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# SK 3311.493 Liquid Cooling Unit

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IT INFRASTRUCTURE SOFTWARE & SERVICES

FRIEDHELM LOH GROUP

ENCLOSURES

### 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	Space-saving solution by installing the redundant internal unit in the VX IT server enclosure or the Micro Data Center Maximum energy efficiency due to EC fan technology and IT-based control Control of the server inlet temperature The inverter-controlled compressor matches the cooling output to the current level of heat loss in the enclosure 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
Applications	Cooling unit for VX IT server enclosures and for Micro Data Centers
Function principle	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. The device supports "front to back" air routing typical of IT applications, and regulates the server inlet temperature to the set value
Material	Carbon steel, spray finished
Color	Internal unit: RAL 7035 External unit: white

#### Features

Supply includes	Internal unit (condenser) 2 external units (inverter controlled) 482.6 mm (19") mounting bracket cover with control and display elements Condensate hose
Installation options in VX	<ul> <li>19" profile rails, standard or dynamic, must be off-centered by 50 mm in regards to width</li> <li>The distance between the front of the 19" profile rails and the front edge of the VX frame must be at least 100 mm</li> <li>Two system chassis for the inner mounting level are required to fasten the internal unit</li> <li>Air baffle plates are required to separate the hot/cold zones within an enclosure</li> <li>A base/plinth is needed to route cables downwards</li> </ul>
Note	If the cooling output falls below its minimum value, fluctuations in the air intake temperature may result The electrical connection is made to the external unit, the internal unit is supplied by the external unit A separate power supply is required for each external unit
Protection category IP to IEC 60 529	Internal unit IP 20 External unit IP X4
Modulation range	3 - 6.5 kW
Max. cooling output	6.5 kW
Type of connection (electrical)	Connection clamp
Duty cycle	100 %
Operating temperature	The specified operating temperature applies to the external unit
Instalation options in TS IT	<ul> <li>19" levels must be configured as profile rails and offset by 50 mm off-center in the width</li> <li>The distance between the front of the 19" profile rails and the front edge of the TS frame must be at least 100 mm</li> <li>Not suitable for combination with 19" mounting frame</li> <li>Two system chassis for the inner mounting level are required to fasten the internal unit</li> <li>An air baffle plate is required for TS IT to separate the hot and cold areas within an enclosure</li> <li>A base/plinth is needed to route cables downwards</li> </ul>

#### Features

Refrigerant/cooling medium	Refrigerant: R410A
Suitable for	Enclosure type: VX IT Width: = 800 mm Height: ≥ 1,800 mm Depth: ≥ 1,000 mm
Dimensions of the internal unit	Width: 105 mm Height: 1,550 mm Depth: 820 mm
Dimensions, external unit	Width: 845 mm Height: 700 mm Depth: 320 mm
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
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