



5. Troubleshooting list and error messages - Electronics

The last 10 error messages are stored in the service programme r38. In this service programme you can query the error messages with date and time (by pressing Mr. C) and delete them in the service programme d01.

OEB	OES	OGB	OGS	Error-message	Error description	possible cause or remedy
5.1 Error messages						
✓		✓		E01.0	Not enough water in the steam generator (water level could not be reached within 3 minutes)	<ul style="list-style-type: none"> • Tap closed • Soft water connection not connected to water supply • Dirt filter in the solenoid valve or in the mains water connection dirty • Water level sensor calcified (insulated) or defective • Through the use of non-original CONVOTHERM cleaners, foaming in the steam generator and insulating film on double level sensor • Filling gap in the steam generator is closed by calcium deposits • Water conductance too low through softening • Solenoid valve Y3 faulty • Injection nozzle in non-return device blocked • Steam generator calcified • Contact problems between steam generator and housing (earth connection) • Contact problems between water level sensor and terminal strip X15 of the control module
	✓		✓	E01.0	Not enough water (water pressure below 0.5 bar 3 seconds after valve switched through)	<ul style="list-style-type: none"> • Tap closed • Solenoid valve Y4 faulty • Pressure switch S1 defective • Dirt filter in the solenoid valve or in the mains water connection dirty • T-piece for pressure switch / manometer or injection nozzle in water supply blocked / dirty → clean with needle • Contact problems between pressure switch and terminal strip X15 of the control module • Appliance not connected to soft water and therefore inlet calcified



OEB	OES	OGB	OGS	Error-message	Error description	possible cause or remedy
✓	✓	✓	✓	E02.0	Excessive temperature in the wiring space At a temperature > 45°C the auxiliary fan is switched on. Error threshold at 80°C Fan runs permanently in the OGB and OGS.	<ul style="list-style-type: none"> Vent slits blocked by an inadequate space between appliance and wall Air supply blocked Minimum distance to heat sources not observed + and - of the 12 V auxiliary fan reversed
✓	✓			E03.0-0-0	Fan malfunction (Excessive temperature in the motor winding) → Thermoprotection contact has triggered (not with the OES 6.06)	<ul style="list-style-type: none"> Fan motor has excessive temperature in the winding <ol style="list-style-type: none"> One phase is missing from the power connection Fan motor defective One phase is not connected through from the contactor Miniature fuse F10 (6.3 A or 10 A for floor models) has tripped Thermoprotection contact in the motor winding (bimetal) defective or interrupted
		✓	✓	E03.1-xxx-yyy	Temperature of the fan motor 1 (top) too high	<ul style="list-style-type: none"> Fan motor has excessive temperature in the winding (over 165°C) <ol style="list-style-type: none"> One phase is missing from the power connection Fan motor defective One phase is not connected through from the contactor Miniature fuse F10 (6.3 A or 10 A for floor models) has tripped Thermoprotection contact in the motor winding (bimetal) defective or interrupted For an explanation of the parameter xxx-yyy-zzz see the end of 5.1 → page 9
		✓	✓	E03.2-xxx-yyy	The speed sensor of the fan motor 1 (top) is no longer reporting a speed	<ul style="list-style-type: none"> Motor speed not reached Speed sensor on the motor defective Mains voltage supply has faults, possibly also undervoltage Frequency converter defective FC dirty For an explanation of the parameter xxx-yyy-zzz see the end of 5.1 → page 9
		✓	✓	E03.4-xxx-yyy	Error frequency converter 1 (for top motor)	<ul style="list-style-type: none"> Mains voltage supply has faults, possibly also undervoltage Frequency converter defective FC dirty Wiring space temp. too high (but E02 is not being displayed yet → check wiring space cooling)



OEB	OES	OGB	OGS	Error-message	Error description	possible cause or remedy
						<ul style="list-style-type: none"> • Check operation of auxiliary fan • Fan blocked or wrong motor • Motor defective • FC defective • For an explanation of the parameter xxx-yyy-zzz see the end of 5.1 → page 9
		✓	✓	E03.8-xxx-yyy	Temperature of the fan motor 2 (bottom) too high	<ul style="list-style-type: none"> • Fan motor has excessive temperature in the winding (over 165°C) <ul style="list-style-type: none"> a) One phase is missing from the power connection b) Fan motor defective c) One phase is not connected through from the contactor d) Miniature fuse F10 (6.3 A or 10 A for floor models) has tripped e) Thermoprotection contact in the motor winding (bimetal) defective or interrupted • For an explanation of the parameter xxx-yyy-zzz see the end of 5.1 → page 9
		✓	✓	E03.16-xxx-yyy	The speed sensor of the fan motor 2 (bottom) is no longer reporting a speed	<ul style="list-style-type: none"> • Motor speed not reached • Speed sensor on the motor defective • Mains voltage supply has faults, possibly also undervoltage • Frequency converter defective • FC dirty • For an explanation of the parameter xxx-yyy-zzz see the end of 5.1 → page 9
		✓	✓	E03.32-xxx-yyy	Error frequency converter 2 (for top motor)	<ul style="list-style-type: none"> • Mains voltage supply has faults, possibly also undervoltage • Frequency converter defective • FC dirty • Wiring space temp. too high (but E02 is not being displayed yet → Check wiring space cooling) • Check operation of auxiliary fan • Fan blocked or wrong motor • Motor defective • FC defective • For an explanation of the parameter xxx-yyy-zzz see the end of 5.1 → page 9
		✓	✓	E03.128	Communication failure between CM and GM or between GM and FC	<ul style="list-style-type: none"> • Check cable connection GM too FC • FC defective • GM defective • For an explanation of the parameter xxx-yyy-zzz see the end of 5.1 → page 9



OEB	OES	OGB	OGS	Error-message	Error description	possible cause or remedy
		✓	✓	E03.zzz -xxx-yyy	Other error variants	<ul style="list-style-type: none"> For an explanation of the parameter xxx-yyy-zzz see the end of 5.1 → page 9
		✓	✓	E03.1	Fan malfunction (Excessive temperature in the motor winding) → Thermoprotection contact has triggered	<ul style="list-style-type: none"> Fan motor has excessive temperature in the winding (over 165°C) <ul style="list-style-type: none"> a) One phase is missing from the power connection b) Fan motor defective c) One phase is not connected through from the contactor d) Miniature fuse F10 (6.3 A or 10 A for floor models) has tripped e) Thermoprotection contact in the motor winding (bimetal) defective or interrupted Burner speed (fan) not reached Motor speed not reached Speed sensor on the motor defective Frequency converter defective (with single phase) Frequency converter (FC) (=all 1 NPE appliances) <ul style="list-style-type: none"> - Old hardware FC (above all appliances before 1.10.04 without gas module!) - Replace FC (5014001) (current version HW 26.11.04 / SW 1.2!!) - Update CM and OM software to the current version (Install 3.14 or above)! Wiring space temp. too high (but E02 is not being displayed yet → Check wiring space cooling)
✓	✓	✓	✓	E04.0	Auxiliary fan fault Motor current too high etc.: threshold of 1.5A (V1-V2)	<ul style="list-style-type: none"> Auxiliary fan defective Auxiliary fan wiring interrupted Auxiliary fan blocked
		✓	✓	E05.0	No gas (after 2 ignition attempts no confirmed gas flame)	<ul style="list-style-type: none"> No gas or fault in burner system Glow igniter defective (measure current approx. 1.5A) Glow insert displaced in metal housing (replace glow igniter) Ionisation electrode defective <ul style="list-style-type: none"> - Short circuit monitoring electrode (observe ignition of the burner in the start phase; if flame was present: monitoring circuit is the cause!) Watch out for short circuit between cable and housing in particular! - Burner stocking braid has a short circuit to earth to the ionisation electrode - Ionisation electrode cable is resting on earth (in the burner or on motor cover) Air in gas pipe Gas tap closed



OEB	OES	OGB	OGS	Error-message	Error description	possible cause or remedy
						<ul style="list-style-type: none"> Input undervoltage (< 195 V) (Gerät über Kabeltrommel angeschlossen) OGS/OGB 10.20/12.20/20.20 (and 20.10 only SG) starts poorly/does not start after glow electrode replacement <ul style="list-style-type: none"> - Wrong glow igniter fitted: short instead of long; correct is 4018001 = long (Wrong is 4018002 = short) STL has triggered (Test passage) Burner fan is not running (visual inspection or in speed actual value in the service programmes) Interruption in monitoring electrode wiring
		✓	✓	E05.1	No gas	<ul style="list-style-type: none"> B7.1 Safety temperature limiter for hot air has triggered (Test passage) No gas at the burner HA1 (Hot air1) In addition same causes possible as with E05.0
		✓		E05.2	No gas	<ul style="list-style-type: none"> B7.2 Safety temperature limiter for steam generator has triggered (Test passage) No gas at the burner SG (steam generator) In addition same causes possible as with E05.0
		✓	✓	E05.3	No gas	<ul style="list-style-type: none"> No gas at the burner HA2 (Hot air2) In addition same causes possible as with E05.0
		✓	✓	E05.4-1	No gas	<ul style="list-style-type: none"> Start speed at the burner HA1 not reached → PWM signal interrupted
		✓	✓	E05.4-2	No gas	<ul style="list-style-type: none"> Start speed at the burner HA1 not reached → Possibly voltage supply disturbed
		✓		E05.5-1	No gas	<ul style="list-style-type: none"> Start speed at the burner SG not reached → PWM signal interrupted
		✓		E05.5-2	No gas	<ul style="list-style-type: none"> Start speed at the burner SG not reached → Possibly voltage supply disturbed
		✓	✓	E05.6-1	No gas (only 20.10 / 20.20)	<ul style="list-style-type: none"> Start speed at the burner HA2 not reached → PWM signal interrupted
		✓	✓	E05.6-2	No gas (only 20.10 / 20.20)	<ul style="list-style-type: none"> Start speed at the burner HA2 not reached → Possibly voltage supply disturbed
		✓	✓	E05.7-1	No gas	<ul style="list-style-type: none"> Full load speed at the burner HA1 not reached → PWM signal interrupted
		✓	✓	E05.7-2	No gas	<ul style="list-style-type: none"> Full load speed at the burner HA1 not reached → Possibly voltage supply disturbed
		✓		E05.8-1	No gas	<ul style="list-style-type: none"> Full load speed at the burner SG not reached → PWM signal interrupted



OEB	OES	OGB	OGS	Error-message	Error description	possible cause or remedy
		✓		E05.8-2	No gas	<ul style="list-style-type: none"> Full load speed at the burner SG not reached → Possibly voltage supply disturbed
		✓	✓	E05.9-1	No gas (only 20.10 / 20.20)	<ul style="list-style-type: none"> Full load speed at the burner HA2 not reached → PWM signal interrupted
		✓	✓	E05.9-2	No gas (only 20.10 / 20.20)	<ul style="list-style-type: none"> Full load speed at the burner HA2 not reached → Possibly voltage supply disturbed
		✓	✓	E05.10	No gas (as of Software Version 4.15) If within 20 sec. no „Flame OK-“ or „Alarm-Signal“	<ul style="list-style-type: none"> Interruption of Flame OK- or Alarm Signal between Flame controller – control module HA1. Check connection between FA and CM / GM: CM (Control Module): on OGS 6.10 to OGS 12.20: X14:1/2 and X15:12 (for units without GM) GM (Gas Module): Plug X20:5/6 and X25:10 FA (Flame controller): Terminals 1, 2, 5
		✓	✓	E05.11	No gas (as of Software Version 4.15) If within 20 sec. no „Flame OK-“ or „Alarm-Signal“	<ul style="list-style-type: none"> Interruption of Flame OK- or Alarm Signal between Flame controller – control module SG. Check connection between FA and GM: GM (Gas Module): Plug X21:4/5 and X25:11 FA (Flame controller): Terminals 1, 2, 5
		✓	✓	E05.12	No gas (as of Software Version 4.15) If within 20 sec. no „Flame OK-“ or „Alarm-Signal“	<ul style="list-style-type: none"> Interruption of Flame OK- or Alarm Signal between Flame controller – control module HA2. Check connection between FA and GM: GM (Gas Module): Plug X22:4/5 and X25:12 FA (Flame controller): Terminals 1, 2, 5
✓	✓	✓	✓	E11.0	Oven sensor (B6 thermoelement) excessive temperature (Temperature on the sensor >300°C)	<ul style="list-style-type: none"> Hot air contactors do not switch off (burnt together) Motor not operating (e.g. because of 2 defective miniature fuses F10, not with the 6.06 as F10 protects the CM).
✓		✓		E13.0	Steam generator (B4 thermoelement) Excessive temperature (if temperature measured in the SG >120°C)	<ul style="list-style-type: none"> Foaming in the steam generator when cooking (due to e.g. wrong, non-original CONVOTHERM cleaning agents) Calcification of the steam generator Boiling dry of the immersion heaters due to double level sensor's short circuit to earth
✓	✓	✓	✓	E15.0	Condenser sensor (B3- thermoelement) excessive temperature (if temperature in the condenser measured > 100°C)	<ul style="list-style-type: none"> Water reservoir in the condenser too hot: <ol style="list-style-type: none"> Water tap closed Appliance connected to hot water Solenoid valve “condenser cooling” defective Coil from the solenoid “condenser cooling” defective Inlet filter in the solenoid valve contaminated Quenching nozzle in the condenser/siphon blocked



OEB	OES	OGB	OGS	Error-message	Error description	possible cause or remedy
	✓			E16.0	Demoisturisation flap operating fault (only 6.06)	<ul style="list-style-type: none"> Demoisturisation flap faulty <ol style="list-style-type: none"> Stiff Motor contact Motor defective Flap blocked Cable defects (contact / motor) Micro switch not correct adjusted
✓	✓	✓	✓	E21.0	Oven sensor (B6-thermoelement) interruption	<ul style="list-style-type: none"> Sensor wiring interrupted (plug X16 of the control module) Oven sensor (B6) interrupted (defective)
✓	✓	✓	✓	E22.0	Core temperature sensor (B10- thermoelement) interruption (if more than 2 measuring points are interrupted)	<ul style="list-style-type: none"> Sensor wiring interrupted (plug X16 of the control module) CTS sensor (B10) interrupted (defective)
✓		✓		E23.0	Steam generator (B4 thermoelement) interruption	<ul style="list-style-type: none"> Sensor wiring interrupted (plug X17 of the control module) Steam generator (B4) interrupted (defective)
✓	✓	✓	✓	E24.0	Bypass sensor (B5-thermoelement) interruption (not with the 6.06)	<ul style="list-style-type: none"> Sensor wiring interrupted (plug X16 of the control module) Bypass sensor (B5) interrupted (defective)
✓	✓	✓	✓	E25.0	Condenser sensor (B3- thermoelement) interruption	<ul style="list-style-type: none"> Sensor wiring interrupted (plug X16 of the control module) Condenser sensor (B3) interrupted (defective)
✓		✓		E26.0	Safety temperature limiter (B8-thermoelement) interruption	<ul style="list-style-type: none"> Sensor wiring interrupted (plug X17 of the control module) CTS (SG) sensor (B8) interrupted (defective)
✓		✓		E27.0	STL (B8-thermoelement) excessive temperature (STL measures a temp. >130°C in the SG when SG heaters switched on)	<ul style="list-style-type: none"> Foaming in the steam generator when cooking (due to e.g. wrong, non-original CONVOTHERM cleaning agents) Calcification of the steam generator Boiling dry of the immersion heaters due to double level sensor's short circuit to earth
✓	✓	✓	✓	E29.0	Short circuit to earth of a thermoelement	<ul style="list-style-type: none"> A thermoelement sensor has contact with appliance housing Connection between sensor wire and sensor housing ➔ Test individual sensors for short circuit to earth (beginning with CTS)
✓		✓		E33.0	Steam generator operating fault (No	<ul style="list-style-type: none"> Immersion heater defective

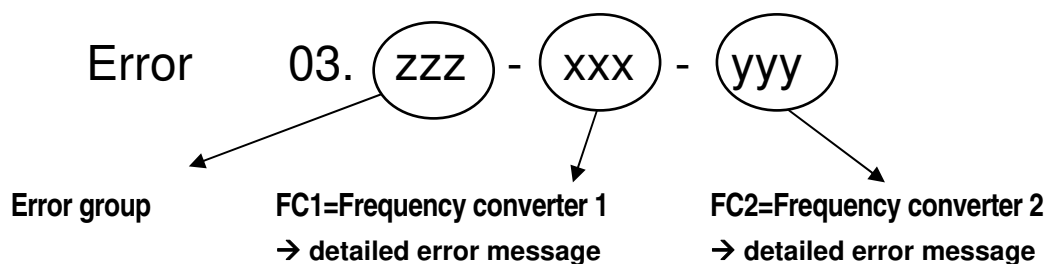


OEB	OES	OGB	OGS	Error-message	Error description	possible cause or remedy
					temperature increase in the SG within 3 mins. by >5°C on the B3 sensor)	<ul style="list-style-type: none"> • Heater contactor defective • Calcified B3 sensor
✓		✓		E34.0	SG pump fault Pump does not start (double level sensor does not reach lower level within 20 secs.)	<ul style="list-style-type: none"> • Pump defective (M4) • Pump blocked / contaminated • Water level sensor has short circuit to earth due to calcification • Filling gap of the area touching the water is calcified together with the double level sensor
✓	✓	✓	✓	E80.0	ID error (identity error)	<ul style="list-style-type: none"> • It cannot be determined whether the appliance is gas or electric, therefore all outputs are switched off. • IDM module defective
✓	✓	✓	✓	E81.0	Programme memory error	<ul style="list-style-type: none"> • If the working parameters of a multi-step programme are not between min. and max. values • After saving a cooking plan in the cookbook the temperature display is changed from °C to °Fahrenheit
✓	✓	✓	✓	E82.0	WP error (working parameter error)	<ul style="list-style-type: none"> • If the working parameters of a cooking programme are not between min. and max. values • Invalid data stored in the cookbook
✓	✓	✓	✓	E83.0	Alg. error (invalid cooking algorithm)	<ul style="list-style-type: none"> • Incompatible software between operating module and control module
✓	✓	✓	✓	E89.0	External memory module defective	<ul style="list-style-type: none"> • The external memory module (IDM module) in the cable harness is defective • Contact problems of the X10 plug
✓	✓	✓	✓	E95.0	Software error	<ul style="list-style-type: none"> • Communication problems between software and hardware • Different hardware and software versions which cannot work together
✓	✓	✓	✓	E96.0 E96.1 E96.2	Connection faulty between control module and operating module	<ul style="list-style-type: none"> • Interface cable between control module and operating module interrupted • Plug on the control module or operating module loose • Communication between CM and OM disturbed briefly → Re-start appliance
✓	✓	✓	✓	Not enough cleaner pressure	Too little flow pressure on the pressure switch S2 (after 40 sec. still below 0.1 bar)	<ul style="list-style-type: none"> • Cleaner level/nozzle flushing agent level in the canister too low • Piping in the pump box is kinked • Suction hose not in the cleaner fluid / nozzle flushing agent



OEB	OES	OGB	OGS	Error-message	Error description	possible cause or remedy
						<ul style="list-style-type: none"> • Rotor nozzle worn or defective -> loses too much fluid in the middle • Cleaner nozzle behind suction plate is loose or missing • Piping in the pump box leaking • Cleaner pump without supply voltage • Cleaner pump overheated • Cleaner pump defective
✓	✓	✓	✓	Fatal IDM error	No viable record in the IDM module and control module	<ul style="list-style-type: none"> • When switching on and booting the appliance controller finds no viable record either in the control module itself or in the IDM <ul style="list-style-type: none"> a) due to overvoltage record in the IDM was destroyed b) IDM module defective c) contact problems of the X10 plug
✓	✓	✓	✓	IDM error	IDM module error	<ul style="list-style-type: none"> • When switching on and booting the appliance controller finds no viable record in the IDM. If there is a viable record in the CM itself, there is an attempt to transfer this to the IDM. If this works, the error disappears, if not, the error always appears briefly when switching on → fit new IDM or reprogram it with "IDM-Tool.exe"

■ Error variants to error 03.zzz-xxx-yyy



Error numbers "zzz", "xxx" and "yyy" are binary coded, i.e. the error numbers shown on the display must be converted with the use of the following tables.

Variants for zzz

128	64	32	16	8	4	2	1
Error on the gas module	not used	Error on the frequency converter 2	Speed sensor of the fan motor 2 is no longer reporting a speed	Temperature of the fan motor 2 too high	Error on the frequency converter 1	Speed sensor of the fan motor 1 is no longer reporting a speed	Temperature of the fan motor 1 too high



Error 03.zzz → Examples:

Error 03.128 → 128 = Error on the gas module

Error 03. 5 → 5 = 4 + 1 → Error on the frequency converter 1 and motor temperature too high

Variants for xxx (for FC1) and yyy (for FC2)

128	64	32	16	8	4	2	1
Motor was stopped (because of an error)	Inertia of motor and fan too great	Overcurrent recognition on the FC	(FC output current stays for a long time above the rated current) e.g. in the event of smaller	Motor temperature → Motor PTC not connected	Electronic temperature of the FC	temporary error on the FC	Error in the power module of the FC

Error 03.zzz - xxx - yyy → Examples:

Error 03. 5 - 36 - 0 →
 5 = Error on the frequency converter 1 and motor temperature too high
 36 = 32 + 4 → Overcurrent recognition on the FC1+ Electronic temperature of the FC1-
 0 = FC2 is OK

Error 03. 32 - 0 - 144 →
 32 = Error on the frequency converter 2 -
 0 = FU1 is OK -
 144 = 128 + 16 → Motor was stopped because of error + FC output current remains for a long time above the rated current



OEB	OES	OGB	OGS	Defect	Possible cause or remedy
5.2 General					
✓	✓	✓	✓	5.2.1 No interior lighting, however appliance fully functioning	<ul style="list-style-type: none"> Light bulb of interior light defective Miniature fuse defective
✓	✓	✓	✓	5.2.2 After starting a programme appliance not functioning	<ul style="list-style-type: none"> Door not closed Magnet on the door is not in the right position Solenoid switch in the door stud defective Check setup of the appliance (Examine floor model for warping) Appliance is set to dummy version → set to normal version: c12=305; c13=999
✓		✓		5.2.3 Not enough water, however no display of the insufficient water symbol in the display of the electronics, boiling dry of the immersion heaters	<ul style="list-style-type: none"> Due to insufficient rinsing of the steam generator foaming water Water level sensor has short circuit to earth due to contamination/calcium in the steam generator Contact problem on level sensor (possibly short circuit to earth) Opening in the area in the steam generator touching the water closed by calcium deposits
✓	✓	✓	✓	5.2.4 Water runs underneath the floor of the appliance from the condenser overflow	<ul style="list-style-type: none"> Building's drainage pipe blocked Building's tundish funnel blocked
✓	✓	✓	✓	5.2.5 Water inside the oven	<ul style="list-style-type: none"> Dirt filter in the outflow of the working chamber contaminated Condenser blocked (dirt filter not present) Demoisturisation tray dirty
✓	✓	✓	✓	5.2.6 No temperature increase in convection mode	<ul style="list-style-type: none"> Safety temperature limiter B7 has tripped Heater contactors do not pull in <ol style="list-style-type: none"> Contact problem on heater terminals Heater contactor defective Hot air heaters defective
✓	✓	✓	✓	5.2.7 Uneven browning	<ul style="list-style-type: none"> Suction plate not correctly fitted Heat produced by the hot air heater is too low Application error: e.g. not sufficiently pre-heated Load not centrally placed in the oven



OEB	OES	OGB	OGS	Defect	Possible cause or remedy
✓	✓	✓	✓	5.2.8 Water drips out of the front area of the appliance floor in table-top models	<ul style="list-style-type: none"> Seak between inner and outer housing is worn or missing → Check seal groove for door seal Channel seal between appliance drip tray and housing is missing Door seal worn
✓	✓	✓	✓	5.2.9 Too dry or too wet in programmes with steam	<ul style="list-style-type: none"> Pressure balance valve in oven ceiling open → check and adjust, if necessary, clean Pressure balance valve in oven ceiling blocked → Clean with hand shower Solenoid valves are not closing properly Bypass sensor greased up / Bypass opening blocked (not with OES 6.06) Demoisturisation activated
5.3 Steam generator					
✓		✓		5.3.1 Steam generator is still not ready to operate after 5 mins.	<ul style="list-style-type: none"> Check polarity of the B4 sensor connection (green/white) Overfilling of the steam generator Heater contactors do not pull in <ol style="list-style-type: none"> Contact problem on terminals Heater contactor defective Immersion heater / heat exchanger in the steam generator calcified Immersion heater defective
✓		✓		5.3.2 Uncontrolled steam supply in stop mode, and moisture in the convection programme	<ul style="list-style-type: none"> Check polarity of the B4 sensor connection (green/white) Steam generator or pre-heating sensor calcified → see 4.4 Decalcifying the CONVOTHERM Pre-heating temperature set too high in c01 Electronics' temperature detection defective (→ Replace control module CM)
✓		✓		5.3.3 Steam generator is no long switching off	<ul style="list-style-type: none"> Check polarity of the B5 sensor connection (green/white) Bypass pipe has come loose Bypass pipe T-piece and B5 blocked or greased up Constant water supply in the condenser Electronics service programme c 05 on permanent steaming



OEB	OES	OGB	OGS	Defect	Possible cause or remedy
					<ul style="list-style-type: none"> • Short circuit of the B5 sensor wiring
✓		✓		5.3.4 No water supply in the steam generator	<ul style="list-style-type: none"> • Water supply pipe closed • Injection part in non-return flow device contaminated • Dirt filter in hose fitting contaminated • Inlet filter in the solenoid valve contaminated • Solenoid valve Y3 is not opening <ol style="list-style-type: none"> a) Solenoid valve defective b) Contact problem on the plug • Contact problem on level sensor (short circuit to earth)
✓		✓		5.3.5 No steam supply in the programmes with steam and hot air	<ul style="list-style-type: none"> • Short circuit of the B5 sensor wiring • Heater contactors do not pull in • Immersion heaters in the SG defective • No water in the SG
✓		✓		5.3.6 Water or foam sprays out of the steam outlet aperture in the inner chamber	<ul style="list-style-type: none"> • Steam generator overfilled • Cleaning agent or decalcifier residues are in the SG → flush out thoroughly several times
✓		✓		5.3.7 Constant water supply in the condenser	<ul style="list-style-type: none"> • Solenoid valve Y3 is not closing <ol style="list-style-type: none"> a) Solenoid valve contaminated (hangs) b) Solenoid valve defective c) Water pressure too low (min. 2 bar) • Water level sensor is not switching • Contact problem on water level sensor or on clamp connection • Electronics - fixing pin (earth connection) loose • Conductance of the water too low • Insulating layer on water level sensor
✓		✓		5.3.8 Water sprays out of air outlet pipe (roof of appliance)	<ul style="list-style-type: none"> • Bypass pipe dirty, blocked or has a water pocket (sags) • B5 sensor (steam measuring sensor) greased up • Exhaust pipe blocked • Steam generator blocked in the area of the water supply pipe



5.4 Condenser				
✓	✓	✓	✓	<p>5.4.1 Constant water supply in the condenser</p> <ul style="list-style-type: none"> • Solenoid valve Y1 is not closing <ul style="list-style-type: none"> a) Solenoid valve contaminated b) Solenoid valve defective c) Water pressure too low • Short circuit of the B3 sensor wiring • Appliance connected to hot water → Cold water • Solenoid valve Y1 reversed with Y2 or Y3
✓	✓	✓	✓	<p>5.4.2 No supply of cooling water in the condenser or supply too low</p> <ul style="list-style-type: none"> • Check polarity of the B3 sensor connection (green/white) • Water supply pipe closed • Condenser quenching nozzle contaminated • Dirt filter in hose fitting contaminated • Inlet filter in the solenoid valve contaminated → clean • Solenoid valve Y1 is not opening <ul style="list-style-type: none"> a) Solenoid coil defective b) Solenoid valve defective • Short circuit of the B3 - sensor wiring or cooling sensor B3 defective
5.5 Motor				
✓	✓	✓	✓	<p>5.5.1 Motor does not run after start of programme</p> <ul style="list-style-type: none"> • Appliance is set to dummy version • Door contact switch defective Twist lever catch (catch screw) too far from the Reed contact • Test door contact switch in service programme r23; if necessary, make appliance level (above all with floor models) • Motor contactor K5/K50/K55/K56/K57 does not pull in <ul style="list-style-type: none"> a) Contact problem on the terminals b) Motor contactor defective • Fan malfunction (excessive temperature) E 03 • Test motor contactors (K5, K50, K55, K56, K57) for sticking contacts

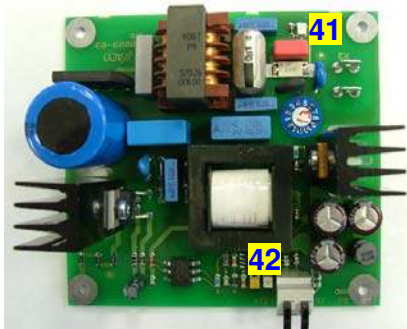


OEB	OES	OGB	OGS	Defect	Possible cause or remedy
5.6 Electronics (see also General)					
✓	✓	✓	✓	5.6.1 Displayed oven temperature does not agree with the actual oven temperature	<ul style="list-style-type: none"> • Short circuit of the B6 sensor wiring • Check polarity of the B6 sensor (green/white)
✓	✓	✓	✓	5.6.2 Time or temperature value set changes up or down all by itself after being set	<ul style="list-style-type: none"> • Movement of the selector dial was not correctly recognised by the electronics → Move selector dial briefly in same direction • Photosensor and receiver have no contact with one another → Align position
✓	✓	✓	✓	5.6.3 Temperature displays are not correct: The higher the temperature on the sensor, the lower the temperature value displayed	<ul style="list-style-type: none"> • Polarity incorrect → check the connection leads of the sensor in question (green and white wires must not be reversed)
✓	✓	✓	✓	5.6.4 Electronics can be operated normally, but appliance is not working	<ul style="list-style-type: none"> • Appliance is set to dummy version • Main contactor defective • see also point 5.5
✓	✓	-	-		
✓	✓	✓	✓	5.6.5 Software hangs due to buttons having been pressed quickly several times	<ul style="list-style-type: none"> • Re-install software by pressing the On / Off button for 5 secs. or by disconnecting from the power supply for 10 secs.
5.7 Safety temperature limiter hot air heater (B7)					
✓	✓			5.7.1 Safety temperature limiter (B7) has tripped.	<ul style="list-style-type: none"> • Inner chamber temperature was over 300 °C Heater contactor is burnt together → Replace contactor • Check polarity of the B6 sensor connection (green/white)
✓	✓			5.7.2 Safety temperature limiter B7 is reacting too early.	<ul style="list-style-type: none"> • B7 defective
					<ul style="list-style-type: none"> •



5.8 Troubleshoot using the LEDs on the controllers

Supply module



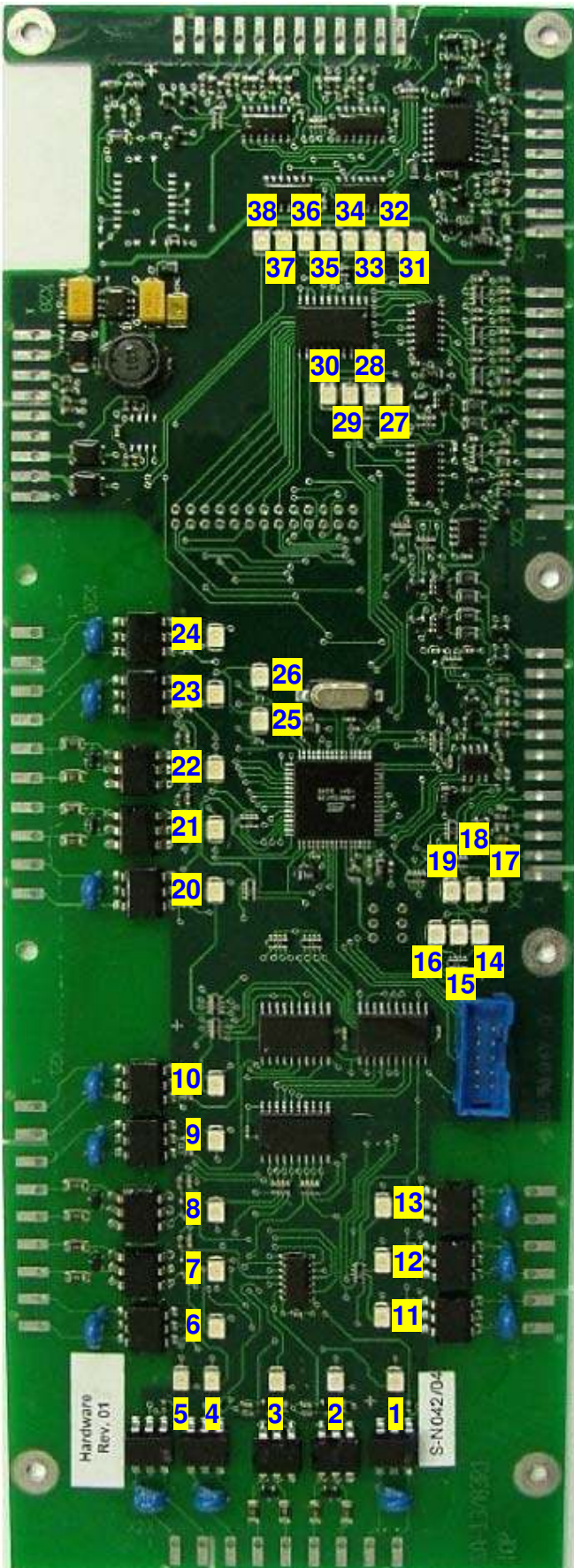
Control module



Operating module



Supply module				
No.	Colour	Function	LED	
41	rd	Diagnosis	lights up	if internal fuse defective
42	gn	Diagnosis	lights up	if output voltage correct (12V)
			goes out	if output voltage below 12 V
Control module				
No.	Colour	Function	LED	
43	gn	Diagnosis	flashes	if CM is working (data is being exchanged between OM and CM)
			goes out	no supply voltage or no programme
Operating module				
No.	Colour	Function	LED	
44	gn	Diagnosis	flickers	when OM is working



Gas module

No.	Colour	Function	Type	Light up if
1	rd	not used	output	
2	gn	not used	input	
3	gn	Burner alarm HA2	input	Alarm signal is present
4	rd	Heat demand HA2	output	Burner is to be ignited
5	rd	Reset HL2	output	Automatic ignition is to be reset
6	rd	not used	output	
7	gn	not used	input	
8	gn	Burner alarm SG	input	Alarm signal is present
9	rd	Heat demand SG	output	Burner is to be ignited
10	rd	Reset SG	output	Automatic ignition is to be reset
11	rd	not used	output	
12	rd	not used	output	
13	rd	not used	output	
14	rd	currently no function	output	
15	rd	currently no function	output	
16	rd	currently no function	output	
17	rd	PWM HA1	output	Fan HA1 is to run
18	rd	PWM SG	output	Fan SG is to run
19	rd	PWM HL2	output	Fan HA2 is to run
20	rd	not used	output	not used
21	gn	not used	input	not used
22	gn	Burner alarm HA1	input	Alarm signal is present
23	rd	Heat demand HA1	output	Burner is to be ignited
24	rd	Reset HA1	output	Automatic ignition is to be reset
25	gn	Diagnostics LED		flashes when everything O K
26	rd	Diagnostics LED		Error is present
27	gn	Speed fan HA1	input	if fan is running
28	gn	Speed fan SG	input	if fan is running
29	gn	Speed fan HA2	input	if fan is running
30	gn	Speed fan motor	input	if oven motor is running (floor model)
31-38	gn	currently no function	input	



Frequency converter Troubleshooting options

red LED (no.40)	Description
Off	Motor is still
Flashing	Motor is running
On	Error on the frequency converter Intermediate circuit voltage and/or mains voltage too low or too high. Electronics temperature outside the permitted range. Motor thermoprotection not connected or outside the permitted range. Test the connection of the motor thermoprotection and the mains voltage.
green LED (no.39)	Description
On	Communication with CM OK
Off	No supply voltage Mains voltage not connected or the FC was switched on and off several times within a short time. This leads to overloading of the starting current limitation. Therefore wait 3 minutes before switching on again.
Flashing	No connection / communication with CM Test the connection of the serial interface to the controller.

