

# °LAUDA

NEW



## THE NEW BATH CIRCULATION THERMOSTATS LAUDA UNIVERSA analytica 2024

°FAHRENHEIT. °CELSIUS. °LAUDA.

# LAUDA Universa

## Universal temperature control

Powerful, sustainable, digital and modular – this is how LAUDA presents bath circulators for Laboratory 4.0.

The new, innovative LAUDA Universa appliance line offers a comprehensive range of bath and circulation thermostats in three primary performance classes, making it easier to find your way around the portfolio. With the three variants Universa ECO, Universa PRO and Universa MAX, all requirements are met, from cost-effective entry-level devices to high-performance professional thermostats. This means that the bathroom thermostat with the perfect price-performance ratio can be selected for every application.

### MODULARITY



The modular design of the bath thermostats ensures maximum flexibility: standardized bath sizes, different performance control units and accessories can be combined with one another almost without exception. Modularity also ensures the perfect price-performance ratio.

- Bath volume: 4 to 42 liters
- Bath depth: 160 to 320 mm

### PERFORMANCE



All bath thermostats are designed for both internal and external temperature control applications. Device characteristics include high precision when maintaining a constant temperature and maximum speed when reaching the target temperature, as well as outstanding dynamics in the event of temperature jumps:

- Max. cooling output 1.5 kW
- Max. heating output 3.6 kW
- Temperature range from  $-90$  to  $300^{\circ}\text{C}$
- Temperature stability up to  $0.01\text{ K}$

### SUSTAINABILITY



Five pillars form the foundation for sustainable LAUDA bath thermostats:

- Latest innovative technology ensures maximum energy efficiency
- Environmentally friendly refrigerant
- Highest quality materials and sophisticated manufacturing processes ensure maximum durability
- Easy to repair
- Return of old devices for recycling

### DIGITIZATION



Fit for the future and ready for LAUDA.LIVE: The integrated web server, which allows monitoring and control using a PC or mobile device, and the modular interface concept enable the flexible integration of LAUDA Universa bath circulation thermostats into various communication scenarios.

- Ethernet, USB, wireless network as standard
- Other interfaces available as accessories
- LAUDA Command app
- Remote maintenance and monitoring via LAUDA.LIVE

# Powerful, sustainable, digital and modular



## Display

Depending on the variant, Universa is fitted with a 3.5 or 5 inch display to allow easy control via the menu. A wide range of functions can be activated with just a few clicks, from calibration and control parameters to displaying a graphical history or the liquid menu.



## Mechanical interface

The newly developed, patented mechanical interface between the control head and the lower section of the bath reliably prevents bath vapors from entering and interfering with the electronics. Air is drawn in through the back of the head and blown out to the front and sides via the air grilles to prevent both freezing and condensation formation. A switch on the front allows the user to change easily between internal and external operation.



## High-quality, sophisticated design

The LAUDA Universa design is based on high-quality components, maximum durability and uncompromising quality: welded bath boilers for precise dimensions and clear edges, as well as thick insulation and a three-part bath rim for the best energy properties and safe, comfortable operation.



LAUDA Universa U 855 M



#### **Extensive connectivity**

All variants of LAUDA Universa bath thermostat are fitted with USB, Ethernet and wireless network interfaces as standard. Additional interfaces and communication protocols are optionally available as accessories.



#### **Sustainable concept**

All Universa thermostats have a speed-controlled compressor, sophisticated refrigeration control and are operated with natural refrigerants. LAUDA Universa works in an energy-saving, application- and cost-optimized manner both in control mode and at partial load.

Even the large capacity versions use a minimal amount of refrigerant, less than 100 g. This protects the environment in two ways: low power consumption and at the same time a very low GWP (global warming potential).

# LAUDA Universa

## Selected functions and features

### Efficient refrigeration technology

- Frequency-controlled compressors reduce power consumption to a minimum
- The SmartCool system ensures efficient control operation by adjusting the cooling capacity according to demand

### LAUDA Command app

- Remote control via any end device (smartphone, tablet, PC)
- Setting of setpoints and configuration parameters
- Start / stop of temperature control processes
- Continuous data recording (Command Professional app)

### Automatic self-adaptation

- Ideal control parameters determined for individual applications
- Suitable for internal bath applications and for external applications

### Accessories

- Extensive range of racks for centrifuge tubes and test tubes
- Standard rails for lid holders and standard rail claw for attaching support tubes – creates space on the laboratory bench and enables individual set-ups
- Bath lid with lockable opening for temperature sensors
- Cylinder-shaped insert for calibrating temperature sensors
- Quick-release coupling for connecting external consumers



Universa ECO

Universa PRO

Universa MAX

Technical features	Universa ECO	Universa PRO	Universa MAX
Display	5-digit LCD	3.5" TFT color display	5" TFT color display
Temperature range	-30 ... 100 °C	-45 ... 200 °C	-90 ... 300 °C
Heating output	2 kW	2.5 kW	3.6 kW
Cooling output	300 W	200 ... 800 W	800 W ... 1.5 kW
Pump type	Pressure pump	Pressure pump	Pressure/suction pump
Bath volume	8 ... 16 liters	4 ... 40 liters	8 ... 42 liters
Bath depths	160 mm, 200 mm	160 mm, 200 mm	200 mm, 320 mm
Safety class	I, NFL	III, FL	III, FL



**IGZ Instruments**  
smart solutions & service

IGZ Instruments AG  
Furtbachstrasse 17  
8107 Buchs ZH

Tel. +41 44 456 33 33  
igz.ch igz@igz.ch

LAUDA DR. R. WOBSEY GMBH & CO. KG  
Laudaplatz 1 • 97922 Lauda-Königshofen • Germany  
www.lauda.de

