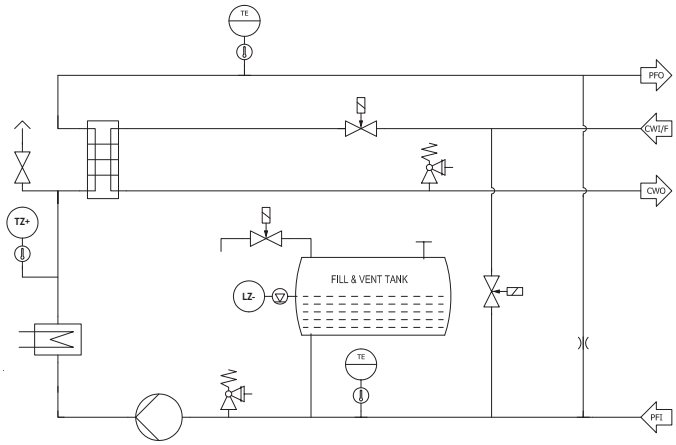
ABOUT THE i-TEMP wd RANGE

The i-Temp wd series offers both heating and cooling and is set-up and ready for connection to the process with direct cooling, specifically designed for operation with water as the circulation fluid. Direct cooling comes as an advantage when a high cooling capacity is required directly at low temperature differences between cooling water and the circulation medium. In this case the cooling water will be fed without temperature loss into the circulation circuit. Water circuits are designed as a closed system which allows pressurised heating of up to 150°C. Depending on the operating condition, the heat will either be removed from the application by cooling or transferred to the application by heating.

Heat transfer occurs by the circulation of water which is transferred through to the application by an efficient pump. A special sensor monitor is featured as standard within the i-Temp wd which measures the current temperature and the intelligent microprocessor controller compares the measured value with the adjusted set value which switches the heating and cooling accordingly. Furthermore a trouble–free operation is guaranteed thanks to a comprehensive safety system.

For applications which require something a little different, units can be tailor-made to fit specific site requirements.

i-TEMP wd VERSION



Unit features include:

- Self optimising C8 advanced controller with high control accuracy
- Simultaneous display of set and actual values
- Measuring, indication and monitoring of the flow rate (optional)
- Integrated operating and service information
- Storage and recall of process parameters with memory card
- Solid State Relays – energy saving control
- Continuous monitoring of process parameters
- Optional connection for external probe (PT100 or Fe-CuNi)
- Optional interfaces at front panel (analogue 0-10v, 0/4-20mA; serial RS 232, RS 422, RS 485, TTY, Profibus, Profinet
- Splash proof electrics

SYMBOL INDEX

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

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Temperature controllers water 140°C and 150°C

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

Model i-Temp	i-Temp wd 60	i-Temp wd 100	i-Temp wd 150	i-Temp wd 250	i-Temp wd 400	i-Temp wd 500
Fluid	water	water	water	water	water	water
Temperature max. (°C)	140	140 (150)	140 (150)	140 (150)	140 (150)	140 (150)
Type of operating pump	peripheral pump	multi stage stainless steel centrigual pump	two-stage stainless centrigual pump	two-stage stainless centrigual pump	centrigual pump	centrigual pump
Pump capacity max. (l/min/bar)	45/6.0	90/6.0	200/5.1	230/5.5	420/3.6	500/4.2
Heating capacity, selectable (kW)	6	9/18/27/36/45/54	9/18/27/36/ 45/54/63/72	9/18/27/36/ 45/54/63/72	9/18/27/36/ 45/54/63/72	9/18/27/36/ 45/54/63/72
Cooling	direct	direct	direct	direct	direct	direct
Cooling capacity max. (kW) [1]	47	100	200	270	460	600
Process supply and return connections	G¾"	G1"	G1¼"	G1½"	DN 50	DN 65
Cooling water supply and return connections [2]	G½"	G1½",¾"	G½",¾",1",1¼"	G½",¾",1",1¼"	G¾",1",1¼",1½",2"	G¾",1",1¼",1½",2"
Housing length L (mm) [3]	210	990 (1120/1465)	990 (1120/1465)	990 (1120/1465)	1465	1465
Housing width W (mm) [3]	450	430 (510/570)	430 (510/570/695)	430 (510/570/695)	570 (695)	570 (695)
Housing height H (mm) [3]	520	735 (935/1275)	735 (935/1275)	735 (935/1275)	1275	1275
Weight min. depending on the specification (kg)	35	120	150	160	200	250
Control of cooling with motor valve	●	●	●	●	●	●
Control of cooling with solenoid valve	●	o	o	o	o	o
Automatic fill	●	●	●	●	●	●
Automatic venting	●	●	●	●	●	●
Electronic level control with dry-running protection	●	●	●	●	●	●
Safety thermostat	●	●	●	●	●	●
Adjustable point limits	●	●	●	●	●	●
Ramp function for temperature alteration	●	●	●	●	●	●
Cooling down to safety temperature when switching off	●	●	●	●	●	●
Strainer in cooling water inlet	●	●	●	●	●	●
Continuous heater control	●	●	●	●	●	●
Acoustic alarm	o	o	o	o	o	o
Digital flow rate indication and monitoring	o	o	o	o	o	o
Pressurised air valve for mould draining	o	o	o	o	o	o
Return temperature indication	o	o	o	o	o	o
Interface for central machine control	o	o	o	o	o	o
Connection for external Fe-CuNi or Pt 100	o	o	o	o	o	o
Strainer in return line circulation medium	o	o	o	o	o	o

* 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

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