

The right temperature worldwide

LAUDA

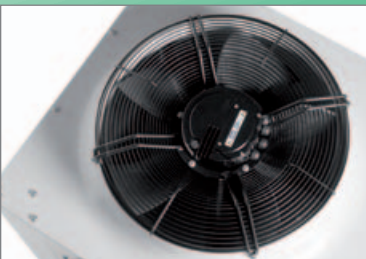


- Low maintenance requirements
- Flexible designs for customization
- Suitable for outdoor installation

LAUDA Ultracool
Industrial chillers

LAUDA Ultracool

Process circulation chillers for industrial applications with cooling outputs up to 265 kW from -5 up to 25 °C



Application examples

- Digital printing
- Laser cutting
- Laser sorting
- Point welding
- Induction heating
- Injection molding
- Centralized cooling water supply

High cooling outputs, compact design, versatile options

LAUDA Ultracool chillers provide reliable temperature control and ensure secure processing. The models are plug & operate systems equipped with a cold water tank, a centrifugal pump and an internal bypass. All chillers are already equipped with an antifreeze protection thermostat to prevent freezing of the heat exchanger. Integrated pres-

sure switches protect the circuit against pressure levels that drift too high or too low. Housings made from galvanized steel and externally coated with epoxy resin protects against corrosion even under aggressive ambient conditions. All models are suitable for outdoor installation.

Your advantages at a glance



The Ultracool advantages

Your benefits



- Centrifugal high-quality water pump with internal bypass
- Use of plate heat exchangers outside of the water tank
- Evaporator and pump in stainless steel construction
- Level switch

- Allows flow rates from 0 to 100 percent
- Efficient heat exchange and low energy loss
- Corrosion resistant
- Pump protection in case of low level



- Integrated water filter and antibacterial additive
- Insulated water tank made of polyethylene
- Use of thermostatic expansion valve

- Protection of application and chiller system
- Corrosion resistant and durable
- Automatic adjustment to changing work load conditions and optimal cooling output



- Protection class IP 54
- Suitable for ambient temperatures up to 50 °C
- Housing made from galvanized steel and externally coated with epoxy resin
- Antifreeze protection thermostat
- Use of refrigerants with low global warming potential (GWP* < 2,500)

- Suitable for outdoor installation
- Operation under extreme ambient temperature conditions
- Protection against corrosion even under aggressive ambient conditions
- Prevents freezing of heat exchanger
- Fulfills the European F Gas Directive No. 517/2014



- Versatile options and accessories, including pump, special color, stainless steel housing, wheels, external bypass, water-cooled versions, deionized water. Additional options and accessories see page 12.

- Customization possibilities for OEM



- Compact and smart design
- Integrated pressure switches
- Large cold water tank

- User friendly installation and maintenance and reduction of footprint to save installation space
- Protection of the refrigeration circuit against pressures that drift too high or too low
- Keeps water temperature constant even under varying load conditions

*GWP = Global Warming Potential

LAUDA Ultracool

Ultracool UC Mini chillers up to 4.9 kW



The three UC Mini chillers are available with cooling outputs from 2.1 up to 4.9 kW. The models work with a hermetic compressor and a centrifugal pump. The pump is noise reduced and works with a very flat flow rate/pressure characteristic. This allows the user to easily adjust the water flow without jeopardizing the pressure.

Compared to the previous models the device dimensions were significantly reduced. Due to the optimized geometry of the devices an easy access to the components that need to be serviced regularly is provided. The temperature range in which the coolers can be used now covers an extended temperature from 0 up to 50 °C ambient. Additionally outdoor installation of these circulation chillers is available as an option.



Circulation chiller UC 4



Options and accessories UC Mini

- 5 bar pump
- Refrfluid 1 (heat transfer liquid with antifreeze + bactericide + anticorrosive)
- External bypass
- Modbus remote control
- Increased temperature stability ± 1 K (instead of ± 2 K)
- Water-cooled version
- Stainless steel housing
- Wheels
- Customized color
- Condenser air filter
- 3-phase power supply
- Outdoor installation (IP 54)



Additional technical data from page 10

NEW

NEW

NEW

Technical features UC Mini		UC 2	UC 3	UC 4
Working temperature range	°C	-5...25	-5...25	-5...25
Ambient temperature range	°C	0...50	0...50	0...50
Cooling output*	kW	2.1	4.1	4.9
Pump pressure nominal**	bar	3.3	3.0	2.8
Pump flow nominal**	L/min	5.6	10.3	13.8
Volume water tank	L	20	20	20
Cat. No. 230 V; 50 Hz		E6002411	E6003411	E6004411
Cat. No. 230 V; 60 Hz		E6002431	E6003431	E6004431

* At 10 °C water outlet temperature and 25 °C ambient temperature, for 50 Hz versions

** Nominal values: at a temperature difference of 5 K between inlet and outlet at the given cooling capacity

Ultracool

UC Midi chillers up to 26.3 kW



Six UC Midi types have cooling outputs ranging from 7.1 up to 26.3 kW. The models work with a reciprocating or scroll compressor and a centrifugal pump. The noise-reduced pump allows customers to easily adjust the water flow. The use of R 134a as refrigerant ensures very low working pressures inside the refrigeration system and operation in ambient temperatures up to 50 °C. The integrated motor fan speed regulator allows operation in ambient conditions up to -15 °C and reduces the noise level additionally.

The models UC-0060 to UC-0240 are also available as UC laser models with pre-configured options included.



Circulation chiller UC-0240 SP



Options and accessories UC Midi

- 5 bar pump
- Refrfluid 1 (heat transfer liquid with antifreeze + bactericide + anticorrosive)
- External bypass
- Modbus remote control
- Auto filling kit
- Increased temperature stability ± 1 K (instead of ± 2 K)
- Water pre-heater
- Water-cooled version
- Feet (wheels as standard)
- External threaded BSP (British Standard Pipe) or NPT stainless steel connections
- Customized color
- Condenser air filter



UC laser with:

- 5 bar pump
- Pump totally in stainless steel
- Increased temperature stability ± 1 K



Additional technical data from page 10

Technical features UC Midi Superplus		UC-0060 SP	UC-0080 SP	UC-0100 SP	UC-0140 SP	UC-0180 SP	UC-0240 SP
Working temperature range	°C	-5...25	-5...25	-5...25	-5...25	-5...25	-5...25
Ambient temperature range	°C	-15...50	-15...50	-15...50	-15...50	-15...50	-15...50
Cooling output*	kW	7,1	9,4	11,4	14,0	22,0	26,3
Pump pressure nominal**	bar	4,0	4,0	3,9	3,7	3,2	2,7
Pump flow nominal**	L/min	20,1	26,6	33,6	43,8	62,6	84,1
Volume water tank	L	100	100	100	100	100	100
Cat. No. 400 V; 3/PE; 50 Hz		E6006323	E6008323	E6010323	E6014323	E6018323	E6024323
Cat. No. 460 V; 3/PE; 60 Hz		E6006341	E6008341	E6010341	E6014341	E6018341	E6024341

* At 10 °C water outlet temperature and 25 °C ambient temperature, for 50 Hz versions

** Nominal values: at a temperature difference of 5 K between inlet and outlet at the given cooling capacity

Ultracool UC Maxi chillers up to 265 kW



Within the Ultracool Maxi range, there are four chillers with cooling outputs from 34.1 up to 64.4 kW which work with one single refrigeration circuit. The five models from 87.9 up to 265 kW of cooling capacities work with two independent refrigeration circuits to provide a backup security. All Maxi models are equipped with scroll compressors, work with R 407C as refrigerant and are suitable for outdoor installation. The internal pipes for the water circuit are made of PP-R (polypropylene random copolymer) and are thermowelded. Besides the main advantage that these connections are absolutely leak free, PP-R is corrosion and frost proof, allow for smaller pressure drops and are long lasting.

The models UC-0300 to UC-0650 are also available as UC laser models with pre-configured options included.



Circulation chiller UC-0400 SP



Options and accessories UC Maxi

- 5 bar pump
- Refrfluid 1 (heat transfer liquid with antifreeze + bactericide + anticorrosive)
- External bypass
- Auto filling kit
- Increased temperature stability ± 1 K (instead of ± 2 K)
- Water pre-heater
- Water-cooled version
- External threaded BSP or NPT stainless steel connections
- Motor fan speed regulator (for ambient temperatures below 0°C)
- Modbus remote control



UC laser with:

- 5 bar pump
- Pump totally in stainless steel
- Increased temperature stability ± 1 K



Additional technical data from page 10

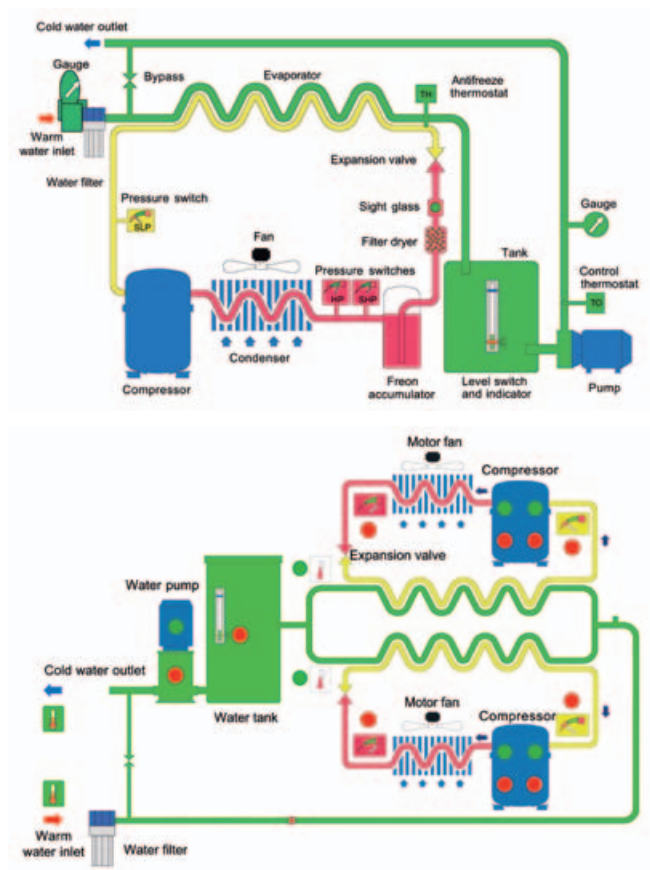
Technical features	UC Maxi Superplus	UC-0300 SP	UC-0400 SP	UC-0500 SP	UC-0650 SP	UC-0800 SP	UC-1000 SP	UC-1350 SP	UC-1700 SP	UC-2400 SP
Working temperature range	$^{\circ}\text{C}$	-5...25	-5...25	-5...25	-5...25	-5...25	-5...25	-5...25	-5...25	-5...25
Ambient temperature range*	$^{\circ}\text{C}$	-15...45	-15...45	-15...45	-15...45	-15...45	-15...45	-15...45	-15...45	-15...45
Cooling output**	kW	34.1	43.3	48.7	64.4	87.9	106.4	139.2	175.7	265.0
Pump pressure nominal***	bar	3.9	3.6	3.3	3.7	3.4	3.3	4.3	3.6	3.8
Pump flow nominal***	L/min	98.0	123.0	150.0	196.0	247.0	299.0	392.0	494.0	733.0
Volume water tank	L	200	200	200	300	300	500	500	500	500
Cat. No. 400 V; 3/PE; 50 Hz		E6030323	E6040323	E6050323	E6065323	E6080223	E6100221	E6135221	E6170221	E6240221
Cat. No. 460 V; 3/PE; 60 Hz		E6030341	E6040341	E6050341	E6065341	E6080241	E6100241	E6135241	E6170241	E6240241

* -15 $^{\circ}\text{C}$ only with option motor fan speed regulator (see page 12)

** At 10 $^{\circ}\text{C}$ water outlet temperature and 25 $^{\circ}\text{C}$ ambient temperature, for 50 Hz versions

*** Nominal values: at a temperature difference of 5 K between inlet and outlet at the given cooling capacity

Refrigeration circuits



To secure high quality and reliability for the refrigeration circuits, only components of renowned suppliers are used.

The Ultracool models UC 2 to UC-0650 work with one refrigeration circuit.

The Ultracool models UC-0800 to UC-2400 work with two refrigeration circuits.

The two independent refrigeration circuits provide a backup security. If one circuit should fail, the unit still runs with 50 percent of the cooling capacity. If less cooling capacity is needed one refrigeration circuit is switched off. Thus, energy consumption and consequently operation costs are reduced.

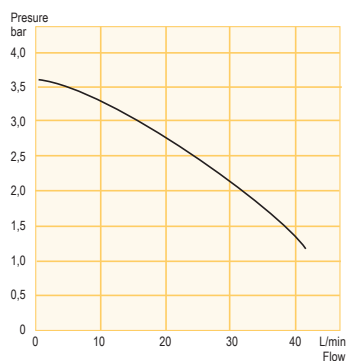
Pumps

In the following tables pump performances are indicated in nominal values. By definition, these are values at a temperature difference of 5 K between inlet and outlet at the given cooling capacity.

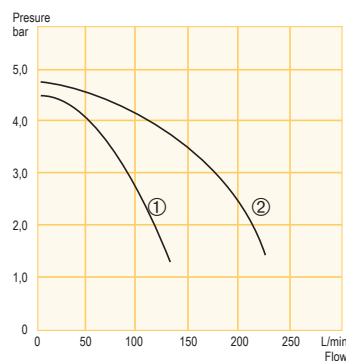
Note:

In addition to the pumps mentioned in this document, there is the possibility to provide the Ultracool chillers with customized pumps.

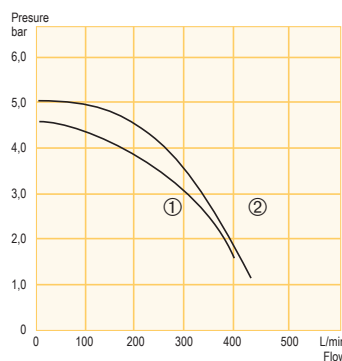
Pump characteristics, Standard pumps (3 bar), 50 Hz



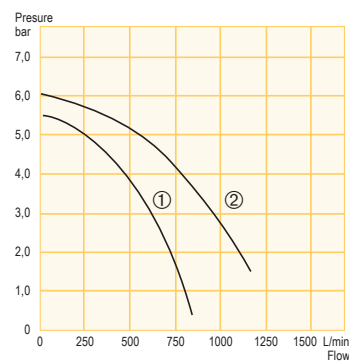
UC 2, UC 3, UC 4



① UC-0060, UC-0080, UC-0100,
UC-0140, UC-0180, UC-0240
② UC-0300, UC-0400; UC-0500



① UC-0650, UC-0800
② UC-1000

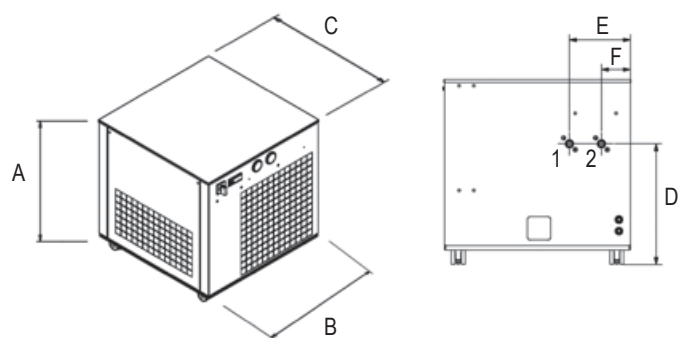


① UC-1350, UC-1700
② UC-2400

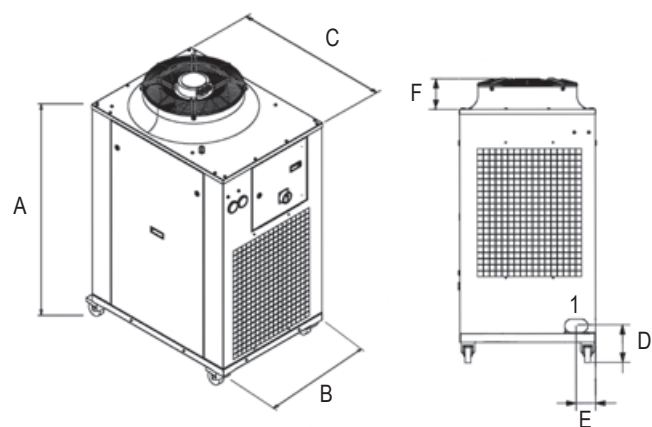
LAUDA Ultracool

Unit dimensions

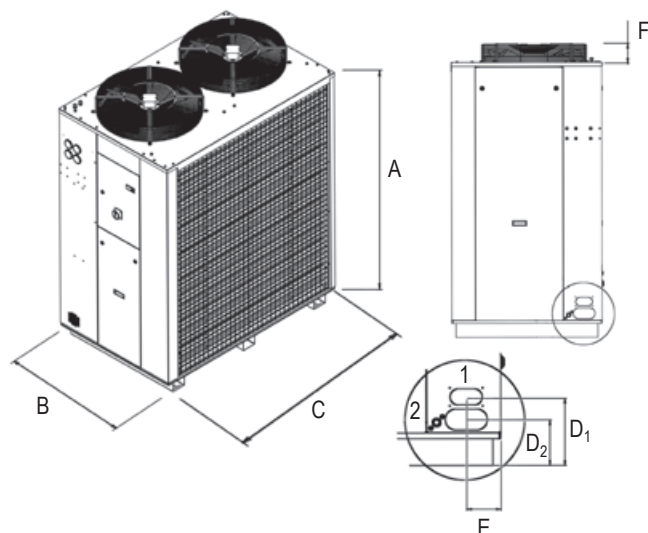
UC Mini UC 2, UC 3, UC 4



UC Midi UC-0060 to UC-0240



UC Maxi UC-0300 to UC-0650



Type	A	B	C mm	D	E	F
UC 2	635	640	640	414	210	100
UC 3	635	640	640	414	210	100
UC 4	635	640	640	414	210	100

1: water outlet
2: water inlet

Type	A	B	C mm	D	E	F
UC-0060	1330	715	945	188	101	162
UC-0080	1330	715	945	188	101	162
UC-0100	1330	715	945	188	101	162
UC-0140	1330	715	945	188	101	162
UC-0180	1330	715	945	188	101	162
UC-0240	1330	715	945	188	101	162

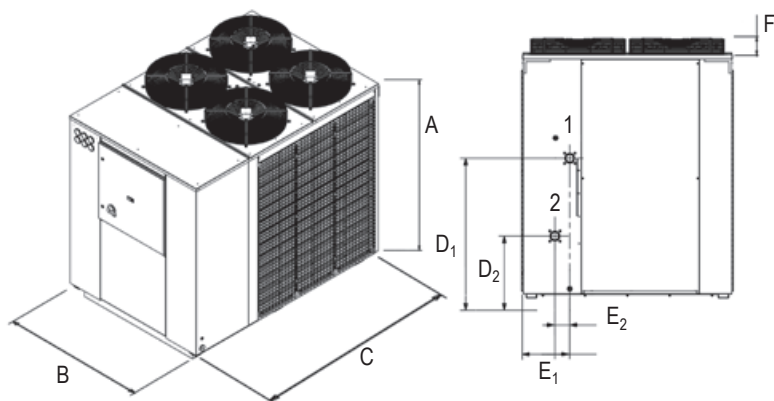
1: connection port
- water inlet
- water outlet
- drain and overflow

Type	A	B	C mm	D ₁	D ₂	E	F
UC-0300	1843	1006	1566	239	160	120	125
UC-0400	1843	1006	1566	239	160	120	125
UC-0500	1843	1006	1566	239	160	120	125
UC-0650	1843	1006	1566	239	160	120	125

1: water inlet and outlet
2: overflow and drain pipe

Unit dimensions

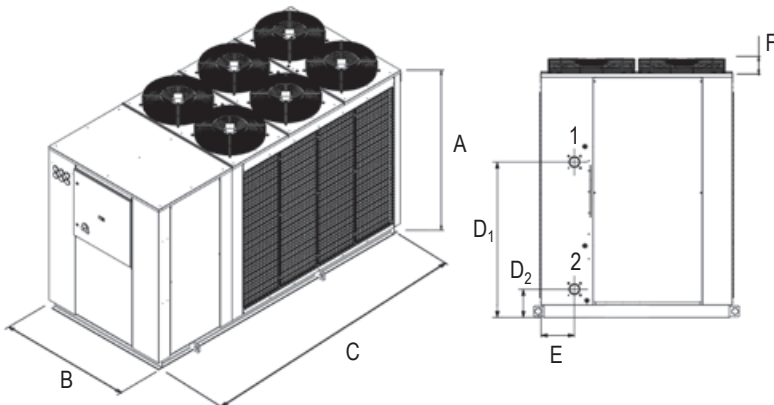
UC Maxi UC-0800 to UC-1000



Type	A	B	C mm	D ₁	D ₂	E ₁	E ₂	F
UC-0800	1885	1545	2230	1123	548	345	110	124
UC-1000	1965	1660	3400	1253	228	270	270	124

1: water inlet
2: water outlet

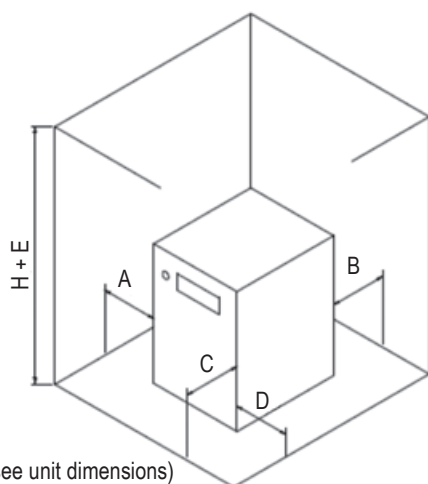
UC Maxi UC-1350 to UC-2400



Type	A	B	C mm	D ₁	D ₂	E	F
UC-1350	1965	1660	3400	1253	228	270	124
UC-1700	1965	1660	3400	1253	228	270	124
UC-2400	1965	1660	3585	1413	273	297	124

1: water inlet
2: water outlet

Minimum space requirements around the Ultracool chillers:



H = height of chiller (see unit dimensions)

The Ultracool chillers generate a certain amount of heat during operation. This heat must be removed efficiently. Find the minimum distances around the different chiller types in the table below.

Minimum distance in m	A	B	C	D	E
Mini	0.5	0.5	0.5	0.5	0.5
Midi	1	1	1	1	1
Maxi	2	2	2	2	2

LAUDA Technical data 50 and 60 Hz

Type	Working temperature range		Temperature stability	Ambient temperature range		Cooling output at water outlet temperature*						Refrigerant circuit		Motor fan	
	°C	±K		°C	25 °C	20 °C	15 °C	10 °C	5 °C	0 °C	5 °C				
					kW	kW	kW	kW	kW	kW	kW	No.	kW	m³/h	
LAUDA Ultracool Mini – 230 V; 50 Hz															
UC 2	-5...25	2	0...50	2.8	2.8	2.5	2.1	1.8	1.5	1.2	1	1	0.15	2200	
UC 3	-5...25	2	0...50	5.5	5.5	4.8	4.1	3.4	2.8	2.2	1	1	0.15	2200	
UC 4	-5...25	2	0...50	6.9	6.9	5.9	4.9	4.1	3.4	2.8	1	1	0.15	2200	
LAUDA Ultracool Midi – 400 V; 3/PE; 50 Hz															
UC-0060 SP	-5...25	2	-15...50	10.8	10.2	8.6	7.1	5.8	4.7	3.8	1	1	1.04	7000	
UC-0080 SP	-5...25	2	-15...50	15.8	14.7	11.9	9.4	7.3	5.6	4.1	1	1	1.04	7000	
UC-0100 SP	-5...25	2	-15...50	18.6	17.1	14.3	11.4	8.8	6.6	4.8	1	1	1.04	7000	
UC-0140 SP	-5...25	2	-15...50	22.3	20.2	17.1	14.0	11.0	8.4	6.3	1	1	1.04	7000	
UC-0180 SP	-5...25	2	-15...50	32.9	30.2	26	22.0	18.0	14.5	11.5	1	1	1.04	9000	
UC-0240 SP	-5...25	2	-15...50	37.3	34.6	30.3	26.3	22.3	18.2	14.5	1	1	1.04	9000	
LAUDA Ultracool Maxi – 400 V; 3/PE; 50 Hz															
UC-0300 SP	-5...25	2	-15...45**	50.3	48.2	40.9	34.1	28.2	23.1	18.6	1	2	1.2	18000	
UC-0400 SP	-5...25	2	-15...45**	62.5	59.7	51.2	43.3	35.1	28.1	22.0	1	2	1.2	18000	
UC-0500 SP	-5...25	2	-15...45**	68.4	65.6	56.8	48.7	41.2	33.5	26.8	1	2	1.2	18000	
UC-0650 SP	-5...25	2	-15...45**	84.6	84.6	75.2	64.4	53.6	43.9	35.5	1	2	2.5	23000	
UC-0800 SP	-5...25	2	-15...45**	114.3	114.3	103.0	87.9	72.3	57.8	45.4	2	4	2.4	36000	
UC-1000 SP	-5...25	2	-15...45**	140.8	140.8	126.1	106.4	85.9	67.0	51.2	2	4	2.4	40800	
UC-1350 SP	-5...25	2	-15...45**	182.1	182.1	163.7	139.2	113.7	90.0	69.8	2	6	3.6	57000	
UC-1700 SP	-5...25	2	-15...45**	228.4	228.4	205.9	175.7	144.6	115.6	90.8	2	6	3.6	55200	
UC-2400 SP	-5...25	2	-15...45**	336.9	336.9	308.8	265.0	223.1	182.8	148.2	2	6	7.5	66000	
LAUDA Ultracool Mini – 230 V; 60 Hz															
UC 2	-5...25	2	0...50	3.0	3.0	2.5	2.1	1.8	1.4	1.2	1	1	0.21	2500	
UC 3	-5...25	2	0...50	5.0	5.0	4.4	3.7	3.0	2.5	2.0	1	1	0.21	2500	
UC 4	-5...25	2	0...50	6.5	6.5	5.5	4.6	3.8	3.2	2.6	1	1	0.21	2500	
LAUDA Ultracool Midi – 460 V; 3/PE; 60 Hz															
UC-0060 SP	-5...25	2	-15...50	14.4	13.6	11.3	9.3	7.5	6.0	4.7	1	1	1.04	7000	
UC-0080 SP	-5...25	2	-15...50	18.1	16.9	13.9	11.0	8.6	6.6	4.9	1	1	1.04	7000	
UC-0100 SP	-5...25	2	-15...50	21.8	20.2	17.0	13.9	10.9	8.3	6.1	1	1	1.04	7000	
UC-0140 SP	-5...25	2	-15...50	25.7	23.4	19.9	16.7	13.6	10.5	7.8	1	1	1.04	7000	
UC-0180 SP	-5...25	2	-15...50	37.7	34.8	30.3	25.9	21.4	17.3	13.8	1	1	1.04	9000	
UC-0240 SP	-5...25	2	-15...50	42.7	39.7	34.9	30.4	26.1	21.9	17.6	1	1	1.04	9000	
LAUDA Ultracool Maxi – 460 V; 3/PE; 60 Hz															
UC-0300 SP	-5...25	2	-15...45**	60.1	57.5	49.5	41.3	34.1	27.8	22.5	1	2	1.6	20200	
UC-0400 SP	-5...25	2	-15...45**	72.2	69.2	59.6	50.8	42.1	34.0	27.1	1	2	1.6	20200	
UC-0500 SP	-5...25	2	-15...45**	80.6	77.4	67	57.5	48.8	40.3	32.3	1	2	1.6	20200	
UC-0650 SP	-5...25	2	-15...45**	99.7	99.7	88.8	76.1	64.4	52.7	42.6	1	2	5.8	31400	
UC-0800 SP	-5...25	2	-15...45**	132.5	132.5	120.1	103.4	87.8	70.9	56.3	2	4	3.2	40000	
UC-1000 SP	-5...25	2	-15...45**	162.6	162.6	147.7	127.3	108.0	86.4	67.0	2	4	3.2	48000	
UC-1350 SP	-5...25	2	-15...45**	212.1	212.1	191.9	164.6	139.3	111.6	87.7	2	6	4.9	66000	
UC-1700 SP	-5...25	2	-15...45**	264.9	264.9	240.2	206.7	175.5	141.8	112.6	2	6	4.9	63000	
UC-2400 SP	-5...25	2	-15...45**	396.9	396.9	364.1	313.0	266.4	219.5	177.9	2	6	17.5	91800	

* 25 °C ambient temperature

** -15 °C only with option motor fan speed regulator (see page 12)

Correction factor ambient temperature; $C_{NOM} = C_{WORK} \times F$

Ambient temperature	25	30	35	40	45
Correction factor F	1	0.9	0.85	0.78	0.66

Note: The values calculated with the correction factors are only approximated values.

Pump pressure nominal bar	Pump flow nominal L/min	Water circuit connection*	Volume water tank L	Dimensions (WxDxH) mm	Protection level	Noise level dB(A)	Weight kg	Loading kW	Max. fuse A	Cat. No.	Type
LAUDA Ultracool Mini – 230 V; 50 Hz											
3.3	5.6	Rp 1/2	20	640x640x635	IP 44	50.1	80	1.4	16	E6002411	UC 2
3.0	10.3	Rp 1/2	20	640x640x635	IP 44	50.4	80	1.5	16	E6003411	UC 3
2.8	13.8	Rp 1/2	20	640x640x635	IP 44	50.4	85	1.8	16	E6004411	UC 4
LAUDA Ultracool Midi – 400 V; 3/PE; 50 Hz											
4.0	20.1	HT DN25	100	715x945x1490	IP 54	56.3	165	3.8	20	E6006323	UC-0060 SP
4.0	26.6	HT DN25	100	715x945x1490	IP 54	60.1	175	4.1	25	E6008323	UC-0080 SP
3.9	33.6	HT DN25	100	715x945x1490	IP 54	58.5	175	4.6	25	E6010323	UC-0100 SP
3.7	43.8	HT DN25	100	715x945x1490	IP 54	58.1	180	5.6	25	E6014323	UC-0140 SP
3.2	62.6	HT DN25	100	715x945x1490	IP 54	56.0	210	6.6	32	E6018323	UC-0180 SP
2.7	84.1	HT DN25	100	715x945x1490	IP 54	57.5	230	8.0	40	E6024323	UC-0240 SP
LAUDA Ultracool Maxi – 400 V; 3/PE; 50 Hz											
3.9	98.0	HT DN40	200	1005x1565x1965	IP 54	50.2	450	9.4	40	E6030323	UC-0300 SP
3.6	124.0	HT DN40	200	1005x1565x1965	IP 54	53.5	450	11.4	40	E6040323	UC-0400 SP
3.3	150.0	HT DN40	200	1005x1565x1965	IP 54	55.3	450	13.6	50	E6050323	UC-0500 SP
3.7	196.0	HT DN40	300	1005x1565x1965	IP 54	59.2	630	18.5	63	E6065323	UC-0650 SP
3.4	247.0	Rp 2	300	1545x2230x2010	IP 54	58.3	1020	27.5	80	E6080223	UC-0800 SP
3.3	299.0	Rp 2 1/2	500	1660x3400x2090	IP 54	63.1	1460	32.4	100	E6100221	UC-1000 SP
4.3	392.0	Rp 2 1/2	500	1660x3400x2090	IP 54	62.2	1570	43.8	150	E6135221	UC-1350 SP
3.6	494.0	Rp 2 1/2	500	1660x3400x2090	IP 54	61.3	1630	54.9	150	E6170221	UC-1700 SP
3.8	733.0	DIN-2566 DN80	500	1660x3585x2090	IP 54	62.7	1690	71.4	200	E6240221	UC-2400 SP
LAUDA Ultracool Mini – 230 V; 60 Hz											
3.4	5.6	½" NPT(F)	20	640x640x635	IP 44	53.0	80	1.4	16	E6002431	UC 2
3.0	10.3	½" NPT(F)	20	640x640x635	IP 44	53.2	80	1.5	16	E6003431	UC 3
3.2	13.8	½" NPT(F)	20	640x640x635	IP 44	53.2	85	1.8	16	E6004431	UC 4
LAUDA Ultracool Midi – 460 V; 3/PE; 60 Hz											
3.9	20.1	HT DN25	100	715x945x1490	IP 54	56.5	165	5.0	20	E6006341	UC-0060 SP
3.8	26.6	HT DN25	100	715x945x1490	IP 54	60.8	175	4.9	25	E6008341	UC-0080 SP
3.8	33.6	HT DN25	100	715x945x1490	IP 54	60.8	175	5.8	25	E6010341	UC-0100 SP
3.7	43.8	HT DN25	100	715x945x1490	IP 54	60.8	180	7.0	25	E6014341	UC-0140 SP
3.5	62.6	HT DN25	100	715x945x1490	IP 54	58.0	210	8.3	32	E6018341	UC-0180 SP
3.1	84.1	HT DN25	100	715x945x1490	IP 54	59.1	230	10.5	40	E6024341	UC-0240 SP
LAUDA Ultracool Maxi – 460 V; 3/PE; 60 Hz											
4.7	98.0	HT DN40	200	1005x1565x1965	IP 54	55.6	450	12.5	40	E6030341	UC-0300 SP
4.5	124.0	HT DN40	200	1005x1565x1965	IP 54	57.4	450	15.0	40	E6040341	UC-0400 SP
4.3	150.0	HT DN40	200	1005x1565x1965	IP 54	58.3	450	18.3	50	E6050341	UC-0500 SP
3.8	196.0	HT DN40	300	1005x1565x1965	IP 54	64.8	630	25.7	63	E6065341	UC-0650 SP
3.0	247.0	2" NPT(F)	300	1545x2230x2010	IP 54	61.3	1020	35.4	80	E6080241	UC-0800 SP
4.5	299.0	2 ½" NPT(F)	500	1660x3400x2090	IP 54	65.2	1460	42.1	100	E6100241	UC-1000 SP
4.9	392.0	2 ½" NPT(F)	500	1660x3400x2090	IP 54	64.3	1570	55.3	150	E6135241	UC-1350 SP
4.2	494.0	2 ½" NPT(F)	500	1660x3400x2090	IP 54	64.3	1630	70.2	150	E6170241	UC-1700 SP
2.9	733.0	DIN-2566 DN80	500	1660x3585x2090	IP 54	68.5	1690	96.1	200	E6240241	UC-2400 SP

*Rp = G = BSP internal parallel thread

NPT(F) = NPT internal taper thread

HT DN = hose tail for internal nominal pipe diameter (mm)

DIN-2566 DN = DIN-2566 flange for internal nominal pipe diameter (mm)

LAUDA Ultracool

Ultracool options and accessories

This table shows a short description of the available standard options for LAUDA Ultracool chiller units. Please be aware that not all chiller models can be combined with these options.

Options	
TF	Chiller without pump and water tank
SP 5bar	5 bar water pump
SP 3bar SS	3 bar water pump entirely in stainless steel
SP 5bar SS	5 bar water pump entirely in stainless steel
AF	Auto filling kit. For automatic filling of the water tank
CF	Condenser air filter. For protection in dusty environments
FS	Flow switch. Stops the unit when there is no flow
FT	Feet for floor fixation
MB	Modbus connectivity (RS 485 interface)
PHD	Phase detector
PWP	Water heater to pre-heat the water while the unit is idle
RCP	Remote Control Panel
SC	Special RAL color for the housing
SR	Motor fan speed regulator. For ambient temperatures below 0 °C. Also reduction of noise and power consumption
SS	Stainless steel housing
TS	Increased temperature stability of ± 1 K
W	Water-cooled version
WH	Wheels. Four nylon castors with brakes for easy movement
OD	Outdoor installation for UC Mini. Design in protection class IP 54
°C	Programming in °C
°F	Programming in °F

Accessories	
IK10	2 x 10 m installation kit. Includes 2 hoses and 2 sets of fittings
IK20	2 x 20 m installation kit. Includes 2 hoses and 2 sets of fittings
IK50	2 x 50 m installation kit. Includes 2 hoses and 2 sets of fittings
T230-400	230-400 V External Autotransformer for various supply voltages
T208-460	208-460 V External Autotransformer for various supply voltages
T230-460	230-460 V External Autotransformer for various supply voltages
T400-460	400-460 V External Autotransformer for various supply voltages
EB/EBU	External by-pass (BSP)/External by-pass (NPT)
EFM/EFMU	Water flow meter (BSP)/Water flow meter (NPT) For installation in the water circuit for exact indication of the water flow.
LSP	Low Water Setpoint. Setting the outlet temperature to 0 °C or lower.
PRV/PRVU	Pressure Reducing Valve (BSP)/Pressure Reducing Valve (NPT)
PSC	Power Supply Cable (5 m)
SV/SVU	Water solenoid valve kit (BSP)/Water solenoid valve kit (NPT) To be installed in the water inlet to prevent water returning when the pump is off.
TP	Thermostat Protection. Plastic cover for additional protection of the controller against extreme ambient conditions.
TC/TCU	Stainless steel threaded connections (BSP)/Stainless steel threaded connections (NPT)
TCW/TCWU	Threaded connections for water-cooling ports (BSP)/Threaded connections for water-cooling ports (NPT)
EB + SV/EBU + SVU	External by-pass + water solenoid valve kit (BSP)/External by-pass + water solenoid valve kit (NPT)

Heat transfer liquid	Description	Container size in liter	Cat. No.
Refrifluid 1	Water/glycol mixture (80/20), including Refrifluid B	25 Liters	E7012402
Refrifluid 1	Water/glycol mixture (80/20), including Refrifluid B	50 Liters	E7012404
Refrifluid 1	Water/glycol mixture (80/20), including Refrifluid B	100 Liters	E7012406
Additive for heat transfer liquid	Description	Container size in liter	Cat. No.
Refrifluid B	Concentrated antibacterial and anticorrosive additive	2 Liters	E7011852
Refrifluid B	Concentrated antibacterial and anticorrosive additive	4 Liters	E7011854

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

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