VEHICLE HEATERS, ADDITIONAL PARTS, INSTALLATION TIPS AND TECHNICAL DATA
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>1</th>
<th>HEATING SYSTEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>HEATING SYSTEMS – AIR OR WATER</td>
</tr>
<tr>
<td>1.2</td>
<td>Hydronic – WATER HEATERS</td>
</tr>
<tr>
<td>1.3</td>
<td>AIRTRONIC – AIR HEATERS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2</th>
<th>HYDRONIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>TECHNOLOGY</td>
</tr>
<tr>
<td>2.2</td>
<td>DEVICE OVERVIEW</td>
</tr>
<tr>
<td>2.3</td>
<td>DEVICE RANGE</td>
</tr>
<tr>
<td>2.4</td>
<td>VEHICLE-SPECIFIC ADDITIONAL PARTS</td>
</tr>
<tr>
<td>2.5</td>
<td>COMPLETE PACKAGES / UNIVERSAL INSTALLATION KITS</td>
</tr>
<tr>
<td>2.6</td>
<td>PARTS RANGE</td>
</tr>
<tr>
<td>2.7</td>
<td>CONTROL UNITS</td>
</tr>
<tr>
<td>2.8</td>
<td>OPTIONAL ADD-ONS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3</th>
<th>AIRTRONIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>TECHNOLOGY</td>
</tr>
<tr>
<td>3.2</td>
<td>DEVICE OVERVIEW</td>
</tr>
<tr>
<td>3.3</td>
<td>DEVICE RANGE</td>
</tr>
<tr>
<td>3.4</td>
<td>INSTALLATION PARTS</td>
</tr>
<tr>
<td>3.5</td>
<td>CONTROL UNITS</td>
</tr>
<tr>
<td>3.6</td>
<td>OPTIONAL ADD-ONS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4</th>
<th>SERVICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>EASYSCAN DIAGNOSTIC AND SERVICE TOOL</td>
</tr>
<tr>
<td>4.2</td>
<td>OTHER DIAGNOSTIC DEVICES</td>
</tr>
<tr>
<td>4.3</td>
<td>TESTING EQUIPMENT</td>
</tr>
<tr>
<td>4.4</td>
<td>SERVICE / REPLACEMENT DEVICE PROGRAM</td>
</tr>
<tr>
<td>4.5</td>
<td>REPLACEMENT DEVICES PROGRAM</td>
</tr>
<tr>
<td>4.6</td>
<td>ADDITIONAL HEATERS / OEM HEATERS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5</th>
<th>FAN CONTROL</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1</td>
<td>FAN &amp; FLAP MODULE EASYFAN</td>
</tr>
<tr>
<td>5.2</td>
<td>A/C KIT WITH IPCU FOR CONTROLLING THE VEHICLE’S FAN</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6</th>
<th>THE BENEFITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1</td>
<td>THE BENEFITS FOR WORKSHOPS</td>
</tr>
<tr>
<td>6.2</td>
<td>THE BENEFITS FOR END CUSTOMERS</td>
</tr>
</tbody>
</table>
### ACCESSORIES

<table>
<thead>
<tr>
<th>7</th>
<th>WATER-CONDUCTING PARTS</th>
<th>76 – 81</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>AIR-CONDUCTING PARTS</td>
<td>83 – 91</td>
</tr>
<tr>
<td>9</td>
<td>FUEL-CONDUCTING PARTS</td>
<td>92 – 98</td>
</tr>
<tr>
<td>10</td>
<td>ELECTRICAL PARTS / TESTING EQUIPMENT</td>
<td>99 – 113</td>
</tr>
<tr>
<td>11</td>
<td>EXHAUST-CONDUCTING AND COMBUSTION-AIR-CONDUCTING PARTS</td>
<td>116 – 123</td>
</tr>
<tr>
<td>12</td>
<td>FASTENING PARTS</td>
<td>124 – 133</td>
</tr>
<tr>
<td>13</td>
<td>NAME PLATES / INFORMATION SIGNS</td>
<td>134 – 136</td>
</tr>
<tr>
<td>14</td>
<td>ADDITIONAL PRODUCTS – CONVECTORS AND INDIVIDUAL DEVICES</td>
<td>137 – 145</td>
</tr>
</tbody>
</table>
The basic principle of pre-heaters is to heat the passenger compartment of all kinds of vehicles without having to depend on the heat given off by a running engine. That’s a well-known fact. But at some point or other you must have asked yourself what the actual difference is between air and water heaters.

**AIR-BASED PRE-HEATERS – EBERSPÄCHER AIRTROニック:***  
Air-based pre-heaters are mostly installed inside the cab and directly heat the air inside it, which is sucked in via the unit’s own fan. Their effects are noticeable almost instantly, as the heat in the form of hot gas, which is produced by a burner, does not have to heat up a water circuit first. Modern devices are very quiet, low on emissions and chiefly used to maintain the temperature in the cab of a truck or transporter at a pleasant level even while it is at a standstill (e.g. overnight).

**WATER-BASED PRE-HEATERS – EBERSPÄCHER HYDРОНИЧ:***  
Water-based pre-heaters have a compact design and can be fitted almost anywhere in the engine compartment. They are therefore the pre-heater of choice for cars with interiors too cramped for additional installations. The heat generated by a burner is transferred to the vehicle’s cooling water. An (additional) electric circulation pump distributes the heat, even when the engine is switched off. Then, the interior fan is activated automatically – everything works as it does in normal heater operation. Water-based heaters therefore not only warm up the interior, but also heat the engine or the water used in boats or motor homes. Engines heated in this way can be started more easily in cold weather while also protecting the car battery from the effects of the cold, and producing fewer harmful emissions on starting, as the hotter exhaust temperature enables the catalytic converter to reach its operating temperature more quickly. The cold-starting phase, which produces mechanical stress and higher emissions, is dramatically reduced, as the oil reaches operating temperature fast when the engine is started. This saves fuel and money on the one hand, and lowers CO₂ emissions on the other.

Both systems generally run on the vehicle’s fuel, straight out of the fuel tank. Depending on the model, heaters can be activated with a timer switch, radio remote control or cellphone.
1 | HEATING SYSTEMS: HYDRONIC – WATER HEATERS

**HYDRONIC 4 KW:**
Cab and engine heater
- Passenger cars (up to 2.0 l displacement)
- Emergency vehicles
- Station wagons (with additional thermo-combi valve if using Hydronic 4; ideally use Hydronic 5)
- Small agricultural and construction machinery
- Motor yachts up to around 22 ft long*

**HYDRONIC 5 KW:**
Cab and engine heater
- Passenger cars, station wagons (up to 2.5 l displacement; for 2.6 l displacement or greater we always recommend the Hydronic 2 Comfort)
- Emergency vehicles
- Vans, large taxis, minivans
- Commercial vehicles, including tandem configurations with air heaters
- Construction and agricultural machines
- Motor yachts up to around 25 ft long
- Motor homes*

**HYDRONIC M8 / M10 / M12:**
- Commercial vehicles from approx. 150 kw engine power
- Cargo area heating
- Military vehicles
- Large agricultural and construction machinery
- Motor yachts up to approx. 45 ft long
- Motor homes

**HYDRONIC M16 / L24 / L30 / L35:**
- Coaches and city buses
- Large freight compartments for goods which need to be kept warm
- Container setups
- Diesel locomotives
- Yachts and ships up to approx. 72 ft long

* The heater is approved for mains operation (230 V/50 Hz), e.g. in camping or parking areas for motor homes or in marinas for boats, only in combination with a special cable harness (order no.: 25 2852 82 11 00, see p.108). The cable harness is included in the universal installation kit for recreational vehicles and boats (order no.: 25 2852 82 00 00).
1 | HEATING SYSTEMS: AIRTRONIC – AIR HEATERS

**AIRTRONIC D2:**
Heating comfort for a variety of applications.

- Truck cabs with sleeping cabins
- Construction and agricultural machinery without engine-dependent heating
- Forklifts and other plant machinery
- Electric vehicles
- Yachts up to approx. 22 ft long

**AIRTRONIC D3:**
For demanding long-term heating requirements.
Quiet and energy-saving.

- Motor homes
- Minivans, and vehicles used for conferences and consultancy
- Large truck / luxury cabs with sleeping cabins

**AIRTRONIC D4 / D4 PLUS / B4:**
The high-performance, compact air heater for mid-range requirements.

- Large trucks – cabs with sleeping cabins
- Vans, small buses
- Large agricultural and construction machinery
- Yachts up to approx. 35 ft long

**AIRTRONIC D5 / B5:**
TRS-enabled, continuously variable, pre-selectable interior temperature regulation.

- Vans, workshop vehicles and personnel carriers, small buses (fast heating despite door opening frequently)
- Ambulances and emergency medics’ vehicles
- Special heating and temperature requirements
- Freight compartment and freight goods heating plus frost protection and dew point prevention
- Yachts and ships up to approx. 45 ft long

**AIRTRONIC D5 / B5:**
TRS-enabled, continuously variable, pre-selectable interior temperature regulation.

- Vans, workshop vehicles and personnel carriers, small buses (fast heating despite door opening frequently)
- Ambulances and emergency medics’ vehicles
- Special heating and temperature requirements
- Freight compartment and freight goods heating plus frost protection and dew point prevention
- Yachts and ships up to approx. 45 ft long

**D8 LC:**
Continuously variable, pre-selectable interior temperature regulation.

- Large freight compartments, containers
- Personnel carriers
- Coaches and city buses
- Ships up to around 62 ft long
HYDRONIC S3 ECONOMY* FUNCTIONS:

- Combustion air is conveyed to the combustion chamber by the fan motor and impeller.
- Fuel is drawn from the vehicle’s tank.
- Fuel is conveyed to the combustion chamber by the metering pump (reciprocating pump).
- The glow element vaporizes this fuel as it enters the combustion chamber and creates a combustible fuel-air mix with the combustion air.
- The resulting flame formation switches off the glow element, transfers the heat to the cooling water via the convector, and diverts exhaust gas via the exhaust silencer.
- The cooling water circulation pump conveys cool water to the heater, where it is warmed by the convector and then routed to the vehicle’s convector and combustion engine.

* The heater is approved for mains operation (230 V/50 Hz), e.g. in camping or parking areas for motor homes or in marinas for boats, only in combination with a special cable harness (order no.: 25 2652 82 11 00, see p.108). The cable harness is included in the universal installation kit for recreational vehicles and boats (order no.: 25 2652 82 00 00).
Hydronic 2 Comfort Functions:

- See Hydronic functions (page opposite)
- The Hydronic 2 Comfort has an inbuilt thermostat valve in the comfort circuit which ensures that the vehicle interior is warmed first. When the cooling water temperature is at least 67°C the valve then opens the wider circuit in order to route heat to the vehicle’s combustion engine. By this point the vehicle interior has already reached a temperature which enables the windows to thaw completely.
- The Hydronic 2 Comfort is therefore absolutely ideal for short-distance car drivers, as the short heating time puts less load on the vehicle battery.
HYDRONIC M FUNCTIONS:

- Combustion air is conveyed to the combustion chamber by the fan motor and impeller.
- Fuel is drawn from the vehicle’s tank.
- Fuel is conveyed to the combustion chamber by the metering pump (reciprocating pump).
- The glow element vaporises this fuel as it enters the combustion chamber and creates a combustible fuel-air mix with the combustion air.
- The resulting flame formation switches off the glow element, transfers the heat to the cooling water via the convector, and diverts exhaust gas via the exhaust silencer.
- The cooling water circulation pump conveys cool water to the heater, where it is warmed by the convector and then routed to the vehicle’s own convector and combustion engine.
HYDRONIC L FUNCTIONS:

- Combustion air is conveyed to the combustion chamber by the fan motor and impeller.
- A gear pump conveys fuel from the vehicle's tank and builds up pressure against the closed solenoid valve.
- The solenoid valve opens and the fuel is atomized by the fuel nozzle in the combustion chamber / flame tube.
- The ignition spark monitor ignites the fuel-air mix.
- The resulting flame detection by an optical flame sensor switches off the ignition spark monitor, transfers the heat to the cooling water via the convector, and diverts exhaust gas via the exhaust silencer.
- The cooling water circulation pump conveys cool water to the heater, where it is warmed by the convector and then routed to the vehicle's own convector and combustion engine.
### EBERSPÄCHER HYDRONIC

#### Hydronic D5W S
- **Product package**: Heater, Heater
- **Order no. for heater**: 25 2218 05 00 00
- **Fuel**: Diesel
- **Voltage**: V 24
- **Heating medium**: Water
- **Control / heat settings**: low / high
- **Heat output**: W 2,400 / 5,000
- **Fuel consumption**: l / h 0.27 / 0.62
- **Power consumption, heater**: W 10 / 37
- **Power consumption, water pump**: W 15
- **Elec. power consumption, start**: W 110
- **Minimum water throughput**: l / h 250
- **Lower voltage limit**: V 20.4
- **Upper voltage limit**: V 32
- **Interference suppression**: 5 for VHF / SW / MW, 2 for LW
- **Dimensions**: L x W x H mm 220 x 86 x 101.5
- **Weight empty**: kg 2.3

#### Hydronic D5W SC
- **Product package**: Heater, Heater
- **Order no. for heater**: 25 2147 05 00 00
- **Fuel**: Diesel
- **Voltage**: V 24
- **Heating medium**: Water
- **Control / heat settings**: low / high
- **Heat output**: W 2,400 / 5,000
- **Fuel consumption**: l / h 0.27 / 0.62
- **Power consumption, heater**: W 10 / 37
- **Power consumption, water pump**: W 13
- **Elec. power consumption, start**: W 120
- **Minimum water throughput**: l / h 250
- **Lower voltage limit**: V 10.5
- **Upper voltage limit**: V 32
- **Interference suppression**: 5 (Din En 55025)
- **Dimensions**: L x W x H mm 220 x 86 x 139
- **Weight empty**: kg 2.4

#### Hydronic 2 Comfort
- **Product package**: Heater, B5 SC, D5 SC
- **Order no. for heater**: 20 1928 05 00 00
- **Fuel**: Gasoline and E85
- **Heating medium**: Water
- **Control / heat settings**: low / high / power
- **Heat output**: W 2,300 / 5,000 / 5,200
- **Fuel consumption**: l / h 0.32 / 0.69 / 0.72
- **Power consumption, heater**: W 12 / 37 / 40
- **Power consumption, water pump**: W 11
- **Elec. power consumption, start**: W 120
- **Minimum water throughput**: l / h 250
- **Lower voltage limit**: V 10.5
- **Upper voltage limit**: V 16
- **Interference suppression**: 5 (DIN 55025)
- **Dimensions**: L x W x H mm 214 x 86 x 139
- **Weight empty**: kg 2.4

#### Hydronic 2 Comfort
- **Product package**: Heater, D5 SC
- **Order no. for heater**: 25 2598 05 00 00
- **Fuel**: Diesel and FAME*
- **Heating medium**: Water
- **Control / heat settings**: low / high / power
- **Heat output**: W 2,100 / 5,000 / 5,200
- **Fuel consumption**: l / h 0.26 / 0.61 / 0.64
- **Power consumption, heater**: W 10 / 37 / 40
- **Power consumption, water pump**: W 16
- **Elec. power consumption, start**: W 120
- **Minimum water throughput**: l / h 250
- **Lower voltage limit**: V 10.5
- **Upper voltage limit**: V 16
- **Interference suppression**: 5 (DIN 55025)
- **Dimensions**: L x W x H mm 214 x 86 x 139
- **Weight empty**: kg 2.4

---

*Diesel with max. 20 % FAME

---

**EBERSPÄCHER HYDRONIC**

#### Hydronic D5S 12V
- **Product package**: Heater, Heater
- **Order no. for heater**: 20 1909 05 00 00
- **Fuel**: Gasoline and E85
- **Voltage**: V 12
- **Heating medium**: Water
- **Control / heat settings**: low / high / power
- **Heat output**: W 2,300 / 4,000 / 4,400
- **Fuel consumption**: l / h 0.32 / 0.69 / 0.72
- **Power consumption, heater**: W 12 / 21 / 27
- **Power consumption, water pump**: W 11
- **Elec. power consumption, start**: W 120
- **Minimum water throughput**: l / h 250
- **Lower voltage limit**: V 10.5
- **Upper voltage limit**: V 16
- **Interference suppression**: 5 (DIN 55025)
- **Dimensions**: L x W x H mm 220 x 86 x 139
- **Weight empty**: kg 2.4

#### Hydronic D5S 12V DP
- **Product package**: Heater, Heater (with or without APRMP)*
- **Order no. for heater**: 20 1904 05 00 00
- **Fuel**: Diesel
- **Voltage**: V 12
- **Heating medium**: Water
- **Control / heat settings**: low / high / power
- **Heat output**: W 2,300 / 5,000 / 5,200
- **Fuel consumption**: l / h 0.32 / 0.69 / 0.72
- **Power consumption, heater**: W 12 / 37 / 40
- **Power consumption, water pump**: W 11
- **Elec. power consumption, start**: W 120
- **Minimum water throughput**: l / h 250
- **Lower voltage limit**: V 10.5
- **Upper voltage limit**: V 16
- **Interference suppression**: 5 (DIN 55025)
- **Dimensions**: L x W x H mm 220 x 86 x 139
- **Weight empty**: kg 2.4

#### Hydronic D5S
- **Product package**: Heater (with or without APRMP)*
- **Order no. for heater**: 25 2558 05 00 00
- **Fuel**: Diesel
- **Voltage**: V 12
- **Heating medium**: Water
- **Control / heat settings**: low / high / power
- **Heat output**: W 2,100 / 5,000 / 5,200
- **Fuel consumption**: l / h 0.26 / 0.61 / 0.64
- **Power consumption, heater**: W 12 / 37 / 40
- **Power consumption, water pump**: W 11
- **Elec. power consumption, start**: W 120
- **Minimum water throughput**: l / h 250
- **Lower voltage limit**: V 10.5
- **Upper voltage limit**: V 16
- **Interference suppression**: 5 (DIN 55025)
- **Dimensions**: L x W x H mm 220 x 86 x 139
- **Weight empty**: kg 2.4

---

*A PRMP = pressure-resistant metering pump
### EBERSPÄCHER HYDRONIC

<table>
<thead>
<tr>
<th>Product package</th>
<th>Heater</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hydronic S3 Economy</strong></td>
<td><strong>Hydronic 2 Ethanol E4S</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Techn. designation</th>
<th>Order no. for heater</th>
<th>Fuel</th>
<th>Voltage</th>
<th>Heating medium</th>
<th>Control / heat settings</th>
<th>Heat output</th>
<th>Fuel consumption</th>
<th>Power consumption, heater</th>
<th>Power consumption, water pump</th>
<th>Elec. power consumption, start</th>
<th>Minimum water throughput</th>
<th>Lower voltage limit</th>
<th>Upper voltage limit</th>
<th>Interference suppression</th>
<th>Dimensions L x W x H</th>
<th>Weight empty</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hydronic S3 Economy B4E</strong></td>
<td>20 1994 05 00 00</td>
<td>Gasoline</td>
<td>V 12</td>
<td>Water</td>
<td>Infinitely variable</td>
<td>1,800 to 4,300</td>
<td>0.57</td>
<td>7 / 24</td>
<td>17</td>
<td>135</td>
<td>300</td>
<td>10.5</td>
<td>16</td>
<td>5 (DIN EN 55025)</td>
<td>214 x 86 x 139</td>
<td>2.4</td>
</tr>
<tr>
<td><strong>Hydronic S3 Economy B5E</strong></td>
<td>20 1993 05 00 00</td>
<td>Gasoline</td>
<td>V 12</td>
<td>Water</td>
<td>Infinitely variable</td>
<td>1,800 to 5,000</td>
<td>0.67</td>
<td>7 / 32</td>
<td>17</td>
<td>135</td>
<td>300</td>
<td>10.5</td>
<td>16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Hydronic S3 Economy D4E</strong></td>
<td>25 2913 05 00 00</td>
<td>Diesel</td>
<td>V 12</td>
<td>Water</td>
<td>Infinitely variable</td>
<td>1,300 to 4,300</td>
<td>0.53</td>
<td>5 / 27</td>
<td>17</td>
<td>135</td>
<td>300</td>
<td>10.5</td>
<td>16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Hydronic S3 Economy D5E</strong></td>
<td>25 2912 05 00 00</td>
<td>Diesel</td>
<td>V 12</td>
<td>Water</td>
<td>Infinitely variable</td>
<td>1,300 to 5,000</td>
<td>0.59</td>
<td>5 / 32</td>
<td>17</td>
<td>135</td>
<td>300</td>
<td>10.5</td>
<td>16</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The heater is approved for mains operation (230 V/50 Hz), e.g. in camping or parking areas for motor homes or in marinas for boats, only in combination with a special cable harness (order no.: 25 2652 82 11 00, see p.108). The cable harness is included in the universal installation kit for recreational vehicles and boats (order no.: 25 2652 82 00 00).
## EBERSPÄCHER HYDRONIC

<table>
<thead>
<tr>
<th>Product Information</th>
<th>Hydronic M8 Biodiesel</th>
<th>Hydronic M8 Biodiesel</th>
<th>Hydronic M10</th>
<th>Hydronic M10</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Heater</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Product package</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Techn. designation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Order no. for heater</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fuel</strong></td>
<td>Diesel and FAME (biodiesel)</td>
<td>Diesel and FAME (biodiesel)</td>
<td>Diesel</td>
<td>Diesel</td>
</tr>
<tr>
<td><strong>Voltage</strong></td>
<td>V 12</td>
<td>V 24</td>
<td>V 12</td>
<td>V 24</td>
</tr>
<tr>
<td><strong>Heating medium</strong></td>
<td>Water</td>
<td>Water</td>
<td>Water</td>
<td>Water</td>
</tr>
<tr>
<td><strong>Control / heat settings</strong></td>
<td>low / medium / high / power</td>
<td>low / medium / high / power</td>
<td>low / medium / high / power</td>
<td>low / medium / high / power</td>
</tr>
<tr>
<td><strong>Heat output</strong></td>
<td>W 1,500 / 3,500 / 5,000 / 8,000</td>
<td>1,500 / 3,500 / 5,000 / 8,000</td>
<td>1,500 / 3,500 / 8,000 / 9,500</td>
<td>1,500 / 3,500 / 8,000 / 9,500</td>
</tr>
<tr>
<td><strong>Fuel consumption</strong></td>
<td>l / h 0.18 / 0.4 / 0.65 / 0.9</td>
<td>0.18 / 0.4 / 0.65 / 0.9</td>
<td>0.18 / 0.4 / 0.9 / 1.2</td>
<td>0.18 / 0.4 / 0.9 / 1.2</td>
</tr>
<tr>
<td><strong>Power consumption, heater</strong></td>
<td>W 6 / 10 / 17 / 26</td>
<td>6 / 10 / 17 / 26</td>
<td>6 / 10 / 31 / 57</td>
<td>6 / 10 / 31 / 57</td>
</tr>
<tr>
<td><strong>Power consumption, water pump</strong></td>
<td>W 29</td>
<td>29</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td><strong>Elec. power consumption, start</strong></td>
<td>W 200</td>
<td>200</td>
<td>120</td>
<td>120</td>
</tr>
<tr>
<td><strong>Minimum water throughput</strong></td>
<td>l / h 500</td>
<td>500</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td><strong>Lower voltage limit</strong></td>
<td>V 10</td>
<td>20</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td><strong>Upper voltage limit</strong></td>
<td>V 15</td>
<td>30</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td><strong>Interference suppression</strong></td>
<td>5 (DIN EN 55025)</td>
<td>5 (DIN EN 55025)</td>
<td>5 (DIN EN 55025)</td>
<td>5 (DIN EN 55025)</td>
</tr>
<tr>
<td><strong>Dimensions L x W x H</strong></td>
<td>mm 331 x 138 x 221</td>
<td>331 x 138 x 221</td>
<td>331 x 138 x 221</td>
<td>331 x 138 x 221</td>
</tr>
<tr>
<td><strong>Weight empty</strong></td>
<td>kg 6.2</td>
<td>6.2</td>
<td>6.2</td>
<td>6.2</td>
</tr>
</tbody>
</table>

## EBERSPÄCHER HYDRONIC

<table>
<thead>
<tr>
<th>Product Information</th>
<th>Hydronic M12</th>
<th>Hydronic M12</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Heater</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Product package</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Techn. designation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Order no. for heater</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fuel</strong></td>
<td>Diesel</td>
<td>Diesel</td>
</tr>
<tr>
<td><strong>Voltage</strong></td>
<td>V 12</td>
<td>V 24</td>
</tr>
<tr>
<td><strong>Heating medium</strong></td>
<td>Water</td>
<td>Water</td>
</tr>
<tr>
<td><strong>Control / heat settings</strong></td>
<td>low / medium / 1 / medium 2 / medium 3 / high / power</td>
<td>low / medium / 1 / medium 2 / medium 3 / high / power</td>
</tr>
<tr>
<td><strong>Heat output</strong></td>
<td>W 1,200 / 1,500 / 3,500 / 5,000 / 9,500 / 12,000</td>
<td>1,200 / 1,500 / 3,500 / 5,000 / 9,500 / 12,000</td>
</tr>
<tr>
<td><strong>Fuel consumption</strong></td>
<td>l / h 0.15 / 0.18 / 0.4 / 0.65 / 1.2 / 1.5</td>
<td>0.15 / 0.18 / 0.4 / 0.65 / 1.2 / 1.5</td>
</tr>
<tr>
<td><strong>Power consumption, heater</strong></td>
<td>W 5 / 6 / 10 / 17 / 57 / 103</td>
<td>5 / 6 / 10 / 17 / 57 / 103</td>
</tr>
<tr>
<td><strong>Power consumption, water pump</strong></td>
<td>W 29</td>
<td>29</td>
</tr>
<tr>
<td><strong>Elec. power consumption, start</strong></td>
<td>W 120</td>
<td>120</td>
</tr>
<tr>
<td><strong>Minimum water throughput</strong></td>
<td>l / h 500</td>
<td>500</td>
</tr>
<tr>
<td><strong>Lower voltage limit</strong></td>
<td>V 10</td>
<td>20</td>
</tr>
<tr>
<td><strong>Upper voltage limit</strong></td>
<td>V 15</td>
<td>30</td>
</tr>
<tr>
<td><strong>Interference suppression</strong></td>
<td>5 (DIN EN 55025)</td>
<td>5 (DIN EN 55025)</td>
</tr>
<tr>
<td><strong>Dimensions L x W x H</strong></td>
<td>mm 331 x 138 x 221</td>
<td>331 x 138 x 221</td>
</tr>
<tr>
<td><strong>Weight empty</strong></td>
<td>kg 6.2</td>
<td>6.2</td>
</tr>
</tbody>
</table>
# EBERSPÄCHER HYDRONIC

<table>
<thead>
<tr>
<th>Product package</th>
<th>Hydronic L16</th>
<th>Hydronic L24</th>
<th>Hydronic L30</th>
<th>Hydronic L35</th>
</tr>
</thead>
<tbody>
<tr>
<td>Techn. designation</td>
<td>Hydronic L-II (HL2-16)</td>
<td>Hydronic L-II (HL2-24)</td>
<td>Hydronic L-II (HL2-30)</td>
<td>Hydronic L-II (HL2-35)</td>
</tr>
<tr>
<td>Order no. for heater</td>
<td>25 2486 02 00 00</td>
<td>25 2487 02 00 00</td>
<td>25 2599 02 00 00</td>
<td>25 2600 02 00 00</td>
</tr>
<tr>
<td>Order no. for compact heater</td>
<td>—</td>
<td>25 2487 05 00 00</td>
<td>25 2599 05 00 00</td>
<td>25 2600 05 00 00</td>
</tr>
<tr>
<td>Fuel</td>
<td>Diesel and fuel oil</td>
<td>Diesel and fuel oil</td>
<td>Diesel and fuel oil</td>
<td>Diesel and fuel oil</td>
</tr>
<tr>
<td>Voltage</td>
<td>V 24</td>
<td>V 24</td>
<td>V 24</td>
<td>V 24</td>
</tr>
<tr>
<td>Heating medium</td>
<td>Water</td>
<td>Water</td>
<td>Water</td>
<td>Water</td>
</tr>
<tr>
<td>Heat output</td>
<td>W 16,000</td>
<td>W 24,000</td>
<td>W 30,000</td>
<td>W 35,000</td>
</tr>
<tr>
<td>Fuel consumption, heater</td>
<td>2 liter/hour</td>
<td>2.9 liter/hour</td>
<td>3.65 liter/hour</td>
<td>4.2 liter/hour</td>
</tr>
<tr>
<td>Power consumption, heater</td>
<td>60 W</td>
<td>80 W</td>
<td>105 W</td>
<td>120 W</td>
</tr>
<tr>
<td>Power consumption, water pump</td>
<td>104 – 210*</td>
<td>104 – 210*</td>
<td>104 – 210*</td>
<td>104 – 210*</td>
</tr>
<tr>
<td>Minimum water throughput</td>
<td>1,400 l/h</td>
<td>2,000 l/h</td>
<td>2,600 l/h</td>
<td>3,000 l/h</td>
</tr>
<tr>
<td>Lower voltage limit</td>
<td>V 20</td>
<td>V 20</td>
<td>V 20</td>
<td>V 20</td>
</tr>
<tr>
<td>Upper voltage limit</td>
<td>V 30</td>
<td>V 30</td>
<td>V 30</td>
<td>V 30</td>
</tr>
<tr>
<td>Dimensions L x W x H</td>
<td>600 x 230 x 222</td>
<td>600 x 230 x 222</td>
<td>600 x 230 x 222</td>
<td>600 x 230 x 222</td>
</tr>
<tr>
<td>Weight empty*</td>
<td>kg 18</td>
<td>kg 18</td>
<td>kg 18</td>
<td>kg 18</td>
</tr>
</tbody>
</table>

* depending on the water pump model

---

# EBERSPÄCHER WATER PUMPS FOR HYDRONIC L

<table>
<thead>
<tr>
<th>Water pumps</th>
<th>Flowtronic 5000</th>
<th>Flowtronic 5000 S</th>
<th>Flowtronic 6000 SC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order no. for water pump</td>
<td>25 2488 26 00 00</td>
<td>25 1818 30 00 00</td>
<td>25 2488 25 00 00</td>
</tr>
<tr>
<td>Coolant</td>
<td>Water-glycol mix with up to max 50 % glycol</td>
<td>Water-glycol mix with up to max 50 % glycol</td>
<td>Water-glycol mix with up to max 50 % glycol</td>
</tr>
<tr>
<td>Delivery rate</td>
<td>l/h 5,200 at 0.2 bar</td>
<td>l/h 5,200 at 0.2 bar</td>
<td>l/h 6,000 at 0.4 bar</td>
</tr>
<tr>
<td>Operating pressure</td>
<td>bar max. 2</td>
<td>max. 2</td>
<td>max. 2</td>
</tr>
<tr>
<td>Nominal voltage</td>
<td>V 24</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Elec. power consumption</td>
<td>W 104</td>
<td>104</td>
<td>210</td>
</tr>
<tr>
<td>Protection class</td>
<td>IP5K4</td>
<td>IP54A</td>
<td>IP25 (potted electronics)</td>
</tr>
<tr>
<td>Dry running</td>
<td>No</td>
<td>No</td>
<td>Yes – motor switches itself off after 45 minutes</td>
</tr>
<tr>
<td>Shaft-impeller connector</td>
<td>Mechanical seal</td>
<td>Magnetic coupling</td>
<td>Magnetic coupling</td>
</tr>
<tr>
<td>Weight empty*</td>
<td>kg 2.04</td>
<td>2.2</td>
<td>2.5</td>
</tr>
</tbody>
</table>
ADVANTAGES:

- Hydronic S3 Economy: New bracket design plus straight and 90° angled water fittings (rotatable through 360°) which can be used in any combination for faster installation. New installation recommendations and kits are available.

- Hydronic 2 Economy APRMP (pressure-resistant metering pump): Faster installation as there is no need to remove the tank. Please see the relevant installation recommendations, plus optional add-ons on page 24, for the range of cars for which this equipment is suitable.

- Hydronic 2 Comfort: Faster installation if thermal management is required. There is no need to install a separate comfort installation kit.

- The Biodiesel M8, Standard M10 and Hydronic M12 provide increased power for larger engines and cabins, e.g. large trucks, small buses, cargo areas.

- The Hydronic L, 16 – 35 kW, is ideally suited for buses, trains, boats and cargo areas.

FUEL COMPATIBILITY:

- Multifuel E85: The Hydronic 2 BSS and BSSC with fuel kit (E85 kit) for heating electric vehicles and multifuel vehicles; fuel kit order number 22 1000 20 31 00.

- Biodiesel: Hydronic S3 Economy (up to 30 %), Hydronic 2 Economy (up to 20 %), Hydronic 2 Comfort (up to 20 %), Hydronic (up to 10 %), Hydronic M8 (100 %), Hydronic M10 / M12 (up to 20 %).

- E10: all (professionally installed) water heaters.

EXPERT TIPS FOR INSTALLING THE PRESSURE-RESISTANT METERING PUMP: You need to know the fuel pressure and temperature. The end of the fuel return line must be just above the floor of the tank and must not be fitted with a check valve. Diesel vehicles can then be connected straight to the return line. Please also always take note of the technical description of the particular equipment.
The product package for individual devices generally includes the heater itself, the fuel-metering pump and the water pump. For retrofitting vehicles for which Eberspächer provides installation recommendations, a vehicle-specific installation kit (IK) and, if applicable, an air-conditioning kit are also required.

<table>
<thead>
<tr>
<th>Heater</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Heater</td>
</tr>
<tr>
<td></td>
<td>• Water pump</td>
</tr>
<tr>
<td></td>
<td>• Metering pump</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vehicle-specific installation kit</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Heater mounting bracket</td>
</tr>
<tr>
<td></td>
<td>• Water hoses</td>
</tr>
<tr>
<td></td>
<td>• Fuel lines</td>
</tr>
<tr>
<td></td>
<td>• Cable harnesses</td>
</tr>
<tr>
<td></td>
<td>• Combustion-air hose</td>
</tr>
<tr>
<td></td>
<td>• Exhaust hose with silencer and if applicable, A/C kit</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EasyFan / A/C kit</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Cable harness</td>
</tr>
<tr>
<td></td>
<td>• Preconfigured cable harness</td>
</tr>
<tr>
<td></td>
<td>• Relay</td>
</tr>
<tr>
<td></td>
<td>• IPCU (see also Service, options with IPCU, if there is no EasyFan / A/C kit)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Control unit</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Easy Start Select / Timer / Remote / Remote+ / EasyStart Web</td>
</tr>
</tbody>
</table>

Images are for illustrative purposes only.
The following table shows the housing types and product packages of the various water heater models along with their corresponding installation kits. In contrast with individual devices, complete packages include the heater (incl. fuel-metering and water pump) and universal installation kit. The universal installation kit includes a host of (vehicle independent) parts required for installation. In this case, additional vehicle-specific installation parts are required which are not listed in the respective installation recommendations. If Eberspächer provides no installation recommendations for a particular vehicle, you can still retrofit a pre-heater using a complete package (see also the next section, “Hydronic – retrofit parts range for passenger cars”, step 4B). S-models have a space-saving housing design, with the fuel-metering and water pump mounted on the outside. SC-models generally have the water pump on the inside of the equipment, and on diesel heaters the fuel-metering pump is also on the inside. For gasoline versions the fuel-metering pump is generally installed on the outside.

<table>
<thead>
<tr>
<th>Water heaters</th>
<th>Heater</th>
<th>Individual devices</th>
<th>Complete package</th>
<th>Vehicle-specific IK A/C kit if applicable</th>
<th>Universal IK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydronic</td>
<td>25 2218 05 00 00</td>
<td>x</td>
<td></td>
<td></td>
<td>25 2218 80 00 00</td>
</tr>
<tr>
<td></td>
<td>25 2147 05 00 00</td>
<td>x</td>
<td></td>
<td></td>
<td>25 2009 80 00 00</td>
</tr>
<tr>
<td></td>
<td>20 1861 05 00 00</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>20 1663 05 00 00</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>25 2418 05 00 00</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>25 2386 05 00 00</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>25 2385 05 00 00</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>25 2390 05 00 00</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydronic 2</td>
<td>25 2558 05 00 00</td>
<td>x</td>
<td>x</td>
<td></td>
<td>25 2526 81 00 00</td>
</tr>
<tr>
<td></td>
<td>25 2554 05 00 00</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>25 2557 05 00 00</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>25 2526 05 00 00</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>20 1909 05 00 00</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>20 1904 05 00 00</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydronic 2</td>
<td>20 1920 05 00 00</td>
<td>x</td>
<td>x</td>
<td></td>
<td>20 1920 82 00 00</td>
</tr>
<tr>
<td>Ethanol E4S</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20 1920 83 00 00**</td>
</tr>
<tr>
<td>Hydronic 2</td>
<td>20 1928 05 00 00</td>
<td>x</td>
<td>x</td>
<td></td>
<td>25 2598 80 00 00</td>
</tr>
<tr>
<td>Comfort</td>
<td>25 2598 05 00 00</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydronic S3</td>
<td>20 1963 05 00 00</td>
<td>x</td>
<td>x</td>
<td></td>
<td>25 2652 80 00 00</td>
</tr>
<tr>
<td>Economy*</td>
<td>20 1952 05 00 00</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>20 2694 05 00 00</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>25 2652 05 00 00</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydronic M2</td>
<td>25 2470 05 00 00</td>
<td>x</td>
<td>x</td>
<td></td>
<td>25 2435 81 00 00</td>
</tr>
<tr>
<td></td>
<td>25 2471 05 00 00</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>25 2434 05 00 00</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>25 2435 05 00 00</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>25 2472 05 00 00</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>25 2473 05 00 00</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The heater is approved for mains operation (230 V/50 Hz), e.g. in camping or parking areas for motor homes or in marinas for boats, only in combination with a special cable harness (order no.: 25 2652 82 11 00, see p.108). The cable harness is included in the universal installation kit for recreational vehicles and boats (order no.: 25 2652 82 00 00).
** IK with cat.
1 | LOGGING INTO THE PARTNER PORTAL

Log into the Eberspächer Partner Portal with your personal access details (email and password): http://partner.eberspaecher.com

2 | “INSTALLATION INFORMATION” PANE

Next, select the “Installation Information / Installation Recommendations” tab.
3 | SELECTING YOUR VEHICLE TYPE

Using the dropdown menu, select the required vehicle and confirm with the “Search” button.

4A | THERE IS AN INSTALLATION RECOMMENDATION FOR THE VEHICLE

If there is an existing retrofit installation recommendation for the vehicle, the vehicle model will be listed along with the recommended heater, including the price (excl. sales tax). Click on the vehicle in the list. The parts required for the installation are now displayed:

- **Recommended heater** (including water pump and fuel metering pump)
- **Control unit**
- **Vehicle-specific installation kit** including all parts required for the mechanical installation
- **A/C kit** if applicable (for models with automatic air conditioning)
- **Additional installation parts** if applicable
- **Recommended installation guide time**

* Heaters and control units with a black arrow after the price can be adapted if necessary by clicking the arrow and making a selection.

If you click the “Get estimate” button, this will take you to the estimates pane where you can obtain a quote.

4B | THERE IS NO INSTALLATION RECOMMENDATION FOR THE VEHICLE

If there is no installation recommendation, you will see a note to this effect and the installation recommendation will be grayed out. However, it may still be possible to retrofit an Eberspächer pre-heater in the selected vehicle by using the universal installation kit. The required installation parts are displayed.

- **Recommended heater**
- **Control unit**
- **Required installation parts**
- **Installation guide time**

* Heaters and control units with a black arrow after the price can be adapted if necessary by clicking the arrow and making a selection.
INSTALLATION OF THE HYDRONIC M WATER HEATER WITH 8 – 12 kW HEATING OUTPUT:

Installation parts for the Hydronic-M heaters are usually heavily application-dependent. Planning installation of these heaters requires not only the heater and universal installation kit but also, where applicable, additional installation parts that need to be determined during installation planning. Please see the section on “Accessories” for the corresponding additional parts. For example, with convector and boiler installations, a wide range of heating options can be used in parallel.

Hydronic-M heater installations generally require the following parts:

- Hydronic M heater with 8 kW, 10 kW or 12 kW output, 12 or 24 V
- Hydronic M universal installation kit
- Control unit (of your choice)
- Additional installation parts based on application, if applicable (see also “Accessories” section)

See also the sections on “Complete packages / universal installation kits”, “Device range” and “Control units”.

INSTALLATION OF THE HYDRONIC L WATER HEATER WITH 16 – 35 kW HEATING OUTPUT:

Installation parts for the Hydronic L heaters are also heavily application-dependent. As a result there is no universal installation kit for these heaters.

Alongside the heater, installation planning needs to include some additional installation parts which have to be specified during planning. Please see the section on “Accessories” for the corresponding additional parts. Again, for example, there is a host of heating options that can be used in parallel in convector and boiler installation.

The 24 kW, 30 kW and 35 kW heater variants are available individually as well as in a compact version. To make heater installation easier the compact version comes with the water pump and fuel filter and their installation parts pre-installed.

- Hydronic L 16 kW, 24 kW, 30 kW or 35 kW heater as individual device or compact version
- Additional parts for connecting the water circuit
- Additional parts for the fuel supply
- Additional parts of the exhaust system
- Control unit (of your choice)

See also the sections on “Device range” and “Control units”.

---

Our Technical Hotline can provide you with advice and support on this: Phone: 0180 5 26 26 26
2 | CONTROL UNITS

**ACCESSORIES**

<table>
<thead>
<tr>
<th>Accessory</th>
<th>EasyStart Select</th>
<th>EasyStart Timer</th>
<th>EasyStart Remote</th>
<th>EasyStart Remote+</th>
<th>EasyStart Web</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature sensor for displaying</td>
<td>—</td>
<td>22 1000 34 22 00</td>
<td>—</td>
<td>Included in the product package</td>
<td>Included in the product package</td>
</tr>
<tr>
<td>interior temperature</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Timer trim</td>
<td>—</td>
<td>22 1000 51 41 00</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

**APPROVED COMBINATIONS**

**SLAVE CONTROL UNITS**

| Master Control Units | EasyStart Select | EasyStart Timer | EasyStart Remote | Button | EasyStart Web |
|----------------------|------------------|----------------||------------------|--------|---------------|
| EasyStart Timer      | X                | X              | X                | X      | —             |
| EasyStart Remote+    | X                | X              | —                | Included in the product package | — |
| EasyStart Web        | X                | X              | X                | Included in the product package | — |

**EasyStart Web:**
This product can be combined with one of the following control units from the EasyStart family: EasyStart Select, EasyStart Timer, EasyStart Remote.

**EasyStart Timer and EasyStart Remote+:**

**APPROVED COMBINATIONS OF HEATER AND CONTROL UNIT:**

**OPTION 1**
You can control a second heater by using the DAT line (purple) and the diagnostic line (blue and white). However, it is not possible to connect an additional control unit. Diagnostics can be run for both heaters.

**OPTION 2**
You can switch on any device by activating the switch output (switch on / vehicle blower output). A second control unit can be connected via the DAT line (purple). Diagnostics is available for the first heater but not for the second.

**COMPATIBILITY MODE FOR HEATERS WITHOUT EBERSPÄCHER DIAGNOSTICS, E.G. HYDRONiC 24 V AND HYDRONiC L2:**
Heater diagnostics cannot be run via the control unit.
## CONTROL UNITS

<table>
<thead>
<tr>
<th>Model</th>
<th>EasyStart Select Control unit</th>
<th>EasyStart Timer</th>
<th>EasyStart Remote Remote control</th>
<th>EasyStart Remote+ Remote control</th>
<th>EasyStart Web**/*** Web-based remote control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order number</td>
<td>22 1000 34 13 00</td>
<td>22 1000 34 15 00</td>
<td>22 1000 34 23 00</td>
<td>22 1000 34 17 00</td>
<td>22 1000 34 51 00</td>
</tr>
<tr>
<td>Description</td>
<td>Basic version</td>
<td>Comfort version</td>
<td>Basic version</td>
<td>Comfort version</td>
<td>Operation by smartphone app (available for iPhone and Android) or web app (browser version)</td>
</tr>
<tr>
<td>Functions</td>
<td>• Heating / ventilation on / off</td>
<td>• Heating / ventilation on / off</td>
<td>• Heating / ventilation on / off</td>
<td>• Heating / ventilation on / off</td>
<td>• Heating / ventilation on / off</td>
</tr>
<tr>
<td></td>
<td>• Program / delete pre-select mode</td>
<td>• Program / delete pre-select mode</td>
<td>• Operating time adjustable</td>
<td>• Operating time adjustable</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Long-press function for immediate heating</td>
<td>• Long-press function for immediate heating</td>
<td>• A second / additional heater can be operated</td>
<td>• A second / additional heater can be operated</td>
<td>• A second / additional heater can be operated</td>
</tr>
<tr>
<td>Programming the timer</td>
<td>–</td>
<td>• Three programming locations within seven days</td>
<td>–</td>
<td>• Three programming locations within seven days</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Selection of individual days of the week or one of three time periods (Mo.–Fr. / Sa.+Su. / Mo.–Su.)</td>
<td></td>
<td>• Selection of individual days of the week or one of three time periods (Mo.–Fr. / Sa.+Su. / Mo.–Su.)</td>
<td></td>
</tr>
<tr>
<td>Timer programming: automatic heating time calculation</td>
<td>–</td>
<td>Optional with connection of temperature sensor</td>
<td>–</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Immediate start-up mode running time</td>
<td>60 min. preset</td>
<td>Adjustable 10 – 120 min.</td>
<td>Adjustable 10, 20, 30, 40, 50 or 60 min.</td>
<td>Adjustable 10 – 120 min.</td>
<td>Adjustable 10 – 720 min.</td>
</tr>
<tr>
<td>Pre-ventilation*</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Display Interior temperature</td>
<td>–</td>
<td>Optional</td>
<td>–</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Feedback</td>
<td>• Status: Heater</td>
<td>• Status: Heater</td>
<td>• Data transfer successful</td>
<td>• Data transfer successful</td>
<td>• Status: Heater and timer</td>
</tr>
<tr>
<td></td>
<td>• Status: Connection to the heater</td>
<td>• Status: Connection to the heater</td>
<td>• Status: Heater and timer</td>
<td>• Status: Connection to the heater</td>
<td>• Feedback via app or browser version</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Status: Connection to the heater</td>
<td>• Status: Connection to the heater</td>
<td>• Status: Connection to the heater</td>
<td>• Status: Connection to the heater</td>
</tr>
<tr>
<td>Range</td>
<td>–</td>
<td>–</td>
<td>Up to 1 km under optimum conditions</td>
<td>Up to 1 km under optimum conditions</td>
<td>Unlimited (given network coverage)</td>
</tr>
<tr>
<td>Display</td>
<td>LED-illuminated ICON display. Lighting can be integrated with vehicle lighting circuit.</td>
<td>Matrix display illuminated with LEDs. Lighting can be integrated with vehicle lighting circuit.</td>
<td>Two-tone LED</td>
<td>Matrix display illuminated with LEDs.</td>
<td>Display on smartphone app or web browser. Illuminated button in the vehicle.</td>
</tr>
</tbody>
</table>

* Depending on heater type
** End users can pre-book connectivity at standard cellphone rates for 12 months at a time at www.myeberspaecher.com
*** Network coverage available in the following countries: Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Great Britain and Northern Ireland, Italy, Latvia, Lithuania, Netherlands, Norway, Poland, Romania, Russia, Sweden, Switzerland, Turkey, Ukraine and Belarus.
2 I CONTROL UNITS – EASYSTART WEB*

1. ADVANTAGES (FUNCTIONS):
- Pre-installed SIM chip instead of having to fit a SIM card
- Integrated antenna in the receiver allows for easy installation
- Hardware backward compatible with most pre-heaters from 2007 onward
- Package includes On / Off button with operating display
- Package includes temperature sensor
- Remote browser diagnostics available (on approval by end customer)

2. FURTHER FEATURES:
- Use of all available networks for optimum connectivity
- No need to fit or replace a SIM card
- Roaming function enables use in other countries without additional costs
- Convenient, cost-effective pre-booking of a flat rate for 12 months at a time
- Intuitive operation with newly designed smartphone app
- Compatibility with all internet-enabled devices via wireless-optimized browser version
- Automatic running time calculation
- Undervoltage warning for vehicle battery
- Current status display (e.g. operational state, interior temperature and timer)
- Another control unit from the EasyStart TP7 family can be used in addition
- Flexible heater control with the various control units

TECHNICAL DATA:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Order number</td>
<td>22 1000 34 5100</td>
</tr>
<tr>
<td>Dimensions L x W x H (without fastening brackets) mm</td>
<td>66 x 106 x 25</td>
</tr>
<tr>
<td>Protection rating</td>
<td>IP 40 to ISO 20653</td>
</tr>
<tr>
<td>Average standby current draw mA</td>
<td>Standby mode &lt; 1</td>
</tr>
<tr>
<td>Current draw A</td>
<td><em>Call-in</em> &lt; 0.5</td>
</tr>
<tr>
<td>Max. continuous current draw (during operation) mA</td>
<td>&lt; 30</td>
</tr>
<tr>
<td>Operating temperature °C</td>
<td>−40 to +85</td>
</tr>
<tr>
<td>Wireless module</td>
<td>Integrated quad-band GSM module (2G)</td>
</tr>
<tr>
<td>Service life</td>
<td>Standby mode: &gt; 10 a</td>
</tr>
<tr>
<td></td>
<td>During operation: &gt; 6,000 h</td>
</tr>
<tr>
<td></td>
<td>Button: &gt; 10,000 actuations</td>
</tr>
</tbody>
</table>

* Network coverage available in the following countries: Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Great Britain and Northern Ireland, Italy, Latvia, Lithuania, Netherlands, Norway, Poland, Romania, Russia, Sweden, Switzerland, Turkey, Ukraine and Belarus.
2 | OPTIONAL ADD-ONS

ADDITIONAL HEATER KIT:
- Order number: 24 8532 00 0000
- Designation: ES additional heater kit for Hydronic 2 with EasyStart
- Area of application: Hydronic 2 Economy in combination with EasyStart

Expands pre-heater functionality for additional heating when driving (providing added value). The heating is switched on and off based on the outside temperature when the combustion engine is running. If the outside temperature is lower than around 5 °C the heating switches on, and switches off at higher temperatures.

PRE-VENTILATION OPTION:
- The Hydronic 12 V and Hydronic 2 Economy and Comfort have a pre-ventilation function
- Both this and the EasyStart control units are automatically detected (see Commissioning EasyStart)

ALTITUDE KIT*:
Suitable for Hydronic and Hydronic 2 and is required from altitudes of around 1,500 m. When the heater starts, the pressure sensor measures the atmospheric pressure cyclically and sends the measured values to the heater control module. The control module evaluates the measured values and if required, adjusts the fuel feed in the metering pump to the current atmospheric pressure. It begins reducing fuel feed at around 1,400 m, which immediately starts to reduce heating power by around 9 % for every 1,000 m in altitude.

Check the compatibility of the heater, and pressure sensor and control unit before installation. (Please look for "H-Kit" on the heater identification label)

Technical data:
- Max. permissible height: approx. 3,500 m
- Measuring range: 600 hPa to 1,150 hPa
- Nominal voltage: 12 / 24 V
- Operating voltage: 8 to 32 V
- Dimensions: 76 x 76 x 29 mm
- Operating temperature: -40 °C to +85 °C

IDENTIFICATION LABEL:
1. In this case, on the right-hand side of the heater identification label you will see "H-Kit". If the label carries this mark, the heater is suitable for automatic altitude adjustment.

2. The heater’s packaging (box) carries a sticker on which you will find the drawing number of the heater: The last two characters of this number (e.g. "ON") specify heater status. Based on this information, the Technical Hotline can tell you whether the heater is compatible with the altitude kit. If the label is not legible, please contact the Technical Hotline.

* The Hydronic M8, M10 and M12 feature the automatic altitude adjustment function. The heating can be operated up to altitudes of 3,500 m.
“INLINE INTEGRATION” OF COOLING CIRCUIT:
Cut through the vehicle’s water feed hose from the engine and the convector.
Connect the heater and water pump to the water feed hose using the connection fittings and water hoses.
Run and connect a water hose from the water pump pressure fitting to the heater water inlet fitting.

Heating characteristic
When the heater is switched on, heat is initially only conveyed to the vehicle’s engine via the vehicle convector.
Once the coolant temperature reaches approx. 30 °C, the vehicle’s fan starts up and heat is supplied to the passenger compartment as well.

COOLING CIRCUIT WITH CHECK VALVE:
Cut through the vehicle’s water feed hose from the engine to the convector and insert the check valve.
Connect the heater and the water pump and hoses to the check valve.
Run and connect a water hose from the water pump pressure fitting to the heater water inlet fitting.

Heating characteristic
When the heater is switched on, heat is initially only conveyed to the vehicle’s engine via the vehicle convector.
Once the coolant temperature reaches approx. 30 °C, the vehicle’s fan starts up and heat is supplied to the passenger compartment as well.

NOTE:
- The “cooling circuit with check valve” maintains the effectiveness of the vehicle heating when the heater is switched off.
- The check valve must be ordered separately – see page 80 for order number.

* The heater is approved for mains operation (230 V/50 Hz), e.g. in camping or parking areas for motor homes or in marinas for boats, only in combination with a special cable harness (order no.: 25 2652 82 11 00, see p.108). The cable harness is included in the universal installation kit for recreational vehicles and boats (order no.: 25 2652 82 00 00).
COOLING CIRCUIT WITH COMBI VALVE:

Using the 5-connection combi valve
If the water feed and return lines between the vehicle's engine and convctor are installed separately in the engine compartment, the 5-connection combi valve must be used along with a T-piece.

Using the 6-connection combi valve
If the water feed and return lines between the vehicle's engine and convctor are installed in parallel in the engine compartment, the 6-connection combi valve can be used (without a T-piece).

Heating characteristic in pre-heating mode – small cooling circuit:
Initially the heat from the heater, at a coolant temperature of approximately 67 °C, is conveyed only to the vehicle convctor, rapidly heating the vehicle interior.

Once the coolant temperature reaches around 67 °C, some of the heat from the heater is also conveyed to the engine. This allows the engine to be pre-heated while preventing the “small cooling circuit” for interior heating from cooling too fast.

Heating characteristic in additional heating mode – large cooling circuit
When the vehicle's engine is operating, heat is distributed evenly between its convctor and engine, making the warmup phase even shorter and heating the vehicle interior.

INSTALLING A COMBI VALVE WITH 5 CONNECTIONS:
Cut the water feed hose running from the vehicle’s engine and convctor, and install the combi valve.
Cut through the water return hose from the vehicle’s convctor and engine and insert the T-piece.
Connect the heater and water pump and hoses to the combi valve and T-piece as shown in the drawing.

---

* The heater is approved for mains operation (230 V/50 Hz), e.g. in camping or parking areas for motor homes or in marinas for boats, only in combination with a special cable harness (order no.: 25 2652 82 11 00, see p. 108). The cable harness is included in the universal installation kit for recreational vehicles and boats (order no.: 25 2652 82 00 00).
**INSTALLING A COMBI VALVE WITH 6 CONNECTIONS:**
Cut the water feed and return lines between the vehicle's engine and convector and install the combi valve.
Connect the heater and water pump and hoses to the combi valve as shown in the drawing.

**COOLING CIRCUIT WITH TWO CHECK VALVES:**
To pre-heat the vehicle interior only (vehicle engine disengaged)
Cut the water feed and return lines between the vehicle’s engine and convector and insert the combi valve.
Install the heater in the water feed hose between the check valve and the vehicle's convector
Connect the water pump and hoses to the check valve.

**Heating characteristic**
When the heater is switched on, the heat is conveyed only to the vehicle’s convector. Once the coolant temperature reaches approx. 30 °C, the vehicle’s fan starts up and more heat is supplied to the passenger compartment.

---

1. To water pump
2. From water pump
3. To heater
4. From vehicle convector
5. To vehicle engine
6. From vehicle engine

---

* The heater is approved for mains operation (230 V/50 Hz), e.g. in camping or parking areas for motor homes or in marinas for boats, only in combination with a special cable harness (order no.: 25 2652 82 11 00, see p.108). The cable harness is included in the universal installation kit for recreational vehicles and boats (order no.: 25 2652 82 00 00).
2. WATER CIRCUIT WITH THERMAL COMBI VALVE:
- Large engines > 2.5 l and / or large cabins
- Small and compact cars, short distances
- Advantage: Switchover at 67 °C, variable cost-effective installation as combi valve with five or six connections
- Partial through-flow of engine from 67 °C
- Prioritizes cabin heat

INSTALLING A COMBI VALVE WITH FIVE CONNECTIONS:
Cut through the vehicle’s water feed hose from the engine to the convector and insert the combi valve. Cut through the water return hose from the vehicle’s convector and engine and insert the T-piece. Connect the heater and water pump and hoses to the combi valve and T-piece as shown in the drawing.

INSTALLING A COMBI VALVE WITH 6 CONNECTIONS:
Cut through the water feed and return hoses between the vehicle’s engine and convector and insert the combi valve. Connect the heater and water pump and hoses to the combi valve as shown in the drawing.

HEATING CHARACTERISTIC IN PRE-HEATING MODE – SMALL COOLING CIRCUIT:
Until the coolant temperature reaches around 67 °C, the heater initially conveys heat to the vehicle’s own convector only, so that the vehicle interior heats up quickly.

Once the coolant temperature reaches around 67 °C, some of the heat from the heater is also conveyed to the engine. This allows the engine to be pre-heated while preventing the small cooling circuit for interior heating from cooling too fast.

HEATING CHARACTERISTIC IN ADDITIONAL HEATING MODE – LARGE COOLING WATER CIRCUIT:
When the engine is running, the heat from the vehicle’s convector and engine are distributed equally, speeding up the warmup phase and the heating of the vehicle interior.
### Retrofit Kits with Water Check Valve:

<table>
<thead>
<tr>
<th></th>
<th>Retrofit kit 1</th>
<th>Retrofit kit 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Order no.</strong></td>
<td>24 0348 80 00 00</td>
<td>24 0349 80 00 00</td>
</tr>
<tr>
<td><strong>Suitable heaters</strong></td>
<td>Hydronic plus Universal IK</td>
<td>Hydronic plus Universal IK</td>
</tr>
<tr>
<td>ø water hose for vehicle</td>
<td>18 mm</td>
<td>20 mm</td>
</tr>
<tr>
<td><strong>Type of water circuit</strong></td>
<td>Interior heating</td>
<td>Interior heating</td>
</tr>
</tbody>
</table>

**Interior pre-heating only**
You can choose from a number of options when it comes to installing the new Hydronic 2 Comfort. The installation can be adapted to a wide variety of customer requirements by prioritizing the preferred type of heating required.

1. **COMFORT INSTALLATION: PRIORITIZATION OF THE INTERIOR:**
   This version is the most frequently used installation variant. Using the bypass, the interior and then the engine is heated (from around 67 °C).

2. **SOLENOID VALVE INSTALLATION FOR SPECIFIC MARKETS: PRIORITIZATION OF THE ENGINE**
   This circuit option, which heats the engine first and then the interior (from approx. 67 °C) is available for specific markets which have a preference for rapidly heating the engine first.

3. **CLASSIC PRE-HEATER INSTALLATION: IN-LINE WATER CIRCUIT:**
   Like any other pre-heater, the Hydronic 2 Comfort can of course also be installed in-line in the water circuit. An additional dummy plug is required to do this. Ideal for installation jobs that need to be performed at short notice.

1. Engine
2. Convecter
3. Hydronic 2 Comfort
4. Check valve
Hydronic 2 Economy with pressure-resistant metering pump:
- Advantage: easy to connect to the vehicle’s fuel system, speeding up installation
- Prerequisite: Fuel pressure < 2 bar for diesel, no common rail diesel (due to fuel temperature), no check valve on tank connection, return line ends just above tank floor

Please note! The following versions of the Hydronic 2 Economy include the pressure-resistant metering pump:
- D4S 12 V: 25 2558 05 00 00
- DSS 12 V: 25 2557 05 00 00

Gasoline applications with a pressure of > 0.2 bar also require the pressure reducer

Please note! For fuel lines pressurized at 2.0 bar to max. 4.0 bar, use the pressure reducer (order no. 22 1000 20 08 00) or a separate tank connection.
AIRTRONIC FUNCTIONS:

- Combustion air is conveyed to the combustion chamber by the fan motor and impeller.
- Fuel is drawn from the vehicle’s tank.
- Fuel is conveyed to the combustion chamber by the metering pump.
- The glow element (filament glow plug from 5 kW) vaporizes this fuel as it enters the combustion chamber and creates a combustible fuel-air mix with the combustion air.
- The resulting flame formation switches off the glow element (or filament glow plug), transfers the heat to the heating air via the convector, and diverts exhaust gas via the exhaust silencer.
- The fan motor and heating-air impeller convey cool air to the heater, where it is warmed by the convector and then blown into the vehicle interior.
### EBERSPÄCHER AIRTRONIC

<table>
<thead>
<tr>
<th><strong>Heater</strong></th>
<th>Airtronic D2</th>
<th>Airtronic D2</th>
<th>Airtronic D3</th>
<th>Airtronic B4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product package</strong></td>
<td>Heater OR complete package</td>
<td>Heater OR complete package</td>
<td>Heater</td>
<td>Heater</td>
</tr>
<tr>
<td><strong>Techn. designation</strong></td>
<td>Airtronic (D2)</td>
<td>Airtronic (D2)</td>
<td>Airtronic M (D3)</td>
<td>Airtronic M (B4)</td>
</tr>
<tr>
<td><strong>Order no. for heater</strong></td>
<td>25 2069 05 00 00</td>
<td>25 2070 05 00 00</td>
<td>25 2317 05 00 00</td>
<td>20 1812 05 00 00</td>
</tr>
<tr>
<td><strong>Order no. for complete package</strong></td>
<td>25 2675 05 00 00</td>
<td>25 2676 05 00 00</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Fuel</strong></td>
<td>Diesel</td>
<td>Diesel</td>
<td>Diesel</td>
<td>Gasoline</td>
</tr>
<tr>
<td><strong>Voltage</strong></td>
<td>V</td>
<td>12</td>
<td>24</td>
<td>12</td>
</tr>
<tr>
<td><strong>Heating medium</strong></td>
<td>Air</td>
<td>Air</td>
<td>Air</td>
<td>Air</td>
</tr>
<tr>
<td><strong>Control / heat settings</strong></td>
<td>off / low / medium / high / power</td>
<td>off / low / medium / high / power</td>
<td>off / low / medium / high / power</td>
<td>off / low / medium / high / power</td>
</tr>
<tr>
<td><strong>Heat output</strong></td>
<td>W</td>
<td>– / 850 / 1,200 / 1,800 / 2,200</td>
<td>– / 850 / 1,200 / 1,800 / 2,200</td>
<td>– / 900 / 1,600 / 2,200 / 3,000 / 4,000</td>
</tr>
<tr>
<td><strong>Fuel consumption</strong></td>
<td>l / h</td>
<td>– / 0.1 / 0.15 / 0.23 / 0.28</td>
<td>– / 0.1 / 0.15 / 0.23 / 0.28</td>
<td>– / 0.11 / 0.2 / 0.28 / 0.31 / 0.38</td>
</tr>
<tr>
<td><strong>Elec. power consumption, operation</strong></td>
<td>W</td>
<td>5 / 8 / 12 / 22 / 34</td>
<td>5 / 8 / 12 / 22 / 34</td>
<td>5 / 7 / 10 / 16 / 24</td>
</tr>
<tr>
<td><strong>Elec. power consumption, start</strong></td>
<td>W</td>
<td>—</td>
<td>—</td>
<td>100</td>
</tr>
<tr>
<td><strong>Air flow volume w/o backpressure kg / h</strong></td>
<td>—</td>
<td>—</td>
<td>13 / 40 / 60 / 90 / 105</td>
<td>13 / 40 / 60 / 90 / 105</td>
</tr>
<tr>
<td><strong>Lower voltage limit</strong></td>
<td>V</td>
<td>10.2</td>
<td>10.5</td>
<td>10.5</td>
</tr>
<tr>
<td><strong>Upper voltage limit</strong></td>
<td>V</td>
<td>16</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td><strong>Interference suppression</strong></td>
<td>Disturbance class 5 (DIN EN 55025)</td>
<td>Disturbance class 5 (DIN EN 55025)</td>
<td>Disturbance class 5 (DIN EN 55025)</td>
<td>Disturbance class 5 (DIN EN 55025)</td>
</tr>
<tr>
<td><strong>Dimensions L x W x H mm</strong></td>
<td>310 x 115 x 122</td>
<td>310 x 115 x 122</td>
<td>376 x 140 x 150</td>
<td>376 x 140 x 150</td>
</tr>
<tr>
<td><strong>Weight empty kg</strong></td>
<td>2.7</td>
<td>2.7</td>
<td>4.5</td>
<td>4.5</td>
</tr>
<tr>
<td><strong>Ventilation mode</strong></td>
<td>available</td>
<td>available</td>
<td>available</td>
<td>available</td>
</tr>
</tbody>
</table>

### EBERSPÄCHER AIRTRONIC

<table>
<thead>
<tr>
<th><strong>Heater</strong></th>
<th>Airtronic D4</th>
<th>Airtronic D4</th>
<th>Airtronic D4 Plus</th>
<th>Airtronic D4 Plus</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product package</strong></td>
<td>Heater</td>
<td>Heater</td>
<td>Heater</td>
<td>Heater</td>
</tr>
<tr>
<td><strong>Techn. designation</strong></td>
<td>Airtronic M (D4)</td>
<td>Airtronic M (D4)</td>
<td>Airtronic M (D4 Plus)</td>
<td>Airtronic M (D4 Plus)</td>
</tr>
<tr>
<td><strong>Order no. for heater</strong></td>
<td>25 2113 05 00 00</td>
<td>25 2114 05 00 00</td>
<td>25 2484 05 00 00</td>
<td>25 2498 05 00 00</td>
</tr>
<tr>
<td><strong>Fuel</strong></td>
<td>Diesel</td>
<td>Diesel</td>
<td>Diesel</td>
<td>Diesel</td>
</tr>
<tr>
<td><strong>Voltage</strong></td>
<td>V</td>
<td>12</td>
<td>24</td>
<td>12</td>
</tr>
<tr>
<td><strong>Heating medium</strong></td>
<td>Air</td>
<td>Air</td>
<td>Air</td>
<td>Air</td>
</tr>
<tr>
<td><strong>Control / heat settings</strong></td>
<td>off / low / medium / high / power</td>
<td>off / low / medium / high / power</td>
<td>off / low / medium / high / power</td>
<td>off / low / medium / high / power</td>
</tr>
<tr>
<td><strong>Heat output</strong></td>
<td>W</td>
<td>– / 900 / 2,000 / 3,000 / 4,000</td>
<td>– / 900 / 2,000 / 3,000 / 4,000</td>
<td>– / 900 / 2,000 / 3,000 / 4,000</td>
</tr>
<tr>
<td><strong>Fuel consumption</strong></td>
<td>l / h</td>
<td>– / 0.11 / 0.25 / 0.38 / 0.51</td>
<td>– / 0.11 / 0.25 / 0.38 / 0.51</td>
<td>– / 0.11 / 0.25 / 0.38 / 0.51</td>
</tr>
<tr>
<td><strong>Elec. power consumption, operation</strong></td>
<td>W</td>
<td>5 / 7 / 13 / 24 / 40</td>
<td>5 / 7 / 13 / 24 / 40</td>
<td>5 / 7 / 16 / 30 / 55</td>
</tr>
<tr>
<td><strong>Elec. power consumption, start</strong></td>
<td>W</td>
<td>—</td>
<td>—</td>
<td>100</td>
</tr>
<tr>
<td><strong>Air flow volume w/o backpressure kg / h</strong></td>
<td>24 / 60 / 110 / 150 / 185</td>
<td>24 / 60 / 110 / 150 / 185</td>
<td>22 / 55 / 100 / 140 / 175</td>
<td>22 / 55 / 100 / 140 / 175</td>
</tr>
<tr>
<td><strong>Lower voltage limit</strong></td>
<td>V</td>
<td>10.5</td>
<td>10.5</td>
<td>21</td>
</tr>
<tr>
<td><strong>Upper voltage limit</strong></td>
<td>V</td>
<td>16</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td><strong>Interference suppression</strong></td>
<td>Disturbance class 5 (DIN EN 55025)</td>
<td>Disturbance class 5 (DIN EN 55025)</td>
<td>Disturbance class 5 (DIN EN 55025)</td>
<td>Disturbance class 5 (DIN EN 55025)</td>
</tr>
<tr>
<td><strong>Dimensions L x W x H mm</strong></td>
<td>376 x 140 x 150</td>
<td>376 x 140 x 150</td>
<td>376 x 140 x 150</td>
<td>376 x 140 x 150</td>
</tr>
<tr>
<td><strong>Weight empty kg</strong></td>
<td>4.5</td>
<td>4.5</td>
<td>4.5</td>
<td>4.5</td>
</tr>
<tr>
<td><strong>Ventilation mode</strong></td>
<td>available</td>
<td>available</td>
<td>available</td>
<td>available</td>
</tr>
</tbody>
</table>
### EBERSPÄCHER AIRTRONIC

<table>
<thead>
<tr>
<th>Feature</th>
<th>Airtronic B5</th>
<th>Airtronic D5</th>
<th>Airtronic D5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Heater</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Product package</strong></td>
<td>Heater</td>
<td>Heater</td>
<td>Heater</td>
</tr>
<tr>
<td><strong>Techn. designation</strong></td>
<td>Airtronic L (B5)</td>
<td>Airtronic L (D5)</td>
<td>Airtronic L (D5)</td>
</tr>
<tr>
<td><strong>Order no. for heater</strong></td>
<td>20 1859 05 00 00</td>
<td>25 2361 05 00 00</td>
<td>25 2362 05 00 00</td>
</tr>
<tr>
<td><strong>Fuel</strong></td>
<td>Gasoline</td>
<td>Diesel</td>
<td>Diesel</td>
</tr>
<tr>
<td><strong>Voltage</strong></td>
<td>V</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td><strong>Heating medium</strong></td>
<td>Air</td>
<td>Air</td>
<td>Air</td>
</tr>
<tr>
<td><strong>Control / heat settings</strong></td>
<td>low / medium / high / power</td>
<td>low / medium / high / power</td>
<td>low / medium / high / power</td>
</tr>
<tr>
<td><strong>Heat output</strong></td>
<td>W</td>
<td>2,000 / 2,700 / 4,800 / 5,500</td>
<td>1,600 / 2,700 / 4,800 / 5,500</td>
</tr>
<tr>
<td><strong>Fuel consumption / h</strong></td>
<td>I / h</td>
<td>0.27 / 0.37 / 0.65 / 0.75</td>
<td>0.2 / 0.34 / 0.58 / 0.66</td>
</tr>
<tr>
<td><strong>Elec. power consumption, operation</strong></td>
<td>W</td>
<td>15 / 30 / 80 / 85</td>
<td>25 / 35 / 80 / 85</td>
</tr>
<tr>
<td><strong>Elec. power consumption, start</strong></td>
<td>W</td>
<td>250</td>
<td>250</td>
</tr>
<tr>
<td><strong>Air flow volume w/o backpressure / kg / h</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lower voltage limit</strong></td>
<td>V</td>
<td>10.5</td>
<td>10.5</td>
</tr>
<tr>
<td><strong>Upper voltage limit</strong></td>
<td>V</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td><strong>Interference suppression</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dimensions L x W x H / mm</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Weight empty</strong></td>
<td>kg</td>
<td>9.3</td>
<td>9.3</td>
</tr>
<tr>
<td><strong>Ventilation mode</strong></td>
<td></td>
<td>available</td>
<td>available</td>
</tr>
</tbody>
</table>

### EBERSPÄCHER AIRTRONIC

<table>
<thead>
<tr>
<th>Feature</th>
<th>D8 LC</th>
<th>D8 LC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Heater</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Product package</strong></td>
<td>Heater</td>
<td>Heater</td>
</tr>
<tr>
<td><strong>Techn. designation</strong></td>
<td>8 L (D8 LC)</td>
<td>8 L (D8 LC)</td>
</tr>
<tr>
<td><strong>Order no. for heater</strong></td>
<td>25 1890 00 00 00</td>
<td>25 1891 00 00 00</td>
</tr>
<tr>
<td><strong>Fuel</strong></td>
<td>Diesel</td>
<td>Diesel</td>
</tr>
<tr>
<td><strong>Voltage</strong></td>
<td>V</td>
<td>12</td>
</tr>
<tr>
<td><strong>Heating medium</strong></td>
<td>Air</td>
<td>Air</td>
</tr>
<tr>
<td><strong>Control / heat settings</strong></td>
<td>low / high</td>
<td>low / high</td>
</tr>
<tr>
<td><strong>Heat output</strong></td>
<td>W</td>
<td>3,500 / 8,000</td>
</tr>
<tr>
<td><strong>Fuel consumption / h</strong></td>
<td>I / h</td>
<td>0.4 / 1.05</td>
</tr>
<tr>
<td><strong>Elec. power consumption, operation</strong></td>
<td>W</td>
<td>115</td>
</tr>
<tr>
<td><strong>Elec. power consumption, start</strong></td>
<td>W</td>
<td>330</td>
</tr>
<tr>
<td><strong>Air flow volume w/o backpressure / kg / h</strong></td>
<td></td>
<td>310</td>
</tr>
<tr>
<td><strong>Lower voltage limit</strong></td>
<td>V</td>
<td>10</td>
</tr>
<tr>
<td><strong>Upper voltage limit</strong></td>
<td>V</td>
<td>14</td>
</tr>
<tr>
<td><strong>Interference suppression</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dimensions L x W x H / mm</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Weight empty</strong></td>
<td>kg</td>
<td>14</td>
</tr>
<tr>
<td><strong>Ventilation mode</strong></td>
<td></td>
<td>available</td>
</tr>
</tbody>
</table>
3 | SELECTING THE AIR HEATER

The heating output information provided refers to heating the interior of a cold vehicle to around 20 °C in cold outside temperatures. If the heater only needs to maintain the existing temperature of the interior, less heating power is required. The heating outputs are only guide values. The exact heating requirement also depends on other environmental conditions (e.g. wind, materials, cabin walls, heating-air ducting, etc.).

### Guide Values for Required Heating Output

<table>
<thead>
<tr>
<th>Example</th>
<th>Volume of interior</th>
<th>Outside temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt; -15 °C</td>
<td>-15 °C to 0 °C</td>
</tr>
<tr>
<td>Truck cabin</td>
<td>&lt; 8 m³</td>
<td>4 kW</td>
</tr>
<tr>
<td>Small bus</td>
<td>8 – 12 m³</td>
<td>5 kW (4 kW)*</td>
</tr>
<tr>
<td>Motor home / van</td>
<td>12 – 20 m³</td>
<td>8 kW</td>
</tr>
<tr>
<td>Yacht / boat</td>
<td>&gt; 20 m³</td>
<td>see documentation: Marine catalog</td>
</tr>
</tbody>
</table>

* Values (referring to heat-insulated cabins / vehicles)

### Range of Devices and Their Respective Advantages:

- **Airtronic D2:** the smallest air heater on the market, advantageous in cramped installation spaces.
- **Airtronic D4:** output 4,000 W, air ducting 90 mm, for vans and suitably sized trucks; offers the advantage of high power within a reasonable installation space, wide range of applications, from 900 W (gasoline 1,300 W) to 4,000 W.
- **Airtronic D3:** in well insulated vehicles, 3,000 W, 90 mm air ducting, energy-saving benefits of 7 – 24 W which makes it quiet and fuel-efficient, wide-ranging application 900 – 3,000 W.
- **Airtronic D4 Plus:** generally for longer air ducting, with the advantage of a higher air flow volume with 90 and / or 75 mm ducting.
3 | SELECTING THE AIR HEATER

- Heating power requirement 4,000 W
  - Space requirement check Airtronic D4
    - OK
  - Space requirement check for heating-air ducting
    - Select ø 90 mm or 75 mm air duct
      - ø 90 mm
      - Check: scope of heating-air ducting (length, number of curved sections, vents, etc.)
        - What guide number** is required?
          - ≤ 3
            - Airtronic D4 Plus + Universal IK (ø 90)
          - ≤ 10
            - Airtronic D4 + Universal IK (ø 90)
  - Select ø 90 mm or 75 mm air duct
    - ø 75 mm
    - Check: scope of heating-air ducting (length, number of curved sections, vents, etc.)
      - What guide number** is required?
        - ≤ 3
          - Airtronic D4 Plus + Universal IK (ø 75)
        - ≤ 10
          - Airtronic D4 + Universal IK (ø 75)

Alternative***: Airtronic D3
* Installation kit Plus = expanded product package

** Guide number: each component of the heating-air ducting (air hose, curved sections, vents, etc.) has a line guide number. The sum of these line guide numbers must not be greater than the guide number for the heater, otherwise the heater could malfunction – e.g. overheating. The higher the guide number for the heater, the more heating-air ducting components may be connected. Please refer to Eberspächer’s Accessories catalog for a detailed explanation of guide numbers.

*** Airtronic D3 option: lower heating power (3,000 W) and therefore lower power consumption => and quieter operation => e.g. for well-insulated cabins
GENERAL NOTES ON HEATING-AIR DUCTING:

Heating-air ducting can also be mounted onto the heater. Each part has a line guide number which indicates the reduction in the heating-air throughput. In order to give you the opportunity to check that the installation you have planned does not reduce the heating-air throughput to an inadmissible level, we have calculated a heater guide number for each heater and a line guide number for each heating-air ducting; see information in the guide number tables:

0 = no temperature increase,
− = no line guide number.

The total of the line guide numbers of the heating-air ducts connected to the heater must not be greater than the heater guide number, as otherwise the vent temperature would be inadmissibly high, the heat distribution would be uneven and the overheating sensor would respond. If the total of the line guide numbers is greater than the heater guide number, the total can be reduced by selecting a larger diameter for the air ducts or switching from a one-duct to a two-duct system.

1-duct means:

One heating-air duct leads to or from the heater. The line guide numbers under “1-duct” apply.

2-duct means:

After the heater, the heating-air line divides into two ducts. Up until this branch, the line guide numbers specified under “1-duct” apply, from the branch onwards the line guide numbers under “2-duct” apply. Note the information on air ducting and calculating the total of the guide line numbers starting on page 42.

When using two air ducts or multiple vents, at least one of the ducts must be permanently open.

The branch that can be closed must not be taken into account when calculating the total of the line guide numbers.

RULE OF THUMB:

Double cross-section or two lines the same, routed in parallel = 1 / 4 of the guide number.

Example:

Hose ø 60 mm
Cross-section A = 19.6 cm², guide number 1.0
Hose ø 75,
Cross-section A = 44.2 cm², guide number 0.25

With smooth welded pipes, the line guide number is only half of the flexible hose with the same diameter (i.e. double pipe length).

WITH INNOVATIVE AIR CONTROL UNITS:

To counter the uneven distribution of warm air in systems with multiple ducts and vents, we have developed innovative air flow regulating elements that are simply clipped into the hose connection fitting of the air vent. These patented regulating elements reduce the air flow cross-section accordingly and therefore the amount of air that escapes. Available for fitting diameters 60, 75 and 90 mm.
THE NEW RANGE OF AIR VENTS:
Particularly colorfast and durable even at high temperatures, the covers of our completely re-designed range of vents are impressive, featuring a streamlined and high-quality design that allows for a variety of flow directions. They are available in white and black, allowing seamless integration into any interior.
- Clear, simple system thanks to the modular design.
- Plug-in connections between cover and fitting or fitting and air hose for easy assembly.
- Fittings available in 50, 60, 75 and 90 mm.

EXAMPLE CALCULATION FOR HEATING-AIR DUCTING:
Airtronic: Heater guide no = 6

<table>
<thead>
<tr>
<th>NO.</th>
<th>DESCRIPTION</th>
<th>LINE GUIDE NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Protective grille</td>
<td>1.7</td>
</tr>
<tr>
<td>2</td>
<td>Connectors ø 60</td>
<td>1.7</td>
</tr>
<tr>
<td>3</td>
<td>Flex. Pipe ø 60, 0.3 m long</td>
<td>0.3</td>
</tr>
<tr>
<td>4</td>
<td>Flex. Pipe ø 60, 1.0 m long</td>
<td>1.0</td>
</tr>
<tr>
<td>5</td>
<td>Straight air scoop, ø 60</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>1 x 90° elbow, flex. pipe</td>
<td>0.6</td>
</tr>
<tr>
<td>7</td>
<td>Rotating air vent</td>
<td>1.4</td>
</tr>
</tbody>
</table>

Total of the line guide numbers: 5.0

Total of line guide numbers, 5.0, does not exceed the heater guide number 6, so the installation is admissible.

HEATER GUIDE NUMBERS:

<table>
<thead>
<tr>
<th>HEATER</th>
<th>GUIDE NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airtronic D2 with scoop 60</td>
<td>6</td>
</tr>
<tr>
<td>Airtronic D2 with scoop 75</td>
<td>12</td>
</tr>
<tr>
<td>Airtronic D3 / D4 / B4 with scoop 75</td>
<td>3</td>
</tr>
<tr>
<td>Airtronic D3 / D4 / B4 with scoop 90</td>
<td>10</td>
</tr>
<tr>
<td>Airtronic D4 Plus with scoop 75 (air-recirculation mode)</td>
<td>8</td>
</tr>
<tr>
<td>Airtronic D4 Plus with scoop 75 (in fresh-air mode)</td>
<td>10</td>
</tr>
<tr>
<td>Airtronic D4 Plus with scoop 90</td>
<td>15</td>
</tr>
<tr>
<td>Air heaters</td>
<td>Heater guide number 6</td>
</tr>
<tr>
<td>--------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Airtronic D2, 12 V</td>
<td>25 2069 05 0000</td>
</tr>
<tr>
<td>Airtronic D2, 24 V</td>
<td>25 2069 05 0000</td>
</tr>
<tr>
<td>Airtronic D3, 12 V</td>
<td>25 2069 05 0000</td>
</tr>
<tr>
<td>Airtronic B4, 12 V</td>
<td>25 2069 05 0000</td>
</tr>
<tr>
<td>Airtronic D4, 12 V</td>
<td>25 2069 05 0000</td>
</tr>
<tr>
<td>Airtronic D4, 24 V</td>
<td>25 2069 05 0000</td>
</tr>
<tr>
<td>Airtronic D4 Plus, 12 V</td>
<td>25 2069 05 0000</td>
</tr>
</tbody>
</table>

**Please Note:**
- See page 56 for control units.
- Parts with no image number are small parts which are bagged.
- If the installation requires additional parts, see page 83.
- For notes on the heater guide numbers, see pages 40 and 48.
HEATER – PRODUCT PACKAGE:

1. Airtronic heater
2. Metering pump

COMPLETE PACKAGE – PRODUCT PACKAGE:

1. Airtronic heater
2. Metering pump
   - Installation kit with ø 60 mm air scoop
3. EasyStart Select
4. Fuel tank extractor – only with complete package
   
   25 2676 05 0000

UNIVERSAL INSTALLATION KIT – PRODUCT PACKAGE:

5. Cable harness, pos / neg (included with item 22)
6. Cable harness, operation (included with item 22)
7. Flexible exhaust pipe (1 m long)
8. Combustion-air hose (1 m long)
9. Cable tie (2x 10)
10. Mounting bracket, metering pump
11. Pipe, 6 x 2 (1.5 m long)
12. Pipe, 4 x 1.25 (7.5 m long)
13. Hose clip (1x)
14. Vent, 30° (ø 75 / 90 mm)
15. Fitting (ø 75 mm)
16. Flat vent, 30° (ø 50 / 60 mm)
17. Fitting (ø 60 mm)
18. Grille
19. Scoop
20. Flexible pipe
21. Exhaust silencer
22. Cable harness, heater

* Only with the complete Airtronic D2 package.
* Only with the complete 24 V Airtronic D2 package.
*** Only with the Airtronic D2 installation kit and the complete Airtronic D2 package.
**** Only with the installation kit for the Airtronic B3 Plus, D3, D4 and D4 Plus.
3 | “PLUS” INSTALLATION KITS

“PLUS” INSTALLATION KITS ARE IDEAL FOR INSTALLATIONS IN MOTOR HOMES AND BoATS.

<table>
<thead>
<tr>
<th>INSTALLATION KIT “PLUS”</th>
</tr>
</thead>
</table>
| Airtronic D2, 12 V   | Air scoop ø 75 mm  
|                         | Heater guide number 12  
|                         | 25 2069 82 0000  
| Airtronic D2, 24 V   | 25 2069 82 0000  

PLEASE NOTE:
- See page 56 for control units.
- Parts with no image number are small parts which are bagged.
- If the installation requires additional parts, see page 83.
- For notes on the heater guide numbers, see pages 40 and 48.
HEATER – PRODUCT PACKAGE:
1. Airtronic heater
2. Metering pump

INSTALLATION KIT “PLUS” – PRODUCT PACKAGE:
3. Combustion-air intake silencer
4. Exhaust silencer
5. Fitting (3x ø 60 mm)
6. Flat vent, 0° (ø 50 / 60 mm)
7. Y-junction (ø 75 / 60 / 60 mm)
8. Tank connection kit
9. Temperature control sensor
10. Cable harness for temperature control sensor
11. Cable harness, pos / neg (included with Item 17)
12. Cable harness, operation (included with Item 17)
13. Hose clip (2x ø 60 mm)
14. Hose clip (2x ø 75 mm)
15. Flexible exhaust pipe (1 m long)
16. Flexible exhaust pipe (1 m long)
17. Grille
18. Holder, metering pump
19. Air scoop (ø 75 mm)
20. Flat vent, 30° (2x ø 50 / 60 mm)
21. Adapter ø 6 / 4
22. Pipe 4 x 1 (6 m long; included with Item 8)
23. Pipe 4 x 1 (6 m long; included with Item 8)
24. Pipe clip ø 50 mm

NOT IN PRODUCT PACKAGE:
11. Flexible pipe (ø 75 mm) for heating-air ducting
27. Flexible pipe (ø 60 mm) for heating-air ducting
### 3 | INSTALLATION PARTS

<table>
<thead>
<tr>
<th>Air heaters</th>
<th>Heater</th>
<th>Universal IK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airtronic L – B5, 12 V</td>
<td>20 1859 05 0000</td>
<td>25 2361 80 0000</td>
</tr>
<tr>
<td>Airtronic L – D5, 12 V</td>
<td>25 2361 05 0000</td>
<td>25 2361 80 0000</td>
</tr>
<tr>
<td>Airtronic L – D5, 24 V</td>
<td>25 2362 05 0000</td>
<td>25 2361 80 0000</td>
</tr>
</tbody>
</table>

**PLEASE NOTE:**
- See page 56 for control units.
- Parts with no image number are small parts which are bagged.
- If the installation requires additional parts, see page 83.
### Air heaters

<table>
<thead>
<tr>
<th>Type</th>
<th>Order No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>D8 LC, 12 V</td>
<td>25 1890 00 0000</td>
</tr>
<tr>
<td>D8 LC, 24 V</td>
<td>25 1891 00 0000</td>
</tr>
</tbody>
</table>

### PRODUCT PACKAGE:

- 1 Heater, pre-mounted
- 2 Metering pump with integrated fuel filter and mounting bracket
- 3 Control unit
- 4 Temperature sensor, external
- 5 Cable harness with connection parts
- 6 Bushing connector housing with connection parts
- 7 Blade fuse with fuse holder
- 8 Bushing connector housing with bushing connectors and seals (2 x)
- 9 Rubber-metal buffer with fastening parts (4 x)

### NOT INCLUDED IN PRODUCT PACKAGE:

- 10 Cable harness, temperature sensor 25 1482 89 4000
- 11 Combustion air hose 10 2114 25 0000
- 11a Hose clip 10 2067 03 2050
- 11b End sleeve for combustion-air hose 25 1480 89 0400
- 12 Pipe clip for flex. exhaust pipe LW42 152 05 005
- 13 Flexible exhaust pipe LW42 360 61 381
- 14 End sleeve for flex. exhaust pipe LW42 22 1000 40 0200
- 15 Exhaust pipe (rigid) 047 05 044

### PLEASE NOTE:

- See page 56 for control units.
- Parts with no image number are small parts which are bagged.
- If the installation requires additional parts, see page 83.

* Self-assembly with the 5 m cable harness (Order no. 22 1000 30 0300). Cut the existing connectors off the cable harness. Prepare the cable strands for the bushing connectors and fit them. The bushing connectors are included in the product package. Connect the cable harness to the cable harness connector (6) and to the bushing connector housing of the control unit (6) following the circuit diagrams at the end of the documentation.
**AIRTRONIC**

Heater number 6 – with ø 60 air scoop  
Heater number 12 – with ø 75 air scoop

The drawing shows the application options for the main air ducts.  
There are no installation examples.

**PLEASE NOTE:**  
For an explanation of one- and two-duct heating-air ducting, see page 40.
<table>
<thead>
<tr>
<th>NO.</th>
<th>NAME (DIMENSIONS IN MM)</th>
<th>LINE GUIDE NUMBER 1-DUCT</th>
<th>LINE GUIDE NUMBER 2-DUCT</th>
<th>SEE SERIES NO. SEC. 7 AIR-CONDUCTING PARTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heating-air duct with ø 60 scoop (heater guide number 6)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Scoop, ø 60</td>
<td>0</td>
<td>0</td>
<td>21</td>
</tr>
<tr>
<td>2</td>
<td>Flex. pipe ø 60 per m</td>
<td>1.0</td>
<td>0.25</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>90° elbow, flexible pipe</td>
<td>0.6</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>4</td>
<td>Flat vent, ø 60 fitting</td>
<td>0.5</td>
<td>0.1</td>
<td>13</td>
</tr>
<tr>
<td>5</td>
<td>Fitting, ø 60</td>
<td>0</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>6</td>
<td>Heater grille, ø 60</td>
<td>0</td>
<td>–</td>
<td>17</td>
</tr>
<tr>
<td>7</td>
<td>Air filter, ø 60</td>
<td>1.6</td>
<td>–</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>Ball-shaped scoop, ø 60</td>
<td>4.8</td>
<td>–</td>
<td>32</td>
</tr>
<tr>
<td>9</td>
<td>ø 50 connection fitting for ø 60 ø 75 ball-shaped scoops</td>
<td>4.5</td>
<td>–</td>
<td>31</td>
</tr>
<tr>
<td>10</td>
<td>Pipe elbow, 90° ø 60</td>
<td>4</td>
<td>–</td>
<td>33</td>
</tr>
<tr>
<td>11</td>
<td>Upright vent, 30° with ø 60 fitting</td>
<td>3.2</td>
<td>0.8</td>
<td>10</td>
</tr>
<tr>
<td>12</td>
<td>T-junction</td>
<td>1.4</td>
<td>0.25</td>
<td>35</td>
</tr>
<tr>
<td>13</td>
<td>Butterfly valve ø 60 / 60 / 60 with “right / left” flap position</td>
<td>–</td>
<td>0.6</td>
<td>40</td>
</tr>
<tr>
<td>14</td>
<td>Y-junction</td>
<td>–</td>
<td>1</td>
<td>43</td>
</tr>
<tr>
<td>15</td>
<td>Closable vent ø 50 / 60</td>
<td>–</td>
<td>–</td>
<td>12</td>
</tr>
<tr>
<td>16</td>
<td>Flat vent, 30° ø 50 / 60</td>
<td>0.7</td>
<td>0.2</td>
<td>11</td>
</tr>
<tr>
<td>17</td>
<td>Symmetrical metal Y-junction ø 60 / 50 / 50</td>
<td>–</td>
<td>0.3</td>
<td>42</td>
</tr>
<tr>
<td>18</td>
<td>Upright vent, 90° ø 50 / 60</td>
<td>n/a</td>
<td>n/a</td>
<td>14</td>
</tr>
<tr>
<td>Heating-air duct with ø 75 scoop (heater guide number 12)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Adapter</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Scoop, ø 75</td>
<td>0</td>
<td>0</td>
<td>21</td>
</tr>
<tr>
<td>21</td>
<td>Flex. pipe ø 75 per m</td>
<td>1</td>
<td>0.25</td>
<td>1</td>
</tr>
<tr>
<td>22</td>
<td>90° elbow, flex. pipe, ø 75</td>
<td>0.2</td>
<td>–</td>
<td>1</td>
</tr>
<tr>
<td>23</td>
<td>Intake silencer, ø 75</td>
<td>0.7</td>
<td>–</td>
<td>4</td>
</tr>
<tr>
<td>24</td>
<td>Fitting, ø 75</td>
<td>0</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>25</td>
<td>Flat vent, ø 75 / 90 with ø 75 fitting</td>
<td>0.6</td>
<td>0.1</td>
<td>13</td>
</tr>
<tr>
<td>26</td>
<td>Upright vent, 30° ø 75 / 90 with ø 75 fitting</td>
<td>0.5</td>
<td>0.15</td>
<td>10</td>
</tr>
<tr>
<td>27</td>
<td>Pipe elbow, 90° ø 75</td>
<td>4.5</td>
<td>–</td>
<td>33</td>
</tr>
<tr>
<td>28</td>
<td>Flat vent, 90° ø 75</td>
<td>0.5</td>
<td>0.15</td>
<td>11</td>
</tr>
<tr>
<td>29</td>
<td>Upright vent, ø 75 with ø 75 fitting</td>
<td>0.8</td>
<td>0.15</td>
<td>14</td>
</tr>
<tr>
<td>30</td>
<td>Closable vent ø 75 / 90 with ø 75 fitting</td>
<td>0.6</td>
<td>0.2</td>
<td>11</td>
</tr>
<tr>
<td>31</td>
<td>T-junction ø 75 / 75 / 75</td>
<td>–</td>
<td>0.8</td>
<td>35</td>
</tr>
<tr>
<td>32</td>
<td>Butterfly valve, ø 75 / 75 / 75</td>
<td>–</td>
<td>1.2</td>
<td>40</td>
</tr>
<tr>
<td>33</td>
<td>Y-junction ø 75 / 75 / 75</td>
<td>–</td>
<td>0.6</td>
<td>43</td>
</tr>
<tr>
<td>34</td>
<td>Hose connector fitting, ø 75</td>
<td>0.5</td>
<td>0.1</td>
<td>44</td>
</tr>
<tr>
<td>35</td>
<td>Silencer, ø 75</td>
<td>0.6</td>
<td>–</td>
<td>3</td>
</tr>
<tr>
<td>36</td>
<td>Ball-shaped scoop, ø 75</td>
<td>6</td>
<td>–</td>
<td>32</td>
</tr>
<tr>
<td>37</td>
<td>Symmetrical plastic Y-junction ø 75 / 60 / 60</td>
<td>–</td>
<td>0.8</td>
<td>42</td>
</tr>
<tr>
<td>38</td>
<td>Symmetrical metal Y-junction ø 75 / 50 / 50</td>
<td>–</td>
<td>0.9</td>
<td>42.1</td>
</tr>
<tr>
<td>39</td>
<td>Adapter ø 75 – 60</td>
<td>3.2</td>
<td>–</td>
<td>45</td>
</tr>
</tbody>
</table>
AIRTRONIC M

Heater number 3 – with ø 75 air scoop
Heater number 10 – with ø 90 air scoop

The drawing shows the application options for the main air ducts.
There are no installation examples.

* Heater guide numbers for the Airtronic D4 Plus are different, see page 42.

PLEASE NOTE:
For an explanation of one- and two-duct heating-air ducting, see page 40.
<table>
<thead>
<tr>
<th>NO.</th>
<th>NAME (DIMENSIONS IN MM)</th>
<th>LINE GUIDE NUMBER 1-DUCT</th>
<th>LINE GUIDE NUMBER 2-DUCT</th>
<th>SEE SERIES NO. SEC. 7 AIR-CONDUCTING PARTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Ø 75</td>
<td>Ø 90</td>
<td>Ø 75</td>
</tr>
<tr>
<td>1a</td>
<td>Scoop, ø 75</td>
<td>0</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>2</td>
<td>Flex. pipe ø 75 per m</td>
<td>1</td>
<td>–</td>
<td>0.25</td>
</tr>
<tr>
<td>3</td>
<td>90° elbow, flexible pipe, ø 75</td>
<td>0.4</td>
<td>–</td>
<td>0.1</td>
</tr>
<tr>
<td>4</td>
<td>Flat vent, ø 75</td>
<td>0.0</td>
<td>–</td>
<td>0.0</td>
</tr>
<tr>
<td>6</td>
<td>Grille, ø 75</td>
<td>2.0</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>7</td>
<td>Intake silencer, ø 75</td>
<td>0.8</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>8</td>
<td>T-junction, ø 75</td>
<td>–</td>
<td>0.5</td>
<td>–</td>
</tr>
<tr>
<td>9</td>
<td>Butterfly valve ø 90 / 90 / 90 with 75 / 90 adapters</td>
<td>–</td>
<td>1.8</td>
<td>–</td>
</tr>
<tr>
<td>10</td>
<td>Plastic Y-junction ø 75 / 75 / 75</td>
<td>–</td>
<td>0.6</td>
<td>–</td>
</tr>
<tr>
<td>11</td>
<td>Flat vent, 30° with ø 75 fitting</td>
<td>0.4</td>
<td>–</td>
<td>0.1</td>
</tr>
<tr>
<td>12</td>
<td>Upright vent, 30° with ø 75 fitting</td>
<td>0.6</td>
<td>–</td>
<td>0.2</td>
</tr>
<tr>
<td>13</td>
<td>Upright vent, 90° with ø 75 fitting</td>
<td>1.1</td>
<td>–</td>
<td>0.3</td>
</tr>
<tr>
<td>14</td>
<td>Ball-shaped scoop, ø 75</td>
<td>2.0</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>15</td>
<td>Closable vent with ø 75 fitting</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>16</td>
<td>Ring, ø 75 / 90</td>
<td>0.5</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>17</td>
<td>Symmetrical plastic Y-junction ø 75 / 60 / 60</td>
<td>–</td>
<td>0.9</td>
<td>–</td>
</tr>
<tr>
<td>18</td>
<td>Hose connector</td>
<td>0.5</td>
<td>–</td>
<td>0.1</td>
</tr>
</tbody>
</table>

|     |                         | Ø 90 | –    | –    | –    |                                    |
| 1b  | Scoop, ø 90             | –    | 0    | –    | –    | 21                                    |
| 18  | Flex. pipe ø 90 per m   | –    | 1    | –    | 0.25 | 1                                     |
| 19  | Hose connector fitting, ø 90 | –    | 0.5  | –    | 0.1  | 44                                    |
| 20  | Silencer, ø 90          | –    | 0.7  | –    | –    | 3                                     |
| 21  | Fitting, ø 90           | –    | 0    | –    | 0    | 16                                    |
| 23  | Flat vent, ø 90 with ø 90 fitting | –    | 1.1  | –    | 0.3  | 13                                    |
| 24  | Butterfly valve, ø 90 / 90 / 90 | –    | 1.2  | –    | –    | 40                                    |
| 25  | Y-junction ø 90 / 90 / 90 | –    | –    | –    | 0.3  | 43                                    |
| 26  | Ball-shaped scoop, ø 90* | –    | 5.0  | –    | –    | 32                                    |
| 27  | Ring, ø 90 / 100        | –    | 0    | –    | –    | 34                                    |
| 28  | Flexible pipe, ø 100, per m | –    | 0.4  | –    | –    | 1                                     |
| 29  | Hose connector fitting, ø 100 | –    | 0.1  | –    | –    | 44                                    |
| 30  | Silencer, ø 100         | –    | 0.5  | –    | –    | 3                                     |
| 31  | Rotatable vent ø 100    | –    | 2.1  | –    | 0.5  | 11.1                                   |
| 32  | Y-junction ø 100 / 100 / 100 | –    | –    | –    | 0.5  | 43                                    |
| 33  | Adapter ø 75 – 100      | –    | –    | –    | 0.8  | 45                                    |
| 36  | T-junction, ø 90        | –    | –    | –    | 0.6  | 35                                    |
| 37  | Flat vent, 30° with ø 90 fitting | –    | 2.0  | –    | 0.4  | 11                                    |
| 38  | Upright vent, 90° with ø 90 fitting | –    | 2.7  | –    | 0.3  | 14                                    |
| 39  | Upright vent, 30° with ø 90 fitting | –    | 2.4  | –    | 0.6  | 10                                    |
| 40  | 90° elbow, flexible pipe, ø 90 | 0.1  | –    | –    | –    | 1                                     |
| 41  | Symmetrical plastic Y-junction ø 90 / 75 / 75 | –    | –    | –    | 0.9  | 42                                    |
| 42  | Symmetrical plastic Y-junction ø 90 / 60 / 60 | –    | –    | –    | 2.1  | 42                                    |
| 43  | Adapter ø 75 – 90       | –    | 3.3  | –    | –    | 45                                    |
| 44  | T-junction, ø 100       | –    | –    | –    | 0.4  | 35                                    |
| 45  | Adapter ø 90 – 100      | –    | 0.4  | –    | –    | 45                                    |

* Cannot be used with the Airtronic D4 Plus
**AIRTRONIC L**

Heater number 10

The drawing shows the application options for the main air ducts. There are no installation examples.

**PLEASE NOTE:**
For an explanation of one- and two-duct heating-air ducting, see page 40.

---

= Ø 75 mm
= Ø 90 mm
= Ø 100 mm
* item 4 – when using the ø 90 / 100 adapter, cut the grille
AIR HEATER 8 L

Heater number 8

The drawing shows the application options for the main air ducts.
There are no installation examples.

PLEASE NOTE:
For an explanation of one- and two-duct heating-air ducting,
see page 40.
<table>
<thead>
<tr>
<th>NO.</th>
<th>NAME (DIMENSIONS IN MM)</th>
<th>LINE GUIDE NUMBER 1-DUCT</th>
<th>LINE GUIDE NUMBER 2-DUCT</th>
<th>SEE SERIES NO. AIR-CONDUCTING PARTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Heating-air duct with ø 100 scoop</strong> (heater guide number 8)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Grille, ø 100</td>
<td>0.1</td>
<td>–</td>
<td>17</td>
</tr>
<tr>
<td>2</td>
<td>Flexible pipe, ø 100, per m</td>
<td>1</td>
<td>0.25</td>
<td>1</td>
</tr>
<tr>
<td>2a</td>
<td>90° elbow, flexible pipe, ø 100</td>
<td>0.5</td>
<td>0.15</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Metal hose fitting, ø 100</td>
<td>0</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>4</td>
<td>Grille, ø 100</td>
<td>1.8</td>
<td>0.1</td>
<td>13.1</td>
</tr>
<tr>
<td>5</td>
<td>Silencer, ø 100</td>
<td>1.1</td>
<td>0.25</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>Hose connector fitting, ø 100</td>
<td>0.5</td>
<td>0.1</td>
<td>44</td>
</tr>
<tr>
<td>7</td>
<td>Rotatable vent ø 100</td>
<td>5.5</td>
<td>1.2</td>
<td>11.1</td>
</tr>
<tr>
<td>8</td>
<td>Adapter ø 90 – 100</td>
<td>1.4</td>
<td>–</td>
<td>45</td>
</tr>
<tr>
<td>9</td>
<td>Butterfly valve, ø 90 / 90 / 90</td>
<td>–</td>
<td>2.6</td>
<td>40</td>
</tr>
<tr>
<td>10</td>
<td>Flexible pipe, ø 90, per m</td>
<td>3</td>
<td>0.8</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>Y-junction, ø 100</td>
<td>–</td>
<td>0.4</td>
<td>43</td>
</tr>
<tr>
<td>12</td>
<td>Adapter ø 75 – 100</td>
<td>6.1</td>
<td>–</td>
<td>47</td>
</tr>
<tr>
<td>13</td>
<td>Flexible pipe, ø 75, per m</td>
<td>–</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>Fitting, ø 75</td>
<td>0</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>15</td>
<td>Closable vent 75</td>
<td>–</td>
<td>–</td>
<td>12</td>
</tr>
<tr>
<td>16</td>
<td>Closable vent 90</td>
<td>–</td>
<td>–</td>
<td>12</td>
</tr>
<tr>
<td>17</td>
<td>90° elbow, flexible pipe, ø 75</td>
<td>–</td>
<td>1.1</td>
<td>1</td>
</tr>
<tr>
<td>18</td>
<td>T-junction, ø 100</td>
<td>–</td>
<td>0.2</td>
<td>35</td>
</tr>
<tr>
<td>19</td>
<td>Flat vent, 0° with ø 75 fitting</td>
<td>–</td>
<td>1.3</td>
<td>13</td>
</tr>
<tr>
<td>20</td>
<td>Flat vent, 30° with ø 75 fitting</td>
<td>–</td>
<td>1.5</td>
<td>11</td>
</tr>
<tr>
<td>21</td>
<td>Upright vent, 30° with ø 75 fitting</td>
<td>–</td>
<td>1.6</td>
<td>10</td>
</tr>
<tr>
<td>22</td>
<td>Upright vent, 90° with ø 75 fitting</td>
<td>–</td>
<td>1.8</td>
<td>14</td>
</tr>
<tr>
<td>23</td>
<td>Fitting, 90</td>
<td>0</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>24</td>
<td>Flat vent, 0° with ø 90 fitting</td>
<td>–</td>
<td>0.8</td>
<td>13</td>
</tr>
<tr>
<td>25</td>
<td>Flat vent, 30° with ø 90 fitting</td>
<td>–</td>
<td>1.1</td>
<td>11</td>
</tr>
<tr>
<td>26</td>
<td>Upright vent, 30° with ø 90 fitting</td>
<td>–</td>
<td>1.1</td>
<td>10</td>
</tr>
<tr>
<td>27</td>
<td>Upright vent, 90° with ø 90 fitting</td>
<td>–</td>
<td>1.3</td>
<td>14</td>
</tr>
</tbody>
</table>
# CONTROL UNITS

<table>
<thead>
<tr>
<th>Model</th>
<th>EasyStart Select Control unit</th>
<th>EasyStart Timer</th>
<th>EasyStart Remote Remote control</th>
<th>EasyStart Remote+ Remote control</th>
<th>EasyStart Web**/*** Web-based remote control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order number</td>
<td>22 1000 34 13 00</td>
<td>22 1000 34 15 00</td>
<td>22 1000 34 23 00</td>
<td>22 1000 34 17 00</td>
<td>22 1000 34 51 00</td>
</tr>
<tr>
<td>Description</td>
<td>Basic version</td>
<td>Comfort version</td>
<td>Basic version</td>
<td>Comfort version</td>
<td>Operation by smartphone app (available for iPhone and Android) or web app (browser version)</td>
</tr>
<tr>
<td>Functions</td>
<td>• Heating / ventilation on / off</td>
<td>• Heating / ventilation on / off</td>
<td>• Heating / ventilation on / off</td>
<td>• Heating / ventilation on / off</td>
<td>• Heating / ventilation on / off</td>
</tr>
<tr>
<td></td>
<td>• Program / delete pre-select mode</td>
<td>• Program / delete pre-select mode</td>
<td>• Program / delete pre-select mode</td>
<td>• Program / delete pre-select mode</td>
<td>• Program / delete pre-select mode</td>
</tr>
<tr>
<td></td>
<td>• Long-press function for immediate heating</td>
<td>• Long-press function for immediate heating</td>
<td>• Long-press function for immediate heating</td>
<td>• Long-press function for immediate heating</td>
<td>• Long-press function for immediate heating</td>
</tr>
<tr>
<td></td>
<td>• A second / additional heater can be operated</td>
<td>• A second / additional heater can be operated</td>
<td>• A second / additional heater can be operated</td>
<td>• A second / additional heater can be operated</td>
<td>• A second / additional heater can be operated</td>
</tr>
<tr>
<td>Programming the timer</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Timer programming: automatic heating time calculation</td>
<td>–</td>
<td>Optional with connection of temperature sensor</td>
<td>–</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Immediate start-up mode running time</td>
<td>60 min. preset</td>
<td>Adjustable 10 – 120 min.</td>
<td>Adjustable 10, 20, 30, 40, 50 or 60 min.</td>
<td>Adjustable 10 – 120 min.</td>
<td>Adjustable 10 – 720 min.</td>
</tr>
<tr>
<td>Pre-ventilation*</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Display Interior temperature</td>
<td>–</td>
<td>Optional</td>
<td>–</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Feedback</td>
<td>• Status: Heater</td>
<td>• Status: Heater</td>
<td>• Data transfer successful</td>
<td>• Data transfer successful</td>
<td>• Status: Heater and timer</td>
</tr>
<tr>
<td></td>
<td>• Status: Connection to the heater</td>
<td>• Status: Connection to the heater</td>
<td>• Status: Heater and timer</td>
<td>• Status: Connection to the heater</td>
<td>• Feedback via app or browser version</td>
</tr>
<tr>
<td></td>
<td>• Status: Connection to the heater</td>
<td>• Status: Connection to the heater</td>
<td>• Status: Connection to the heater</td>
<td>• Status: Connection to the heater</td>
<td>• Status: Connection to the heater</td>
</tr>
<tr>
<td>Range</td>
<td>–</td>
<td>–</td>
<td>Up to 1 km under optimum conditions</td>
<td>Up to 1 km under optimum conditions</td>
<td>Unlimited (given network coverage)</td>
</tr>
<tr>
<td>Display</td>
<td>LED-illuminated ICON display. Lighting can be integrated with vehicle lighting circuit.</td>
<td>Matrix display illuminated with LEDs. Lighting can be integrated with vehicle lighting circuit.</td>
<td>Two-tone LED</td>
<td>Matrix display illuminated with LEDs.</td>
<td>Display on smartphone app or web browser. Illuminated button in the vehicle.</td>
</tr>
</tbody>
</table>

* Depending on heater type
** End users can pre-book connectivity at standard cellphone rates for 12 months at a time at www.myeberspach.com
*** Network coverage available in the following countries: Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Great Britain and Northern Ireland, Italy, Latvia, Lithuania, Netherlands, Norway, Poland, Romania, Russia, Sweden, Switzerland, Turkey, Ukraine and Belarus.
3 | CONTROL UNITS

### ACCESSORIES

<table>
<thead>
<tr>
<th></th>
<th>EasyStart Select</th>
<th>EasyStart Timer</th>
<th>EasyStart Remote</th>
<th>EasyStart Remote+</th>
<th>EasyStart Web</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature sensor</td>
<td>—</td>
<td>22 1000 34 22 00</td>
<td>—</td>
<td>Included in the product package</td>
<td>Included in the product package</td>
</tr>
<tr>
<td>for displaying</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interior temperature</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Timer trim</td>
<td>—</td>
<td>22 1000 51 41 00</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

### APPROVED COMBINATIONS

#### SLAVE CONTROL UNITS

<table>
<thead>
<tr>
<th></th>
<th>EasyStart Select</th>
<th>EasyStart Timer</th>
<th>EasyStart Remote</th>
<th>Button</th>
<th>EasyStart Web</th>
</tr>
</thead>
<tbody>
<tr>
<td>EasyStart Timer</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>—</td>
</tr>
<tr>
<td>EasyStart Remote+</td>
<td>X</td>
<td>X</td>
<td>—</td>
<td>Included in the product package</td>
<td>—</td>
</tr>
<tr>
<td>EasyStart Web</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Included in the product package</td>
<td>—</td>
</tr>
</tbody>
</table>

#### MASTER CONTROL UNITS

- **EasyStart Web:**
  This product can be combined with one of the following control units from the EasyStart family: EasyStart Select, EasyStart Timer, EasyStart Remote.

- **EasyStart Timer and EasyStart Remote+**

  **APPROVED COMBINATIONS OF HEATER AND CONTROL UNIT:**

  **OPTION 1**

  You can control a second heater by using the DAT line (purple) and the diagnostic line (blue and white). However, it is not possible to connect an additional control unit. Diagnostics can be run for both heaters.

  **OPTION 2**

  You can switch on any device by activating the switch output (switch on / vehicle blower output). A second control unit can be connected via the DAT line (purple). Diagnostics is available for the first heater but not for the second.

  **COMPATIBILITY MODE FOR HEATERS WITHOUT EBERSPÄCHER DIAGNOSTICS, E.G. AIR HEATER D8 LC:**

  Heater diagnostics can be run with TP6 control units and EDiTH diagnostics (diagnosis of up to five faults). Air heaters also require a separate control unit for inputting setpoints.
AIR-RECIRCULATION MODE WITH INTERNAL TEMPERATURE SENSOR:

STANDARD SETUP:
Air-recirculation mode with measurement of actual temperature by the temperature sensor in heater.

OPTIONAL ADD-ON 1:
Fresh-air mode with measurements of actual temperature using external temperature sensor installed separately in a suitable area for measuring the required temperature.

OPTIONAL ADD-ON 2 – PRE-VENTILATION:
Airtronic heaters come with the pre-ventilation function. Both this and the EasyStart control units are automatically detected (see Commissioning EasyStart control units). For other heaters or control units, see the technical information.
FRESH-AIR MODE WITH EXTERNAL SENSOR:

OVERVIEW: FRESH-AIR MODE AND TEMPERATURE DISPLAY OPTIONS ON THE EASYSTART CONTROL UNITS, EasyStart Timer EXAMPLE:

<table>
<thead>
<tr>
<th>Temperature sensor 2.15.1 for displaying the interior temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>c to the heater</td>
</tr>
<tr>
<td>y connect and insulate lines</td>
</tr>
<tr>
<td>g to the heater</td>
</tr>
<tr>
<td>Exterior temperature sensor B9 for fresh air heating mode</td>
</tr>
<tr>
<td>For connection, the technical information for the heater</td>
</tr>
</tbody>
</table>

E3 EasyStart Timer
22 1000 34 15 00

B9 temperature control sensor
exterior, interior 25 1774 89 03 00
PTC resistance $R_0 = 2000 \, \Omega$
4 | SERVICE: EASYSCAN DIAGNOSTIC AND SERVICE TOOL

EASYSCAN – THE NEW DIAGNOSTIC AND SERVICE TOOL FOR PRE-HEATER SYSTEMS:

EasyScan is the diagnostic and service tool for the decades to come – it is the workshop’s future-proof solution for challenges in the long term. The proprietary Eberspächer standard is no longer used. Instead, the new tool is compatible with widely used standards in the automotive industry. The diagnostic unit can be connected to the vehicle’s OBD port, if permitted by the vehicle manufacturer. The new tool is the successor to our existing diagnostics system EDITH and accordingly, is backward compatible. Usually air and water heaters from 2007 and 2009, respectively, can be diagnosed.

1. ADVANTAGES (FUNCTIONS):
- Compatibility with universally applicable automotive standards (CAN, UDS)
- New, modern, user-friendly interface
- Comprehensive evaluation of current operating status
- Automatic creation of a usage profile
- Error analysis of devices and components
- Error code output for heaters with CAN communication including additional system parameters
- Heating application function check
- Commissioning support for heating systems with CAN communication
- Integrated results log at the end of commissioning and for diagnostic sessions
- Existing heater adapters can continue to be used
- Direct link to the Eberspächer Partner Portal at any time
- Set up for installing datasets, e.g. for the Fan and Flap Module EasyFan as well as EasyStart Web updates

2. FURTHER FEATURES:
- PC software is downloaded via the Partner Portal
- Alternative for installing and updating software locally from a data carrier
- Ongoing updates provided on the Partner Portal
- Product package: VCI, USB cable and Y adapter cable (connection for existing heaters and forthcoming applications)
TECHNICAL DATA:

<table>
<thead>
<tr>
<th>Part number</th>
<th>22.1550.89.0000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compatibility</td>
<td>Air and water heaters Hydronic 1 (12 V), Hydronic 2, Hydronic 2 Commercial (12 V &amp; 24 V), Hydronic S3 Economy (12 V), Hydronic M II (12 V &amp; 24 V), Airtronic (12 V &amp; 24 V) and all forthcoming heaters</td>
</tr>
<tr>
<td>Temperature range</td>
<td>°C</td>
</tr>
<tr>
<td>Dimensions L x W x H</td>
<td>mm</td>
</tr>
<tr>
<td>Protection rating</td>
<td>IP 20</td>
</tr>
</tbody>
</table>

PC system requirements:
- Standard PC or laptop with Windows 7 or later
- Hardware: Processor speed min. 1 GHz, depending on system configuration and data complexity
- RAM: min. 1 GB (3 GB recommended)
- USB port
- OS: Windows 7 (32- + 64-bit, SP1) or later

Languages

<table>
<thead>
<tr>
<th>DE / EN</th>
</tr>
</thead>
<tbody>
<tr>
<td>In progress:</td>
</tr>
<tr>
<td>FR / IT / CZ / PL / CN / JP / KO / RU</td>
</tr>
<tr>
<td>Other languages on request</td>
</tr>
</tbody>
</table>

Fig.: Graphic representation of startup process

Fig.: Error memory readout
EBERSPÄCHER DIAGNOSTICS OPTIONS:
- **EasyScan:** requires PC, ISO adapter and software – see heater fault finding or introduction to EasyScan on the Service Portal
- **With EasyStart control units:** See heater and control unit fault finding on the Partner Portal

<table>
<thead>
<tr>
<th>Testing heaters using</th>
<th>EasyScan</th>
<th>CONTROL unit / diagnostic device</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full test without PC</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Full test with PC</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

**EASYSCAN:**
- Reads out general heater data, e.g. running times for function tests in the vehicle and on the test bench, parameter displays
- Individual component activation for components testing or line filling
- Recommended basic installation

**USE THE DIAGNOSTIC DEVICE 22 1545 89 00 00:**
- With existing diagnostic devices 22 1512 89 0000 and 22 1529 89 0000 and with the new diagnostic device 22 1545 89 00 00
  See heater fault finding and introduction to diagnostic device on the Service Portal

**DIAGNOSTIC DEVICES:**
- For correct commissioning or rapid diagnostics in vehicles, without a diagnostics-enabled control unit
- If there is no PC
- Minimal installation
## TESTING EQUIPMENT FOR HEATERS:

<table>
<thead>
<tr>
<th>Designation</th>
<th>Item no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EasyScan</td>
<td>22 1550 89 00 00</td>
</tr>
<tr>
<td>Diagnostic device (new timer)</td>
<td>22 1545 89 00 00</td>
</tr>
</tbody>
</table>

## CURRENT ADAPTER CABLES:

<table>
<thead>
<tr>
<th>Designation</th>
<th>Item no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydronic 1 3/4/5 kW</td>
<td>22 1000 31 63 00</td>
</tr>
<tr>
<td>Hydronic 2 Economy / Comfort</td>
<td>22 1000 33 78 00</td>
</tr>
<tr>
<td>Hydronic M-II</td>
<td>22 1000 33 78 00</td>
</tr>
<tr>
<td>Hydronic 10 (25 2161/25 2162)</td>
<td>22 1000 32 52 00</td>
</tr>
<tr>
<td>Hydronic 16/24/30/35</td>
<td>22 1000 31 66 00</td>
</tr>
<tr>
<td>Hydronic 2 (OEM)</td>
<td>22 1000 32 64 00</td>
</tr>
<tr>
<td>Airtronic (D2/D3/D3 Plus/D4/D4 Plus)</td>
<td>22 1000 31 86 00</td>
</tr>
</tbody>
</table>

## ADAPTER CABLES FOR OLDER HEATERS:

<table>
<thead>
<tr>
<th>Designation</th>
<th>Item no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air heater compact</td>
<td>22 1000 30 69 00</td>
</tr>
<tr>
<td>Air heater C (D1LC DAF)</td>
<td>22 1000 30 20 00</td>
</tr>
<tr>
<td>D9W, Hydronic 10 (old diagnostic timer)</td>
<td>22 1000 30 05 00</td>
</tr>
<tr>
<td>D9W, Hydronic 10</td>
<td>22 1000 31 83 00</td>
</tr>
<tr>
<td>Hydronic 10 (25 2161/25 2162)</td>
<td>22 1000 32 52 00</td>
</tr>
<tr>
<td>D1/3LC MAN</td>
<td>22 1000 30 32 00</td>
</tr>
<tr>
<td>Hydronic 30 Neoplan</td>
<td>22 1000 31 16 00</td>
</tr>
<tr>
<td>D1LC/D1LC compact RVI</td>
<td>22 1000 31 23 00</td>
</tr>
<tr>
<td>D1/3LC compact DAF</td>
<td>22 1000 31 21 00</td>
</tr>
</tbody>
</table>
## OVERVIEW OF REPLACEMENT HEATERS (RECONDITIONED DEVICES, FOR DEFECTS OCCURRING BETWEEN 1 AND 48 MONTHS):

<table>
<thead>
<tr>
<th>HEATER</th>
<th>Designation</th>
<th>Order number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydronic B4W S</td>
<td>Facelift version replacement device</td>
<td>20 1852 97 01 00</td>
</tr>
<tr>
<td>Hydronic B4W SC</td>
<td>Facelift version replacement device</td>
<td>20 1821 97 01 00</td>
</tr>
<tr>
<td>Hydronic B5W S</td>
<td>Facelift version replacement device</td>
<td>20 1819 97 01 00</td>
</tr>
<tr>
<td>Hydronic B5W SC</td>
<td>Facelift version replacement device</td>
<td>20 1820 97 01 00</td>
</tr>
<tr>
<td>Hydronic D4W S</td>
<td>Facelift version replacement device</td>
<td>25 2355 97 01 00</td>
</tr>
<tr>
<td>Hydronic D4W SC</td>
<td>Facelift version replacement device</td>
<td>25 2221 97 01 00</td>
</tr>
<tr>
<td>Hydronic D5W S 12 V</td>
<td>Facelift version replacement device</td>
<td>25 2217 97 01 00</td>
</tr>
<tr>
<td>Hydronic D5W SC</td>
<td>Facelift version replacement device</td>
<td>25 2219 97 01 00</td>
</tr>
<tr>
<td>Hydronic D5W S 24 V</td>
<td>Facelift version replacement device</td>
<td>25 2218 97 01 00</td>
</tr>
<tr>
<td>Hydronic 2 Economy D4S</td>
<td>Replacement device</td>
<td>25 2554 97 01 00</td>
</tr>
<tr>
<td>Hydronic 2 Economy D5S</td>
<td>Replacement device</td>
<td>25 2526 97 01 00</td>
</tr>
<tr>
<td>Hydronic 2 Economy B4S</td>
<td>Replacement device</td>
<td>20 1909 97 01 00</td>
</tr>
<tr>
<td>Hydronic 2 Economy B4S</td>
<td>Replacement device</td>
<td>20 1904 97 01 00</td>
</tr>
<tr>
<td>Airtronic D2 12 V</td>
<td>Replacement device</td>
<td>25 2069 97 01 00</td>
</tr>
<tr>
<td>Airtronic D2 24 V</td>
<td>Replacement device</td>
<td>25 2070 97 01 00</td>
</tr>
<tr>
<td>Airtronic D4 12 V</td>
<td>Replacement device</td>
<td>25 2113 97 01 00</td>
</tr>
<tr>
<td>Airtronic D4 24 V</td>
<td>Replacement device</td>
<td>25 2114 97 01 00</td>
</tr>
<tr>
<td>Airtronic D4 Plus 12V</td>
<td>Replacement device</td>
<td>25 2484 97 01 00</td>
</tr>
<tr>
<td>Airtronic D4 Plus 12V</td>
<td>Replacement device</td>
<td>25 2498 97 01 00</td>
</tr>
</tbody>
</table>
### OVERVIEW OF NEW DEVICES (REQUIRED FOR DEFECTS OCCURRING FROM 48 MONTHS):

<table>
<thead>
<tr>
<th>HEATER</th>
<th>Designation</th>
<th>Order number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydronic B4W S 12 V</td>
<td>Facelift version replacement device</td>
<td>20 1852 97 02 00</td>
</tr>
<tr>
<td>Hydronic B4W SC 12 V</td>
<td>Facelift version replacement device</td>
<td>20 1821 97 02 00</td>
</tr>
<tr>
<td>Hydronic D4W S 12 V</td>
<td>Facelift version replacement device</td>
<td>25 2355 97 02 00</td>
</tr>
<tr>
<td>Hydronic D4W SC 12 V</td>
<td>Facelift version replacement device</td>
<td>25 2221 97 02 00</td>
</tr>
<tr>
<td>Hydronic B5W S 12 V</td>
<td>Facelift version replacement device</td>
<td>20 1819 97 02 00</td>
</tr>
<tr>
<td>Hydronic B5W SC 12 V</td>
<td>Facelift version replacement device</td>
<td>20 1820 97 02 00</td>
</tr>
<tr>
<td>Hydronic D5W S 12 V</td>
<td>Facelift version replacement device</td>
<td>25 2217 97 02 00</td>
</tr>
<tr>
<td>Hydronic D5W SC 12 V</td>
<td>Facelift version replacement device</td>
<td>25 2219 97 02 00</td>
</tr>
<tr>
<td>Hydronic D5W S 24 V</td>
<td>Facelift version replacement device</td>
<td>25 2218 97 02 00</td>
</tr>
<tr>
<td>Airtronic D2 12 V</td>
<td>Replacement device</td>
<td>25 2069 97 02 00</td>
</tr>
<tr>
<td>Airtronic D2 24 V</td>
<td>Replacement device</td>
<td>25 2070 97 02 00</td>
</tr>
<tr>
<td>Airtronic D4 12 V</td>
<td>Replacement device</td>
<td>25 2113 97 02 00</td>
</tr>
<tr>
<td>Airtronic D4 24 V</td>
<td>Replacement device</td>
<td>25 2114 97 02 00</td>
</tr>
</tbody>
</table>

### PLEASE NOTE THE FOLLOWING AS REGARDS HYDRONIC HEATERS:

When replacing older generation heaters with facelift devices, you will also need the following parts:

- 1x facelift unit mounting bracket
- 1x fastening screw
- 2x 20 / 18 water hose reducers

Old generation Hydronic 4KW heaters are 20 mm shorter than the facelifted 4KW heater.
## 4 | ADDITIONAL HEATERS / OEM HEATERS

<table>
<thead>
<tr>
<th>ADDITIONAL HEATERS</th>
<th>Designation</th>
<th>Order number</th>
</tr>
</thead>
<tbody>
<tr>
<td>D3W Z 12 V</td>
<td>VW T4, PME</td>
<td>25 2121 05 00 00</td>
</tr>
<tr>
<td>D5W Z 12 V</td>
<td>VW Sharan MPV from 2000 onwards</td>
<td>25 2163 05 00 00</td>
</tr>
<tr>
<td>D5Z-F 12 V</td>
<td>VW Sharan MPV from 2004 onwards</td>
<td>25 2278 05 00 00</td>
</tr>
<tr>
<td>D5W Z 12 V</td>
<td>DC Sprinter T1N</td>
<td>25 2162 05 00 00</td>
</tr>
<tr>
<td>D5W Z 12 V</td>
<td>DC TO (Vito + V-Class)</td>
<td>25 2124 05 00 00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OEM HEATERS</th>
<th>Designation</th>
<th>Order number</th>
</tr>
</thead>
<tbody>
<tr>
<td>D5W S 12 V</td>
<td>DC Sprinter T1N T2W</td>
<td>25 2091 05 00 00</td>
</tr>
<tr>
<td>D4W S 12 V</td>
<td>VW Sharan MPV + T4</td>
<td>25 2123 05 00 00</td>
</tr>
<tr>
<td>D5W S 12 V TO</td>
<td>Vito V Class DC</td>
<td>25 2125 05 00 00</td>
</tr>
<tr>
<td>D5W S 12 V</td>
<td>VW Sharan</td>
<td>25 2164 05 00 00</td>
</tr>
<tr>
<td>D5S-F 12 V</td>
<td>VW Sharan MPV</td>
<td>25 2279 05 00 00</td>
</tr>
</tbody>
</table>
EASYFAN – THE NEW FAN & FLAP MODULE FOR HYDRONIC 1, 2 AND S3 ECONOMY IN PASSENGER CAR APPLICATIONS:
The Fan & Flap module EasyFan is a product developed in-house for activating vehicle fans and air and heating flaps. As a customer you will benefit from the usual high-quality Eberspächer support and well-maintained data.

1. ADVANTAGES (FUNCTIONS):
- Automatic activation of vehicle fan and air and heating flaps: no need for the user to set the fan or flaps to “Defrost” in the vehicle before the heating process
- All previously selected fan and flap settings are automatically restored after the heating process or after the engine has started
- For Hydronic 1, 2 and S3 Economy, delivered pre-programmed for vehicle-specific installation
- Automotive electronics fault protection: no physical connection between product and CAN unless the engine is switched off, otherwise automatic cutoff

2. FURTHER FEATURES:
- Vehicle-specific EasyFan modules are available for a wide range of cars and A/C versions
- Impress customers who own the following brands of car:
  - Volkswagen, Škoda, Seat
  - Audi
  - Mercedes-Benz
  - BMW
  - Renault, Nissan
  - Toyota
  - Peugeot, Citroën
  - Ford

As always, for more details please visit: partner.eberspaecher.com

- Input signal:
  - First interface (Hydronic 1 and 2): EasyFan is activated via the heater’s fan output
  - Second interface (Hydronic S3 only): EasyFan is activated via a CAN message from the heater

- Output signal:
  - Fan and flap settings are controlled via CAN messages to the climate control unit
  - Two hardware versions for high- and low-speed CAN are available to accommodate the various car bus systems on the market.
### TECHNICAL DATA:

<table>
<thead>
<tr>
<th>Programmed versions</th>
<th>For part numbers, see the vehicle-specific A/C kit on the Partner Portal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current draw mA</td>
<td>50</td>
</tr>
<tr>
<td>Closed-circuit current mA</td>
<td>0.1</td>
</tr>
<tr>
<td>Protection rating IP</td>
<td>40</td>
</tr>
<tr>
<td>Operating temperature °C</td>
<td>– 40 to +85</td>
</tr>
<tr>
<td>Dimensions L x W x H (with fastening brackets) mm</td>
<td>72 x 76 x 23</td>
</tr>
</tbody>
</table>
THE IPCU IS PART OF THE A/C KIT:
A/C kits should be installed first!

OPTIONS:
- See installation recommendations / Service Portal as to whether A/C kit is available
- If there is no A/C kit, see Service Portal:
- IPCU programming list (Download area)
- Call the Technical Hotline

WARNING:
- Taking measurements requires specialist knowledge in automotive electronics
- Taking measurements requires the vehicle manufacturer’s circuit diagrams
- We can accept no liability for measuring errors which result in permanent damage to the vehicle’s air-conditioning system and/or measuring devices and diagnostics equipment

PROGRAMMING OPTIONS WITH EDITH BASIC:
Adapter cable for IPCU configuration
Order no.: 22 1000 32 74 00

INTRODUCTION TO TAKING MEASUREMENTS WITH THE RELEVANT INSTRUMENTS:
Universal multimeter with frequency meter and duty cycle or an oscilloscope (workshop equipment).

TAKING MEASUREMENTS:
- Preselect voltage meter measuring range minimum U3; measure according to circuit diagram
- Switch on ignition
- Change fan speed using A/C control unit
- If the voltage is changeable between 0 – 5 V or 0 – 10 V: voltage divider, choose a low fan speed, note voltage values
- No clear change:
  - Switch fan to 0, measure direct current in voltage range
  - Voltage to battery: Low activity or
  - 0 V: High activity, note
    Important: do not exceed maximum voltage!
- Switch to frequency measurement, read and note frequency
- Select low fan speed, switch to duty cycle and note duty cycle in %
- Choose a fan speed that puts the duty cycle at ~50 %,
  Switch the measuring device to minimum U13, read voltage, multiply by 2 and note
Robust design, high-performance, sophisticated technology: Eberspächer fuel heaters have made a name for themselves around the world. For every application, our innovative heating technology ensures an extremely comfortable degree of warmth as soon as the driver or passengers enter a vehicle. Use our products for the benefit of your customers – and therefore to your advantage. We have summarized the most important reasons why both you and your customers should choose Eberspächer.

**MORE TURNOVER AND BETTER WORKSHOP UTILIZATION:**
Selling pre-heaters is a high-margin alternative to conventional workshop business. Make the best possible use of this opportunity to increase your workshop’s utilization.

**POTENTIAL:**
More than 90% of customers who have bought a pre-heater would opt for this extra again with their next vehicle.

**PARTNERSHIP:**
As an Eberspächer Partner you are comprehensively trained so that you have all the necessary know-how on Eberspächer pre-heaters. You also have access to our Web portal where you can obtain important information such as installation recommendations, prices and catalogs. At the start of the season you receive our comprehensive advertising package.

**HERE’S HOW YOU CAN SUPPORT SALES INTERNALLY:**
- Your customer will only buy something he knows and loves. That means your demonstration vehicles should have a pre-heater too!
- Motivation is everything: in the run-up, make sure that your salespeople are fired up and fully-versed on the subject of pre-heaters.
- To make sure they close the deal: provide your employees with impressive sample calculations for available leasing and finance offers.
- Go for maximum impact: drive the advertising message on your homepage, in your newsletter or with direct mail too.

**SO WHEN YOU’RE PLANNING, HERE ARE THE KEY AREAS TO CONSIDER:**
- Provide your sales team and your parts and service managers with campaign information in good time.
- Set out which vehicle models the promotional package can be offered for.
- Make sure you provide a careful calculation of the package price.
- Order our advertising materials and use them for optimum effect at your premises.
- Make sure you have the necessary parts in stock!
- Check that your pre-heater workshop knowledge is up-to-date and if you need a refresher, use the training provided by your distributor and Eberspächer.
- Together with your team, work through a guideline for your sales discussions. Next – some compelling arguments!
6  THE BENEFITS FOR END CUSTOMERS

CUSTOMER BENEFITS FOR CAR OWNERS:

- Not only do you no longer have to waste time scraping the ice off the windows in the morning – a pre-heater also ensures you have a pleasantly warm car to get into after playing sports, having a wellness treatment, or spending an evening at the movies or theater. A pre-heater is also a true status symbol which every high-end car should have.

- The Eberspächer pre-heater ensures that your windows are thawed in time for you to leave, and do not fog up. A clear view of the road and no need to wear a thick winter jacket at the steering wheel – for real safety!

- A cold start puts as much of a burden on the engine as many miles of highway driving. A modern pre-heater prevents this, because it heats not only the interior but also the engine via the cooling circuit. The extremely wear-inducing cold-start phase is avoided, which helps to maintain the vehicle’s value.

- An engine warmed by a pre-heater consumes considerably less fuel when starting and for the first few minutes of a journey, because the cold-starting or warm-up phase described earlier does not occur.

- Pollutant emissions during a warm start are lower than during a cold start. This not only eases people’s conscience, but also specifically protects the environment.

- Winters at our latitudes last much longer than we realize. Ice in April is not unusual! And the thermometer often drops below zero as early as October. On hot summer days, just select pre-ventilation and you can keep your car supplied with fresh outside air while it is parked as well.

CUSTOMER BENEFITS FOR MOTOR HOME OWNERS:

- The heater is supplied with fuel from the vehicle’s fuel tank so the customer needn’t worry about gas bottles and connections when traveling abroad.

- Eberspächer heaters feature low fuel and electricity consumption.

- The heating can be conveniently operated using presets, remote control or phone.

- Eberspächer fuel-operated heaters are now even quieter.

- Compared to competitor products, Eberspächer products permit space-saving installation underfloor or in the engine compartment in addition to interior installation.

- Heating is permitted worldwide even while – without additional components.

- The heater’s design is particularly easy to service and maintain.
Eberspächer heaters feature low fuel and electricity consumption.

The heater provides exactly the climate you want in the cabin.

You can operate your heater conveniently using the controller, presets or phone.

Eberspächer fuel-operated heaters are now even quieter.

You need not sacrifice any room in the cabin in order to install the heater as they can be housed in any space with good external ventilation, e.g. in the storage locker, the cockpit or other storage areas.

The heater’s design is particularly easy to service and maintain.

It also provides hot water for your shower or general use.

CUSTOMER BENEFITS FOR SPECIAL-PURPOSE VEHICLE OWNERS:

- Lower operating costs due to high efficiency.
- Reliable starting even in low temperatures
- Comfortable temperatures in mobile workplaces and optimum temperature control for storage compartments.
- Eberspächer fuel-operated heaters are now even quieter.
- The heater is installed in the motor home interior. Space-saving underfloor installation or in the engine compartment is also possible.
- The heater’s design is particularly easy to service and maintain.

CUSTOMER BENEFITS FOR BOAT OWNERS:

- Eberspächer heaters feature low fuel and electricity consumption.
- The heater provides exactly the climate you want in the cabin.
- You can operate your heater conveniently using the controller, presets or phone.
- Eberspächer fuel-operated heaters are now even quieter.
- The heater’s design is particularly easy to service and maintain.
- It also provides hot water for your shower or general use.
GENERAL INFORMATION:

- Install water pumps no higher than the heater and preferably lower.

- All water lines for heaters must always be below the engine’s coolant level.

- When installing a water heater, always use water hoses approved for use with vehicles, otherwise there is a danger of parts of the hose becoming flattened or layers of the hose perishing, blocking the water circuit.

- Always secure water hoses with hose clips at connections.

- Always route water hoses so that they are not affected by moving parts and cannot be chafed. Pay particular attention to the heavy vibration caused by switching the engine on and off.

- Always use a large radius when routing water hoses to prevent kinking, and do not leave hoses hanging loose.

- Protect water hoses from intense heat or even contact with hot engine parts, e.g. the exhaust pipe.

- Always vent the whole water circuit of a vehicle after any assembly operation.

- Please also refer to the safety information on this section in the heater documentation.
7 | WATER-CONDUCTING PARTS

Flowtronic 6000 SC water pump
With magnetic coupling and mounting bracket
Water flow rate 6,000 l/h at 0.4 bar

Flowtronic 6000 SC spares kit

Flowtronic 5000 water pump
With mounting bracket, water flow rate 5,200 l/h at 0.2 bar

Flowtronic 5000 spares kit
For water pump 25 2488 26 00 00

| 24 V | 25 2488 25 00 00 |
| 25 2488 99 25 10 |
| 25 2488 26 00 00 |
| 25 2488 99 26 10 |
Flowtronic 5000 S water pump
With magnetic coupling and mounting bracket
Water flow rate 5,200 l/h at 0.2 bar

Flowtronic 1200 S water pump
With magnetic coupling, 200 mm long cable harness
12 V without mounting bracket, 24 V with mounting bracket
Water flow rate 700 l/h at 0.3 bar

Flowtronic 800 S water pump
Water flow rate 820 l/h at 0.1 bar

Water pump
with mounting bracket installed, adapter cable, M6x12 hexagon screws
Water flow rate 850 l/h at 0.1 bar
7 | WATER-CONDUCTING PARTS

Water pump
with mounting bracket installed, adapter cable, M6x12 hexagon screws
Water flow rate 850 l/h at 0.1 bar

Water pump

Water hose

Water hose

Reducer hose

Reducer hose
7 | WATER-CONDUCTING PARTS

Water hose

- = Check connection diameter

Water hose

- = Check connection diameter

Water hose for shortening

- = Always used for connecting the Hydronic 2 / Hydronic 2 C to the water pump

Water hose

- = Check connection diameter
7 | WATER-CONDUCTING PARTS

Connection pipe

<table>
<thead>
<tr>
<th>Part</th>
<th>Material</th>
<th>Diameter</th>
<th>Length</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brass, d = 15 mm, L = 55 mm</td>
<td>1 1 1 1</td>
<td></td>
<td></td>
<td>20 1533 88 00 03</td>
</tr>
<tr>
<td>Brass, d = 18 mm, L = 55 mm</td>
<td>1 1 1 1</td>
<td></td>
<td></td>
<td>20 1528 88 00 03</td>
</tr>
<tr>
<td>Plastic, d = 20 mm, L = 60 mm</td>
<td>1 1 1 1</td>
<td></td>
<td></td>
<td>22 1000 10 01 03</td>
</tr>
<tr>
<td>Brass, d = 22 mm, L = 55 mm</td>
<td>1 1 1 1</td>
<td></td>
<td></td>
<td>20 1645 89 00 07</td>
</tr>
<tr>
<td>Brass, d = 38 mm, L = 60 mm</td>
<td>1 1 1 1</td>
<td></td>
<td></td>
<td>25 1214 89 00 21</td>
</tr>
</tbody>
</table>

~ = Check connection diameter

Ventilation pipe

Brass

<table>
<thead>
<tr>
<th>Part</th>
<th>Material</th>
<th>Diameter</th>
<th>Length</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brass, D = 18 mm, L = 65 mm</td>
<td>1 1 1 1</td>
<td></td>
<td></td>
<td>20 1645 89 01 00</td>
</tr>
</tbody>
</table>

~ = Check connection diameter

Reducer

<table>
<thead>
<tr>
<th>Part</th>
<th>Material</th>
<th>Diameter</th>
<th>Length</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brass, D = 18 mm, d = 15 mm, L = 60 mm</td>
<td>1 1 1 1</td>
<td></td>
<td></td>
<td>20 1645 80 02 01</td>
</tr>
<tr>
<td>Plastic, D = 20 mm, d = 15 mm, L = 60 mm</td>
<td>1 1 1 1</td>
<td></td>
<td></td>
<td>22 1000 10 01 05</td>
</tr>
<tr>
<td>Plastic, D = 20 mm, d = 18 mm, L = 60 mm</td>
<td>1 1 1 1</td>
<td></td>
<td></td>
<td>22 1000 10 01 04</td>
</tr>
<tr>
<td>Brass, D = 20 mm, d = 16 mm, L = 60 mm</td>
<td>1 1 1 1</td>
<td></td>
<td></td>
<td>24 0176 89 00 01</td>
</tr>
<tr>
<td>Brass, D = 22 mm, d = 15 mm, L = 60 mm</td>
<td>1 1 1 1</td>
<td></td>
<td></td>
<td>25 1214 89 00 11</td>
</tr>
<tr>
<td>Brass, D = 22 mm, d = 18 mm, L = 60 mm</td>
<td>1 1 1 1</td>
<td></td>
<td></td>
<td>20 1645 89 00 05</td>
</tr>
<tr>
<td>Brass, D = 22 mm, d = 20 mm, L = 60 mm</td>
<td>1 1 1 1</td>
<td></td>
<td></td>
<td>25 1214 89 00 04</td>
</tr>
</tbody>
</table>

~ = Check connection diameter

T-piece

Brass

<table>
<thead>
<tr>
<th>Part</th>
<th>Material</th>
<th>Diameter</th>
<th>Length</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>D = 18 mm, d = 15 mm, L = 60 mm</td>
<td>1 1 1 1</td>
<td></td>
<td></td>
<td>25 1214 89 16 00</td>
</tr>
<tr>
<td>D = 18 mm, d = 18 mm, L = 75 mm</td>
<td>1 1 1 1</td>
<td></td>
<td></td>
<td>20 1645 89 10 00</td>
</tr>
<tr>
<td>D = 20 mm, d = 18 mm, L = 75 mm</td>
<td>1 1 1 1</td>
<td></td>
<td></td>
<td>20 1645 89 11 00</td>
</tr>
<tr>
<td>D = 20 mm, d = 20 mm, L = 75 mm</td>
<td>1 1 1 1</td>
<td></td>
<td></td>
<td>20 1673 80 11 00</td>
</tr>
<tr>
<td>D = 38 mm, d = 38 mm, L = 120 mm</td>
<td>1 1 1 1</td>
<td></td>
<td></td>
<td>25 1371 89 04 00</td>
</tr>
</tbody>
</table>

~ = Check connection diameter

unrestricted use ~ restricted use
7 | WATER-CONDUCTING PARTS

**Combi valve** with thermostat function
With five connections

![Combi valve diagram](image)

* not suitable for Hydronic 2 Comfort
Also required: T-piece, page 79

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 UV7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/L2</th>
</tr>
</thead>
<tbody>
<tr>
<td>~ 25 2014 80 72 00</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
</tbody>
</table>

**Combi valve** with thermostat function
With six connections

![Combi valve diagram](image)

* not suitable for Hydronic 2 Comfort

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 UV7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/L2</th>
</tr>
</thead>
<tbody>
<tr>
<td>~ 25 2014 80 62 00</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
</tbody>
</table>

**Water check valve**

![Water check valve diagram](image)

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 UV7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/L2</th>
</tr>
</thead>
<tbody>
<tr>
<td>~ 22 1000 10 11 00</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>~ 22 1000 10 10 00</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
</tbody>
</table>

**Water check valve**

![Water check valve diagram](image)

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 UV7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/L2</th>
</tr>
</thead>
<tbody>
<tr>
<td>~ 22 1000 10 12 00</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>~ 22 1000 10 09 00</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
</tbody>
</table>
7 | WATER-CONDUCTING PARTS

Water filter for Hydronic M protects the water pump from soiling, thereby ensuring the heater's function.

Supplier:
Eberspächer AB
Kardanvägen 34
SE – 461 38 Trollhättan
Sweden
Phone: +46 8 6831-100
info-se@eberspaecher.com

Water check valve

D = 20 mm, d = 18 mm
D = 20 mm, d = 20 mm

Water check valve

d = 18 mm

Heat-shrink fit hose
Anti-chafing protector for water hose

ø 40 mm / ø 20 mm

Supplier: Eberspächer AB
Kardanvägen 34
SE – 461 38 Trollhättan
Sweden
Phone: +46 8 6831-100
info-se@eberspaecher.com
Safety hose
Aluminum / paper / plastic temperature / anti-chafing protector
for water hoses with ø 18 mm and ø 20 mm

\[ di = 30 \text{ mm}, \ L = 2 \text{ m} \]
8 | AIR-CONDUCTING PARTS

GENERAL INFORMATION:

- Heating-air throughput is at its highest in a heater if the airflow is unimpeded. Heating-air ducts reduce heating-air throughput.

- In order to give you the opportunity to check that the installation you have planned does not reduce the heating air throughput to an inadmissible level, we have calculated a heater guide number for each heater and a line guide number for each air duct.

- The total of the line guide numbers of the heating-air ducts connected to the heater must not be greater than the heater guide number, as otherwise the air flow temperature would be inadmissibly high and the overheating sensor would respond.

- If the total of the line guide numbers is greater than the heater guide number, the total can be reduced by selecting a larger diameter for the air ducts.

RULE OF THUMB:

Double cross-section or two lines the same, routed in parallel
= \( \frac{1}{4} \) of the guide number.

Example:

Hose ø 60 mm
Cross-section A = 19.6 cm\(^2\), guide number 1.0
Hose ø 75 mm
Cross-section A = 44.2 cm\(^2\), guide number 0.25

With smooth welded pipes, the line guide number is only half of the flexible hose with the same diameter (i.e. double pipe length).
## 8 | AIR-CONDUCTING PARTS

### 1 Flexible hose (linear m)
Aluminum / paper / plastic, for heating-air ducting in interior

<table>
<thead>
<tr>
<th>di (mm)</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>10 2114 29 00 00</td>
</tr>
<tr>
<td>60</td>
<td>10 2114 31 00 00</td>
</tr>
<tr>
<td>75</td>
<td>10 2114 34 00 00</td>
</tr>
<tr>
<td>90</td>
<td>10 2114 37 00 00</td>
</tr>
<tr>
<td>100</td>
<td>10 2114 38 00 00</td>
</tr>
</tbody>
</table>

![Flexible hose diagram](image1)

- See page 126 for air hose clips
- = Check connection diameter

### 2 Flexible hose
Plastic hose with metal spiral, suitable for outside installation

<table>
<thead>
<tr>
<th>di (mm)</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>360 00 165</td>
</tr>
<tr>
<td>75</td>
<td>360 00 012</td>
</tr>
<tr>
<td>90</td>
<td>360 00 013</td>
</tr>
<tr>
<td>100</td>
<td>360 00 014</td>
</tr>
</tbody>
</table>

![Flexible hose diagram](image2)

- See page 126 for air hose clips
- = Check connection diameter

### 3 Silencer
Hot air, aluminum

<table>
<thead>
<tr>
<th>di (mm)</th>
<th>D (mm)</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>75</td>
<td>120</td>
<td>25 1226 89 15 00</td>
</tr>
<tr>
<td>90</td>
<td>140</td>
<td>25 1226 89 17 00</td>
</tr>
<tr>
<td>100</td>
<td>150</td>
<td>25 1226 89 56 00</td>
</tr>
</tbody>
</table>

- = Check connection diameter

![Silencer diagram](image3)

### 4 Intake silencer
Aluminum / paper / plastic heating-air intake

<table>
<thead>
<tr>
<th>di (mm)</th>
<th>D (mm)</th>
<th>L (mm)</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>75</td>
<td>110</td>
<td>600</td>
<td>330 00 072</td>
</tr>
</tbody>
</table>

- = Check connection diameter

---

See page 126 for air hose clips

= Check connection diameter

---

![Intake silencer diagram](image4)
8 | AIR-CONDUCTING PARTS

5
Filter
Installation on air-intake side

~ = Check regularly for dirt and clean if required.
Ensure that the protected intake area is protected.

\[ \text{di} = 60 \text{ mm}, D = 107 \text{ mm} \]

10
Upright vent, 30°
Rotatable, see item 16 for fitting

suitable for \( \phi \) 50 / 60 mm fitting, black
suitable for \( \phi \) 50 / 60 mm fitting, white
suitable for \( \phi \) 75 / 90 mm fitting, black
suitable for \( \phi \) 75 / 90 mm fitting, white

~ = Check connection diameter

11
Flat vent, 30°
Rotatable, see item 16 for fitting

suitable for \( \phi \) 50 / 60 mm fitting, black
suitable for \( \phi \) 50 / 60 mm fitting, white
suitable for \( \phi \) 75 / 90 mm fitting, black
suitable for \( \phi \) 75 / 90 mm fitting, white

~ = Check connection diameter

11.1
Vent
Rotatable

* with 4 stainless steel screws

\[ \text{d1} = 60 \text{ mm}, \text{d2} = 100 \text{ mm}, \text{black} \]

~ = Check connection diameter

* \( \text{d1} = 60 \text{ mm}, \text{d2} = 100 \text{ mm}, \text{white} \)
### 8 | AIR-CONDUCTING PARTS

#### 12 Closable vent
Rotatable, see item 16 for fitting

<table>
<thead>
<tr>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 UV 7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/M2</th>
<th>Hydronic L/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>~ = Check connection diameter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>suitable for ø 50 / 60 mm fitting, black</td>
<td>ℹ️</td>
<td>ℹ️</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>22 1000 01 00 72</td>
</tr>
<tr>
<td>suitable for ø 50 / 60 mm fitting, white</td>
<td>ℹ️</td>
<td>ℹ️</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>22 1000 01 00 73</td>
</tr>
<tr>
<td>suitable for ø 75 / 90 mm fitting, black</td>
<td>ℹ️</td>
<td>ℹ️</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>22 1000 01 00 76</td>
</tr>
<tr>
<td>suitable for ø 75 / 90 mm fitting, white</td>
<td>ℹ️</td>
<td>ℹ️</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>22 1000 01 00 77</td>
</tr>
</tbody>
</table>

#### 13 Flat vent, 0°
Rotatable, see item 16 for fitting

<table>
<thead>
<tr>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 UV 7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/M2</th>
<th>Hydronic L/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>~ = Check connection diameter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>suitable for ø 50 / 60 mm fitting, black</td>
<td>ℹ️</td>
<td>ℹ️</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>22 1000 01 00 40</td>
</tr>
<tr>
<td>suitable for ø 50 / 60 mm fitting, white</td>
<td>ℹ️</td>
<td>ℹ️</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>22 1000 01 00 41</td>
</tr>
<tr>
<td>suitable for ø 75 / 90 mm fitting, black</td>
<td>ℹ️</td>
<td>ℹ️</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>22 1000 01 00 48</td>
</tr>
<tr>
<td>suitable for ø 75 / 90 mm fitting, white</td>
<td>ℹ️</td>
<td>ℹ️</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>22 1000 01 00 49</td>
</tr>
</tbody>
</table>

#### 13.1 Grille

<table>
<thead>
<tr>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 UV 7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/M2</th>
<th>Hydronic L/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>~ = Check connection diameter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* D = 93 mm, L = 75, d = 60 mm Nickel-plated</td>
<td>ℹ️</td>
<td>ℹ️</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>25 1226 89 05 00</td>
</tr>
<tr>
<td>* D = 93 mm, L = 75, d = 60 mm Plastic</td>
<td>ℹ️</td>
<td>ℹ️</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>22 1000 01 00 01</td>
</tr>
</tbody>
</table>

#### 14 Upright vent, 90°
Rotatable, see item 16 for fitting

<table>
<thead>
<tr>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 UV 7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/M2</th>
<th>Hydronic L/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>~ = Check connection diameter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>suitable for ø 50 / 60 mm fitting, black</td>
<td>ℹ️</td>
<td>ℹ️</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>22 1000 01 00 64</td>
</tr>
<tr>
<td>suitable for ø 50 / 60 mm fitting, white</td>
<td>ℹ️</td>
<td>ℹ️</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>22 1000 01 00 65</td>
</tr>
<tr>
<td>suitable for ø 75 / 90 mm fitting, black</td>
<td>ℹ️</td>
<td>ℹ️</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>22 1000 01 00 68</td>
</tr>
<tr>
<td>suitable for ø 75 / 90 mm fitting, white</td>
<td>ℹ️</td>
<td>ℹ️</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>22 1000 01 00 69</td>
</tr>
</tbody>
</table>

---

* ~ suitable for item 18

---

[Diagram of Grille]

---

[Diagram of Upright vent, 90°]
## 8 | AIR-CONDUCTING PARTS

### 15 Air control element
See page 40

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Plastic, ø 60 mm</th>
<th>Plastic, ø 75 mm</th>
<th>Plastic, ø 90 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>22 1000 01 00 79</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22 1000 01 00 80</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22 1000 01 00 81</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* for fitting, Item 16, order no. 22 1000 01 00 35
** for fitting, Item 16, order no. 22 1000 01 00 36
*** for fitting, Item 16, order no. 22 1000 01 00 37

### 16 Fitting
for vents, items 10, 11, 12, 13 and 14

<table>
<thead>
<tr>
<th>d</th>
<th>d1</th>
<th>D</th>
<th>L</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>67</td>
<td>89</td>
<td>39</td>
<td>22 1000 01 00 34</td>
</tr>
<tr>
<td>60</td>
<td>67</td>
<td>89</td>
<td>40</td>
<td>22 1000 01 00 35</td>
</tr>
<tr>
<td>75</td>
<td>92</td>
<td>115</td>
<td>42</td>
<td>22 1000 01 00 36</td>
</tr>
<tr>
<td>90</td>
<td>92</td>
<td>115</td>
<td>40</td>
<td>22 1000 01 00 37</td>
</tr>
</tbody>
</table>

* d1 = core drill bit diameter

### 17 Grille, heater

<table>
<thead>
<tr>
<th>di</th>
<th>L</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>20</td>
<td>25 1688 80 06 00</td>
</tr>
<tr>
<td>75</td>
<td>22</td>
<td>25 1552 05 01 00</td>
</tr>
<tr>
<td>90</td>
<td>24</td>
<td>25 1729 80 00 01</td>
</tr>
<tr>
<td>100</td>
<td>22</td>
<td>25 1226 89 44 00</td>
</tr>
</tbody>
</table>

* di = 60 mm, L = 20 mm

### 18 Hose fitting
Suitable for grille, Item 13.1*

<table>
<thead>
<tr>
<th>d</th>
<th>D</th>
<th>L</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>97</td>
<td>75</td>
<td>20 1575 80 08 01</td>
</tr>
<tr>
<td>60</td>
<td>97</td>
<td>75</td>
<td>20 1577 89 06 01</td>
</tr>
</tbody>
</table>

* D = 93 mm
## 8 | AIR-CONDUCTING PARTS

### 21
Scoop

<table>
<thead>
<tr>
<th>d</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 mm</td>
<td>22 1000 01 00 16</td>
</tr>
<tr>
<td>75 mm</td>
<td>22 1000 01 00 17</td>
</tr>
<tr>
<td>75 mm</td>
<td>22 1000 01 00 18</td>
</tr>
<tr>
<td>90 mm</td>
<td>22 1000 01 00 19</td>
</tr>
</tbody>
</table>

### 22
Scoop

<table>
<thead>
<tr>
<th>d</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>90 mm</td>
<td>25 1729 01 09 00</td>
</tr>
</tbody>
</table>

### 30
Ball-shaped scoop

<table>
<thead>
<tr>
<th>d</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>90 mm</td>
<td>25 1729 89 10 00</td>
</tr>
</tbody>
</table>

### 31
Connection fitting
Ball-shaped scoop, Item 30 / 32

<table>
<thead>
<tr>
<th>d</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 mm</td>
<td>20 1575 89 00 15</td>
</tr>
<tr>
<td>50 mm</td>
<td>22 1000 01 00 04</td>
</tr>
</tbody>
</table>

### 32
Ball-shaped scoop

Caution! Make sure the line guide number is not too high

<table>
<thead>
<tr>
<th>d</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 mm</td>
<td>22 1000 01 00 20</td>
</tr>
<tr>
<td>75 mm</td>
<td>22 1000 01 00 28</td>
</tr>
<tr>
<td>75 mm</td>
<td>22 1000 01 00 22</td>
</tr>
<tr>
<td>90 mm</td>
<td>22 1000 01 00 23</td>
</tr>
</tbody>
</table>

* Cannot be used with the Airtronic D4 Plus
8 | AIR-CONDUCTING PARTS

33
Pipe elbow, 90°

34
Ring
Protective grille (item 17), di = 90 mm.
Can be used as an adapter – remove grille.

35
T-junction

40
Butterfly valve

\[\text{di} = 60 \text{ mm}, \text{da} = 60 \text{ mm}\]
\[\text{di} = 75 \text{ mm}, \text{da} = 75 \text{ mm}\]

\[\text{di} = 60 \text{ mm}, \text{da} = 75 \text{ mm}\]
\[\text{di} = 75 \text{ mm}, \text{da} = 90 \text{ mm}\]
\[\text{di} = 90 \text{ mm}, \text{da} = 100 \text{ mm}\]

\[\text{di} = 60 \text{ mm}, \text{da} = 75 \text{ mm}\]
\[\text{di} = 75 \text{ mm}, \text{da} = 90 \text{ mm}\]
\[\text{di} = 90 \text{ mm}, \text{da} = 100 \text{ mm}\]

\[\text{Metal, } d = 50 \text{ mm}\]
\[\text{Plastic, } d = 60 \text{ mm}\]
\[\text{Plastic, } d = 75 \text{ mm}\]
\[\text{Plastic, } d = 90 \text{ mm}\]
\[\text{Metal, } d = 100 \text{ mm}\]

\[\text{d} = 60 \text{ mm}\]
\[\text{d} = 90 \text{ mm}\]

~ = Check connection diameter
8 | AIR-CONDUCTING PARTS

41 Control unit
For butterfly valve, Item 40, 2 m long

42 Y-junction
Symmetrical

42.1 Y-junction

43 Y-junction

44 Hose connector fitting

---

~ = Check connection diameter

Adapter, see Item 45
8 | AIR-CONDUCTING PARTS

45 Adapter
For item 40, 43 and 44

<table>
<thead>
<tr>
<th>di = 75 mm, da = 50 mm, L = 50 mm</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/M2</th>
<th>Hydronic L/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 1226 89 00 46</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>di = 75 mm, da = 60 mm, L = 45 mm</td>
<td>Airtronic L</td>
<td>Airtronic L</td>
<td>Hydronic 4/5 kW</td>
<td>Hydronic M/M2</td>
<td>Hydronic L/L2</td>
<td>Order no.</td>
</tr>
<tr>
<td>25 1226 89 00 50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>di = 90 mm, da = 75 mm, L = 45 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22 1000 01 00 12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>di = 100 mm, da = 50 mm, L = 62 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 1226 89 00 48</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>di = 100 mm, da = 60 mm, L = 57 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 1226 89 00 49</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>di = 100 mm, da = 90 mm, L = 42 mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

~ = Check connection diameter

46 Adapter

<table>
<thead>
<tr>
<th>di = 60 mm, da = 75 mm, L = 40.5 mm</th>
<th>Airtronic L</th>
<th>Hydronic L/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 1688 89 00 10</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

~ = Check connection diameter

47 Adapter

<table>
<thead>
<tr>
<th>Plastic, di = 75 mm, D = 90 mm, L = 54 mm</th>
<th>Airtronic L</th>
<th>Hydronic L/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>22 1000 01 00 85</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Metal, di = 90 mm, D = 100 mm, L = 46 mm</th>
<th>Airtronic L</th>
<th>Hydronic L/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 1462 89 00 01</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

~ = Check connection diameter

48 Sleeve / adapter

<table>
<thead>
<tr>
<th>d = 90 mm / 100 mm</th>
<th>Airtronic L</th>
<th>Hydronic L/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 1607 80 00 01</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

~ = Check connection diameter

unrestricted use
restricted use
GENERAL INFORMATION:

- Protect fuel lines, filters and metering pumps from impermissible heat levels; do not install near control dampers and exhaust pipes.
- Take the rear axle suspension into account when installing fuel lines, fuel filters and metering pumps near the rear axle.
- When cutting fuel hoses and types, be sure to use a sharp knife.
- Cut surfaces must have no dents or burrs.
- Please also refer to the safety information on this section in the heater documentation.
9 | FUEL-CONDUCTING PARTS

Tank connection
For cars with an inner tank pump

① da = 4 mm, di = 2 mm
② da = 4 mm, di = 2 mm, L = 295 mm

Order no.

<table>
<thead>
<tr>
<th></th>
<th>M8</th>
</tr>
</thead>
<tbody>
<tr>
<td>M6</td>
<td></td>
</tr>
<tr>
<td>100</td>
<td></td>
</tr>
<tr>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Ø 3.5 x 3</td>
<td></td>
</tr>
<tr>
<td>295</td>
<td></td>
</tr>
</tbody>
</table>

Tank connection with return
For commercial vehicles

da = 6 mm, di = 4 mm

Order no.

<table>
<thead>
<tr>
<th></th>
<th>M18</th>
</tr>
</thead>
<tbody>
<tr>
<td>600</td>
<td></td>
</tr>
</tbody>
</table>

Tank connection
For commercial vehicles

da = 6 mm, di = 2 mm

Order no.

<table>
<thead>
<tr>
<th></th>
<th>M18</th>
</tr>
</thead>
<tbody>
<tr>
<td>600</td>
<td></td>
</tr>
</tbody>
</table>

Kit – fuel lines for E85
Only for Hydronic 2 – BS S

l1 = ø 4x1.25 pipe; L = 6 m, black / l2 = ø 4x1 pipe; L = 2 m, black

Order no.

<table>
<thead>
<tr>
<th></th>
<th>M18</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td></td>
</tr>
<tr>
<td>600</td>
<td></td>
</tr>
</tbody>
</table>

Tank connection kit
For cars with an inner tank pump

l1 = ø 4x1.25 pipe; L = 6 m / l2 = ø 4x1 pipe; L = 6 m / da = 4 mm, di = 2 mm

Order no.

<table>
<thead>
<tr>
<th></th>
<th>M8</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td></td>
</tr>
<tr>
<td>600</td>
<td></td>
</tr>
<tr>
<td>Ø 3.5 x 3</td>
<td></td>
</tr>
<tr>
<td>295</td>
<td></td>
</tr>
</tbody>
</table>
**FUEL-CONDUCTING PARTS**

**Fuel supply kit**
For installation in the tank ventilation hose

```
<table>
<thead>
<tr>
<th>Fuel hose (linear m)</th>
<th>di = 3.5 mm, D = 9.50 mm</th>
<th>* di = 3.5 mm, D = 9.50 mm</th>
<th>* di = 5.0 mm, D = 11.0 mm</th>
<th>* di = 7.5 mm, D = 13.5 mm</th>
<th>* di = 9.0 mm, D = 15.0 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>360 75 300</td>
<td>360 75 400</td>
<td>360 75 350</td>
<td>360 75 401</td>
<td>360 75 402</td>
</tr>
</tbody>
</table>
```

**Order no.**

<table>
<thead>
<tr>
<th>unrestricted use</th>
<th>restricted use</th>
</tr>
</thead>
<tbody>
<tr>
<td>22 1000 20 06 00</td>
<td>22 1000 20 17 00</td>
</tr>
</tbody>
</table>
### Fuel Conducting Parts

#### Fuel Supply Kit

*For installing fuel line in boat engine compartments*

#### Fire-resistant hose according to DIN EN ISO 14859

<table>
<thead>
<tr>
<th>Product</th>
<th>Dimensions</th>
<th>Fuel</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>22 1000 20 10 00</td>
</tr>
</tbody>
</table>

#### Fuel Hose 105° Elbow

*PME-compatible*

<table>
<thead>
<tr>
<th>Product</th>
<th>Dimensions</th>
<th>Fuel</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>di = 3.5 mm, D = 9.5 mm</td>
<td></td>
<td>25 1888 80 01 01</td>
</tr>
</tbody>
</table>

#### Hydronic S3 Adapter

<table>
<thead>
<tr>
<th>Product</th>
<th>Dimensions</th>
<th>Fuel</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Outer diameter D = 10</td>
<td></td>
<td>22 1000 20 38 00</td>
</tr>
</tbody>
</table>

#### Hydronic S3 Adapter Elbow

<table>
<thead>
<tr>
<th>Product</th>
<th>Dimensions</th>
<th>Fuel</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>D = 9.5 mm, di1 = 4.5 mm, di2 = 3.5 mm</td>
<td></td>
<td>22 1000 20 41 00</td>
</tr>
</tbody>
</table>

#### Adapter

<table>
<thead>
<tr>
<th>Product</th>
<th>Dimensions</th>
<th>Fuel</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Outer diameter D = 10</td>
<td></td>
<td>25 1888 80 01 02</td>
</tr>
</tbody>
</table>

#### Adapter 105° Elbow

*PME-compatible*

<table>
<thead>
<tr>
<th>Product</th>
<th>Dimensions</th>
<th>Fuel</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Outer diameter D = 10</td>
<td></td>
<td>25 2110 05 03 01</td>
</tr>
</tbody>
</table>

#### Adapter for Fuel Pipes

<table>
<thead>
<tr>
<th>Product</th>
<th>Dimensions</th>
<th>Fuel</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Outer diameter D = 12</td>
<td></td>
<td>22 1000 20 30 00</td>
</tr>
</tbody>
</table>
# 9 | FUEL-CONDUCTING PARTS

## Fuel pipe (linear m)

**Plastic**

<table>
<thead>
<tr>
<th>Material</th>
<th>Di (mm)</th>
<th>D (mm)</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural-colored</td>
<td>1.5</td>
<td>4</td>
<td>890 31 118</td>
</tr>
<tr>
<td>Natural-colored</td>
<td>2</td>
<td>4</td>
<td>890 31 055</td>
</tr>
<tr>
<td>Ethanol resistant</td>
<td>1.5</td>
<td>4</td>
<td>890 31 139</td>
</tr>
<tr>
<td>Ethanol resistant</td>
<td>2</td>
<td>4</td>
<td>890 31 138</td>
</tr>
<tr>
<td>Blue</td>
<td>2</td>
<td>4</td>
<td>890 31 054</td>
</tr>
<tr>
<td>Black</td>
<td>2</td>
<td>6</td>
<td>890 31 125</td>
</tr>
<tr>
<td>Blue</td>
<td>4</td>
<td>6</td>
<td>890 31 101</td>
</tr>
</tbody>
</table>

## Foam rubber hose (linear m)

*Chafing protection and soundproofing for fuel pipe*

<table>
<thead>
<tr>
<th>Material</th>
<th>Di (mm)</th>
<th>D (mm)</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Di = 5 mm, D = 11 mm</td>
<td></td>
<td></td>
<td>360 75 200</td>
</tr>
<tr>
<td>Di = 10 mm, D = 13 mm</td>
<td></td>
<td></td>
<td>360 00 183</td>
</tr>
</tbody>
</table>

## Heat protection hose

*For fuel pipe*

*Aluminum clad with fiberglass cloth*

*Also suitable for electrical cabling*

<table>
<thead>
<tr>
<th>Material</th>
<th>Di (mm)</th>
<th>D (mm)</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Di = 4 mm, D = 11 mm</td>
<td></td>
<td></td>
<td>360 75 200</td>
</tr>
<tr>
<td>Da = 4 mm, D = 11 mm</td>
<td></td>
<td></td>
<td>22 1000 20 01 00</td>
</tr>
<tr>
<td>Da = 6 mm, D = 11 mm</td>
<td></td>
<td></td>
<td>22 1000 20 02 00</td>
</tr>
<tr>
<td>Da = 8 mm, D = 11 mm</td>
<td></td>
<td></td>
<td>22 1000 20 03 00</td>
</tr>
</tbody>
</table>

## Reinforcing sleeve

*Brass, for plastic fuel pipes*

*10 per pack*

<table>
<thead>
<tr>
<th>Material</th>
<th>Da (mm)</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Da = 4 mm, for 6x1 pipe</td>
<td></td>
<td>22 1000 20 01 00</td>
</tr>
<tr>
<td>Da = 6 mm, for 8x1 pipe</td>
<td></td>
<td>22 1000 20 02 00</td>
</tr>
<tr>
<td>Da = 8 mm, for 10x1 pipe</td>
<td></td>
<td>22 1000 20 03 00</td>
</tr>
</tbody>
</table>

## Hose nipple

*Straight, for M10 x 1 union nut*

<table>
<thead>
<tr>
<th>Material</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Straight</td>
<td>25 1351 88 01 01</td>
</tr>
</tbody>
</table>
9 | FUEL-CONDUCTING PARTS

Ring fitting with hose connection

T-piece
Plastic

Fuel filter with paper insert
Plastic / installation in front of fuel circulation pump

Fuel filter with metal strainer
Plastic / for metering pumps with cup strainer

Check valve
9 | FUEL-CONDUCTING PARTS

Pressure reducer
with cup strainer and hose fitting
Input pressure 0.3 – 4 bar
Control pressure min. 50 mbar, max. 150 mbar

Complete fuel tank, 10 l
Plastic

Complete fuel tank, 10 l – single part
Lid
Plastic

Complete fuel tank, 10 l – single part
Fuel strainer

Complete fuel tank, 10 l – single part
Seal

---

<table>
<thead>
<tr>
<th>Order no.</th>
<th>unrestricted use</th>
<th>restricted use</th>
</tr>
</thead>
<tbody>
<tr>
<td>22 1000 20 08 00</td>
<td>Airtronic</td>
<td>Airtronic M</td>
</tr>
</tbody>
</table>

~ = Only suitable for diesel / bio-diesel (FAME) / heating oil
GENERAL INFORMATION:

- Using a timer you can manually or automatically switch on the heater at a preset time (pre-heating mode).

- Always make sure that a heater can run on, even if the vehicle’s whole electrical system can be shut down with a battery main switch (i.e. via an additional electrical connection or clear instruction that the battery main switch should be open when the heater is running with a flame).

- The rule of thumb for the electrical power supply is: charging time = heating time.

- In certain circumstances, heaters in motor homes or commercial vehicles are operated for longer sustained periods. In these cases, the on-board energy resources need to be monitored.

- For more detailed information, see technical description and installation instructions.

- Please also refer to the safety information on this section in the heater documentation.
## 10 | Electrical Parts

### EasyStart Remote+ Remote control

<table>
<thead>
<tr>
<th>Feature</th>
<th>12 V / 24 V</th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 kW/7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>~</td>
<td></td>
<td></td>
<td>22 1000 34 17 00</td>
</tr>
</tbody>
</table>

* with Airtronic: additional control unit required for temperature preselection

### EasyStart Remote* Remote control

<table>
<thead>
<tr>
<th>Feature</th>
<th>12 V / 24 V</th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 kW/7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>~</td>
<td></td>
<td></td>
<td>22 1000 34 23 00</td>
</tr>
</tbody>
</table>

* with Airtronic: additional control unit required for temperature preselection

### EasyStart Timer

<table>
<thead>
<tr>
<th>Feature</th>
<th>12 V / 24 V</th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 kW/7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>~</td>
<td></td>
<td></td>
<td>22 1000 34 15 00</td>
</tr>
</tbody>
</table>

Timer trim for EasyStart Timer, see page 131

### EasyStart Select

<table>
<thead>
<tr>
<th>Feature</th>
<th>12 V / 24 V</th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 kW/7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>~</td>
<td></td>
<td></td>
<td>22 1000 34 13 00</td>
</tr>
</tbody>
</table>

~ = heater operation only, no diagnostics
## ELECTRICAL PARTS

### EasyStart Web
Web-based remote operation

![EasyStart Web](image)

<table>
<thead>
<tr>
<th>12 V / 24 V</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 UV 7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/M2</th>
<th>Hydronic L/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22 1000 34 51 00</td>
</tr>
</tbody>
</table>

### EasyStart Remote+ — single part
Mobile part

![EasyStart Remote+](image)

12 V / 24 V

<table>
<thead>
<tr>
<th>12 V / 24 V</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 UV 7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/M2</th>
<th>Hydronic L/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22 1000 34 18 00</td>
</tr>
</tbody>
</table>

### EasyStart Remote+ — single part
Fixed part

![EasyStart Remote+](image)

12 V / 24 V

<table>
<thead>
<tr>
<th>12 V / 24 V</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 UV 7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/M2</th>
<th>Hydronic L/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22 1000 34 19 00</td>
</tr>
</tbody>
</table>

### EasyStart Remote+ — single part
Sensor — interior temperature, display

![EasyStart Remote+](image)

12 V / 24 V

<table>
<thead>
<tr>
<th>12 V / 24 V</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 UV 7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/M2</th>
<th>Hydronic L/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22 1000 34 22 00</td>
</tr>
</tbody>
</table>

### EasyStart Remote — single part
Mobile part

![EasyStart Remote](image)

12 V / 24 V

<table>
<thead>
<tr>
<th>12 V / 24 V</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 UV 7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/M2</th>
<th>Hydronic L/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22 1000 34 24 00</td>
</tr>
</tbody>
</table>
### 10 | ELECTRICAL PARTS

**EasyStart Remote** — single part
**Fixed part**

<table>
<thead>
<tr>
<th>12 V / 24 V</th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>~</td>
<td></td>
<td></td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>22 1000 34 25 00</td>
</tr>
</tbody>
</table>

**EasyStart Remote+ / EasyStart Remote** — single part
**Cover for battery compartment**

<table>
<thead>
<tr>
<th>12 V / 24 V</th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>~</td>
<td></td>
<td></td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>22 1000 34 18 01</td>
</tr>
<tr>
<td>~</td>
<td></td>
<td></td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>22 1000 34 24 01</td>
</tr>
</tbody>
</table>

**EasyStart Remote+ / EasyStart Remote** — single part
**Antenna**

<table>
<thead>
<tr>
<th>12 V / 24 V</th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>~</td>
<td></td>
<td></td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>22 1000 34 21 00</td>
</tr>
</tbody>
</table>

**EasyStart Remote+ / EasyStart Remote** — single part
**Button**

<table>
<thead>
<tr>
<th>12 V / 24 V</th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>22 1000 34 20 00</td>
</tr>
</tbody>
</table>

**EasyStart Call / EasyStart Remote+ / EasyStart Remote / EasyStart Timer / EasyStart Select** — single part
**Electrical connection parts**

<table>
<thead>
<tr>
<th>12 V / 24 V</th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>22 1000 34 26 00</td>
</tr>
</tbody>
</table>
### 10 | ELECTRICAL PARTS

#### EasyStart Select – single part
Plugs

<table>
<thead>
<tr>
<th>Product</th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 / UY7 S</th>
<th>Hydronic M/M2</th>
<th>Hydronic L/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22 1000 34 13 01</td>
</tr>
</tbody>
</table>

#### EasyStart Call – single part
Slide antenna

<table>
<thead>
<tr>
<th>Product</th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 / UY7 S</th>
<th>Hydronic M/M2</th>
<th>Hydronic L/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22 1000 34 03 00</td>
</tr>
</tbody>
</table>

#### EasyStart Call – single part
Button

<table>
<thead>
<tr>
<th>Product</th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 / UY7 S</th>
<th>Hydronic M/M2</th>
<th>Hydronic L/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22 1000 34 04 00</td>
</tr>
</tbody>
</table>

#### EasyStart Call – single part
Temperature sensor

<table>
<thead>
<tr>
<th>Product</th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 / UY7 S</th>
<th>Hydronic M/M2</th>
<th>Hydronic L/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22 1000 34 09 00</td>
</tr>
</tbody>
</table>

#### EasyStart Call, EasyStart Remote+ / EasyStart Remote / EasyStart Timer – single part
Adapter cable

<table>
<thead>
<tr>
<th>Product</th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 / UY7 S</th>
<th>Hydronic M/M2</th>
<th>Hydronic L/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22 1000 34 08 00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22 1000 34 45 00</td>
</tr>
</tbody>
</table>
### 10 | ELECTRICAL PARTS

<table>
<thead>
<tr>
<th>Part Description</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EasyStart R+ – single part</td>
<td>22 1000 32 81 00</td>
</tr>
<tr>
<td>Mobile part</td>
<td></td>
</tr>
<tr>
<td>EasyStart R+ – single part</td>
<td>22 1000 32 82 00</td>
</tr>
<tr>
<td>Fixed part</td>
<td></td>
</tr>
<tr>
<td>EasyStart R – single part</td>
<td>22 1000 32 86 00</td>
</tr>
<tr>
<td>Spare part 22 1000 32 80 00</td>
<td></td>
</tr>
<tr>
<td>EasyStart R+ / EasyStart R – single part</td>
<td>22 1000 32 87 00</td>
</tr>
<tr>
<td>Cover for battery compartment</td>
<td></td>
</tr>
<tr>
<td>Spare part 22 1000 32 80 00 and 22 1000 32 85 00</td>
<td>22 1000 32 91 00</td>
</tr>
</tbody>
</table>
## 10 | ELECTRICAL PARTS

**EasyStart R+ / EasyStart R — single part**

- **Antenna**
  - Spare part for 22 1000 32 80 00 and 22 1000 32 85 00
  - **Order no.** 22 1000 32 83 00

**EasyStart R+ / EasyStart R — single part**

- **Electrical connection parts**
  - Spare part for 22 1000 32 80 00 and 22 1000 32 85 00
  - **Order no.** 22 1000 32 90 00

**EasyStart R+ / EasyStart R / EasyStart T — single part**

- **Button**
  - Spare part for 22 1000 32 80 00, 22 1000 32 85 00 and 22 1000 32 88 00
  - **Order no.** 22 1000 32 84 00

**EasyStart R+ / EasyStart R / EasyStart T — single part**

- **Electrical connection parts**
  - Spare part for 22 1000 32 80 00, 22 1000 32 85 00 and 22 1000 32 88 00
  - **Order no.** 22 1000 32 92 00

**EasyStart R+ / EasyStart T — single part**

- **Sensor — interior temperature, display**
  - Spare part for 22 1000 32 80 00 and 22 1000 32 88 00
  - **Order no.** 22 1000 32 97 00

---

**Airtronic**
- Airtronic M
- Airtronic L
- Air heater 8 L/V 7 S
- Hydronic 4/5 kW
- Hydronic M/L
- Hydronic U/L

**Order no.**

- unrestricted use
- restricted use
### ELECTRICAL PARTS

#### Calltronic – single part
Slide antenna

<table>
<thead>
<tr>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 UVT S</th>
<th>Hydronic 45 kW</th>
<th>Hydronic M/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22 1000 33 63 00</td>
</tr>
</tbody>
</table>

#### Calltronic 1 – single part
Slide antenna

<table>
<thead>
<tr>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 UVT S</th>
<th>Hydronic 45 kW</th>
<th>Hydronic M/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22 1000 33 84 00</td>
</tr>
</tbody>
</table>
# 10 | ELECTRICAL PARTS

## Mini-controller – single part

![Mini-controller diagram]

<table>
<thead>
<tr>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 L/V7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/M2</th>
<th>Hydronic L/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>22 1000 32 07 00</td>
</tr>
</tbody>
</table>

## Control unit

* with bushing connector housing and bushing connector
** without bushing connector housing and bushing connectors / only for air heater 8 L

~ = No ventilation, no diagnostic information.

<table>
<thead>
<tr>
<th>12 V</th>
<th>24 V</th>
</tr>
</thead>
<tbody>
<tr>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>~</td>
<td>~</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>12 V</th>
<th>24 V</th>
</tr>
</thead>
<tbody>
<tr>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>~</td>
<td>~</td>
</tr>
</tbody>
</table>

## Control unit – single part

7-pin bushing connector housing

<table>
<thead>
<tr>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>206 31 282</td>
</tr>
</tbody>
</table>

## Control unit – single part

Bushing connector

<table>
<thead>
<tr>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>206 36 151</td>
</tr>
</tbody>
</table>
## Electrical Parts

### External and internal temperature control sensor, flush wall-mounted installation
2 m cable harness

- = Can be used with control unit

<table>
<thead>
<tr>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 LV/7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>22 1000 35 21 00</td>
</tr>
</tbody>
</table>

### Exterior and interior temperature control sensor, surface installation
2 m cable harness

- = Can be used with control unit

<table>
<thead>
<tr>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 LV/7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>25 1774 89 03 00</td>
</tr>
</tbody>
</table>

### Cable harness / temperature sensor
For 25 1774 89 03 00

<table>
<thead>
<tr>
<th>4 m, 2-pin</th>
<th>4 m, 3-pin</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>~</td>
<td>~</td>
<td>25 1688 89 09 00</td>
</tr>
<tr>
<td>~</td>
<td>~</td>
<td>25 1482 89 40 00</td>
</tr>
</tbody>
</table>

### Additional heater installation kit
Only for Hydronic 2 in combination with EasyStart Remote+ / Remote / Timer

Thermostatic switch including connectors and fastenings

- Switch-off point: 10°C
- Switch-on point: 5°C

<table>
<thead>
<tr>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>~</td>
</tr>
<tr>
<td>24 8532 00 00 00</td>
</tr>
</tbody>
</table>

### Hydronic S3 Economy cable harness for recreational vehicles and boats
required for heating when using a mains connection (230 V/50 Hz), e.g. in camping or parking areas for mobile homes or in marinas for boats

<table>
<thead>
<tr>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>~</td>
</tr>
<tr>
<td>25 2652 82 11 00</td>
</tr>
</tbody>
</table>

* available from 3rd quarter 2017
## ELECTRICAL PARTS

| Voltage divider for fan control – single part | Connector block |  |
| Voltage divider for fan control – single part | Bushing connector |  |
| IPCU retrofit kit |  |
| IPCU retrofit kit – single part | Relay |  |

### Voltage divider for fan control – single part

<table>
<thead>
<tr>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M</th>
<th>Hydronic U2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>203 00 085</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Bushing connector

<table>
<thead>
<tr>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M</th>
<th>Hydronic U2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>203 53 020</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### IPCU retrofit kit

<table>
<thead>
<tr>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M</th>
<th>Hydronic U2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 0273 00 00 00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### IPCU retrofit kit – single part

<table>
<thead>
<tr>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M</th>
<th>Hydronic U2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>22 1000 32 73 00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

~ = For customer-specific retrofit kits, see the Service Portal – EPRO / Accessories / Electrical parts

12 V
### 10 | ELECTRICAL PARTS

**IPC adapter cable for EDITH Basic**

![IPC adapter cable](image)

**Order no.**

<table>
<thead>
<tr>
<th>Product</th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 UV7 S</th>
<th>Hydronic M/W</th>
<th>Hydronic L/L2</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>22 1000 32 74 00</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>22 1000 32 74 00</td>
</tr>
</tbody>
</table>

**Relay, changeover contact**

Max. current consumption 40 A

![Relay](image)

**Order no.**

<table>
<thead>
<tr>
<th>Product</th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 UV7 S</th>
<th>Hydronic M/W</th>
<th>Hydronic L/L2</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>203 00 097</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>203 00 097</td>
</tr>
<tr>
<td>203 00 096</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>203 00 096</td>
</tr>
</tbody>
</table>

**Triple fuse holder with pin**

With 5 A, 15 A, 25 A fuses plus fastening parts

![Fuse holder](image)

**Order no.**

<table>
<thead>
<tr>
<th>Product</th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 UV7 S</th>
<th>Hydronic M/W</th>
<th>Hydronic L/L2</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>22 1000 31 06 00</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>22 1000 31 06 00</td>
</tr>
</tbody>
</table>

**Holder for fuse and diagnostic connector (Hydronic S3) including clip**

(for 22 1000 31 06 00; see above)

![Holder](image)

**Order no.**

<table>
<thead>
<tr>
<th>Product</th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 UV7 S</th>
<th>Hydronic M/W</th>
<th>Hydronic L/L2</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>22 1000 5149 00</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>22 1000 5149 00</td>
</tr>
</tbody>
</table>
### 10 | ELECTRICAL PARTS

#### Flat connector housing / Junior Timer
For mini-timer 22 1000 30 14 00

<table>
<thead>
<tr>
<th>Connector</th>
<th>Airmatic</th>
<th>Airmatic M</th>
<th>Airmatic L</th>
<th>Air heater 8UV7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M2</th>
<th>Hydronic L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-pin</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>206 31 100</td>
</tr>
</tbody>
</table>

#### Flat connector housing / Junior Timer
For mini-timer 22 1000 32 35 00

<table>
<thead>
<tr>
<th>Connector</th>
<th>Airmatic</th>
<th>Airmatic M</th>
<th>Airmatic L</th>
<th>Air heater 8UV7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M2</th>
<th>Hydronic L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-pin</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>206 31 106</td>
</tr>
</tbody>
</table>

#### Flat connector housing / Junior Timer

<table>
<thead>
<tr>
<th>Connector</th>
<th>Airmatic</th>
<th>Airmatic M</th>
<th>Airmatic L</th>
<th>Air heater 8UV7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M2</th>
<th>Hydronic L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-pin</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>206 31 101</td>
</tr>
</tbody>
</table>

#### Flat connector
For flat connector housing / Junior Timer

<table>
<thead>
<tr>
<th>Connector</th>
<th>Airmatic</th>
<th>Airmatic M</th>
<th>Airmatic L</th>
<th>Air heater 8UV7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M2</th>
<th>Hydronic L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5² – 1.0²</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>206 36 018</td>
</tr>
</tbody>
</table>

#### Bushing connector housing / Junior Timer
For mini-timer 22 1000 30 14 00

<table>
<thead>
<tr>
<th>Connector</th>
<th>Airmatic</th>
<th>Airmatic M</th>
<th>Airmatic L</th>
<th>Air heater 8UV7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M2</th>
<th>Hydronic L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-pin</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>206 31 296</td>
</tr>
</tbody>
</table>

#### Bushing connector housing / Junior Timer
For mini-timer 22 1000 32 35 00

<table>
<thead>
<tr>
<th>Connector</th>
<th>Airmatic</th>
<th>Airmatic M</th>
<th>Airmatic L</th>
<th>Air heater 8UV7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M2</th>
<th>Hydronic L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-pin</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>206 31 297</td>
</tr>
</tbody>
</table>
## 10 | ELECTRICAL PARTS

### Bushing connector housing / Junior Timer

<table>
<thead>
<tr>
<th>Order no.</th>
<th>8-pin</th>
</tr>
</thead>
<tbody>
<tr>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>~</td>
<td>~</td>
</tr>
</tbody>
</table>

**For bushing connector housing / Junior Timer**

### Bushing connector

<table>
<thead>
<tr>
<th>Order no.</th>
<th>0.5² – 1.0²</th>
<th>1.0² – 2.5²</th>
</tr>
</thead>
<tbody>
<tr>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
</tbody>
</table>

**For bushing connector housing / Junior Timer**

### Flat connector housing AMP 2.8

<table>
<thead>
<tr>
<th>Order no.</th>
<th>2-pin</th>
</tr>
</thead>
<tbody>
<tr>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>~</td>
<td>~</td>
</tr>
</tbody>
</table>

**For flat connector housing AMP 2.8**

### Flat connector

<table>
<thead>
<tr>
<th>Order no.</th>
<th>0.5² – 1.0²</th>
<th>1.0² – 2.5²</th>
</tr>
</thead>
<tbody>
<tr>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
</tbody>
</table>

**For flat connector housing AMP 2.8**

### Bushing connector housing AMP 2.8

<table>
<thead>
<tr>
<th>Order no.</th>
<th>~</th>
</tr>
</thead>
<tbody>
<tr>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>~</td>
<td>~</td>
</tr>
</tbody>
</table>

**For bushing connector housing AMP 2.8**

### Bushing connector

<table>
<thead>
<tr>
<th>Order no.</th>
<th>0.5² – 1.0²</th>
<th>1.0² – 2.5²</th>
</tr>
</thead>
<tbody>
<tr>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
</tbody>
</table>

**For bushing connector housing AMP 2.8**

### 8-pin bushing connector housing kit

For the Hydronic, with contacts and seals

<table>
<thead>
<tr>
<th>Order no.</th>
<th>unrerestricted use</th>
<th>restricted use</th>
</tr>
</thead>
<tbody>
<tr>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>~</td>
<td>~</td>
<td>~</td>
</tr>
</tbody>
</table>

**For the Hydronic, with contacts and seals**

---

*unrestricted use ~ restricted use*
10 | ELECTRICAL PARTS / TESTING EQUIPMENT

Connector housing kit for Hydronic S3
for metering pump, with contacts and seals

<table>
<thead>
<tr>
<th></th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8/UV7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connector housing kit</td>
<td>22 1000 35 25 00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Altitude kit *
Air pressure sensor for heating mode at altitudes up to 3,500 m above sea level

<table>
<thead>
<tr>
<th></th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8/UV7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Altitude kit</td>
<td>22 1000 31 87 00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* For use with the Airtronic / Airtronic M and Hydronic / Hydronic 2 labeled “H-Kit” on the factory plate on the side

Adapter cable
For air pressure sensor diagnostics

<table>
<thead>
<tr>
<th></th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8/UV7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adapter cable</td>
<td>22 1000 33 31 00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Diagnostic device

<table>
<thead>
<tr>
<th></th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8/UV7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnostic device</td>
<td>22 1545 89 00 00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## EasyScan

![EasyScan diagram](image)

### Adapter cable *

<table>
<thead>
<tr>
<th>Description</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airtronic / Airtronic M, Hydronic / Hydronic 2 / Hydronic 2 C / Hydronic M2</td>
<td>22 1000 31 86 00</td>
</tr>
<tr>
<td>(versions from June 2012)</td>
<td>22 1000 31 63 00</td>
</tr>
<tr>
<td>Hydronic L / Hydronic L2</td>
<td>22 1000 31 78 00</td>
</tr>
<tr>
<td>EasyStart Web</td>
<td>22 1000 31 66 00</td>
</tr>
</tbody>
</table>

* Cable harness with diagnostic connector

### Adapter cable for older models of heater

<table>
<thead>
<tr>
<th>Description</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydronic M</td>
<td>22 1000 32 52 00</td>
</tr>
<tr>
<td>Hydronic M2 (versions pre-dating June 2012)</td>
<td>22 1000 33 44 00</td>
</tr>
<tr>
<td>B / D1 LC compact, B / D3 LC compact, B / D3 LP compact</td>
<td>22 1000 30 69 00</td>
</tr>
<tr>
<td>B / D1 LC, B / D3 LC, B / D3 LP, B / D5 LC, D9 W, Hydronic 10</td>
<td>22 1000 30 20 00</td>
</tr>
</tbody>
</table>

### Adapter cable

<table>
<thead>
<tr>
<th>Description</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toyota</td>
<td>22 1526 89 03 00</td>
</tr>
<tr>
<td>Neoplan</td>
<td>22 1000 31 16 00</td>
</tr>
</tbody>
</table>

### Adapter cable for older models of heater

<table>
<thead>
<tr>
<th>Description</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAN B / D1 LC compact, B / D3 LC compact, MAN B / D1 LC / D3 LC, RVI B / D1 LC compact, B / D3 LC compact, RVI D1 LC, DAF B / D1 LC compact, B / D3 LC compact</td>
<td>22 1000 32 20 00</td>
</tr>
<tr>
<td></td>
<td>22 1000 30 32 00</td>
</tr>
<tr>
<td></td>
<td>22 1000 31 25 00</td>
</tr>
<tr>
<td></td>
<td>22 1000 31 23 00</td>
</tr>
<tr>
<td></td>
<td>22 1000 31 21 00</td>
</tr>
</tbody>
</table>

### USB to serial adapter

Incl. EDIth diagnostic tool software CD

<table>
<thead>
<tr>
<th>Description</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>USB to serial adapter</td>
<td>22 1543 89 00 00</td>
</tr>
</tbody>
</table>
GENERAL INFORMATION:

The exhaust and combustion air system must be installed in such a way that it ensures the following:

- The connection to the heater plug is sealed.
- The mouth of the pipe is never facing a head wind.
- As far as possible, the mouth of the pipe is protected from spray water ingress and spray must be able to run straight out again without penetrating the heater.
- There is no possibility of heater or vehicle engine exhaust gases being sucked in.
- Please also refer to the safety information on this section in the heater documentation.

Installing the exhaust line:

- Exhaust pipes should always be installed with a fall towards the tail of the pipe.
- If this is not possible, a water drainage hole must be drilled at the lowest point.
- If this point is not in the open air (e.g. in a ship’s engine room), this opening must have a sealed connection to an overflow vessel.
- Under no circumstances must any cross-sections in the exhaust line be narrower than those on the heater exhaust connection.
- For permissible lengths, diameters and curvatures in the combustion-air and exhaust lines, see the technical information and installation instructions.
11 | EXHAUST-CONDUCTING AND COMBUSTION-AIR-CONDUCTING PARTS

Exhaust hose
Stainless steel (yard goods)

See page 127 for spacer ring
~ In combination with exhaust pipe elbow 25 1226 89 46 00

Exhaust hose with end sleeve
1-layer stainless steel

Fiberglass hose
Heat protection

* Silicone coated
~ Check diameter of exhaust line

---

### Exhaust hose

- **Stainless steel (yard goods)**

<table>
<thead>
<tr>
<th>di (mm)</th>
<th>L (mm)</th>
<th>Order No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>400</td>
<td>22 1000 40 46 00</td>
</tr>
<tr>
<td>24</td>
<td>800</td>
<td>22 1000 40 49 00</td>
</tr>
<tr>
<td>24</td>
<td>1,300</td>
<td>22 1000 40 43 00</td>
</tr>
<tr>
<td>30</td>
<td>1,300</td>
<td>22 1000 40 65 00</td>
</tr>
</tbody>
</table>

### Exhaust hose with end sleeve

<table>
<thead>
<tr>
<th>di (mm)</th>
<th>L (mm)</th>
<th>Order No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>28</td>
<td>500</td>
<td>360 00 363</td>
</tr>
<tr>
<td>30</td>
<td>300</td>
<td>25 1676 80 00 01</td>
</tr>
<tr>
<td>30</td>
<td>150</td>
<td>24 0151 00 00 05</td>
</tr>
<tr>
<td>40</td>
<td>60</td>
<td>25 1894 80 04 01</td>
</tr>
<tr>
<td>70</td>
<td>1,200</td>
<td>25 1445 05 03 04</td>
</tr>
</tbody>
</table>

### Fiberglass hose

<table>
<thead>
<tr>
<th>di (mm)</th>
<th>L (mm)</th>
<th>Order No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>28</td>
<td>500</td>
<td>360 00 363</td>
</tr>
<tr>
<td>30</td>
<td>300</td>
<td>25 1676 80 00 01</td>
</tr>
<tr>
<td>30</td>
<td>150</td>
<td>24 0151 00 00 05</td>
</tr>
<tr>
<td>40</td>
<td>60</td>
<td>25 1894 80 04 01</td>
</tr>
<tr>
<td>70</td>
<td>1,200</td>
<td>25 1445 05 03 04</td>
</tr>
</tbody>
</table>

---

1. See page 127 for spacer ring
2. In combination with exhaust pipe elbow 25 1226 89 46 00

---

* Silicone coated
~ Check diameter of exhaust line

---

unrestricted use ~ restricted use
## 11 | EXHAUST-CONDUCTING AND COMBUSTION-AIR-CONDUCTING PARTS

### End sleeve for exhaust pipe

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ø 30 mm</td>
<td>25 1785 80 02 00</td>
</tr>
<tr>
<td>ø 42 mm</td>
<td>22 1000 40 02 00</td>
</tr>
</tbody>
</table>

### Adapter for exhaust hose

- **di = 24 mm, da = 30 mm**
  - Order no. 25 1520 80 01 01

### Adapter with condensate drainage

- **d = 24 mm, L = 65 mm**
  - Order no. 22 1050 89 40 00
- **d = 30 mm, L = 60 mm**
  - Order no. 25 1226 89 59 00

### Exhaust pipe angle

- **di = 24 mm, da = 30 mm, h = 50 mm / 80 mm**
  - Order no. 25 1226 89 55 00
**11 | EXHAUST-CONDUCTING AND COMBUSTION-AIR-CONDUCTING PARTS**

M10 x 1 exhaust pipe elbow with drainage

![Diagram of M10 x 1 exhaust pipe elbow with drainage]

- di = 24 mm, da = 24 mm, h = 50 mm, L = 110 mm
- di = 24 mm, da = 30 mm, h = 50 mm, L = 80 mm

<table>
<thead>
<tr>
<th>Order no.</th>
<th>unrestricted use</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 LU7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M10</th>
<th>Hydronic L12</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 1226 89 45 00</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>22 1050 89 39 00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Condensate drain

![Diagram of condensate drain]

- Only for use with parts that have condensate drainage

Exhaust pipe elbow

- with condensate hole, di = 24 mm, da = 24 mm
- without condensate hole, di = 24 mm, da = 24 mm

Exhaust pipe elbow

M10 x 1 exhaust pipe elbow with drainage

![Diagram of M10 x 1 exhaust pipe elbow with drainage]

- di = 42 mm, da = 40 mm

<table>
<thead>
<tr>
<th>Order no.</th>
<th>unrestricted use</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 LU7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M10</th>
<th>Hydronic L12</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 1226 89 46 00</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>
11 | EXHAUST-CONDUCTING AND COMBUSTION-AIR-CONDUCTING PARTS

Exhaust pipe elbow

![Exhaust pipe elbow diagram]

- **di = 70 mm, da = 72 mm**
- **Order no.:** 22 1000 40 03 00

Exhaust silencer

![Exhaust silencer diagram]

- The exhaust silencer must not be installed in boat interiors.
- **da = 24 mm**
- **Order no.:** 22 1000 40 21 00

Exhaust silencer

![Exhaust silencer diagram]

- The exhaust silencer must not be installed in boat interiors.
- **da = 24 mm**
- **Order no.:** 22 1000 40 19 00

Exhaust silencer

![Exhaust silencer diagram]

- The exhaust silencer must not be installed in boat interiors.
- **da = 30 mm, L = 180 mm, L1 = 224 mm**
- **Order no.:** 25 1806 80 01 00

Exhaust silencer

![Exhaust silencer diagram]

- The exhaust silencer must not be installed in boat interiors.
- **da = 24 mm**
- **Order no.:** 25 1864 81 01 00

See page 130 for exhaust silencer mounting bracket.
11 | EXHAUST-CONDUCTING AND COMBUSTION-AIR-CONDUCTING PARTS

Exhaust silencer
Flexible stainless steel, for boats

- = Check connection diameter

di = 30 mm

Hull fitting
Polished stainless steel

da = 30 mm, D = 90 mm

oxidation catalyst,

The exhaust silencer must not be installed in boat interiors.

Only for Airtronic diesel heaters; not suitable for use with PME (biodiesel).

Self-adhesive aluminum film
Heat protection film

Order no.

<table>
<thead>
<tr>
<th>Part</th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 4/5 kW</th>
<th>Hydronic M/M2</th>
<th>Hydronic L/L2</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exhaust silencer</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>25 1226 89 58 00</td>
<td></td>
</tr>
<tr>
<td>Hull fitting</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>22 1050 89 43 00</td>
<td></td>
</tr>
<tr>
<td>oxidation catalyst</td>
<td>da = 24 mm</td>
<td>22 1000 40 17 00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-adhesive aluminum film</td>
<td>~</td>
<td>871 00 051</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 11 | EXHAUST-CONDUCTING AND COMBUSTION-AIR-CONDUCTING PARTS

#### Flexible pipe for combustion air (linear m)

- **di = 20 mm**
- **di = 25 mm**

<table>
<thead>
<tr>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 UV7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/M2</th>
<th>Hydronic L/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>360 00 092</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10 2114 21 00 00</td>
</tr>
</tbody>
</table>

#### Flexible double pipe for combustion air

**Sound-absorbing**

- **di = 20 mm**

<table>
<thead>
<tr>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>360 00 179</td>
</tr>
</tbody>
</table>

#### End sleeve with crossbar for combustion-air pipe

- **di = 20 mm**
- **di = 25 mm**

<table>
<thead>
<tr>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 1688 80 12 01</td>
</tr>
<tr>
<td>25 1729 89 00 02</td>
</tr>
</tbody>
</table>

#### Air filter for combustion air

- **di = 25 mm**

<table>
<thead>
<tr>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>330 00 051</td>
</tr>
</tbody>
</table>

### Notes

- **= Check connection diameter**
- **unrestricted use**
- **restricted use**
## Exhaust-ducting and Combustion-air-ducting Parts

### Elbow for combustion air
**Plastic**

<table>
<thead>
<tr>
<th>Di</th>
<th>H</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 mm</td>
<td>45 mm</td>
<td>22 1000 40 00 02</td>
</tr>
<tr>
<td>25 mm</td>
<td>50 mm</td>
<td>22 1000 40 00 01</td>
</tr>
</tbody>
</table>

---

### Scoop with hose connection

<table>
<thead>
<tr>
<th>D</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 mm</td>
<td>22 1000 40 06 00</td>
</tr>
</tbody>
</table>

---

### Silencer for combustion air
**Flexible**

- For Hydronic S3, Hydronic 2 and Hydronic

<table>
<thead>
<tr>
<th>Di</th>
<th>L1</th>
<th>L2</th>
<th>L3</th>
<th>L</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 mm</td>
<td>180 mm</td>
<td>100 mm</td>
<td>780 mm</td>
<td>22 1000 40 00 13</td>
<td></td>
</tr>
<tr>
<td>25 mm</td>
<td>405 mm</td>
<td>135 mm</td>
<td>25 mm</td>
<td>565 mm</td>
<td>20 1689 80 05 00</td>
</tr>
<tr>
<td>25 mm</td>
<td>555 mm</td>
<td>100 mm</td>
<td>30 mm</td>
<td>685 mm</td>
<td>25 1945 80 13 00</td>
</tr>
</tbody>
</table>

---

### Flexible hose, see page 84
GENERAL INFORMATION:

- The fastening parts supplied take account of all standard installation conditions.

- In installations in cars and buses, the heater or its mount can usually be rigidly attached to the corresponding part of the body.

- However in trucks and in particular, construction machinery, rubber-metal buffers need to be installed as vibration dampers, but these must not be placed under tension or shearing stress.

- This type of rubber-metal component also reduces structure-borne noise transmission and so they are used e.g. on houseboats for installing both the heater and the metering pump.

- Please also refer to the safety information on this section in the heater documentation.
## Fastening Parts

### Hose Clip

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Pipe Style</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M2</th>
<th>Hydronic L2</th>
<th>Order No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ø 16 – ø 25 mm</td>
<td></td>
<td></td>
<td></td>
<td>10 2067 01 60 25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ø 20 – ø 32 mm</td>
<td></td>
<td></td>
<td></td>
<td>10 2067 02 00 32</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ø 32 – ø 50 mm</td>
<td></td>
<td></td>
<td></td>
<td>10 2067 03 20 50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ø 40 – ø 47 mm</td>
<td></td>
<td></td>
<td></td>
<td>15 2090 17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ø 50 – ø 70 mm</td>
<td></td>
<td></td>
<td></td>
<td>10 2067 05 00 70</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ø 70 – ø 90 mm</td>
<td></td>
<td></td>
<td></td>
<td>10 2067 07 00 90</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ø 90 – ø 110 mm</td>
<td></td>
<td></td>
<td></td>
<td>10 2067 09 01 10</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

~ = Check connection diameter

### Hose Clip with Lug

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Pipe Style</th>
<th>Order No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ø 9 – ø 10.5 mm</td>
<td></td>
<td>152 61 104</td>
</tr>
<tr>
<td>ø 21 – ø 24.0 mm</td>
<td></td>
<td>152 61 115</td>
</tr>
</tbody>
</table>

~ = Check connection diameter

### Hose Clip

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Pipe Style</th>
<th>Order No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ø 7 mm</td>
<td></td>
<td>10 2068 00 70 78</td>
</tr>
<tr>
<td>ø 9 mm</td>
<td></td>
<td>10 2068 00 90 98</td>
</tr>
<tr>
<td>ø 10 mm</td>
<td></td>
<td>10 2068 01 00 98</td>
</tr>
<tr>
<td>ø 11 mm</td>
<td></td>
<td>10 2068 01 10 98</td>
</tr>
<tr>
<td>ø 12 mm</td>
<td></td>
<td>10 2068 01 20 98</td>
</tr>
<tr>
<td>ø 14 mm</td>
<td></td>
<td>10 2068 01 40 98</td>
</tr>
</tbody>
</table>

~ = Check connection diameter

### Pipe Clip for Exhaust Pipe

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Pipe Style</th>
<th>Order No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ø 26 – ø 28 mm</td>
<td></td>
<td>22 1000 51 44 00</td>
</tr>
<tr>
<td>ø 32 – ø 34 mm</td>
<td></td>
<td>22 1000 51 45 00</td>
</tr>
</tbody>
</table>

### Pipe Clip for Exhaust Pipe

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Pipe Style</th>
<th>Order No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ø 42 – ø 45 mm</td>
<td></td>
<td>152 09 004</td>
</tr>
<tr>
<td>ø 43 – ø 46 mm</td>
<td></td>
<td>152 09 005</td>
</tr>
</tbody>
</table>

unrestricted use ~ restricted use
## 12 | FASTENING PARTS

### Mounting bracket for metering pump and Flowtronic Water Pump 800 S (see page 76)

**Rubber**

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 or 7 S</th>
<th>Hydronic 4 or 5 kW</th>
<th>Hydronic M or L2</th>
</tr>
</thead>
<tbody>
<tr>
<td>22 1000 50 03 00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22 1000 50 07 00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Fuel, Ø 34 mm**
- **Water, Ø 41 mm**

### Air hose fastening kit

**Plastic, 3 per pack**

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 or 7 S</th>
<th>Hydronic 4 or 5 kW</th>
<th>Hydronic M or L2</th>
</tr>
</thead>
<tbody>
<tr>
<td>22 1000 50 02 00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Ø 60 – Ø 100 mm**

### Clip

**Galvanized**

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 or 7 S</th>
<th>Hydronic 4 or 5 kW</th>
<th>Hydronic M or L2</th>
</tr>
</thead>
<tbody>
<tr>
<td>152 09 010</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>152 10 039</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>152 09 011</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>152 09 012</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Ø 28 mm**
- **Ø 41 mm**
- **Ø 50 mm**
- **Ø 65 mm**

**Do not use for flexible exhaust pipes!**

### Clip

**Stainless steel**

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 or 7 S</th>
<th>Hydronic 4 or 5 kW</th>
<th>Hydronic M or L2</th>
</tr>
</thead>
<tbody>
<tr>
<td>152 10 048</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>152 61 001</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>152 10 069</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Ø 25 mm**
- **Ø 28 mm**
- **Ø 32 mm**

### Pipe clip with rubber inlay

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 or 7 S</th>
<th>Hydronic 4 or 5 kW</th>
<th>Hydronic M or L2</th>
</tr>
</thead>
<tbody>
<tr>
<td>152 00 139</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>152 00 131</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Ø 10 mm**
- **Ø 41 mm**

### Fastening clip

**For water hoses, Ø 15 mm – 20 mm**

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 or 7 S</th>
<th>Hydronic 4 or 5 kW</th>
<th>Hydronic M or L2</th>
</tr>
</thead>
<tbody>
<tr>
<td>156 31 011</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Notes

- See page 130 for mounting bracket

---

**Unrestricted use**

**Restricted use**
### FASTENING PARTS

**Mounting bracket for metering pump**  
For use with boats and camping vehicles

![Mounting Bracket Diagram](image)

<table>
<thead>
<tr>
<th>Application</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 U/V T</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/L2</th>
<th>Hydronic L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airtronic</td>
<td>✅</td>
<td>✅</td>
<td>✅</td>
<td>✅</td>
<td></td>
<td></td>
<td>20 1634 80 06 00</td>
</tr>
<tr>
<td>Airtronic L</td>
<td>✅</td>
<td>✅</td>
<td>✅</td>
<td>✅</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air heater 8 U/V T</td>
<td>✅</td>
<td>✅</td>
<td>✅</td>
<td>✅</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydronic 4/5 kW</td>
<td>✅</td>
<td>✅</td>
<td>✅</td>
<td>✅</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydronic M/L2</td>
<td>✅</td>
<td>✅</td>
<td>✅</td>
<td>✅</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydronic L2</td>
<td>✅</td>
<td>✅</td>
<td>✅</td>
<td>✅</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Rubber spacer profile for exhaust line and water hoses**  
Silicone rubber, temperature resistant

![Rubber Spacer Profile Diagram](image)

<table>
<thead>
<tr>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 1634 80 06 00</td>
</tr>
</tbody>
</table>

**Gasket for exhaust pipe**

![Gasket Diagram](image)

<table>
<thead>
<tr>
<th>di = 41 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 8542 11 00 02</td>
</tr>
</tbody>
</table>

**Mounting bracket for water pump**  
For use with water pump 25 2217 27 00 00  
(see page 76)

![Mounting Bracket for Water Pump Diagram](image)

<table>
<thead>
<tr>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 2217 27 01 00</td>
</tr>
</tbody>
</table>
12 | FASTENING PARTS

Gasket for heating-air duct

![Diagram of gasket for heating-air duct]

- $d_i = 72 – 85 \text{ mm}, d_a = 100 \text{ mm}$
- Order no.: 20 1280 04 00 01

Rubber grommet

![Diagram of rubber grommet]

- $d_i = 4 – 10 \text{ mm}, d_a = 16.5 \text{ mm}$
- Order no.: 20 1280 09 01 03

Grommet for combustion-air pipe

![Diagram of grommet for combustion-air pipe]

- $d_i = 25 – 30 \text{ mm}, d_a = 41 \text{ mm}$
- Order no.: 20 1282 20 00 01

Grommet for exhaust pipe

![Diagram of grommet for exhaust pipe]

- $d_i = 23 – 30 \text{ mm}, d_a = 41 \text{ mm}$
- Order no.: 20 1549 65 00 02
- $d_i = 38 – 45 \text{ mm}, d_a = 60 \text{ mm}$
- Order no.: 20 1282 20 00 02
12 | FASTENING PARTS

Rubber-metal buffer

<table>
<thead>
<tr>
<th>Thread Size</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8/14V7 S</th>
<th>Hydronic 4.5 kW</th>
<th>Hydronic L2</th>
<th>Hydronic M2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>M6 / ST 6.3 C x 15</td>
<td>unrestricted use</td>
<td>unrestricted use</td>
<td>unrestricted use</td>
<td>unrestricted use</td>
<td>restricted use</td>
<td>restricted use</td>
<td>20 1673 80 01 01</td>
</tr>
</tbody>
</table>

Rubber-metal buffer

<table>
<thead>
<tr>
<th>Thread Size</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8/14V7 S</th>
<th>Hydronic 4.5 kW</th>
<th>Hydronic L2</th>
<th>Hydronic M2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 x M6 x 11 mm</td>
<td>unrestricted use</td>
<td>unrestricted use</td>
<td>unrestricted use</td>
<td>unrestricted use</td>
<td>restricted use</td>
<td>restricted use</td>
<td>20 1185 00 00 01</td>
</tr>
</tbody>
</table>

Rubber-metal buffer

Metal-reinforced

<table>
<thead>
<tr>
<th>Thread Size</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8/14V7 S</th>
<th>Hydronic 4.5 kW</th>
<th>Hydronic L2</th>
<th>Hydronic M2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>M6 x 10 mm / M6 x 15 mm</td>
<td>unrestricted use</td>
<td>unrestricted use</td>
<td>unrestricted use</td>
<td>unrestricted use</td>
<td>restricted use</td>
<td>restricted use</td>
<td>22 1000 50 00 08</td>
</tr>
</tbody>
</table>

Rubber-metal buffer

<table>
<thead>
<tr>
<th>Thread Size</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8/14V7 S</th>
<th>Hydronic 4.5 kW</th>
<th>Hydronic L2</th>
<th>Hydronic M2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 x M6 x 10, d = 20 mm, h1 = 15 mm, h2 = 35 mm</td>
<td>unrestricted use</td>
<td>unrestricted use</td>
<td>unrestricted use</td>
<td>unrestricted use</td>
<td>restricted use</td>
<td>restricted use</td>
<td>20 1607 65 00 02</td>
</tr>
<tr>
<td>2 x M6 x 10, d = 20 mm, h1 = 25 mm, h2 = 45 mm</td>
<td>unrestricted use</td>
<td>unrestricted use</td>
<td>unrestricted use</td>
<td>unrestricted use</td>
<td>restricted use</td>
<td>restricted use</td>
<td>20 1609 05 00 04</td>
</tr>
<tr>
<td>2 x M8 x 13, d = 30 mm, h1 = 15 mm, h2 = 41 mm</td>
<td>unrestricted use</td>
<td>unrestricted use</td>
<td>unrestricted use</td>
<td>unrestricted use</td>
<td>restricted use</td>
<td>restricted use</td>
<td>330 09 002</td>
</tr>
</tbody>
</table>
## 12 | FASTENING PARTS

### Mounting bracket

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 UV7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M2</th>
<th>Hydronic L2</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 1348 03 00 02</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>20 1348 03 00 04</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>20 1533 88 00 07</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

### L-mounting bracket

For exhaust silencer 22 1000 40 19 00

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 UV7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M2</th>
<th>Hydronic L2</th>
</tr>
</thead>
<tbody>
<tr>
<td>22 1000 51 34 00</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

See page 120 for exhaust silencer

### Z-mounting bracket

For exhaust silencer 22 1000 40 19 00

<table>
<thead>
<tr>
<th>Order no.</th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 UV7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M2</th>
<th>Hydronic L2</th>
</tr>
</thead>
<tbody>
<tr>
<td>22 1000 51 35 00</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

See page 120 for exhaust silencer
12 | FASTENING PARTS

Mounting frame for EasyStart T

For use when replacing the modular timer with EasyStart T

EasyStart T – single part
Fastening parts

EasyStart T – single part
Bracket
For slanting, level or convex installation surfaces

Trim for EasyStart Timer

Spacer plate
Rubber

Unit mounting bracket

For unrestricted use

~ ~ ~ ~ ~ ~ ~ ~ ~

Order no.

22 1000 51 33 00

22 1000 32 93 00

22 1000 51 32 00

22 1000 51 41 00

25 1482 89 00 02

20 1575 89 00 10

22 1050 89 08 00

unrestricted use  restricted use
12 | FASTENING PARTS

Unit mounting bracket

Heater mounting bracket

Unit mounting bracket

Fastening plate

Mounting bracket

Unrestricted use | Restricted use

<table>
<thead>
<tr>
<th>Product Information</th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 UV7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/20</th>
<th>Hydronic L/2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order no.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24 0076 00 00 01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 1482 89 00 11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 1575 89 04 00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 1482 89 00 13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22 1000 50 00 03</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
12 | FASTENING PARTS

Mounting bracket

Mounting bracket for Hydronic S3

Mounting bracket for Hydronic

Mounting bracket for Hydronic 2

Also required:

M6x95 fastening screw, order no. 100 10 259

Special screw also required:

for Economy / Comfort 25 2526 80 01 01

Order no.

Airtronic
Airtronic M
Airtronic L
Air heater 8/147 S
Hydronic 4/5 kW
Hydronic M/M2
Hydronic L/L2

22 1000 50 00 06
22 1000 51 42 00
22 1000 51 36 00
22 1000 51 37 00

unrestricted use  restricted use
GENERAL INFORMATION:

Name plates

The name plate must be easily visible after installation. If necessary, a second (duplicate) name plate can be attached in a clearly visible place on the heater after installation or on one of the covers in front of the heater. A second plate is not required if the original can be seen by removing a cover without the aid of tools.

A second (duplicate) name plate can be sent on request (chargeable). To order this, complete the form below and fax it to the number given.

The duplicate name plate costs EUR 15.

Please note!

Name plates for heaters with a general design certification (German: ABG – Allgemeine Bauartgenehmigung) are identifiable by the wavy line which is its mark of conformity ()Mathematical expression.

Name plates for heaters with an EC type approval are identifiable by the official EC and EEC type approval mark.
## ORDER
### 2. NAME PLATE (DUPLICATE)

Copy this form, fill in the information from the original identification label and fax your order to:

**+49 (0)711 939 1130**  
(Germany only)

<table>
<thead>
<tr>
<th>Company</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Street, building number</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zip code, town / city</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VAT-no.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fax</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Email</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sender (please print in block letters)

<table>
<thead>
<tr>
<th>Heater type</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Version</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Version number</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factory number</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mark of conformity or EC type approval</td>
<td>e1</td>
<td></td>
</tr>
<tr>
<td>and EMC type approval</td>
<td>e1</td>
<td></td>
</tr>
<tr>
<td>Fuel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical values</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heat flow</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating pressure</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 13 | NAME PLATES / INFORMATION SIGNS

#### Information sticker

<table>
<thead>
<tr>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 LTV 8 S</th>
<th>Hydronic 45 kW</th>
<th>Hydronic M2</th>
<th>Hydronic L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>25 2652 05 00 01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>25 1482 89 00 08</td>
</tr>
</tbody>
</table>

Vor dem Betätigen des Batterie-Trennschalters Heizgerät abschalten und Nachlauf abwarten.
## 14 | AUXILIARY PRODUCTS – CONVECTORS

Conectors and fan convectors with 2,000 – 10,000 W output.

<table>
<thead>
<tr>
<th>HELIOS 2000</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Incl. on / off switch, airflow / h 125 m³, 2 kW</td>
<td></td>
</tr>
</tbody>
</table>

### Aluminum grille
- L = 172, B = 129, T = 107
- 12 V
- 24 V
- Order no.: 22 2282 10 41 00

### Aluminum grille, gray
- L = 200, B = 170, T = 105
- 12 V
- 24 V
- Order no.: 22 2282 10 41 20

### Plastic grille, white
- L = 200, B = 170, T = 105
- 12 V
- 24 V
- Order no.: 22 2282 10 42 20

### Plastic grille, white
- L = 200, B = 170, T = 105
- 12 V
- 24 V
- Order no.: 22 2282 10 42 21

### Stainless steel grille
- L = 200, B = 170, T = 105
- 12 V
- 24 V
- Order no.: 22 2282 10 42 22

### HELIOS 2000
- Noiseless, incl. on / off switch, airflow / h 125 m³, 2 kW

### Aluminum grille
- L = 172, B = 129, T = 107
- 12 V
- 24 V
- Order no.: 22 2282 10 41 26

### Order no.

---

*unrestricted use ~ restricted use*
# 14 | AUXILIARY PRODUCTS – CONVECTORS

## HELIOS 2000 PREMIUM
**Incl. on / off switch, airflow / h 125 m³, 2 kW**

<table>
<thead>
<tr>
<th>Grille, black</th>
<th>12 V 24 V</th>
<th>L = 172, B = 129, T = 103.5</th>
<th>22 2282 10 41 13</th>
<th>22 2282 10 42 16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grille, white</td>
<td>12 V 24 V</td>
<td>L = 172, B = 129, T = 103.5</td>
<td>22 2282 10 41 12</td>
<td>22 2282 10 42 15</td>
</tr>
<tr>
<td>Grille, gray</td>
<td>12 V 24 V</td>
<td>L = 172, B = 129, T = 103.5</td>
<td>22 2282 10 41 11</td>
<td>22 2282 10 42 11</td>
</tr>
</tbody>
</table>

## HELIOS 2000 PREMIUM
**Incl. on / off switch, airflow / h 125 m³, 2 kW**

| Aluminum grille | 12 V 24 V | L = 172, B = 129, T = 103.5 | 22 2282 10 41 14 | 22 2282 10 42 17 |

## HELIOS 4000
**Incl. on / off switch, airflow / h: 250 m³, 4 kW**

| Aluminum grille | 12 V 24 V | L = 320, B = 129, T = 104 mm | 22 2282 10 51 00 | 22 2282 10 52 00 |
14 | AUXILIARY PRODUCTS – CONVECTORS

HELIOS 7000
With housing and on / off switch, airflow / h 500 m³, 4 kW

HELIOS 7000
Without housing, with on / off switch, airflow / h 500 m³, 4 kW

XEROS 4000
Airflow / h 200 m³, 4 kW
14 | AUXILIARY PRODUCTS – CONVECTORS

XEROS 4000
with fittings, airflow / h: 200 m³, 4 kW

- with 2 fittings, ø 45
  L = 273, B = 114, T = 267 mm
  12 V
  24 V

- with 2 fittings, ø 50
  L = 273, B = 114, T = 267 mm
  12 V
  24 V

- with 2 fittings, ø 60
  L = 273, B = 114, T = 267 mm
  12 V
  24 V

- with 2 fittings, ø 75
  L = 273, B = 114, T = 267 mm
  12 V
  24 V

- with rotatable and closable vents
  L = 273, B = 114, T = 267 mm
  12 V
  ~

ZENITH 8000
Airflow / h: 440 m³, 8 kW

- Standard
  L = 315, B = 130, T = 242 mm
  12 V
  24 V

- with plastic grilles
  L = 315, B = 130, T = 242 mm
  12 V
  24 V

- with 3 fittings ø 60
  L = 315, B = 130, T = 242 mm
  12 V
  24 V

- with 3 fittings ø 75
  L = 315, B = 130, T = 242 mm
  12 V
  24 V

- with 4 fittings ø 60
  L = 315, B = 130, T = 242 mm
  12 V
  24 V

ARTIK 10 000
Airflow / h: 440 m³, 10 kW

- Marine stainless steel defroster
  L = 442, B = 132, T = 225
  12 V
  24 V
## Accessories

Grille for HELIOS 2000 convvector

<table>
<thead>
<tr>
<th>Material</th>
<th>Dimensions</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum</td>
<td>L = 170, B = 140</td>
<td>22 2134 08 60 00C</td>
</tr>
<tr>
<td>Stainless steel</td>
<td>L = 170, B = 140</td>
<td>22 2134 09 90 00B</td>
</tr>
</tbody>
</table>

Grille for HELIOS 2000 convvector

<table>
<thead>
<tr>
<th>Material</th>
<th>Dimensions</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plastic, black</td>
<td>L = 200, B = 170, T = 22</td>
<td>22 2134 10 10 01</td>
</tr>
<tr>
<td>Plastic, white</td>
<td>L = 200, B = 170, T = 22</td>
<td>22 2134 10 10 02</td>
</tr>
<tr>
<td>Plastic, gray</td>
<td>L = 200, B = 170, T = 22</td>
<td>22 2134 10 10 00</td>
</tr>
</tbody>
</table>

Plastic grille for ZENITH 8000 convvector

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>L = 231, B = 131, T = 6</td>
<td>22 2145 73 50 00A</td>
</tr>
</tbody>
</table>

Plastic air diffuser with 3 fittings, for ZENITH 8000 convvector

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Dimensions</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ø 60 mm</td>
<td>L = 231, B = 131, T = 6</td>
<td>22 2145 73 40 00A</td>
</tr>
</tbody>
</table>
Plastic air diffuser with 4 fittings, for ZENITH 8000 convector

<table>
<thead>
<tr>
<th>ø 60 mm</th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 UV7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/M2</th>
<th>Hydronic L/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22 2145 73 70 00</td>
</tr>
</tbody>
</table>

Fitting for air diffuser

<table>
<thead>
<tr>
<th>ø 50 mm</th>
<th>ø 60 mm</th>
<th>ø 75 mm</th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 UV7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/M2</th>
<th>Hydronic L/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22 2000 06 57 07</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22 2000 06 58 87</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22 2000 06 57 27</td>
</tr>
</tbody>
</table>

Water hose

<table>
<thead>
<tr>
<th>2000</th>
<th>50</th>
<th>di = 18 mm</th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 UV7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/M2</th>
<th>Hydronic L/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22 2330 04 20 00</td>
</tr>
</tbody>
</table>

Pipe, aluminum

<table>
<thead>
<tr>
<th>350</th>
<th>80</th>
<th>di = 18 mm</th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 UV7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/M2</th>
<th>Hydronic L/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22 2175 00 00 91</td>
</tr>
</tbody>
</table>

2-way motor control valve

<table>
<thead>
<tr>
<th>D = 22 mm</th>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Air heater 8 UV7 S</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/M2</th>
<th>Hydronic L/L2</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22 2118 02 60 00</td>
</tr>
</tbody>
</table>
GENERAL INFORMATION ON THIRD-PARTY PRODUCTS:

Not all auxiliary products can be purchased direct from Eberspächer. Where applicable, these products must be ordered from the specified supplier.

Warm water boiler

Supplier:
Eberspächer (UK) Ltd.
Headlands Business Park
Salisbury Road, Ringwood
Hampshire BH24 3PB, UK
Tel. +44 1425 480151
Fax. +44 1425 480152

All warm water boilers have an integrated 220 V – 240 V AC heating coil.

* Thermostatic mixing valve
14 | AUXILIARY PRODUCTS – INDIVIDUAL DEVICES

Stainless steel box for Airtronic D2 / D4

Supplier:
Kjöller Eberspächer Marine
Rovingsgade 82
Copenhagen N, DK – 2000, Denmark
Tel. + 45 35 82 95 00
Fax. + 45 35 82 30 95

B = 147 mm, H = 212 mm, T = 295 mm
B = 172 mm, H = 240 mm, T = 360 mm

Polarn 4000
Portable, diesel-operated heater with Airtronic D4 –
compact air heater with integrated 5 l diesel tank

Polarn 8000
Portable, diesel-operated heater with air heater 8L –
compact air heater with fuel supply from separate tank

Order no.

<table>
<thead>
<tr>
<th>Airtronic</th>
<th>Airtronic M</th>
<th>Airtronic L</th>
<th>Hydronic 4/5 kW</th>
<th>Hydronic M/2</th>
<th>Hydronic L/2</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 9998 00 00 21</td>
<td>24 9998 00 00 10</td>
<td>24 9998 00 00 22</td>
<td>24 9998 00 00 32</td>
<td>24 9998 00 00 33</td>
<td></td>
</tr>
</tbody>
</table>

unrestricted use  restricted use
14 | AUXILIARY PRODUCTS – INDIVIDUAL DEVICES

Marine kit – air heater

Product package:

- Control unit (mini-controller)
- Mounting bracket for heater
- Cable harness
- Combustion-air intake silencer
- Exhaust pipe angle
- Exhaust silencer
- Hull fitting
- Fuel tank extractor
- Fuel pipes
- Fuel hoses
- Temperature sensor
- Various mounting brackets
- Mounting accessories

To be ordered separately:
all air ducts for the planned heating-air ducting

Optional:
EasyStart Timer timer switch (see page 100)

Marine kit – water heater

Product package:

- Mounting bracket for heater
- Cable harness
- Combustion-air intake silencer
- Exhaust silencer
- Hull fitting
- Fuel tank extractor
- Fuel pipes
- Fuel hose
- Fastening parts
- Electrical parts
- Water hoses
- Connection parts
- Mounting accessories

To be ordered separately:
EasyStart Timer timer switch (see page 100)
MORE INFORMATION IS AVAILABLE FROM ANY OF OUR 5,000 SERVICE PARTNERS WORLDWIDE.

GERMANY

Eberspächer Heizung
Vertriebs-GmbH & Co. KG
Wilhelmstrasse 47
17358 Torgelow
Hotline: +49 800 1234300
Fax hotline: +49 1805 262624
technik-heizung@eberspaecher.com
www.eberspaecher-standheizung.com

Eberspächer Climate Control Systems GmbH & Co. KG
Eberspächerstrasse 24
73730 Esslingen
GERMANY
Phone: +49 711 939 00
Fax: +49 711 939 0634
info@eberspaecher.com
www.eberspaecher.com

AUSTRIA

Eberspächer GmbH
IZ NÖ-Süd2
Hondastraße 2, Obj. M47
2351 Wiener Neudorf
Phone: +43 (0)2236 6771440
Fax: +43 (0)2236 6771442
office-at@eberspaecher.com
www.eberspaecher.at

Eberspächer Heizung
Vertriebs-GmbH & Co. KG
Wilhelmstrasse 47
17358 Torgelow
Hotline: +49 800 1234300
Fax hotline: +49 1805 262624
technik-heizung@eberspaecher.com
www.eberspaecher-standheizung.com

AUSTRALIA

Eberspächer gmbH
iz nÖ-Süd2
Hondastraße 2, Obj. M47
2351 Wiener Neudorf
Phone: +43 (0)2236 6771440
Fax: +43 (0)2236 6771442
office-at@eberspaecher.com
www.eberspaecher.at