technotrans

power to transform

The base.line

The inexpensive ones!

base.line

Appreciated around the globe:

Cold-water temperature controllers

Compact water chillers

Industrial cooling equipment

Free cooling systems

Cooling and water supply systems

HotCooled solutions –

in a unique temperature spectrum.

Innovative, efficient, sustainable.

Temperature control units

Basic standard temperature controllers

Innovative standard temperature controllers

Highly efficient premium temperature controllers

Temperature controllers with water distributors

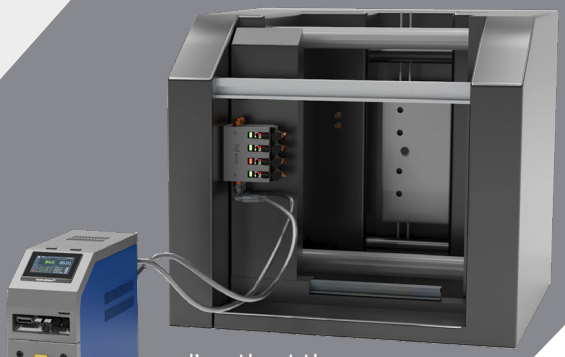
Customised premium temperature controllers

our product portfolio.

Central cooling systems

Water treatment systems

Mold cleaning



Flexible Installation

directly at the consumer installed. Visualization on the device.

Process monitoring with vortex or Ultrasonic measurement

factory fitted to the temperature control unit (also retrofittable)

Wasserverteiler

Temperature control machines

Customised premium temperature control machines

Temperature control systems

Variothermal temperature control systems

We have the perfect solution for you!

Our temperature control units are divided into four product lines: **base.line**, **high.line**, **eco.line** and **flex.line**. These temperature control units differ essentially in their operating concept with regard to comfort, analysis functions, and the efficiency technology that is being applied.
The temperature controller series of the **base.line**, **high.line** and **eco.line** is largely preconfigured with extensive features and can be customized with individual options.
The performance range of the preconfigured temperature controllers includes units with a heating capacity of up to 72 kW, a flow rate of up to 440 l/min and a media temperature of up to 180 °C.
In the **flex.line** series, the temperature controller can be individually and flexibly configured on request with extensive features and numerous options.

The performance range of the flexible temperature controllers includes units with a heating capacity of up to 72 kW, a flow rate of up to 500 l/min and a media temperature of up to 350 °C.

A special feature of almost all standard technotrans temperature control units is the longlife heater with zero-loss heat transfer. Together, all four product lines and both degrees of individualisation stand for high quality and reliability, as well as the "MADE IN GERMANY" label.

The "longlife" stainless steel heating cartridges used in the **high.line** and **eco.line** come with an additional 10-year long-term guarantee.

Our product lines and their key features!

base.line

The inexpensive ones!

In terms of its efficiency and user-friendliness, the **base.line** series is in line with the current, „simpler“ market standard which is based on peripheral pumps.

high.line

The individual ones!

In terms of its efficiency and user-friendliness, the **high.line** series is in line with the current, „more sophisticated“ market standard which is based on peripheral or centrifugal pumps.

eco.line

The efficient ones!

The **eco.line**, with its peripheral impeller and highly efficient centrifugal pumps, in combination with speed control, sets new standards in the market in terms of efficiency and ease of use.

flex.line

The flexible ones!

The **flex.line** allows a high degree of freedom in unit configuration. Customer requirements can be met individually from a comprehensive modular system.

Efficient
Reduced energy and operating costs through the use of high-efficiency pump designs, performance-controlled pump drives, and optimized heat transfer.

Sustainable
Both customers and the climate benefit in the long term from resource- saving operation – efficient cooling and tem-perature control solutions not only reduce operating costs, but also protect the environment.

Reliable
High process and operational reliability – in combination with proven technology – ensure high quality, availability, and reproducibility; for example, extremely precise tem- perature control ensures reliable processes.

Innovative
Efficient cooling and temperature control systems ensure consistent performance and extend the service life of the processes. Low-vibration, smooth-running, and efficient solutions reduce the CO2 footprint.

Features of the product lines!

The devices, designed in a modern industrial design, stand for high-quality but affordable technology, high availability, ease of operation and ease of service.

The temperature control units of the **base.line** are our investment-cost-optimized standard units for an economical temperature control with water at temperatures up to 180 °C and flow rates up to 60 l/min.
The **base.line** unit with its simple operation via a membrane keypad with 7-segment display is the preferred solution for many applications. with an excellent price/performance ratio.
The basic equipment includes the microprocessor control technotrans basicControl with display of set and actual temperatures, automatic replenishment, automatic mold draining, an energy-saving energy-saving continuous heating control and much more.

For individualization, among other things, different interfaces, individual coloring and labeling, mounting on rubber buffers or rails instead of rollers and other useful options are offered.

The temperature control units of the **high.line** are also investment-cost-optimized standard units for economical and at the same time particularly convenient temperature control with water at temperatures up to 180 °C and flow rates up to 200 l/min.
The **high.line** and **eco.line** series with the innovative technotrans compactControl controller is equipped with a fast 32-bit processor.
This features the independent, self-developed logotherm display and operating unit with 7-inch multi-touch display, intuitive user interface and user-friendly menu navigation.

base.line

	Typ	Medium	Temperature-range [°C]	Heating power max. [kW]	Cooling power max. [kW]	Pump capacity Modulating duty max. [l/min / bar]
Direct cooling (cd)	**teco cd 95 base 60**	water	95	9	52	60 (6,0)
Indirect cooling (ci/cw/ct)	**teco ci 95 base 60 se**	water	95	9	23 (75)	60/3,8 (60)
	teco ci 95 base 60	water	95	9	23 (75)	60/3,8 (6,0)
	teco ci 140 base 60	water	140	9	120	60/6,3
	teco ci 160 base 60	water	160	9	120	60/6,0
	teco ci 180 base 60	water	180	9	120	60/6,0
	teco ci 95 base 150	water	95	9/10/27/36	250	150/5,0
	teco ci 95 base 200	water	95	9/10/27/36	250	200/5,0
	teco ct 130 base 60	thermal oil	130	6	30	57/6,8
	teco cw 25 base 4	water	0 – 25	-	4	60/3,5
	teco cw 25 base 10	water	0 – 25	-	10	60/5,8

Our temperature control units at a glance!

base.line

Page 8

teco ci base se
(indirectly cooled)
Temperature control unit [water]
95 °C

Page 10

tco cd base
(direkt gekühlt)
Temperature control unit [water]
95 °C

Page 12

teco ci base
(indirectly cooled)
Temperature control unit [water]
95 °C, 140 °C, 160 °C, 180 °C

Page 14

teco ct base
(indirectly cooled)
Temperature control unit [thermal oil]
130 °C

Page 15

teco cw base
(indirectly cooled)
Cooling unit [glycol-free water]
0 bis 25 °C

The product line base.line se

The **base.line se** are our „low-profile“ devices as an all-in-one solution with an optimal price-performance ratio. The device series is optimal for global use. A 50 Hz version, a 60 Hz version and a flexible bifrequency version are available. bifrequency version is available. The 60 Hz and bifrequency versions are characterized by an by an enlarged heat exchanger surface with high cooling capacity.

» All-in-one solution for global deployment «

teco ci base se – temperature control units with indirect cooling in 95 °C version

- Simple operation via membrane keyboard with 7-segment display
- basicControl micro controller
- stainless steel „longlife“ heating cartridge
- Long-life peripheral impeller pump without mechanical seal
- Stainless steel tank
- Splash-proof control cabinet acc. to IP 54
- Ready for connection with supply cable and CEE socket
- Interface port integrated in the front of the unit (e.g. for optional interface analog, serial, Profibus, Profinet or OPC UA)
- Housing and hood: RAL 7012 basalt grey
- Side panels: RAL 260 40 45 LED blue
- Customised paint on request

• = standard / ◦ = option

		95 °C		
Technical data	Model teco	ci 95 base 60 se (01)	ci 95 base 60 se (02)	ci 95 base 60 se (03)
	Medium	water	water	water
	Temperature max. [°C]	95	95	95
	Pump capacity max. [l/min / bar]	60/3,8	60/3,8	60 / 6,0
	Operating voltage	380-415V / 50Hz	380-415V / 60Hz	380-415V / 50 Hz 440-480V / 60 Hz
	Pump mode	constant	constant	constant
	Heating capacity [kW]	7,5-9 kW (380-415V)	8,2-9,8 kW (440-480V)	6,1-9,8 kW (380-480V)
	Cooling	indirect	indirect	indirect
	Cooling capacity [kW] [1]	23	75	75
	Weight [kg]	44	48	49
	Circulating medium supply and return connections	G 1/2”	G 1/2”	G 1/2”
	Cooling water supply and return connections	G 1/2”	G 1/2”	G 1/2”
	Dimensions without attachechment parts in mm [D x W x H]	678x250x594	678x250x594	678x250x594
Equipment/Options	Membrane keyboard with 7-segment display	•	•	•
	Stainless steel „longlife“ heating cartridge	•	•	•
	Continuous heating control via solid state relays	•	•	•
	Automatic filling and replenishing	•	•	•
	Additional manual filling option for conditioned water	•	•	•
	Strainer in cooling water connection	•	•	•
	Wetted parts made of corrosion-resistant materials	•	•	•
	Acoustic alarm	•	•	•
	Mold draining	•[2]	•[2]	•[2]
	Sealless pump	•	•	•

[1] at 15 °C cooling water temperature and 90 °C flow temperature.
[2] by reversing the direction of pump rotation

Technical modifications reserved.

The product line base.line

The temperature control units of the base.line are our investment-cost-optimized standard units for economical temperature control with water at temperatures temperatures up to 180 °C and flow rates up to 60 l/min.
The **base.line** unit with its simple operation via membrane keypad with 7-segment display is the preferred solution for many applications.

» Excellent price / Performance ratio «

teco cd base – temperature control units with direct cooling in 95 °C version

- Simple operation via membrane keyboard with 7-segment display
- basicControl micro-controller
- Stainless steel „longlife“ heating cartridge
- Long-life peripheral pump without mechanical seal
- Stainless steel tank
- Splash-proof control cabinet acc. to IP 54
- Ready for connection with supply cable and CEE socket
- Interface port integrated in the front of the unit (e.g. for optional interface analog, serial, Profibus, Profinet or OPC UA)
- Optional external sensor connection
- Housing and hood: RAL 7012 basalt gray
- Side panels: RAL 260 40 45 LED blue
- Customised paint on request

• = standard / ◦ = option

		95 °C
Technical data	Model teco	cd 95 base 60
	Medium	water
	Temperature max. [°C]	95
	Pump capacity amx. [l/min / bar]	60 / 6,0
	Pump mode	constant
	Heating capacity [kW]	9
	Cooling	direct
	Cooling capacity [kW] [1]	52
	Weight [kg]	44
	Circulating medium supply and return connections	G 1/2”
	Cooling water supply and return connections	G 1/4”
	Dimensions without attachment parts in mm [D x W x H]	662x280x611
Equipment/Options	Membrane keyboard with 7-segment display	•
	Stainless steel „longlife“ heating cartridge	•
	Continuous heating control via solid state relays	•
	Automatic filling and replenishment	•
	Additional manual filling option for conditioned water	•
	Strainer in cooling water connection	•
	Strainer in the circulation medium return	◦
	Shut-off valves in the circulating media and cooling water circuits	◦
	Wetted parts made of corrosion-resistant materials	•
	Acoustic alarm	•
	Mold draining	•[2]
	Low maintenance flow measurement	◦
	Sealless pump	

[1] at 15 °C cooling water temperature and 90 °C flow temperature.
[2] by reversing the direction of pump rotation

Technical modifications reserved.

teco ci base – temperature control units with indirect cooling in 95 °C, 140 °C, 160 °C and 180 °C version

- Simple operation via membrane keyboard with 7-segment display
- basicControl micro controller
- Stainless steel „longlife“ heating cartridge
- Long-life peripheral impeller pump (also sealless)
- Stainless steel tank (up to 95 °C) / closed circuit from 140 °C)
- Splash-proof control cabinet acc. to IP 54
- Ready for connection with supply cable and CEE socket
- Interface port integrated in front of device (e.g. for optional interface analog, serial, Profibus, Profinet or OPC UA)
- Optional external sensor connection
- Housing and hood: RAL 7012 basalt gray
- Side panels: RAL 260 40 45 LED blue

• = standard / ◦ = option

		95 °C			
	Model teco	**ci 95 base 60**		**ci 95 base 150**	**ci 95 base 200**
Technical data	Medium	water	water	water	water
	Temperature amx. [°C]	95	95	95	95
	Pump capacity max. [l/min / bar]	60 / 3,8	60 / 6,0	150 / 5,0	200 / 5,0
	Pump mode	constant	constant	constant	constant
	Heating capacity [kW]	9	9	9 / 18 / 27 / 36	9 / 18 / 27 / 36
	Cooling	indirect	indirect	indirect	indirect
	Cooling capacity [kW] [1]	23	75	250	250
	Weight [kg]	50	50	95	100
	Circulating medium siupply and return connections	G 1/2”	G 1/2”	G 1	G 1
	Cooling water supply andreturn connections	G 1/2”	G 1/2”	G 3/4”	G 3/4”
	Dimensions without attachment parts in mm [D x W x H]	662 x 280 x 611	662 x 280 x 611	849 x 399 x 752	849 x 395 x 752
Equipment/Options	Membrane keyboard with 7-segment display	•	•	•	•
	Stainless steel „longlife“ heating cartridge	•	•	•	•
	Continuous heating control via solid state relays	•	•	•	•
	Automatic filling and replenishment	•	•	•	•
	Additional manual filling option for conditioned water	•	•	•	•
	Strainer in cooling water connection	•	•	•	•
	Strainer in the circulation medium return	◦	◦	◦	◦
	Shut-off valves in the circulating media and cooling water circuits	◦	◦	◦	◦
	Wetted parts made of corrosion-resistant materials	•	•	•	•
	Acoustic alarm	•	•	•	•
	Mold draining	•[2) 3)]	•[2) 3)]	•[2)]	•[2)]
	Low maintenance flow measurement	◦	◦	◦	◦
	Sealless pump	•	•	•	•

[1)] at 15 °C cooling water temperature and 90 °C flow temperature [2)] by reversing the direction of pump rotation
[3)] not in conjunction with return flow protection

»The **base.line** device with its operation is the preferred solution for many applications solution with an excellent price/performance ratio.«

• = standard / ◦ = option / – = not available

	140 °C	160 °C	180 °C
Model teco	**ci 140 base 60**	**ci 160 base 60**	**ci 180 base 60**
Medium	water	water	water
Temperature max. [°C]	140	160	180
Pump capacity max. [l/min / bar]	60 / 6,3	60 / 6,0	60 / 6,0
Pump mode	constant	constant	constant
Heating capacity [kW]	9	9	9
Cooling	indirect	indirect	indirect
Cooling capacity [kW] [1]	120	120	40
Weight [kg]	62	62	62
Circulating medium supply and return connections	G 1/2"	G 1/2"	G 1/2"
Cooling water supply and return connections	G 1/4"	G 1/4"	G 1/4"
Dimensions without attachment parts in mm [D x W x H]	807 x 280 x 611	807 x 280 x 611	807 x 280 x 611
Membrane keyboard with 7-segment display	•	•	•
Stainless steel „longlife" heating cartridge	•	•	•
Continuous heating control via solid state relays	•	•	•
Automatic filling and replenishment	•	•	•
Integrated makeup pump	–	•	•
Strainer in cooling water connection	•	•	•
Strainer in the circulation medium return	◦	◦	◦
Shut-off valves in the circulating media and cooling water circuits	◦	◦	◦
Wetted parts made of corrosion-resistant materials	•	•	•
Acoustic alarm	•	•	•
Mold draining	◦ [2) 3)]	◦ [2) 3)]	◦ [2) 3)]
Leakage stop function	• [4)]	• [4)]	• [4)]
Sealless, magnetically coupled stainless steel pump	–	•	•

Technische Daten

Ausstattung/Optionen

[1)] at 15 °C cooling water temperature and 130 °C flow temperature [2)] by reversing the direction of pump rotation
[3)] not in conjunction with leak stop function [4)] not in conjunction with mold drainage

Technical modifications reserved.

teco ct – oil temperature control unit in 130°C

- Simple operation via membrane keyboard with 7-segment display
- basicControl micro controller
- Stainless steel „longlife“ heating cartridge
- Longlife peripheral impeller pump
- Stainless steel tank
- Splash-proof control cabinet acc. to IP 54
- Ready for connection with supply cable and CEE socket
- Interface port integrated in the front of the unit (e.g. for optional interface analog, serial, Profibus, Profinet or OPC UA)
- Optional external sensor connection
- Housing and hood: RAL 7012 basalt gray
- Side panels: RAL 260 40 45 LED blue
- Customised paint on request

»Bifrequency execution«

• = standard / ◦ = option

		130 °C
Technical data	Model teco	ct 130 base 60
	Medium	thermal oil
	Temperature max. [°C]	130
	Pump capacity max. (l/min / bar]	47 / 5,5 / 50 Hz I 57 / 6,8 /60 Hz
	Pump mode	constant
	Heating capacity [kW]	6
	Cooling	indirect
	Cooling capacity [kW] [1]	30
	Weight [kg]	37
	Circulating medium siupply and return connections	G 1/2”
	Cooling water supply andreturn connections	G 1/2”
	Dimensions without attachment parts in mm [T x B x H]	662 x 280 x 611
Equipment/Options	Membrane keyboard with 7-segment display	•
	Stainless steel „longlife“ heating cartridge	•
	Continuous heating control via solid state relays	•
	Film temperature monitoring	•
	Strainer in the circulation medium return	•
	Wetted parts made of corrosion-resistant materials	•
	Acoustic alarm	•
	Suitable for several voltage and frequency ranges	•
	Sealless pump	•

[1] at 15 °C cooling water temperature and 130 °C flow temperature

teco cw – cold water unit 0 – 25 °C
no glycol use, no waste heat into the hall

If the central cooling system is fully utilized or the piping effort is too high, a decentralized solution directly on the machine for cooling of consumers.

technotrans offers a unique concept with the teco cw cooling unit, because it can be used like a temperature control unit. Sustainability is also at the forefront of this series:

- The teco cw unit can be operated without the use of glycol.
- The production hall's ventilation system can be relieved because no waste heat enters the hall via the air.
- With natural refrigerant propane R290.

»Integrated cold water generation«

• = standard / ◦ = option / – = not available

		0 - 25 °C	
	Model teco	**teco cw 25 base 4**	**teco cw 25 base 10**
Technical data	Medium	water	water
	Temperature max. [°C]	0 - 25	0 - 25
	Pump capacity max. [l/min / bar]	60 / 3,5	60 / 5,8
	Pump mode	constant	constant
	Heating capacity [kW]	-	-
	Cooling	indirect	indirect
	Cooling capacity [kW] [1]	4	10
	Weight. [kg]	90	130
	Circulating medium supply and return connections	G 1/2"	G 1/2"
	Cooling water supply and return connections	G 1/4"	G 1/4"
	Dimensions without attachment parts in mm [D x W x H]	921 x 250 x 611	1281 x 399 x 752
Equipment/Options	Membrane keyboard with 7-segment display	•	•
	Automatic filling and replenishment	•	•
	Additional manual filling option for conditioned water	•	•
	Strainer in cooling water connection	•	•
	Strainer in the circulation medium return	◦	◦
	Shut-off valves in the circulating media and cooling water circuits	◦	◦
	Wetted parts made of corrosion-resistant materials	•	•
	Acoustic alarm	•	•
	Mold draining / leakage stop function	•[2) 3)]	•[2) 3)]
	Low maintenance flow measurement	◦	◦

[1)] at 30 °C cooling water temperature and 10 °C flow temperature [2)] by reversing the direction of pump rotation
[3)] not in conjunction with return flow protection

technotrans

technotrans solutions GmbH
Scherl 10 · D-58540 Meinerzhagen
Tel. +49 2354 7060-0 · Fax +49 2354 7060-150
info-solutions@technotrans.de · **www.temperiergeraete-tt.com**