



PRO: SPLITTING THE UNITS INTO BATH & CIRCULATION THERMOSTAT

No-Compromise in Professional Temperature Control!

Bath
for internal applications



Circulator
for external applications



PRO HEATING BATH THERMOSTAT

Temperature range from 30 °C to 250 °C

- 3 models with a maximum bath volume from 10 to 28.5 L

Base remote control unit



PRO P 10

Command touch



PRO P 10 C

PRO BATH THERMOSTAT

Main switch, LiBus located on the right side of the device



Main switch

LiBus

Type plate

Power cord connector

PRO BATH THERMOSTATS

$T_{\max}$ set and interfaces on the left side of the device

Interfaces :

- RS 232/485
- Analog
- Profibus
- Ether CAT
- Contact



ETHERNET CONFIGURATION

Ethernet needs configuration before initial use



USB: Only for software updates

Ethernet configuration

PC control

no yes

DHCP Client

off on

IP address

0 . 0 . 0 . 1 apply

Subnet mask

0 . 0 . 33 . 1 apply

Standard gateway

0 . 0 . 0 . 0 apply

DNS Server

0 . 0 . 0 . 0 apply

Port

8449



MAC address

00:01:00:00:00:0E

PRO BASE CONTROL UNIT

Flexible and user-friendly



- Visible from distance and high-contrast graphical OLED-Display
- Operation with Cursor- and Softkeys
- Plain text menu navigation
- One programmer with 20 segments
- Removable
- Control unit for the bath thermostats can rotate through 360 °C
- Cable extension up to 50 meters

PRO COMMAND CONTROL UNIT

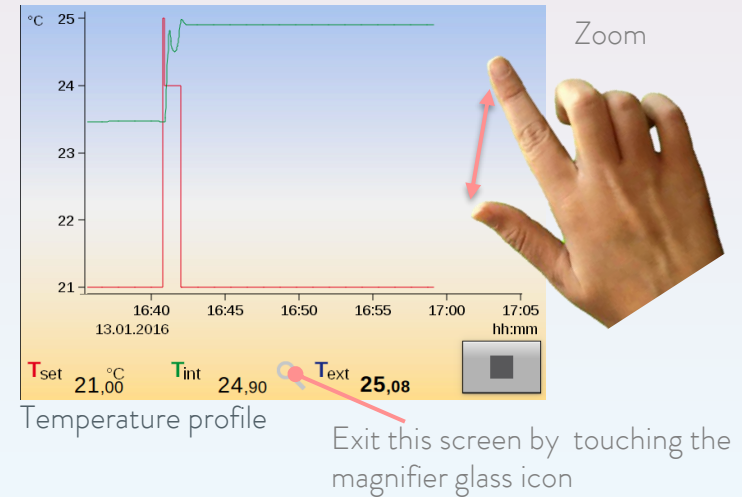
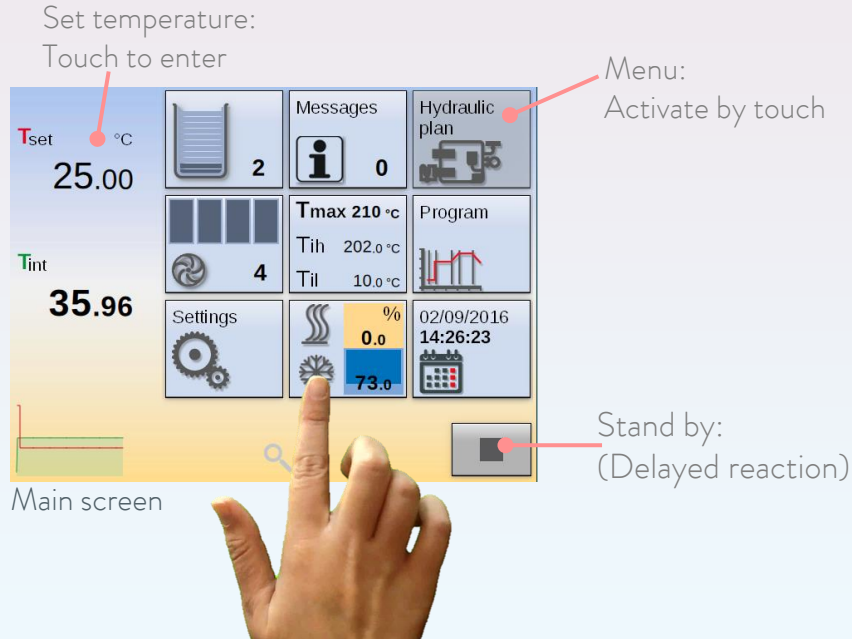
Convenient multi-touch screen



- Touch graphical user interface, 5,7“ display
- Screen for temperature profile
- User administration
- Control unit with up to 100 programs, up to 50 segments each
- Timer / Weekly planer; up to 9 count-downs
- Data in- and export via USB
- Data logging, export to USB stick
- Individual user right for up to 20 users
- Removable
- Temperature display n °C or °F
- Cable extension up to 50 meters

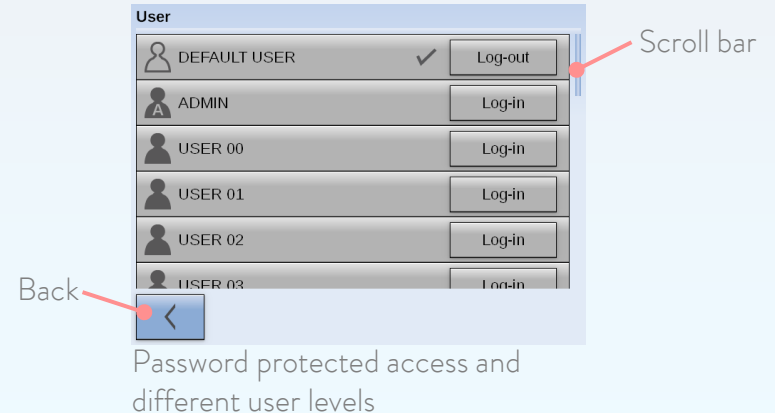
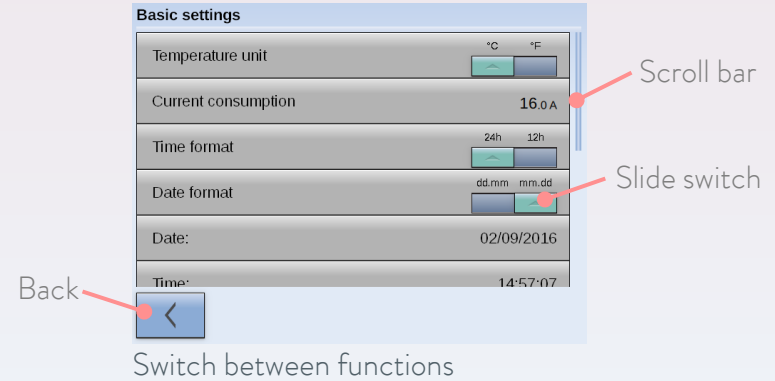
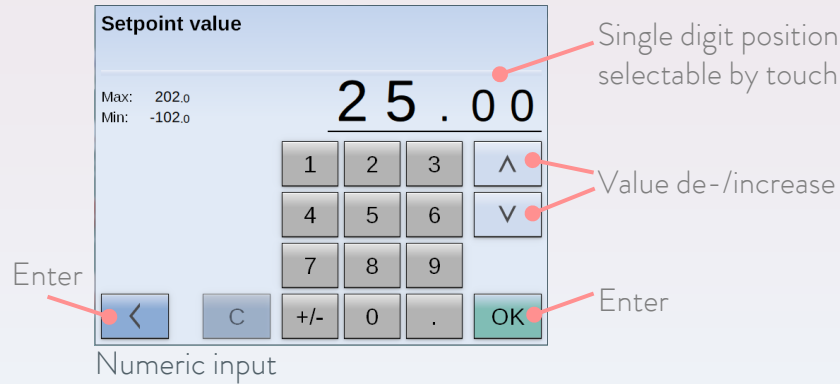
COMMAND TOUCH

Large multi-touch screen with versatile functions



COMMAND TOUCH

Large multi-touch screen with versatile functions



COMMAND TOUCH PROGRAMMER

Large multi-touch screen with versatile functions

Edit program 

Name: Cycles:

Seg.	T end °C	Time h:m	ΔT °C	Control	Out 1	Out 2	Out 3
Start	10.00	----	0.50	1 	----	----	----
01	-10.00	17:00	----	5 	----	----	----
02	10.00	00:01	----	1 	----	----	----
03	-10.00	17:00	----	2 	----	----	----



Programme 

3M M@LO			
ASDFGHJKLOPIUZZTREWQ			
GG			
Langes_Programm			
TEST @25C			
TEST@25C			



Standard symbols

- Start
- Pause
- Stop

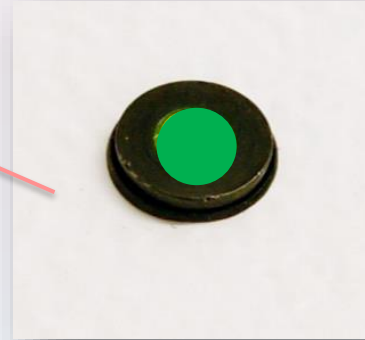
- Change of temperature profile when a new segment is inserted.
- If no time value is entered for a temperature step, the change depends on bath volume and power of the system.

PRO: SYSTEM STATUS INDICATED BY STATUS-LED

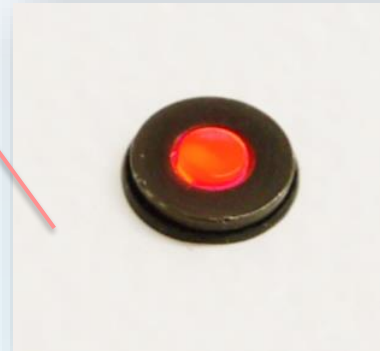
Status-LED



Alarm Reset

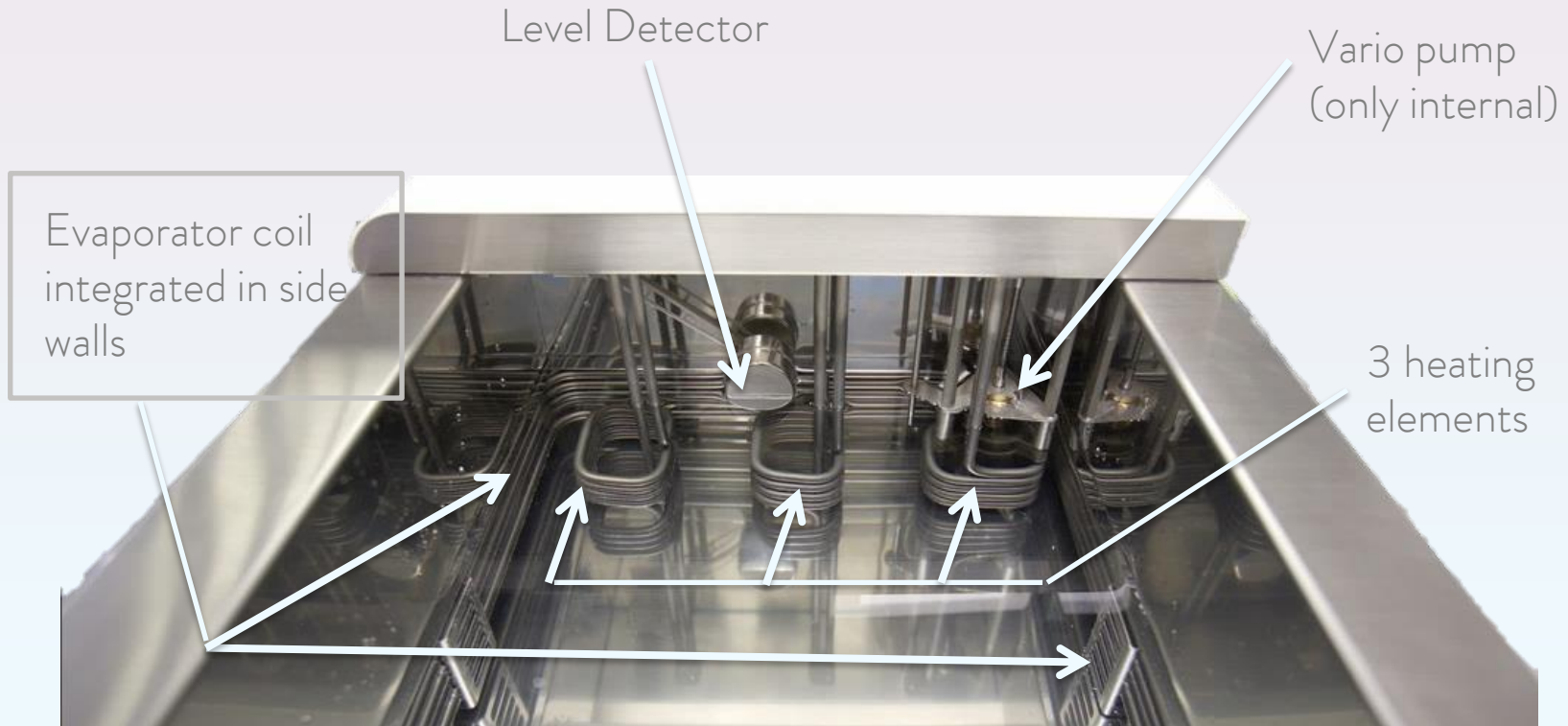


Green: Unit works well

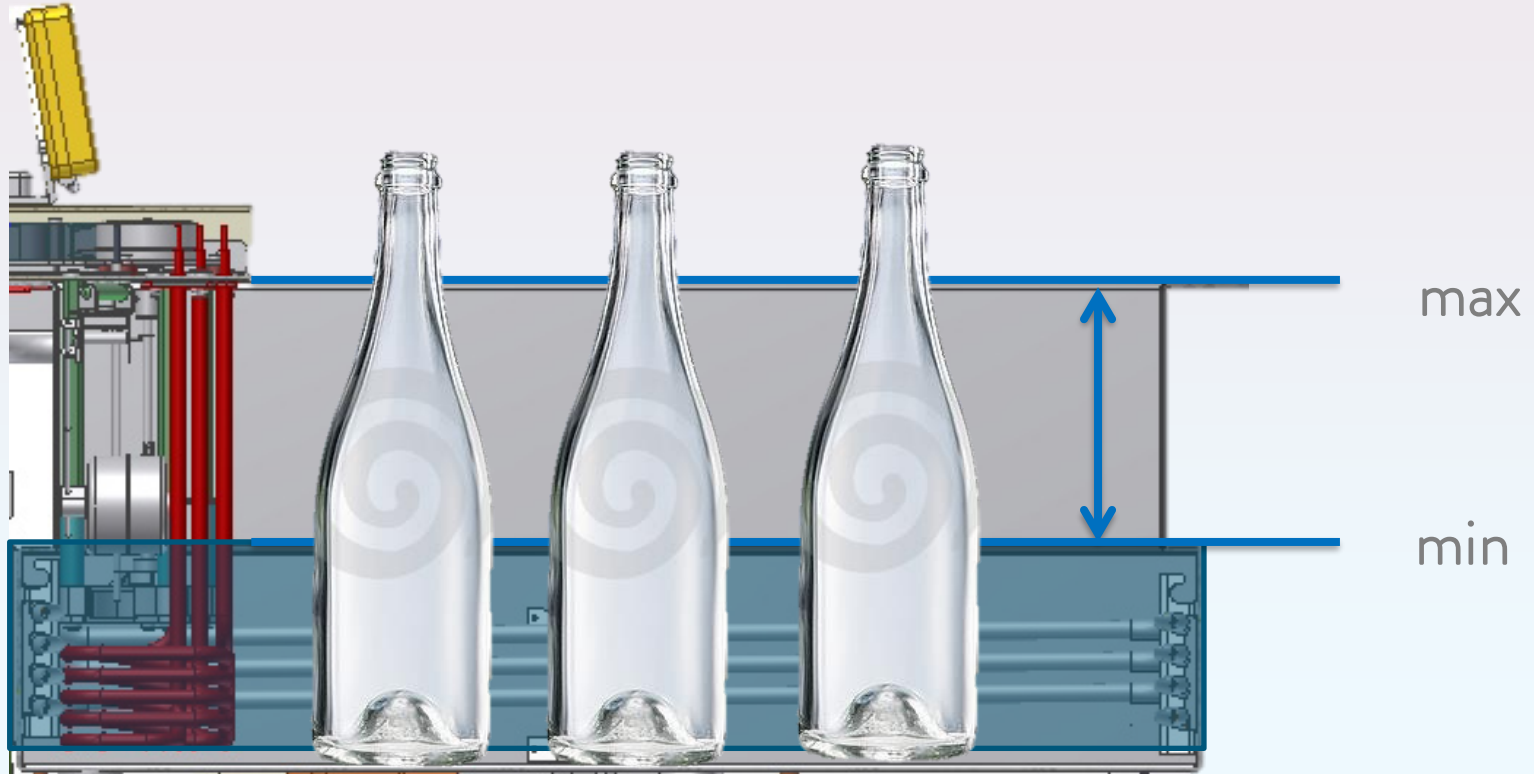


Flashes red: Alarm status

PRO BATHROOM INTERIOR



LAUDA PRO BATH: A WIDE LEVEL RANGE ALLOWS SAMPLES TO BE REMOVED WITHOUT LEVEL ALARM



TECHNICAL DATA

PRO Heating thermostats

		P 10 (C)	P 20 (C)	P 30 (C)
Working temperature range	°C	40 – 250	35 – 250	30 – 250
Operating temperature range (with external cooling)	°C	-30 – 250	-30 – 250	-30 – 250
Temperature stability	±K	0.01	0.01	0.01
Heater power	kW	3.5	3.5	3.5
Bath opening (WxD)	mm	240 x 150	300 x 290	340 x 385
Bath depth (H)	mm	200	200	200
Usable depth	mm	180	180	180
Filling volume	L	5.5 ... 10	11 ... 20	15.5 ... 28.5

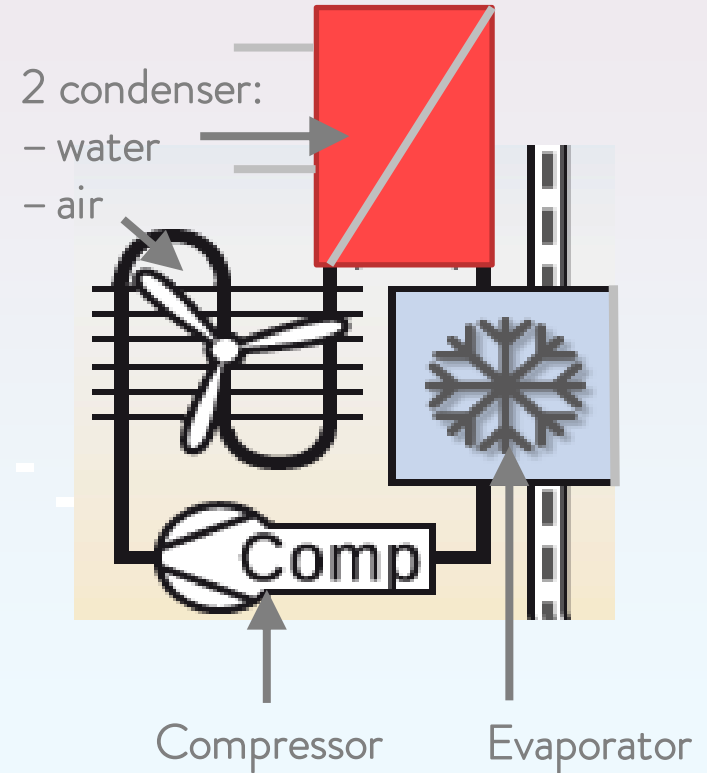
TECHNICAL DATA

PRO Cooling thermostats

		RP 2040 (C)	RP 3035 (C)	RP 2045 (C)	RP 1090 (C)	RP 2090 (C)	RP 10100 (C)
Working temp. range	°C	-40 – 200	-35 – 200	-45 - 200	-90 – 200	-90 – 200	-100 - 200
Heater power	kW	3.5	3.5	3.5	3.5	3.5	3.5
Bath opening (WxD)	mm	300 x 290	340 x 375	300 x 290	240 x 150	300 x 290	240 x 150
Bath depth (H)	mm	200	200	200	200	200	200
Usable depth	mm	180	180	180	180	180	180
Filling volume	L	12.5 ... 21	17.5 ... 29.5	12.5 ... 21	6.5 ... 11	12.5 ... 21	6.5 ... 11

HYBRID COOLING

- Supports air cooling at elevated ambient temperatures
→ cooling power is maintained
- Reduced noise level
- Excess heat is not transferred fully to ambient
- Perfect for air-restricted installation



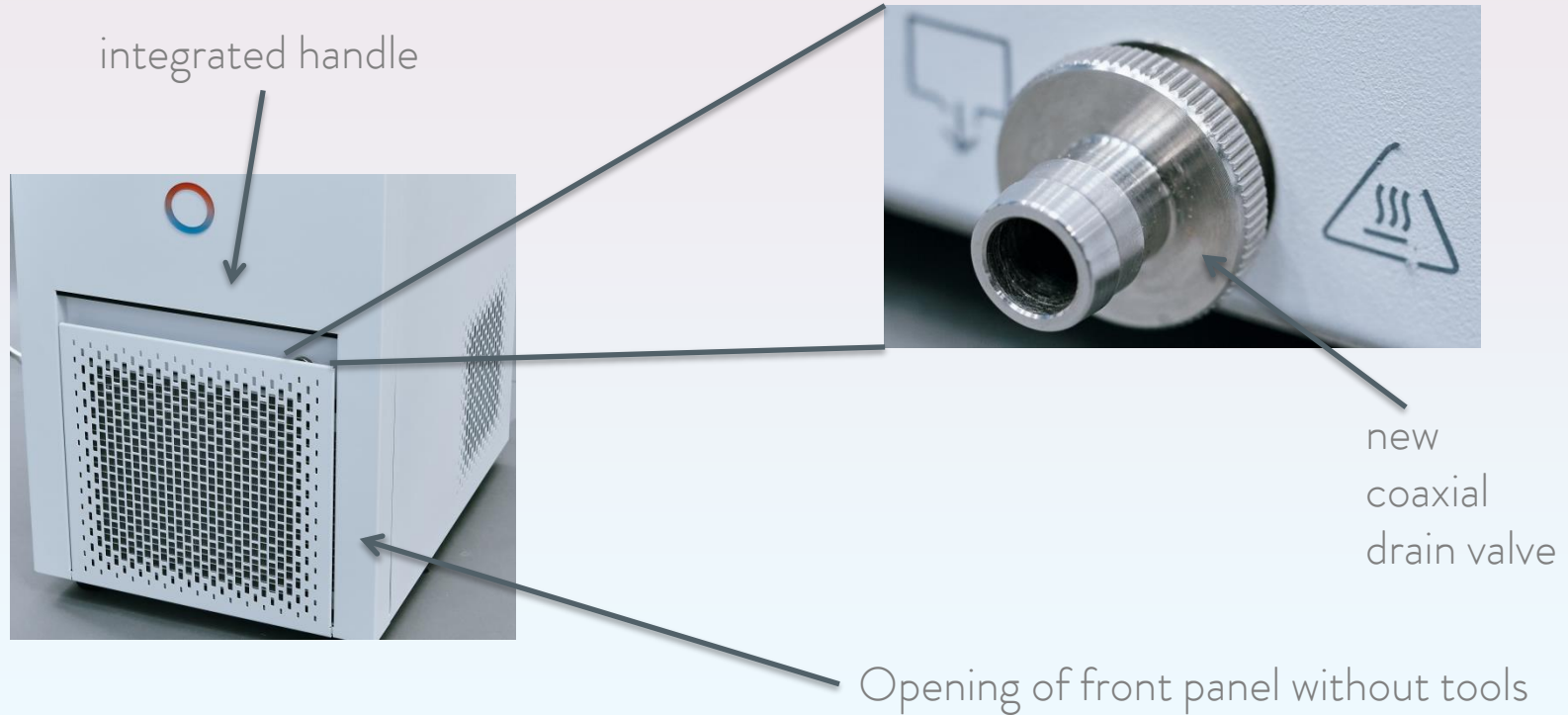
REFRIGERANT OF COOLING THERMOSTATS

Cooling thermostats with semi-halogenated and natural refrigerant

Fluorinated greenhouse gases		Refrigerant 1st stage	Refrigerant 2nd stage	Global warming Potential GWP (100a)*	Max. filling quantity	CO ₂ equivalent
	RP 2040	R-404A	--	3922	0.25 kg	1.0 t
	RP 3035				0.25 kg	1.0 t
	RP 2045				0.3 kg	1.2 t
Natural refrigerant	RP 1090	R-404A	R-170	3922 / 3	0.26 / 0.08 kg	1.0 / 1.0 t
	RP 2090		R-170		0.26 / 0.08 kg	1.0 / 1.0 t
	RP 10100		R-1150		0.22 / 0.06 kg	0.9 / 0.9 t
Natural refrigerant		Refrigerant 1st stage	Refrigerant 2nd stage	Global warming Potential GWP (100a)*	Max. filling quantity	
	RP 2040	R-290	--	3	0.099 kg	
	RP 3035				0.099 kg	
	RP 2045				0.149 kg	
Natural refrigerant	RP 1090	R-290	R-170	3 / 3	0.11 / 0.08 kg	
	RP 2090		R-170		0.11 / 0.08 kg	
	RP 10100		R-1150		0.099 / 0.06 kg	

MAINTAINING AND DRAINING

Easy handling



PRO: 3 HEATING AND 6 COOLING BATH THERMOSTATS

Model	Temp. range		Cooling
	min.	max.	
P 10, P 20, P 30	35 °C	250 °C	Cooling coil

Model	Temp. range		Cooling power @ 20 °C
	min.	max.	
RP 2040	- 40 °C	200 °C	800 W
RP 3035	- 35 °C		800 W
RP 2045	- 45 °C		1500 W
RP 1090	- 90 °C		800 W
RP 2090	- 90 °C		800 W
RP 10100	- 100 °C		400 W

Your advantages at a glance

- + Temperature control down to -100 °C *
- + Reduced minimum fill level with full functionality
- + Rapid heating thanks to high heater power of 3.5 kW
- + 360° access to the bath
- + Waste heat reduction as a result of hybrid cooling
- + USB and Ethernet interfaces are standard and other interface modules are available
- + Operating unit can be rotated through 360°
- + Control possible from up to 50 meters away