

| FAULT CODE                  | FAULT DESCRIPTION   | COMMENTS & REMEDIAL ACTION  |
|-----------------------------|---|---|
| Service                     | The heater has a fault that can only be repaired by a specialist.                               | Visit an authorised Eberspächer Workshop. There are faults stored in memory   |
| Undervoltage                | The heater control box<br>was undervoltaged without<br>interruption for at least<br>20 seconds. | Check the battery for a drop in voltage. Charge battery or replace, if necessary.   |
| Overvoltage                 | Overvoltage applied at the heater control box without interruption for at least 20 seconds.     | Check battery and replace, if necessary.  |
| Fuel Supply<br>or Pump      | Fault in the fuel supply<br>or fuel pump.   | Check connection and cables for continuity, short circuit and damage. Pull the plug off the metering pump and inspect for damage. Check the fuel level in the fuel tank. If the fault cannot be remedied, please contact Eberspächer Support.   |
| Water Circuit<br>or Pump    | With water heaters only:<br>Water temperature in the<br>heater too high.                        | Check the water pump for proper function. Check the water circulation in the water circuit. The heater can be reset to the delivery condition by removing the heater fuse. If the fault cannot be remedied, please contact Eberspächer Support. Installation instructions   EasyStart Pro 22.1000.35.2203.0A EN |
| Air Ducting or Outlet       | With air heaters only:<br>Air temperature in the heater<br>too high.                            | Check the air lines. Are air lines clogged or kinked? Air all air louvres free? The heater can be reset to the delivery condition by removing the heater fuse. If the fault cannot be remedied, please contact Eberspächer Support.   |
| Overheat.<br>Heater locked. | Overheating of the heater detected. The heater is interlocked for safety reasons.               | The heater can be reset to the delivery condition by removing the heater fuse.  If the fault cannot be remedied, please contact Eberspächer Support.  |



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| Restricted<br>Operation   | Emergency running of the heater.  | There is a fault in the heater.  Restricted operation is still possible, however (with air heaters with target temperature 20°C).  If the fault cannot be remedied, please contact Eberspächer Support.         |
| ■ 1 ► Ext. Temp. Sensor defective   | The external temperature sensor is defective.   | Check the wiring of the external temperature sensor for continuity, short-circuit or damage; replace the temperature sensor, if necessary. If the fault cannot be remedied, please contact Eberspächer Support. |
| 4 2 ► Int. Temp. Sensor defective   | The internal temperature sensor is defective.   | There is no remedy for this fault. The control unit has to be replaced.   |
| ■ 3    ■ Rotary Knob jammed   | The operating button is blocked.  | Can the operating button be freed again by hand?<br>If the fault cannot be remedied, please contact<br>Eberspächer Support.   |
| <ul><li>4</li></ul>   | The button is blocked.  | Can the button be freed again by hand?<br>If the fault cannot be remedied, please contact<br>Eberspächer Support.   |
|   | Data are missing for EasyStart Pro for initial commissioning.   | Disconnect EasyStart Pro from the power supply and connect again. If the fault cannot be remedied, please contact Eberspächer Support.  |
| ▼ 7     ▼ Timer mode not allowed  | Timer mode is not permitted during ADR mode.  | Terminate ADR mode and test timer mode again. If the fault cannot be remedied, please contact Eberspächer Support.  |
| ■ 8   | The heater is in auxiliary heating mode via Switching Plus and cannot be operated via EasyStart Pro during this time. | Terminate auxiliary heating mode via Switching Plus.  |
| ◆ 9   ► CAN communication error  • CAN comm | Terminate auxiliary heating mode via Switching Plus.  | Inspect the wiring for cable breakages/short-circuits. If the fault cannot be remedied, please contact Eberspächer Support.   |



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| Fault code P000 for EasyScan and TP 7.1 (if connected via CAN) () for TP 7 (LIN) P000100 (071) P000101 (072) P000102 (073) | Error description Overheating/air outlet sensor  - Interruption  - Short circuit  - Short circuit to battery (+)   | Cause Remedial action Check overheating sensor.  - Check cables for continuity, short circuit and damage.  - Unplug connector -XB2, measure resistance between cable BU (chamber 1) and cable GN (chamber 2).  - Measured values see page 27, in case of deviating values -> renew lead harness of heater.   |
| P000110 (087)<br>P000111 (088)<br>P000112 (089)  | Water/air inlet error  - Interruption  - Short circuit  - Short circuit to battery (+)  Note!  Fault code P000110 (087) and P000111 (088) are displayed only if the heater is in operation  Temperature reached at water outlet sensor at least 80 °C. | Check the water inlet sensor.  Check cables for continuity, short circuit and damage.  – Unplug connector -XB2, measure resistance between cable BU (chamber 1) and cable GN (chamber 2).  – Measured values see page 27, in case of deviating values –> renew lead harness of heater.   |
| P00010A (051)  | Cold blowing<br>– Timeout  | The combustion chamber has not cooled sufficiently for a restart.  Check whether hot combustion air is drawn in.  If not -> check flame sensor, see Fault code P000120 (064) and Fault code P000121 (065).   |
| P000114 (014)  | Possible risk of overheating (implausible signal) Note! Fault code P000114 (014) is displayed only if the heater is in operation Temperature reached at overheating sensor at least 80 °C.   | Temperature difference between the flame and overheating sensor is too large. For remedial action see Fault code P000115 (012). Check flame sensor.  - Unplug connector -XB4, measure resistance between cable BU (chamber 5) and cable BU (chamber 6).  - Measured values see page 27, in case of deviating values -> renew lead harness of heater. |



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| P000115 (012)            | Overheating  | Temperature at overheating sensor >125 °C   |
|                          | – Software threshold exceeded  | Check air throughput  |
|                          |  | Check overheating sensor  |
|                          |  | <ul> <li>Check cables for continuity, short circuit<br/>and damage.</li> </ul>  |
|                          |  | <ul> <li>Unplug connector -XB4, measure resistance<br/>between cable RD (chamber 9) and cable RD<br/>(chamber 10).</li> </ul> |
|                          |  | <ul> <li>Measured values see page 27, in case of deviating<br/>values -&gt; renew lead harness of heater.</li> </ul>          |
| P000116 (017)            | Overheating  | Temperature at overheating sensor >130 °C   |
|                          | – Hardware threshold   | For remedial action see Fault code P000115 (012).   |
|                          | exceeded   | Check overheating sensor.   |
|                          |  | <ul> <li>Check cables for continuity, short circuit and<br/>damage.</li> </ul>  |
|                          |  | <ul> <li>Unplug connector -XB4, measure resistance<br/>between cable RD (chamber 9) and cable RD<br/>(chamber 10).</li> </ul> |
|                          |  | <ul> <li>Measured values see page 27, in case of deviating<br/>values -&gt; renew lead harness of heater.</li> </ul>          |
| P00011A (015)            | Operating lock-out  – Too many overheating events detected           | The control box is locked due to too frequent consecutive overheating (Fault code P000114 (014), Fault code P000115 (012)).   |
|                          | Crains detected  | For remedial action see Fault code P000114 (014), Fault code P000115 (012).   |
|                          |  | Unlock control box, see Chapter 4.3, p. 13.   |
| P000120 (064)            | Flame sensor   | Check flame sensor.   |
| P000121 (065)<br>P000122 | – Interruption   | – Check cable for continuity, short circuit and damage.   |
|                          | <ul><li>Short circuit</li><li>Short circuit to battery (+)</li></ul> | <ul> <li>Unplug connector -XB2, measure resistance<br/>between cable BU (chamber 1) and cable GN<br/>(chamber 2).</li> </ul>  |
|                          |  | <ul> <li>Measured values see page 27, in case of deviating<br/>values -&gt; renew lead harness of heater.</li> </ul>          |
|                          |  | Further display Fault code P000120 (064) and Fault code P000121 (065)   |
|                          |  | -> replace control box, see Chapter 5.4.2, p. 23.   |



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| P000125 (057) P000126 (053) P000127 (054) P000128 (055) P000129 (056) | Flame cutout from start process Flame cutout within the control range 0% – 25% Flame cutout within the control range 25% – 50% Flame cutout within the control range 50% – 75% Flame cutout within the control range 75% – 100% Note! In case of flame cutout during the start phase or in normal operation the heater is restarted (max. 3 times). If the restart was successful, the fault code display is deleted. | Check exhaust and combustion air system. Check fuel quantity and fuel supply, Chapter 5.6, p. 34. Check flame sensor, see Fault code P000120 (064) and Fault code P000121 (065).  |
| P00012A (052)   | Safety time 1  – Exceedance   | Check exhaust and combustion air system. Check fuel quantity and fuel supply, see Chapter 5.6, p. 34. Renew the fuel filter. Clean the fuel filter in the connection socket of the metering pump.   |
| P00012B (050)   | Operating lock-out, too many safety timeouts  | Following three unsuccessful start attempts the control box is locked. Unlock control box, see Chapter 4.3, p. 13. Check fuel quantity and fuel supply, see Chapter 5.6, p. 34.   |
| P000130 (060)   | External air inlet temperature sensor (LEF2)  – Interruption  | Test external air inlet sensor  Disconnect the GYRD / BNWH plug-in connection of the external sensor and measure the resistance value, diagram and table of values see page 13,  - if temperature sensor is ok, re-connect the GYRD / BNWH plug-in connection.  Disconnect connector XS12/XB12 at the heater and measure the resistance value in connector housing XB12 between PIN 6 and PIN 12. If an interruption occurs, the ohmic value is > 7175 O / > 3 kO.  If resistance value is ok -> replace control box. |



| FAULT CODE                                      | FAULT DESCRIPTION   | COMMENTS & REMEDIAL ACTION  |
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| P000131 (061)<br>P000132                        | External air inlet temperature sensor (LEF2)  – Short circuit  – Short circuit to battery (+)   | Test external air inlet sensor  Disconnect the GYRD / BNWH plug-in connection of the external temperature sensor and measure the resistance value, diagram and table of values see page 13,  – if ok, re-connect the GYRD / BNWH plug-in connection.  Disconnect connector XS12/XB12 at the heater and measure the resistance value in connector housing XB12 between PIN 6 and PIN 12. In case of short circuit, the ohmic value is < 486 O / < 800 O.  If the error P000131 (061) continues to be displayed -> replace control box. |
| P000143 (006)                                   | Air pressure sensor – Implausible signal  | Delete error and try again. If error occurs again, replace control box.   |
| P000200 (048)<br>P000201 (047)                  | Metering pump  – Interruption  – Short circuit  | Check metering pump lead harness for continuity, short circuit and damage.  – Lead harness ok –> renew the metering pump.   |
| P000202 (049)                                   | Metering pump  - Short circuit to battery (+) or transistor error   | Check cables for continuity, short circuit and damage.  – Unplug the connector at the metering pump.  Display Fault code P000200 (048) metering pump defective –> replace metering pump.  |
| P000210 (020)<br>P000211 (021)<br>P000212 (022) | Glow plug  - Interruption  - Short circuit  - Short circuit to battery (+) or transistor error  Caution!  Damage to unit in case of overvoltage  Voltage > 9.5 V irreparably damages the glow plug. |   |
| P000213 (019)                                   | Glow plug  – Ignition energy too low  | Glow plug energy input is too low. Check cables for continuity, short circuit and damage. Test glow plug, see Fault code P000210 (020) to Fault code P000212 (022).   |



| FAULT CODE                     | FAULT DESCRIPTION   | COMMENTS & REMEDIAL ACTION  |
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| P000220 (031)<br>P000221 (032) | Electric motor  - Interruption  - Short circuit   | Measure fan speed with EasyScan diagnostic tool, see EasyScan operating instructions.   |
| P000223 (033)                  | Burner motor  - Blocking  | Impeller blocked (frozen, soiled, sluggish,). Remove blockage.  - Check electric motor for smooth and easy running by turning the impeller manually. Note! In the case of the Airtronic D4L 24V, during running heating mode and simultaneous motor start and undervoltage of the vehicle battery, in exceptional cases, error message P000223 (033) can occur, although no valid faults exist.  Delete faults using EasyScan and acknowledge in the control unit on occurrence. Further display Fault code P000300 (074) Renew fan, see Chapter 5.4.10, p. 28. |
| P000260<br>P000261<br>P000262  | Universal output  - Interruption  - Short circuit  - Short circuit to battery (+) or transistor error | Test universal output.  Test WHRD conductor for continuity, short circuit and damage.  If cable ok -> replace control box.  |
| P000300 (074)                  | Overheating detection  Metering pump hardware or cutout circuit defective                             | Best air outlet sensor.  - Check cables for continuity, short circuit and damage.  - Unplug connector XB4, measure resistance between cable RD (chamber 9) and cable RD (chamber 10).  - Measured values see page 27, in case of deviating values -> renew lead harness of heater.  Further display Fault code P000300 (074) -> replace lead harness of the heater.  Unlock control box, see Chapter 4.3, p. 13.  |
| P000301 (090)<br>P000302 (090) | Watchdog reset Too many watchdog resets   | Delete errors, the heater remains ready for operation.  Replace control box, see Chapter 5.4.2, p. 23   |
| P000303 (099)                  | Operating lockout: Too frequent output stage errors   | Replace control box, see Chapter 5.4.2, p. 23   |



| FAULT CODE                     | FAULT DESCRIPTION   | COMMENTS & REMEDIAL ACTION   |
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| P000304 (091)                  | Too many resets (loose contact)   | Replace control box, see Chapter 5.4.2, p. 23  |
| P000305 (095)                  | Control box not calibrated  | Replace control box, see Chapter 5.4.2, p. 23  |
| P000306 (098)                  | Second cutout circuit is defective  | Replace control box, see Chapter 5.4.2, p. 23  |
| P000307 (081)                  | CAN communication error in control unit   |  |
| P00030A                        | Communication error   | Delete error. Heater remains ready for operation.  |
| P000310 (010)<br>P000311 (010) | Control box cutout due to overvoltage Heater cutout due to overvoltage Note! Heater is not functioning.   | Overvoltage applied at the control box without interruption for at least 20 seconds.  Unplug connector -XB1 at the heater.  Start the vehicle engine.  Measure voltage between cable RD (chamber 1) and cable BN (chamber 2).  - Airtronic 12 volt – voltage > 16 V –> check generator controller  - Airtronic 24 volt – voltage > 32 V -> check generator controller  - Check the battery.  |
| P000312 (011)<br>P000313 (011) | Control box cutout due to undervoltage Heater cutout due to undervoltage Note! Heater is not functioning. | Undervoltage applied at the control box without interruption for at least 20 seconds.  Unplug connector -XB1 at the heater.  Start the vehicle engine.  Measure voltage between cable RD (chamber 1) and cable BN (chamber 2).  - Airtronic 12 volt – voltage < 10 V –> check generator controller  - Airtronic 24 volt – voltage < 21 V -> check generator controller  - Check the fuses, the supply cables, the ground connections and the positive terminal post at the battery for voltage drop (corrosion). |
| P000330 (092)                  | ROM error   | Replace control box, see Chapter 5.4.2, p. 23  |
| P000331 (093)                  | RAM error   | Replace control box, see Chapter 5.4.2, p. 23  |



| FAULT CODE    | FAULT DESCRIPTION                  | COMMENTS & REMEDIAL ACTION                    |
|---------------|------------------------------------|---|
| P000332 (094) | NVMEM error<br>(EEPROM, DataFlash) | Replace control box, see Chapter 5.4.2, p. 23 |
| P000342       | Invalid configuration              | Check ADR coding.                             |
| P000394       | ADR button  – Short circuit        |   |

