




SIEMENS

Ingenuity for life



Energy data and energy for data centers – now and in the future

SIVACON 8PS LData busbar trunking system

LData: Rely on your power supply

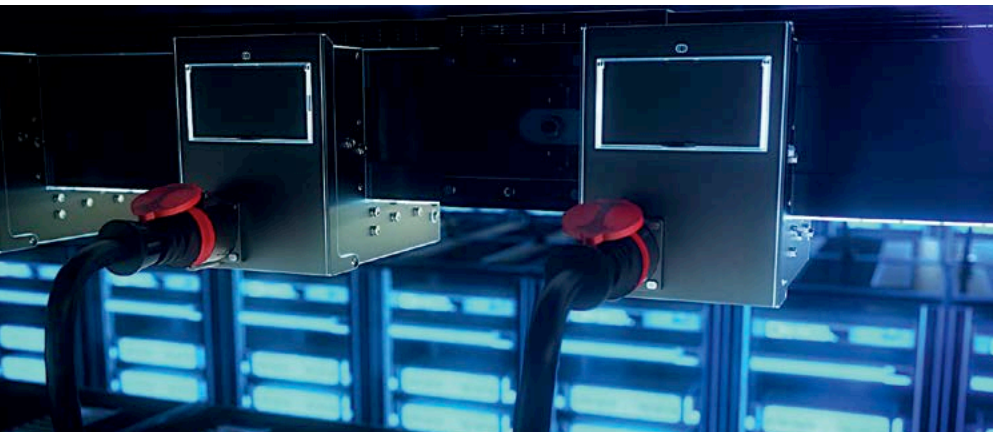
A reliable, continuous power supply is a substantial cost factor for data centers which continues beyond the procurement stage. Operators of data centers should be able to perform retrofits and upgrades without interrupting operations. The LData system from the SIVACON 8PS product family supports this with easy planning and rapid installation.

LData: Flexible and economical

With a current of up to 2,500 A, LData is a solution that already meets your future needs today. Its design is especially flexible: The modular tap-off units are compact and can be installed along the entire length of a busbar without a fixed grid, for example every 60 cm, to suit the width of your server racks. In addition, the use of powerline technology means LData gives you the opportunity to make your energy consumption transparent and continuously optimize it.

LData: Your benefits at a glance

- Highly available and flexible – a busbar trunking system especially for data centers
- Large cross-sections reduce power losses, and with currents of up to 2,500 A, the system is ready right now for the needs of the future
- Economical thanks to a space-saving, modular design and power tap-off throughout the system
- Two-stage mounting process for tap-off units provides added safety
- Future-oriented thanks to powerline technology and integration in higher-level or cloud-based solutions
- Flexible, end-to-end support with comprehensive system solutions saves costs throughout the entire lifecycle





Cubic tap-off unit



L-shaped tap-off unit



Trunking units for overhead assembly



Example of assembly for double floor

LData: System-based advantages

More flexibility thanks to new tap-off units

The newly designed tap-off unit makes the LData system especially versatile to use, which is an important aspect when considering future expansions or changes to your data center, or changes to its infrastructure. Tap-off units can be connected to any location on the busbar except the terminal connection point.

Especially safe mounting

Mechanical attachment of the tap-off units and their electrical contacts takes place in two separate stages, making the work for the operator especially safe.

Standard for energy efficiency, now and in the future

The LData system was designed for high-performance data centers with a high power density and a power requirement of 1,000 A or more. LData lets you decide whether the system will offer only the admissible power loss values in accordance with the standard, or whether they will be capped well below these values. The latter option is more environmentally friendly and reduces your operating costs, since the lower power loss reduces both your power consumption and your need for cooling power.

Smart systems let you plan reliably

You can record your energy data via the LData tap-off units with communications-capable measuring and switching devices. The data transmission via powerline technology over the busbar is especially cost-effective and easy, with no need for additional control-wiring. That means it's both economical and easy for you to enjoy state-of-the-art power management in accordance with ISO 50001, which meets the latest requirements for greater energy transparency.

LData components

- Straight lengths (1 m / 2 m / 3 m)
- End feeder units and end caps
- Cubic tap-off units for plugging in above racks
- L-shaped tap-off units for plugging into a run in the double floor or above the racks
- By request: Customer-specific tap-off units, adapters to other SIVACON 8PS systems

Technical data – System							
Rated operational voltage U_e	[V AC]	600					
Rated frequency	[Hz]	50					
Ambient temperature min/max/ 24-hour mean	[°C]	-5/40/35					
Standards and regulations		IEC 61439-1 /-6					
Degree of protection		IP21					
Color		RAL9017 (black)					
Rated current I_{nA}							
horizontal, edgewise	[A]	1000	1200	1600	2000	2250	2500
horizontal, flat	[A]	*)	*)	*)	*)	*)	*)
Rated peak withstand current I_{pk}	[kA]	84	84	84	84	84	*)
Rated short-time withstand current I_{cw} (1 s)	[kA]	40	40	40	40	40	*)
Fire load	[kWh/m]	3.65	3.60	3.79	4.12	4.38	*)
Maximum support distance	[m]	3	3	3	3	3	*)
Conductor material		Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Conductor cross-section (phases, N, PE)	[mm ²]	524	524	698	1014	1203	*)
Housing dimensions H x W	[mm]	180 x 210	180 x 210	180 x 210	180 x 210	215 x 210	*)
Weight	[kg/m]	20	20	23	27	31	*)

*) upon request

Technical data – Tap-off units		
	Cubic	L-shaped
Rated current I_{nc}	max. 250 A	max. 125 A
Rated operational voltage U_e	415 V	415 V
Miniature circuit breaker		
Operating current max. 32 A	•	•
Switching poles 1/3/4 poles	•	•
Molded case circuit breaker		
Switching poles 3/4 poles	•	•
Operating current 16 A ... 125 A 160 A ... 250 A	• •	• •
Rated short-time withstand current I_{cw} (1 s) 25 kA/36 kA/55 kA	•	•
Customer connection Direct connection CEE socket outlet Cable + CEE connection	• • •	• • •
Data transmission powerline technology Conventionally wired	• •	• •

LData: Type designations

For lengths (L, E), cable power feeds (C) and accessories (Z)

	[NNN]	[NB]	[NN]	[B]	[B(B)]	[N(NNN)]
LDATA - ... 5H - 21 - . . - ...						
Current (A)						
L/C	four figures					
Z	optional					
Conductor configuration						
L/E/C	5 TN-S system					
	H 100% N / 100% PE					
Z	optional					
Degree of protection						
L/E/C	2 Dust protection IP2X					
	1 Water protection IPX1					
Z	optional					
Type identification						
L	Lengths					
E	Length with expansion compensation					
C	Cable feeder					
Z	Accessories					
Specification of type identification (optional)						
L/E	U Tap-off points downward					
	F Fixed point					
Z	E End cap					
	B Fastener					
Specification						
L/E	Length, mm					
C	Version number (counted in single digits)					
Z	Version number (counted in single digits)					

Examples

Length 3000 mm	LDATA-12505H-21-LU-3000
Cable power feed	LDATA-10005H-21-C-1
End cap	LDATA-21-ZE-1

Subject to changes and errors. The information given in this document only contains general descriptions and/or performance features which may not always specifically reflect those described, or which may undergo modification in the course of further development of the products. The requested performance features are binding only when they are expressly agreed upon in the concluded contract.

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For tap-off units (T)

	[NNN]	[NB]	[NN]	[B]	[N(NNN)]
LDATA - T- ... 5H - .1 - . - ...					
Tap-off unit					
Max. current (A)					
Conductor configuration					
5 TN-S system					
H 100% N / 100% PE					
Degree of protection					
2 Dust protection IP2X					
4 Dust protection IP4X					
1 Water protection IPX1					
Design					
L L-shaped unit					
C Cubic unit					
Specification					
Version number (counted in three digits)					

Example

Tap-off unit LDATA-T-0635H-41-L-001

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