

tBOX

Thermal Control Unit for industrial applications

**EURO
CHILLER**

■ Part of Atlas Copco Group



3~ 18 kW
heating capacity

30-120 l/min range

Find out more



New Eurochiller tBOX range

High end Thermal Control Unit for industrial applications

Introducing the **tBOX – Thermal Control Unit**, a next-generation solution designed to deliver precise, reliable, and efficient temperature regulation for demanding applications.

Built with advanced thermal management technology, the **tBOX** ensures **optimal performance** and **precision**, even in the most demanding applications. Compact yet powerful, the **tBOX** combines **intelligent PLC control**, robust hardware, and **versatile connectivity** to integrate seamlessly into your operations. With its **intuitive interface**, **configurable settings**, and **durable design**, the **tBOX** sets a new standard in thermal management — helping you to save energy, extend system life, and maintain peak performance with confidence.



Adaptivity

tBOX is designed to adapt to each environment, with an ease of maintenance. Built into a resistant steel frame, covered in a high-strength epoxy powder coating, the machine is equipped with **automatic water filling**, **automatic air discharge**, air overflow on filling by solenoid valve



Customization

The unit is fully customizable:

- Heating capacity: **3 – 18 kW**
- Cooling type: **direct or indirect**
- Max water temperature: **90°C -140 °C**
- Flowrate: **90 – 120 l/min**
- Options for: **3-way valve**, magnetic-driven pump, peripheral pump and reversible pump.



Precision & Connectivity

tBOX thermoregulators offer extremely precise temperature regulation, essential for the quality of industrial processes. With advanced technology and **integrated connectivity through its PLC**, it is possible to control and monitor the TCU remotely, ensuring flexibility and responsiveness in managing operations, thanks to MODBUS/ Ethernet/ OPC-UA protocols.

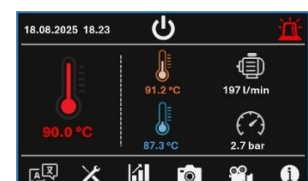
PLUG&PLAY



≥ 60 CONFIGURATIONS



ADVANCED PLC



New Eurochiller tBOX range

Cutting-Edge Technology and Premium Components

Ready for Industry 5.0



Robust frame structure

Epoxy coating protection

Heaters

Low intensity submersible heaters

Heat Exchanger

High efficiency SS plates heat exchanger

Centrifugal water pump

60/ 120 liter pump configurations



Hydraulic circuit

Rusty-free tank and pipes

PLC controller

Industrial Touch screen display interface

Automatic Start&Stop

Start & Stop included, with degassing feature

Communication Protocols

Up to 10 available communication protocols

The **tBOX PLC interface** enables seamless integration with the most widely used industrial communication protocols, including Ethernet and Profibus. This feature supports the digital transformation of manufacturing environments by ensuring full connectivity within modern factory.



tBOX High End Water Thermal Control Unit for industrial applications

Technical Data

tBOX 400V/ 50Hz		3	6	9	12	18
Heating	[kW]	3	6	9	12	18
Cooling*	[kW]	105				
Range	[°C]	20-140				
Storage Vessel	[l]	10				
Model Pump P1	[l/min]	60				
Model Pump P2	[l/min]	120				
Net pressure P1/P2	[bar]	3,0				
Water Connections	[-]	PROCESS IN/OUT:3/4" COOLING IN/OUT:1/2"				
Length	[mm]	800				
Width	[mm]	350				
Height	[mm]	740				
Net Weight	[kg]	55				

Applications of tBOX TCUs in the Plastics Industry

- Plastic Molding Machines
- Chill Rolls
- Shredder Recycling
- Wrap Recycling
- Bag, Bottle, and Film Production
- Injection Molding
- Blown Film Molding
- Stretch Blow Molding
- Profile Extrusion

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