LAUDA

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OVERALL BROCHURE CONSTANT TEMPERATURE EQUIPMENT

2026/2027

°FAHRENHEIT. °CELSIUS. °LAUDA.

LAUDA IMMERSION AND BATH CIRCULATION THERMOSTATS

Specific application examples

- Sample preparation in chemical and pharmaceutical analysis
- Quality control of samples
- Biotechnology
- Materials testing
- Functional testing of electronic components
- Stress tests
- Notch impact testing
- Semiconductor coating


LAUDA
Tset
30,00
Tint
24,26
ANZEIGE
MENU
START

LAUDA Alpha

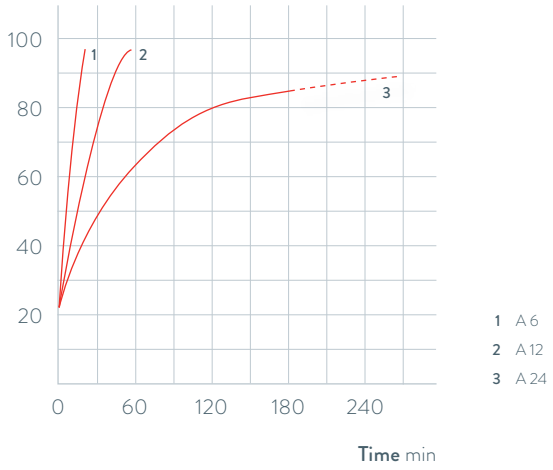
For inexpensive temperature control from −30 to 100 °C in the laboratory

−30 °C — 100 °C

Affordable thermostats with reliable technology in a modern design
LAUDA Alpha is the most cost-effective entry-level line of LAUDA bath thermostats. These reliable and user-friendly thermostats are reduced to the essentials in terms of their functions. Designed for use with non-flammable liquids, they can be used for internal temperature control tasks and, when used with a pump connection set, also for external temperature control tasks.

HEATING PERFORMANCE Heat transfer liquid: Water, bath closed

Bath temperature °C



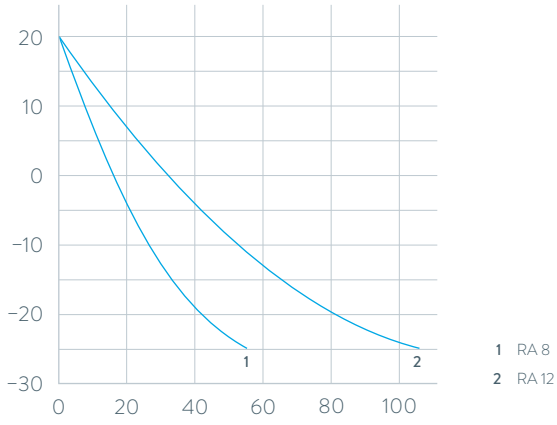
1 A 6
2 A 12
3 A 24

Time min

Immersion thermostat with screw clamp for fixing

COOLING PERFORMANCE Heat transfer liquid: Ethanol, bath closed

Bath temperature °C



1 RA 8
2 RA 12

Time min

Important functions
- Deep-drawn stainless steel bath vessels
- Integrated timer function allows automatic device shutdown (Standby)
- Low-level and overtemperature protection for operation with non-flammable liquids

Included accessories
Screw clamp (for immersion thermostat), bath cover, pump connection set (for refrigeration thermostats), slip-on nozzle

Further accessories
Pump connection set, cooling coil, bath cover set

All technical data and power supply variants can be found in the ›Technical data‹ section.

More at **www.lauda.de/de/1724**

LAUDA Alpha

The LAUDA Alpha device line, suitable for non-flammable liquids, covers a temperature range from −30 to 100 °C. Alpha comprises one immersion, three heating, and two cooling thermostats with natural refrigerants and is the optimal solution for basic applications in the laboratory.

LAUDA Universa

Unlimited versatility in temperature control

The new generation of temperature control technology
Powerful, sustainable, digital, and modular – LAUDA is redefining temperature control technology for the laboratory. The innovative LAUDA Universa product line offers a comprehensive modular system of bath circulation thermostats in three performance classes: ECO, PRO, and MAX. From economically optimized standard devices to powerful high-end thermostats, each device can be flexibly configured – perfectly tailored to your 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, 200 and 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 1.6 kW
- Max. heating output 3.7 kW
- Temperature range from –90 to 300 °C
- Temperature stability up to 0.01 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
- Trade-in of old devices for recycling

DIGITIZATION

Wireless control of devices, analysis of temperature curves, and management of programs via WLAN and app, as well as the modular interface concept, allow LAUDA Universa bath circulators to be flexibly integrated into communication scenarios.

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

NEW

LAUDA.LIVE ready

LAUDA Universa ECO –
The entry point
into the modular world
Temperature range from
−30 to 100 °C

LAUDA Universa PRO –
The modular solution
for versatile processes
Temperature range from
−45 to 200 °C

LAUDA Universa MAX –
The powerful solution
for the highest demands
Temperature range from
−90 to 300 °C

LAUDA Universa

LAUDA Universa stands for a new generation of bath circulators – reliable, precise, and powerful. Three clearly graded performance classes enable the optimal selection for a wide range of requirements in laboratories, research, and industry. Whether entry-level, all-rounder, or high-end system: All device variants impress with high temperature stability, strong heating and cooling performance, and modern features for greater efficiency and process reliability.

LAUDA Universa ECO

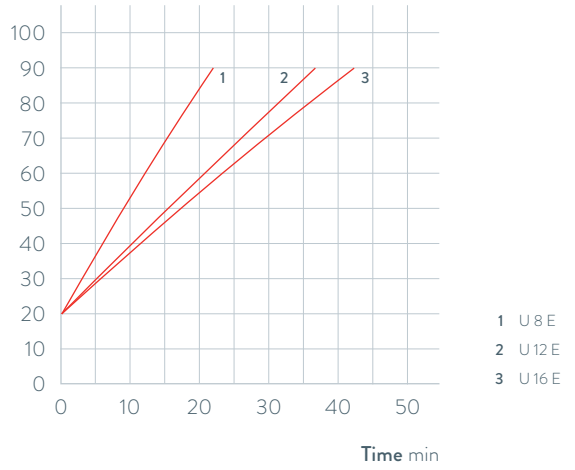
The smart choice for convenient basic temperature control from −30 to 100 °C

−30 °C 100 °C

Reliable. Compact. Economical.
For basic temperature control tasks in everyday laboratory work, the LAUDA Universa ECO product variant offers reliable performance at an attractive entry-level price. With 300 W cooling capacity, up to 2 kW heating capacity, a temperature range from −30 to 100 °C, and simple operation, the system is ideal for routine applications.

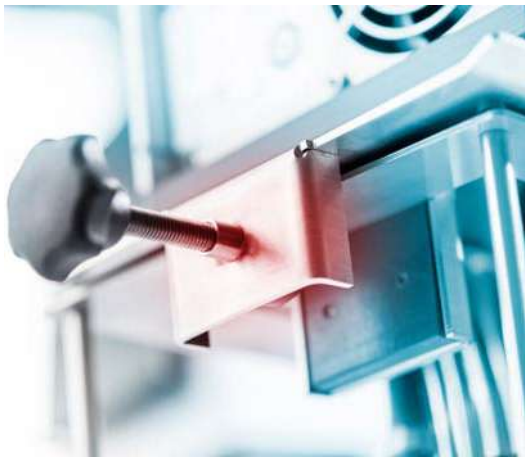
HEATING PERFORMANCE Heat transfer liquid: Water, bath closed

Bath temperature °C



1 U 8 E
2 U 12 E
3 U 16 E

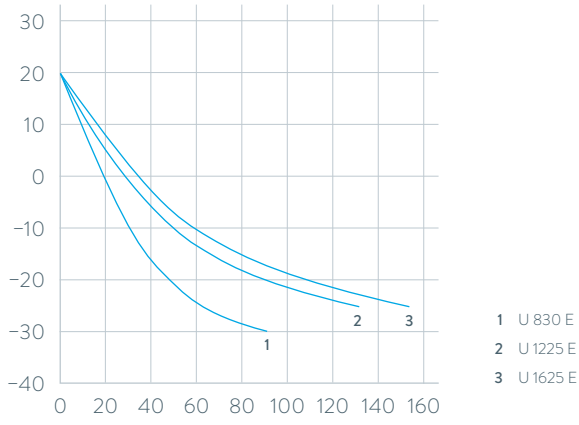
Time min



Immersion thermostat with clamping screw for fixing

COOLING PERFORMANCE Heat transfer liquid: Ethanol, bath closed

Bath temperature °C



1 U 830 E
2 U 1225 E
3 U 1625 E

Time min

Important functions
- Timer function
- The LAUDA Command app enables wireless device operation on external devices such as PCs, tablets, and smartphones in the network
- Remote monitoring and maintenance via LAUDA.LIVE

Included accessories
Mounting screw (for immersion thermostats), bath cover (for refrigeration thermostats), WLAN, Ethernet, and USB interfaces

Further accessories
Pump connection set, cooling coil, bath cover with ring openings or with feed-through, Command Professional app

All technical data and power supply variants can be found in the ›Technical data‹ section.

More at **www.lauda.de/de/1820**

NEW

LAUDA.LIVE
ready

LAUDA Universa ECO

LAUDA Universa ECO is the entry-level model in the LAUDA Universa family and combines high sustainability with digital control. The energy-efficient thermostats with natural refrigerants are particularly resource-efficient thanks to speed-controlled compressors and fans. Their temperature range extends from −30 to 100 °C. Universa ECO includes an immersion thermostat, three heating thermostats, and three cooling thermostats. The heating thermostats are also available in versions with a transparent bath.

LAUDA Universa PRO

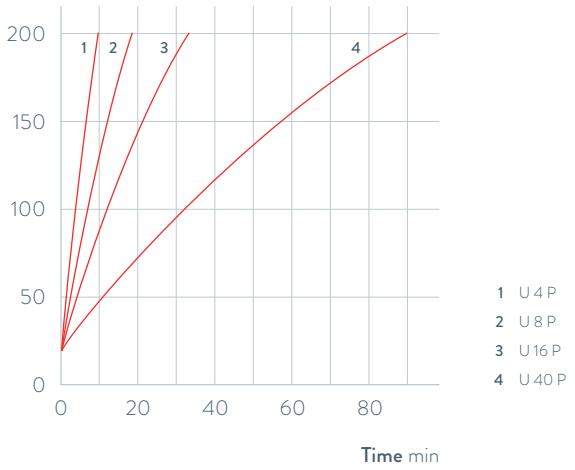
The all-rounder for versatile laboratory applications from −45 to 200 °C

−45 °C — 200 °C

Flexible. Powerful. Dynamic.
LAUDA Universa PRO products combine powerful performance with digital intelligence. With 200 to 800 W cooling capacity, up to 2.5 kW heating capacity, temperature ranges from −45 to 200 °C and numerous functions such as a program controller, fluid menu, adaptive bath edge ventilation, and weekly planner, they offer the perfect balance for demanding applications in the laboratory environment. In addition, a comprehensive connectivity package with Ethernet, USB, and WLAN as standard, as well as twelve additional interfaces as accessories, enables integration into numerous scenarios.

HEATING PERFORMANCE Heat transfer liquid: Therm 250, bath closed

Bath temperature °C

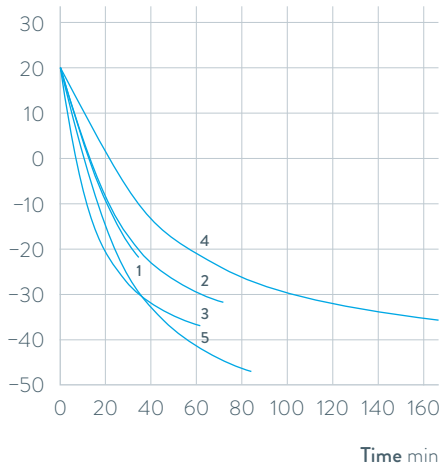


1 U 4 P
2 U 8 P
3 U 16 P
4 U 40 P

Adjustment of the flow distribution for internal and external circulation, directly on the front of the control head during operation

COOLING PERFORMANCE Heat transfer liquid: Ethanol, bath closed

Bath temperature °C



1 U 420 P
2 U 630 P
3 U 635 P
4 U 1635 P
5 U 1245 P

Important functions
- Powerful pressure pump with 6 selectable power levels
- Programmer, fluid menu
- Can be retrofitted with two additional interface modules
- The LAUDA Command app enables wireless device operation on external devices such as PCs, tablets, and smartphones in the network
- Remote monitoring and maintenance via LAUDA.LIVE

Included accessories
Mounting screw (for immersion thermostats), cooling coil (for heating thermostats), bath cover, pump connection set (for cooling thermostats), olive connection set, WLAN, Ethernet, and USB interfaces

Further accessories
Pump connection set (for immersion and heating thermostats), bath cover, plug-in modules, Command Professional app

All technical data and power supply variants can be found in the ›Technical data‹ section.

More at **www.lauda.de/de/1820**

NEW

LAUDA.LIVE ready

LAUDA Universa PRO

LAUDA Universa PRO is the all-rounder for numerous temperature control applications. The energy-efficient thermostats feature speed-controlled compressors and fans, sophisticated cooling control, and are operated with natural refrigerants. The comprehensive interface concept offers maximum flexibility. The wide range of functions, the Command app, and LAUDA.LIVE make Universa PRO a versatile solution for demanding temperature control tasks. LAUDA Universa PRO offers one immersion thermostat, four heating thermostats with stainless steel baths, as well as three with transparent baths and five cooling thermostats. The variants cover a temperature range from −45 to 200 °C.

LAUDA Universa MAX

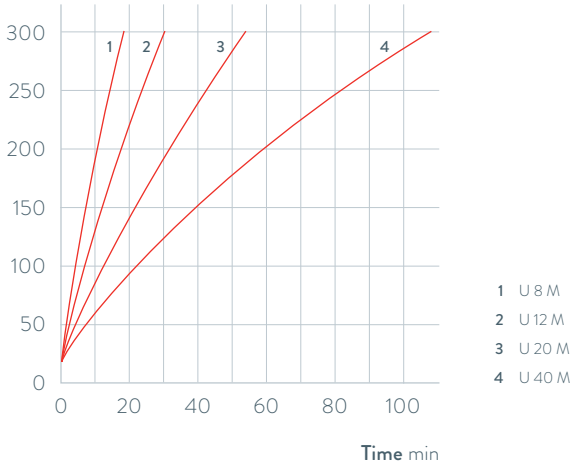
The high-performance solution for the most demanding requirements from −90 to 300 °C

−90 °C — 300 °C

Maximum performance. Precise control. Extreme temperature ranges.
As a high-end solution and the most powerful variant, Universa MAX offers up to 1.6 kW cooling capacity with a working temperature range from −90 to 300 °C. Like LAUDA Universa PRO, they offer a wide range of functions with a program controller, fluid menu, adaptive bath edge ventilation, and weekly planner, but also feature additional functions such as self-adaptation and higher performance. They can be used with digital and cloud solutions such as Command app and LAUDA.LIVE and are already prepared for further developments in artificial intelligence such as predictive maintenance.

HEATING PERFORMANCE Heat transfer liquid: Therm 250, bath closed

Bath temperature °C



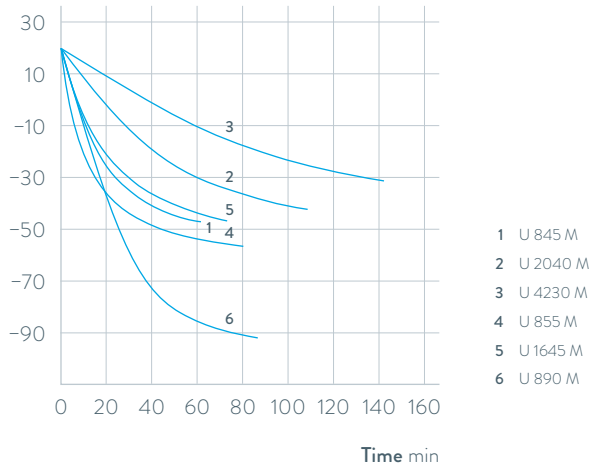
Time min

1 U 8 M
2 U 12 M
3 U 20 M
4 U 40 M

Equipped with Ethernet, USB, WLAN, and Pt100/LiBus as standard – expandable with two interface modules

COOLING PERFORMANCE Heat transfer liquid: Ethanol, bath closed

Bath temperature °C



Time min

1 U 845 M
2 U 2040 M
3 U 4230 M
4 U 855 M
5 U 1645 M
6 U 890 M

Important functions
- Powerful pressure/suction pump with 8 selectable power levels
- Adaptive bath edge ventilation
- Programmer, weekly planner, calibration options, self-adaptation
- Can be retrofitted with two additional interface modules
- All device types with pressure-suction pump are also available with ball bearing pump as an option
- LAUDA Command app enables wireless device operation
- Remote monitoring and maintenance via LAUDA.LIVE

Included accessories
Cooling coil, pump connection, bath cover, WLAN, Ethernet and USB interfaces, olive connection set

Further accessories
Reverse flow protection, coolant valve, interface modules (see p. 86), jet pipes, Command Professional app

All technical data and power supply variants can be found in the ›Technical data‹ section.

More at **www.lauda.de/de/1820**

NEW

LAUDA.LIVE
ready

LAUDA Universa MAX

LAUDA Universa MAX is the high-end class of the LAUDA Universa family. These powerful thermostats combine all the functions of the Universa PRO with additional features such as self-adaptation and increased device performance for pumping, heating, and cooling. Equipped with a pressure-suction pump, they offer maximum flexibility for internal and external temperature control tasks. The energy-efficient systems with natural refrigerants and comprehensive digital connectivity set new standards in performance, precision, and ease of use. Four heating and six cooling thermostats cover a temperature range from −90 to 300 °C.

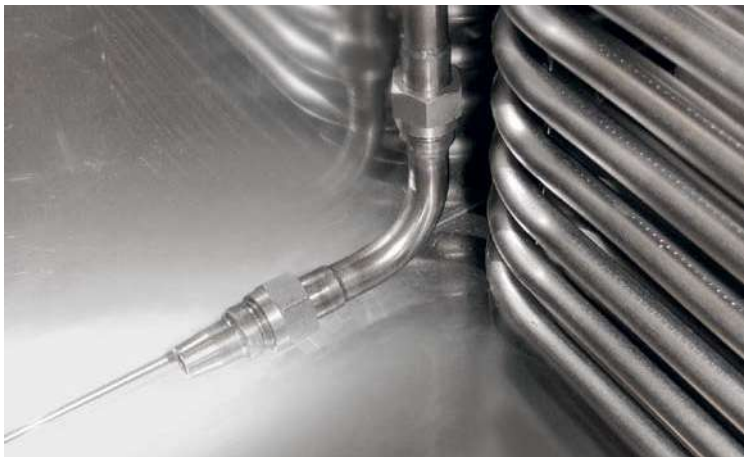
LAUDA Proline Kryomats

High-performance cooling thermostats from −90 to 200 °C for use in process technology and material testing

−90 °C — 200 °C

High cooling performance and compact design

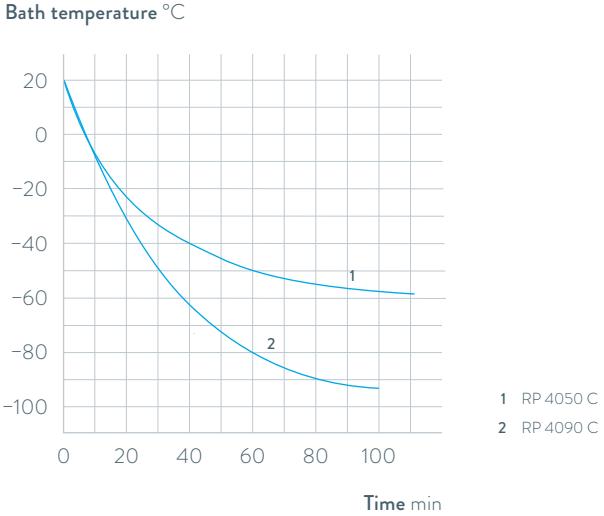
The Proline Kryomats are cooling thermostats that feature the latest technology with high efficiency and an excellent price-performance ratio. The pressure pump is optimized for internal circulation and can be set to four levels – the standard-issue LAUDA Command remote control also makes it especially user-friendly. Furthermore, integrated bath edge and bath bridge heating prevent the formation of condensation caused by air humidity at low temperatures.



Optimal circulation and temperature distribution throughout the entire bath thanks to an adjustable pump nozzle

Spacious baths and large bath openings – ideal for bulky test specimens and effective throughput

COOLING PERFORMANCE Heat transfer liquid: Ethanol, bath closed



1 RP 4050 C
2 RP 4090 C

Important functions

- Removable Command operating unit with high-resolution, graphic LCD screen and individually selectable display functions
- Programmer with 150 temperature/time segments, can be divided into 5 programs
- Pump connections on side and rear, integrated bypass

Included accessories

Bath cover, tubing nipples

Further accessories

Additional pump, hanging baskets, plug-in modules: analog, contact, Ethernet, Profibus, and EtherCAT modules

All technical data and power supply variants can be found in the ›Technical data‹ section.

More at **www.lauda.de/de/1742**

LAUDA Proline Kryomats
The air and water-cooled versions of the Proline Kryomats offer a large bath opening and a volume of 40 liters.

LAUDA Immersion and bath circulation thermostats

Device type overview

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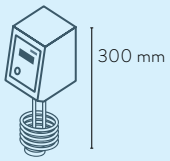

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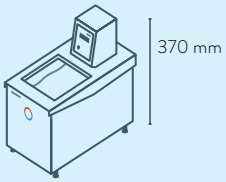

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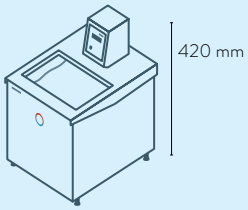

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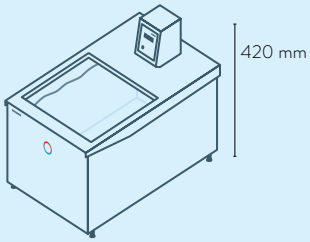
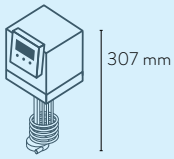
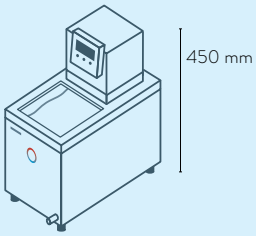


A 24

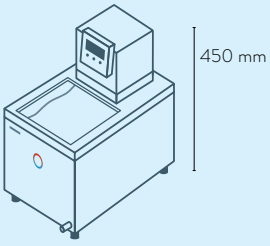
LAUDA Universa ECO / Page 74



ECO



U 8 E



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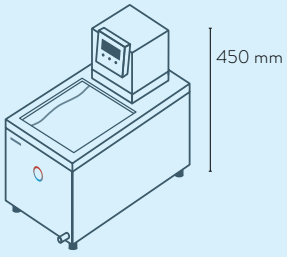
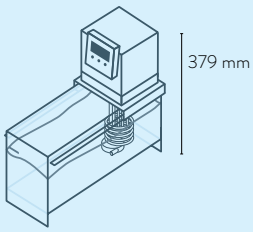
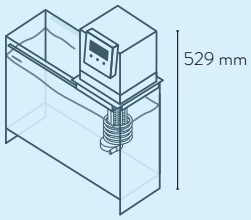


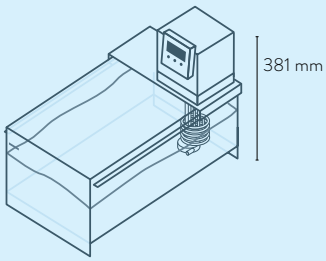
U 16 E



U 6 TE

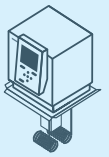


U 15 TE

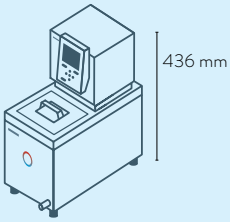


U 20 TE

LAUDA Universa PRO / Page 76

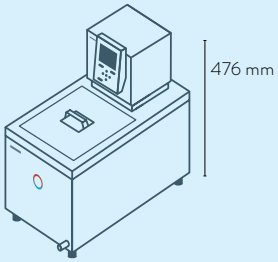


PRO



U 4 P

U 8 P



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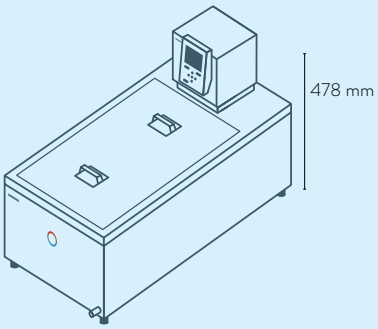

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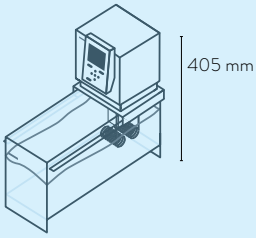
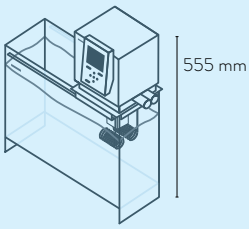


U 6 TP



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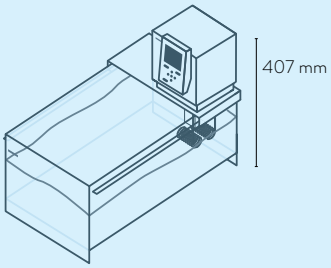
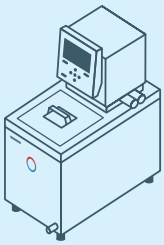
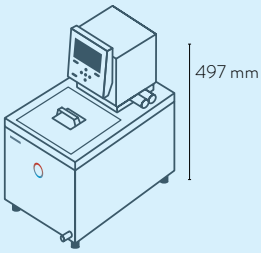


U 20 TP

LAUDA Universa MAX / Page 78



U 8 M



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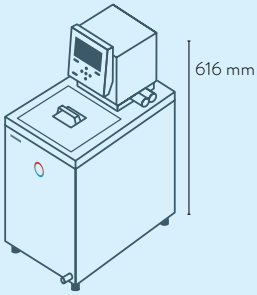

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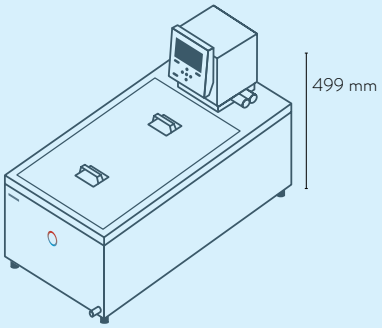

U 40 M

LAUDA Cooling thermostats

Device type overview

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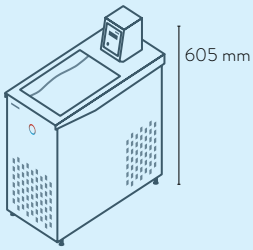
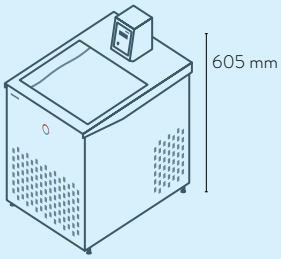
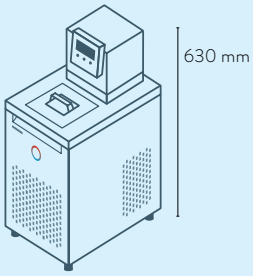


RA 8

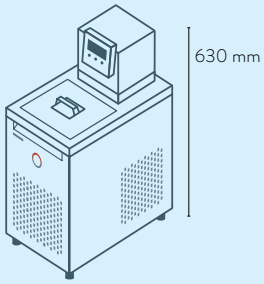


RA 12

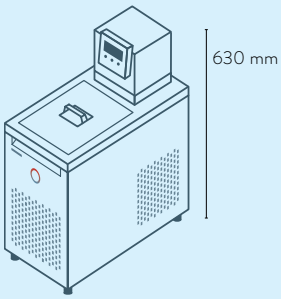
LAUDA Universa ECO / Page 74



U 830 E

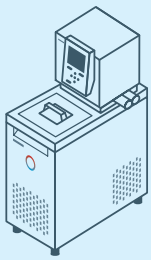


U 1225 E

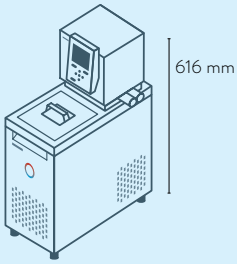


U 1625 E

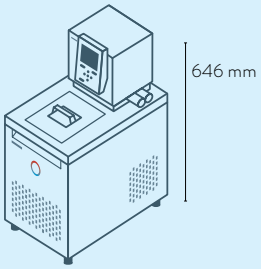
LAUDA Universa PRO / Page 76



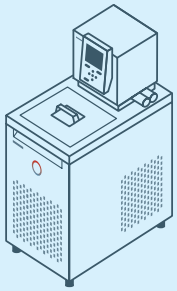
U 420 P



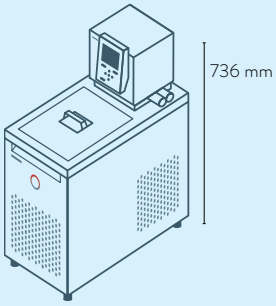
U 630 P



U 635 P

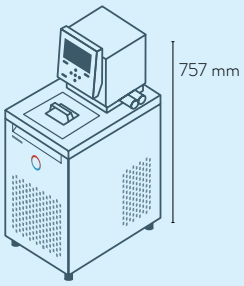


U 1245 P

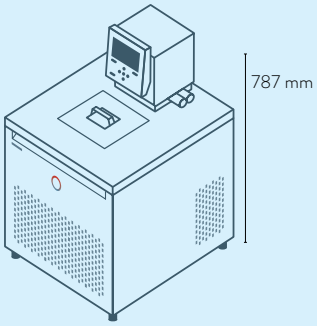


U 1635 P

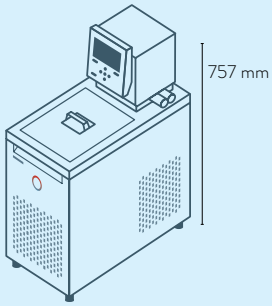
LAUDA Universa MAX / Page 78



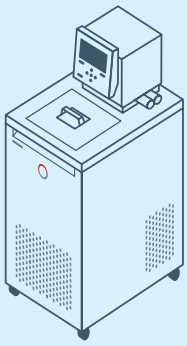
U 845 M
U 855 M



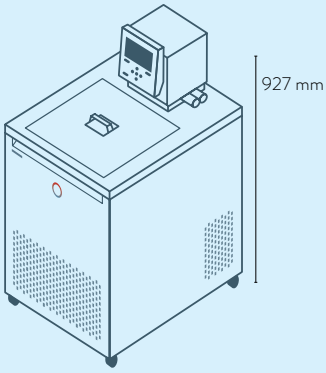
U 890 M



U 1645 M

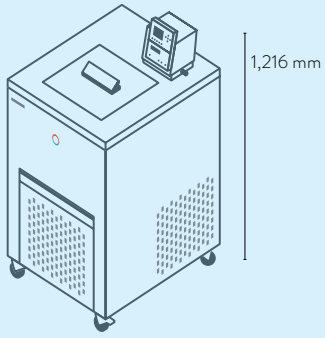


U 2040 M



U 4230 M

LAUDA Proline Kryomats / Page 80



RP 4050 C / RP 4050 CW
RP 4090 C / RP 4090 CW

LAUDA Immersion and bath circulation thermostats

Interfaces

Part Number	WLAN	USB Host (Typ A)	Ethernet	Pt100	LiBus module	RS-232 / 485 LRZ 913	Analog module LRZ 912	Pt100 / LiBus module small cover LRZ 918	Pt100 / LiBus module large cover LRZ 925	RS-232 / 485 Advanced / LiBus LRZ 926	Contact Namur Advanced / LiBus LRZ 927	Contact D-Sub Advanced / LiBus LRZ 928	Profibus Advanced / LiBus LRZ 929	Ethernet Advanced / LiBus LRZ 930	EtherCAT M8 Advanced / LiBus* LRZ 931	Profinet RJ45 Advanced / LiBus LRZ 932	CAN D-Sub Advanced / LiBus LRZ 933	OPC UA RJ45 Advanced / LiBus LRZ 934	Modbus TCP Advanced / LiBus LRZ 935	Contact Namur LRZ 914	Contact D-Sub LRZ 915	Profibus LRZ 917	EtherCAT M8 LRZ 922	EtherCAT RJ45 LRZ 923	Number of module slots, large	Number of module slots, small
LAUDA Alpha / Page 70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LAUDA Universa ECO / Page 74	S	S	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LAUDA Universa PRO / Page 76	S	S	S	-	-	-	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	-	-	-	Z	-	1	1
LAUDA Universa MAX / Page 78	S	S	S	S	S	-	Z	-	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	-	-	-	Z	-	2	-
LAUDA Proline Kryomat / Page 80	-	-	Z	S	-	S	Z	-	-	-	-	-	-	-	-	-	-	-	-	Z	Z	Z	Z	Z	2	-

S = Series standard
Z = Available as an accessory

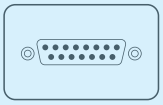
* from Q3/2026

LAUDA interfaces

LRZ 912
Analog module

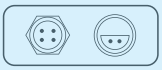
LRZ 913
RS-232/485
interface

LRZ 914
Contact module, 1 input,
1 output (NAMUR)



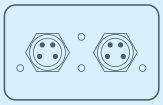
LRZ 915
Contact module,
3 inputs, 3 outputs

LRZ 917
Profibus module

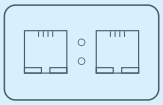


LRZ 918
Pt100/LiBus-Modul,
small cover

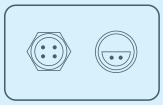
LRZ 921
Ethernet module



LRZ 922
EtherCAT module
with M8 connection



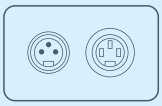
LRZ 923
EtherCAT module
with RJ45 connection



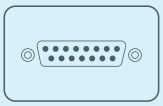
LRZ 925
External Pt100/LiBus-
module, large cover

LAUDA interfaces Advanced

LRZ 926
RS-232/485 module
Advanced, D-Sub 9-pin

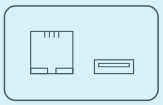


LRZ 927
Contact module NAMUR
Advanced, 1 input, 1 output

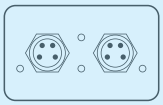


LRZ 928
Contact module D-Sub
Advanced, 3 inputs, 3 outputs

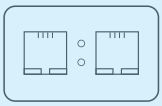
LRZ 929
Profibus module
Advanced, D-Sub 9-pin



LRZ 930
Ethernet module
Advanced, RJ45

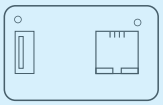


LRZ 931
EtherCAT module
Advanced, with M8 connection

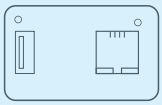


LRZ 932
Profinet module
Advanced, RJ45

LRZ 933
CAN module Advanced,
D-Sub 9-pin



LRZ 934
OPC UA module Advanced



LRZ 935
Modbus TCP module
Advanced

LAUDA Immersion and bath circulation thermostats

Function overview

Operating element	Alpha	Universa ECO	Universa PRO	Universa MAX	Proline Kryomate
Display	7-Segment	VA LC	TFT	TFT	LCD mono
Size	66 x 37 mm	2,9"; 77 x 38 mm	3,5"; 77 x 64 mm	5"; 121 x 76 mm	Base/Command
Mode of operation	3-button	3-button	Cursor softkey	Cursor softkey	Cursor softkey
Removable control	-	-	-	-	✓
Language	1 (english)	1 (english)	6	6	4
Data logging, export to USB stick	-	✓	✓	✓	-
Safe mode	-	-	-	✓	-
1-point calibration	✓	✓	✓	✓	✓
2-point calibration	-	-	-	✓	-
Self-adaptation control	-	-	-	✓	✓
Programmer, programs/segments	-	-	5 / 150	5 / 150	5 / 150
Programmer, tolerance range function	-	-	✓	✓	✓
Ramp function	-	-	✓	✓	✓
Timer function	-	✓	✓	✓	✓
Weekly timer	-	-	✓	✓	✓
Countdown function	✓	✓	-	-	-
Graphic temperature profile display	-	-	✓	✓	✓
Switch for dividing the pump flow rate	-	-	✓	✓	✓
Level indicator (digital)	-	-	-	✓	✓
User-defined fluids	-	-	✓	✓	-
T_{set} setting	-	-	✓	✓	-
Integrated web server	-	✓	✓	✓	-
Cloud connection	-	✓	✓	✓	-
Adaptive bath edge ventilation	-	-	✓	✓	-
Fluid menu	-	-	✓	✓	-
Standby timer	-	-	✓	✓	✓
Low level warning	-	-	-	✓	✓
Low level alarm	✓	✓	✓	✓	✓
Overtemperature shutdown point	-	-	✓	✓	✓
Automatic setting of temperature limits	-	-	✓	✓	-
Auto start	-	-	✓	✓	✓
Current consumption limit	-	-	✓	✓	-
Drain tap	-	✓	✓	✓	✓
Drain screw	✓*	-	-	-	-

* Alpha Cooling thermostats

LAUDA Immersion and bath circulation thermostats

Standard accessories

Device type	Bath cover	Cooling coil with M 16 x 1 connection thread	Pump connection set with M 16 x 1 stainless steel connections	2x hose olives 13.5 mm, 2x union nuts	Mounting screw
LAUDA Alpha with natural refrigerant / Page 70					
Immersion thermostats	-	-	-	-	Yes
Heating thermostats	-	-	-	-	-
Cooling thermostats	Yes	-	Nipple (Øa = 12 mm)	-	-
LAUDA Universa ECO with natural refrigerant / Page 74					
Immersion thermostats	-	-	-	-	Yes
Heating thermostats	-	-	-	-	-
Heating thermostats with transparent bath	-	-	-	-	-
Cooling thermostats	Yes	-	-	-	-
LAUDA Universa PRO with natural refrigerant / Page 76					
Immersion thermostats	-	-	-	-	Yes
Heating thermostats	-	Yes	-	Yes	-
Heating thermostats with transparent bath	-	Yes	-	Yes	-
Cooling thermostats	Yes	-	Yes	Yes	-
LAUDA Universa MAX with natural refrigerant / Page 78					
Heating thermostats	Yes	Yes	Yes	Yes	-
Cooling thermostats	Yes	-	Yes	Yes	-
LAUDA Proline Kryomat / Page 80					
Cooling thermostats	Yes	-	Yes	Yes	-

LAUDA Immersion and heating thermostats

Technical data according to DIN 12876 standard

Device type	Working temperature range °C	Working temperature range with water cooling °C	Operating temperature range °C	Temperature stability ±K	Safety fittings	Heater power max. kW	Pump type*	Pump pressure max. bar	Pump suction max. bar	Pump flow max. pressure L/min	Pump flow max. suction L/min	Pump connection thread mm	Nipples Øe	Bath volume min. L
LAUDA Alpha Immersion and heating thermostats / Page 70														
A	25 ... 100	20 ... 100	−25 ... 100	0.05	NFL	1.5	D	0.20	-	15.0	-	N/A	-	-
A 6	25 ... 100	20 ... 100	−25 ... 100	0.05	NFL	1.5	D	0.20	-	15.0	-	N/A	-	2.5
A 12	25 ... 100	20 ... 100	−25 ... 100	0.05	NFL	1.5	D	0.20	-	15.0	-	N/A	-	8.0
A 24	25 ... 100	20 ... 100	−25 ... 100	0.05	NFL	1.5	D	0.20	-	15.0	-	N/A	-	18.0
LAUDA Universa ECO Immersion and heating thermostats / Page 74														
ECO	35 ... 100	25 ... 100	−30 ... 100	0.05	NFL	2.2	D	0.20	-	15.0	-	N/A	-	-
U 6 TE	35 ... 100	20 ... 100	−20 ... 100	0.05	NFL	2.2	D	0.20	-	15.0	-	N/A	-	5.2
U 15 TE	35 ... 100	20 ... 100	−20 ... 100	0.05	NFL	2.2	D	0.20	-	15.0	-	N/A	-	13.2
U 20 TE	35 ... 100	20 ... 100	−20 ... 100	0.05	NFL	2.2	D	0.20	-	15.0	-	N/A	-	13.3
U 8 E	35 ... 100	20 ... 100	−30 ... 100	0.05	NFL	2.2	D	0.20	-	15.0	-	N/A	-	6.6
U 12 E	35 ... 100	20 ... 100	−30 ... 100	0.05	NFL	2.2	D	0.20	-	15.0	-	N/A	-	10.8
U 16 E	35 ... 100	20 ... 100	−30 ... 100	0.05	NFL	2.2	D	0.20	-	15.0	-	N/A	-	12.7

* D: Pressure pump (for circulating the temperature control fluid)
V(D): Variable speed pump (D with power levels)

Bath volume max. L	Bath opening (W × D) mm	Bath depth mm	Usable depth mm	Heigth top of bath mm	Dimensions (W × D × H) mm	Weight kg	Power supply V; Hz	Loading max. kW	Option WLAN	Option	Part Number	Device type
-	-	-	-	-	125×150×300	3.6	230 V; 50 Hz & 220 V; 60 Hz	1.5	-	-	L000618	A
5.5	145×161	150	130	212	181×332×370	6.5	230 V; 50 Hz & 220 V; 60 Hz	1.5	-	-	L000619	A 6
12.0	235×161	200	180	262	270×332×420	7.7	230 V; 50 Hz & 220 V; 60 Hz	1.5	-	-	L000620	A 12
25.0	295×374	200	180	262	332×535×420	10.5	230 V; 50 Hz & 220 V; 60 Hz	1.5	-	-	L000621	A 24
-	-	-	-	-	195×231×307	4.0	200-240 V; 50/60 Hz	2.4	- WLAN	- -	L004282 L003967	ECO
8.0	130×270	160	140	206	189×435×379	5.9	200-240 V; 50/60 Hz	2.4	- WLAN	- -	L004713 L004701	U 6 TE
15.0	263×130	310	290	356	432×189×529	7.1	200-240 V; 50/60 Hz	2.4	- WLAN	- -	L004714 L004702	U 15 TE
20.0	300×343	160	140	208	363×510×381	8.8	200-240 V; 50/60 Hz	2.4	- WLAN	- -	L004715 L004703	U 20 TE
8.8	150×150	200	180	280	230×400×450	13.0	200-240 V; 50/60 Hz	2.4	- WLAN	- -	L004283 L003968	U 8 E
14.3	200×200	200	180	280	280×450×450	16.0	200-240 V; 50/60 Hz	2.4	- WLAN	- -	L004284 L003969	U 12 E
17.1	200×300	200	180	280	280×550×450	17.0	200-240 V; 50/60 Hz	2.4	- WLAN	- -	L004285 L003970	U 16 E

LAUDA Immersion and heating thermostats

Technical data according to DIN 12876 standard

Device type	Working temperature range °C	Working temperature range with water cooling °C	Operating temperature range °C	Temperature stability ±K	Safety fittings	Heater power max. kW	Pump type*	Pump pressure max. bar	Pump suction max. bar	Pump flow max. pressure L/min	Pump flow max. suction L/min	Pump connection thread mm	Nipples Øe	Bath volume min. L
LAUDA Universa PRO Immersion and heating thermostats / Page 76														
PRO	30 ... 200	20 ... 200	−30 ... 200	0.02	FL	2.8	V(D)	0.55	-	22.0	-	-	13.5	-
U 6 TP	30 ... 100	20 ... 100	−20 ... 100	0.01	FL	2.8	V(D)	0.55	-	22.0	-	-	13.5	5.0
U 15 TP	30 ... 100	20 ... 100	−20 ... 100	0.01	FL	2.8	V(D)	0.55	-	22.0	-	-	13.5	13.5
U 20 TP	30 ... 100	20 ... 100	−20 ... 100	0.01	FL	2.8	V(D)	0.55	-	22.0	-	-	13.5	15.0
U 4 P	30 ... 200	20 ... 200	−30 ... 200	0.01	FL	2.8	V(D)	0.55	-	22.0	-	-	13.5	3.0
U 8 P	40 ... 200	20 ... 200	−30 ... 200	0.01	FL	2.8	V(D)	0.55	-	22.0	-	-	13.5	5.8
U 16 P	40 ... 200	20 ... 200	−30 ... 200	0.01	FL	2.8	V(D)	0.55	-	22.0	-	-	13.5	11.5
U 40 P	40 ... 200	20 ... 200	−30 ... 200	0.01	FL	2.8	V(D)	0.55	-	22.0	-	-	13.5	27.5
LAUDA Universa MAX Heating thermostats / Page 78														
U 8 M	70 ... 300	20 ... 300	−30 ... 300	0.01	FL	3.7	VF	0.70	0.4	25.0	23	M16×1	13.5	5.8
U 12 M	70 ... 300	20 ... 300	−30 ... 300	0.01	FL	3.7	VF	0.70	0.4	25.0	23	M16×1	13.5	8.5
U 16 M	70 ... 300	20 ... 300	−30 ... 300	0.01	FL	3.7	VF	0.70	0.4	25.0	23	M16×1	13.5	11.5
U 20 M	65 ... 300	20 ... 300	−30 ... 300	0.01	FL	3.7	VF	1.10	-	32.0	-	M16×1	13.5	9.5
U 40 M	65 ... 300	20 ... 300	−30 ... 300	0.01	FL	3.7	VF	0.70	0.4	25.0	23	M16×1	13.5	29.0

* V(D): Variable pump (D with power levels)
VF: Pressure-suction pump with power levels

Bath volume max. L	**Bath opening (W × D)** mm	**Bath depth** mm	**Usable depth** mm	**Heigth top of bath** mm	**Dimensions (W × D × H)** mm	**Weight** kg	**Power supply** V; Hz	**Loading max.** kW	**Option WLAN**	**Option****	**Part Number**	**Device type**
-	-	-	-	-	195×234×333	6.0	200-240 V; 50/60 Hz	2.1	- WLAN	- -	L004222 L003890	PRO
6.0	130×270	160	140	206	189×438×405	6.0	200-240 V; 50/60 Hz	2.9	- WLAN	- -	L004227 L003895	U 6 TP
15.0	263×130	310	290	356	432×191×555	8.0	200-240 V; 50/60 Hz	2.9	- WLAN	- -	L004228 L003896	U 15 TP
20.0	300×343	160	140	208	363×513×407	9.0	200-240 V; 50/60 Hz	2.9	- WLAN	- -	L004229 L003897	U 20 TP
5.0	130×100	160	140	240	190×330×436	12.0	200-240 V; 50/60 Hz	2.9	- WLAN	- -	L004223 L003891	U 4 P
8.5	150×150	200	180	280	230×400×476	15.0	200-240 V; 50/60 Hz	2.9	- WLAN	- -	L004224 L003892	U 8 P
17.0	200×300	200	180	280	280×550×476	18.0	200-240 V; 50/60 Hz	2.9	- WLAN	- -	L004225 L003893	U 16 P
41.0	300×600	200	180	282	380×850×478	29.0	200-240 V; 50/60 Hz	2.9	- WLAN	- -	L004226 L003894	U 40 P
8.5	150×150	200	180	280	230×400×497	17.0	200-240 V; 50/60 Hz	3.8	- - WLAN WLAN	- KP - KP	L004138 L004148 L003749 L003759	U 8 M
13.0	200×200	200	180	280	280×450×497	19.0	200-240 V; 50/60 Hz	3.8	- - WLAN WLAN	- KP - KP	L004139 L004149 L003750 L003760	U 12 M
17.0	200×300	200	180	280	280×550×497	22.0	200-240 V; 50/60 Hz	3.8	WLAN WLAN	- KP	L003822 L003823	U 16 M
22.0	200×200	320	300	400	280×450×617	24.0	200-240 V; 50/60 Hz	3.8	- WLAN	- -	L004140 L003751	U 20 M
42.0	300×600	200	180	282	380×850×499	36.0	200-240 V; 50/60 Hz	3.8	- - WLAN WLAN	- KP - KP	L004141 L004150 L003752 L003761	U 40 M

** KP: Ball bearing pump

LAUDA Cooling thermostats

Technical data according to DIN 12876 standard

Device type	Working temperature range °C	Temperature stability ±K	Safety fittings	Heater power max. kW	Cooling output kW													Pump type*	Pump pressure max. bar
					20 °C	10 °C	0 °C	–10 °C	–20 °C	–25 °C	–30 °C	–40 °C	–50 °C	–60 °C	–70 °C	–80 °C	–90 °C		
LAUDA Alpha Cooling thermostats with natural refrigerant / Page 70																			
RA 8	–25 ... 100	0.05	NFL	1.5	0.33	0.29	0.26	0.18	0.10	0.07	-	-	-	-	-	-	-	D	0.2
RA 12	–25 ... 100	0.05	NFL	1.5	0.33	0.29	0.26	0.18	0.10	0.07	-	-	-	-	-	-	-	D	0.2
LAUDA Universa ECO Cooling thermostats with natural refrigerant / Page 74																			
U 830 E	–30 ... 100	0.05	NFL	2.2	0.3	-	0.23	0.18	0.10	-	0.07	-	-	-	-	-	-	D	0.2
U 1225 E	–25 ... 100	0.05	NFL	2.2	0.3	-	0.22	0.15	0.07	-	-	-	-	-	-	-	-	D	0.2
U 1625 E	–25 ... 100	0.05	NFL	2.2	0.3	-	0.22	0.14	0.06	-	-	-	-	-	-	-	-	D	0.2
LAUDA Universa PRO Cooling thermostats with natural refrigerant / Page 76																			
U 420 P	–20 ... 200	0.02	FL	2.8	0.2[2]	-	0.18[2]	0.14[2]	0.07[1]	-	-	-	-	-	-	-	-	V (D)	0.55
U 630 P	–30 ... 200	0.02	FL	2.8	0.3[2]	-	0.25[2]	0.19[2]	0.12[1]	-	0.02[1]	-	-	-	-	-	-	V (D)	0.55
U 635 P	–35 ... 200	0.02	FL	2.8	0.5[2]	-	0.47[2]	0.30[2]	0.17[1]	-	0.06[1]	-	-	-	-	-	-	V (D)	0.55
U 1245 P	–45 ... 200	0.02	FL	2.8	0.8[2]	-	0.73[2]	0.60[2]	0.45[1]	-	0.26[1]	0.12[1]	-	-	-	-	-	V (D)	0.55
U 1635 P	–35 ... 200	0.02	FL	2.8	0.5[2]	-	0.43[2]	0.37[2]	0.15[1]	-	0.05[1]	-	-	-	-	-	-	V (D)	0.55

[1] Pump output step 3
[2] Pump output step 6

* V: Variable pump (pressure pump with different power levels)
V (D): Variable pump (D with power levels)

Pump flow max. pressure L /min	Pump connection thread	Nipples Øe	Bath volume min. L	Bath volume max. L	Bath opening (W × D) mm	Bath depth mm	Usable depth mm	Heigth top of bath mm	Dimensions (W × D × H) mm	Weight kg	Power supply V; Hz	Loading max. kW	Option WLAN	Option	Part Number	Device type
15.0	N/A	13	5.0	7.5	165×177	160	140	450	235×500×605	29.0	230 V; 50 Hz & 220 V; 60 Hz	1.8	-	-	L004603	RA 8
15.0	N/A	13	9.5	14.5	300×203	160	140	450	365×500×605	37.0	230 V; 50 Hz & 220 V; 60 Hz	1.8	-	-	L004606	RA 12
15.0	-	-	6.4	8.5	150×150	200	180	460	260×480×630	28.0	220-240 V; 50/60 Hz	2.4	- WLAN	- -	L004286 L003971	U 830 E
15.0	-	-	9.9	13.4	200×200	200	180	460	310×510×630	31.0	220-240 V; 50/60 Hz	2.4	- WLAN	- -	L004287 L003972	U 1225 E
15.0	-	-	12.8	17.1	200×300	200	180	460	310×610×630	34.0	220-240 V; 50/60 Hz	2.4	- WLAN	- -	L004288 L003973	U 1625 E
22.0	M16×1	13.5	1.8	4.0	130×100	160	140	420	210×410×616	26.0	220-240 V; 50/60 Hz	2.9	- WLAN	- -	L004230 L003898	U 420 P
22.0	M16×1	13.5	3.2	5.7	130×150	160	140	420	215×460×616	28.0	220-240 V; 50/60 Hz	2.9	- WLAN	- -	L004231 L003899	U 630 P
22.0	M16×1	13.5	3.2	5.7	130×150	160	140	450	290×480×646	34.0	220-240 V; 50/60 Hz	2.9	- WLAN	- -	L004232 L003900	U 635 P
22.0	M16×1	13.5	8.5	13.0	200×200	200	180	540	310×510×736	44.0	220-240 V; 50/60 Hz	2.9	- WLAN	- -	L004233 L003901	U 1245 P
22.0	M16×1	13.5	11.0	16.5	200×300	200	180	540	310×610×736	41.0	220-240 V; 50/60 Hz	2.9	- WLAN	- -	L004234 L003902	U 1635 P

LAUDA Cooling thermostats

Technical data according to DIN 12876 standard

Device type	Working temperature range °C	Temperature stability ±K	Safety fittings	Heater power max. kW	Cooling output kW											Pump type*	Pump pressure max. bar
					20 °C	0 °C	–10 °C	–20 °C	–30 °C	–40 °C	–50 °C	–60 °C	–70 °C	–80 °C	–90 °C		
LAUDA Universa MAX Cooling thermostats with natural refrigerant / Page 78																	
U 845 M	–45 ... 200	0.01	FL	3.7	0.8[3]	0.70[3]	0.59[3]	0.44[2]	0.26[2]	0.12[2]	-	-	-	-	-	VF	0.7
U 855 M	–55 ... 200	0.01	FL	3.7	1.6[3]	1.25[3]	0.88[3]	0.62[2]	0.38[2]	0.18[2]	0.05[2]	-	-	-	-	VF	0.7
U 890 M	–90 ... 200	0.01	FL	3.7	0.8[3]	0.74[3]	0.72[3]	0.72[2]	0.68[2]	0.64[2]	0.60[2]	0.46[2]	0.28[2]	0.12[2]	0.02[2]	VF	0.7
U 1645 M	–45 ... 200	0.01	FL	3.7	1.6[3]	1.20[3]	0.86[3]	0.58[2]	0.35[2]	0.15[2]	-	-	-	-	-	VF	0.7
U 2040 M	–40 ... 200	0.01	FL	3.7	0.8[3]	0.71[3]	0.60[3]	0.45[2]	0.26[2]	0.10[2]	-	-	-	-	-	V(D)	1.1
U 4230 M	–30 ... 200	0.01	FL	3.7	0.8[3]	0.70[3]	0.59[3]	0.43[2]	0.18[2]	-	0.12[2]	-	-	-	-	V(D)	1.1
LAUDA Proline Kryomate / Page 80																	
RP 4050 C	–50 ... 200	0.05	FL	3.5	5.00[1]	3.00[1]	-	1.60[1]	1.00[1]	0.50[1]	0.25[1]	-	-	-	-	V(D)	0.5
RP 4050 CW	–50 ... 200	0.05	FL	3.5	6.00[1]	3.50[1]	-	1.80[1]	1.10[1]	0.60[1]	0.25[1]	-	-	-	-	V(D)	0.5
RP 4090 C	–90 ... 200	0.05	FL	3.5	3.00[1]	2.90[1]	-	2.50[1]	2.30[1]	2.00[1]	1.60[1]	1.30[1]	0.80[1]	0.50[1]	0.15[1]	V(D)	0.5
RP 4090 CW	–90 ... 200	0.05	FL	3.5	4.00[1]	3.70[1]	-	3.10[1]	2.70[1]	2.00[1]	1.60[1]	1.30[1]	0.80[1]	0.50[1]	0.15[1]	V(D)	0.5

[1] Pump output step 2
[2] Pump output step 4
[3] Pump output step 8

* V(D): Variable pump (D with power levels)
VF: Pressure-suction pump with power levels

Pump flow max. pressure L /min	Pump connection thread	Nipples Øe	Bath volume min. L	Bath volume max. L	Bath opening (W × D) mm	Bath depth mm	Usable depth mm	Heigth top of bath mm	Dimensions (W × D × H) mm	Weight kg	Power supply V; Hz	Loading max. kW	Option WLAN	Option***	Part Number	Device type
25.0	M16×1	13.5	5.0	8.0	150×150	200	180	540	310×490×757	45.0	200-240 V; 50/60 Hz	3.8	- - WLAN WLAN	- KP - KP	L004142 L004151 L003753 L003762	U 845 M
25.0	M16×1	13.5	5.0	8.0	150×150	200	180	540	310×490×757	45.0	200-240 V; 50/60 Hz	3.8	- - WLAN WLAN	- KP - KP	L004143 L004152 L003754 L003763	U 855 M
25.0	M16×1	13.5	5.0	8.0	150×150	200	180	570	525×615×787	77.0	200-240 V; 50/60 Hz	3.8	- - WLAN WLAN	- KP - KP	L004144 L004153 L003755 L003764	U 890 M
25.0	M16×1	13.5	10.5	16.5	200×300	200	180	540	310×610×757	49.0	200-240 V; 50/60 Hz	3.8	- - WLAN WLAN	- KP - KP	L004146 L004154 L003757 L003765	U 1645 M
32.0	M16×1	13.5	9.0	21.0	200×200	320	300	710	350×540×927	57.0	200-240 V; 50/60 Hz	3.8	- WLAN	- -	L004145 L003756	U 2040 M
32.0	M16×1	13.5	19.0	47.0	300×350	320	300	710	450×690×927	69.0	200-240 V; 50/60 Hz	3.8	- WLAN	- -	L004147 L003758	U 4230 M
19.0	-	-	32.0	44.0	350×350	250	230	905	600×700×1,216	129.0	400 V; 3/N/PE; 50 Hz	5.0	-	-	L001653**	RP 4050 C
19.0	-	-	32.0	44.0	350×350	250	230	905	600×700×1,216	124.0	400 V; 3/N/PE; 50 Hz	5.0	-	-	L001657**	RP 4050 CW
19.0	M16×1	13.5	32.0	44.0	350×350	250	230	905	600×700×1,216	161.0	400 V; 3/N/PE; 50 Hz	7.0	-	-	L001655**	RP 4090 C
19.0	M16×1	13.5	32.0	44.0	350×350	250	230	905	600×700×1,216	160.0	400 V; 3/N/PE; 50 Hz	7.0	-	-	L001659**	RP 4090 CW

** Utilises traditional refrigerants (HFCs) in accordance with European legislation to control F-gases (EU) 573/2024.
Detailed information can be found on the respective product detail page of the part number at www.lauda.de

*** KP: Ball bearing pump

LAUDA Immersion and heating thermostats

Power supply variants

Device type	Power supply V; Hz	Heater power max. kW	Loading max. kW	Plug code*	Option WLAN	Option	Part Number	Device type	Power supply V; Hz	Heater power max. kW	Loading max. kW	Plug code*	Option WLAN	Option	Part Number
LAUDA Alpha / Page 70															
A	100 V; 50/60 Hz	1.0	1.0	14	-	-	L000634	A 12	115 V; 60 Hz	1.2	1.2	14	-	-	L000632
A	115 V; 60 Hz	1.2	1.2	14	-	-	L000630	A 24	115 V; 60 Hz	1.2	1.2	14	-	-	L000633
A 6	100 V; 50/60 Hz	1.0	1.0	14	-	-	L000635								
A 6	115 V; 60 Hz	1.2	1.2	14	-	-	L000631								
LAUDA Universa ECO / Page 74															
ECO	100 V; 50/60 Hz	1.0	1.1	14	-	-	L004289	U 12 E	100 V; 50/60 Hz	1.0	1.1	14	-	-	L004291
ECO	100 V; 50/60 Hz	1.0	1.1	14	WLAN	-	L003974	U 12 E	100 V; 50/60 Hz	1.0	1.1	14	WLAN	-	L003976
ECO	100-125 V; 50/60 Hz	1.4	1.5	14	-	-	L004296	U 12 E	100-125 V; 50/60 Hz	1.4	1.5	14	-	-	L004298
ECO	100-125 V; 50/60 Hz	1.4	1.5	14	WLAN		L003981	U 12 E	100-125 V; 50/60 Hz	1.4	1.5	14	WLAN	-	L003983
U 8 E	100 V; 50/60 Hz	1.0	1.1	14	-	-	L004290	U 16 E	100 V; 50/60 Hz	1.0	1.1	14	-	-	L004292
U 8 E	100 V; 50/60 Hz	1.0	1.1	14	WLAN	-	L003975	U 16 E	100 V; 50/60 Hz	1.0	1.1	14	WLAN	-	L003977
U 8 E	100-125 V; 50/60 Hz	1.4	1.5	14	-	-	L004297	U 16 E	100-125 V; 50/60 Hz	1.4	1.5	14	-	-	L004299
U 8 E	100-125 V; 50/60 Hz	1.4	1.5	14	WLAN	-	L003982	U 16 E	100-125 V; 50/60 Hz	1.4	1.5	14	WLAN	-	L003984
LAUDA Universa PRO / Page 76															
PRO	100-125 V; 50/60 Hz	1.5	1.5	14	-	-	L004261	U 4 P	100-125 V; 50/60 Hz	1.5	1.5	14	-	-	L004262
PRO	100-125 V; 50/60 Hz	1.5	1.5	14	WLAN	-	L003944	U 4 P	100-125 V; 50/60 Hz	1.5	1.5	14	WLAN	-	L003945
U 6 TP	100-125 V; 50/60 Hz	1.5	1.5	14	-	-	L004266	U 8 P	100-125 V; 50/60 Hz	1.5	1.5	14	-	-	L004263
U 6 TP	100-125 V; 50/60 Hz	1.5	1.5	14	WLAN	-	L003949	U 8 P	100-125 V; 50/60 Hz	1.5	1.5	14	WLAN	-	L003946
U 15 TP	100-125 V; 50/60 Hz	1.5	1.5	14	-	-	L004267	U 16 P	100-125 V; 50/60 Hz	1.5	1.5	14	-	-	L004264
U 15 TP	100-125 V; 50/60 Hz	1.5	1.5	14	WLAN	-	L003950	U 16 P	100-125 V; 50/60 Hz	1.5	1.5	14	WLAN	-	L003947
U 20 TP	100-125 V; 50/60 Hz	1.5	1.5	14	-	-	L004268	U 40 P	100-125 V; 50/60 Hz	1.5	1.5	14	-	-	L004265
U 20 TP	100-125 V; 50/60 Hz	1.5	1.5	14	WLAN	-	L003951	U 40 P	100-125 V; 50/60 Hz	1.5	1.5	14	WLAN	-	L003948

*All data for the plug codes can be found on page 142

Device type	Power supply V; Hz	Heater power max. kW	Loading max. kW	Plug code*	Option WLAN	Option**	Part Number	Device type	Power supply V; Hz	Heater power max. kW	Loading max. kW	Plug code*	Option WLAN	Option**	Part Number
LAUDA Universa MAX / Page 78															
U 8 M	100-125 V; 50/60 Hz	2.0	2.0	4	-	-	L004201	U 20 M	100-125 V; 50/60 Hz	2.0	2.0	4	-	-	L004203
U 8 M	100-125 V; 50/60 Hz	2.0	2.0	4	WLAN	-	L003861	U 20 M	100-125 V; 50/60 Hz	2.0	2.0	4	WLAN	-	L003863
U 8 M	100-125 V; 50/60 Hz	2.0	2.0	4	-	KP	L004211	U 40 M	100-125 V; 50/60 Hz	2.0	2.0	4	-	-	L004204
U 8 M	100-125 V; 50/60 Hz	2.0	2.0	4	WLAN	KP	L003871	U 40 M	100-125 V; 50/60 Hz	2.0	2.0	4	WLAN	-	L003864
U 12 M	100-125 V; 50/60 Hz	2.0	2.0	4	-	-	L004202	U 40 M	100-125 V; 50/60 Hz	2.0	2.0	4	-	KP	L004213
U 12 M	100-125 V; 50/60 Hz	2.0	2.0	4	WLAN	-	L003862	U 40 M	100-125 V; 50/60 Hz	2.0	2.0	4	WLAN	KP	L003873
U 12 M	100-125 V; 50/60 Hz	2.0	2.0	4	-	KP	L004212								
U 12 M	100-125 V; 50/60 Hz	2.0	2.0	4	WLAN	KP	L003872								

** KP: Ball bearing pump

LAUDA Cooling thermostats

Power supply variants

LAUDA Alpha with natural refrigerant / Page 70

Device type	Power supply V; Hz	Heater power max. kW	Loading max. kW	Plug code*	Option WLAN	Option	Part Number
RA 8	115 V; 60 Hz	1,2	1,5	14	-	-	L004604
RA 8	100 V; 50/60 Hz	1,0	1,3	14	-	-	L004605
RA 12	115 V; 60 Hz	1,2	1,5	14	-	-	L004607
RA 12	100 V; 50/60 Hz	1,0	1,3	14	-	-	L004608

LAUDA Universa ECO with natural refrigerant / Page 74

Device type	Power supply V; Hz	Heater power max. kW	Loading max. kW	Plug code*	Option WLAN	Option	Part Number
U 830 E	100 V; 50/60 Hz	1.0	1.2	14	-	-	L004293
U 830 E	100 V; 50/60 Hz	1.0	1.1	14	WLAN	-	L003978
U 830 E	110-127 V; 60 Hz	1.4	1.5	14	-	-	L004300
U 830 E	110-127 V; 60 Hz	1.4	1.5	14	WLAN	-	L003985
U 1225 E	110-127 V; 60 Hz	1.4	1.5	14	-	-	L004301
U 1225 E	110-127 V; 60 Hz	1.4	1.5	14	WLAN	-	L003986
U 1225 E	100 V; 50/60 Hz	1.0	1.2	14	-	-	L004294
U 1225 E	100 V; 50/60 Hz	1.0	1.1	14	WLAN	-	L003979
U 1625 E	100 V; 50/60 Hz	1.0	1.2	14	-	-	L004295
U 1625 E	100 V; 50/60 Hz	1.0	1.1	14	WLAN	-	L003980
U 1625 E	110-127 V; 60 Hz	1.4	1.5	14	-	-	L004302
U 1625 E	110-127 V; 60 Hz	1.4	1.5	14	WLAN	-	L003987

LAUDA Universa PRO with natural refrigerant / Page 76

Device type	Power supply V; Hz	Heater power max. kW	Loading max. kW	Plug code*	Option WLAN	Option	Part Number
U 420 P	110-125 V; 60 Hz	1.5	1.5	14	-	-	L004269
U 420 P	110-125 V; 60 Hz	1.5	1.5	14	WLAN	-	L003952
U 420 P	100 V; 50/60 Hz	1.1	1.2	14	-	-	L004435
U 420 P	100 V; 50/60 Hz	1.1	1.2	14	WLAN	-	L004122
U 630 P	110-125 V; 60 Hz	1.5	1.5	14	-	-	L004270
U 630 P	110-125 V; 60 Hz	1.5	1.5	14	WLAN	-	L003953
U 630 P	100 V; 50/60 Hz	1.1	1.2	14	-	-	L004436
U 630 P	100 V; 50/60 Hz	1.1	1.2	14	WLAN	-	L004123
U 635 P	100-125 V; 50/60 Hz	1.5	1.5	14	-	-	L004271
U 635 P	100-125 V; 50/60 Hz	1.5	1.5	14	WLAN	-	L003954
U 1245 P	100-125 V; 50/60 Hz	1.5	1.5	14	-	-	L004272
U 1245 P	100-125 V; 50/60 Hz	1.5	1.5	14	WLAN	-	L003955
U 1635 P	100-125 V; 50/60 Hz	1.5	1.5	14	-	-	L004273
U 1635 P	100-125 V; 50/60 Hz	1.5	1.5	14	WLAN	-	L003956

*All data for the plug codes can be found on page 142

Device type	Power supply V; Hz	Heater power max. kW	Loading max. kW	Plug code*	Option WLAN	Option**	Part Number	Device type	Power supply V; Hz	Heater power max. kW	Loading max. kW	Plug code*	Option WLAN	Option**	Part Number
LAUDA Universa MAX with natural refrigerant / Page 78															
U 845 M	100-125 V; 50/60 Hz	2.0	2.0	4	-	-	L004205	U 1645 M	100-125 V; 50/60 Hz	2.0	2.0	4	-	-	L004209
U 845 M	100-125 V; 50/60 Hz	2.0	2.0	4	WLAN	-	L003865	U 1645 M	100-125 V; 50/60 Hz	2.0	2.0	4	WLAN	-	L003869
U 845 M	100-125 V; 50/60 Hz	2.0	2.0	4	-	KP	L004214	U 1645 M	100-125 V; 50/60 Hz	2.0	2.0	4	-	KP	L004217
U 845 M	100-125 V; 50/60 Hz	2.0	2.0	4	WLAN	KP	L003874	U 1645 M	100-125 V; 50/60 Hz	2.0	2.0	4	WLAN	KP	L003877
U 855 M	100-125 V; 50/60 Hz	2.0	2.0	4	-	-	L004206	U 2040 M	100-125 V; 50/60 Hz	2.0	2.0	4	-	-	L004208
U 855 M	100-125 V; 50/60 Hz	2.0	2.0	4	WLAN	-	L003866	U 2040 M	100-125 V; 50/60 Hz	2.0	2.0	4	WLAN	-	L003868
U 855 M	100-125 V; 50/60 Hz	2.0	2.0	4	-	KP	L004215	U 4230 M	100-125 V; 50/60 Hz	2.0	2.0	4	-	-	L004210
U 855 M	100-125 V; 50/60 Hz	2.0	2.0	4	WLAN	KP	L003875	U 4230 M	100-125 V; 50/60 Hz	2.0	2.0	4	WLAN	-	L003870
LAUDA Proline Kryomate / Page 80															
RP 4050 C	208 V; 3/PE; 60 Hz	3.0	5.0	31	-	-	L001677	RP 4090 C	200 V; 3/PE; 50/60 Hz	2.8	7.0	31	-	-	L001703
RP 4050 C	200 V; 3/PE; 50/60 Hz	2.8	5.0	31	-	-	L001701	RP 4090 C	208 V; 3/PE; 60 Hz	3.0	7.0	31	-	-	L001679
RP 4050 CW	200 V; 3/PE; 50/60 Hz	2.8	5.0	31	-	-	L001705	RP 4090 CW	200 V; 3/PE; 50/60 Hz	2.8	7.0	31	-	-	L001707
								RP 4090 CW	208 V; 3/PE; 60 Hz	3.0	7.0	31	-	-	L001683

** KP: Ball bearing pump

LAUDA Immersion and bath circulation thermostats

More characteristics

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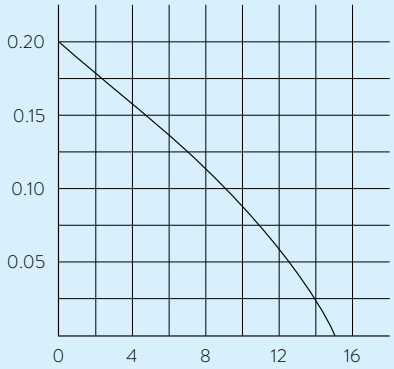
PUMP CHARACTERISTIC Heat transfer liquid: Water

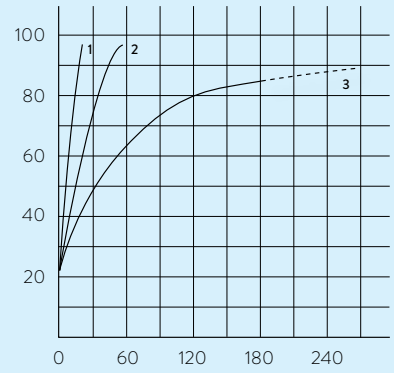
Pressure bar



Flow rate L/min

HEATING PERFORMANCE Heat transfer liquid: Water, bath closed

Bath temperature °C

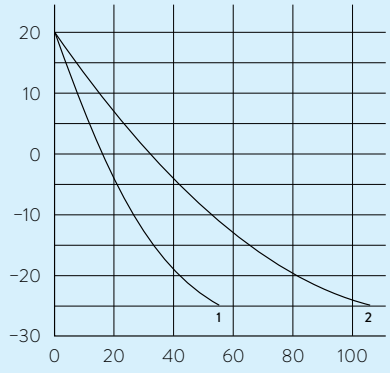


1 A 6
2 A 12
3 A 24

Time min

COOLING PERFORMANCE Heat transfer liquid: Ethanol, bath closed

Bath temperature °C

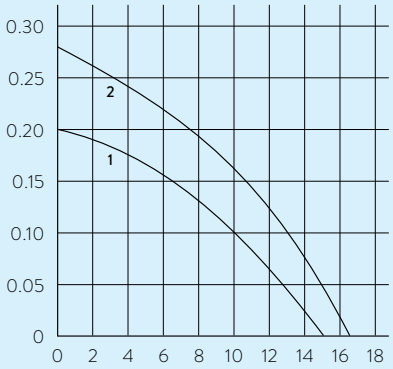


1 RA 8
2 RA 12

Time min

PUMP CHARACTERISTIC Heat transfer liquid: Water

Pressure bar

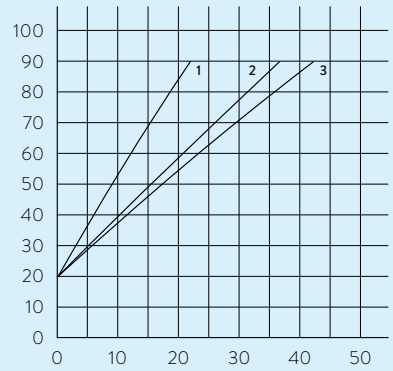


1 50 Hz
2 60 Hz

Flow rate L/min

HEATING PERFORMANCE Heat transfer liquid: Water, bath closed

Bath temperature °C

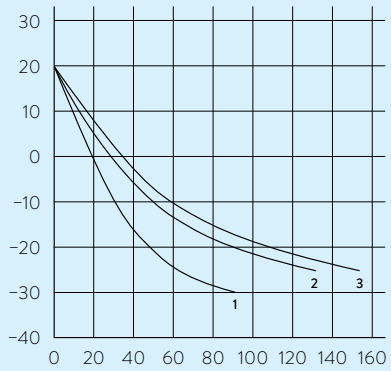


1 U 8 E
2 U 12 E
3 U 16 E

Time min

COOLING PERFORMANCE Heat transfer liquid: Ethanol, bath closed

Bath temperature °C



1 U 830 E
2 U 1225 E
3 U 1625 E

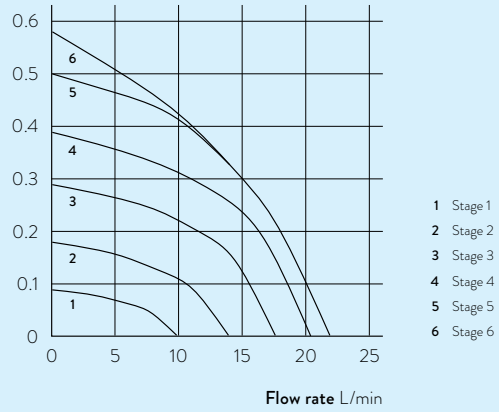
Time min

LAUDA Immersion and bath circulation thermostats
More characteristics

LAUDA Universa PRO / Page 76

PUMP CHARACTERISTIC Heat transfer liquid: Water

Pressure bar

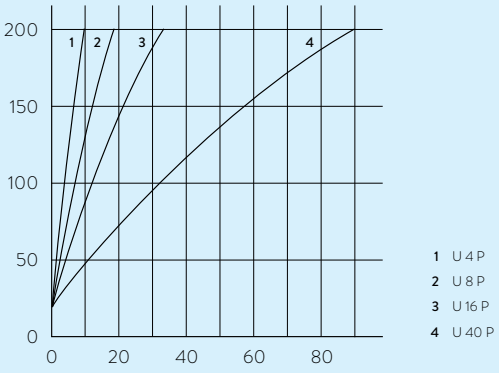


1 Stage 1
2 Stage 2
3 Stage 3
4 Stage 4
5 Stage 5
6 Stage 6

Flow rate L/min

HEATING PERFORMANCE Heat transfer liquid: Therm 250, bath closed

Bath temperature °C

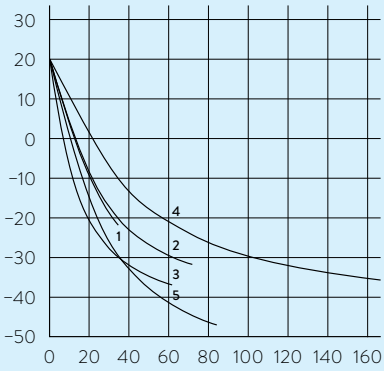


1 U 4 P
2 U 8 P
3 U 16 P
4 U 40 P

Time min

COOLING PERFORMANCE Heat transfer liquid: Ethanol, bath closed

Bath temperature °C

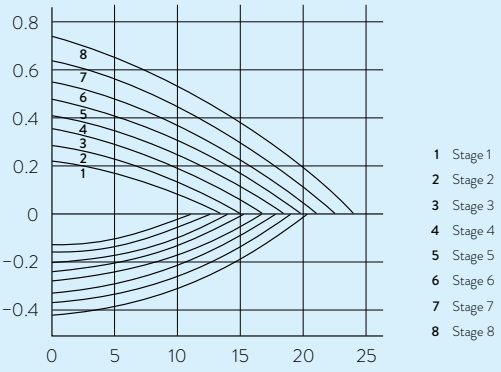


1 U 420 P
2 U 630 P
3 U 635 P
4 U 1635 P
5 U 1245 P

Time min

PUMP CHARACTERISTIC Heat transfer liquid: Water

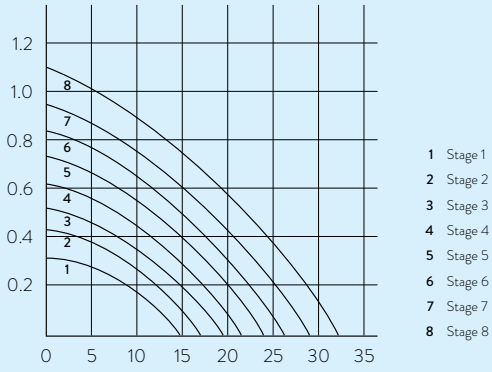
Pressure bar



Suction **Flow rate** L/min

PUMP CHARACTERISTIC Heat transfer liquid: Water

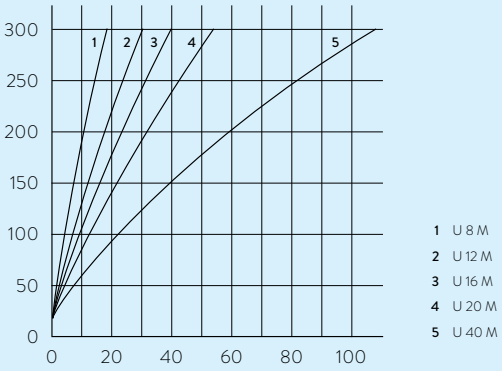
Pressure bar



Flow rate L/min

HEATING PERFORMANCE Heat transfer liquid: Therm 250, bath closed, Pump output step 8

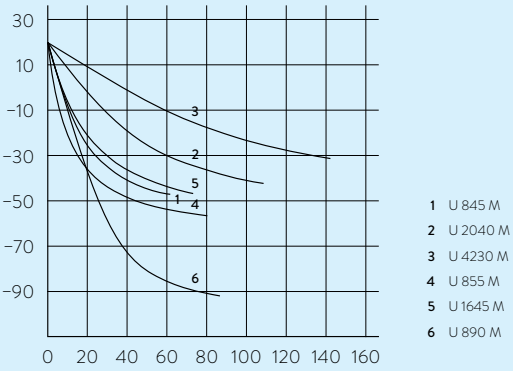
Bath temperature °C



Time min

COOLING PERFORMANCE Heat transfer liquid: Ethanol, bath closed

Bath temperature °C



Time min

	Pressure-suction pump	Pressure-suction pump with ball bearing	Pressure pump
Heating thermostats	U 8, U 12 M, U 40 M	U 8, U 12 M, U 40 M	U 20 M
Cooling thermostats	U 845 M, U 855 M, U 890 M	U 845 M, U 855 M, U 890 M	U 2040 M, U 4230 M