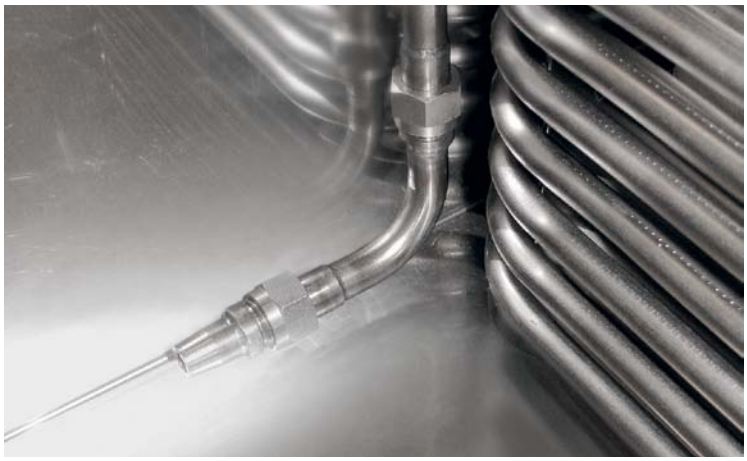
LAUDA Proline Kryomats

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

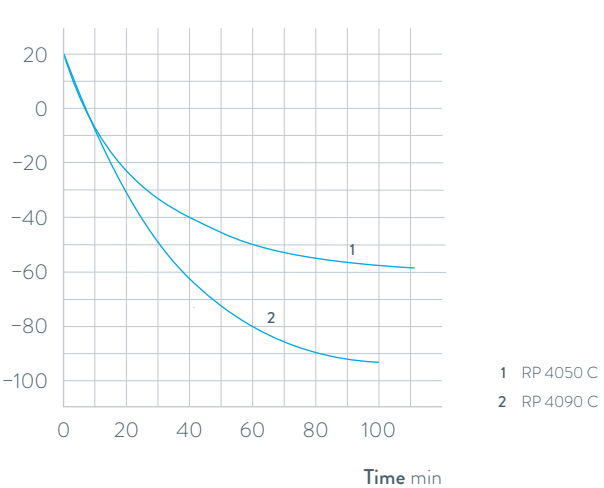
The Proline Kryomats are cooling thermostats that feature the latest technology with high efficiency and an excellent price-performance ratio. The pressure pump is optimized for internal circulation and can be set to four levels – the standard-issue LAUDA Command remote control also makes it especially 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

Inset baskets, interface 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 are available with large bath openings and volumes of 30 and 40 liters.

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	-100 °C		
LAUDA PRO / Page 94																				
RP 2040	−40 ... 200	0.01	III, FL	3.6	0.80[3]	0.80[3]	0.80[3]	0.60[3]	0.40[2]	-	0.19[2]	0.06[2]	-	-	-	-	-	-	V	-
RP 2045	−45 ... 200	0.01	III, FL	3.6	1.50[3]	1.43[3]	1.17[3]	0.84[3]	0.52[2]	-	0.28[2]	0.13[2]	-	-	-	-	-	-	V	-
RP 3035	−35 ... 200	0.01	III, FL	3.6	0.80[3]	0.80[3]	0.80[3]	0.58[3]	0.35[2]	-	0.16[2]	-	-	-	-	-	-	-	V	-
RP 1090	−90 ... 200	0.01	III, FL	3.6	0.80[3]	0.75[3]	0.72[3]	0.69[3]	0.66[2]	-	0.63[2]	0.60[2]	0.54[2]	0.37[2]	0.24[2]	0.11[2]	0.02[2]	-	V	-
RP 2090	−90 ... 200	0.01	III, FL	3.6	0.80[3]	0.71[3]	0.68[3]	0.65[3]	0.62[2]	-	0.61[2]	0.58[2]	0.52[2]	0.34[2]	0.18[2]	0.07[2]	0.01[2]	-	V	-
RP 10100	−100 ... 200	0.01	III, FL	3.6	0.40[3]	0.40[3]	0.40[3]	0.40[3]	0.40[2]	-	0.39[2]	0.37[2]	0.35[2]	0.32[2]	0.25[2]	0.17[2]	0.06[2]	0.01[2]	V	-
RP 2040 C	−40 ... 200	0.01	III, FL	3.6	0.80[3]	0.80[3]	0.80[3]	0.60[3]	0.40[2]	-	0.19[2]	0.06[2]	-	-	-	-	-	-	V	-
RP 2045 C	−45 ... 200	0.01	III, FL	3.6	1.50[3]	1.43[3]	1.17[3]	0.84[3]	0.52[2]	-	0.28[2]	0.13[2]	-	-	-	-	-	-	V	-
RP 3035 C	−35 ... 200	0.01	III, FL	3.6	0.80[3]	0.80[3]	0.80[3]	0.58[3]	0.35[2]	-	0.16[2]	-	-	-	-	-	-	-	V	-
RP 1090 C	−90 ... 200	0.01	III, FL	3.6	0.80[3]	0.75[3]	0.72[3]	0.69[3]	0.66[2]	-	0.63[2]	0.60[2]	0.54[2]	0.37[2]	0.24[2]	0.11[2]	0.02[2]	-	V	-
RP 2090 C	−90 ... 200	0.01	III, FL	3.6	0.80[3]	0.71[3]	0.68[3]	0.65[3]	0.62[2]	-	0.61[2]	0.58[2]	0.52[2]	0.34[2]	0.18[2]	0.07[2]	0.01[2]	-	V	-
RP 10100 C	−100 ... 200	0.01	III, FL	3.6	0.40[3]	0.40[3]	0.40[3]	0.40[3]	0.40[2]	-	0.39[2]	0.37[2]	0.35[2]	0.32[2]	0.25[2]	0.17[2]	0.06[2]	0.01[2]	V	-
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RP 4050 C	−50 ... 200	0.05	III, FL	3.5	5.00[1]	-	3.00[1]	-	1.60[1]	-	1.00[1]	0.50[1]	0.25[1]	-	-	-	-	-	V	0.5
RP 4050 CW	−50 ... 200	0.05	III, FL	3.5	6.00[1]	-	3.50[1]	-	1.80[1]	-	1.10[1]	0.60[1]	0.25[1]	-	-	-	-	-	V	0.5
RP 4090 C	−90 ... 200	0.05	III, 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	0.5
RP 4090 CW	−90 ... 200	0.05	III, 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	0.5

[1] Pump output step 2 [2] Pump output step 4 [3] Pump output step 8 All device types with mark › W ‹ are water-cooled

Pump flow max. pressure L /min	Pump connection thread	Nipples Ø e	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	Part Number	Device type
-	N/A	-	12.5	21.0	300×290	200	180	568	400×565×680	51.0	230 V; 50 Hz	3.7	L000007**	RP 2040
-	N/A	-	12.5	21.0	300×290	200	180	568	400×565×680	59.0	230 V; 50 Hz	3.7	L000008**	RP 2045
-	N/A	-	17.5	29.5	340×375	200	180	568	440×600×680	54.0	230 V; 50 Hz	3.7	L000009**	RP 3035
-	N/A	-	6.5	10.5	240×150	200	180	618	440×600×730	85.0	230 V; 50 Hz	3.7	L000010**	RP 1090
-	N/A	-	12.5	21.0	300×290	200	180	618	500×600×730	91.0	230 V; 50 Hz	3.7	L000011**	RP 2090
-	N/A	-	6.5	10.5	240×150	200	180	618	500×600×730	86.0	230 V; 50 Hz	3.7	L000012**	RP 10100
-	N/A	-	12.5	21.0	300×290	200	180	568	400×565×730	52.0	230 V; 50 Hz	3.7	L000013**	RP 2040 C
-	N/A	-	12.5	21.0	300×290	200	180	568	400×565×730	59.0	230 V; 50 Hz	3.7	L000014**	RP 2045 C
-	N/A	-	17.5	29.5	340×375	200	180	568	440×600×730	55.0	230 V; 50 Hz	3.7	L000015**	RP 3035 C
-	N/A	-	6.5	10.5	240×150	200	180	618	440×600×780	86.0	230 V; 50 Hz	3.7	L000016**	RP 1090 C
-	N/A	-	12.5	21.0	300×290	200	180	618	500×600×780	89.0	230 V; 50 Hz	3.7	L000017**	RP 2090 C
-	N/A	-	6.5	10.5	240×150	200	180	618	500×600×780	86.0	230 V; 50 Hz	3.7	L000018**	RP 10100 C
19.0	M16×1	13	32.0	44.0	350×350	250	230	905	600×700×1216	129.0	400 V; 3/N/PE; 50 Hz	5.0	L001653*	RP 4050 C
19.0	M16×1	13	32.0	44.0	350×350	250	230	905	600×700×1216	124.0	400 V; 3/N/PE; 50 Hz	5.0	L001657*	RP 4050 CW
19.0	M16×1	13	32.0	44.0	350×350	250	230	905	600×700×1216	161.0	400 V; 3/N/PE; 50 Hz	7.0	L001655*	RP 4090 C
19.0	M16×1	13	32.0	44.0	350×350	250	230	905	600×700×1216	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 order number at www.lauda.de

** Utilises natural refrigerants

Device type	Power supply V; Hz	Heater power max. kW	Loading max. kW	Plug code*	Part Number	Device type	Power supply V; Hz	Heater power max. kW	Loading max. kW	Plug code*	Part Number
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RP 1090	200 V; 50/60 Hz	2.7	3.2	3	L000485	RP 2090 C	200 V; 50/60 Hz	2.7	3.2	2	L000478
RP 1090	200 V; 50/60 Hz	2.7	3.2	32	L000517	RP 2090 C	200 V; 50/60 Hz	2.7	3.2	3	L000494
RP 1090	200 V; 50/60 Hz	2.7	3.2	2	L000469	RP 2090 C	200 V; 50/60 Hz	2.7	3.2	32	L000526
RP 1090	200 V; 50/60 Hz	2.7	3.2	31	L000501	RP 2090 C	200 V; 50/60 Hz	2.7	3.2	31	L000510
RP 1090	208-220 V; 60 Hz	3.3	3.5	32	L000437	RP 2090 C	208-220 V; 60 Hz	3.3	3.5	3	L000318
RP 1090	208-220 V; 60 Hz	3.3	3.5	3	L000309	RP 2090 C	208-220 V; 60 Hz	3.3	3.5	32	L000446
RP 1090	208-220 V; 60 Hz	3.3	3.5	2	L000567	RP 2090 C	208-220 V; 60 Hz	3.3	3.5	31	L000430
RP 1090	208-220 V; 60 Hz	3.3	3.5	31	L000421	RP 2090 C	208-220 V; 60 Hz	3.3	3.5	2	L000576
RP 1090 C	200 V; 50/60 Hz	2.7	3.2	32	L000525	RP 10100	200 V; 50/60 Hz	2.7	3.2	32	L000519
RP 1090 C	200 V; 50/60 Hz	2.7	3.2	2	L000477	RP 10100	200 V; 50/60 Hz	2.7	3.2	31	L000503
RP 1090 C	200 V; 50/60 Hz	2.7	3.2	31	L000509	RP 10100	200 V; 50/60 Hz	2.7	3.2	2	L000471
RP 1090 C	200 V; 50/60 Hz	2.7	3.2	3	L000493	RP 10100	200 V; 50/60 Hz	2.7	3.2	3	L000487
RP 1090 C	208-220 V; 60 Hz	3.3	3.5	31	L000429	RP 10100	208-220 V; 60 Hz	3.3	3.5	32	L000439
RP 1090 C	208-220 V; 60 Hz	3.3	3.5	2	L000575	RP 10100	208-220 V; 60 Hz	3.3	3.5	31	L000423
RP 1090 C	208-220 V; 60 Hz	3.3	3.5	32	L000445	RP 10100	208-220 V; 60 Hz	3.3	3.5	2	L000569
RP 1090 C	208-220 V; 60 Hz	3.3	3.5	3	L000317	RP 10100	208-220 V; 60 Hz	3.3	3.5	3	L000311
RP 2090	200 V; 50/60 Hz	2.7	3.2	2	L000470	RP 10100 C	200 V; 50/60 Hz	2.7	3.2	32	L000527
RP 2090	200 V; 50/60 Hz	2.7	3.2	32	L000518	RP 10100 C	200 V; 50/60 Hz	2.7	3.2	31	L000511
RP 2090	200 V; 50/60 Hz	2.7	3.2	31	L000502	RP 10100 C	200 V; 50/60 Hz	2.7	3.2	3	L000495
RP 2090	200 V; 50/60 Hz	2.7	3.2	3	L000486	RP 10100 C	200 V; 50/60 Hz	2.7	3.2	2	L000479
RP 2090	208-220 V; 60 Hz	3.3	3.5	32	L000438	RP 10100 C	208-220 V; 60 Hz	3.3	3.5	3	L000319
RP 2090	208-220 V; 60 Hz	3.3	3.5	2	L000568	RP 10100 C	208-220 V; 60 Hz	3.3	3.5	31	L000431
RP 2090	208-220 V; 60 Hz	3.3	3.5	3	L000310	RP 10100 C	208-220 V; 60 Hz	3.3	3.5	32	L000447
RP 2090	208-220 V; 60 Hz	3.3	3.5	31	L000422	RP 10100 C	208-220 V; 60 Hz	3.3	3.5	2	L000577
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RP 4050 C	200 V; 3/PE; 50/60 Hz	2.8	5.0	31	L001701	RP 4090 C	200 V; 3/PE; 50/60 Hz	2.8	7.0	31	L001703
RP 4050 C	208 V; 3/PE; 60 Hz	3.0	5.0	31	L001677	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 4050 CW	208 V; 3/PE; 60 Hz	3.0	5.0	31	L001681	RP 4090 CW	208 V; 3/PE; 60 Hz	3.0	7.0	31	L001683

* All data for the plug codes can be found on page 174 All device types with mark › W ‹ are water-cooled