

# THERMOtech

*The Power to Save Energy.*



TEMPERATURE CONTROL UNIT



## UNI

The UNI series temperature control units operate with water up to 90°C to keep the temperature values in plastic and rubber processes under control. Thermotek is ergonomically designed for easy operation at narrow locations. Operator safety is ensured by following CE Machinery Directives. Heater elements, level switch and fluid tank; are ideally selected from stainless steel material for long years of operation at all industrial environments

### Technical Specifications

THERMOTECH		UNI
FLUID TYPE		WATER
MAX. TEMPERATURE	°C	90
HEATING POWER	kw	6 - 9 - 12
COOLING CAPACITY	kw	26
COOLING TYPE		INDIRECT
TANK VOLUME	lt	18
PUMP		
POWER	kw	0,5
MAX. FLOW RATE	lt/min.	60
MAX. PRESSURE	bar	4
CONNECTIONS		
MOULD		3/4"
COOLING&FILLING		1/2"
DIMENSIONS	mm	650 X 255 X 700 (h)
WEIGHT	kg	50



## DIRECT

DIRECT series temperature control units operate with water up to 90°C and keep temperature values in plastic and rubber processes. Thermotek Direct units are used in low temperature processes and when high cooling capacity is required. The units mix the process water with cooling water to obtain low  $\Delta t$  values.

### Technical Specifications



THERMOTECH		DIRECT 9	DIRECT 12	DIRECT 18	DIRECT 24	DIRECT 36
FLUID TYPE		WATER				
MAX. TEMPERATURE	°C	90				
HEATING POWER	kw	9	12	18	24	36
COOLING TYPE		DIRECT				
PUMP						
POWER	kw	0,75		1,5		2,2
MAX. FLOW RATE	lt/min.	90		200		240
MAX. PRESSURE	bar	3,4		3,6		4,2
CONNECTIONS						
MOULD		1"		1 1/2"		
COOLING&FILLING		1"		1"		
DIMENSIONS	mm	700 X 410 X 850 (h)		980 X 410 X 980 (h)		
WEIGHT	kg	90	100	120	130	160

## ST

ST series temperature control units operate with water up to 160°C and keep precise temperature values in plastic and rubber processes. Heaters controlled by solid state relay provide fast, quiet and reliable operation for the user.

### Technical Specifications

THERMOTECH		ST 9	ST 12	ST 18	ST 24
FLUID TYPE		WATER			
MAX. TEMPERATURE	°C	140 - (160 Optional)			
HEATING POWER	kw	9	12	18	24
COOLING CAPACITY	kw	40	40	65	65
COOLING TYPE		INDIRECT			
TANK VOLUME	lt	10	10	15	15
PUMP					
POWER	kw	2,0			
MAX. FLOW RATE	lt/min.	90			
MAX. PRESSURE	bar	7			
CONNECTION					
MOULD		3/4"			
COOLING&FILLING		1/2"	1/2"	1/2"	1/2"
DIMENSIONS	mm	980 X 410 X 980 (h)			
WEIGHT	kg	120	130	150	175



## POWER

POWER series temperature control units operate with oil up to 150°C and keep stable temperature values in plastic and rubber processes. Unit can control temperature within +/-0,5°C by PID logic both in heating and cooling mode.

### Technical Specifications

THERMOTech		POWER
FLUID TYPE		OIL
MAX. TEMPERATURE	°C	150
HEATING POWER	kw	6 - 9 - 12
COOLING CAPACITY	kw	20
COOLING TYPE		INDIRECT
TANK VOLUME	lt	18
PUMP		
POWER	kw	0,5
MAX. FLOW RATE	lt/min.	60
MAX. PRESSURE	bar	4
CONNECTIONS		
MOULD		3/4"
COOLING&FILLING		1/2"
DIMENSIONS	mm	650 x 255 x 700 (h)
WEIGHT	kg	50



## POWER PLUS

POWER PLUS series temperature control units operate with oil up to 200°C and keep temperature values in plastic and metal injection machines under tight control. It can control temperature with narrower tolerance by preventing the shock effect at the first entrance of cold water. It is used in processes that require high temperature and precise temperature control.

### Technical Specifications

THERMOTECH		POWER PLUS 9	POWER PLUS 12	POWER PLUS 18	POWER PLUS 24
FLUID TYPE		OIL			
MAX. TEMPERATURE	°C	200			
HEATING POWER	kw	9	12	18	24
COOLING CAPACITY	kw	40	40	65	65
COOLING TYPE		INDIRECT	INDIRECT	INDIRECT	INDIRECT
TANK VOLUME	lt	20	20	20	20
PUMP					
POWER	kw	2,2			
MAX. FLOW RATE	lt/min.	80			
MAX. PRESSURE	bar	6,7			
CONNECTIONS					
MOULD		3/4"			
COOLING&FILLING		1/2"			
DIMENSIONS	mm	980 X 410 X 980 (h)			
WEIGHT	kg	150	160	190	210

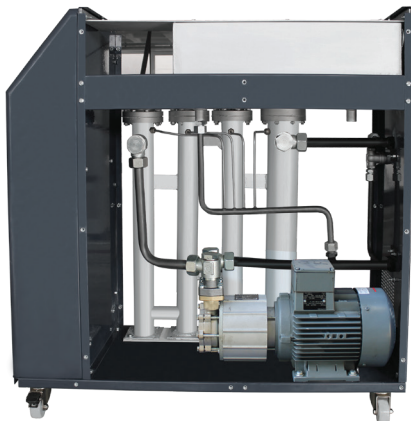


## EX

EX series temperature control units operate with oil up to 300°C and keep stable temperature values in plastic and aluminum processes. Robust sleeve bearings made from SIC and ceramic shafts guarantee a long lifetime and are free from leakage and maintenance-free thanks to magnetic couplings. Since there is no mechanical seal, it is more durable against dry running and mechanical installation faults.

### Technical Specifications

THERMOTECH		EX 9	EX 12	EX 18	EX 24	EX 36
FLUID TYPE		OIL				
MAX. TEMPERATURE	°C	300				
HEATING POWER	kw	9	12	18	24	36
COOLING CAPACITY	kw	40	40	65	65	65
COOLING TYPE		INDRECT				
TANK VOLUME	lt	20	20	20	20	20
PUMP						
POWER	kw	2,2				
MAX. FLOW RATE	lt/min.	80				
MAX. PRESSURE	bar	6,7				
CONNECTIONS						
MOULD		3/4"				
COOLING&FILLING		1/2"				
DIMENSIONS	mm	980 X 410 X 980 (h)				1200 X 600 X 1150 (h)
WEIGHT	kg	150	175	190	200	220

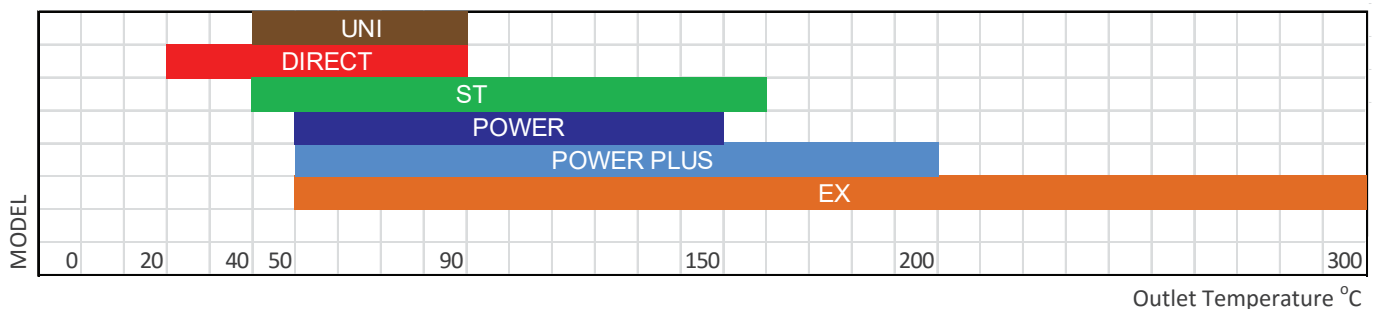


## Technical Specifications

MODEL	UNI	DIRECT	ST	POWER	POWER PLUS	EX
CONTROL BOARD						
TOUCHSCREEN PANEL	O	S	S	O	S	S
PID CONTROL	S	S	S	S	S	S
AUTO TUNE FUNCTION	S	S	S	S	S	S
SOLID STATE RELAY FOR HEATER	O	O	S	O	O	O
24 HOUR TIMER	O	O	O	O	O	O
DRY CONTACT FOR ALARM	X	O	O	X	O	O
AUDIBLE ALARM	O	O	O	O	O	O
REMOTE ON/OFF	X	O	O	X	O	O
RS-485	O	S	S	O	S	S
SET AND ACTUAL TEMPERATURE	S	S	S	S	S	S
SAFETY EQUIPMENTS						
BALL TYPE FLUID LEVEL ALARM	S	X	X	S	S	S
MAGNETIC TYPE LEVEL ALARM	X	X	S	X	X	X
PUMP OVERLOAD ALARM	S	S	S	S	S	S
PROBE FAILURE ALARM	S	S	S	S	S	S
SAFETY THERMOSTAT	S	S	S	S	S	S
PHASE SEQUENCE CONTROLLER	O	O	S	O	O	O
LOW PRESSURE SWITCH	X	O	S	X	O	O
HIGH PRESSURE AUTOMATIC BY-PASS	O	O	O	O	O	O
HEATING ELEMENTS						
STAINLESS STEEL	S	S	S	S	O	O
CYLINDRICAL SHAPE HEATING ELEMENTS	X	S	S	X	S	S
COOLING CIRCUIT						
PLATE TYPE HEAT EXCHANGER	S	X	S	S	O	X
RAPID COOLING FUNCTION	X	S	O	X	O	O
SHELL&TUBE TYPE HEAT EXCHANGER	X	X	O	X	S	S
HYDRAULIC SYSTEM						
AUTOMATIC FILLING	S	S	S	X	X	X
MULTI DISTRIBUTOR	O	O	O	O	O	O
STAINLESS STEEL TANK	S	X	S	S	X	X
PROPORTIONAL FLOW CONTROL	O	O	X	X	X	X
BRASS CASING PUMP	S	X	X	S	X	X
EXPANSION TANK	X	X	X	X	S	S
PRESSURE GAUGE	O	S	S	O	S	S
FRAME						
GALVANISED STEEL FRAME	S	S	S	S	S	S
FOUR WHEELS	S	S	S	S	S	S

S: Standard - O: Optional - X: N/A

## Thermotech Operation Limit







## ABOUT US

With over 35 years of experience in designing cooling systems, AytekChillers specializes in water chilling systems for industrial and commercial process cooling applications.

Today, Aytek offers a full range of technologically advanced cooling and tempering systems (ISO 9001 certification from the TUV in 2013) with an excellent quality-price ratio, enabling us to be the market leader in Industrial Cooling in Turkey.

More than 3000 chillers sold in Turkey and Export Markets, makes Aytek a well known brand with a successful sales organization, an extensive network of partners and service centers and constantly growing turnover.

We are out to prove that an effective cooling system that is less expensive can provide high production output with an optimum energy consumption throughout its operating life.

We welcome your cooling challenge and will assist you to find out system loads and project priorities, then select the proper cooling system that is suitable for the project.