

Rittal – The System.

Faster – better – everywhere.



SK 3311.493 Liquid Cooling Unit

State: 1/9/2026 (Source: rittal.com/us-en)

ENCLOSURES

POWER DISTRIBUTION

CLIMATE CONTROL

IT INFRASTRUCTURE

SOFTWARE & SERVICES

FRIEDHELM LOH GROUP



SK 3311.493 - Liquid Cooling Unit LCU DX, redundant

Refrigerant-based enclosure cooling in redundant version for VX IT or Micro Data Center without heating up the installation room. With two output categories 3 kW and 6.5 kW, the ideal cooling solution for smaller IT applications.

Features

Model No.	SK 3311.493
Version	LCU DX 6.5 kW redundant
Benefits	<p>Space-saving solution by installing the redundant internal unit in the VX IT server enclosure or the Micro Data Center</p> <p>Maximum energy efficiency due to EC fan technology and IT-based control</p> <p>Control of the server inlet temperature</p> <p>The inverter-controlled compressor matches the cooling output to the current level of heat loss in the enclosure</p> <p>Absorbed thermal energy is emitted directly into the ambient air at the location of the (inverter controlled) external unit , without heating up the installation room</p>
Applications	Cooling unit for VX IT server enclosures and for Micro Data Centers
Function principle	<p>Within the internal unit, the redundant versions each have two cooling circuits and two controllers, plus two inverter-controlled external units. The fault and operating hours switchover mechanism ensures regular switching between the external units and a switchover in the event of a fault or a failure.</p> <p>The device supports "front to back" air routing typical of IT applications, and regulates the server inlet temperature to the set value</p>
Material	Carbon steel, spray finished
Color	<p>Internal unit: RAL 7035</p> <p>External unit: white</p>

Features

Supply includes	<p>Internal unit (condenser)</p> <p>2 external units (inverter controlled)</p> <p>482.6 mm (19") mounting bracket cover with control and display elements</p> <p>Condensate hose</p>
Installation options in VX	<p>19" profile rails, standard or dynamic, must be off-centered by 50 mm in regards to width</p> <p>The distance between the front of the 19" profile rails and the front edge of the VX frame must be at least 100 mm</p> <p>Two system chassis for the inner mounting level are required to fasten the internal unit</p> <p>Air baffle plates are required to separate the hot/cold zones within an enclosure</p> <p>A base/plinth is needed to route cables downwards</p>
Note	<p>If the cooling output falls below its minimum value, fluctuations in the air intake temperature may result</p> <p>The electrical connection is made to the external unit, the internal unit is supplied by the external unit</p> <p>A separate power supply is required for each external unit</p>
Protection category IP to IEC 60529	<p>Internal unit IP 20</p> <p>External unit IP X4</p>
Modulation range	3 - 6.5 kW
Max. cooling output	<p>6.5 kW</p> <p>22,179 BTU/h</p>
Type of connection (electrical)	Connection clamp
Duty cycle	100 %
Operating temperature	The specified operating temperature applies to the external unit

Features

Installation options in TS IT	<p>19" levels must be configured as profile rails and offset by 50 mm off-center in the width</p> <p>The distance between the front of the 19" profile rails and the front edge of the TS frame must be at least 100 mm</p> <p>Not suitable for combination with 19" mounting frame</p> <p>Two system chassis for the inner mounting level are required to fasten the internal unit</p> <p>An air baffle plate is required for TS IT to separate the hot and cold areas within an enclosure</p> <p>A base/plinth is needed to route cables downwards</p>
Refrigerant/cooling medium	Refrigerant: R410A
Suitable for	<p>Enclosure type: VX IT</p> <p>Width: = 800 mm</p> <p>Height: ≥ 1,800 mm</p> <p>Depth: ≥ 1,000 mm</p> <p>Enclosure type: VX IT</p> <p>Width: = 31.5 "</p> <p>Height: ≥ 70.9 "</p> <p>Depth: ≥ 39.4 "</p>
Dimensions of the internal unit	<p>Width: 105 mm</p> <p>Height: 1,550 mm</p> <p>Depth: 820 mm</p> <p>Width: 4.13 "</p> <p>Height: 61 "</p> <p>Depth: 32.3 "</p>
Dimensions, external unit	<p>Width: 845 mm</p> <p>Height: 700 mm</p> <p>Depth: 320 mm</p> <p>Width: 33.3 "</p> <p>Height: 27.6 "</p> <p>Depth: 12.6 "</p>
Rated operating voltage	230 V, 1~, 50 Hz
Pre-fuse	20 A
Rated current	15.9 A
Packaging unit	1 pc(s).
Net weight	161

Features

Gross weight	171
Customs tariff number	84158200
EAN	4028177709362
ETIM 9	EC000855
ETIM 8	EC000855
ECLASS 8.0	27180704

Approvals

Certificates	EAC
Explanations	Declaration of conformity