

Circulating Chiller ULK-N Series

Description

The ULK series comprises high-performance, space-saving, and quiet recirculating chillers for laboratories, production facilities, and industrial applications. Customizable through a wide range of available options.

Environmentally friendly and future-orientated thanks to natural refrigerants: reduced refrigerant quantity and considerably lower GWP values (global warming potential), as well as low power consumption.

Included in the scope of delivery

- Coolant
- Elbow hose nozzle Ø 12,7mm, self-sealing, with quick coupling

Characteristics

- **Environmentally friendly**
 - energy-saving fan with EC technology
 - natural refrigerant with high efficiency reduces power consumption
 - lower refrigerant charge quantities per device
- **Low operating noise**
 - due to particularly quiet components
 - fan adjusts the speed to the demand
- **User-friendly**
 - easy filling and emptying thanks to integrated filling funnel and drain valve
 - leak-free hose replacement thanks to self-sealing hose connector with quick coupling
- **High-quality components**
 - Touchscreen controller with glass surface and integrated digital display for fill level and pump status
 - Brand-name components for long service life
 - Hermetically sealed, air-cooled, and low-maintenance refrigeration unit
- **Operational safety**
 - Freeze and overheat protection
 - Automatic pump shut-off in case of low coolant level
 - Visual and audible alarms
 - Clear-text error messages for quick diagnostics



ULK 602 N

ULK 1002 N

ULK 2002 N

Options

- RS485 interface for MODBUS communication: Enables integration into control systems.
- RS485 interface for ST-Bus communication: Allows easy reading and modification of values.
- Voltage input for external setpoint control: Allows direct control of the temperature via external input signals.
- Voltage output for actual value transmission: Transmits the current temperature values to an external system.
- Potential-free contact: Enables connection to an external alarm system for enhanced safety.
- Direct temperature measurement in your application: An external sensor measures the temperature directly at the process point. Automatic adjustment of the setpoint ensures particularly stable temperature control and greater process reliability compared to standard systems.
- Mobile version: four castors, two lockable.

Accessories

Thermo-insulated Hoses

- Hose with thermal insulation and hose clamps
- Ø 10mm: for hose connection Ø 10 mm
- Ø 12,7mm: for hose connection Ø 12-13 mm
- Down to -20°C, 16 bar, PVC, reinforced
- Sold by the metre

HKF coolant 15.1 POF ECO

- Recommended for all FRYKA circulating coolers
- 5 litre container
- Ready-made mixture
- Frost-proof up to -15°C
- Incl. practical dispensing tap

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Technical Data

Model	ULK 602 N	ULK 1002 N	ULK 2002 N
Order No.	104.1501 N	104.1504 N	104.1505 N
Working temperature range	-10°C to +40°C	-10°C to +40°C	-10°C to +40°C
Cooling accuracy at -10°C	+/- 0.5 K	+/- 0.5 K	+/- 1 K
Display resolution	0.1 K	0.1 K	0.1 K
Cooling Capacity			
at +20°C	600 W	1000 W	2000 W
at +10°C	500 W	800 W	1550 W
at 0°C	350 W	550 W	900 W
at -10°C	200 W	300 W	650 W
Circulation Pump			
Flow rate (max.)	10 l/min	12 l/min	12 l/min
Flow pressure (max.)	0.6 bar	2.9 bar	2.9 bar
General Technical Data			
External dimensions (W x D x H)	310 x 415 x 585 mm	350 x 450 x 680 mm	400 x 450 x 730 mm
Installation dimensions (W x D)	310 x 715 mm	350 x 750 mm	600 x 750 mm
Weight	28 kg	39 kg	42 kg
Noise level (distance 1 m)	49 dB(A)	52 dB(A)	52 dB(A)
Ambient temperature range	+5°C to +40°C	+5°C to +40°C	+5°C to +40°C
Max. permissible temperature of the coolant	60°C	60°C	60°C
Electrical connection	230 V / 50 Hz	230 V / 50 Hz	230 V / 50 Hz
Power consumption	380 W	800 W	950 W
Current max.	3.0 A	5.0 A	6.5 A
Coolant tank	1.5 to 4.0 litres	2.5 to 9.0 litres	2.5 to 9.0 litres
Hose connections	12.7 mm	12.7 mm	12.7 mm
Protection class	IP 20	IP 20	IP 20
Class. acc. DIN 12876	I / NFL	I / NFL	I / NFL
Max. operating pressure	25 bar	25 bar	25 bar
Refrigerant	R290	R290	R290
Minimum room volume	12 m ³	12 m ³	12 m ³