ColdLogik CL21 Rear Door Heat Exchanger

ColdLogik Rear Door Heat Exchangers are established as highly efficient cooling systems for use on data center/server racks. Designed to operate on a closed loop water circuit, ensuring optimum thermal and energy performance by removing heat generated by the active equipment directly at source.

The ColdLogik CL21 Smart Passive is designed to provide high performance cooling with Zero operational costs. The performance is entirely dependent on the active equipment inside the cabinet, and the available static pressure. At 14° C / 57.2°F Water inlet, the CL21 Smart Passive is able to supply up to 29kW of cooling. Ideal for a data centre targeting a highly sustainable operating structure.









Performance Examples



Performance examples — these examples show the RDHx duties attainable when the active equipment inside the rack produces varying volumes of airflow. Other performance duties are attainable when calculating bespoke project specific requirements.

| CL21 Smart Passive Cooling Capacity | | | | | | | | | |
|-------------------------------------|-------------------|-----------------|----------------|----------------|----------------|----------------|----------------|--|--|
| Performance Data for: | | 42U / 47U / 52U | | | | | | | |
| DB Air On | °C (°F) | 40 (104) | | | | | | | |
| Water In | °C (°F) | 14 (57.2) | | | | | | | |
| Water Out | °C (°F) | 20 (68) | | | | | | | |
| Max Duty | kW | 7 | 13 | 17 | 22 | 25 | 29 | | |
| Airflow | m³/h (cfm) | 1000 (589) | 2000 (1177) | 3000 (1766) | 4000 (2354) | 5000 (2943) | 6000 (3531) | | |
| Air Pressure Drop Across Coil | Pa | 3.2 | 9.6 | 18.4 | 29.2 | 41.7 | 55.7 | | |
| Fluid Flow | m³/h (USGal/m) | 1 (4.5) | 1.9 (8.2) | 2.6 (11.3) | 3.2 (13.9) | 3.7 (16.2) | 4.2 (18.3) | | |
| Fluid Pressure Drop | kPa | 2.3 | 6.9 | 12.4 | 18.1 | 24.1 | 30 | | |

| CL21 Smart Passive Cooling Capacity | | | | | | | | | |
|-------------------------------------|-------------------|-----------------|----------------|----------------|----------------|----------------|----------------|--|--|
| Performance Data for: | | 42U / 47U / 52U | | | | | | | |
| DB Air On | °C (°F) | 35 (95) | | | | | | | |
| Water In | °C (°F) | 14 (57.2) | | | | | | | |
| Water Out | °C (°F) | 20 (68) | | | | | | | |
| Max Duty | kW | 5 | 10 | 13 | 17 | 19 | 22 | | |
| Airflow | m³/h (cfm) | 1000 (589) | 2000 (1177) | 3000 (1766) | 4000 (2354) | 5000 (2943) | 6000 (3531) | | |
| Air Pressure Drop Across Coil | Pa | 3.2 | 9.7 | 18.5 | 29.3 | 41.9 | 56 | | |
| Fluid Flow | m³/h (USGal/m) | 0.8 (3.5) | 1.4 (6.3) | 2 (8.7) | 2.4 (10.7) | 2.8 (12.4) | 3.2 (14) | | |
| Fluid Pressure Drop | kPa | 1.2 | 4.3 | 7.7 | 11.3 | 14.8 | 18.4 | | |

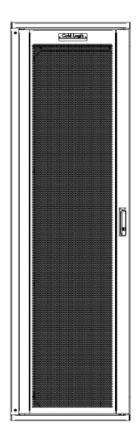
Cooling capacity data is shown for illustration purposes. USystems work alongside their customers who largely have unique challenges and ambitions. The nature of our technology, capabilities and approach is emulated in the delivery of efficient designs and solutions across the globe.

Technical Data



| CL21 Smart Passive (Including interface frame) | | | | | | | | | | |
|--|----------------|--|------------------|------------------|-----------------|------------------|------------------|------------------|------------------|------------------|
| Technical Information to Suit: | | 42U | | | 47U | | | 52U | | |
| | | 600w | 750w | 800w* | 600w | 750w | 800w* | 600w | 750w | 800w* |
| Height | | 2000 (78.4) | | | 2222 (87.5) | | | 2444 (96.2) | | |
| Width | mm (") | 597 (23.5) | 747 (29.4) | 797 (31.4) | 597 (23.5) | 747 (29.4) | 797 (31.4) | 597 (23.5) | 747 (29.4) | 797 (31.4) |
| Depth | mm (") | 198 (7.8) | | | | | | | | |
| Dry Weight (RDHx only) | kg (lb) | 55 (121.3) | 68.8 (151.6) | 68.8 (151.6) | 61.5 (135.7) | 76.9 (169.6) | 76.9 (169.6) | 68.1 (150.2) | 85.1 (187.7) | 85.1 (187.7) |
| Dry Weight (including frame) | kg (lb) | 83 (183) | 98.8 (217.7) | 99.8 (219.9) | 92.5 (204.1) | 108.9 (240.2) | 109.9 (240.2) | 101.1 (222.9) | 119.1 (262.7) | 120.1 (264.9) |
| Wet Weight (including frame) | kg (lb) | 87.8 (193.6) | 103.6 (228.3) | 104.6 (230.5) | 97.8 (215.8) | 114.2 (251.9) | 115.2 (254.1) | 106.4 (234.6) | 124.4 (274.3) | 125.4 (276.5) |
| Paint | Finalised | RAL 9003 (White) | | | | | | | | |
| Paint | on Order | RAL 9005 (Black) | | | | | | | | |
| Hinge Side | | Left-Hand Side - Standard | | | | | | | | |
| | | Right-Hand Side - Available on Request | | | | | | | | |
| Connections | mm (") | 25 (1) | | | | | | | | |
| Water Volume Capacity | L (U.S.gal) | 4.8 (1.3) | | | | | | | | |

^{*}CL21 Door is 750w, CL21 Frame is 800w









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Further Documentation

For additional information, please refer to the below. Available through your USystems representative, or our central enquires line at sales@usystems.com

Complete Product Range
Operations and Maintenance Manual
Troubleshooting Guide
Product Brochure

Available at www.usystems.com Please contact sales@usystems.com Please contact sales@usystems.com Available at www.usystems.com