The right temperature worldwide

LAUDA

Chapter Microcool

LAUDA – the big one

Thermostats, Circulation chillers, Water baths

Overall Brochure 2016/2017

LAUDA Microcool

Circulation chillers for reliable continuous operation in the lab and in research from -10 up to 40 °C

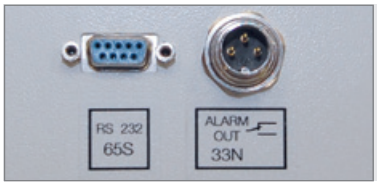
Excellent price-performance ratio, compact design and simple to use

LAUDA Microcool has been designed as a circulation chiller line with five compact models and cooling capacities from 0.25 to 1.2 kW. The user interface with large LED display and the membrane keyboard make the devices easy to use. An RS-232 interface and alarm contact are integrated as standard. What is unusual in this price category of circulation chillers is the high-quality block pump with magnetic coupling. The magnetic coupling of pump and electric motor exclude sealing problems on the pump shaft. LAUDA Microcool circulation chillers are used whenever heat needs to be dissipated reliably and quickly, e. g. in laboratories for rotary evaporators, distillation systems or analytical devices.

Application examples

- Cooling of rotary evaporators
- Cooling of distillation systems
- Supply of cooling traps
- Cooling of analytical devices

Your advantages at a glance

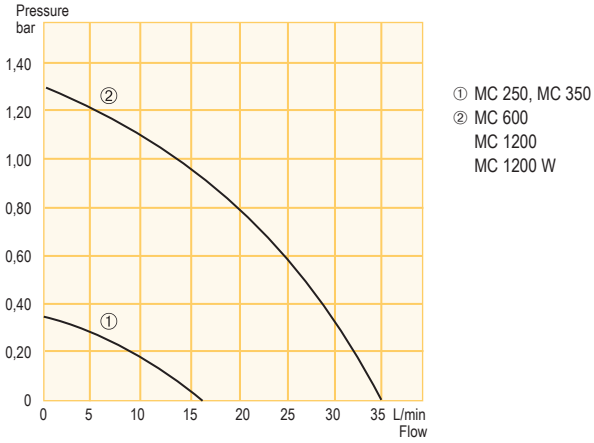
	The Microcool advantages	Your benefits
	• Five device types in four housing sizes • Cooling capacities from 250 W up to 1200 W	• Clear device portfolio for simple selection • Covers the majority of basic lab uses
	• User interface with large LED display and membrane keyboard • Autostart timer and auto-shutdown function • Illuminated window for checking heat transfer liquid level	• Simple and intuitive use • Timer-based activation and deactivation of the circulation chillers • Quick optical detection of the filling level
	• Block pump with magnetic coupling of pump and electric motor • Integrated adjustable bypass and pressure gauge at MC 600, MC 1200 and MC 1200 W • Integrated overflow connection	• Prevents sealing problems at the pump shaft • Integrated pump pressure adjustment for connected delicate glassware • Controlled filling of the devices
	• RS-232 interface and alarm contact standard	• System integration into processes without additional costs
	• Compact design and low space requirements • Integrated filling funnel on top of the device • Easily removable front grid	• Saves valuable laboratory space • Simple and safe filling • Easy-to-clean condenser

Microcool
Circulation chiller with cooling capacity up to 1200 Watt

The compact MC 250 and MC 350 makes them ideal for being positioned on the benchtop. The circulation chillers are equipped with a magnetic coupling pump. This supplies a pump pressure of 0.35 bar and a maximum pump flow of 16 L/min.

The 600 and 1200 Watt cooling capacity models are floor standing instruments designed to fit underneath the lab bench. They are equipped with a pressure gauge to display the pressure and casters which can be controlled and locked. Pump pressure can be adjusted via the integrated bypass. At 1200 Watt, the most powerful device is also available in a water-cooled version as the MC 1200 W.

Pump characteristics Heat transfer liquid: Water



Temperature range
-10…40 °C

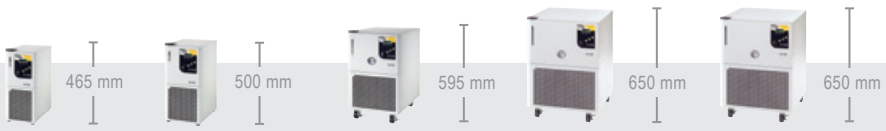
Included as standard
RS 232 interface · alarm contact

Included accessories (except of MC 250, MC 350)
Nipples (3/4") · screw caps

Circulation chiller MC 250

All technical data on page 106 and following

Other power supply variants on page 114



Technical features		MC 250	MC 350	MC 600	MC 1200	MC 1200 W
Working temperature range*	°C	-10…40	-10…40	-10…40	-10…40	-10…40
Temperature stability	±K	0.5	0.5	0.5	0.5	0.5
Cooling output at 20 °C	kW	0.25	0.35	0.6	1.2	1.2
Pump pressure max.	bar	0.35	0.35	1.3	1.3	1.3
Pump flow max.	L/min	16	16	35	35	35
Cat. No. 230 V; 50 Hz		LWM 118	LWM 119	LWM 120	LWM 121	LWM 122

* Working temperature range is equal to ACC range

Microcool accessories (excerpt)

EPDM tubing

Cat. No.	Description	d_i (mm)	d_e (mm)	Temperature range °C	Pressure range max. bar
RKJ 111	Polymer tubing	9	11	10…120	1
RKJ 112	Polymer tubing	12	14	10…120	1
LZS 021	Insulated	12	21	-35…90	-
RKJ 031	Reinforced fibres	13 (1/2“)	19	-40...100	20
RKJ 032	Reinforced fibres	19 (3/4“)	27	-40...100	20
RKJ 009	Tube insulation for 1/2“	23	33	-50…105	-
RKJ 013	Tube insulation for 3/4“	29	39.5	-50…105	-

d_i = internal diameter ; d_e = external diameter

RKJ 031

Adapter G 3/4“

Cat. No.	Designation	Description
LWZ 016	Nipple	3/4“ Screw cap, 1/2“ nipple
LWZ 040	Nipple	3/4“ Screw cap, 10 mm nipple

LWZ 016

Stainless steel hose clamps

To secure hoses

Cat. No.	Description
EZS 012	Hose clamp for external diameter 10-16 mm, 1/2“
EZS 013	Hose clamp for external diameter 12-22 mm, 1/2“
EZS 015	Hose clamp for external diameter 20-32 mm, 3/4“

EZS 012

Heat transfer liquids

Cat. No.	Description	Temperature range °C
LZB 120	Aqua 90, 5 L	5…90
LZB 220	Aqua 90, 10 L	5…90
LZB 320	Aqua 90, 20 L	5…90
LZB 109	Kryo 30, 5 L	-30…90
LZB 209	Kryo 30, 10 L	-30…90
LZB 309	Kryo 30, 20 L	-30…90

LZB 209

Order the detailed LAUDA accessories brochure and the heat transfer liquids brochure free of charge. These and additional product information can also be found at **www.lauda.de**

Temperature solutions:

Thermostats · Circulation chillers · Water baths
Process cooling systems · Heat transfer systems · Secondary circuit systems

LAUDA DR. R. WOBSER GMBH & CO. KG
Headquarters
Pfarrstraße 41/43
97922 Lauda-Königshofen
Germany
Phone: +49 (0)9343 503-0
E-mail: info@lauda.de

LAUDA-Noah, LP
308 Digital Drive
Morgan Hill, CA 95037
USA
Tel.: +1 360 993 1395
E-mail: info@lauda-noah.com

LAUDA Technology Ltd.
4200 Waterside
Solihull Parkway
Birmingham Business Park
B37 7YN Birmingham
Great Britain
Phone: +44 121 717 4789
E-mail: info@lauda-technology.co.uk

LAUDA China Co. Ltd. Shanghai
2nd floor, Building 6
No. 201 MinYi Road
SongJiang District
201612 Shanghai
China
Phone: +86 21 64401098
E-mail: info@lauda.cn

LAUDA-Brinkmann, LP
1819 Underwood Boulevard
08075 Delran, NJ
USA
Phone: +1 856 7647300
E-mail: info@lauda-brinkmann.com

LAUDA América Latina Tecnologia Ltda.
Av. Paulista, 726 – 17° andar – Cj. 1707
01310-910 – São Paulo – SP
Brazil
Phone: +55 11 3192-3904
E-mail: info@lauda.net.br

LAUDA France S.A.R.L.
Parc Technologique de Paris Nord II
Bâtiment G
69, rue de la Belle Etoile
BP 81050 Roissy en France
95933 Roissy Charles de Gaulle Cedex
France
Phone: +33 1 48638009
E-mail: info@lauda.fr

Office Beijing
15/F, Office Building A,
Parkview Green,
9 Dongdaqiao Road,
Chaoyang District
100020 Beijing
China
Phone: +86 10 57306210
E-mail: info@lauda.cn

LAUDA-Brinkmann, LP
308 Digital Drive
Morgan Hill, CA 95037
USA
Phone: +1 856 7647300
E-mail: info@lauda-brinkmann.com

LAUDA Ultracool S.L.
C/ Colom, 606
08228 Terrassa (Barcelona)
Spain
Phone: +34 93 7854866
E-mail: info@lauda-ultracool.com

LAUDA Italia S.r.l.
Strada 6 – Palazzo A – Scala 13
20090 Assago Milanofiori (MI)
Italy
Phone: +39 02 9079194
E-mail: info@lauda-italia.it

LAUDA Singapore Pte. Ltd.
25 International Business Park
#04-103M German Centre
Singapore 609916
Phone: +65 6563 0241
E-mail: info@lauda.sg

LAUDA-Noah, LP
2501 SE Columbia Way, Suite 140
Vancouver, WA 98661
USA
Tel.: +1 360 993 1395
E-Mail: info@lauda-noah.com

LAUDA IBÉRICA SOLUCIONES TÉCNICAS, S.L.
C/ Colom, 606
08228 Terrassa (Barcelona)
Spain
Phone: +34 93 7854866
E-mail: info@lauda-iberica.es

OOO „LAUDA Wostok“
Malaja Pirogowskaja Str. 5
119435 Moscow
Russia
Phone: +7 495 9376562
E-mail: info@lauda.ru

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LAUDA DR. R. WOBSER GMBH & CO. KG
Pfarrstraße 41/43 · 97922 Lauda-Königshofen · Germany
Phone: +49 (0)9343 503-0 · Fax: +49 (0)9343 503-222
E-mail: info@lauda.de · Internet: www.lauda.de