

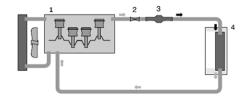
Pumping in cold weather conditions Heating systems for BA pumps powered by Hatz H50 engines



OPTIONAL HEATING SYSTEMS

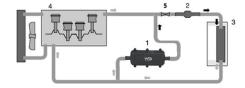
1. Natural Heating System. Choose this system to prevent the float tank from freezing during the pumping process.

The float tank of the BA pump is fitted with a heat exchanger which is connected to the engine water cooling system. When the engine is running, the water in the float tank is heated which prevents it freezing from the cold wind. When the outside temperature rises above freezing, the valve (2) can be closed in order to prevent damage to the vacuum system.



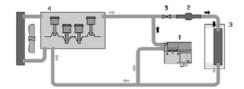
- Article number 93050110.
- This cannot prevent frost damage to the pump during standstill.
- The amount of refrigerant required differs from the manufacturer's specification in the engine manual.
- 2. **Electric Heating System.** Choose this system to minimize the risk of freezing in cases where an external power supply is available.

An electric heating element heats the engine's cooling water and circulates the fluid through a heat exchanger in the BA pumps float tank. Even when at a standstill, the pump set remains heated thereby minimizing the risk of frost damage. When the outside temperature rises above freezing, the valve (5) can be closed to prevent damage to the vacuum system



- Article Number 115V 60Hz is 93050105 230V 50Hz is 93050100.
- A thermostat automatically switches the heater on / off.
- The amount of refrigerant required differs from the manufacturer's specification in the engine manual.
- **3. Webasto Heating System**. Select this system to minimize the risk of freezing without depending on an external power supply.

The Webasto heater is equipped with its own diesel drive and circulation pump. The engines cooling water is heated and circulated via a heat exchanger in the BA pump float tank. Even when at a standstill, the pump set remains heated, reducing the risk of frost damage. When the outside temperature rises above freezing, the valve (5) is closed manually to prevent damage to the vacuum system.



- Article Number 93050120.
- Runs on diesel fuel that compliant with the EN590 standard.
- A thermostat automatically switches the heater on / off.
- The amount of refrigerant required differs from the manufacturer's specification in the engine manual.

