

## Knürr CoolServe®

*19" air-to-water heat exchanger installation for channeling heat loads out of closed server racks*



# CoolServe® Upgrade Solution – Flexible, Innovative, Effective.

Knürr CoolServe®, is a heat exchanger (air-to-water) with 19” technology for effectively channeling heat loads out of closed server racks.

The airflow is adapted to the server cooling, so that the warm server outlet air is taken in at the rear of the CoolServe®. A high-performance heat exchanger takes the heat out of the air and transfers it to the cold water system. The cooled air is then guided to the front of the CoolServe® in front of the 19” level of the server rack. The system is equipped with redundant ventilators, feed (A and B feed) and mains components for internal power supply, similar to the installed servers.

The internal rack temperature is regulated via a cooling water regulating valve, i.e. in order to save energy, only the amount of cooling water that is actually required to extract the rack heat is routed by the high-performance heat exchanger. The server intake air temperature is the regulating parameter here.



made  
in  
Germany



Please see the current flyer:  
**KnürrMiracel®**  
for your Knürr 19”  
Rack information.

Download (PDF):  
[www.knuerr.com](http://www.knuerr.com)

- Optimum adjustment as required to the components to be installed with the vertical or horizontal installation position of the slot-in unit.



- The electronic module can be taken out at the front, and therefore enables easy access to the internal components.



Effective cooling output	Width	Height	Depth	Prerun and post-run connection	Electrical connection
<b>4,5 kW*</b> <b>6 kW**</b>	19" (448 mm)	3 HU (132 mm)	740 mm	1/2" male thread	207 – 243 VAC 50/60 Hz 235 W

Cooling water spread:	12/18°C
Exhaust temperature after heat exchanger:	20 – 25°C in acc. with ASHRAE
Temperature increase over the whole server:	Approx. 15K – 25K
Cooling water volume flow:	Max. 1m³/h (without frost protection)
Pressure loss:	39KPa
Max. operating pressure:	10 bar
Absolute humidity:	8g/kg
Ambient temperature:	12 – 35°C
Color:	Front grid and side bracket RAL 7021; otherwise aluminum finish

### CoolServe® D740 19" Slot-in Unit

Model	19" W	H	D	HU	Color	Order no.	UP
CoolServe® D740	• 448	132	740	3	RAL 7021	<b>08.004.301.8</b>	1 set
CoolServe® D740 SP ***	• 448	132	740	3	RAL 7021	<b>08.004.302.8</b>	1 set
unit CoolServe® DN15 Connection Set, flexible pipework (not shown)						<b>08.009.090.0</b>	1 set

\* Server outlet air temperature 37°C  
 \*\* Server outlet air temperature 47°C  
 \*\*\* CoolServe® SP is constructed similar to Cool-Serve®, however voltage supply is provided exclusively via power supply.

Installation in the 19" rack and professional connection of all cables and lines, including earthing and pipework, are essentially part of Knürr's scope of services.

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