FAULT CODE	DESCRIPTION	POSSIBLE CAUSES	ACTIONS
003	Coffee group mobile chamber movement error	 Key missing Mechanical block Motor faulty Motor encoder faulty Limit switch faulty (when opening) CPU faulty 	 Insert key Check for mechanical interference Check motor function. Replace if necessary Check limit stop function (Fcc). Replace if necessary Check presence of magnets on chamber Replace CPU Check wiring Replace drive sub group
004	Coffee group movement error	• error 003 or error 007 occurred 3 consecutive times	• After the 004 malfunction occurs, the machine is blocked: identify the origin by referring to the causes and actions for errors 003 and/or 007. Once the anomaly has been resolved, switch the machine of and on again to restore normal operation.
007	Coffee group lower piston movement error	 Mechanical block Motor faulty Motor encoder faulty Limit switch faulty (in descent) CPU faulty 	Check for mechanical interference Check motor function. Replace if necessary Check limit stop function (Fcp). Replace if necessary Check presence of magnets on piston Replace CPU Check wiring Replace drive sub group
008	Coffee group movement timeout	Overload during operation for chamber and/or lower piston Failure to achieve absorption during compression or drying CPU faulty	Clean hydraulic sub group

	9. D	iagno	stics	messages
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FAULT CODE	DESCRIPTION	POSSIBLE CAUSES	ACTIONS
017	Soluble dispenser motor-driver malfunction	 Short circuit in wiring or motor. Faulty slave CPU expansion board. 	 Check the wiring. Check/replace the motor. Check/replace the slave CPU expansion.
018	Spout movement timeout	Mechanical block Limit stop not functioning Motor/encoder faulty Incorrect setting of "delivery spout movement sensitivity" parameter.	Check for mechanical interference Check motor function. Replace motor Check adequacy of delivery spout stroke according to set value. Replace motor Check limit stop (EFC). Replace limit stop if necessary Check wiring and mechanical assembly. Replace the assemble Check motor power supply Replace CPU Reduce "delivery spout movement sensitivity" parameter.
019	No communication with slave CPU expansion board.	Slave CPU board not updated (boot V.2.3 or later, code 538.092.050 or later). Slave CPU expansion board not well connected. Faulty slave CPU board. Faulty slave CPU expansion board.	 Check the version of the slave CPU board. Check the correct connection between the slave CPU board and the slave CPU expansion board. Check the correct red LED status light present on the CPU slave expansion board and see if it is flashing (it should be flashing at 2 Hz in boot mode, flashing at 1 Hz in application mode, fixed light if connected but with no communication from slave CPU board). If the error continues, replace the faulty board.
020	USB power-supply malfunction	USB-port current-consumption too high	 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
024	Clock malfunction	Inconsistent date and time information.	Reset date and time. If the error persists, replace the master control panel.

FAULT CODE	DESCRIPTION	POSSIBLE CAUSES	ACTIONS
025	Lower-piston motor power supply alarm	Short circuit in wiring or motor	 Check that voltage is reaching the CPU board Check the power supply (protection) Check wiring
026	Milk-pump motor-driver malfunction	Short circuit in wiring or motor	Check the wiring. Check/replace the motor Check/replace the CPU
030	Slave CPU failure	No communication with slave CPU board	 Check wiring, connections and power supply of the slave CPU. If the problem error persists, replace the slave CPU board.
037	Milk conductivity sensor fault.	 Sensor disconnected from electricity. Sensor faulty. Faulty slave CPU board. 	 Check the wiring. Replace the sensor. Replace the board. G6.
038	Milk temperature sensor fault.	 Sensor disconnected from electricity. Sensor faulty. Faulty slave CPU board. 	Check the wiring.Replace the sensor.Replace the board. C7.
039	Lack of detergent during milk wash.	 Milk wash carried out without using the appropriate detergent. Inappropriate liquid detergent. Faulty milk conductivity sensor. Faulty slave CPU board. 	 Perform the wash using the liquid detergent, observing the instructions of the procedure described in the user manuals. Use the liquid detergent recommended in the user manuals. Replace the sensor. D8 Replace the board. D8.
040	Milk pump overcurrent alarm	Overload during operation Rotor blocked Pump motor faulty	Check wiring Check/replace milk pump (Mpl) Check/replace slave CPU

FAULT CODE	DESCRIPTION	POSSIBLE CAUSES	ACTIONS
044	Lack of coffee MM1.	 Lack of coffee MM1 MM1 coffee hopper blockage MM1 grinding too fine Blockage MM1 coffee chute "No coffee" sensor faulty (where present) MM1 motor faulty Insufficient coffee dose 	 Pour the coffee into the MM1 hopper Check for coffee blockage in the MM1 hopper Use a coarser grind for MM1 Check for blockages of the MM1 coffee chute Replace MM1 no-coffee sensor Replace MM1 motor Increase MM1 coffee dose
045	Lack of coffee MM2.	 Lack of coffee MM2 MM2 coffee hopper blockage MM2 grinding too fine Blockage MM2 coffee chute "No coffee" sensor faulty (where present) MM2 motor faulty Insufficient coffee dose 	Pour the coffee into the MM2 hopper Check for coffee blockage in the MM2 hopper Use a coarser grind for MM2 Check for blockages of the MM2 coffee chute Replace MM2 no-coffee sensor Replace MM2 motor Increase MM2 coffee dose
046	Lack of coffee DEK	DEK dose not present DEK chute blocked	Add DEK dose Check for blockages in coffee slides.
049	Dispensing stop due to lack of milk	 There is no milk in the container. No milk was drawn. Faulty milk conductivity sensor. Faulty slave CPU board. 	 Fill the milk container. Check that the milk suction part of the circuit works properly. Replace the sensor. Replace the board.
050	Dispensing stop, low service boiler pressure.	 Incoming water is particularly cold. Dissolved gas in the water being released in the service boiler. 	 Check hardness and pH of the water entering the machine and the water treatment system. Activate the cycle to reset the boiler pressure.

FAULT CODE	DESCRIPTION	POSSIBLE CAUSES	ACTIONS
051	Service boiler pressure sensor anomaly	Sensor disconnected from electricity Sensor faulty CPU board faulty	Check the wiring. Replace the sensor. Replace the board.
052	Time-out service boiler heating	 Resettable safety thermostat intervention. Heating element wiring and/or triac board interrupted. Heating element interrupted. Triac board or CPU slave malfunction 	 Check if the safety thermostat has tripped and, if it has, reset it. Check whether there are interruptions or detached faston connectors in the wiring. Check that the boiler heating element is not interrupted and if so replace it. Replace Triac board.
058	Service boiler over- pressure anomaly	 Level probe malfunction; service boiler clogged. Heating element continuously supplied. Triac board faulty. Pressure sensor faulty. 	 Check the level probe. Check the wiring. Replace triac board. Replace pressure sensor.
059	Time-out service boiler loading	Water circuit supply interrupted Solenoid valve Evi faulty or disconnected Water pump (Pvb) faulty or disconnected Loading circuit blocked Break in wiring CPU board faulty Level sensor dirty or faulty	Check connection to the water supply (> 2 bar) (in the case of suction from a water tank, use of an auxiliary pump) Check/replace the Evi solenoid valve. Check/replace water pump (Pvb) Check/replace pressure reducer (Rp) Check flowmeter (DV) Check wiring Check/replace level probe Replace CPU board

9. Diagnostics messages

FAULT CODE	DESCRIPTION	POSSIBLE CAUSES	ACTIONS
060	Service boiler level signal anomaly.	Electrical disturbance in earth connection.	Check earthing and machine insulation.
066	Incorrect dose during coffee dispensing	Water circuit supply interrupted Excessive ground coffee dose Ground coffee too fine EvG solenoid valve blocked Solenoid valve Evi faulty or disconnected Water pump (Pvb) faulty or disconnected Water pump (Pvb) bypass faulty Expansion valve (Ve) faulty Flowmeter faulty. Filter/sprayhead blocked CPU board faulty	Check connection to the water supply (> 2 bar) (in the case of suction from a water tank, use of an auxiliary pump) Check ground coffee dose and grind level Check/clean coffee filter and sprayhead Check/clean EvG solenoid valve Check/replace the Evi solenoid valve. Check/replace water pump (Pvb) Check flowmeter (DV) reading increase during dispensing Check replacement of expansion valve (Ve) Check/replace water pump (Pvb) bypass Replace flowmeter Check wiring Replace CPU board
067	Irregular flow from delivery spout during coffee group wash	Water circuit supply interrupted Filter/sprayhead blocked Coffee circuit blocked EvG solenoid valve blocked Solenoid valve Evi faulty or disconnected Water pump (Pvb) faulty or disconnected Water pump (Pvb) bypass faulty Expansion valve (Ve) faulty Flowmeter faulty.	Check connection to the water supply (> 2 bar) (in the case of suction from a water tank, use of an auxiliary pump) Check/clean coffee filter and sprayhead Check/clean coffee circuit Check/clean EvG solenoid valve Check/replace the Evi solenoid valve. Check/replace water pump (Pvb) Check replacement of expansion valve (Ve) Check/replace water pump (Pvb) bypass Replace flowmeter Check wiring Replace CPU board.

FAULT CODE	DESCRIPTION	POSSIBLE CAUSES	ACTIONS
088	NVM EEPROM data integrity error	Data integrity error in non-volatile memory of the slave CPU.	 Turn the machine off and on again. If the problem error persists, replace the slave CPU board
089	NVM RAM data integrity error.	Data integrity error in non- volatile RAM memory of the master CPU.	Turn the machine off and on again. If the error persists, replace the master control panel.
092	Request water softener resin regeneration.		Softener maintenance.
093	Need to replace water filter.		Replace the water-softner filter.
094	Enable boiler safety valve test.	Access was made with a specific USB key to enable the service boiler safety valve test function.	
095	Event logged each time a Master authorisation is performed.		
096	Maintenance due alarm.		Carry out ordinary maintenance.
097	Reset password.	Action desired by the user by entering the relevant code.	
098	Malfunction archive reset.	Initialisation malfunction history structure	

DESCRIPTION	POSSIBLE CAUSES	ACTIONS
Loading standard data.	Load factory settings requested.	If the error persists, replace the master control panel.
Database integrity error	Data integrity error in the database of the master CPU.	 Turn the machine off and on again. Check interconnection wiring between the CPU boards. If the error persists, replace the master control panel.
Serial port to slave CPU malfunction.	Malfunction of the serial communication port with the slave CPU.	
Touchscreen fault. The touchscreen does not respond.	• Electrical disturbances.	When the problem occurs, the machine immediately carries out a reset procedure to return to normal operation. • Check earthing and machine insulation.
Restore NVM CPU master parameters.	Power supply anomalies. Electrical disturbances.	When the problem occurs, the machine immediately carries out a reset procedure to return to normal operation. • If necessary, check earthing and machine insulation.
Event logged each time the maintenance check is deactivated.		
Opening master panel.	Open panel indicator.	
	Loading standard data. Database integrity error Serial port to slave CPU malfunction. Touchscreen fault. The touchscreen does not respond. Restore NVM CPU master parameters. Event logged each time the maintenance check is deactivated.	Loading standard data. Database integrity error Data integrity error in the database of the master CPU. Serial port to slave CPU malfunction. Malfunction of the serial communication port with the slave CPU. Touchscreen fault. The touchscreen does not respond. Restore NVM CPU master parameters. Power supply anomalies. Electrical disturbances. Power supply anomalies. Electrical disturbances.