LAUDA CIRCULATION CHILLERS



Specific application examples

- Rotary evaporators
- Distillation systems
- Spectrometers
- Supply of cooling traps
- Digital printing
- Laser cutting
- Laser sorting
- Point welding
- Injection molding
- Tunnel drilling machines
- Centralized cooling water supply


LAUDA
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LAUDA Microcool

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

−10 °C 40 °C

Compact circulation chillers with outstanding price-performance ratio
The LAUDA Microcool line of user-friendly circulation chillers consists of four compact models with large LED display and membrane keypad, offering cooling capacities of 0.25 to 1.2 kW. The highlight of these devices is the premium quality centrifugal pump with magnetic coupling – unique to this price category: Magnetic coupling of pump and electric motor prevents any kind of seal issue from arising on the pump shaft, eliminating the chance for any fluid to leak.



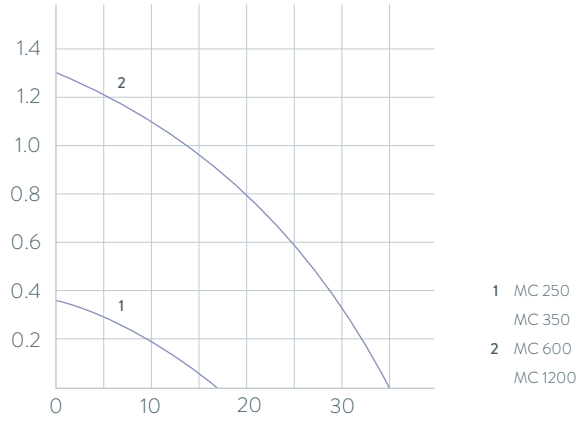
Illuminated viewing glass enables quick identification of the fill level



Standard-issue RS 232 interface and alarm contact

PUMP CHARACTERISTICS Water

Pressure bar



Pump flow L/min

1 MC 250
MC 350
2 MC 600
MC 1200

Important functions
- Auto-start timer and auto shutdown function
- Filling opening at the top, drain connection at the rear
- Cooling capacity adapted via solenoid valve control, including automatic compressor control

Included accessories
Nipples, screw caps

Further accessories
Tubing

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

More at **www.lauda.de/1764**



LAUDA Microcool

The compact circulation chillers MC 250 and MC 350 fit effortlessly on a lab bench. Somewhat larger models are also available having 600 and 1200 watts of cooling capacity and which can be positioned on the floor under a lab bench to save space.



LAUDA Variocool

Circulation chillers up to 10 kW from −20 to 40 °C for the dissipation of process heat in laboratories, mini plants and production

−20 °C 40 °C

Comprehensive spectrum of services for demanding temperature control tasks
The LAUDA Variocool circulation chillers impress with their space-saving construction and versatility provided by a wide variety of options. They are simple and convenient to operate via the color TFT display. Other interfaces can be retrofitted to supplement the standard USB interface and alarm contact. Positioned in the front of the device they allow easy access. The working pressure and flow rate can be adapted to the respective requirements in different applications using an integrated bypass and optional pumps to achieve optimum temperature control.



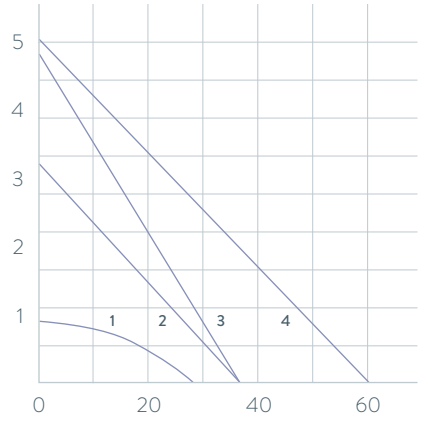
Color TFT display and membrane keypad offer simple and easy adjustment options



Standard-issue USB interface and alarm contact as well as additional optional interfaces that can be retrofitted

PUMP CHARACTERISTIC Water

Pressure bar



Pump flow L/min

1 0,9 bar, 28 L/min
2 3,2 bar, 37 L/min
3 4,8 bar, 37 L/min
4 5,0 bar, 60 L/min

Important functions
- Adjustable bypass for pressure limitation
- Filling opening at the top, drain tap at the rear
- Integral programmer
- Electronic level indicator and low-level alarm
- SmartCool system for energy-saving digital cooling control including automatic compressor control

Included accessories
Nipples, screw caps

Further accessories
Hoses, 2-port and 4-port manifold, ball valves, flow monitors and interface modules

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

More at **www.lauda.de/1766**



LAUDA Variocool

All models are available in air and water-cooled versions (W) and fitted with moveable as well as fixable castors. High-performance circulation chillers in a tower design starting from the VC 5000 model are available with sound insulation or the option of outdoor installation.

LAUDA Circulation chillers

Function overview

Operating element	Microcool	Variocool	Ultracool UC 8 - UC 65	Ultracool Mini, Maxi
Display	7-Segment	TFT	LCD	LCD mono
Mode of operation	3-button	Cursor softkey	6-button	3-button softkey
1-point calibration	√	√	-	-
Programmer, programs/segments	-	5 / 150	-	-
Programmer, tolerance range function	-	√	-	-
Graphic temperature profile display	-	√	-	-
Pump pressure display (analog)	- / √	√	√	√
Pump pressure display (digital)	-	-	√	-
Adjustable bypass	-	√	√	√
Level indicator (analog)	√	-	-	-
Level indicator (digital)	-	√	-	-
Standby timer	√	√	-	√
Flow control instrument	-	Z	-	-
Overflow	√	-	-	-
Low-level alarm	√	√	√	√
Drain tap	-	√	√	√
Drain screw	√	-	-	-

LAUDA 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	Heater power max. kW	Cooling output kW					Pump pressure max. bar	Pump flow max. pressure L/min	Pump connection thread mm	Bath volume min. L
						20 °C	10 °C	0 °C	–10 °C	–20 °C				
LAUDA Microcool / Page 114														
MC 250	–10 ... 40	0.50	5 ... 40	Air	-	0.25	0.20	0.15	0.09	-	0.4	16	Ø 10 mm	2.0
MC 350	–10 ... 40	0.50	5 ... 40	Air	-	0.35	0.27	0.20	0.12	-	0.4	16	Ø 10 mm	4.0
MC 600	–10 ... 40	0.50	5 ... 40	Air	-	0.60	0.50	0.36	0.15	-	1.3	35	G 3/4	4.0
MC 1200	–10 ... 40	0.50	5 ... 40	Air	-	1.20	1.05	0.75	0.40	-	1.3	35	G 3/4	7.0
LAUDA Variocool / Page 116														
VC 1200	–20 ... 40	0.05	5 ... 40	Air	-	1.20	1.00	0.70	0.40	0.14	0.9	28	G 3/4	8.0
VC 1200	–20 ... 40	0.05	5 ... 40	Air	-	1.12	0.92	0.62	0.32	0.06	3.2	37	G 3/4	8.0
VC 1200	–20 ... 40	0.05	5 ... 40	Air	-	1.00	0.80	0.50	0.20	0.01	4.8	37	G 3/4	8.0
VC 1200 W	–20 ... 40	0.05	5 ... 40	Water	-	1.20	1.00	0.70	0.40	0.14	0.9	28	G 3/4	8.0
VC 1200 W	–20 ... 40	0.05	5 ... 40	Water	-	1.12	0.92	0.62	0.32	0.06	3.2	37	G 3/4	8.0
VC 1200 W	–20 ... 40	0.05	5 ... 40	Water	-	1.00	0.80	0.50	0.20	0.01	4.8	37	G 3/4	8.0
VC 2000	–20 ... 40	0.05	5 ... 40	Air	-	2.00	1.50	1.06	0.68	0.38	0.9	28	G 3/4	8.0
VC 2000	–20 ... 40	0.05	5 ... 40	Air	-	1.92	1.42	0.98	0.60	0.30	3.2	37	G 3/4	8.0
VC 2000	–20 ... 40	0.05	5 ... 40	Air	-	1.80	1.30	0.86	0.48	0.18	4.8	37	G 3/4	8.0
VC 2000 W	–20 ... 40	0.05	5 ... 40	Water	-	2.00	1.50	1.06	0.68	0.38	0.9	28	G 3/4	8.0
VC 2000 W	–20 ... 40	0.05	5 ... 40	Water	-	1.92	1.42	0.98	0.60	0.30	3.2	37	G 3/4	8.0
VC 2000 W	–20 ... 40	0.05	5 ... 40	Water	-	1.80	1.30	0.86	0.48	0.18	4.8	37	G 3/4	8.0
VC 3000	–20 ... 40	0.05	5 ... 40	Air	-	3.00	2.40	1.68	0.95	0.45	3.2	37	G 3/4	20.0
VC 3000	–20 ... 40	0.05	5 ... 40	Air	-	2.80	2.20	1.48	0.75	0.25	4.8	37	G 3/4	20.0
VC 3000 W	–20 ... 40	0.05	5 ... 40	Water	-	3.00	2.40	1.68	0.95	0.45	3.2	37	G 3/4	20.0
VC 3000 W	–20 ... 40	0.05	5 ... 40	Water	-	2.80	2.20	1.48	0.75	0.25	4.8	37	G 3/4	20.0
VC 5000	–20 ... 40	0.05	5 ... 40	Air	-	5.00	3.90	2.75	1.70	0.90	3.2	37	G 3/4	20.0
VC 5000	–20 ... 40	0.05	5 ... 40	Air	-	4.50	3.40	2.25	1.20	0.40	4.8	37	G 3/4	20.0
VC 5000	–20 ... 40	0.05	5 ... 40	Air	-	4.65	3.55	2.40	1.35	0.55	5.0	60	G 3/4	20.0
VC 5000 W	–20 ... 40	0.05	5 ... 40	Water	-	5.00	3.90	2.75	1.70	0.90	3.2	37	G 3/4	20.0
VC 5000 W	–20 ... 40	0.05	5 ... 40	Water	-	4.50	3.40	2.25	1.20	0.40	4.8	37	G 3/4	20.0
VC 5000 W	–20 ... 40	0.05	5 ... 40	Water	-	4.65	3.55	2.40	1.35	0.55	5.0	60	G 3/4	20.0
VC 7000	–20 ... 40	0.10	5 ... 40	Air	-	7.00	5.30	3.70	2.40	1.30	3.2	37	G 1 1/4	48.0
VC 7000	–20 ... 40	0.10	5 ... 40	Air	-	6.50	4.80	3.20	1.90	0.80	4.8	37	G 1 1/4	48.0
VC 7000	–20 ... 40	0.10	5 ... 40	Air	-	6.65	4.95	3.35	2.05	0.95	5.0	60	G 1 1/4	48.0

*For Variocool: load-dependent

Bath volume max. L	**Dimensions (W × D × H)** mm	**Protection Rating**	**Noise level** dB (A)	**Weight** kg	**Loading max.** kW	**Power supply** V; Hz	**Cat. No.**	**Device type**
4.0	200 × 350 × 465	IP 32	60	26.0	0.2	230 V; 50 Hz	L001046	MC 250
7.0	240 × 400 × 500	IP 32	60	35.0	0.5	230 V; 50 Hz	L001047	MC 350
8.0	350 × 480 × 595	IP 32	57	51.0	0.7	230 V; 50 Hz	L001048	MC 600
14.0	450 × 550 × 650	IP 32	59	64.0	1.2	230 V; 50 Hz	L001049	MC 1200
15.0	450 × 550 × 650	IP 32	51	54.0	1.1	230 V; 50 Hz	L000657	VC 1200
15.0	450 × 550 × 790	IP 32	53	54.0	1.1	230 V; 50 Hz	L000784	VC 1200
15.0	450 × 550 × 790	IP 32	57	54.0	1.1	230 V; 50 Hz	L000785	VC 1200
15.0	450 × 550 × 650	IP 32	50	51.0	1.1	230 V; 50 Hz	L000671	VC 1200 W
15.0	450 × 550 × 790	IP 32	52	51.0	1.1	230 V; 50 Hz	L000805	VC 1200 W
15.0	450 × 550 × 790	IP 32	56	51.0	1.1	230 V; 50 Hz	L000806	VC 1200 W
15.0	450 × 550 × 650	IP 32	52	57,0	1.6	230 V; 50 Hz	L000658	VC 2000
15.0	450 × 550 × 790	IP 32	56	57.0	1.6	230 V; 50 Hz	L000786	VC 2000
15.0	450 × 550 × 790	IP 32	58	57.0	1.6	230 V; 50 Hz	L000787	VC 2000
15.0	450 × 550 × 650	IP 32	50	54.0	1.6	230 V; 50 Hz	L000672	VC 2000 W
15.0	450 × 550 × 790	IP 32	53	54.0	1.6	230 V; 50 Hz	L000807	VC 2000 W
15.0	450 × 550 × 790	IP 32	56	54.0	1.6	230 V; 50 Hz	L000808	VC 2000 W
33.0	550 × 650 × 970	IP 32	57	93.0	1.8	230 V; 50 Hz	L000659	VC 3000
33.0	550 × 650 × 970	IP 32	61	93.0	1.8	230 V; 50 Hz	L000788	VC 3000
33.0	550 × 650 × 970	IP 32	55	89.0	1.8	230 V; 50 Hz	L000673	VC 3000 W
33.0	550 × 650 × 970	IP 32	59	89.0	1.8	230 V; 50 Hz	L000809	VC 3000 W
33.0	550 × 650 × 970	IP 32	65	98.0	3.3	400 V; 3/N/PE; 50 Hz	L000668	VC 5000
33.0	550 × 650 × 970	IP 32	69	98.0	3.3	400 V; 3/N/PE; 50 Hz	L000799	VC 5000
33.0	550 × 650 × 970	IP 32	69	98.0	3.3	400 V; 3/N/PE; 50 Hz	L000802	VC 5000
33.0	550 × 650 × 970	IP 32	64	94.0	3.3	400 V; 3/N/PE; 50 Hz	L000680	VC 5000 W
33.0	550 × 650 × 970	IP 32	68	94.0	3.3	400 V; 3/N/PE; 50 Hz	L000820	VC 5000 W
33.0	550 × 650 × 970	IP 32	68	94.0	3.3	400 V; 3/N/PE; 50 Hz	L000823	VC 5000 W
64.0	650 × 670 × 1250	IP 32	66	138.0	4.3	400 V; 3/N/PE; 50 Hz	L000669	VC 7000
64.0	650 × 670 × 1250	IP 32	69	138.0	4.3	400 V; 3/N/PE; 50 Hz	L000800	VC 7000
64.0	650 × 670 × 1250	IP 32	69	138.0	4.3	400 V; 3/N/PE; 50 Hz	L000803	VC 7000

LAUDA 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	Heater power max. kW	Cooling output kW					Pump pressure max. bar	Pump flow max. pressure L/min	Pump connection thread mm	Bath volume min. L
						20 °C	10 °C	0 °C	–10 °C	–20 °C				
LAUDA Variocool / Page 116														
VC 7000 W	–20 ... 40	0.10	5 ... 40	Water	-	7.00	5.30	3.70	2.40	1.30	3.2	37	G 1 1/4	48.0
VC 7000 W	–20 ... 40	0.10	5 ... 40	Water	-	6.50	4.80	3.20	1.90	0.80	4.8	37	G 1 1/4	48.0
VC 7000 W	–20 ... 40	0.10	5 ... 40	Water	-	6.65	4.95	3.35	2.05	0.95	5.0	60	G 1 1/4	48.0
VC 10000	–20 ... 40	0.10	5 ... 40	Air	-	10.00	7.60	5.30	3.50	2.00	3.2	37	G 1 1/4	48.0
VC 10000	–20 ... 40	0.10	5 ... 40	Air	-	9.50	7.10	4.80	3.00	1.50	4.8	37	G 1 1/4	48.0
VC 10000	–20 ... 40	0.10	5 ... 40	Air	-	9.65	7.25	4.95	3.15	1.65	5.0	60	G 1 1/4	48.0
VC 10000 W	–20 ... 40	0.10	5 ... 40	Water	-	10.00	7.60	5.30	3.50	2.00	3.2	37	G 1 1/4	48.0
VC 10000 W	–20 ... 40	0.10	5 ... 40	Water	-	9.50	7.10	4.80	3.00	1.50	4.8	37	G 1 1/4	48.0
VC 10000 W	–20 ... 40	0.10	5 ... 40	Water	-	9.65	7.25	4.95	3.15	1.65	5.0	60	G 1 1/4	48.0

*load-dependent

Bath volume max. L	**Dimensions (W × D × H)** mm	**Protection Rating**	**Noise level** dB (A)	**Weight** kg	**Loading max.** kW	**Power supply** V; Hz	**Cat. No.**	**Device type**
64.0	650 × 670 × 1250	IP 32	60	131.0	4.3	400 V; 3/N/PE; 50 Hz	L000681	VC 7000 W
64.0	650 × 670 × 1250	IP 32	64	131.0	4.3	400 V; 3/N/PE; 50 Hz	L000821	VC 7000 W
64.0	650 × 670 × 1250	IP 32	64	131.0	4.3	400 V; 3/N/PE; 50 Hz	L000824	VC 7000 W
64.0	650 × 670 × 1250	IP 32	67	147.0	5.4	400 V; 3/N/PE; 50 Hz	L000670	VC 10000
64.0	650 × 670 × 1250	IP 32	70	147.0	5.4	400 V; 3/N/PE; 50 Hz	L000801	VC 10000
64.0	650 × 670 × 1250	IP 32	70	147.0	5.4	400 V; 3/N/PE; 50 Hz	L000804	VC 10000
64.0	650 × 670 × 1250	IP 32	61	140.0	5.4	400 V; 3/N/PE; 50 Hz	L000682	VC 10000 W
64.0	650 × 670 × 1250	IP 32	65	140.0	5.4	400 V; 3/N/PE; 50 Hz	L000822	VC 10000 W
64.0	650 × 670 × 1250	IP 32	65	140.0	5.4	400 V; 3/N/PE; 50 Hz	L000825	VC 10000 W