

12. Diagnostic messages

MALFUN. CODE	DESCRIPTION	POSSIBLE CAUSES	VERIFICATIONS and SOLUTIONS
020	USB power-supply malfunction.	<ul style="list-style-type: none"> • USB-port current-consumption too high. 	<ul style="list-style-type: none"> • Check the status of the USB port and its connections in order to identify possible causes of excessive consumption (e.g. short-circuit). • Once the cause of the malfunction is fixed the USB port should restore itself automatically and return to normal operation. • If the problem persists, replace the CPU board.
(x)21*	Group boiler pressure sensor x out of range (x = 1, 2, 3, 4) Note: Group 1 is to the far left.	<ul style="list-style-type: none"> • Sensor failure • Card failure. 	<ul style="list-style-type: none"> • Check cabling • Replace the sensor • Replace the card.
023	AC 24V power supply malfunction.	<ul style="list-style-type: none"> • The glass fuse on the CPU board is likely broken. 	<ul style="list-style-type: none"> • Replace the fuse.
024	Clock malfunction.	<ul style="list-style-type: none"> • Contacts oxidised. • Dead battery. • Clock blocked. 	<ul style="list-style-type: none"> • Clean the contacts on the battery. • Measure the voltage of the battery (3 V DC) and, if necessary, replace it. • If the battery is OK try, with the machine turned off, to remove it from the board and wait 2-3 minutes. Then reinsert the battery and check that the clock is working properly.
025*	No power: group, EV, milk pump	<ul style="list-style-type: none"> • Voltage drop in the power supply 	<ul style="list-style-type: none"> • Check if CPU card has power. • Check power supply unit (protection) • Check cabling
029 *	LCD display not connected (applies only to machines other than Emblem R and M100).	<ul style="list-style-type: none"> • Break in cabling. • Display fault. 	<ul style="list-style-type: none"> • Check cabling.
030	Slave micro processor malfunction.		<ul style="list-style-type: none"> • If the problem persists, replace the Newton board.
041*	Milk pump motor overcurrent	<ul style="list-style-type: none"> • Consequence of applied force • Rotor blocked • Pump motor faulty 	<ul style="list-style-type: none"> • Check wiring. • Check whether the circuit or pump is clogged. • Replace the pump.
051	Temperature sensor signal out of range.	<ul style="list-style-type: none"> • Sensor failure • Card failure. 	<ul style="list-style-type: none"> • Check cabling • Replace the sensor • Replace the card.
(x)51*	Group boiler temperature sensor x out of range (x = 1, 2, 3, 4) Note: Group 1 is to the far left.	<ul style="list-style-type: none"> • Thermocouple disconnected • Sensor failure. 	<ul style="list-style-type: none"> • Check cabling • Replace the sensor.
052	Boiler heating timeout - 45 minutes.	<ul style="list-style-type: none"> • The safety thermocouple has been triggered • The resistance is interrupted (cabling defect) • The Triac card is malfunctioning. 	<ul style="list-style-type: none"> • Check if the safety thermostat has been triggered, and reset it if necessary • Check if there are interruptions or detached fastons on the cabling • Check that the boiler resistance is not interrupted and replace it if necessary • Replace the Triac card.

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(x)52*	Group x boiler heating timeout - 20 minutes (x = 1, 2, 3, 4) Note: Group 1 is to the far left.	<ul style="list-style-type: none"> • The group x boiler safety thermostat has been triggered • The resistance is interrupted (cabling defect). • Triac board fault. 	<ul style="list-style-type: none"> • Check if the safety thermostat of the group x boiler has been triggered, and reset it if necessary • Check if there are interruptions or detached fastons on the cabling • Check that the group x boiler resistance is not interrupted and replace it if necessary • Replace Triac board.
(x) 53*	Steam thermocouple out of range. DX > 053; SX > 153	<ul style="list-style-type: none"> • Thermocuple disconnected • Wrong configuration during standard data insertion. 	<ul style="list-style-type: none"> • Enter in the programming mode and insert the correct standard data.. • Check connections. • Replace the steam temperature probe.
058	Boiler overpressure alarm.	<ul style="list-style-type: none"> • Resistanc alwayspowered. • Temperature sensor out of range. 	<ul style="list-style-type: none"> • Check cabling • Replace the sensor.
059	Boiler: Refill timeout - 15 minutes.	<ul style="list-style-type: none"> • No water • Refill EV failure • Wiring interrupted • Card failure. 	<ul style="list-style-type: none"> • Check water is supplied from the main line. • Replace the refill EV. • Check cabling. • Replace the card.
060	Boiler-level signal errors.	<ul style="list-style-type: none"> • Electrical fault. • Leakage to earth. 	<ul style="list-style-type: none"> • Check wiring. • Check, by activating the components individually on the manual control panel, that the level signal does not show any anomalies (%).
062	Coffees dispensed for MM1 with flow under the limit (3 consecutive coffees dispensed).	<ul style="list-style-type: none"> • coffee filter blocked • coffee type changed • qref calibration wrong • grind too fine, excessive dose ground. 	<ul style="list-style-type: none"> • wash the group • clean/replace the coffee filter • use a coarser grind • calibrate the machine correctly on the basis of the coffee/recipe.
063	Coffees dispensed referred to MM1 with flow over the limit (3 consecutive coffees dispensed).	<ul style="list-style-type: none"> • coffee type changed • qref calibration wrong • grinding too coarse • grinder/dispenser blocked, insufficient dose of ground coffee. 	<ul style="list-style-type: none"> • check that there are no external elements in the grinders • check that the measure grinder is working (pick-up current and fuses) • use a finer grind • calibrate the machine correctly on the basis of the coffee/recipe.
064	Coffees dispensed referred to MM2 with flow under the limit (3 consecutive coffees dispensed).	<ul style="list-style-type: none"> • coffee filter blocked • coffee type changed • qref calibration wrong • grind too fine, excessive dose ground. 	<ul style="list-style-type: none"> • wash the group • clean/replace the coffee filter • use a coarser grind • calibrate the machine correctly on the basis of the coffee/recipe.
065	Coffees dispensed referred to MM2 with flow over the limit (3 consecutive coffees dispensed).	<ul style="list-style-type: none"> • coffee type changed • qref calibration wrong • grinding too coarse • grinder/dispenser blocked, insufficient dose of ground coffee. 	<ul style="list-style-type: none"> • check that there are no external elements in the grinders • check that the measure grinder is working (pick-up current and fuses) • use a finer grind • calibrate the machine correctly on the basis of the coffee/recipe.

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(x)66	Error in the group that is dispensing. (x = 1, 2, 3, 4) Note: Group 1 is to the far left.		<ul style="list-style-type: none"> • Check water is supplied from the main line. • Check there are no fitting obstructions or leakage. • Check flowmeter electrical connections. • Replace the broken flowmeter. • Replace the broken board.
(x)70	Measure-grinder adjustment: Bluetooth set up by the technician. (x = 1, 2) MM1 > 170; MM2 > 270		Event only archived and not displayed on the display during normal machine operation.
082	Temporary communication problem with the keyboards/ TFT display.		<ul style="list-style-type: none"> • Check the insulation. • Check the wiring and connections.
083	Services key communication error.	<ul style="list-style-type: none"> • Incorrect keyboard configuration (if applicable). • Wiring interrupted • Card failure. 	<ul style="list-style-type: none"> • Check that the dip switches are correctly configured on the key board (if applicable). • Check cabling • Replace key board.
(x)83*	Group x (x = 1, 2, 3, 4) keypad communication error Note: Group 1 is to the far left.	<ul style="list-style-type: none"> • Incorrect keyboard configuration (if applicable). • Wiring interrupted • Card failure. 	<ul style="list-style-type: none"> • Check that the dip switches are correctly configured on the key board (if applicable). • Check cabling • Replace key board.
(x)85*	Bluetooth communication error (x = 1, 2) MM1 > 185; MM2 > 285	<ul style="list-style-type: none"> • Incorrect association with measure grinder. • Measure grinder turned off. 	<ul style="list-style-type: none"> • Turn on the grinder. • Repeat device association.
089	NVM RAM data integrity error	<ul style="list-style-type: none"> • Incorrect association with measure grinder. • Measure grinder turned off. 	Turn the machine off and on again. If the error persists, replace the CPU board. Check the condition of the clock battery.
091*	No tank during milk washing cycle	Data integrity error in non-volatile RAM memory of the CPU board.	<ul style="list-style-type: none"> • Check the correct operation of the tank presence sensor on the manual control panel. • Check the wiring.
092	Request water softener resin regeneration.	<ul style="list-style-type: none"> • Removal of tank during the wash. • Tank presence sensor faulty. 	<ul style="list-style-type: none"> • Softener maintenance.
093	Request replacement water filter.		<ul style="list-style-type: none"> • Replace the water-softner filter.
096	Maintenance needed.		<ul style="list-style-type: none"> • The machine has displayed the message to warn the user that maintenance must be performed. Carry out maintenance operations.

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097*	Reset standard password.	<ul style="list-style-type: none"> • Action desired by the user by entering the special code (applicable only for machines with TFT display). 	
098	Historical malfunctions and wash 1 reset.	<ul style="list-style-type: none"> • Initialisation malfunction history (and washing history for machines without TFT display) 	<ul style="list-style-type: none"> • Event only archived and not displayed on the display during normal machine operation.
099	Default data input.		
105	SD card communication malfunction.	<ul style="list-style-type: none"> • SD card corrupted or malfunction. 	<ul style="list-style-type: none"> • Replace SD card.
282	Keypad reset operation carried out by CPU board due to repeated communication problems.		<ul style="list-style-type: none"> • Check the insulation. • Check the wiring and connections.
583	TS/AS keyboard board communication error. RGB light module failure only for Emblem R.	<ul style="list-style-type: none"> • Break in wiring. • Keyboard board failure. • Light board failure. 	<ul style="list-style-type: none"> • Check wiring. • Replace keyboard board. • Replace light board.
683	Turbosteam module communication malfunction.	<ul style="list-style-type: none"> • Break in wiring. • Board failure. 	<ul style="list-style-type: none"> • Check wiring. • Replace Turbosteam board.

Faults - * - appear only in some product configurations.