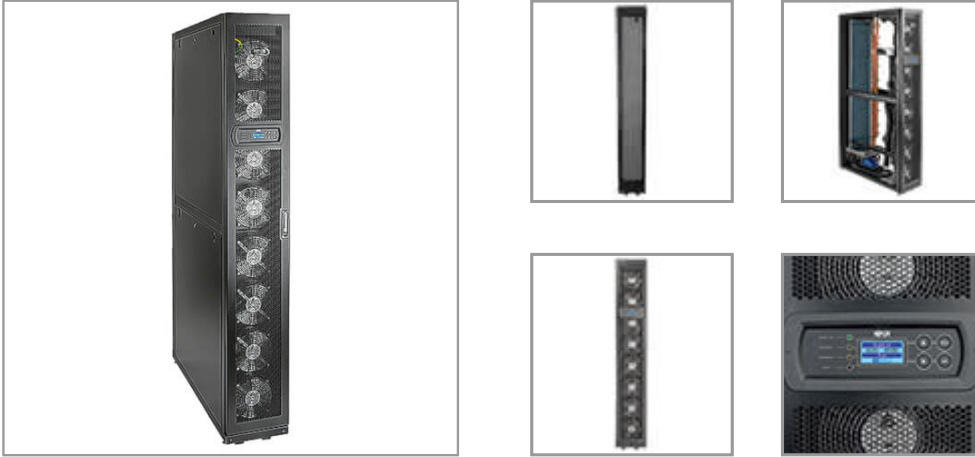


In-Row Cooler for Server Racks - 60 kW, 208–230V, Chilled Water Type

MODEL NUMBER: SRCOOL60KCW



Modular, in-row cabinet design uses chilled water to efficiently cool your components, lower overall energy costs and lengthen the lifespan of your valuable equipment. Recommended for mid- to large-sized data centers with an existing chilled water system.

Description

The SRCOOL60KCW SmartRack® In-Row Precision Server Rack Cooling System pulls unconditioned air through the rear of the unit, cools it using chilled water and releases cold air through the front. The row-based unit integrates into your data center environment adjacent to heat loads. Its high cooling efficiency lowers overall energy costs and lengthens the lifespan of your equipment. Its modular, in-row cabinet design easily facilitates expansion or movement on its built-in casters, allowing your increasing cooling needs to be reconfigured as your data center grows.

A built-in controller detects and manages data center temperatures, automatically adjusts cooling levels and supports two automatic control modes: intelligent control mode and PID control mode. The user-friendly LED and LCD interface provides at-a-glance setting, monitoring and access to system configuration and status.

An alarm system notifies you in case of abnormal conditions, including high condensation, high or low temperature or humidity, and full drain pan. The SRCOOL60KCW In-Row Rack Air Conditioner also monitors heat load temperature via remote sensors and informs you of any water leakage. Hot-swappable multi-speed fans provide variable CFM based on room conditions.

The doors and side panels lock securely to help prevent damage, tampering or theft. A preinstalled TLNETCARD web management accessory lets you monitor temperatures, receive alerts, review logs and control settings from anywhere 24/7 via Ethernet network.

Features

Highlights

- Accurately detects and manages temperature and output
- Provides 204,000 BTU (60 kW) of cooling capacity
- Locks securely to prevent unauthorized access
- User-friendly LCD indicators and control panel
- Supports optional remote management via Ethernet

Package Includes

- SRCOOL60KCW SmartRack In-Row Precision Server Rack Cooling Unit - 60 kW, 208–230V, 50/60 Hz, Chilled Water Type
- (2) 4-pin terminal blocks
- 3-pin terminal block
- RJ45 to DB9 cable
- (2) Cable glands
- (2) Communications wiring duct cover plates
- Power supply cover plate
- Hex wrench, 2.8 mm
- (3) Cable ties
- (2) Keys
- Owner's manual

204,000 BTU (60 kW) of Cooling Power

- Pulls unconditioned air through rear of the unit, cools it with chilled water and releases cold air through front
- Lowers energy costs
- Lengthens equipment lifespan
- Row-based unit integrates with data centers and can be positioned adjacent to heat loads

Intelligent Temperature Control

- Detects and manages data center temperature
- Automatically adjusts cool air output
- Dual auto control modes: intelligent control mode and PID control mode

User-Friendly Interface

- Easy-to-read LEDs indicate power, standby, alarm and fault information at a glance
- LCD screen provides access to power, status, setting and administrator controls

3-Way Ball Valve

- Automatically closes within 15 sec. of abnormal power interruption to prevent water from flowing into the coil and creating condensation

Condensed Water Pump

- Automatically drains condensed water and detects water pan's respective level to avoid leakage

Optional Upper Piping Configuration

- Supports upper and lower (with optional SRCOOL60KTP, sold separately) piping for flexible configuration

Alarm and Detection Systems

- Remote temperature sensors accurately monitor heat load temperature
- Optional water leakage detector configurable up to 50 m (164 ft.)
- 2 output and 2 input dry contacts for fire, smoke and system alarms
- Detects abnormal conditions and reports via buzzer, external dry contact device or Ethernet

Designed for Security and Long Life

- Doors and side panels lock securely to help prevent damage, tampering or theft
- Insulated side panels isolate unit from external temperature variations
- Multi-speed hot-swappable fans provide variable CFM based on room conditions

Built-In Rolling Casters

- Heavy-duty casters allow you to easily roll the unit where needed

Advanced Network Monitoring

- Built-in TLNETCARD lets you monitor temperatures, receive alerts, review logs and control settings 24/7 via Ethernet
- Optional SRCOOL60KRT or SRCOOL60KRTH remote sensors (sold separately) accurately monitor heat loads

Specifications

OVERVIEW	
UPC Code	037332190307
INPUT	
Electrical Consumption (Max)	2410 Watt Max
Nominal Input Voltage(s) Supported	208V AC; 230V AC
Maximum Input Amps	12
Input Connection Type	5 POLE TERMINAL BLOCK, 300 VOLTS, 30 AMPS
Input Frequency	50/60 Hz
COOLING	
Cooling Type	Active
Airflow	4400 CFM
USER INTERFACE, ALERTS & CONTROLS	
Front Panel LEDs	Multi-line LCD control panel
PHYSICAL	
Color	Black
Material of Construction	Aluminium, Steel
Shipping Dimensions (hwd / in.)	86.02 x 17.00 x 50.40
Shipping Dimensions (hwd / cm)	218.49 x 43.18 x 128.02
Shipping Weight (lbs.)	555.57
Shipping Weight (kg)	252.00
Unit Dimensions (hwd / in.)	78.740 x 11.810 x 42.910
Unit Dimensions (hwd / cm)	200 x 30 x 108.99
Unit Weight (lbs.)	416.67
Unit Weight (kg)	189.00
ENVIRONMENTAL	
Storage Temperature Range	-15 DEG C to 65 DEG C
Operating Elevation (ft.)	0 to 6561.8
Operating Temperature	4 DEG C to 50 DEG C
Operating Elevation (m)	0 to 2,000

Operating Humidity Range	5 to 95%
Ambient Operation RH	30% - 85%
Chilled Water Flow Meter (LMP)	10-80 LPM +/- 4%; 81-150 LPM +/- 2%
Range of CHW Inlet Temperature (Celsius)	5-22 DEG C; 5KG/CM2
Condensate Drain Pumps (L/HR)	5 L/HR at 5MM head, (15 M horizontal) @ 60Hz; 5 L/HR at 4.8MM head, (15 M horizontal) @ 50Hz
Condensate Water Drains	Drain pump drain tube, length 1.7M, I.D. 3/8", length cut out of cabinet, 1M
Primary Fan Filters	Aluminum (washable), MERV 1, ASHRAE 52.2
COMMUNICATIONS	
SNMP Compatibility	 TLNETCARD
Hotkey	Press UP+DOWN and hold 3 seconds to enter auto mode
Alarm Events	The following will trigger a warning (yellow LED): Filter abnormal, condensate level high, inner communication abnormal, temp/humidity sensor temp high/low, inlet water temp high/low, chiller flow rate high/low, T/RH sensor humidity high/low, NTC temp high/low, run over hours, cooling capacity abnormal
Fault Events	The following will trigger a fault (red LED): Condensate overflow, leak, fire, smoke, T/RH sensor abnormal, NTC abnormal, RTD sensor abnormal, flow meter abnormal, fan abnormal, ball valve abnormal, drain pan full
Input Dry Contact Ports	2 contacts (fire and smoke alarm inputs), 3 second delay to trigger
Output Dry Contact Ports	2 contacts
Systems & Sensors Information	Supply air temp and humidity (SHT15), return air temp and humidity (SHT15), rack inlet temp (NTC) (optional), chilled water flow rate, chilled water inlet and outlet temp, ball valve position rate/feedback, filter clogged (pressure switch)
Controller Area Network (CAN bus)	Supported
Communications Interface	DB9 Serial; RS485 (+, -, G)
FEATURES & SPECIFICATIONS	
Sound Level (Noise)	88 DBA @ 4400 CFM @ 1 METER
Fans (Type/Quantity)	54V, 5800 RPM, 825 CFM, Brushless fan, hot-swappable (8)
MECHANICAL	
Chilled Water Outlet	1 INT, PT/Female
Chilled Water Inlets	1 INCH, PT/Female
OPERATION	
Operation Mode	Stand-by, Auto, Installation, Force, Manual
Supply Air Temperature (Celsius)	18-27 deg. C (limited by heating load)
Glycol Correction Details	Return air temp: 29.4 deg. C DB; 18.1 deg. C WB; Air volume: 4930 M3/H; Temp difference of chilled water 7.2 deg. C; Chilled water flow rate: 62 LPM; Max solution not to exceed 50%
Applied Containment Types	Close/Open
Ball Valve Controls	PID Controller, fuzzy logic support

Fan Controls	By setting return air max flow T, Min flow T, Fan step setting for proportional control
Force Modes	Three-way valve fully opens, fans at full speed, stand by LED flashing
Installation Modes	Three-way valve fully opens, fans at minimum speed, main LED flashing
Manual Modes	Fan speed, ball valve open/closed, back light, buzzer, alarms, chilled pump, LEDs, drain pump, main and stand-by LEDs on solid
Power Redundancies	Dual input with two rectifiers
System Type Selections	Open type (open type initial fan speed is 50%), closed type (closed type initial fan speed is 30%)
Temperature Unit Selections	Deg. C; Deg. F (default is Deg. C)
WARRANTY & SUPPORT	
Product Warranty Period (Worldwide)	1-year limited warranty