Manual - Slim Water heater

Isotemp Slim water heater has been designed and produced to ensure that your water heater will give long and trouble free operation for many years.
It is important, however, that your Isotemp water heater is correctly installed and maintained. During the winter period when the unit is not being used it is essential that it is drained to avoid risk of damage due to freezing.
Every single Isotemp water heater is individually pressure tested prior to delivery and carries a 2 year factory warranty in respect of defects in material and/or manufacture and a limited 5 year warranty on the inner tank.

Installation:

1. Positioning: The water heater may be placed in a suitable position with the engine water connectors on the water heater below the level of the engine header tank. The connection hoses between the engine and the water heater should be kept as short as possible.

2. Mounting: The water heater can be mounted horizontal, with the safety valve lowest, or vertical with all connections pointing downwards. The mounting brackets can be turned to fit the bottom or a bulkhead on board. Bear in mind the weight of the unit when full of water.

3. Water connections:

3.1 Fittings: Use only fittings and accessories made of non-corrosive material such as brass or stainless steel. Avoid plastic fittings on the water heater depending on the heat. For the engine connections, use heat resistant (210°F reinforced rubber hoses, resistant to anti-freeze and pressure proved for 70 psi . For the fresh water, use heat resistant fresh water hoses (food industry quality). They shall be rated 115 psi .
Seal threaded connections with e.g. Loctite 577 or Bondline T777 or similar.

3.2 Engine connections (see diagram): The water heater may be used with either fresh or sea water cooled engines. The flow of cooling water from the engine through the water heater must be at least ½ gallon/min. If the boat has two engines, connect the water heater to one engine only.
Connection to the engine shall be done with min. 5/8" hoses and adaptors to avoid restrictions. See the instructions in the engine operators manual, regarding hose connection points.

3.3 Freshwater connections (see diagram): The water heater is fed with fresh water from the electrical fresh water pump. Max pressure 42 psi. The hot water outlet, which also vents the water heater, should be connected to a mixer tap at the sink and/or basin outlet. Cold water can be mixed with hot to avoid scalding. Set a proper temperature on the thermostat mixing valve on the water heater, if fitted. The waste water hose must always have a free outlet. There must be no valves or skin fittings, fitted to the waste water hose. A small quantity of water may be expended via the safety valve during the heating up period.

3:4 Electrical connection: All internal connections are made in the factory. The power supply cable is fitted with an international plug, which should be fitted to a correctly installed socket. This socket as all "high-voltage" installations on board, must be carried out to fulfill valid regulations. The Isotemp Slim water heater is designed to meet regulations in this field. When leaving the boat for longer periods, it is recommended to pull out the cable connector from the socket. This should be done even if the shore power system is shut off, as there can be a difference in the electrical system, between the earth and the salt-water earth of the boat. This can seriously damage the immersion or water heater.

4. Start up/Test: Start the engine and check the circulation of the cooling water. Secure the hoses after checking. When using with a fresh water engine cooling system, compensate with anti-freeze for the additional volume in hoses and heat exchanger. Fill up the water heater with fresh water by starting the fresh water pump, leaving the hot water tap open to air the system. Check there are no water leaks and finally connect the power cable when the water heater is full. Check that the safety valve outlet is free to allow water to escape.
Note: the water expands during the heat up process.

5. Maintenace:
5:1 Winter drain: When there is a risk of freezing temperatures, the water heater must be drained. This is done by pulling the lever on the safety valve to its open position. Take off the hot water hose and/or open the air bleeder screw on the mixer valve, to allow air coming into the tank.
The water heater can be left safely on board over winter.

5:2 Immersion heater: The immersion heater is 115V-800W. The thermostat has an integrated working thermostat and a double overheat protection thermostat. This is manually re-settable, by pushing the white indicator pin at the top of the thermostat. Also check why the overheat thermostat initially tripped before re-connection the power supply.
When leaving the boat for longer periods, it is recommended to dis-connect the power supply cable plug. This should be done even if the shore power system is shut off, as there can be a difference in the electrical system, between the earth lead and the salt water earth of the boat. This can seriously damage the immersion and water heater.

5:3 Controls: Check regularly that there is no leakage in the connections.

Technical data Isotherm Slim

Type	Volume gallons	L x øD inch	Weight lbs.	Immersion heater
601521S000003	4	20.9 x 11.8	17.6	115V/800W
602021S000003	5.2	25.8 x 11.8	20	115V/800W
602521S000003	6.5	30.7 x 11.8	24.3	115V/800W

Connection fresh water: Cold water in inside BSP ½" straight thread
Warm water out, outside BSP ½", straight thread
Engine water connections: Outside BSP ½" straight thread
Immersion heater thread BSP 1¼" inside.
Material: Tank and connections stainless steel AISI 316, outside cover and mounting feet stainless steel AISI 304
Safety valve: 65 psi
Insulation: Polyurethan foam

The manufacturer reserves the right to change the specifications without prior notice.

CE

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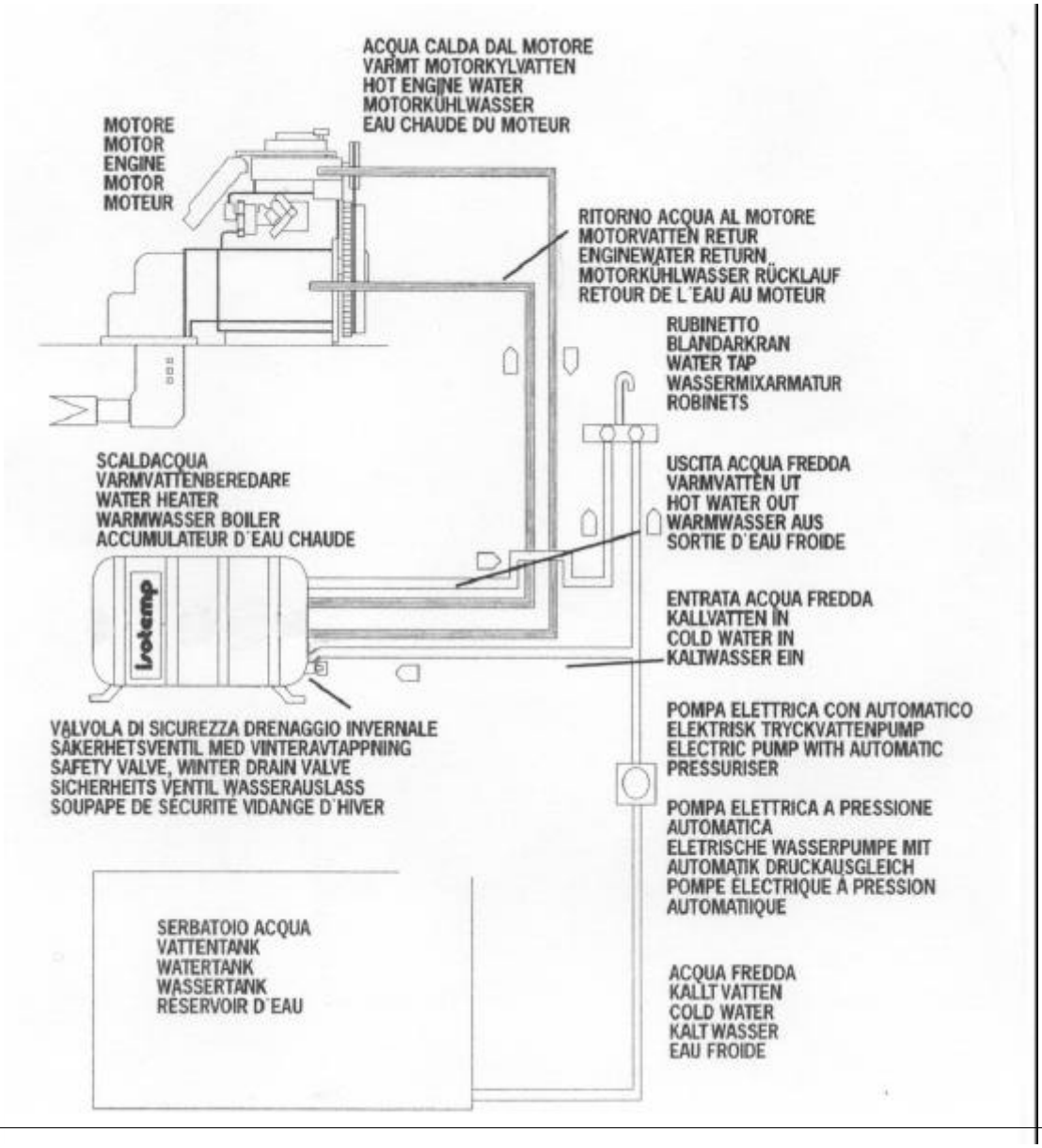
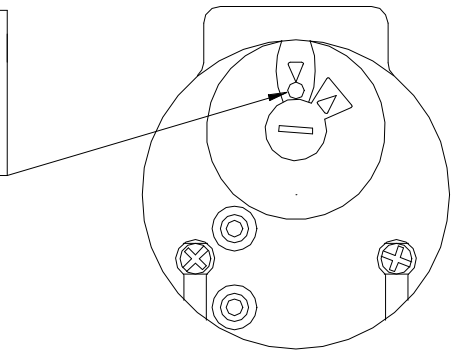
Connection diagram

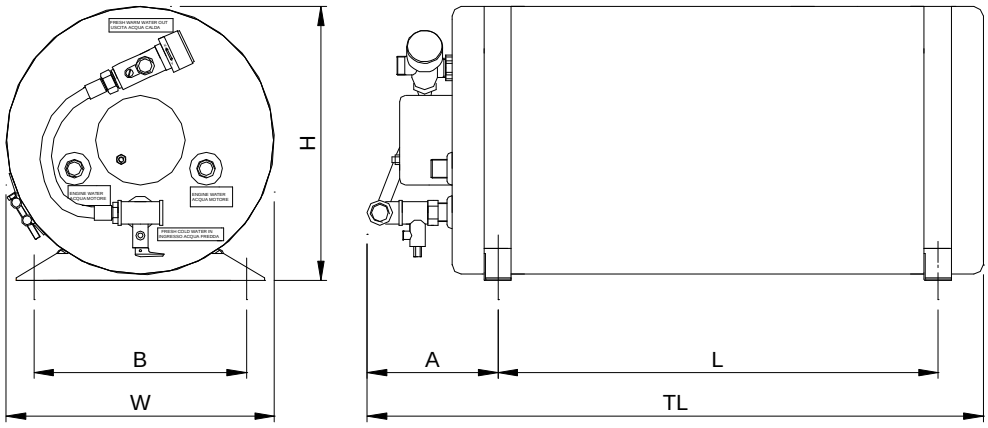


Thermostat

Thermostat:
Protezione per calore essessiva
Överhettningsskydd
Over heat protection
Überhitzungsschutz
Protection chaleur exceptionell



Dimensions Isotemp Slim



Model	A	L	B	TL	W	H	
601521S000003	5.5	13.4	9.65	20.9	11.25	11.7	Slim 15L
602021S000003	5.5	18.3	9.65	25.8	11.25	11.7	Slim 20L
602521S000003	5.5	23.2	9.65	30.7	11.25	11.7	Slim 25L