3 Event recording and troubleshooting

3.1 Events indicated in the display

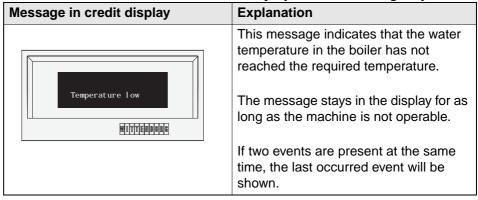
Introduction

This section lists, in alphabetical order, events indicated in the display, explanations to these events and corrective action in cases where this is necessary.

Events in the machine are shown in the credit display for as long as they interrupt normal operation of the machine. They may be considered as active events. Subsequently, they are listed in the Event log book found in the Operator menu.

The Event log book registers the date and time of the first and last occurrence of each event and the number of times it has occurred.

Example: Indication of event in the credit display Active events are shown in the credit display in the following way:



Example: Indication of event in the event log book Events are stored in the Event log book and are shown in the display in the following way:

Message in Event log book	Explanation
Temperature low *F: 220103 14.07 L: 080203 16.56(3) ^ v Esc	F: = First time of occurrence (date+time) L: = Latest occurrence (date+time) (xxx): = number of times of occurrence

3.1.1 Event messages in connection with Diagnostics/Test

Diagnostics/Test messages

Event messages that may appear during the testing of any of the machine's functions are explained in *chapter 4 Programming, Diagnostics/Test* as these messages are closely connected to the testing procedures.

3.1.2 Event messages in event book and credit display

Base tray full

This message indicates a problem related to the base tray which has caused the machine to stop operating.

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Possible cause	Remedy
Base tray and/or base tray sensors wet or soiled	Switch machine off, wipe dry base tray. See <i>Operating instructions</i> .
Base tray sensors defective	Check, replace if necessary.
Harness for base tray sensors defective	Check, replace if necessary.

Branch pipe error

This message indicates a time-out on the branch pipe causing the machine to stop operating.

Turn the machine off and on. If the message remains, investigate the possibilities in the table below.

Possible cause	Remedy
Defective branch pipe switch or switches	Check, replace if necessary. See <i>chap. 5C Dosing system.</i>
Defective branch pipe motor	
Cable connection defective	
Defective harness to motor	
Cup blocking the movement of the branch pipe (Cafitesse 3100 only)	Remove cup.
Grease or dirt blocking or obstructing the movement of the branch pipe	Clean branch pipe system, i.e. distributor head, hoses and mixing funnels. See Operating instructions.

Bad dosing left B2 (Log book only)

This message indicates that the flavour of drinks is not satisfactory. The dosing of ingredients in drinks is not correct.

Possible cause	Remedy
Condition of the ingredients is not up to standard, e.g. sedimented or frozen	Check the condition of ingredients, replace product pack if necessary. See Operating instructions.
Positioning of the B2 dosing unit in the coil is not correct	Check position of the dosing unit. See Operating instructions.

Bad dosing right B2 (Log book only) This message indicates that the flavour of drinks is not satisfactory. The dosing of ingredients in drinks is not correct.

Possible cause	Remedy
Condition of the ingredients is not up to standard, e.g. sedimented or frozen	Check the condition of ingredients, replace product pack if necessary. See Operating instructions.
Positioning of the B2 dosing unit in the coil is not correct	Check position of the dosing unit. See Operating instructions.

Cleaning required

This message indicates that the rinse time interval is exceeded, causing the machine to stop operating. Rinse time intervals are defined under Set Rinse Timeout in *chapter 4 Programming*.

Possible cause	Remedy
Rinse time exceeded	Clean the machine using one of the rinse functions.

Cooler temp too high (Log book only) This message occurs if the temperature in the cooling compartment has been $> 30^{\circ}$ for more than three hours.

Possible cause	Remedy
Cooling compartment door defective	Replace cooling compartment door. See <i>chap. 5F Cooling system</i> .
Air inlet filter blocked or defective	Clean or replace air inlet filter. See Operating instructions.
Peltier cooling units defective	Replace Peltier cooling units. See <i>chap. 5F Cooling system.</i>
Temperature sensor defective	Replace temperature sensor. See <i>chap. 5F Cooling system.</i>

Cooler temp too low (Log book only)

This message occurs if the temperature in the cooling compartment has been $< -1^{\circ}$ for more than three hours.

Possible cause	Remedy
Peltier cooling unit defective	Replace Peltier cooling unit. See <i>chap. 5F Cooling system.</i>
Temperature sensor defective	Replace temperature sensor. See <i>chap. 5F Cooling system.</i>
PCB B/C defective	Replace PCB B/C. See chap. 5K Power supply unit and control.

Cup not delivered (Cafitesse 3100 only)

This message indicates that the machine has not been able to dispense a cup, causing the machine to stop operating.

Possible cause	Remedy
Dirt or grease blocking cup slide	Clean cup slide.
Defective cup slide	Change cup slide. See chap. 5D Product delivery
Defective cup drop ring	Replace cup drop ring. See chap. 5D Product delivery.
Incorrect cup size	Replace with cups that fit ring size. See chap. 5D Product delivery.
Cup blocking cup slide/cup ring area	Remove blocking cup.

Door closed (Log book only)

The purpose of the [Door closed] message is to record the time and date of door closings. However, the message is also being given when power is returned to the machine.

Door open (Log book only)

This message is either a status indication similar to the message above [Door closed] or an indication of a problem with the door.

Possible cause	Remedy
Door is not closed properly	Close door properly.
Door switch is defective	Check, replace if necessary.
Door harness is defective	Check, replace if necessary.

Drip tray full

This message indicates that the drip tray is full or that another problem related to the drip tray has caused the machine to stop operating.

Possible cause	Remedy
Drip tray is full	Switch machine off, empty drip tray and wipe dry sensors. See Operator manual.
Drip tray sensors are soiled	Clean and wipe dry sensors. See Operator manual
Drip tray sensors are defective	Check, replace if necessary. See chap. 5D Dosing system.
Harness for drip tray sensors is defective	Check, replace if necessary. See chap. 5D Dosing system.

Factory info XXX RXX (Log book only) This message indicates an internal software application error which may or may not cause the machine to stop operating. The error code is for internal use and should be reported to the manufacturer.

Possible cause	Remedy
Software application error	Note! Report error to manufacturer together with error code. (XXX RXX).

IngMotor xx error (Log book only)

This message indicates an error related to one of the instant ingredient motors causing the machine to stop operating. The message [Out of service] appears in the credit display.

Possible cause	Remedy
Defective instant ingredient motor	Check motor, replace if necessary. See <i>chap. 5C Dosing system.</i>
Defective VMC	Check VMC, replace if necessary. See chap. 5K Power supply unit and control.
Defective harness	Check harness, replace if necessary.

IngMotor xx overload (Log book only) This message indicates an overload of one of the instant ingredient motors causing the machine to stop operating. The message [Out of service] appears in the credit display.

Possible cause	Remedy
Moist ingredient powder is blocking motor	Check ingredient motor. See chap. 5C Dosing system.
Instant ingredient canister is not properly positioned	Reposition canister.
Outlet spout of instant ingredient canister is closed	Open outlet spout of canister.
Outlet spout of instant ingredient canister is blocked up	Clean Instant ingredient canister and outlet spout. See Operating instructions.

L B2 Curroutof spec. (Log book only)

This message indicates that current of the left B2 driver circuit is out of specification. The machine will still be able to dispense drinks, but drinks affected by the left B2 cannot be dispensed.

Possible cause	Remedy
Short circuit or circuit disconnected	Repair or connect circuit.
Wiring incorrect or connections defective	Check wiring or replace connections. See chap. 5K Power supply unit and control.
Left B2 coil is defective	Replace left B2 coil. See chap. 5C Dosing system.
PCB is defective	Replace PCB. See chap. 5K Power supply unit and control.

L peltier curr. high (Log book only)

This message appears when the current of the left Peltier element is too high. It could indicate a short circuit.

Set condition:

ON mode: Current above 4.65 A for more than 0.5 seconds. Stand-by mode: Current above 2.1 A for more than 0.5 seconds.

Possible cause	Remedy
Air inlet filter blocked or defective	Clean or replace air inlet filter. See Operating instructions.
Wiring incorrect or connections defective	Check wiring or replace connections.
Left Peltier element is defective	Replace peltier element. See chap. 5F Cooling system.
PCB C is defective	Replace PCB B/C. See chap. 5K Power supply unit and control.

L peltier curr. low (Log book only)

When the air inlet filter is blocked, the Peltier temperature rises. The thermal cut-out could have tripped.

Set condition:

ON mode: Current below 2.2 A for more than 0.5 seconds. Stand-by mode: Current below 0.2 A for more than 0.5 seconds.

Possible cause	Remedy
Air inlet filter is blocked or defective	Clean or replace air inlet filter.
	See Operating instructions.
Wiring incorrect or connections defective	Check wiring or replace connections.
Left Peltier element is defective	Replace left peltier element.
	See chap. 5F Cooling system.
PCB C is defective	Replace PCB B/C.
	See chap. 5K Power supply unit and control.

(in credit display)

Left BIB empty (Log book only)

This message indicates that the left BIB pack is empty. If this BIB is NOT empty, please check the following:

Possible cause	Remedy
Wiring incorrect or connections defective	Check wiring or replace connections.
Empty sensor defective	Replace empty sensor.
	See chap. 5C Dosing system.
Float in B2 dosing unit is defective	Replace product pack.
	See Operating instructions.
PCB C is defective	Replace PCB B/C.
	See chap. 5K Power supply unit and control.

LQ temp sensor error (Log book only) This message indicates that the liquid temperature sensor in the cooling compartment gives unrealistic readings.

Possible cause	Remedy
Wiring incorrect or connections defective	Check wiring or replace connections. See chap. 5K Power supply unit and control.
Temperature sensor is defective	Replace temperature sensor. See <i>chap. 5F Cooling system.</i>
PCB C is defective	Replace PCB C. See chap. 5K Power supply unit and control.

Mixer current error (Log book only)

This message indicates that the mixer driver circuit has detected an out of specification (Max > 5 A, Min. < 0.1 A) three times in a row.

Possible cause	Remedy
Whipper is jammed or defective	Replace whipper. See chap. 5C Dosing system.
	, , ,
Trough assembly is not correct	Check and correct trough assembly or replace trough. See <i>chap. 5C Dosing system</i> .
	See Chap. SC Dosing system.
Seal is defective	Replace seal.
Mixer motor is defective	Replace mixer motor.
	See chap. 5C Dosing system.
Wiring incorrect or connections	Check wiring or replace connections.
defective	See chap. 5K Power supply unit and control.
PCB is defective	Replace PCB.
	See chap. 5K Power supply unit and control.

Module C no responds

This message indicates that module C is defective causing the machine to stop operating. The message [Out of service] appears in the credit display.

Possible cause	Remedy
Wiring incorrect or connections defective	Check wiring or replace connections. See chap. 5K Power supply unit and control.
PCB C is incorrectly inserted in rack	Insert PCB C correctly in rack.
PCB is defective	Replace PCB C. See chap. 5K Power supply unit and control.
Middle fuse on switch mode power pack is defective	Replace middle fuse on switch mode power pack.

No cups (Cafitesse 3100 only) This message indicates that the cup magazine is empty or that another problem related to the cup dispensing system has caused the machine to stop operating. The message is followed by the message [Use own cup].

Possible cause	Remedy
Cup magazine empty	Use own cup / Refill cup magazine.
Defective cup sensor	Check, replace if necessary. See <i>chap. 5D Product delivery.</i>

No payment comm.

This message appears if a coin mechanism has been selected in the menu system, but the connection between the coin mechanism and the machine is missing. See chapter 4 Programming, Set payment type.

Possible cause	Remedy
The coin mechanism has not been connected to the machine	Connect the coin mechanism cable to the coin mechanism switch inside the machine door. See <i>chap. 5P Payment system.</i>
Defective harness for coin mechanism	Check harness, replace if necessary. See <i>chap. 5P Payment system</i> .
Defective SPC	Check, replace if necessary. See chap. 5K Power supply unit and control.

Out of service

This message appears in the credit display if the machine is temporarily unable to operate due to a technical or a mechanical problem.

The cause of the event will be registered in the Event log book, e.g. as [SPC short circuit]. This and other possible event messages can be found in this alphabetical event list.

After the message [Out of service] has been shown on the display for five seconds, the error message(s) registered in the Event log book will automatically be shown.

R B2 Curroutof spec. (Log book only)

This message indicates that current of the right B2 driver circuit is out of specification. The machine will still be able to dispense drinks, but drinks affected by the right B2 cannot be dispensed.

Possible cause	Remedy
Short circuit or circuit disconnected	Repair or connect circuit.
Wiring incorrect or connections defective	Check wiring or replace connections. See chap. 5K Power supply unit and control.
Right B2 coil is defective	Replace right B2 coil. See <i>chap. 5C Dosing system.</i>
PCB is defective	Replace PCB. See chap. 5K Power supply unit and control.

R peltier curr. high (Log book only)

This message occurs when the current of the right Peltier element is too high. It could indicate a short circuit.

Set condition:

ON mode: Current above 4.65 A for more than 0.5 seconds. Stand-by mode: Current above 2.1 A for more than 0.5 seconds.

Possible cause	Remedy
Air inlet filter is blocked or defective	Clean or replace air inlet filter. See Operating instructions.
Wiring incorrect or connections defective	Check wiring or replace connections.
Right Peltier element is defective	Replace right peltier element. See <i>chap. 5F Cooling system</i> .
PCB C is defective	Replace PCB C. See chap. 5K Power supply unit and control.

R peltier curr. low (Log book only)

When the air inlet filter is blocked, the Peltier temperature rises. The thermal cut-out could have tripped.

Set condition:

ON mode: Current below 2.2 A for more than 0.5 seconds. Stand-by mode: Current below 0.2 A for more than 0.5 seconds.

Possible cause	Remedy
Air inlet filter blocked or defective	Clean or replace air inlet filter
Wiring incorrect or connections defective	Check wiring or replace connections.
Peltier element is defective	Replace peltier element. See chap. 5F Cooling system.
PCB C is defective	Replace PCB C. See chap. 5K Power supply unit and control.

Regenerate softener

This message indicates that the set number of drinks to be dispensed before the water softener filter should be replaced is exceeded. The message will be shown on every opening of the door until the counter has been reset.

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Possible cause	Remedy
Change of softener filteris required	Change filter and reset counter. See chap. 4 Programming, Softener
	counter.



(in credit display)

Right BIB empty (Log book only)

This message indicates that the right BIB pack is empty. If this BIB is NOT empty, please check the following:

Possible cause	Remedy
Wiring incorrect or connections defective	Check wiring or replace connections.
Empty sensor is defective	Replace empty sensor. See <i>chap. 5C Dosing system.</i>
Float in B2 dosing unit is defective	Replace product pack. See Operating instructions.
PCB C is defective	Replace PCB C. See chap. 5K Power supply unit and control.

SPC short circuit (Log book only)

This message indicates a short circuit of the SPC printed circuit board causing the machine to stop operating. The message [Out of service] appears in the credit display.

Possible cause	Remedy
Defective SPC	Check, replace if necessary. See chap. 5K Power supply unit and control.

Temperature low

This message indicates that the machine is not able to deliver hot drinks due to the water temperature being too low.

Possible cause	Remedy
The machine has been turned on recently	Wait until the water is heated sufficiently (maximum 15 minutes).
	The display is automatically cleared when the water in the boiler reaches the correct temperature.
Heating element defective	Check heating element, replace if necessary. See chap. 5A Water system.
Harness for heating element defective	Check harness, replace if necessary. See <i>chap. 5A Water system.</i>
Temperature sensor or harness for temperature sensor defective	Check sensor and harness, replace if necessary. See chap. 5A Water system.
Dry boiling thermostat has triggered	Press the reset button. See <i>chap. 5A Water system.</i>
	If the heating element is not heating again or dry boiling thermostat triggers repeatedly, check for other types of errors or check temperature setting. See <i>chap. 4 Programming, Temperatures.</i>

(credit display)

This message appears if the through-lid sensor and ingredient switch sensors have detected that the trough has not been placed correctly.

Trough not in place (Log book only)

Possible cause	Remedy
Trough incorrectly positioned	Position trough correctly. The [T] in the display will disappear.
Wiring incorrect or connections defective	Check wiring or replace connections.
Sensor defective	Check sensor, replace if necessary.
PCB C is defective	Replace PCB C. See chap. 5K Power supply unit and control.

Unexpected xx reset (Log book only)

This message indicates that one of the machine's circuit board modules (VMC, SPC, FB1, ES and SB) has made an unexpected reset.

Possible cause	Remedy
Defective module.	Check module, replace if necessary. See chap. 5K Power supply unit and control.

VMC short circuit (Log book only)

This message indicates a short circuit causing the machine to stop operating. The message [Out of service] appears in the credit display.

Possible cause	Remedy
Short circuit in harness	Check harness, replace if necessary.
Defective motor for instant ingredients, whipper or pump	Check motors, replace if necessary. • See chap. 5C Dosing system (instant ingredient motor and whipper motor) or • chap. 5A Water system (pump).
VMC is defective	Check, replace if necessary. See chap. 5K Power supply unit and control.

Water level low

This message appears if the boiler has not filled within three minutes after the machine has been switched on.

Switch the machine off, open the water tap, check water connection and hoses. If the message remains, investigate the possibilities in the table below.

Possible cause	Remedy
	Check, descale or replace if necessary. See chap. 5A Water system.
Water supply connection blocked	Remove impurities.

Water pump error (Log book only)

This message indicates a problem with the water pump causing the machine to stop operating. The message [Out of service] appears in the credit display.

Possible cause	Remedy
Defective pump	Check motor, replace if necessary. See <i>chap. 5A Water system.</i>
Defective VMC	Check VMC, replace if necessary. See chap. 5K Power supply unit and control.
Defective harness	Check harness, replace if necessary.

Water pump overload (Log book only) This message indicates an overload of the water pump causing the machine to stop operating. The message [Out of service] appears in the credit display.

Possible cause	Remedy
Limescale build-up blocking pump	Descale pump. See <i>chap. 5A Water system.</i>
Foreign body blocking pump	Disassemble water system, remove foreign body. See <i>chap. 5A Water system.</i>

Water system failure

This message appears if the machine has dispensed three hot drinks without refilling the boiler.

Possible cause	Remedy
Defective water pump	Check, replace if necessary. See chap. 5A Water system.
Defective water level sensor	Check, replace if necessary. See chap. 5A Water system.

Water tank overboil

This message indicates that the water temperature has reached boiling point, causing the machine to stop operating.

Possible cause	Remedy
Overboil thermostat has triggered	Press the reset button. See <i>chap. 5A Water system.</i>
Overboil thermostat is defective	Check, replace if necessary.
Harness for overboil thermostat is defective	See chap. 5A Water system.
Temperature sensor is defective	Check, replace if necessary.
Harness for temperature sensor is defective	See chap. 5A Water system.

Whipper xx error (Log book only)

This message indicates a condition in one of the whipper motors causing the machine to stop operating. The message [Out of service] appears in the credit display.

Possible cause	Remedy
Defective whipper motor	Check motor, replace if necessary. See <i>chap. 5C Dosing system.</i>
Defective VMC	Check VMC, replace if necessary. See chap. 5K Power supply unit and control.
Defective harness	Check harness, replace if necessary.

Whipper xx overload (Log book only)

This message indicates an overload of one of the whippers causing the machine to stop operating. The message [Out of service] appears in the credit display.

Possible cause	Remedy
Instant ingredient system blocked	Clean Instant ingredient system (whipper, mixing funnel, powder trap). See Operating instructions.
Foreign body blocking instant ingredient system	Remove foreign body.

3.2 Troubleshooting - events not indicated in the display

Introduction

This section describes events that are *not* indicated in the credit display and Event log book, and suggestions for remedy.

Machine is out of function no display

Possible cause	Remedy
Power supply interrupted	Check the power supply.
Main switch defective	Check the main switch, replace if necessary.
Power supply cable defective	Check, replace if necessary. See chap. 5K Power supply unit and control.
Plug contact fault	Check contacts, replace if necessary.
Fuse defective	Check the power supply, replace the fuse if necessary. See chap. 5K Power supply unit and control.

No drinks delivered

Possible cause	Remedy
Harness or sensor for water level control blocked by limescale build-up or incorrectly installed	Check, descale or replace if necessary. See <i>chap 5A Water system</i> .
Water in hose between bottom of boiler and overflow thermostat	Empty hose into waste bucket. See <i>chap 5A Water system</i> .

Water system overflows

Note: It is important that the possible causes be checked in the order listed in the table.



Open the machine, leave the power supply on and the water tap open. Remove cover at boiler, *see chap 5A Water system*, and check for the following types of errors:

Possible cause	Remedy
Inlet valve defective	 Check valve by removing one of the terminals from the inlet valve. If the problem persists, replace the inlet valve. See <i>chap 5A Water system</i>. If the water stops running, the valve is ok.
Harness or sensor for water level control blocked by limescale build-up or incorrectly installed	Check, descale or replace if necessary. See <i>chap 5A Water system.</i>

Possible cause	Remedy
Short-circuit on print board	Using a voltmeter, measure voltage across inlet valve terminal. A constant voltage (of 24 V DC) indicates a controller fault. Change the VMC. See chap. 5K Power supply unit and control.

Coins stuck

Possible cause	Remedy
Coin may be stuck in the coin mechanism	Press the coin return button.
Coin track dirty or greasy	Open coin rejector and clean coin track. See manual for coin mechanism.
Foreign body stuck in coin track	Open coin rejector and remove foreign body. See manual for coin mechanism.

Drinks are too cold

Possible cause	Remedy
Wrong temperature setting	Readjust temperature setting either via the Technician menu, see <i>chap. 4 Programming</i> , or from a pc.

The water quantity delivered is too low or irregular

Possible cause	Remedy
Boiler blocked by limescale build-up or defective	Check boiler and descale, if required, or replace. See <i>chap 5A Water system</i> .
Water supply lines are blocked	Check the water supply lines and clean them if required.
Water valves are incorrectly calibrated	Calibrate the water valves either via the Technician menu, see <i>chap. 4 Programming</i> , or from a pc.

No water is dispensed

Possible cause	Remedy
	Check the water supply lines and clean them if required.

Only water is dispensed

Possible cause	Remedy
Canister is empty	Refill canister.
Canister dislocated	Relocate canister.
Blocked up mixing funnels	Check, and clean if necessary.

Quantity of drink is inadequate

Possible cause	Remedy
Ingredient residue blocking funnel/ whipper housing/delivery tube	Clean/replace blcoked component(s).
Dispensing hose has a kink	Check hoses. Install hose of correct length.

Delivered coffee is not whipped

Possible cause	Remedy
Mixing unit dirty	Clean the mixing unit.
Whipper motor defective	Check the motor and replace if necessary.
	See chap. 5C Dosing system.

Flavour of drink unsatisfactory

Possible cause	Remedy
Wrong ingredients	Use correct ingredients, e.g. correct whitener for coffee and tea.
Dispensing system dirty	Clean/replace components.
Expiry date overdue	Replace ingredients.

Ingredients are moist and become lumpy in canisters

Possible cause	Remedy
Steam rising from mixing funnel	Working from outside, remove dust from the grille at rear of machine or, from inside, remove dust from fan. See <i>chap. 5G Housing / Cabinet</i> .
Powder traps or suction hoses blocked	Check powder traps and their suction hoses. Clean if necessary.

Mixing system overflows

Possible cause	Remedy
Mixing unit blocked	 Clean or replace blocked part or parts. Check if they are positioned correctly. Check powder traps and corresponding extraction tubes.

Leak in mixing system

Possible cause	Remedy
Funnel/Whipper housing not correctly connected	Reinstall and reconnect components.
Seal for whipper housing leaking or not installed	Replace seal.

Machine does not block when base tray is full

Possible cause	Remedy
Foreign body blocking sensors for base tray	Clean sensors.
Sensor defective	Replace sensor.

Liquid escaping from machine

Possible cause	Remedy
Bucket/canister/whipper housing/mixing funnels/delivery hoses not correctly inserted	Install component or components correctly.