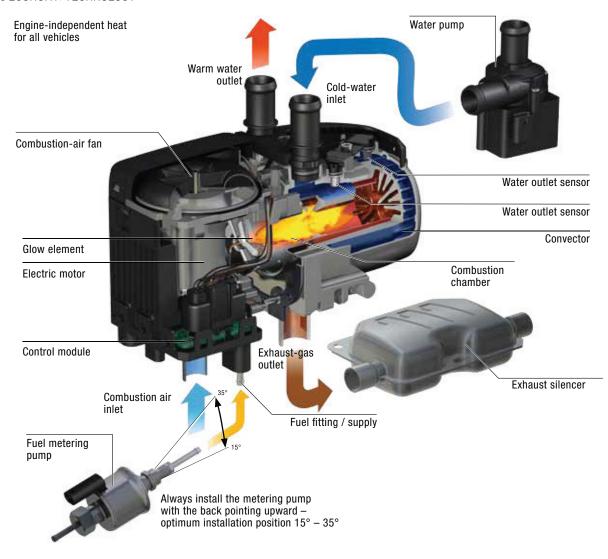
PRODUCT INFORMATION

HYDRONIC S3 ECONOMY: TECHNOLOGY



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 delivered 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.

PRODUCT INFORMATION - Hydronic S3 heaters



EBERSPÄCHER HYDRONIC

| LDLINGI AGIILIN III DINGIN | 10 | | | | | | |
|----------------------------------|--|---------------------|---------------------|---|---------------------|--|--|
| Heater | | Hydronic S3 Economy | Hydronic S3 Economy | Hydronic S3 Economy Hydronic S3 Economy | | | |
| Product package | | Heater | Heater | Heater | Heater | | |
| Techn. designation | | HS3 CS B5E | HS3 CL B5E | HS3 CS D5E | HS3 CL D5E | | |
| Order no. for heater | | 20.2051.05.0000 | 20.2048.05.0000 | 25.2993.05.0000 | 25.2971.05.0000 | | |
| Order no. for heater with PRMP* | | - | - 25.2994.05.0000 | | 25.2990.05.0000 | | |
| Fuel | | Gasoline | Gasoline | Diesel | Diesel | | |
| Voltage | V | 12 | 12 | 12 | 12 | | |
| Heating medium | Mixture of water and anti-freeze (Proportion of antifreeze at least 10 % up to 50 % maximum) | | | % maximum) | | | |
| Control / heat settings | | Infinitely variable | Infinitely variable | Infinitely variable | Infinitely variable | | |
| Heat output | W | 1,800 to 5,000 | 1,800 to 5,000 | 1,300 to 5,000 | 1,300 to 5,000 | | |
| Fuel consumption | I/h | 0.23 / 0.67 | 0.23 / 0.67 | 0.15 / 0.59 | 0.15 / 0.59 | | |
| Power consumption, heater | W | 7 / 32 | 7 / 32 | 5 / 32 | 5 / 32 | | |
| Power consumption, water pump W | | 17 | 17 | 17 | 17 | | |
| Elec. power consumption, start W | | 135 | 135 | 135 | 135 | | |
| Minimum water throughput | I/h | 300 | 300 | 300 | 300 | | |
| Lower voltage limit | V | 10.5 | 10.5 | 10.5 | 10.5 | | |
| Upper voltage limit | V | 16 | 16 | 16 | 16 | | |
| Protection rating | ing Heater: IP5K6K, IP5K9K, Control module: IP6K6K, IP6K9K | | | | | | |
| Dimensions L x W x H | mensions L x W x H mm 215 x 91 x 124 215 x | | 215 x 91 x 124 | 215 x 91 x 124 | 215 x 91 x 124 | | |
| Weight empty | kg | 2.0 | 2.0 | 2.0 | 2.0 | | |

EBERSPÄCHER HYDRONIC

| Heater | | HS3 CS D6L Commercial |
|--------------------------------|-----|--|
| Product package | | Heater |
| Order no. for heater | | 25.2972.05.0000 |
| Fuel | | Diesel - standard commercially available (EN 590) |
| | | Blending with max. 30 % FAME according to EN 14214 is permitted. |
| Voltage | V | 24 |
| Heating medium | | Mixture of water and anti-freeze |
| | | (Proportion of antifreeze at least 10 % up to 50 % maximum) |
| Control / heat settings | | Infinitely variable |
| Heat output | W | 1,300 to 5,600 |
| Fuel consumption | I/h | 0.15 / 0.65 |
| Power consumption, heater | W | 5 / 37 |
| Power consumption, water pump | W | 11 |
| Elec. power consumption, start | W | 135 |
| Minimum water throughput | I/h | 300 |
| Lower voltage limit | V | 20.4 |
| Upper voltage limit | V | 32 |
| Interference suppression | | 5 (DIN EN 55025) |
| Dimensions L x W x H | mm | 215 x 91 x 124 |
| Weight empty | kg | 2.0 |

^{*}PRMP: Pressure resistant metering pump

Item in the kit

HYDRONIC HS3 B/D5E/D6L CS





Hydronic S3 heater

HARDWARE KIT INCLUDES:

Fuel Clamps Grommets Nuts **Exhaust Clamps** Cable Ties Mounting Screws **Ducting Clamps** Washers **Routing Clamps** End Caps **Exhaust Brackets** FUEL SYSTEM INCLUDES:

Clamps 5 mm Fuel Line Plastic Fuel Line 3.5 mm Fuel Line

Refer to the Accessories Section for ducting components and additional accessories.

Hydronic AquaSystem NA - DIESEL

Hydronic AquaSystem NA - GASOLINE

Install Kit with HS3 D5 12V

Install Kit with HS3 B5E 12V

HYDRONIC AQUASYSTEM FOR RV's HS3 - 17,100 BTU



* Heating Element 1500 W /120 VAC

Item in the kit



HARNESSES INCLUDES:

Hydronic S3 heater harness Touch Screen harness Control Power harness Coolant pump harness CAN Bus extension harness

HARDWARE KIT INCLUDES:

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Grommets End Caps Nuts
Exhaust Clamps Washers Exhaust Brackets
Cable Ties Mounting Screws Routing Clamps

Refer to the Accessories Section for ducting components and additional accessories.

FUEL SYSTEM INCLUDES:

Plastic fuel line 2mm X 8.0m~ Fuel hose 3.5mm X 50mm~ Fuel line adaptor 3.5 TO 5 MM FMP holder Clamps

CONTROL OPTIONS AND TIMERS

Control units









| Model | EasyStart Pro | EasyStart Timer | EasyStart Select | Airtronic mini- controller |
|--------------|-----------------|-----------------|------------------|-------------------------------|
| Order number | 22.1000.35.2200 | 22.1000.34.1500 | 22.1000.34.1300 | 22.1000.32.0700 |
| Interface | CAN | LIN, S+ | LIN | S+ |

Control unit compatibility with heaters













| Hydronic S3 12V CS Economy | CAN | S+* | - | - |
|---|-----------------|--------------------------------|-----|-------|
| Hydronic S3 24V CS Commercial | CAN | S+* | - | - |
| Hydronic S3 12V CL Economy | - | LIN | LIN | - |
| Hydronic M II 12/24 V | - | LIN | LIN | - |
| Hydronic L3 24V (16/24/30/35 kW) | CAN / E-Control | LIN | LIN | - |
| Airtronic S3/M3/L3 12 V Commercial | CAN | LIN | LIN | S+ ** |
| Airtronic M3 12V Recreational | CAN | LIN | LIN | S+ ** |
| Airtronic S3/M3/L3/XL3 24V Commercial | CAN | S+* No setpoint input possible | - | S+** |

^{*} With restricted function: diagnostics cannot be run via the control unit

^{**} With restricted function: no external temperature sensor possible

CONTROL OPTIONS AND TIMERS - EASYSTART PRO



1. Advantages (functions):

- Intuitive navigation via a control knob
- Integrated temperature sensor
- Operation of up to two heaters separately or two identical (Airtronic or Hydronic) heaters in a group
- Simple plain text diagnostics for users
- Detailed diagnostics function for the workshop
- Integrated residual heat function for Hydronic (CS) heaters: efficient heating using the engine's residual heat
- Altitude mode can be activated manually above 1,500 m (Hydronic S3 Economy (CS))
- Easy-to-read system status display (home screen)
- Timer function: up to three programming locations available
- Display and LED color ring for clearly indicating the status in all operating conditions

- Various installation variants possible (surface mounting with concealed or visible cable routing, flush mounting)
- Mounting-optimized ribbon cable
- Endless heater operating time can be set (Airtronic 2 + Airtronic 3 and Hydronic S3 (CS))
- Menu operation available in English and German, as well as 25 other languages via EasyScan

2. Additional features:

- · Setup assistant simplifies installation
- · Maintenance interval setting possible
- Immediate heating via the long-press function
- Integration of an additional CAN control unit possible: EasyStart Web (from Q2/2020) or additional EasyStart Pro
- · Permanent display illumination possible
- ADR compliant

• Easy diagnostics via EasyScan; no disassembly required

Technical data:

| Order number | | 22.1000.35.2200 |
|------------------------------|----|---|
| Dimensions L x W x H | mm | 81.8 × 37.0 × 13.5 (without control knob) 81.8 × 37.0 × 18.6 (with control knob) |
| IP type of protection | | IP5K2 |
| Average standby current draw | mA | < 0.4 |
| Operating temperature | °C | -40 to +85 |

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