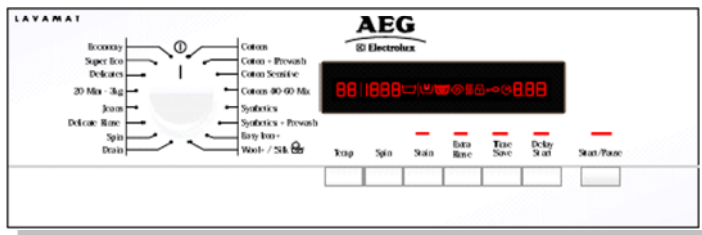
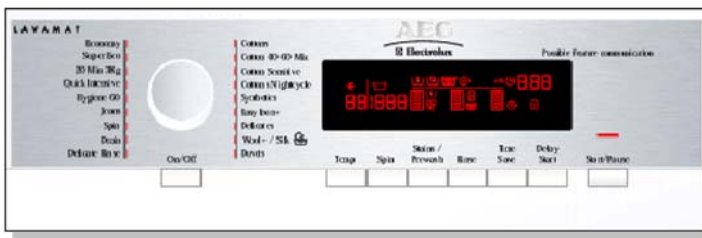




Series 7



Series 8



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**Top loading washing
machines**

**with electronic control
system**

**NEW
COLLECTION**

EWM10

**Demo
Diagnostics
Alarms table**

SERIES 7 / 8

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1 PURPOSE OF THIS MANUAL

The purpose of this manual is to provide service engineers who are already familiar with the repair procedures for traditional washing machines with information regarding washing machines fitted with the EWM10 electronic control system (SERIES 7/8).

Previous platforms (electronic/mechanical) used a safety pressure switch which controlled the minimum water level in the tub, beneath which the supply to the heating element was interrupted.

The current electronic appliances manufactured (EWM10 platform), use a heating element with thermal fuses (inside its branches) for safety, which interrupt in case of temperature overload caused by the water level dropping below the minimum level permitted.

The incorporated NTC probe contacts have a 2.5 mm pitch.

The manual deals with the following topics:

- Settings: Demo, Diagnostics
- Alarms

Low consumption mode

In order to minimise electricity wastage when the cycle is not under way, appliances in this platform offer two ways of enabling a low consumption mode:

- Stand-Off

Stand-Off – When the appliance is switched off at the ON/OFF button, it is in the “Stand-Off” or “virtual” off status. The LEDs and the LCD screen are turned off and the buttons are disabled, although the main circuit board and certain electrical components are electrically powered.

There are two ways to cut off the electricity supply: the first involves unplugging the appliance at the socket or incorporating a small electronic circuit referred to as Zero Watt (0 Watt) into the main circuit board to turn the appliance off automatically.

The auto off function combined with the Zero Watt circuit works in two ways:

1. When you press the ON/OFF button to turn off the appliance, the supply voltage is cut off and the washing machine is secured (motor off, door locked, etc...), the cycle and any options selected are reset, so that the next time the appliance is turned on, it is ready to perform the programme. (To open the door, you will have to wait one or two minutes for the door safety lock to be released).
2. If, after 5 minutes, during the setting phase or after the end of the cycle, the appliance receives no further instructions, it is automatically turned off (for energy savings in conformity with the standards on energy consumption).
 - If this occurs during the setting phase, the programme and the options selected are cancelled and the basic programme appears when the appliance is turned back on.
 - If the cycle has instead ended, all the settings are stored so that when the appliance is turned back on, the user can see that the cycle ended normally, and can restart it if necessary.
3. If an alarm occurs during a washing programme, the auto off function is disabled, and an alarm is displayed.

2 WARNINGS



- Any work on electrical appliances must only be carried out by qualified technicians.
- This platform is not fitted with an ON/OFF switch. Before you access internal components, take the plug out of the socket to cut the power supply.
- If the heating element needs replacing, replace it with one featuring the same characteristics (2 thermal fuses) so as not to compromise the safety of the appliance. It is strictly forbidden to remove/exchange the NTC probes from one heating element to another.
- When replacing components, please refer to the code shown in the list of spare parts relating to the appliance.



3 DEMO MODE

A special cycle is designed to demonstrate the operation of these appliances in shops, without connecting them to the water mains.

- ↪ The door lock is enabled regularly (door locked during operation, possibility of opening it at the end of the cycle or when paused)
- ↪ All low speed movements of the motor, the pulses and spin are disabled.
- ↪ the water fill solenoid valves and the drain pump are disabled
- ↪ The display shows only the setup process (START / PAUSE button is disabled), because without the movement of the door can not be seen and is therefore useless.

3.1 DEMO MODE SETTING

Do not start the procedure with the combination buttons pressed

	Series 7	Series 8
Turn the appliance on at the ON/OFF switch		
Turn the selector dial until the third LED in the right-hand row is on.		
Press the START/PAUSE button and the nearest option button simultaneously (as shown in the figure). Hold the buttons down (approximately three or five seconds) until "dEM" flashes for a short time.		

3.2 Existing DEMO mode

To quit the demo mode, unplug the appliance at the socket, because the ON/OFF button does not function.

4 DIAGNOSTIC SYSTEM

4.1 Accessing diagnostics

Do not start the procedure with the combination buttons pressed

	Serie 7	Serie 8
Turn the appliance on at the ON/OFF switch and the first LED in the right-hand row is turned on.		
Press the START/PAUSE button and the nearest option button simultaneously (as shown in the figure). Hold the buttons/sensors down/pressed until the LEDs and symbols begin to flash in sequence (approximately 3 seconds).		

In the first position, the operation of the buttons, of the LEDs and the groups of symbols depicted on the LCD screen is checked; turn the programme selector dial **clockwise** to run the diagnostic cycle for the operation of the various components and to read any alarms.

During this phase, if any key combination is pressed (except for the one relating to diagnostics), all the combinations of options stored are deleted (Extra rinse, No buzzer, etc..) whereas for SERIES 9, the memories with the customised programmes are also deleted.

4.2 Quitting the diagnostics system

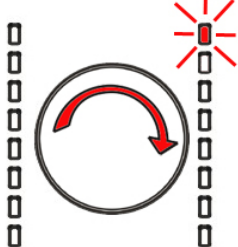

To exit the diagnostic cycle, switch the appliance off, then back on and then off again.

4.3 Diagnostic test phases

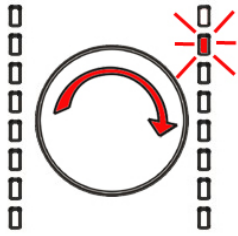

Irrespective of the type of circuit board and the configuration of the selector, after entering the diagnostic mode, turn the programme selector dial **clockwise** to perform the diagnostic cycle for the operation of the various components and to read any alarms.

Concurrently, a selector control code is shown on the LCD display, which indicates for **two** seconds the description in the last column of the table below (all alarms are enabled in the diagnostic cycle).

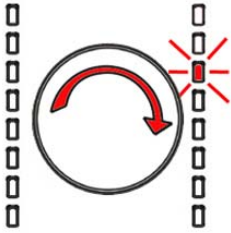

Position 1

User interface test	Purpose of the test:	To test operation of all the LEDs and switches.
	Components activated:	<ul style="list-style-type: none"> The LEDs are turned on in sequence, as are the symbol groups of the LCD display and its backlight.
	Behaviour:	<ul style="list-style-type: none"> All LEDs turn on in sequence. When a button is pressed, the corresponding group of icon lights up. The code is shown on the LCD and a beep sounds. All the icons on the LCD flash.
	Working conditions:	There is a control to run the test (always active).
	LCD display	

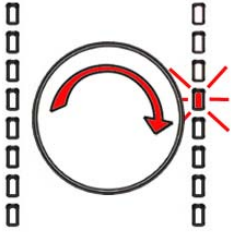

Position 2

Water fill to wash compartment	Purpose of the test:	To check the correct operation of the wash compartment water route.
	Components activated:	<ul style="list-style-type: none"> Door safety interlock Wash solenoid
	Working conditions:	<ul style="list-style-type: none"> Door closed Water level below anti-flooding level Maximum time 5 mins.
	LCD display	 Water level in the tub is displayed (mm)

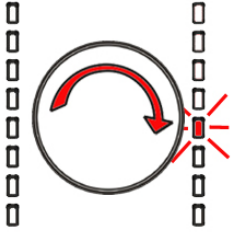

Position 3

Water fill to pre-wash compartment	Purpose of the test:	To check the correct operation of the pre-wash compartment water route.
	Components activated:	<ul style="list-style-type: none"> • Door safety interlock • Pre-wash solenoid
	Working conditions:	<ul style="list-style-type: none"> • Door closed • Water level below anti-flooding level • Maximum time 5 mins.
	LCD display	 Water level in the tub is displayed (mm)

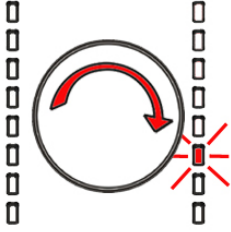

Position 4

Water fill to conditioner compartment	Purpose of the test:	To check the correct operation of the conditioner compartment water route.
	Components activated:	<ul style="list-style-type: none"> • Door safety interlock • Pre-wash and wash solenoid valves
	Working conditions:	<ul style="list-style-type: none"> • Door closed. • Water level below anti-flooding level • Maximum time 5 mins.
	LCD display	 Water level in the tub is displayed (mm)

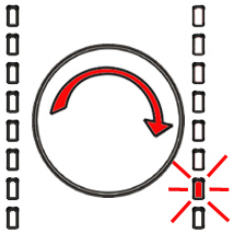

Position 5

Water fill to third solenoid valve (steam valve only in certain models)	Purpose of the test:	To check the correct operation of the steam valve only in certain models)
	Components activated:	<ul style="list-style-type: none"> • Door fastening device • Third solenoid valve
	Working conditions:	<ul style="list-style-type: none"> • Door closed • Water level below anti-flooding level • Maximum time 5 mins.
	LCD display	 Water level in the tub is displayed (mm)

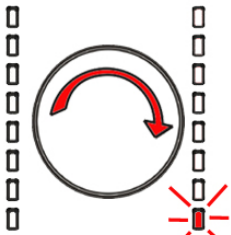

Position 6

Water fill to fourth solenoid valve Hot water (only in certain models)	Purpose of the test:	To check the correct operation of the water fill fourth solenoid valve, Hot water (only in certain models).
	Components activated:	<ul style="list-style-type: none"> • Door safety interlock • Fourth solenoid valve (where featured)
	Working conditions:	<ul style="list-style-type: none"> • Door closed • Water level below anti-flooding level • Maximum time 5 mins.
	LCD display	 Water level in the tub is displayed (mm)

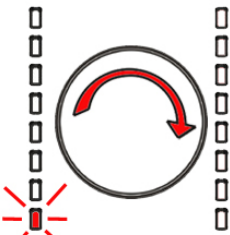

Position 7

Heating	Purpose of the test:	To check the correct operation of the heater unit.
	Components activated:	<ul style="list-style-type: none"> • Door fastening device. • Wash solenoid, if the water in the tub is not enough to cover the heating element. • Heating element.
	Working conditions:	<ul style="list-style-type: none"> • Door closed • Water level high enough to cover the heating element. • Maximum time 10 mins or up to 90°C. (*)
	LCD display	 Temperature in °C measured using the NTC probe.

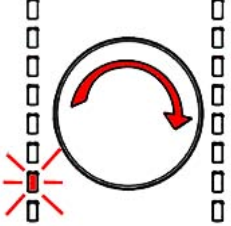

Position 8

Leaks from the tub	Purpose of the test:	To check for any water leaks from the tub during operation.
	Components activated:	<ul style="list-style-type: none"> • Door fastening device. • Wash solenoid, if the water in the tub is not enough to cover the heating element. • Motor (55 rpm anti-clockwise, 250 rpm pulse)
	Working conditions:	<ul style="list-style-type: none"> • Door closed. • Water level above • The heating element.
	LCD display	 Drum speed in rpm/10

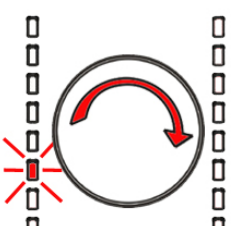

Position 9

Drain, calibration of analogue pressure switch and spin.	Purpose of the test:	To check the correct operation of the spin cycle drain pump and calibrate the analogue pressure switch.
	Components activated:	<ul style="list-style-type: none"> • Door safety interlock • Drain pump • Motor up to 650 rpm then at maximum spin speed (**)
	Working conditions:	<ul style="list-style-type: none"> • Door closed • Water level lower than anti-boiling level for spinning
	LCD display	 Drum speed in rpm/10

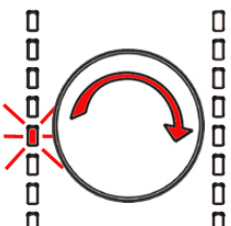

Position 10

Drum position	Purpose of the test:	To check the correct position of the drum via DSP
	Components activated:	<ul style="list-style-type: none"> • Drum motor. • Door safety interlock. • Drum position sensor DSP
	Working conditions:	<ul style="list-style-type: none"> • Door closed
	LCD display	

Position 11

Reading/Deleting the last alarm	Purpose of the test:	Reading/Deleting the last alarm
	Components activated:	-----
	Working conditions:	-----
	LCD display	 Displays any alarms present or stored

Position 12÷16

User interface test	Purpose of the test:	To test operation of all the LEDs and switches.
	Components activated:	<ul style="list-style-type: none"> • The LEDs are turned on in sequence, as are the symbol groups of the LCD display and its backlight.
	Behaviour:	<ul style="list-style-type: none"> • All LEDs turn on in sequence. • When a button is pressed, the corresponding group of icon lights up. • The code is shown on the LCD and a beep sounds. • All the icons on the LCD flash.
	Working conditions:	There is a control to run the test (always active).
	LCD display	

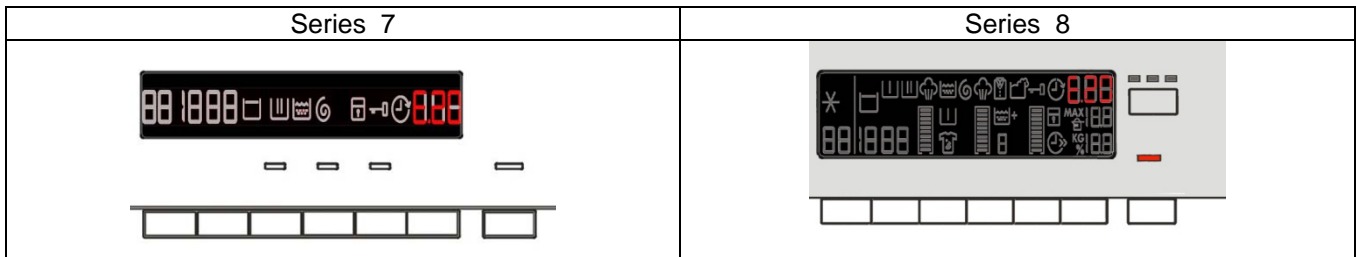
(*) In most cases, the established time is sufficient to check the heating. However, the time can be increased by repeating the phase without draining the water: pass for a moment to a different phase of the diagnostic cycle and then back to the heating control phase (if the temperature is higher than 80°C, heating does not take place).

(**) The check at the maximum speed occurs without control of the A.G.S. (Unbalancing Control Algorithm) and no garments must be inside the appliance.

5 ALARMS

5.1 Displaying the alarms to the user

When a problem arises in the appliance, which generates a “WARNING” or an “ALARM”, this is displayed with three digits, where the time until the end of the cycle is represented.



The alarms displayed to the user are listed below:

- ↵ E10 - Water fill difficulty (tap closed)
- ↵ E20 - Drain difficulty (filter dirty)
- ↵ E40 - Door open

The alarms listed below:

- ↵ EF0 – Water leakage (Aqua Control System)

For its solution, the intervention of a Service engineer is required

While for the alarm:

- ↵ EH0 – Voltage or frequency outside the normal values

It is necessary to wait for power supply voltage and/or frequency to restore normal conditions.

The alarms are enabled during the execution of the washing programme. With the exception of alarms associated with the configuration and the power supply voltage/frequency, which are also displayed during the programme selection phase.

The door can normally be opened (except where specified) when an alarm condition has occurred, on condition that:

- The level of the water in the tub is below a certain level.
- The water temperature is lower than 55°C.
- The motor has stopped.

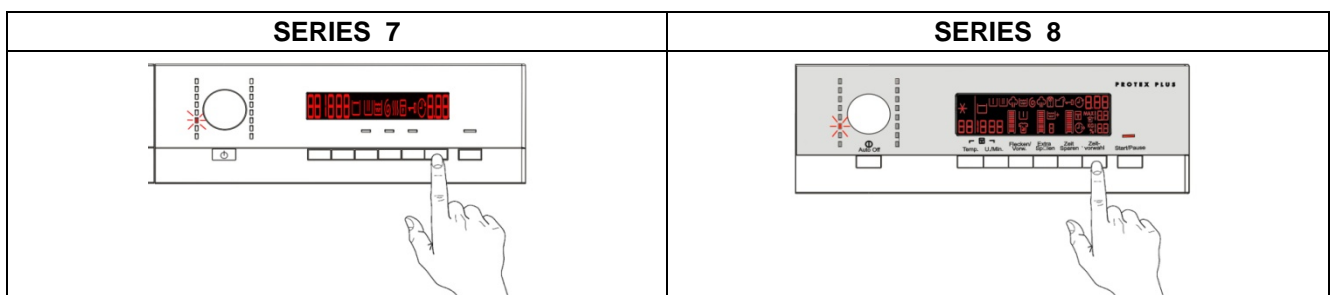
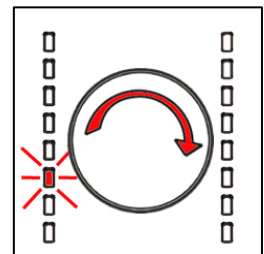
Certain alarm conditions require a drain phase to be performed before the door can be opened for safety reasons:

- Cooling water fill if the temperature is higher than 65°C
- Drain until the analogue pressure switch is on empty, during a max. 3-minute time.

5.2 Reading the alarms

The last three alarms stored in the FLASH memory of the PCB can be displayed:

- Enter the diagnostic mode.
- Irrespective of the type of circuit board and configuration, turn the programme selector knob **clockwise** to the **eleventh position** and the last alarm is displayed.
- To display previous alarms, press the button to the left of the START/PAUSE button in sequence (as shown in the figure)
- To return to the last alarm, press the START/PAUSE button.



5.3 Rapid reading of alarms

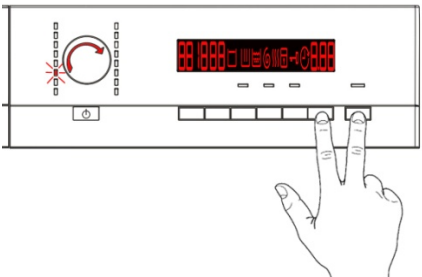
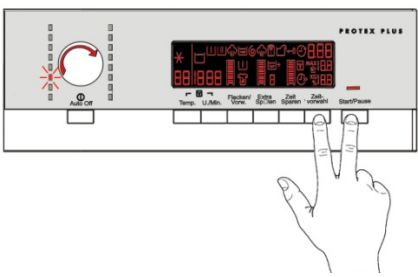
The last three alarms can even be displayed if the selector is not in the tenth diagnostic position or if the appliance is in normal operating mode (for example when performing a wash programme):

- Press the **START/PAUSE** button and the nearest **option button** simultaneously (as if you were entering DIAGNOSTIC mode) for at least 2 seconds: the LCD display shows the last alarm.
- The alarm is displayed until another key is pressed.
- While the alarm is being displayed, the appliance continues to perform the cycle or, if in the programme selection phase, it maintains the previously selected options in memory.

5.4 Deleting the last alarm

It is good practice to cancel the alarms stored:

- after reading the alarm codes, to check whether the alarm re-occurs during the diagnostic cycle
- after repairing the appliance, to check whether it re-occurs during testing

Series 7	Series 8
	
<ol style="list-style-type: none">1. Enter the diagnostic mode,2. Turn the selector dial clockwise until the eleventh LED is turned on (in the left-hand alarm reading row)3. Press the START/PAUSE button and the nearest option button simultaneously (as shown in the figure).4. Hold down the buttons until the LCD display shows "E00" (at least 5 seconds).	

N.B. With this operation all the alarms stored are deleted.

6 OPERATING TIME COUNTER

Using a specific procedure, the operator can display the total operating time for the appliance, which is counted from the moment it is first switched on.

The unit can count up to a maximum of **6,550** hours of operating time.

- Only the operating time of normal programmes (and not diagnostic cycles) is counted.
- The actual operating time for the cycle is counted (which does not include pauses, delayed start time, rinse hold time and soaking phases).
- The precision of the counter is 30 seconds per programme.
- Only whole hours of operation are counted (1 hr and 59 min = 1 hr).

6.1 Reading the operating time




Do not start the procedure with the combination buttons pressed

	Serie 7	Serie 8
Turn the appliance on at the ON/OFF switch		
Turn the selector dial clockwise until the fifth LED in the right-hand row is on.		
Press the START/PAUSE button and the nearest option button simultaneously (as shown in the figure). Hold down the buttons until the hours of operation appear on the display (at least 5 seconds).		

6.2 Display of total operating time

This time is displayed with a sequence of two digits at a time: the first two digits indicate thousands and hundreds, the second two digits indicate tens and units.

For example, if the operating time is **6,550** hours, the display will show the following sequence:

Phase 1 →	Phase 2 →	Phase 3 →
For <u>two seconds</u> , the following is displayed: Hr	For <u>two seconds</u> , the following digits are displayed: ↵ thousands (6) ↵ hundreds (5)	For the next two seconds the following digits are displayed: ↵ tens (5) ↵ units (0)
		

At the end of phase three (after the tens and units are displayed), the cycle is repeated. To return to normal mode, either: switch the appliance off or press a button or turn the selector knob.

6.3 Alarm Summary Table

ALARM CODE	Description	Possible fault	Machine status/action	Reset
E11	Water fill difficulty during washing	<ul style="list-style-type: none"> ▪ Tap closed. ▪ Water pressure too low. ▪ Drain pipe improperly positioned. ▪ Water fill solenoid valve faulty. ▪ Leaks from pressure switch water circuit. ▪ Pressure switch faulty. ▪ Faulty wiring. ▪ Main circuit board faulty. 	Cycle is paused with door locked	START/RESET
E13	Water leaks	<ul style="list-style-type: none"> ▪ Drain pipe improperly positioned. ▪ Water pressure too low. ▪ Water fill solenoid valve faulty. ▪ Leaks/clogging of pressure switch water circuit. ▪ Pressure switch faulty. 	Cycle is paused with door locked	START/RESET
E21	Drain difficulty during washing	<ul style="list-style-type: none"> ▪ Drain tube kinked/clogged/improperly positioned. ▪ Drain filter clogged/dirty. ▪ Faulty wiring. ▪ Pressure switch faulty. ▪ Drain pump rotor blocked. ▪ Drain pump faulty. ▪ Main circuit board faulty. 	Cycle is paused (after 2 attempts)	START ON/OFF RESET
E23	Faulty triac for drain pump	<ul style="list-style-type: none"> ▪ Faulty wiring. ▪ Drain pump faulty. ▪ Main circuit board faulty. 	Safety drain cycle - Cycle stops with door open.	RESET
E24	Malfunction in sensing circuit on triac for drain pump	<ul style="list-style-type: none"> ▪ Main circuit board faulty. 	Safety drain cycle - Cycle stops with door unlocked	RESET

ALARM CODE	Description	Possible fault	Action Machine status	Reset
E31	Malfunction in electronic pressure switch circuit	<ul style="list-style-type: none"> ▪ Wiring; Electronic pressure switch. ▪ Main circuit board. 	Cycle stops with door locked	RESET
E32	Calibration error of the electronic pressure switch	<ul style="list-style-type: none"> ▪ Drain tube kinked/clogged/improperly positioned. ▪ Solenoid valve faulty. ▪ Drain filter clogged/dirty. ▪ Drain pump faulty. ▪ Leaks from pressure switch water circuit. ▪ Pressure switch defective; ▪ Wiring; main circuit board. 	Cycle paused	START/RESET
E35	Overflow	<ul style="list-style-type: none"> ▪ Water fill solenoid valve faulty. ▪ Leaks from pressure switch water circuit. ▪ Faulty wiring. ▪ Pressure switch faulty. ▪ Main circuit board faulty. 	Cycle interrupted. Safety drain cycle. Drain pump continues to operate (5 min. on, then 5 min. off etc.)	RESET
E38	Internal pressure chamber is clogged (water level does not change for at least 30 sec. of drum rotation)	<ul style="list-style-type: none"> ▪ Motor belt broken. ▪ Pressure switch hydraulic circuit clogged. 	Heating phase is skipped	RESET

ALARM CODE	Description	Possible fault	Action Machine status	Reset
E41	Door open	<ul style="list-style-type: none"> ▪ Check whether the door is closed properly ▪ Faulty wiring. ▪ Door safety interlock faulty ▪ Main circuit board faulty. 	Cycle paused	CLOSED THE DOOR
E42	Problems with door lock	<ul style="list-style-type: none"> ▪ Faulty wiring. ▪ Door safety interlock faulty. ▪ Electrical current leak between heating element and ground. ▪ Main circuit board faulty. 	Cycle paused	START/RESET
E43	Faulty triac supplying power to door delay system	<ul style="list-style-type: none"> ▪ Faulty wiring. ▪ Door safety interlock faulty. ▪ Main circuit board faulty. 	Safety drain cycle. Cycle blocked	RESET
E44	Faulty sensing by door delay system	<ul style="list-style-type: none"> ▪ Main circuit board faulty. 	Safety drain cycle. Cycle blocked	RESET
E45	Faulty sensing by door delay system triac	<ul style="list-style-type: none"> ▪ Main circuit board faulty. 	Safety drain cycle. Cycle blocked	RESET

ALARM CODE	Description	Possible fault	Action Machine status	Reset
E52	No signal from motor tachometric generator	<ul style="list-style-type: none"> ▪ Faulty wiring. ▪ Motor faulty; ▪ Inverter board faulty; 	Cycle blocked with door locked after 5 attempts.	ON/OFF RESET
E57	Inverter is drawing too much current (>15A)	<ul style="list-style-type: none"> ▪ Motor-inverter wiring faulty. ▪ Inverter board faulty. ▪ Motor faulty. 	Cycle blocked with door locked after 5 attempts.	ON/OFF RESET
E58	Inverter is drawing too much current (>4.5A)	<ul style="list-style-type: none"> ▪ Abnormal motor operation (overload). ▪ Motor-inverter wiring faulty. ▪ Motor faulty. ▪ Inverter board faulty. 	Cycle blocked with door locked after 5 attempts.	ON/OFF RESET
E59	No signal from tachometric generator for 3 seconds	<ul style="list-style-type: none"> ▪ Motor-inverter wiring faulty. ▪ Inverter board faulty. ▪ Motor faulty; 	Cycle blocked with door locked after 5 attempts.	ON/OFF RESET
E5A	Overheating on heat dissipator for Inverter (>88°C)	<ul style="list-style-type: none"> ▪ Overheating caused by continuous operation or ambient conditions. ▪ Inverter board faulty. ▪ NTC open (on the Inverter board) 	Cycle blocked with door locked after 5 attempts.	ON/OFF RESET
E5H	Input voltage is lower than 175V.	<ul style="list-style-type: none"> ▪ Faulty wiring. ▪ Inverter board faulty; 	Cycle blocked with door locked after 5 attempts.	ON/OFF RESET
E5C	Input voltage is too high - beyond 430V.	<ul style="list-style-type: none"> ▪ Input voltage is too high (measure the grid voltage). ▪ Inverter board faulty 	Cycle blocked with door locked after 5 attempts	ON/OFF RESET
E5D	Data transfer error between Inverter and main PCB	<ul style="list-style-type: none"> ▪ Line interference. ▪ Faulty wiring. ▪ Main board or Inverter board faulty. 	-----	
E5E	Communication error between Inverter and main PCB	<ul style="list-style-type: none"> ▪ Faulty wiring between main board and Inverter. ▪ Inverter board faulty. ▪ Main board faulty. 	Cycle blocked after 5 attempts.	ON/OFF RESET
E5F	Inverter PCB fails to start the motor	<ul style="list-style-type: none"> ▪ Faulty wiring. ▪ Inverter board faulty. ▪ Main board faulty. 	Cycle blocked with door open after 5 attempts.	ON/OFF RESET

ALARM CODE	Description	Possible fault	Action Machine status	Reset
E61	Insufficient heating during the washing phase	<ul style="list-style-type: none"> ▪ Faulty wiring. ▪ NTC probe for wash cycle faulty. ▪ Heating element faulty. ▪ Main circuit board faulty. 	The heating phase is skipped	START/RESET
E62	Overheating during washing phase (temperature higher than 88°C for more than 5 min.)	<ul style="list-style-type: none"> ▪ Faulty wiring. ▪ NTC probe for wash cycle faulty. ▪ Heating element faulty. ▪ Main circuit board faulty. 	Safety drain cycle. Cycle stops with door open	RESET
E66	Heating element power relay faulty (inconsistency between sensing and relay status)	<ul style="list-style-type: none"> ▪ Main circuit board faulty. 	Safety water fill. Cycle stops with door closed.	ON/OFF RESET
E68	Current leak to the ground	<ul style="list-style-type: none"> ▪ Earth leakage between heating element and earth. 	The heating phase is skipped	START/RESET
E69	Heating element interrupted	<ul style="list-style-type: none"> ▪ Faulty wiring. ▪ Heating element for washing interrupted (thermal fuse open). ▪ Main circuit board faulty. 	-----	START ON/OFF RESET
E6A	Heating relay sensing faulty	<ul style="list-style-type: none"> ▪ Main circuit board faulty. 	Cycle stops with door locked	RESET
E6H	Heating element power relay faulty (inconsistency between sensing and relay status)	<ul style="list-style-type: none"> ▪ Faulty wiring. ▪ Earth leakage between heating element and earth. ▪ Main circuit board faulty. 	Safety water fill Cycle stops with door closed.	ON/OFF RESET

ALARM CODE	Description	Possible fault	Action Machine status	Reset
E71	NTC probe for wash cycle faulty (short-circuited or open)	<ul style="list-style-type: none"> ▪ Faulty wiring. ▪ NTC probe for wash cycle faulty. ▪ Main circuit board faulty. 	The heating phase is skipped	START/RESET
E74	NTC probe for wash cycle improperly positioned	<ul style="list-style-type: none"> ▪ Faulty wiring. ▪ NTC probe for wash cycle improperly positioned. ▪ NTC probe faulty. ▪ Main circuit board faulty. 	The heating phase is skipped	RESET
E83	Error in reading selector	<ul style="list-style-type: none"> ▪ Main circuit board faulty. ▪ Incorrect configuration data. 	Cycle cancelled	START/RESET
E86	Selector configuration error	<ul style="list-style-type: none"> ▪ Incorrect configuration of display board. 	-----	START ON/OFF RESET

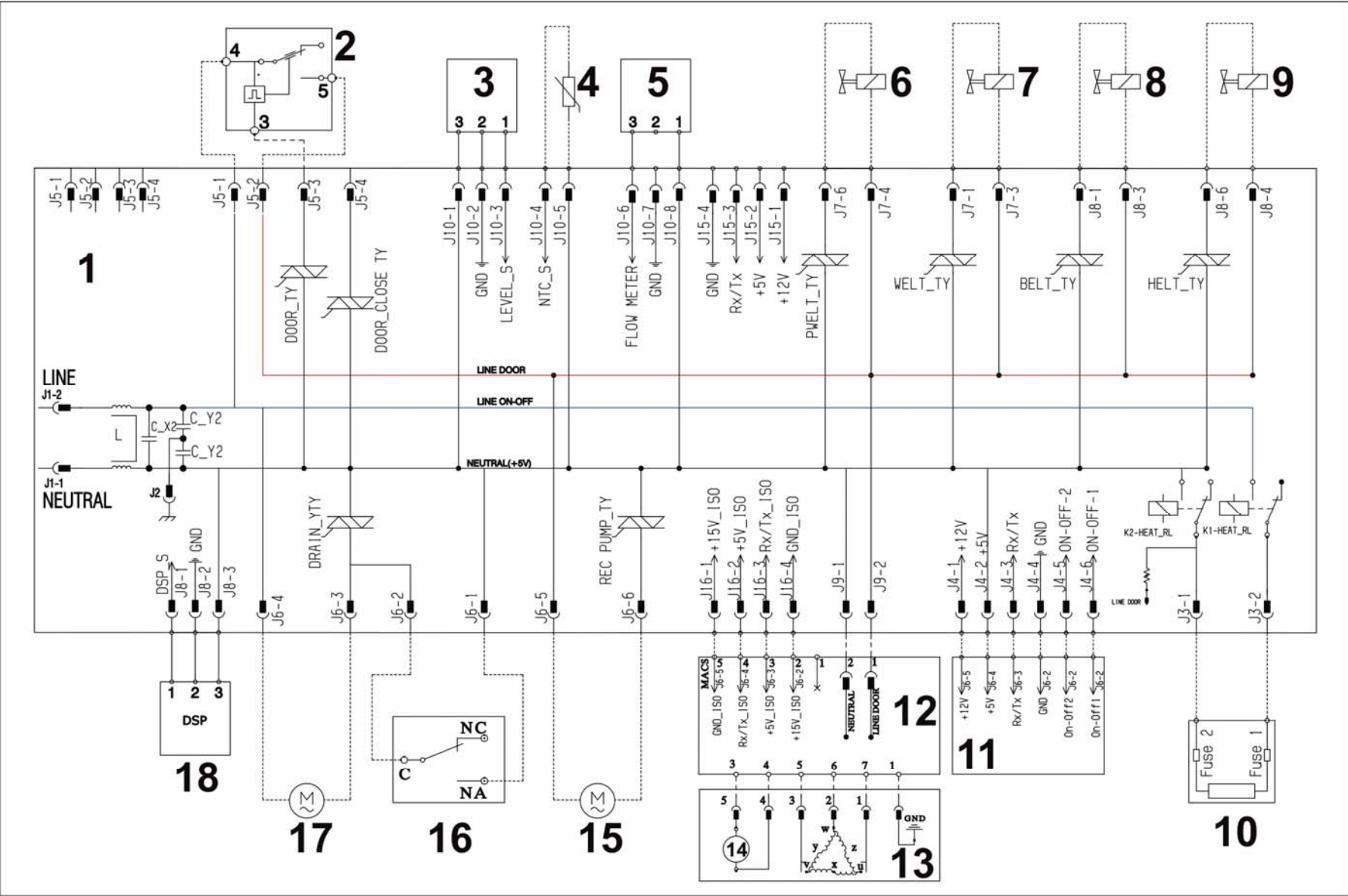
ALARM CODE	Description	Possible fault	Action Machine status	Reset
E91	Communication error between main PCB and display board	<ul style="list-style-type: none"> ▪ Faulty wiring. ▪ Control/display circuit board faulty. ▪ Main circuit board faulty. 	-----	RESET
E92	Communication inconsistency between main PCB and display board. (incompatible versions)	<ul style="list-style-type: none"> ▪ Incorrect control/display board. ▪ Incorrect PCB (does not correspond to the model) 	Cycle blocked	ON/OFF
E93	Appliance configuration error	<ul style="list-style-type: none"> ▪ Main circuit board faulty. ▪ Incorrect configuration data. 	Cycle blocked	ON/OFF
E94	Incorrect configuration of washing cycle	<ul style="list-style-type: none"> ▪ Main circuit board faulty. ▪ Incorrect configuration data. 	Cycle blocked	ON/OFF
E97	Inconsistency between programme selector and cycle configuration	<ul style="list-style-type: none"> ▪ Main circuit board faulty. ▪ Incorrect configuration data. 	Cycle blocked	RESET
E98	Communication error between main PCB - Inverter	<ul style="list-style-type: none"> ▪ Incompatibility between main PCB and Inverter 	Cycle blocked	ON/OFF
E9C	Display board configuration error	<ul style="list-style-type: none"> ▪ Display board faulty 	-----	START ON/OFF RESET
E9E	Display board touch sensor faulty	<ul style="list-style-type: none"> ▪ Display board faulty 	-----	ON/OFF

ALARM CODE	Description	Possible fault	Action Machine status	Reset
EA1	No drum position signal made.	<ul style="list-style-type: none"> ▪ DSP sensor faulty. ▪ Transmission belt broken. ▪ Main circuit board faulty. ▪ Faulty wiring. 	Drum positioning cycle cancelled	START/RESET
EA6	No signal from the DSP during motor activation.	<ul style="list-style-type: none"> ▪ DSP sensor faulty. ▪ Transmission belt broken. ▪ Main circuit board faulty. ▪ Faulty wiring. 	Cycle paused.	START RESET
EC1	Electronically controlled valve blocked with operating flowmeter	<ul style="list-style-type: none"> ▪ Faulty wiring. ▪ Solenoid valve faulty/blocked. ▪ Circuit board faulty 	Cycle stops with door locked Drain pump continues to operate (5 min. on, then 5 min. off etc.)	RESET
EC3	Problems with weight sensor (no signal or outside the limits)	<ul style="list-style-type: none"> ▪ Faulty wiring. ▪ Weight sensor faulty. ▪ Main board faulty. 	-----	START/RESET
EF1	Drain filter clogged (drain phase too long)	<ul style="list-style-type: none"> ▪ Drain filter clogged/dirty. ▪ Drain hose blocked/kinked/too high. 	Warning displayed at the end of cycle.	START/RESET
EF2	Overdosing of detergent (too much foam during drain phases)	<ul style="list-style-type: none"> ▪ Excessive detergent dosing. ▪ Drain hose kinked/blocked. ▪ Drain filter clogged/dirty. 	Warning displayed after 5 attempts or by the specific LED.	RESET
EF3	Aqua control system intervention	<ul style="list-style-type: none"> ▪ Water leaks onto base frame. ▪ Aqua control device faulty. 	Appliance drains	ON/OFF RESET
EF4	Water fill pressure too low, no signal from flowmeter and electronically controlled valve is open	<ul style="list-style-type: none"> ▪ Tap closed. ▪ Water fill pressure too low. 	-----	RESET
EF5	Unbalanced load	<ul style="list-style-type: none"> ▪ Final spin phases skipped. 	-----	START/RESET
EF6	Reset	<ul style="list-style-type: none"> ▪ If it continues, replace the main board 	-----	-----

ALARM CODE	Description	Possible fault	Action Machine status	Reset
EH1	Supply frequency of appliance outside the limits	<ul style="list-style-type: none"> ▪ Problem with the power supply network (incorrect/disturbed). ▪ Main circuit board faulty. 	Wait for nominal frequency conditions	ON/OFF
EH2	Supply voltage too high	<ul style="list-style-type: none"> ▪ Problem with the power supply network (incorrect/disturbed). ▪ Main circuit board faulty. 	Wait for nominal voltage conditions.	ON/OFF
EH3	Supply voltage too low	<ul style="list-style-type: none"> ▪ Problem with the power supply network (incorrect/disturbed). ▪ Main circuit board faulty. 	Wait for nominal voltage conditions.	ON/OFF
EH4	0Watt relay malfunction	<ul style="list-style-type: none"> ▪ Main circuit board faulty. 	-----	ON/OFF RESET
EHE	Inconsistency between FCV relay (in the main board) and safety "sensing" circuit	<ul style="list-style-type: none"> ▪ Faulty wiring. ▪ Main circuit board faulty. 	Safety drain cycle Cycle stops with door open	RESET
EHF	Safety sensing circuit faulty (wrong input voltage to microprocessor)	<ul style="list-style-type: none"> ▪ Main circuit board faulty. 	Safety drain cycle Cycle stops with door open	RESET

7 DIAGRAMS

7.1 WM diagram with THREE-PHASE ASYNCHRONOUS MOTOR



7.2 Key to diagram

Appliance electrical components	PCB components	
<ol style="list-style-type: none"> 1. Main circuit board 2. Door safety interlock (without flange) 3. Electronic pressure switch 4. NTC (washing) 5. Flow sensor 6. Pre-wash solenoid 7. Wash solenoid 8. Steam water solenoid 9. Hot water solenoid 10. Heating element 11. Display board 12. Motor control board (Inverter) 13. Triple-phase motor 14. Tachometric generator (motor) 15. Circulation pump 16. Aqua control sensor 17. Drain pump 18. Drum light 	DOOR_TY DOOR_CLOSE_TY PWELT_TY WELT_TY BELT_TY HELT_TY DRAIN_YTY REC PUMP_TY K1 K2	Door interlock Triac Door interlock Triac Pre-wash solenoid Triac Wash solenoid Triac Electronically controlled TRIAC bleach valve Hot water solenoid valve triac Drain pump Triac Circulation pump TRIAC switch Heating element relay Heating element relay