

Compact cooling water chiller and heat exchanger in 19" rack housing for laser cooling



DAIKIN Fluid Technology GmbH

Partner of the industry for over 55 years

DAIKIN Fluid Technology GmbH combines the technological heritage and more than 55 years of experience of DELTATHERM®, founded in 1971 in Much, Germany, with the global expertise of the DAIKIN Group. Since 2026, the company has entered a new era as part of Daikin Industries, offering industrial cooling and temperature control solutions that unite maximum efficiency, reliability, and sustainability.

Since its foundation, the company has been supplying a wide range of industries – including machine tool manufacturing, laser technology, chemical and food processing industries, and environmental testing – with high-quality and durable cooling systems. The high level of vertical integration and flexibility in customer-specific design developed by DELTATHERM® are now complemented by advanced control technology, energy-efficient solutions, and the global quality standards of the DAIKIN Group.

The portfolio includes industrial chillers, heat exchanger systems, process temperature control units, heating systems, and a variety of cooling components. From standard units to customized special solutions, systems are developed that are optimally tailored to customers' individual production processes. A nearly complete in-house manufacturing depth – from engineering and software development to control cabinet construction, assembly, painting, and comprehensive functional testing – ensures the highest quality standards and fast response times. All core components are sourced exclusively from globally renowned manufacturers to guarantee maximum reliability.

With the commitment "High Quality, High Efficiency, High Reliability," DAIKIN Fluid Technology GmbH develops solutions that ensure maximum temperature stability, safeguard production processes, and at the same time support the transition toward a sustainable industrial future. The company combines technological strength with global competence, creating a new generation of industrial cooling and temperature control systems together with its customers.

In the field of after-sales service, DAIKIN Fluid Technology GmbH provides reliable, globally supported customer service. In addition to the long-established international DELTATHERM service network spanning more than 60 countries, customers now benefit from the expanded service infrastructure of the DAIKIN Group.

This includes:

- Global plant service
- Service hotline to our experts, in German and English
- All standard components in stock and available globally in the shortest time by express mail
- Replacement part availability > 95 %
- An expanding worldwide network of service partners with locations on 6 continents – in Europe, North America, South America, Africa, Asia and Australia
- Online service, through which we can check and maintain your systems
- Ensuring the productivity of your DAIKIN - DELTATHERM® machines

 Made
 in
 Germany



19 inch racks of the LE 19 series

Specially designed as rack cooler for laser cooling with a temperature stability of up to ± 0.1 K in the power range from 150 to 3,000 watts.

The high-performance air- or water-cooled 19-inch rack cooling units of the LE 19 series in the power range from 150 to 3,000 watts not only increase productivity and lower production costs, but also impress with their longevity and guarantee excellent laser performance. Excess heat from the laser is removed by targeted cooling with cold water from the system. LE 19 rack cooling units have generously dimensioned components and are extremely efficient.

For ALL existing laser systems by default as well as special devices.

Short specification of the standard equipment LE 19

- Eco-friendly and energy-saving compact unit
- 19" rack unit, completely covered, 150 to 3,000 watts, air-cooled, for indoor installation
- 19" construction group in galvanised sheet steel, air intake at the front side, air outlet to the rear
- Wired ready for connection, with all switching, control and monitoring devices and electronic temperature regulator with digital target and actual value display
- Fault and monitoring signals led to a 9 pin D-SUB connector
- Cold water circuit with expansion tank
- Powerful centrifugal pump
- Floater switch for level monitoring
- Optical level indicator
- Connection for filling and emptying
- Potential-free collective fault on D-SUB
- Fully hermetic, low-noise compressor with motor protection, vibration-damped
- Condenser with axial fan
- Evaporators adapted to the field of application
- Cooling circuit completely factory-assembled with all necessary cooling system components
- Environmentally friendly and CFC free refrigerant
- Low GWP refrigerant
- Condenser with copper tubes and pressed aluminium lamellae
- Each device undergoes a performance test at the factory
- CE-, RoHS- and REACH-compliant
- Refrigeration technology designed according to DIN EN 378 part 2
- Electronics designed according to DIN EN 60204
- Easy operation and maintenance

Available options LE 19

- Water-cooled version
- Temperature stability ± 0.1 K
- Water-carrying parts made of stainless steel or plasticiser-free plastic
- Reinforced pump / pump pressure up to 5 bar
- Ion exchanger in the bypass
- Filter in the water circuit
- Wire marking
- Overflow valve
- Gate valves in flow and return
- Water inflow temperatures up to 40 °C
- Heavy-duty connector (e.g. Harting)
- Customer-specific design
- Heating for low temperatures
- Flow monitoring
- Conductivity measurement with / without regulation
- Automatic filling unit
- Maintenance timer
- RS 485, MOD bus, Profibus, Profinet interfaces
- External on/off switch
- Special voltages and frequencies (50/60 Hz)
- Limit temperature monitoring
- Differential temperature regulation
- External temperature sensor
- Painted housing

Cooling water chiller in the 19" housing

Series type LE 19		LE 03.4	LE 05.4	LE 10.4	LE 15.4	LE 20.4	LE 25.4	LE 30.4
Cooling capacity	watt	300	500	1000	1500	2000	2500	3000
Water inflow temperature	°C	20	20	20	20	20	20	20
Air capacity	m ³ /h	450	450	450	1000	1000	1000	1000
Pump capacity	l/min	3	3	3	10	10	10	10
Pump drive capacity	watt	150	150	150	500	500	500	500
Pump pressure	bar	3	3	3	3	3	3	3
Tank contents	litre	2	2	2	4	4	4	4
Water connections	inch (")	3/8	3/8	3/8	1/2	1/2	1/2	1/2
Width (W)	mm 19"	480 19"	480 19"	480 19"	480 19"	480 19"	480 19"	480 19"
Depth (D) (without connections)	mm	550	550	550	550	550	550	550
Total height (H)	mm	270 6 HE	270 6 HE	270 6 HE	400 9 HE	400 9 HE	400 9 HE	400 9 HE
Empty weight about	kg	45	47	50	60	65	70	80
Mains voltage		230 Volt / 50 Hz						

Water temperature range from +10 °C to +25 °C

Cooling capacity based on +32 °C ambient temperature



19 inch racks of the heat exchanger (WT 19)

Specially designed as rack cooler for laser cooling with a temperature stability of up to ± 0.1 K in the power range from 150 to 10,000 watts.

A heat exchanger separates the primary circuit (to the systems to be cooled) from the secondary circuit (contaminated water). Media other than water (such as acids, lye, oil, DI water, etc.) can also be cooled in this manner.

LE 19 rack cooling units have generously dimensioned components and are extremely efficient.

For ALL existing laser systems by default as well as special devices.

Short specification of the standard equipment WT 19

- Eco-friendly and energy-saving compact unit
- 19" rack unit, completely covered, 150 to 10,000 watts, for indoor installation
- 19" construction group in galvanised sheet steel
- Wired ready for connection, with all switching, control and monitoring devices and electronic temperature regulator with digital target and actual value display
- Fault and monitoring signals led to a 9 pin D-SUB connector
- Copper brazed plate heat exchanger for cooling the process heat
- Solenoid valve on the cooling water side for controlling the medium temperature
- Dirt trap in the external cooling water inlet
- Medium circuit with PE storage tank
- Powerful centrifugal pump
- Floater switch for level monitoring
- Optical level indicator
- Connection for filling and emptying
- Potential-free collective fault on D-SUB
- Each device undergoes a performance test at the factory
- CE-, RoHS- and REACH-compliant
- Refrigeration technology designed according to DIN EN 378 part 2
- Electronics designed according to DIN EN 60204
- Easy operation and maintenance

Available options WT 19

- Temperature stability ± 0.1 K
- Water-carrying parts made of stainless steel or plasticiser-free plastic
- Reinforced pump / pump pressure up to 5 bar
- Ion exchanger in the bypass
- Filter in the water circuit
- Wire marking
- Overflow valve
- Gate valves in flow and return
- Water inflow temperatures up to 40 °C
- Heavy-duty connector (e.g. Harting)
- Customer-specific design
- Heating for low temperatures
- Flow monitoring
- Conductivity measurement with / without regulation
- Automatic filling unit
- Maintenance timer
- RS 485, MOD bus, Profibus, Profinet interfaces
- External on/off switch
- Special voltages and frequencies (50/60 Hz)
- Limit temperature monitoring
- Differential temperature regulation
- External temperature sensor
- Painted housing

Heat exchanger group in the 19" housing

Series type WT 19		WT 1	WT 3	WT 5	WT 7	WT 10
Cooling capacity	watt	200 - 1000	3000	5000	7000	10000
Water inflow temperature	°C	20	20	20	20	20
Required cooling water temperature	°C	15	15	15	15	15
Required amount of cooling water	l/min	3	9	15	21	29
Pump capacity	l/min	3	10	20	25	30
Pump drive capacity	watt	330	550	900	900	900
Pump pressure	bar	3	3	3	2,8	2,6
Tank contents	litre	2	2	4	4	4
Water connections	inch (")	3/8	1/2	3/4	1	1
Width (W)	mm	480 19"	480 19"	480 19"	480 19"	480 19"
Depth (D) (without connections)	mm	550	550	550	550	550
Total height (H)	mm	270 6 HE	270 6 HE	400 9 HE	400 9 HE	400 9 HE
Empty weight about	kg	22	25	30	36	46
Mains voltage		230 Volt / 50 Hz				

Temperature range from +20 °C to +40 °C

Cooling capacity based on +15 °C cooling water temperature

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Further products from our product range



Industrial series cooling towers with open or closed circuits from 80 to 18,000 kW cooling capacity



Dry and hybrid coolers for water, oil or emulsion from 0.5 to 15,000 kW cooling capacity



Rack chillers in the power range from 0.15 to 3 kW cooling capacity; as heat exchanger up to 10 kW



Industrial cooling machines for water, oil and emulsion from 0.2 to 5,000 kW cooling capacity



Temperature control systems for water up to 160 °C and oil up to 350 °C



Immersion chillers for water, oil and emulsion from 1.7 to 115 kW cooling capacity

Technical modifications and errors reserved.

