

5.4 Error code output

If the heater is fitted with a combination timer, an error code output will appear on the display of the timer after a fault occurs.

NOTE

The error code is output if the heater is fitted with a control element after an error has occurred by the switch-on indicator/error code indicator flashing. After 5 seconds of fast flashing, the error code will be output by a sequence of long flash pulses, the number of flashes is shown in the table below (for example F04 = 4 long flash pulses).

Error code	Error (group)	Additional information during PC diagnostic	Troubleshooting
F 00	Control unit error/ incorrect parameter set/ warm-start detection	<p>01 Control unit error</p> <p>81 EOL checksum error</p> <p>11 Incorrectly coded control unit or incorrect heater (fuel type) installed (the heater will not work if this error occurs)</p> <p>91 Neutrally coded or disabled control unit (the heater will not work if this error occurs)</p> <p>92 Maintain command failed (the heater will not work if this error occurs).</p> <p>18 Customer bus defective</p>	Replace control unit
F 01	No start (after 2 starting attempts)/ no flame formation	<p>02 Even after the restart, no flame has formed</p> <p>82 No start in test</p>	Check fuel supply (tank empty, lines blocked) Clean burner insert, replace flame sensor
F 02	Flame abort (repeated >3)	<p>03 The flame has gone out during operation and has not reformed after a restart attempt</p> <p>83 The flame has gone out during a heating cycle more than FAZ times (EEPROM)</p>	Check fuel supply (tank empty, lines blocked) Clean burner insert, replace flame sensor
F 03	Undervoltage or overvoltage	<p>84 The voltage was less than 10.5 V or 21 V for longer than 20 seconds</p> <p>04 The voltage was more than 16 V or 32 V for longer than 6 seconds</p>	
F 04	Premature flame recognition	05 The flame sensor recognised a flame before combustion had started	Replace flame sensor
F 06	External temperature sensor break or External temperature sensor short circuit	<p>14 Temperature sensor circuit short circuit to earth</p> <p>94 Temperature sensor circuit break or short circuit to +Ub</p>	Check cables, replace temperature sensor Check cables and terminating resistor, replace temperature sensor

Fig. 503 Troubleshooting (Page 1 of 2)

Error code	Error (group)	Additional information during PC diagnostic	Troubleshooting
F 07	Metering pump interrupt or metering pump short-circuit	88 Break or short circuit to +Ub 08 Short circuit to earth	Check cables, replace metering pump Check cables, replace metering pump
F 08	Fan motor interrupt or fan motor short-circuit or fan motor overload or fan motor blocked	89 Break or short circuit to +Ub 09 The switched drive unit cable (combustion and hot air blower) has a short circuit to earth or the drive unit is overloaded 15 Burner motor block guard has tripped 95 Burner motor not turning easily sensor has tripped	Check magnets Replace drive unit (combustion and hot air blower) Eliminate the cause of the blockage / difficulty in movement Replace drive unit (combustion and hot air blower)
F 09	Glow plug interrupt or glow plug short-circuit	8A Glow plug/Flame monitor: Break or short circuit to +Ub 19 Glow circuit: The switched cable of the element has a short circuit to earth	Replace glow plug / flame monitor Replace glow plug / flame monitor
F 10	Overheating	06 The overheating fault lock-out has tripped (heater overheated) 17 Incorrect application or illegal insulation (OHS gradient too high)	Find and remove the cause of the overheating NOTE If no other cause can be found for the overheating, the pressure losses caused by the hot air distribution (too many resistance points) are too high or a hot air filter is soiled
F 11	Overheating sensor interrupt or overheating sensor short circuit	AB Overheating sensor circuit: break or short circuit to +Ub 1B Overheating sensor circuit: the switched cable of the element has a short circuit to earth	Replace overheating sensor Replace overheating sensor
F 12	Heater unit lock-out	07 The permanent heater fault lock-out has been activated	Heater unit is switched on, Fault code F12 is shown. Remove fuse. Switch off heater unit with heater control. Insert fuse again after more than 2 seconds. Switch on heater unit again with heater control. NOTE The following error has occurred several times: Fault counter more than 5 times Incorrect start counter more than 9 times Flame failure counter more than 5 times
F 14	Overheating sensor incorrect position	97 Incorrect position of the overheating sensor (OHS gradient too low)	Position the overheating sensor correctly
F 15	Setpoint generator short circuit	9B Nominal value potentiometer circuit break or short circuit to + Ub	Check cables, replace control element

Fig. 503 Troubleshooting (Page 2 of 2)