



ABOUT THE i-TEMP wh RANGE

The i-Temp wh water heaters have an advantage over oil heat transfer units especially if large amounts of heat needs to be extracted from small cooling surfaces. Particularly for injection moulding and some extrusion processes it is advantageous as it uses pressurised hot water instead of oil because the heat transfer capability is more effective, typically by a factor of three.

Pump flow rates and the surface area of tooling in contact with the product can also be reduced accordingly at the design stage if it is known that water is to be used, this leads to a more efficient system in terms of power and fluid cost.

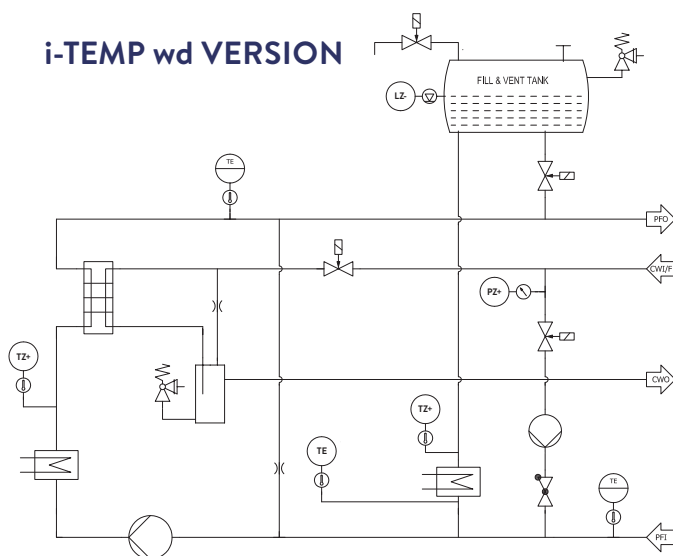
The use of water as a fluid of heat transfer has a further advantage with the amount of liquid which is circulated by the pump and is reduced by a factor of two compared to three with the transfer of heat using oil.

The i-Temp wh range is specifically designed for special applications requiring temperatures in the range of 200°C.




















Unit features include:

- Magnetically coupled pumps
- Return flow temperature monitoring
- Built-in condensing unit to prevent steam hammer
- Level monitoring via a built-in high pressure makeup filling unit
- Ramp function for temperature changes, perfect for plastics processing
- The modular construction of the heating and cooling sections allows a unit to be designed for any type of application
- Optional interfaces at front panel (analogue 0-10v, 0/4-20mA; serial RS 232, RS 422, RS 485, TTY, Profibus, Profinet)
- Splash proof electrics

i-TEMP wd VERSION



SYMBOL INDEX

	COOLING COIL		HIGH PRESSURE SWITCH		N/C SOLENOID VALVE		PROCESS FLUID INLET
	ELECTRICAL HEATER		LOW LEVEL SWITCH		PRESSURE RELIEF VALVE		PROCESS FLUID OUTLET
	PUMP		OVER TEMPERATURE STAT		NON RETURN VALVE		COOLING WATER OUTLET
	PLATE HEAT EXCHANGER		TEMPERATURE SENSOR		Y TYPE STRAINER		MANUAL FILL
			3 WAY SWITCHABLE BLOCK		REDUCED FLOW BYPASS		COOLING WATER INLET / FILL

Temperature controllers water up to 200°C

● = Standard / ○ = Option / – = not available/ Values in () optional

Model i-Temp	i-Temp wh 60	i-Temp wh 90	i-Temp wh 120
Fluid	water	water	water
Temperature max. (°C)	200	200	200
Pump capacity max. (l/min/bar)	60/5.0	80/5.0	120/5.0
Heating capacity (kW)	9 (18/27)	18 (9/27/36)	27 (18/36/45/54)
Cooling	indirect	indirect	indirect
Cooling capacity max. (kW) ¹	32 (64)	40 (80)	48 (96)
Process supply and return connections	DN 25	DN 32	DN 32
Cooling water supply and return connections	G½"	G½"	G½"
Housing length L (mm) ²	1320	1320	1320 (1465)
Housing width W (mm) ²	500	570	570
Housing height H (mm) ²	1275	1275	1275 (1515)
Weight min. depending on the specification (kg) ³	95	105	120
Sealed pump with magnetic coupling	●	●	●
Temperature controlled pressure overlay	●	●	●
Condensing unit to prevent steam impacts in cooling medium return	●	●	●
Return temperature indication	●	●	●
Return flow temperature monitoring and limiting	●	●	●
Built-in high-pressure makeup feed unit	●	●	●
Automatic venting and pressure relief	●	●	●
Electronic level control with dry-running protection	●	●	●
Safety thermostat	●	●	●
Adjustable set point limits	●	●	●
Ramp function for temperature alteration	●	●	●
Cooling down to safety temperature when switching off	●	●	●
Strainer in return line circulation medium	●	●	●
Continuous heater control with switch cabinet fan	●	●	●
Acoustic alarm	○	○	○
Connection for external probe (Fe-CuNi or Pt 100)	○	○	○
Interface for central machine control	○	○	○
Separate fill line	○	○	○
Strainer in return line process fluid	○	○	○
Control of cooling with motor valve	○	○	○
Additional expansion tank for large external volumes	○	○	○
Digital flow rate indication and monitoring	○	○	○

* shut off valve on PFI/PFO

1) at 15°C cooling water temperature and 200°C circulation medium temperature
2) depending on cooling water amount
3) depending on built in heating and cooling capacities as well as the size of the expansion tank