

Hydronic D3W Z Fault Codes

Fault Code	Description of fault	Comment / Remedy
000	no malfunction	---
010	Overvoltage shutoff	Voltage btw.1 (rt) and 2(br) at connector B1/S1 >16 V Voltage btw.1 (rt) and 2 (br) at connector < 10.2 V
011	Undervoltage shutoff	(voltage values must be present > 20 seconds) Check battery, regulator and electrical leads
012	Overheating	Check temperature at temperature or overheating sensor > 125 °C. Check water circuit
014	Possible overheating detected (difference evaluation)	Difference of measured values at temperature sensor >15 °C (min. 70 °C water temperature and metering pump in operation); Check temperature sensor and overheating sensor; replace if necessary. Check values: See Graph page 11 Check water throughput
015 *	Operation disable because perm. number of possible overheatings exceeded (over- heating counter)	Perm. overheating counter reading exceeded.Heating enable only possible by means of diagnostic system (press both "L L" keys simultaneously)
017	Overheating detected (hardware threshold value)	Temperature at temperature or overheating sensor > 130 °C, emergency OFF if Fault Code 012 or 014 not applicable; check water circuit, check temperature sensor and overheating sensor; replace if necessary; See Graph page 11
020	Glow plug break	Check glow plug and electrical cabling for continuity and change if necessary
021	Glow plug output overload	Check glow plug and electrical cabling for continuity and change if necessary
030	Combustion air blower motor EMF outside perm. range	Blower impeller or electric motor jammed (frozen solid, dirty, etc.) Remedy jam, replace electric motor if necessary
031	Combustion air blower motor break	Check lead to combustion air motor (el. motor) for continuity, replace electric motor if necessary
032	Combustion air blower motor short-circuit	Check combustion air blower motor (electric motor); replace if necessary. Check supply lead (chafed, etc.)
038 *	Vehicle fan relay control break	Check electric lead to relay, remedy break, replace relay if) necessary
039 *	Vehicle fan relay control short-circuit	Check electric lead to relay, remedy short-circuit replace relay if necessary
041 *	Water pump break	Check supply lead to water pump for continuity, remedy break, replace water pump if necessary
042 *	Water pump short-circuit (see page 11 for values)	Check supply lead to water pump for short-circuit, check water pump, replace if necessary
047	Metering pump short-circuit	Check supply lead to metering pump for short-circuit, check metering pump, replace if necessary
048	Metering pump break	Check supply lead to metering pump for continuity, remedy break, replace metering pump if necessary
050 *	Operation disable due to excessive start attempts	Safety time counter reading exceeded, Heating only possible via diagnostic system (press "LL" keys simultaneously)

* does not apply to Hydronic D3W Z



Fault Code	Description of fault	Comment / Remedy
051	Cold blow time exceeded	At start, if flame sensor above 70 °C > 240 sec.; Check exhaust gas and combustion air supply, check flame sensor, replace if necessary. Flame sensor values: see Graph page 11
052	Safety time exceeded	When all perm. start attempts used up; check fuel delivery and fuel supply: see Graph page 10, Check exhaust gas and combustion air ducts
053 *	Flame cutout from POWER control stage	Prelim. warning; heater remains ready to operate if start repeats still permissible. Warning signal is cancelled if a perm. repeat successful. <u>Malfunction</u> ; if no further start repeat permissible. Check fuel delivery and fuel supply: see Graph page 10. Check exhaust gas and combustion air ducts. If combustion OK → check flame sensor, replace if necessary. Flame sensor values: see Graph on page 11
054	Flame cutout, HIGH setting	see Remark for Code 053
056	Flame cutout, LOW setting	see Remark for Code 053
060	Temperature sensor break (see page 11 for values)	Check connecting leads. Ohmic value with break at the plug B2 > 2 MΩ, see circuit diagram (observe the control unit design).
061	Temperature sensor short-circuit (see page 11 for values)	Check connecting leads. Ohmic value with short-circuit at the plug B2 < 50 Ω, see circuit diagram (observe the control unit design).
064	Flame sensor break (see page 11 for values)	Check connecting leads. Ohmic value with break at the plug B2 > 3040 Ω, see circuit diagram (observe the control unit design).
065	Flame sensor short-circuit (see page 11 for values)	Check connecting leads. Ohmic value with short-circuit at the plug B2 < 780 Ω, see circuit diagram (observe the control unit design).
071	Overheating sensor break (see page 11 for values)	Check connecting leads. Ohmic value with break at the plug B2 > 2 MΩ, see circuit diagram (observe the control unit design).
072	Overheating sensor short-circuit (see page 11 for values)	Check connecting leads. Ohmic value with short-circuit at the plug B2 < 50 Ω, see circuit diagram (observe the control unit design).
090	Control unit defective (internal fault/Reset)	Internal fault in the microprocessor / memory exists. Exchange the control unit.
091	External interference voltage	Control unit disturbance due to interference voltage from the electrical system. Possible causes: Poor batteries, battery charger, other sources of interference. Eliminate the interference voltage.
092	Control unit defective (ROM error)	Internal fault in the microprocessor / memory exists.
093	Control unit defective (RAM error)	Exchange the control unit.
094	Control unit defective (EEPROM error)	
097	Control unit defective	
098 – 103	Control unit defective (EEPROM error)	Exchange the control unit

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