°LAUDA

NEW

LAUDA MICROCOOL

Circulation chillers for reliable continuous operation in laboratories and research from −10 to 40 °C

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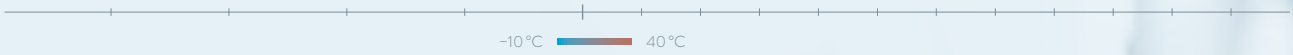
LAUDA Microcool



Compact circulation chillers with excellent price-performance ratio
The easy-to-use LAUDA Microcool circulation chiller line consists of four compact models with a large seven-segment display and membrane keypad, while offering cooling capacities from 0.35 to 2 kW. The highlight of the devices is the high-quality pump with magnetic coupling – unique in this price category: It prevents any sealing problems on the pump shaft thanks to the magnetic coupling of the pump and electric motor.

Overview
- Four models in three housing sizes
- Temperature range –10 to 40 °C
- Cooling capacity range from 350 to 2,000 W
- Temperature stability ±0.5 K
- All models air-cooled
- Optimized cooling capacity via solenoid valve and automatic compressor

Natural refrigerants – safe and environmentally friendly
All LAUDA Microcool circulation chillers use natural refrigerants with an extremely low global warming potential (GWP 3). Even in the most powerful devices, the fill quantity remains below 100 grams. This eliminates the need for costly safety measures or special transport regulations.

Natural Refrigerant
Propane powered

MC 350 MC 600 MC 1200 MC 2000

LAUDA
25.0
GLYCOL

LAUDA Microcool circulation chillers

Technical characteristics and handling

User-friendly

- User-friendly menu navigation and simple 3-button operation
- Quick detection of fill level thanks to backlit sight glass
- Auto-start timer and auto-shutdown function

Standard interfaces

- Standard RS-232 interface for controlling the device via PC
- Alarm contact that is activated in the event of a device malfunction. Malfunctions can thus be reported to a higher-level control system, for example

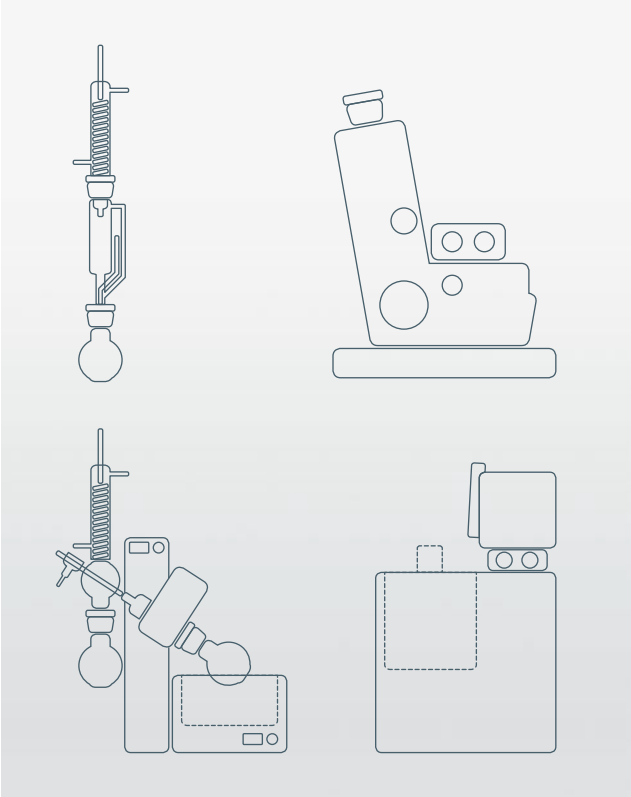
Practical and easy to use

- External bypass for adjusting the pressure requirements to the external consumer and pressure gauge on the MC 600, MC 1200 and MC 2000
- Filling port on the top of the device for quick and easy filling
- Sealless magnetically coupled pump for leak-free operation

Easy to maintain

- Front grille can be removed without tools for cleaning the condenser
- Device casters on the MC 600, MC 1200 and MC 2000

Applications and accessories



Typical applications

Cooling of

- Soxhlet apparatus
- Analytical devices (refractometers, spectrometers)
- Rotary evaporators
- Heating thermostats with cooling coil (e.g., LAUDA Universa, LAUDA Alpha)

Standard equipment

- MC 600, MC 1200, MC 2000: ¾" hose connection with ¾" union nut

Additional accessories

- Polymer hoses, insulated hoses, insulation with different diameters
- Hose clamps

Heat transfer liquids

- Aqua 90: 5 ... 90 °C (demineralized water with stabilizer)
- Kryo 10: −10 ... 90 °C (water-glycol mixture)

LAUDA designation / Chemical characterization	Temperature range °C	Part number / Container size 5 L / 10 L / 20 L
Aqua 90 Demineralized water with stabilizer	5 ... 90 °C	LZB 120 / LZB 220 / LZB 320
Kryo 10 Water-glycol mixture	−10 ... 90 °C	LZB 132 / LZB 232 / LZB 332

LAUDA Microcool circulation chillers

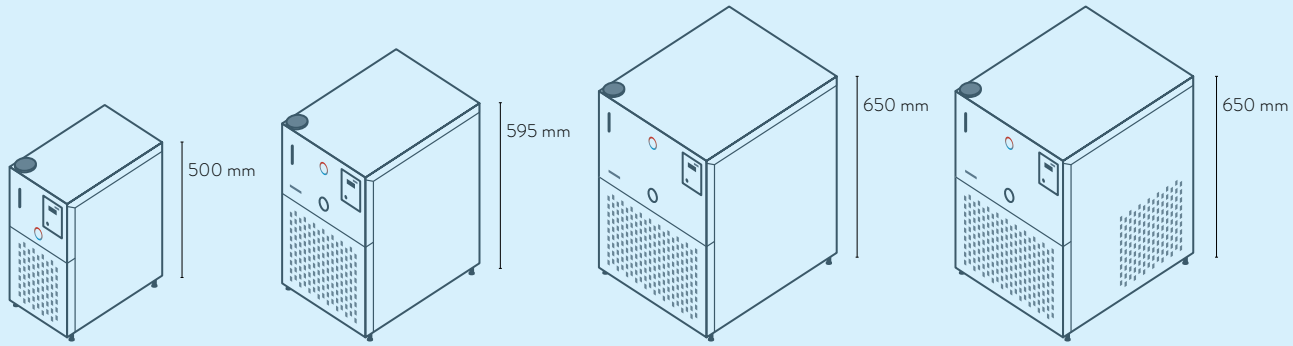
Technical data according to DIN 12876 standard

Device type	Working temperature range °C	Temperature stability* ±K	Ambient temperature range °C	Cooling of the refrigerating machine	Cooling output kW				Pump pressure max. bar	Pump flow max. L/min	Pump connection
					20 °C	10 °C	0 °C	–10 °C			
LAUDA Microcool											
MC 350	–10 ... 40	0.50	5 ... 40	Air	0.35	0.27	0.20	0.12	0.35	16	Ø 10 mm
MC 600	–10 ... 40	0.50	5 ... 40	Air	0.60	0.50	0.37	0.20	1.30	35	G ¾"
MC 1200	–10 ... 40	0.50	5 ... 40	Air	1.20	1.05	0.75	0.40	1.30	35	G ¾"
MC 2000	–10 ... 40	0.50	5 ... 40	Air	2.00	1.70	1.25	0.70	1.30	35	G ¾"

Power supply variants

Device type	Power supply V; Hz	Pump pressure max. bar	Pump flow max. L/min	Loading max. kW	Plug code	Part Number
LAUDA Microcool						
MC 350	115 V; 60 Hz	0.35	16	0.5	14	LO04452
MC 350	220 V; 60 Hz / 230 V; 50 Hz	0.35	16	0.5	2	LO04112
MC 350	220 V; 60 Hz / 230 V; 50 Hz	0.35	16	0.5	5	LO04454
MC 350	100 V; 50/60 Hz	0.35	16	0.5	14	LO04453
MC 600	115 V; 60 Hz	1.30	35	0.8	14	LO04458
MC 600	220 V; 60 Hz	1.30	35	0.7	43	LO04457
MC 600	230 V; 50 Hz	1.30	35	0.7	42	LO04456
MC 600	230 V; 50 Hz	1.30	35	0.7	5	LO04459
MC 1200	115 V; 60 Hz	1.30	35	1.1	14	LO04464
MC 1200	230 V; 50 Hz	1.30	35	1.2	5	LO04460
MC 1200	230 V; 50 Hz	1.30	35	1.2	42	LO04462
MC 2000	115 V; 60 Hz	1.30	35	1.3	14	LO04524
MC 2000	230 V; 50 Hz	1.30	35	1.1	5	LO04522
MC 2000	230 V; 50 Hz	1.30	35	1.1	42	LO04523

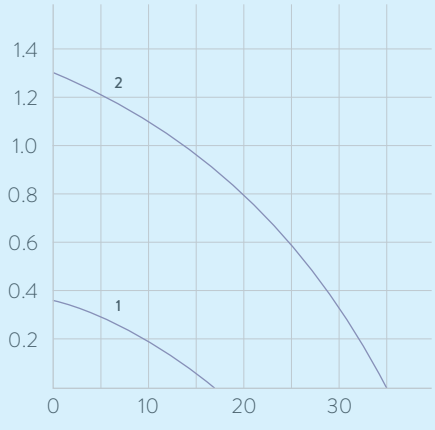
Bath volume max. L	**Dimensions (W × D × H)** mm	**Protection rating**	**Noise level** dB (A)	**Weight** kg	**Loading max.** kW	**Power supply** V; Hz	**Part Number**	**Device type**
7.0	240 × 350 × 500	IP 32	60	34.0	0.5	220 V; 60 Hz / 230 V; 50 Hz	L004451	MC 350
8.0	350 × 480 × 595	IP 32	57	50.0	0.7	230 V; 50 Hz	L004455	MC 600
14.0	450 × 550 × 650	IP 32	59	60.5	1.2	230 V; 50 Hz	L004461	MC 1200
14.0	450 × 550 × 650	IP 32	60	60.5	1.1	230 V; 50 Hz	L004521	MC 2000



MC 350 MC 600 MC 1200 MC 2000

PUMP CHARACTERISTICS Heat transfer liquid: Water

Pressure bar



Flow rate L/min

1 MC 350
2 MC 600, MC 1200, MC 2000