 5 min	LS0 848 5 min	LS0 848 4 min	ES2 ca 6 min
Water	Fill Level N1	cool down (till 60 C, max. 45 s)					rinse hold	
	Detergent Chamber	prewash		main wash	main wash	main wash	10 s prewash then softener	
Temperature	Tsel 40 (30)°C 30°C							
	Door Lock							
	Drain Pump (N1 + 30 s)							
	Load detected: normal, large	18 / 25 min		ca. 54 min	12 - 15 min	12 min	9 - 10 min	16 min
	Load detected: medium	18 / 25 min		ca. 52 min	12 - 15 min	12 min	9 - 10 min	16 min
	Load detected: small	18 / 25 min		up to 52 min	12 - 15 min	12 min	9 - 10 min	9 min
	ECO			Tsel -10 °C / +10 min	12 - 15 min	12 min*	9 - 10 min	16 min
	HALF LOAD			ca. 45 min	9 min		9 min	14 min
	CLEAN PLUS			TL LR and HR Non intuitive layout - Tsel -10 °C / +10 min	12 - 15 min	12 min*	9 - 10 min	16 min
	PREWASH	18 min	12 / 15 min	TL HR intuitive layout - 72 min - 100 min	12 min	12 min*	9 - 10 min	16 min
	Rapid**		18 / 25 min	ca. 54 min	12 min	12 min*	9 - 10 min	16 min
	INTENSIVE RINSE			82°C, ca. 54 min	12 min	12 min*	9 - 10 min	16 min
Options						twice		

* TL HR 5kg, 5.5kg, 5kg and 6kg LR : 2nd Rinse is not performed

** Valid only for TL HR with Intuitive Layout

OPTION NoSpin: the spinning until rinse 3 is performed , extraction phase is skipped

W10425265
Wash Cycle - COTTON



* TL HR 5kg, 5.5kg and 6kg LR : 2nd Rinse is not performed

OPTION NoSpin: the spinning until rinse 3 is performed, extraction phase is skipped

W10425265
Wash Cycle - COTTON Rapid

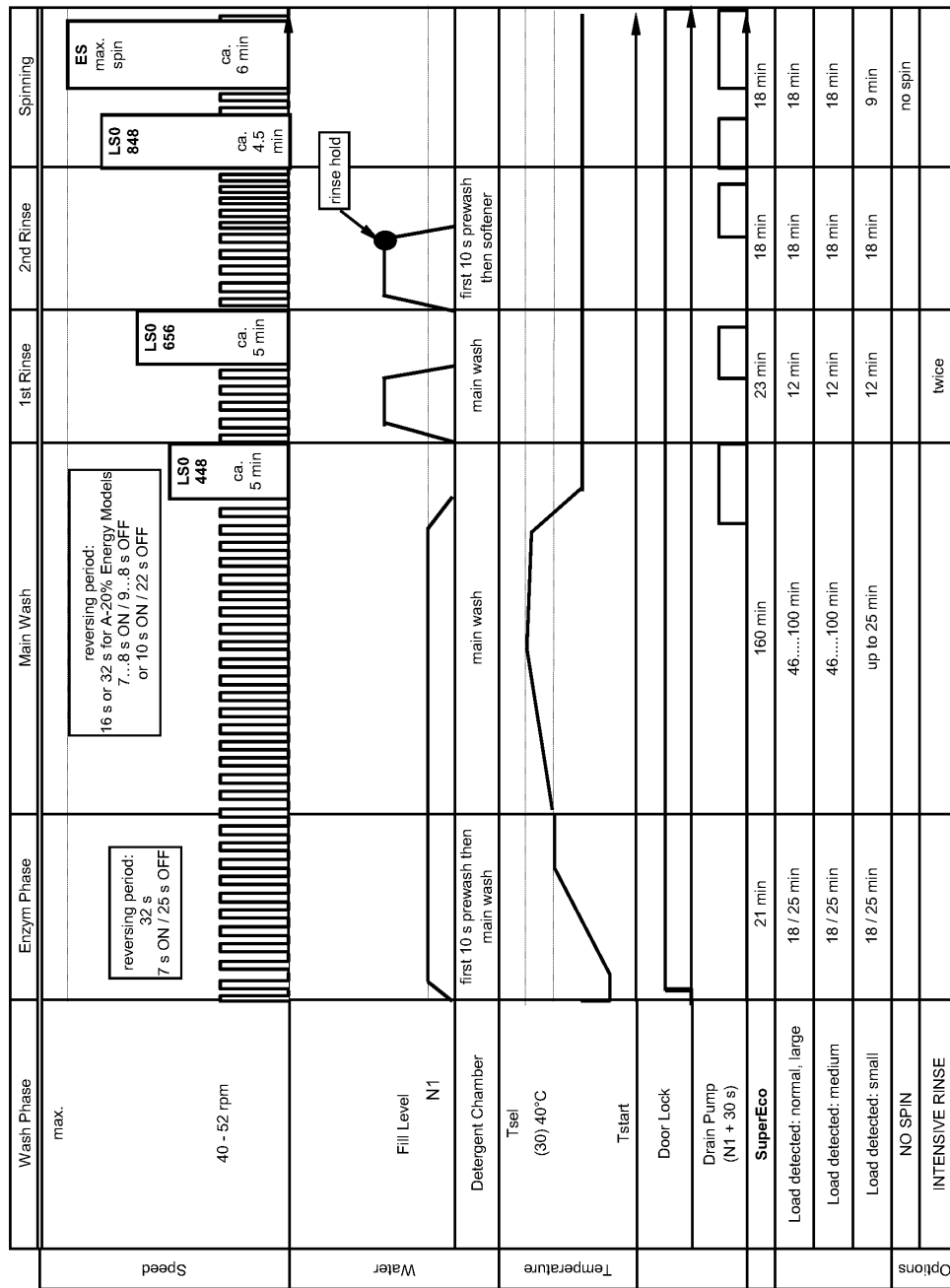
	Wash Phase	Prewash	Enzym Phase	Main Wash	1st Rinse	2nd Rinse *	3rd Rinse	Spinning
Speed	max. 40 - 52 rpm	reversing period: 8s ON / 8 s OFF	reversing period: 16 s or 32 s 8... 14 s ON / 8...2 s OFF or 17...20 s ON / 15...12 s OFF	LSO 448 5 min	LSO 656 5 min	LSO 848 5 min	LSO 848 4 min	ES2 Max. ca. 6 min
Water	Fill Level N1	Easy ironing - cool down (till 45 C)					rinse hold	
Temperature	Detergent Chamber Tsel 40 (30)°C 30°C	prewash		main wash	main wash	main wash	10 s prewash then softener	
	Door Lock							
	Drain Pump (N1 + 30 s)							
	Cotton Rapid	18 / 25 min	18 / 25 min	46...113 min	12 min	12 min	9 min	16 min
	Load detected: normal, large	18 / 25 min	18 / 25 min	46...113 min	12 min	12 min*	9 min	16 min
	Load detected: medium	18 / 25 min	18 / 25 min	46...113 min	12 min	12 min	9 min	16 min
	Load detected: small	18 / 25 min	18 / 25 min	up to 25 min	12 min	12 min	9 min	9 min
Options	PREWASH	19 min	12 / 15 min		12 min	12 min*	9-10 min	16 min
	INTENSIVE RINSE					twice		

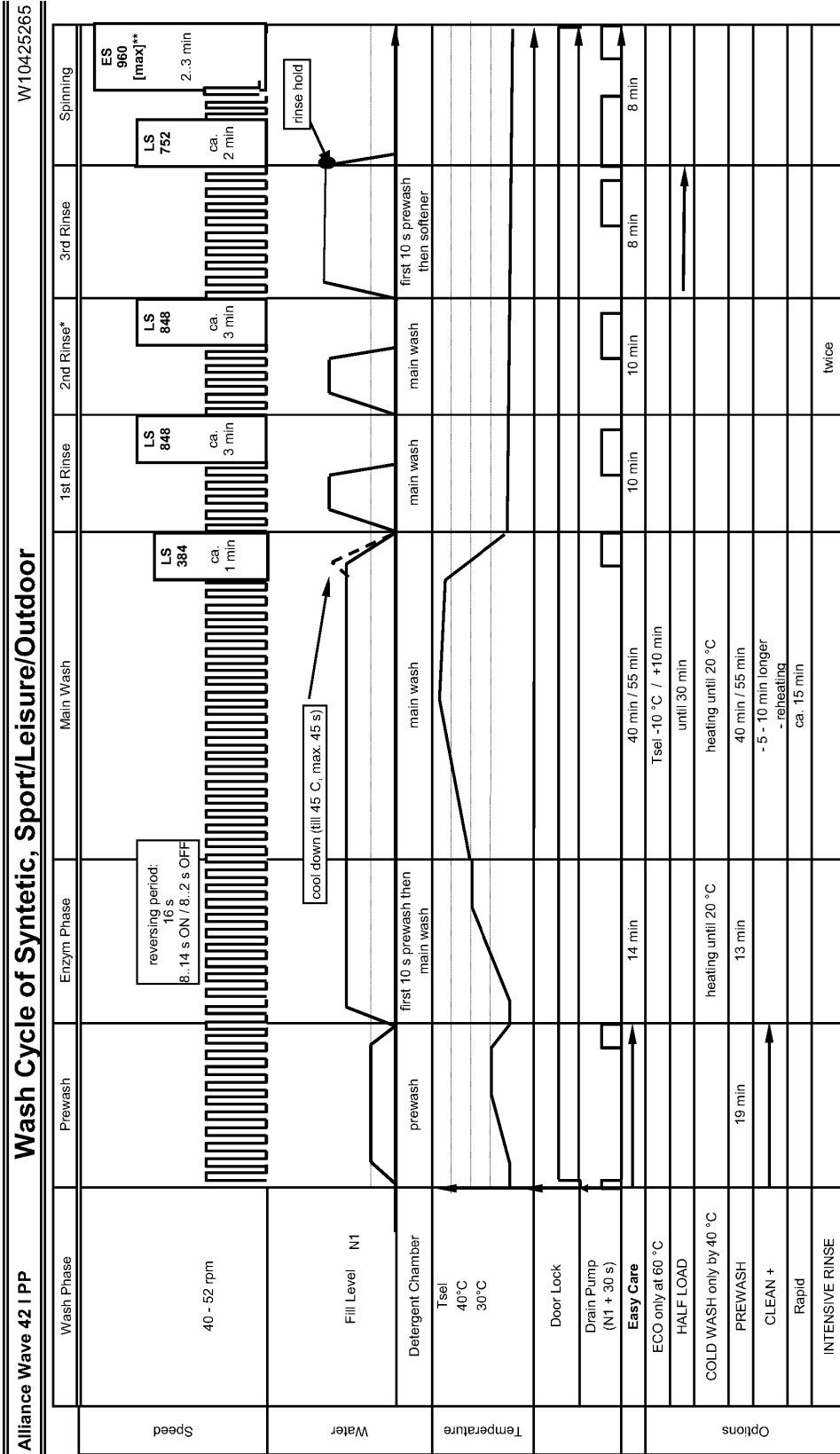
* TL HR 5kg, 5.5kg, 5kg and 6kg LR : 2nd Rinse is not performed
OPTION **NoSpin**: the spinning until rinse 3 is performed , extraction phase is skipped

Alliance Wave 42 PP		Wash Cycle - Cotton 40°C, Jeans, Whites only					W10425265
	Wash Phase max.	Prewash	Enzym Phase	Main Wash	1st Rinse	2nd Rinse	Spinning
Speed	40 - 52 rpm		reversing period: 16 s or 32 s 8...14 s ON / 8...2 s OFF or 16...20 s ON / 16...12 s OFF		LS 656 ca. 4 min	LS 848 ca. 4 min	LS 848 3..4 min ES3 ca. 6 min
Water	Fill Level N1	prewash	first 10 s prewash then main wash	main wash	main wash	first 10 s prewash then softener	rinse hold
Temperature	Detergent Chamber Tsel 40°C 30°C						
	Door Lock						
	Drain Pump (N1 + 30 s)						
	Cotton color		18 - 25 min	75.....95 min	12 min	10 min	16 min
	Load detected: normal / large		18 - 25 min	60...80 min	12 min	10 min	16 min
	Load detected: medium		18 - 25 min	60...80 min	12 min	10 min	16 min
	Load detected: small		18 - 25 min	25 min	12 min	10 min	9 min
	Rapid		18 - 25 min	60...80 min	12 min	10 min	16 min
	HALF LOAD		heating until 20 °C	45 min	12 min	10 min	10 min
	COLD WASH		heating until 20 °C		12 min	7 min	16 min
	CLEAN PLUS		- 10 minutes longer - reheating		12 min	7 min	16 min
	PREWASH	19 min	12.....15 min		twice		
	INTENSIVE RINSE						

- (1) OPTION **NoSpin**: the spinning until rinse 3 is performed, extraction phase is skipped
- (2) Jeans/Baby = Cotton 40°C with integrated intensive rinse option. The options easy ironing and intensive rinse are not selectable. The intensive rinse LED doesn't light.
- (3) Whites Only = Cotton 40°C with integrated clean+ option

Alliance Wave 42 I PP Wash Cycle - SuperEco W10425265





* 2nd Rinse is performed for models with Clean + and Rapid option

** Models with intuitive layout - max. spin speed

OPTION **NoSpin**: the spinning until rinse 3 is performed , extraction phase is skipped

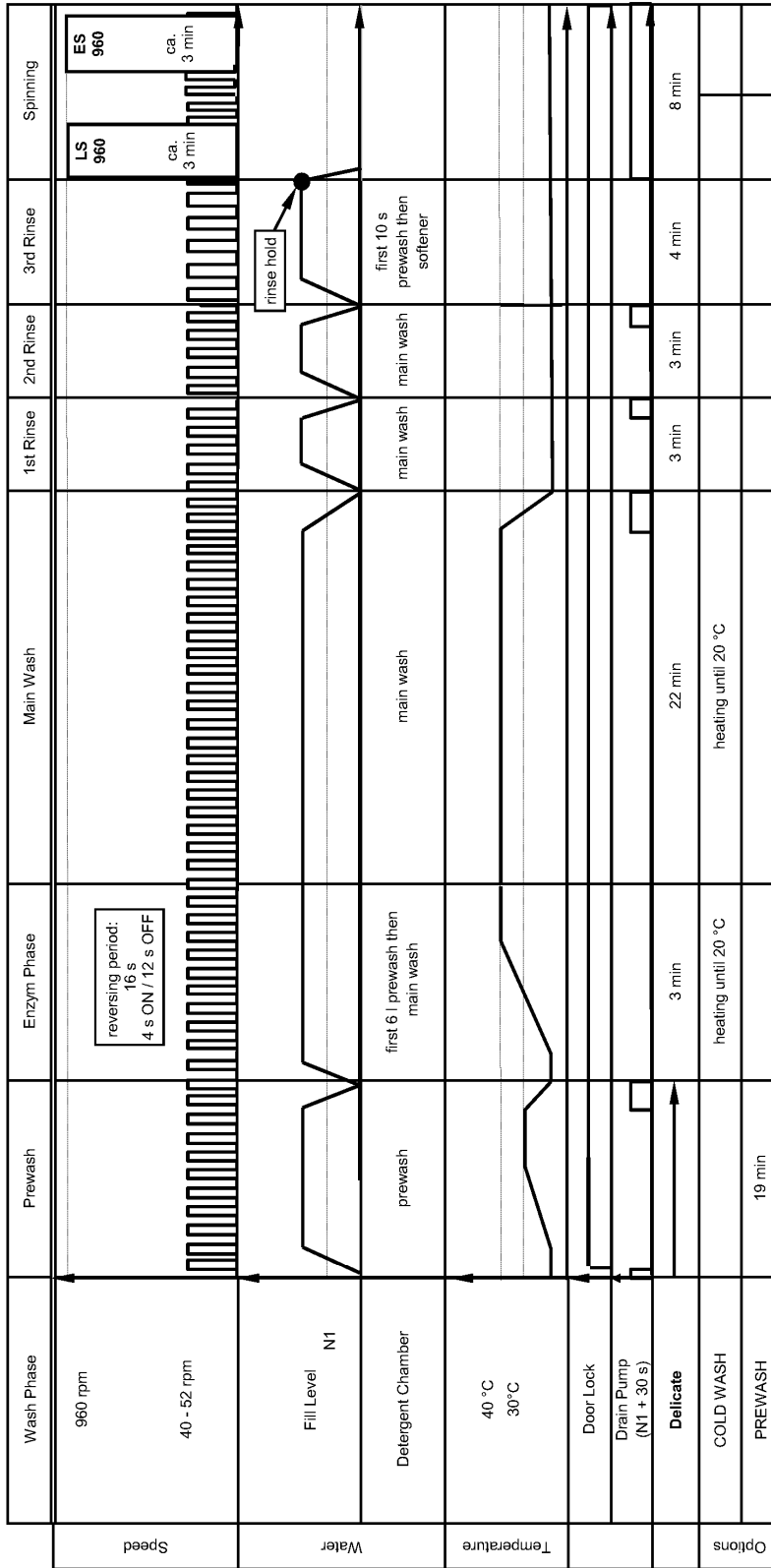
Sport/Leisure/Outdoor = Synthetic 30°C with integrated prewash option

The options prewash and eco are not selectable

W10425265

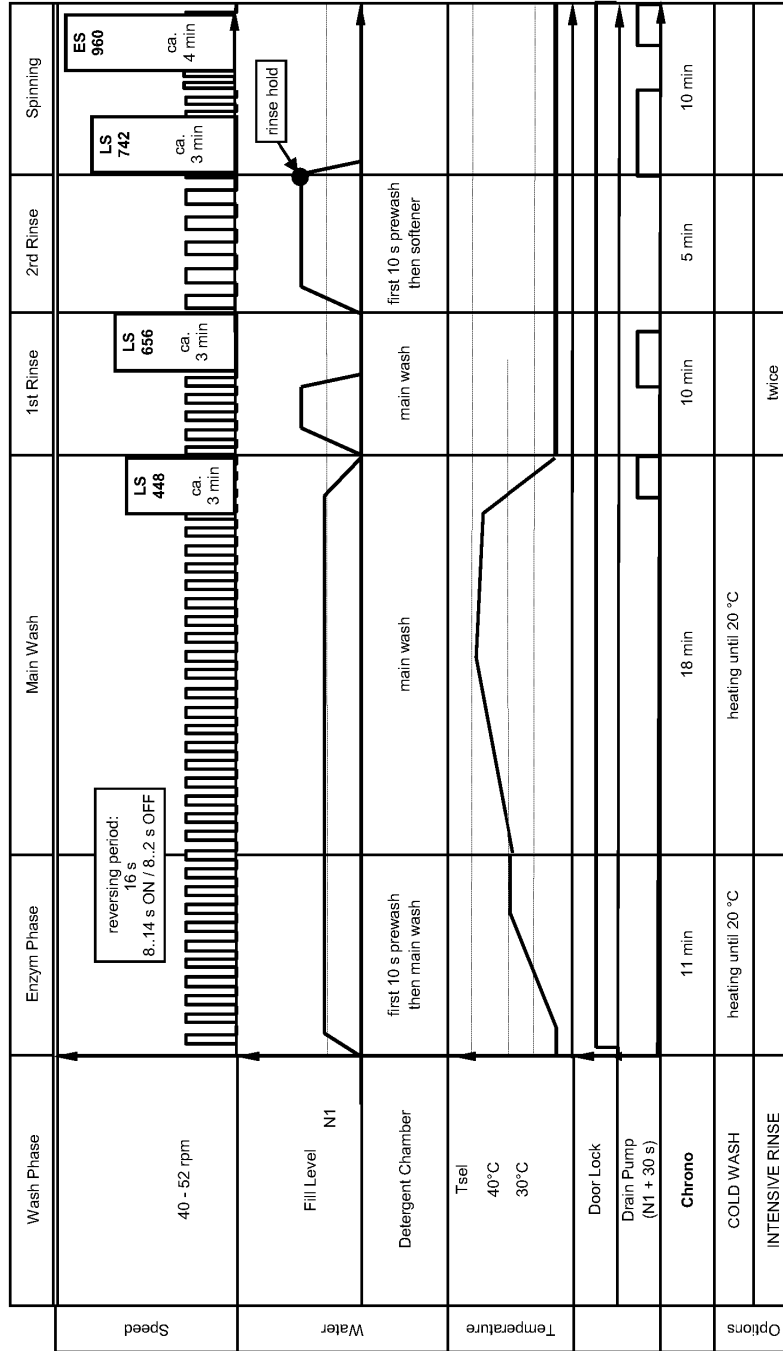
Wash Cycle of Delicate

Alliance Wave 42 | PP



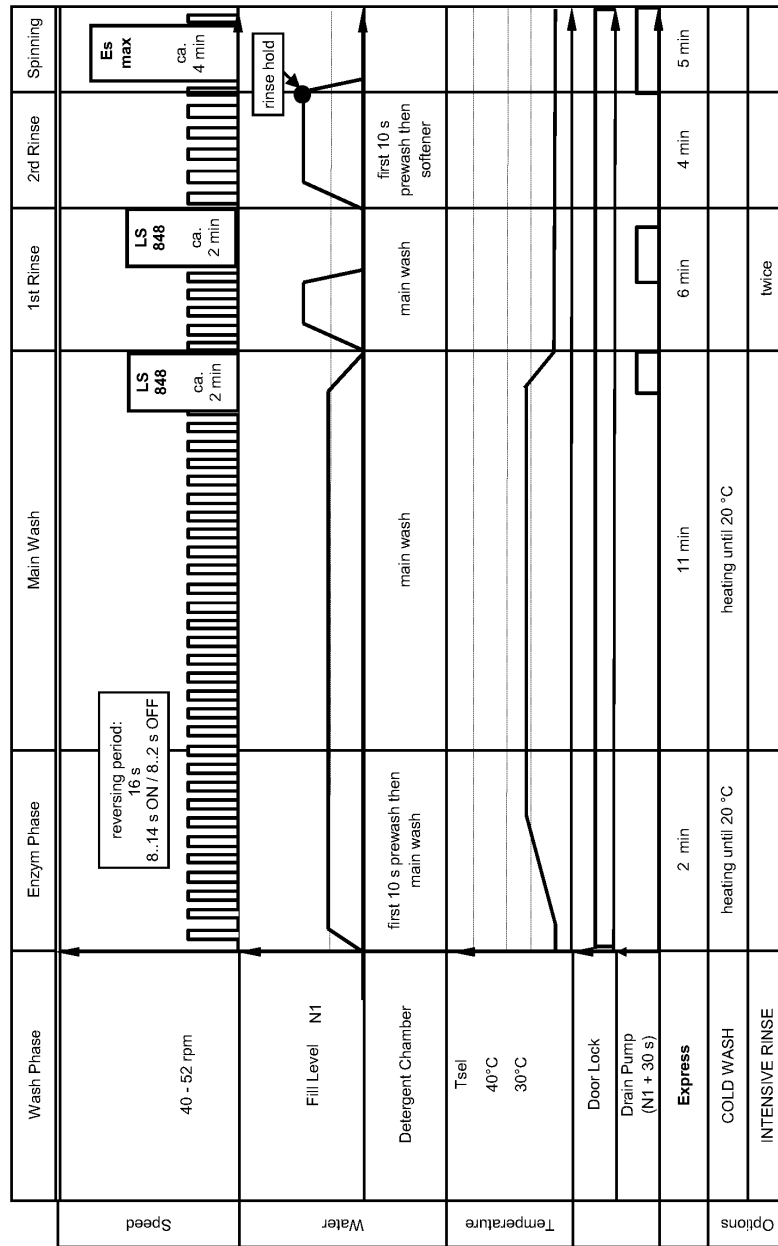
(1) OPTION NoSpin: the spinning until rinse 3 is performed , extraction phase is skipped

Alliance Wave 42 | PP **Wash Cycle of Chrono (1 h cycle)** W10425265



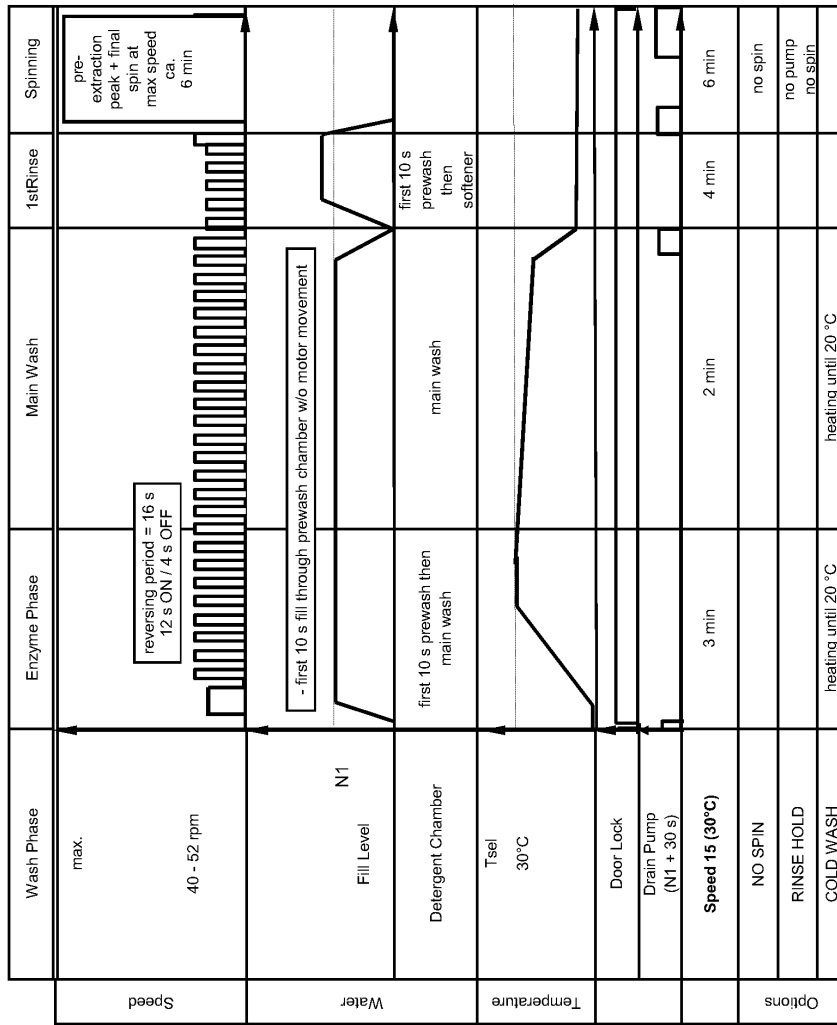
(1) OPTION **NoSpin**: the spinning until rinse 3 is performed , extraction phase is skipped

Alliance Wave 42 | PP **Wash Cycle of Express** W10425265



(1) OPTION **NoSpin**: the spinning until rinse 3 is performed , extraction phase is skipped

Alliance Wave 42 I PP **Wash Cycle of Speed15** W10425265

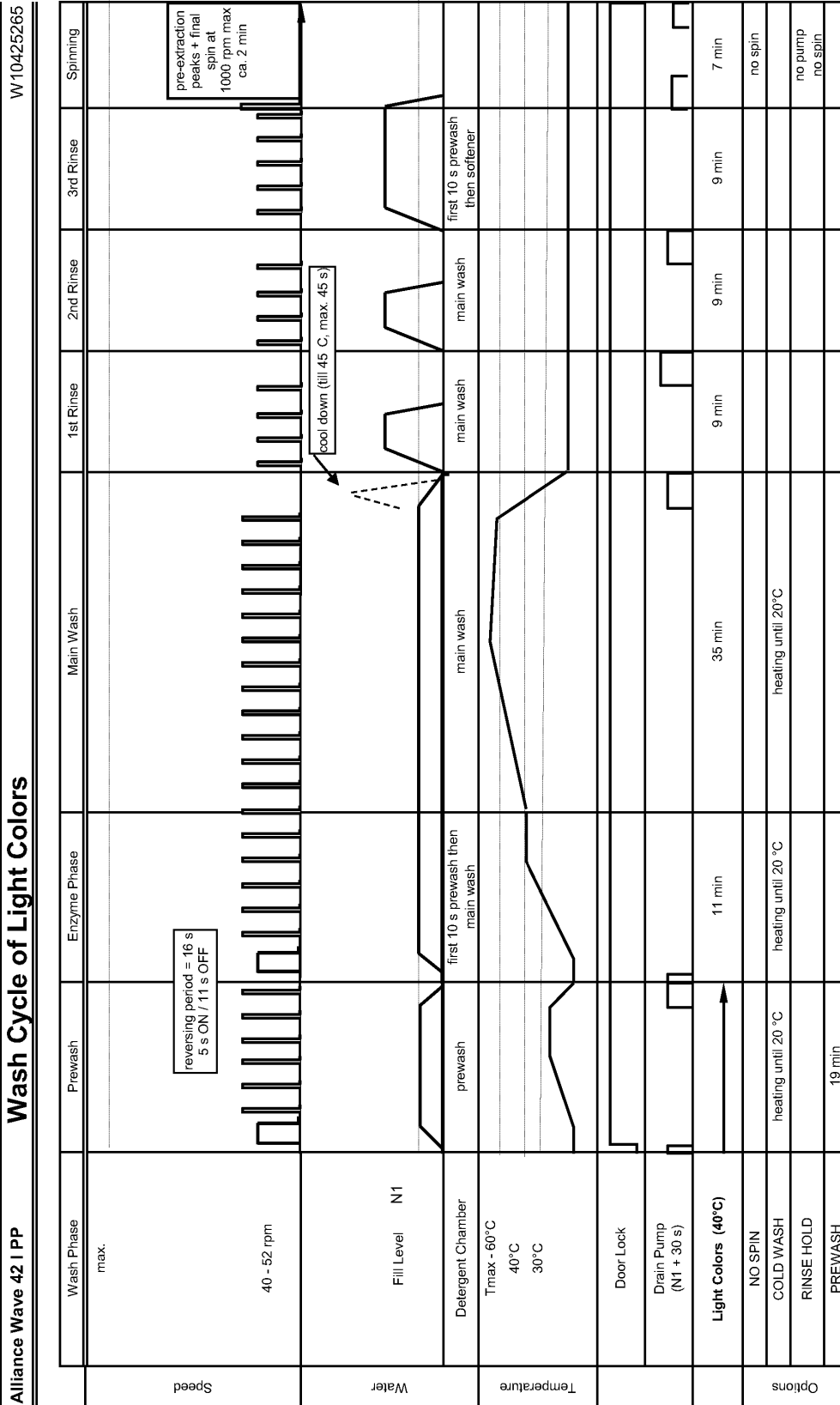


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Wash Cycle of AquaEco

Alliance Wave 42 I PP

	Wash Phase	Enzyme phase	Main Wash	1st rinse	spinning
Speed	40 - 52 rpm	reversing period = 16 s 12 s ON / 4 s OFF			pre-extraction peak + final spin at max speed ca. 6 min
Water	Fill Level N1	- first 10 s fill through prewash chamber w/o motor movement			
	Detergent Chamber	first 10 s prewash then main wash	main wash	first 10 s prewash then softener	
Temperature	Tset 40°C				
	Door Lock				
	Drain Pump (N1 + 30 s)				
	AquaEco	12 min	28 min	14 min	6 min
Options	NO SPIN				no spin
	RINSE HOLD				no pump
	COLD WASH	heating until 20 °C	heating until 20 °C		no spin

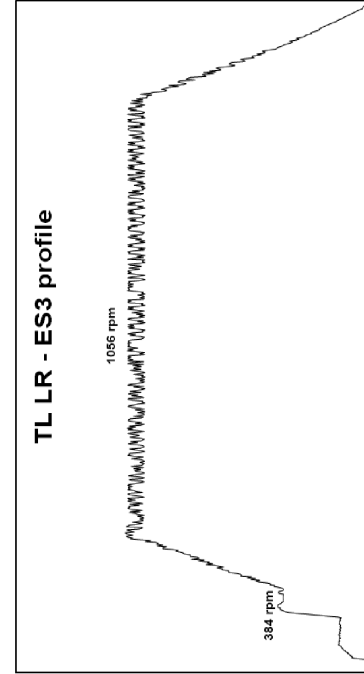
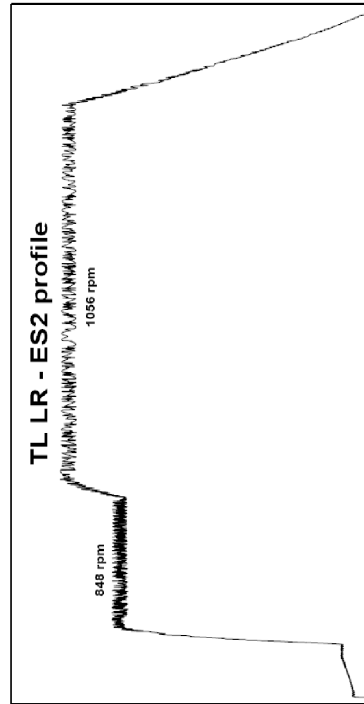
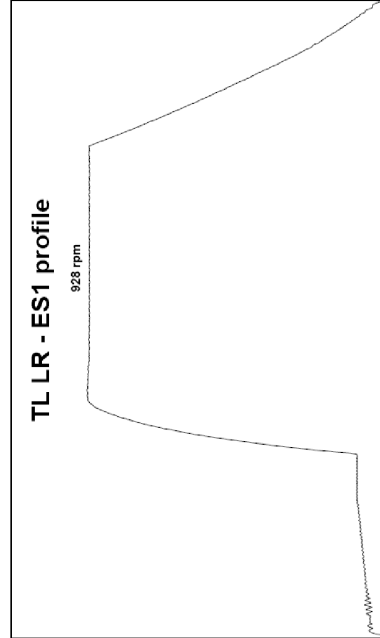
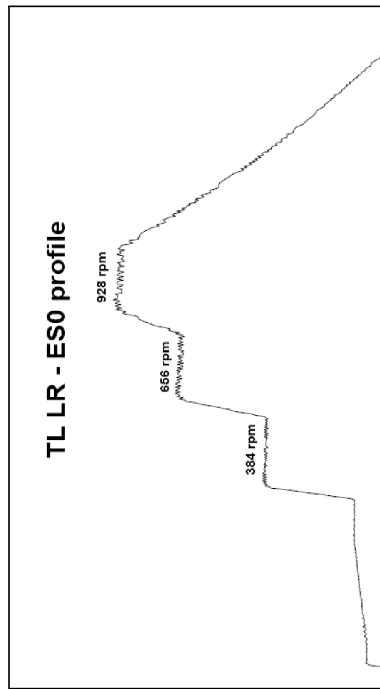


W10425265

Soap dispenser: 3 chambers

Spinning Profiles - TL LR

LS0 =	Peak 0 + Peak 1 + ES0	Peak 1 =	384 rpm
LS1 =	Peak 1 + Peak 2 + Peak 3 + Peak 4	Peak 2 =	608 rpm
LS2 =	Peak 0 + Peak 3	Peak 3 =	656 rpm
LS3 =	Peak 0 + ES0	Peak 4 =	848 rpm

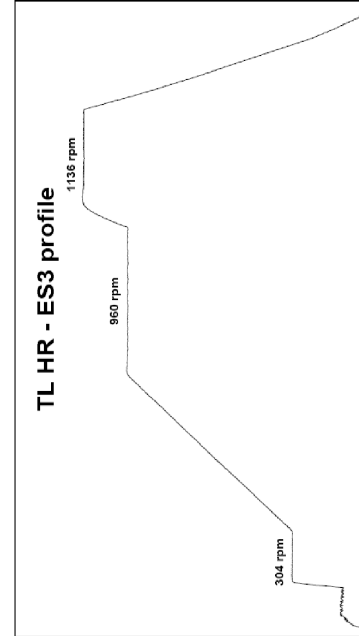
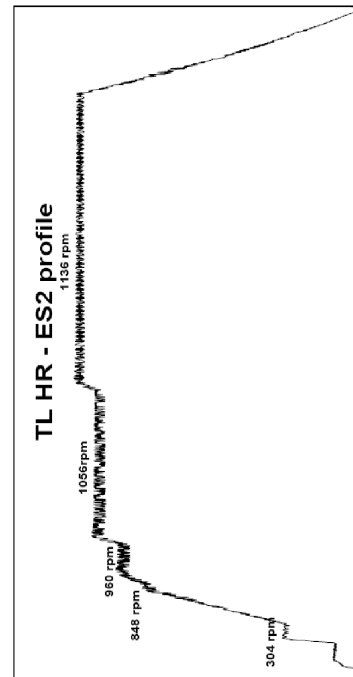
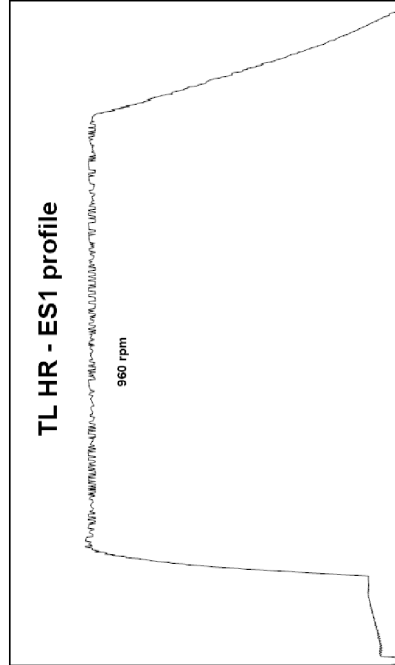
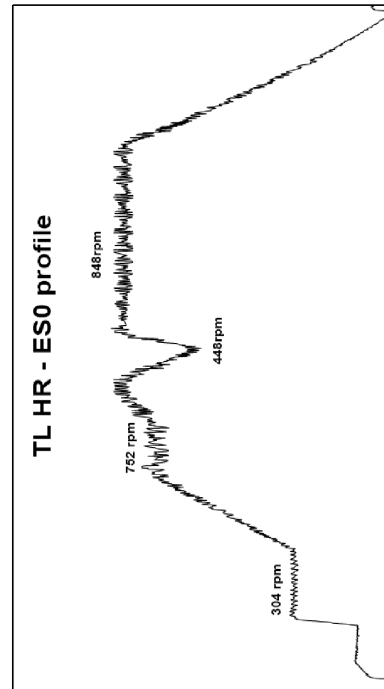


W10425265

Soap dispenser: 3 chambers

Alliance Wave 42 IPP Spinning Profiles - TL HR

LS0 = Peak 0 + ES0
 LS1 = Peak 1 + Peak 2 + Peak 3 + Peak 4
 LS2 = Peak 0 + Peak 3
 LS3 = Peak 0 + ES0
 Peak 1 = 304 rpm
 Peak 2 = 608 rpm
 Peak 3 = 656 rpm
 Peak 4 = 848 rpm



Testprogram

1. Switch the appliance ON
2. Close the door

For appliances with program selection by knob

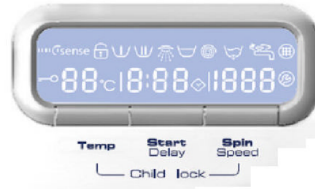


3. Select the first mechanically available position of the rotary program selector on the left of the OFF position (usually "DRAIN" or "SPIN")
4. Press push button Reset 4 times within 5 seconds
5. To go to next step, press push button Reset twice
6. To go to step C5, press Start button once.

For appliances with program selection by button



3. Press Drain/Reset button
4. Press push button Temperature 4 times within 5 seconds
5. To go to next step, press push button Drain/Reset twice
6. To go to step C5, press Start button once.








Attention: Use the test program only without laundry!

ICON - Phases	Digits Temperature	Description of the Program Flow	Check to perform
 Icons are switched on and off in a sequence from left to right and back.	C0	The door is locked. The CCU is performing the Selftest.	CCU detects <ul style="list-style-type: none"> F02, F05, F08, F12, F13, F14, F15, F21, F23, F26
 	C1	Fill 15" hot valve (only if hot fill appliance) Fill 15" in prewash (PW) Fill 15" in mainwash (MW) Fill 15" in PW + MW (Softener) Fill by MW to wash level. Motor is reversing.	Technician: <ul style="list-style-type: none"> Check the valve activation Check the dispensing into the dispenser Check the pressure switch
 	C2	The heating element is switched ON. Motor is reversing.	Technician: <ul style="list-style-type: none"> Check heating element activation Check if the motor is reversing CCU detects: <ul style="list-style-type: none"> F06, F07, F27
 	C3	The drain pump is switched ON until the wash level = OFF + 5" motor is reversing.	Technician: <ul style="list-style-type: none"> Check drain pump activation Check pressure switch operation Check if the motor is reversing CCU detects: <ul style="list-style-type: none"> F06, F07, F27, F03
 	C4	The motor is driven to maximum speed. Drain pump is ON.	Technician: <ul style="list-style-type: none"> Check if the motor is running at max. speed Check drain pump activation CCU detects: <ul style="list-style-type: none"> F28
 	C5	Motor is switched OFF. Door is unlocked.	Technician: <ul style="list-style-type: none"> Check if the door is unlocked CCU detects: <ul style="list-style-type: none"> F13














Digits of "Rest time" are executing an animation, Digits of "Speed" are OFF

WAVE TCP & WAVE 2 4619 714 27081

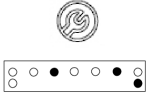




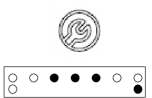
Error Codes

Failure Indication		Explanation and Recommended Procedure
Icon Active	On Digits 3 - 5	
Appliance "dead"	no indication at all or read out by ESAM F60 - F63	<p>CCU failure</p> <p>Potential Causes</p> <p>Read out failure code with ESAM:</p> <ul style="list-style-type: none"> • If F60 - F63 is displayed: • Check if NTC has a short circuit. • Check if NTC wiring has a short circuit • If NTC and wiring is ok, change the CCU
		<p>Door Lock failure</p> <p>If the CCU is not able to lock the door of the washer after program start within 20", CCU is going to selection mode (LED of start/pause button is flashing)</p> <p>Potential Causes</p> <ul style="list-style-type: none"> • mechanical issue with door/ door hook/ door lock interface • door not completely closed • door lock issue
<p>During normal cycle execution</p>  <p>During test program</p>  	<p>During normal cycle execution</p> <p>Remaining Time</p> <p>During test program</p> <p>F01</p>	<p>No water detected entering machine or pressure switch trip not detected.</p> <p>If after 6 minutes the control does not detect water entering machine, then valves will be turned off and the LED Water Tap will be switched ON.</p> <p>The Control is in Pause Mode. If it was possible to remove the failure, by pushing PB Start the appliance will restart.</p> <p>Potential Causes</p> <ul style="list-style-type: none"> • If there is no water in the unit: • Make sure that both valves at the water source(s) are turned on all the way. • Check for plugged or kinked inlet hoses or plugged filter in the inlet valves. • Verify inlet valve operation. • If there is water in the unit: • Pressure switch hose is in good condition and properly connected to tub and pressure switch. • Verify there is not a siphon problem. • Verify wire harness connections to; inlet valves, pressure switch and central control unit (CCU). • Check all hoses for possible leaks. • Verify pressure switch operation. • Verify CCU operation.
	F02	<p>Aquastop Failure</p> <p>If the aquastop contact on the bottom tray of the appliance is closed for more than 30" an aquastop failure will be detected. In aquastop condition the drain pump will run for 3 to 6 minutes. Afterwards the drain pump is off and the door will unlock.</p> <p>Potential Causes</p> <ul style="list-style-type: none"> • If there is water in the bottom tray of the appliance: • Check all hoses for any leakage. • Check if there was overfoam due to too much detergent used. • Check the tub for any leakage. • If there is no water in the bottom tray: • Check if the aquastop switch has a short circuit. • Check if the aquastop wiring is properly connected. • Verify CCU operation. (Check also for F26: Pump triac short circuit is causing this code.)


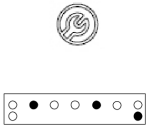
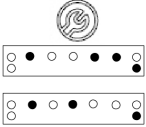
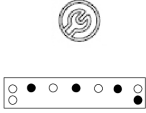
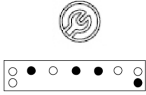
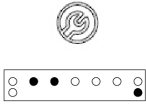
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<p>During normal cycle execution</p>  <p>During test program</p>  	<p>Remaining Time</p> <p>During test program</p> <p>F03</p>	<p>Long Drain</p> <p>If the drain time exceeds the drain timeout, the LED "clean filter" is turned ON. The timeout is: 4 minutes drains -> 4 minutes impulse draining (10sec.ON /10sec. OFF) -> 4 minutes drain.</p> <p>The control is in Pause Mode. Press start button. If the water can be drained out, the cycle will continue.</p> <p>Potential Causes</p> <ul style="list-style-type: none"> • Check the drain hose and make sure it is not plugged or kinked. • Check the drain pump filter for foreign objects. • Check the electrical connections at the pump and make sure the pump is running. • Check the electrical resistance of the drain pump. • The failure can also be generated by too much foam in wash phase. Read also failure description F18. • Check CCU operation.
 	<p>F04</p>	<p>Too Long Heat Time</p> <p>If the water temperature is not increasing over 35°C during 50 minutes of the first heating step in the cycle the CCU will display this Error.</p> <p>Potential Causes</p> <ul style="list-style-type: none"> • Check the electrical resistance of the heating element. • Check Wire Harness connections to the heating element, NTC and CCU. • Check the electrical resistance of the NTC (failure can also occur, when NTC resistance is not changing with temperature). • Check CCU operation
 	<p>F05</p>	<p>Water Temperature Sensor Error</p> <p>If during the water heating step in the wash cycle, the water temperature sensor (NTC) value is out of range, the F05 error code will be displayed.</p> <p>Potential Causes</p> <ul style="list-style-type: none"> • Check the NTC resistance. • Check connections to the NTC and CCU. <p>NTC short circuit (NTC or wiring to NTC): appliance is dead at switch on - read failure code from eeprom: class B failure (F60 - F63)</p>
 	<p>F06</p>	<p>Drive Motor Tachometer Error</p> <p>The control is unable to properly detect motor speed (several times) and the machine will shut down.</p> <p>Potential Causes</p> <ul style="list-style-type: none"> • Check wire harness connections between the motor and CCU. • Check the resistance of the tachometer circuit on the motor. • Check resistances of the motor windings. • Check tension of belt and fixation of pulley.
 	<p>F07</p>	<p>Motor Control Triac Error</p> <p>The main control has detected a short circuit in the motor control triac.</p> <p>Potential Causes</p> <ul style="list-style-type: none"> • Check CCU by running Test Program: if failure occurs with universal motor: exchange CCU if failure occurs with CIM, BPM or Direct Drive: exchange motor control unit
 	<p>F08</p>	<p>Heater Circuit Error open circuit</p> <p>The main control has detected a heater circuit failure. These failure modes are checked before the cycle starts and after the spinning steps.</p> <p>Potential Causes</p> <ul style="list-style-type: none"> • Check the resistance of the heater connectors to the ground. • Check the resistance of the heater. • Check the wiring connectors to the heater and CCU. • Check the CCU.

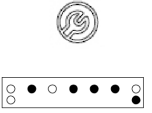
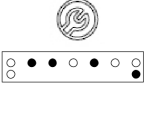
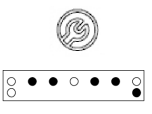
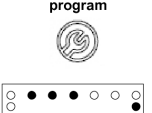

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	<p>F09</p>	<p>MCU low voltage (only appliances with external motor control unit like CIM, BPM or Direct Drive) The MCU has detected a too low mains voltage (ca. 170V). It's not a defect of any component.</p> <p>Potential Causes</p> <ul style="list-style-type: none"> • Check mains voltage supply
	<p>F10</p>	<p>MCU overheat continuously (only appliances with external motor control unit like CIM, BPM or Direct Drive) The MCU has detected a too high temperature.</p> <p>Potential Causes</p> <ul style="list-style-type: none"> • Check for drum blockage (also laundry can block the drum), noise or friction during the drum rotation • Check if the machine was overloaded • Check the ambient temperature -> instruct the customer <p>If the failure is permanent</p> <ul style="list-style-type: none"> • Check motor for defect (see F06) • Check if motor control unit is defect
	<p>F11</p>	<p>MCU not initialized / general MCU-failure (only appliances with external motor control unit like CIM, BPM or Direct Drive) The MCU failed during self-test.</p> <p>Potential Causes</p> <ul style="list-style-type: none"> • Check harness wires between CCU and MCU and motor • Check motor for defect (see F06) • Start cycle door lock has to lock Relay for MCU on CCU has to close "click-noise" MCU self test starts automatically as soon as MCU is connected to voltage self-test was successful when relay on MCU switches - (can be recognized by click sound).
	<p>F12</p>	<p>Heater Circuit Error short circuit The main control has detected a heater circuit failure. These failure modes are checked before the cycle starts and after the spinning steps.</p> <p>Potential Causes</p> <ul style="list-style-type: none"> • Check the resistance of the heater connectors to the ground. • Check the resistance of the heater. • Check the wiring connectors to the heater and CCU. • Check the CCU.
<p>Icon Door open is ON</p> 	<p>F13</p>	<p>CCU failure on door lock control circuit If CCU detects a defect of the door lock triac, F13 is displayed. This check is performed at start of cycle, during the cycle and at the end of the cycle.</p> <p>Potential Causes</p> <ul style="list-style-type: none"> • Check the wiring between the CCU and the door lock. • CCU defect
	<p>F14</p>	<p>EEPROM Error The CCU receives its data from an EEPROM on board the CCU. If there is an error reading this data it will cause this failure indication.</p> <p>Potential Causes</p> <ul style="list-style-type: none"> • A power glitch voltage variation or interruption (mains disturbance) may cause this error: Run the Test Program. This will perform a complete check of the EEPROM. If the failure is detected during the Test Program replace the CCU.

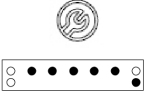




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	<p>F15</p>	<p>Drum Up Circuit Missing (only for TOPLOADERS with DRUM UP Circuit)</p> <p>If the CCU is not detecting the Drum Up switch closing during Motor rotation this failure is displayed. This Error is detected ONLY during the Test Program.</p> <p>Potential Causes</p> <ul style="list-style-type: none"> • Check the position of the electromagnetic device. • Check the position of the reed sensors. • Check the resistance of the reed sensor. • Check the wiring connection between the reed sensor and the CCU.
	<p>F18 FoD</p>	<p>Foam detected During the Wash Cycle</p> <p>If the CCU is not able to drain out the water after washing or not able to spin after several trials this alarm code is displayed.</p> <p>Potential Causes</p> <ul style="list-style-type: none"> • Customer used too much detergent. • Check if there is any problem with the pump hoses. • Check the pump for foreign objects. • Check the electrical resistance of the pump. • Check the electrical resistance of the pressure switch. • Check if pressure switch hose is in good condition and properly connected to tub and pressure switch. • Verify there is not a siphon problem.
	<p>F19 F20</p>	<p>Relay for MCU on CCU is defect (only appliances with external motor control unit like CIM, BPM or Direct Drive)</p> <p>The central control unit has detected, that the relay to switch the MCU ON and OFF is defect (open or short circuit). The relay is placed on the CCU.</p> <p>Potential Causes</p> <ul style="list-style-type: none"> • Check the wiring between CCU and MCU
	<p>F21</p>	<p>User Interface Error (detected only with Smart user interfaces)</p> <p>If the communication between user interface module and CCU is disturbed, this Error is displayed. If the failure is displayed on the digits the display module is not able to "talk" to the CCU. If the failure is displayed on the status LED the CCU is not able to contact the Display module.</p> <p>Potential Causes</p> <ul style="list-style-type: none"> • Check wiring connection to the display module. • Check display module. • Check CCU.
	<p>F22</p>	<p>MCU communication failure (only appliances with external motor control unit like CIM, BPM or Direct Drive)</p> <p>Potential Causes</p> <ul style="list-style-type: none"> • Check wiring /connection between MCU and CCU (communication wires) • Check MCU function • Check CCU function
	<p>F23</p>	<p>Pressure switch Failure</p> <p>If the CCU detects during the wash cycle that the pressure switch contact for the wash level and the pressure switch level for the heater safety are ON or OFF simultaneously for 10" this failure will be displayed.</p> <p>Potential Causes</p> <ul style="list-style-type: none"> • Check the resistance of the pressure switch contacts. • Check the wiring of the connection to the pressure switch and to the CCU. • Start the Test Program. If the problem persists F23 will be displayed. • Check points of F08 / F12 (Failure can be caused also by Heater circuit failure).

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	<p>F24</p>	<p>Overflow Failure</p> <p>If the overflow contact on the pressure switch is closed, the drain pump is switched on for 45". The wash programs continue, if the overflow level is reached not more than 4x in a program. The overflow failure indication will occur, if the overflow contact is closed the 5th time. In overflow condition, the door will remain locked and the drain will run in interval mode.</p> <p>Potential Causes</p> <ul style="list-style-type: none"> • Check the drain hose and make sure it is not plugged or kinked. • Check wiring harness connections between drain pump, pressure switch and CCU. • Check/clean drain pump filter of foreign objects. • Check for drain pump failure. • Check the inlet valve for proper shut off. • Check the pressure switch for proper operation.
	<p>F26</p>	<p>Pump Driver Failure</p> <p>If the CCU detects during the wash cycle that the triac of the pump is defective it will display this failure.</p> <p>Potential Causes</p> <ul style="list-style-type: none"> • Check the resistance of the pressure switch contacts. • A failure of the pressure switch could also cause the Code. • If OK, Start Service test to check the CCU. If the failure occurs replace the CCU.
<p>Only during test program</p> 	<p>Only during test program</p> <p>F27</p>	<p>Reversing relay failure</p> <p>If the CCU detects that the motor is possible to rotate only in one direction this failure is displayed.</p> <p>Potential Causes</p> <ul style="list-style-type: none"> • Check the harness to the motor. • Check the CCU.
<p>Only during test program</p> 	<p>Only during test program</p> <p>F28</p>	<p>Tapped Field Failure</p> <p>If the CCU is not able to switch ON the tapped field of the Motor, this failure code is displayed.</p> <p>Potential Causes</p> <ul style="list-style-type: none"> • Check if the correct motor is built in. • Check the resistance of the fields of the motor. • Check the harness between Motor and CCU. • If the points above are OK replace the CCU.
	<p>F29 OR FdL</p>	<p>Door Lock can not unlock, mechanical issue of door lock blockage,..</p> <p>Potential Causes</p> <ul style="list-style-type: none"> • Check if there is a mechanical problem on the door lock system (also door and door hook) • Check wiring between the CCU and the door lock. • Start the test program. If problem persists the error code F29 or FdL will be displayed <p>WAVE TCP: Door lock timeout is 4 minutes, but can be expired 2x within the last 16 cycles. If 3rd occurrence within 16 cycles: F29 or FdL is displayed The appliance is locked during the failure mode. The appliance can start a new cycle without waiting for unlocking. For unloading the laundry, the customer must wait for unlocking (ca. 4minutes).</p> <p>IMPORTANT: The failure indication can be deleted only by running the test program (completely!) or by reprogramming the variant file.</p> <p>WAVE 2: Door lock timeout is increased to 6minutes F29 or FdL is indicated at 1st occurrence. The door lock is not locked during failure conditions. It is not necessary to delete the failure.</p>

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	<p>F31 or bdd</p>	<p>Blocked Drum Detected (only for Top Loader appliances) CCU detects problems with driving of the motor at the beginning of the cycle or after pause mode when door lock has been unlocked.</p> <p>Potential Causes</p> <ul style="list-style-type: none"> • Check if the drum door are properly closed • Check the belt position • Check the F06 case
	<p>Only during test program</p> <p>F40</p>	<p>MEB Communication Failure / Low Ambient Temperature If there is no communication between CCU and the Myst Extension Board (MEB) or if the ambient temperature is lower than 5 °C this failure code will be displayed.</p> <p>Potential Causes</p> <ul style="list-style-type: none"> • Check if there is power at the MEB CU2 connector. • Check if the communication cable is connected to the MEB and to the UI. • Check if the ambient temperature is higher than 5 °C. This is to avoid steaming with ice in the hoses, which would easily cause damages of the hoses. • If the failure code occurs at star of test program, the last cycle was not properly finished. Run a drain cycle, wait until drain cycle is completely finished and start test program again. • If the points above are OK and the failure occurs again, replace the MEB.
	<p>Only during test program</p> <p>F41</p>	<p>MEB Control Board Failure If there is any failure detected at the Myst Extension Board (MEB) this failure code will be displayed.</p> <p>Potential Causes</p> <ul style="list-style-type: none"> • Check if there is power at the MEB CU2 connector. • If the point above is OK replace the MEB.
	<p>Only during test program</p> <p>F42</p>	<p>Steamer Component Failure If there is any failure at the steamer component or steamer NTC, this failure Code will be displayed.</p> <p>Potential Causes</p> <p>Disconnect appliance from mains for all checks on steamer:</p> <ul style="list-style-type: none"> • Check the harness between Steamer, steamer NTC and MEB. • Check if there is no fuse or reset able thermostat at open state. • Check the electrical resistance of the Steamer Heater (unplug connector HSG3 from MEB measure resistance between pin 1 and 3: ca. 48-57Ohm - measure at harness connector and not at MEB header). • Check if the steamer NTC is not at open or short-circuit state. • Check if the steamer hoses are connected. • Check if the steamer tube is not blocked. • Check water NTC (in wash unit) and wiring connections (see F04 and F05) • If the points above are OK replace the steamer component.
	<p>Only during test program</p> <p>F43</p>	<p>Steam Valve Failure If there is no water supply or the steamer valve does not open, this failure code will be displayed.</p> <p>Potential Causes</p> <ul style="list-style-type: none"> • Check if water supply for the appliance is completely opened. • Check the cable between MEB and valve. • Check power supply from MEB to valve (230V). • Check if the hoses to the valve are connected with no leakage. • If the points above are OK replace the valve. • Re-test the machine and if the failure persists replace the MEB.

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Domino Class B safety functions:

- 1) **Wash Level activated during selection mode:**
The Door is locked and Drain routine is started. If the Drain Pump is not defective the Door will be unlocked after Level N0 + 30 seconds.
Led (display) status: normal indication
If Drain Pump is defective Pump failure will be retriven.
- 2) **Drum Speed is higher than 60rpm in selection mode:**
When the speed > 60 rpm, then after 4 seconds, the doorlock is activated.
Led (display) status: normal indication
- 3) **Water High Temperature in selection or pause mode:**
If temperature which NTC sensor is detecting is higher than 50°C Door Lock will kept locked.
Led (display) status: normal indication

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