Alarm Codes

i11 code: during dynamic filling

- Acoustic signal and visual alarm, depending on the appliance customization; the program can be restarted.
- The water level defined is not reached within the time limit set.
- The time limit set starts when the fill solenoid valve is opened.
- The time limit set is reset when the fill solenoid valve is closed.
- The water will first be drained before an error is displayed to the user.
- Time limit set: Normal 120 sec; Test cycle = 60 sec (times could differ as they are defined in the washing cycle specifications)

- **i20 Code - family : Draining Problem**

- **i20** code : Fails to drain

- Acoustic signal and visual alarm, depending on the appliance customization; the program can be restarted.
- The level switch restore point is not reached within the time limit set.
- The time limit set starts when the drain pump is activated.
- The time limit set is reset when the drain pump stops normally.
- Time limit set: Normal 90 sec; Test cycle = 60 sec

- **i30 Codes - family : Aqua Control**

- **i30** code: aqua control error detected

- The error is set if there is water detected in the bottom tray, or the drain pump is disconnected or the winding in the pump is open circuit.
- Acoustic signal and visual alarm, depending on the appliance customization; the program is restarted automatically in this alarm condition.
- If this alarm condition occurs, the drain pump is activated.
- Time limit set: 10 sec.

- **i40 Codes - family : Analogue pressure sensor problem**

- **i41** code: No pressure sensor signal

- The error is set if the sensor signal is lost for more than 2,5s.
- Abort program and display error.

- **i42** code: Calibration invalid, pressure signal too noisy

- The warning is set if the sensor signal is not stable enough for calibration or if the signal is out of range for an empty sump.
- The signal noise level for calibration is defined in MCF.

- **i43** code: Pressure sensor signal too high

- The error is set if the sensor signal is out of range, signal high for more than 2,5 s.
- The signal range is defined in MCF.
- Abort program and display error.

- **i44** code: Pressure sensor signal too low

- The error is set if the sensor signal is out of range, signal low for more than 2,5 s.
- The signal range is defined in MCF.
- Abort program and display error.

- **i45** code: Calibration invalid, pressure signal too low

- The warning is set if the sensor signal is out of range for an empty dw, signal low.
- The signal range for calibration is defined in MCF.

Alarm Codes

- **i46** code: Calibration invalid, pressure signal too high
- The warning is set if the sensor signal is out of range for an empty dw, signal high.
- The signal range for calibration is defined in MCF.

- **i50 Code - family : Washing Motor Problem**

- **i51** code: Asynchronous motor problem
- Acoustic signal and visual alarm, depending on the appliance customisation; the programme is suspended.
- The washing pump runs without being activated by the software, the cause is a short-circuit.
- The heating element is not activated.
- If the alarm occurs, the fill solenoid valve is activated up to the level pressure switch tripping point, then the cycle is suspended.
- Time limit set: 8 sec.

- **i52** code: WP BLDC motor – abnormal high current detected
- Hardware supervising – will be set when abnormal high current of about 1.3 amps are detected.

- **i53** code: WP BLDC motor – over current
- Alarm will be set when the current is detected higher than the max allowed current of 1.0 A

- **i54** code: WP will not follow / rotor is locked
- Alarm will be set when the motor locked condition is detected during start of motor and also during the running motor; reasons can be dirt, too high load, mechanical problems on impeller.

- **i55** code: DCLink undervoltage
- Alarm is set when the Vbat voltage on motorcontrolboard will be detected lower than 225 VDC and will be cleared if voltage is greater than 260 V DC

- **i56** code: DCLink overvoltage
- Alarm is set when the DCLink voltage on power controlboard is greater than 392 VDC and will be cleared when dropping under 390 VDC.

- **i57** code: MCB Vbat voltage plausability / ADC Fault

This code has different meaning depending on platform.

  - DIVA 2 MCB Vbat voltage plausability

- Alarm will be set if Vbat is detected higher than 440V or lower than 215V.
  rem.: with Vbat voltage the calculation of the motor resistance is executed.

  - PB100 Drain pump ADC fault

- Alarm will be set if the difference between current samples are less than 0.03363 [A] for 0.5 s.

- **i58** code: WP motor plug connection
- Alarm will be set if motor connection is detected wrong based on motor currents measurements.
  If currents are inside the thresholds (+/- 21 mA); debounce is set to 1.5 seconds.
- This code is also possible if a phase is detached or if a winding inside the motor is broken.

Alarm Codes

- **i59** code: WP current read ADC - fault

- Alarm is set if there is detected a fault in the current reading chain on MCB; incl. ADC conversion.
- It´s verified by the current sum of the three motor phases which should be nearly zero; if the sum is higher than 40mA for longer than 300 ms than the assumption is that something is wrong.

- **i5A** code: Over temp or Overload

  This code has different meaning depending on platform.

  - DIVA2 specific

- Internal warning is set when the internal calculations based on the measured currents lets expect that the temperature are out of standard limits (200℃ – with 40℃ margin due to measurement and calculation tolerances).
- The threshold value for the warning is 200 – 70 (max. ambient temperature inside the dishwasher) - 10 (activation margin) = 120℃ ➔ warning level is given.
- If the warning is set, than the motor is stopped and a new winding resistance calculation is performed. In this way the real temperature can be calculated – temp. calculation is based on ref. resistance of motor windings at 22℃.

- the alarm is set if the value is greater than the threshold 178℃ (200 – 22).
rem.: the alarm is reset by MCB after verification procedure with baseboard.

  - PB100 specific

- Alarm is set if load is 0.68 A for 10 s for the wash pump or 0.55 A for 10 s for the drain pump.

- **i5B (i5H)** code: WP/DP current plausibility

- Alarm is set if currents are not changing within 2.5 s with less than 0.0275 A for WP.
- Alarm is set if currents are not changing within 0.5 s with less than 0.03363 A for DP.
- “B” may be displayed as “H” in the 7-segment display

- **i5C** code: DP BLDC motor – abnormal high current detected

- Hardware supervising – will be set when abnormal high current of about 0.7 amps are detected.

- **i5D** code: DP BLDC motor – high current SW

- Alarm will be set when the current is detected higher than the max allowed current of 0.550 A

- **i5E** code: DP will not follow / rotor is locked

- Alarm will be set when the motor blocked condition is detected during start of motor and also during the running motor; reasons can be dirt, too high load, mechanical problems on impeller.

- **i5F** code: DP motor plug connection

- Alarm will be set if motor connection is detected wrong based on motor currents measurements. If currents are inside the thresholds (+/- 22 mA); debounce is set to 1.6 seconds
- This code is also possible if a phase is detached or if a winding inside the motor is broken.

Alarm Codes

- **i60 Code - family : Heating Element Problem**

  This family has different meaning depending on PB and PB firmware releases.

  Past production specific

  This range includes the following PBs and PB firmware releases:
  - Diva & Diva2
  - PB150 with P150R100
  - PB200
  - PB300

- **i60** code: heating

- The alarm is stored and displayed only in service mode; the washing programme continues without the activation of the heating element.
- During the heating phases, the rise in temperature is monitored with an update every 3 min.
- Within these 3 minutes, the temperature must rise by at least 1 °C.

- **i61** code: heating over temperature

- If water temperature is detected higher than 78°C, cycle is stopped. (rem.: origin of this alarm is problem on visi plastic doors)

- **i62** code: relay broken

- Alarm is stored and displayed only in service mode; the washing programme continues without the activation of the heating element.
- One or both relays are broken and power board needs to be replaced.

Current production specific

This range includes the following PBs and PB firmware releases:
- PB100
- PB101
- PB150 with P150R110 or later

A heating alarm is NOT always caused by failure of heater. Service technicians should following the following sequence to avoid unnecessarily heater exchange.
Suggestion of general fault diagnosis sequence:

1) Inspect for loose connectors or damage of isolation harness and connector on PB and heater for loose connectors or damage of isolation.
2) Check the heater element by unplugging heater connector on PB and measuring heater resistance to be valid. Exchange heater only if not.
3) Check current leakage by plugging in heater connector on PB and measuring resistance between one heater phase and protective earth to be > 500kOhm. Exchange heater only if not.
4) Check the relays on the power board by measuring resistance between one heater phase and the two mains power phases to be >10kOhm. If not broken relay on power board, replace heater.
5) Erase alarms using LEDTest, run LineTest. If the same alarm appear again, exchange power board.

- **i63** code: heating system error 1

- The alarm is stored and displayed only in service mode; the washing program continues running
- The causes in the order of probability:
  1) Broken heater
  2) Damaged harness or connectors

Alarm Codes

- **i64** code: heater restorable

- The alarm is stored and displayed only in service mode; the washing program continues running
- The alarm is caused by over temperature of heater
- The is turned off for at least 1 minute and then restored within 10 minutes as the thermocouple cools off
- The heater needs de-scaling
- Do not exchange heater

- **i65** code: heater broken

- The alarm is stored and displayed only in service mode; the washing program continues running without heating

- **i66** code: heating system error 2

- The alarm is stored and displayed only in service mode; the washing program continues running
- The causes in the order of probability:
  3) Welded/stuck neutral relay on power board
  4) Damaged harness or connectors

- **i67**code: heating system error 3

- The alarm is stored and displayed only in service mode; the washing program continues running
- The causes in the order of probability:
  5) Welded/stuck line relay on power board
  6) Damaged harness or connectors

- **i69** code: water temperature too high

- The alarm is caused by the water temperature is detected > 78ºC
- The wash program is terminated
- Do not exchange heater or power board

- **i6A** code: NTC on heater element value out of range

- The alarm is stored and displayed only in service mode; the washing program continues running
- The NTC sensor on heater element is broken

- **i6B(i6H)** code: heat timeout reaches

- The alarm is stored and displayed only in service mode; the washing program continues running
- Heat element will be turned off and restarted in the next heating phase
- The heater needs de-scaling
- Do not exchange heater

- **i6C** code: Heat exchange efficiency low

- The efficiency of heat exchange between heater and water is low
- The washing program continues running
- The alarm is stored. Depends on the personalisation implementation, it is displayed only in service mode, report to user as a machine care hard alert or displayed at the end of program as an acknowledgeable alarm.
- The heater needs de-scaling
- Do not exchange heater
-

- **i70 Code - family : Thermistor problem**

- **i70** code: NTC sensor value out of range

- The alarm is stored and displayed only in service mode; the washing program continues without the activation of the heating element.
- Monitoring starts immediately after the program has been started.
- The voltage measured at the ends of the NTC must be between 0.04 and 4.7 V.
- Time limit set: 10 sec.

Alarm Codes

- **i80 Code - family : Auto Door Opener**

- **i80** code: Auto door opener malfunction
- The error is set if the auto door opener sense signal indicates that it has left the normal position unintentionally while running a cycle, or
- If the auto door opener times out without reaching starting position three times while retracting.
- Timeouts are defined in MCF
- Abort program and display error

- **i81** code: Auto door opener warning
- The warning is set if the auto door opener sense signal indicates that it has left the normal position unintentionally, or
- If the auto door opener times out while opening the door and does not leave the starting position, or
- If the auto door opener reverses direction while opening the door and reach the inside position before expected (door blocked), or
- If the auto door opener times out while retracting.
- Timeouts are defined in MCF
- The warning is not displayed, the cycle continues

- **i82** code: Water Reuse valve warning
- This warning is set if the Water Reuse valve is detected not opened during the water tank conditioning, or
- If the Water Reuse valve is detected not closed in the beginning of the cold rinse phase in every Elabel or intensive Care cycle.
- The warning is not displayed, the cycle continues.

- **i90 Code - family : Configuration Problem**

- **i91** code: checksum MCF
- No washing program start is possible, can be resolved by turning the appliance off and back on again.
- The display board does not satisfy the identification requests of the main board.

- **i92** code: checksum CCF
- The alarm is signalled if the configuration control of the washing cycles provided erroneous results.

- **i93** code: checksum UIDATA
- The alarm is signalled if the configuration control of the UI configuration data provided erroneous results.

- **i94** code: UIDATA version mismatch
- The alarm is signalled if the UIDATA provided in configuration file mismatches the attached UI board.

- **i95** code: UIDATA checksum mismatch
- The alarm is signalled if the UIDATA checksum type provided in configuration file mismatches with the attached UI board.

Alarm Codes

- **iB0 (iH0) Code - family : Sensor Problem**

Note: "B" may be displayed as "H" in the 7-segment display

This family has different meaning depending on PB and PB firmware releases.

Past production specific

This range includes the following PBs and PB firmware releases:
- Diva & Diva2
- PB100 before P100R230 (Excluding P100R230)
- PB200
- PB300

- **iB0 (iH0)** code: turbidity sensor
- The alarm is set if the calibration procedure is not completed after 15 sec.
- The washing program will run as though the dirt value to be considered is high.

Current production specific

This range includes the following PBs and PB firmware releases:
- PB100 after P100R230 (including P100R230)
- PB101
- PB150

- **iB0 (iH0)** code: turbidity sensor unknown calibration error
- The alarm is set if an unknown calibration error has occurred – the cause of the error is not covered by iB2, iB3 and iB4.
- The washing program will run as though the dirt value to be considered is high.

- **iB1 (iH1)** code: turbidity sensor error
- The alarm is set if lose contact with the turbidity sensor, could be because the connection to the sensor is lost.
- The washing program will run as though the dirt value to be considered is high.

- **iB2 (iH2)** code: turbidity sensor not enough power calibration error
- The alarm is set if there is not enough power to drive it to its intended output value, could be because the sensor is too dirty.
- The washing program will run as though the dirt value to be considered is high.

- **iB3 (iH3)** code: turbidity sensor out of range calibration error
- The alarm is set if we get invalid sensor reading during the calibration, could be because the sensor is broken.
- The washing program will run as though the dirt value to be considered is high.

- **iB4 (iH4)** code: turbidity sensor too noisy calibration error
- The alarm is set if the turbidity readings are too noisy during calibration, could be because of dirt or air bubbles disturbing the turbidity sensor during calibration.
- The washing program will run as though the dirt value to be considered is high.

Alarm Codes

- **iC0 Code - family : Communication Problem**

- **iC0** code: user interface communication
- The error signal is displayed if the communication system does not recognize any display board.

- **iC1** code: MACS bus communication
- After three attempts to establish communication, an error is signalled in the hardware control

- **iC2** Code: ADSI communication
- The washing programme is suspended but it can be restarted if the alarm conditions no longer apply

- **iC3** Code: Communication between boards
- The alarm is signaled if the communication between the power board and the motor control board does not start.
- Acoustic signal and visual alarm, depending on the appliance customization; the washing program is restarted automatically if the error conditions no longer apply.

- **iD0 Code - family : Tacho Problem**

- **iD0** code: no signal
- The alarm is stored and displayed only in service mode; there is a new control for each new phase.
- If the washing pump is activated but there is no tacho signal for 30 sec then the motor speed is set to full speed and the heating element is not activated.

- **iD1** code: no signal
- The alarm is stored and displayed only in service mode.
- If the washing pump is activated but there is no tacho signal for 5 sec then the heating element is temporarily deactivated. If after another 30 sec there is still no signal the appliance displays an error code iD0.

- **iE0 – family: flow controller problem**

- **iE0** code: flow control position (spray arm level)
- The alarm is stored and displayed only in service mode; the flow controller will try to recover for each new positioning request.
- The alarm is signalled if the desired position of the flow controller is not reached within a certain time:
    - If the flow controller is not moving at all or if the sensor is broken or shorted, the timeout is 12 seconds.
    - If the flow controller is indeed moving but cannot find the position, the overall timeout is up to about 110 seconds.
- If the alarm is signalled, then heating element is deactivated as long as the alarm is active.

- **iF0 Code - family : water level problem**

- **iF0** Code : overfilling detected
- The alarm is stored and displayed only in service mode; the program continues.
- The error situation is recognized when the total filling times exceed the limits.
- The times are accumulated at each subsequent filling and reset by the cycle package. The subsequent fillings are ignored before the time is reset.

Alarm Codes

- **iF1** code: high water level
- The alarm is stored and displayed only in service mode.
- The alarm condition is recognized if the safety water level is exceeded for more than 4 sec.
- A drain phase is activated until the water level drops below the safety level.
- The washing program continues only if this condition is achieved

Alarm Codes

Service Code Family (Platform specific)	Reason	Type	User visible	User indication	failure code read	Action in case of failure happens		User Indication before March 2017
00	Zero cross or low voltage	stop	No	**Nothing**	**i00**	User interface off & remaining time adaptation off		Nothing
10	Fill_D – static fill level	ack	Yes	**i10**	**i10**	Cycle pause and request to user to confirm to re-start		i10
	Fill – re-fill level	ack	Yes	**i11**	**i11**	Cycle pause and request to user to confirm to restart		i10
20	Draining problem	ack	Yes	**i20**	**i20**	Cycle pause and request to user to confirm to re-start		i20
30	Aqua Control	stop	Yes	**i30**	**i30**	Cycle stop and continuous automatically after problem solved – rta off		i30
40	*Analogue pressure no signal*	abort	Yes	**ii41**	**i41**	Cycle will be terminated, electronic stop after on/off or failure solved electronic will switched to reset on-condition		i40
	Pressure Sensor Calibration signal too noisy	warning	No	**Nothing**	**i42**	Old calibration will be used, cycle continues		Nothing
	Analogue pressure signal too high	abort	Yes	**i43**	**i43**	Cycle will be terminated, electronic stop after on/off or failure solved electronic will switched to reset on-condition		i40
	Analogue pressure signal too low	abort	Yes	**i44**	**i44**	Cycle will be terminated, electronic stop after on/off or failure solved electronic will switched to reset on-condition		i40
	Pressure Sensor Calibration signal too low	warning	No	**Nothing**	**i45**	Old calibration will be used, cycle continues		Nothing
	Pressure Sensor Calibration signal too high	warning	No	**Nothing**	**i46**	Old calibration will be used, cycle continues		Nothing
50	AC Wash pump tsc	abort	Yes	**i51**	**i51**	Cycle will be terminated and electronic switched to reset on-condition		i50
	WP BLDC over current HW	abort	Yes	**i52**	**i52**	Cycle will be terminated and electronic switched to reset on-condition		i50
	WP BLDC over current SW	abort	Yes	**i53**	**i53**	Cycle will be terminated and electronic switched to reset on-condition		i50
	WP BLDC motor not following	abort	Yes	**i54**	**i54**	Cycle will be terminated and electronic switched to reset on-condition		i50
	BLDC under voltage	stop	Yes	**i55**	**i55**	Cycle stop and continuous automatically after probl. Solved – rta off		i50
	BLDC over voltage	stop	Yes	**i56**	**i56**	Cycle stop and continuous automatically after probl. Solved – rta off		i50
PB100 only	DP ADC fault	abort	Yes	**i57**	**i57**	Cycle will be terminated and electronic switched to reset on-condition		i50
Please OBSERVE that i57 has different meaning depending on platform								
DIVA2 only	DCLink plausibility error	abort	Yes	**i57**	**i57**	Cycle will be terminated and electronic switched to reset on-condition		i50
	WP BLDC motor not connected	abort	Yes	**i58**	**i58**	Cycle will be terminated and electronic switched to reset on-condition		i50
	WP BLDC ADC fault	abort	Yes	**i59**	**i59**	Cycle will be terminated and electronic switched to reset on-condition		i50
DIVA2 only	WP BLDC over temp	stop	Yes	**i5A**	**i5A**	Cycle stop and continuous automatically after problem solved – rta off		i50
Please OBSERVE that i5A has different meaning depending on platform								
PB100 only	WP/DP BLDC overload	abort	Yes	**i5A**	**i5A**	Cycle will be terminated and electronic switched to reset on-condition		i50
PB100 only	WP/DP current plausibility	abort	Yes	**i5b (i5H)**	**i5b (i5H)**	Cycle will be terminated and electronic switched to reset on-condition		i50
PB100 only	DP BLDC over current HW	abort	Yes	**i5C**	**i5C**	Cycle will be terminated and electronic switched to reset on-condition		i50
PB100 only	DP BLDC over current SW	abort	Yes	**i5d**	**i5d**	Cycle will be terminated and electronic switched to reset on-condition		i50
PB100 only	DP BLDC motor not following	abort	Yes	**i5E**	**i5E**	Cycle will be terminated and electronic switched to reset on-condition		i50
PB100 only	DP BLDC motor not connected	abort	Yes	**i5F**	**i5F**	Cycle will be terminated and electronic switched to reset on-condition		i50

Alarm Codes

Service Code Family (Platform specific)	Reason	Type	User visible	User indication	failure code read	Action in case of failure happens		User Indication before March 2017
60	***Please OBSERVE that i6x family has different meaning depending on PBs and PB firmware versions***							
DIVA, DIVA2, PB150(R100), PB200, PB300	Heating problem	warning	No	**Nothing**	**i60**	Heating element will be switched off for the rest of the cycle		Nothing
DIVA, DIVA2, PB150(R100), PB200, PB300	Heating – over temperature	abort	Yes	**i61**	**i61**	Cycle will be terminated and electronic switched to reset on-condition		i60
DIVA, DIVA2, PB150(R100), PB200, PB300	Heater relay problems	warning	No	**Nothing**	**i62**	Heating element will be switched off for the rest of the cycle		Nothing
PB100, PB101, PB150(R110 or later)	Heating system error 1	warning	No	**Nothing**	**i63**	Cycle continues running to the end Causes in the order of probability: broken heater damaged harness/connectors		Nothing
PB100, PB101, PB150(R110 or later)	Heater restorable	warning	No	**Nothing**	**i64**	Cycle continues running to the end Heater is turned off for 1 minute, to be self-restored Heater is OK		Nothing
PB100, PB101, PB150(R110 or later)	Heater broken	warning	No	**Nothing**	**i65**	Cycle continues running to the end without heating		Nothing
PB100, PB101, PB150(R110 or later)	heating system error 2	warning	No	**Nothing**	**i66**	Cycle continues running to the end Causes in the order of probability: stuck neutral relay on power board damaged harness/connectors		Nothing
PB100, PB101, PB150(R110 or later)	heating system error 3	warning	No	**Nothing**	**i67**	Cycle continues running to the end Causes in the order of probability: stuck line relay on power board damaged harness/connectors		Nothing
PB100, PB101, PB150(R110 or later)	Water temperature is too high	abort	Yes	**i69**	**i69**	Water temperature detected > 78C Cycle will be terminated and electronic switched to reset on-condition Heater is OK		Nothing
PB100, PB101, PB150(R110 or later)	NTC on heat element value out of range	warning	No	**Nothing**	**i6A**	Cycle continues running Heater will be deactivated for 5 minutes and recover if error condition disappears		Nothing
PB100, PB101, PB150(R110 or later)	Heat timeout reached	warning	No	**Nothing**	**i6b (i6H)**	Cycle continues running Heater is switched off and restart in the next heating phase Heater is OK		Nothing
PB101, PB150(R110 or later)	Heat exchange efficiency low	Ack / warning	Yes / No	**i6C**	**i6C**	The efficiency of heat exchange between heater and water is low Heater may need de-scaling Heater is OK		Nothing
70	NTC problem	warning	No	**Nothing**	**i70**	Heating element will be switched off for the rest of the cycle		Nothing

Alarm Codes

Service Code Family (Platform specific)	Reason	Type	User visible	User indication	failure code read	Action in case of failure happens		User Indication before March 2017
80	Auto Door Opener malfunction	abort	Yes	**i80**	**i80**	Cycle will be terminated and electronic switched to reset on-condition		i80
	Auto Door Opener timeout warning	warning	No	**Nothing**	**i81**	Auto Door Opener tries to recover. If that fails, the cycle continues without auto door opener		Nothing
	Water Reuse Valve warning	warning	No	**Nothing**	**i82**	Cycle continues regardless the error		Nothing
90	Checksum mcf	inactive	No	**Nothing**	**i91**	Electronic functionality blocked – all off		Nothing
	Checksum ccf	inactive	No	**Nothing**	**i92**	Electronic functionality blocked – all off		Nothing
	Checksum UIdata	inactive	No	**Nothing**	**i93**	Electronic functionality blocked – all off		Nothing
	UI data version mismatch	warning	No	**Nothing**	**i94**	No update of UI configuration data is possible		Nothing
	UI data checksum mismatch	warning	No	**Nothing**	**i95**	No update of UI configuration data is possible		Nothing
B0 (H0)	***Please OBSERVE that iBx family has different meaning depending on PBs and PB firmware versions***							
BDIVA2, PB100 before P100R230, PB200 and PB300	Turbidity sensor problem	warning	No	**Nothing**	**ib0 (iH0)**	Turbidity flag set – cycle continuous		Nothing
BPB100 after P100R230, PB101 and PB150	Turbidity sensor calibration unknown error	warning	No	**Nothing**	**ib0 (iH0)**	Cycle continues as though the dirt value to be considered is high		Nothing
PB100 after P100R230, PB101 and PB150	lose contact with the turbidity sensor	warning	No	**Nothing**	**ib1 (iH1)**	Cycle continues as though the dirt value to be considered is high		Nothing
PB100 after P100R230, PB101 and PB150	sensor not enough power calibration	warning	No	**Nothing**	**ib2 (iH2)**	Cycle continues as though the dirt value to be considered is high		Nothing
PB100 after P100R230, PB101 and PB150	sensor out of range calibration	warning	No	**Nothing**	**ib3 (iH3)**	Cycle continues as though the dirt value to be considered is high		Nothing
PB100 after P100R230, PB101 and PB150	sensor too noisy calibration	warning	No	**Nothing**	**ib4 (iH4)**	Cycle continues as though the dirt value to be considered is high		Nothing
C0	No user interface detected	stop	No	**Nothing**	**ic0**	Cycle stop and continuous automatic if problem solved		Nothing
	Macs – bus communication	stop	Yes	**iC1**	**ic1**	Macs low level communication - Cycle stop and continuous automatic if problem solved		iC0
	Adsi – communication to ui	stop	Yes	**iC2**	**ic2**	Cycle stop and continuous automatic if problem solved		iC0
	Motor control board comm	stop	Yes	**iC3**	**ic3**	Command level communication - Cycle stop and continuous automatic if problem solved		iC0
D0	Tacho problem	warning	No	**Nothing**	**id0**	Heating off up to end of cycle – motor to full speed – rta off		Nothing
	Tacho critical	warning	No	**Nothing**	**id1**	Heating off up to problem is solved – full speed – rta off		Nothing
E0	Flow control positioning	warning	No	**Nothing**	**iE0**	Heating element will be switched off		Nothing
F0	Sw fill limit reached	Warning	No	**Nothing**	**iF0**	No further water load up to timer reset – rta off – cycle continues up to end of cycle – is power fail saved		Nothing
	SW Safety level reached	stop	Yes	**iF1**	**iF1**	Cycle stop and continuous automatic if problem solved		iF0