

## VAHLE Powercom®

### VAHLE Powercom® 485

Type	Transfer speed	Transfer length	Powercom® devices per segment	Description	Order number
VAHLE Powercom® 485 230 V	19.2 kbps	up to 5000 m	64	Additional interfaces: Allen-Bradley DH 485, MODBUS Operating voltage: 230 optionally 115 Volt (± 10 %), 50/60 Hz Weight: 1100 g	910 108
VAHLE Powercom® 485 115 V	19.2 kbps	up to 5000 m	64		910 109



### VAHLE Powercom® 485 HD TWIN

Type	Transfer speed	Transfer length	Powercom® devices per segment	Description	Order number
VAHLE Powercom® 485 HD TWIN	28.8 bis 187.5 kbps (adjustable)	up to 200 m <sup>(1)</sup>	16 <sup>(1)</sup>	Display/operation, diagnostic adjustment, channel display, output status display, sensivity adjustment Operating voltage: 115 - 230 V (Multi voltage power supply unit), 50/60 Hz Weight: 850 g	910 126



<sup>(1)</sup> Standard values - higher number of participants or length of segment on request

### Further technical details about VAHLE Powercom® 485 and VAHLE Powercom® 485 HD TWIN

Transfer mode: Half-duplex, Interface: RS 485, 11 Bit (transparent protocol), PROFIBUS-DP and FMS acc. to EN 50170 Volume 2, PROFISAFE, MPI, Suconet, Number of BUS participants: according to BUS specification, Type of wire (connection to interface): according to BUS specification, Typ of wire (connection to and from the

conductor line): shielded power cable, double current collector, Voltage drop: 10 % max., Operating temperature: -20 ° bis + 50 °C, Housing dimension: 85 x 117 x 110 mm (WxHxD)

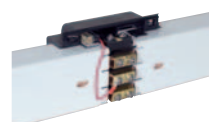


### VAHLE Powercom® Double filter

Type	Order number
VAHLE Powercom® Double filter	910 080

### VAHLE Powercom® Terminal resistance

Type	Order number
VAHLE Powercom® Terminal resistance	Please state the type of conductor line



## Scope of delivery and services Catalogue no.

<b>1 Open conductor systems</b>	
Open conductor systems	1a
<b>2 Insulated conductor systems</b>	
U10	2a
FABA 100	2b
U15, U25, U35	2c
U20, U30, U40	2d
<b>3 Compact conductor systems</b>	
VKS 10	3a
VKS - VKL	3b
<b>4 Enclosed Conductor Systems</b>	
KBSL - KSL	4a
KBH	4b
MKLD - MKLF - MKLS	4c
LSV - LSVG	4d
<b>5 Contactless power system</b>	
Contactless power system (CPS®)	5a
<b>6 Data transmission</b>	
VAHLE Powercom®	6a
Slotted Microwave Guide (SMG)	6b
<b>7 Positioning systems</b>	
VAHLE APOS®	7a
<b>8 Festoon systems and cables</b>	
Festoon systems for □ tracks	8a
Festoon systems for flat cables on I tracks	8b
Festoon systems for round flat cables on I tracks	8c
Festoon systems for ◊ tracks	8d
Cables	8e
<b>9 Reels</b>	
Spring Operated Cable Reels	9a
Motor Powered Cable Reels	9b
<b>10 Other</b>	
Battery charging systems	10a
Heavy enclosed conductor systems	10b
Tender	10c
Contact wire	10d

### Assemblies / Commissioning Spare parts / Maintenance service

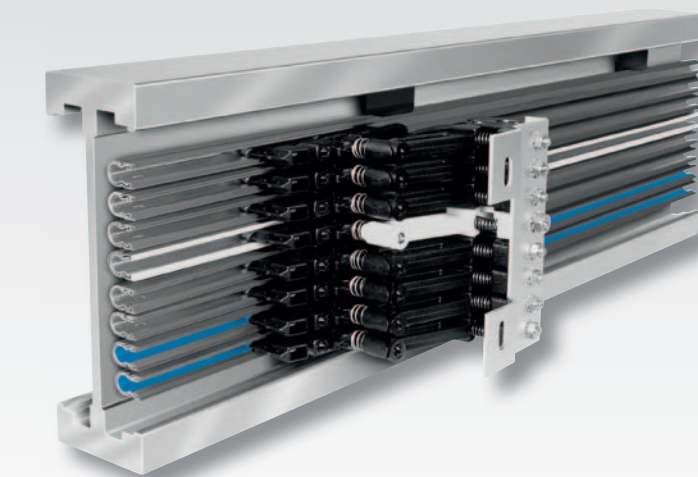


DQS - zertifiziert nach DIN EN ISO 9001:2000  
OHSAS 18001 (Reg.Nr. 003140 QM OH)

**VAHLE**   
DATA IN MOTION!

Kamen/Germany +49(0)2307/704-0  
www.vahle.de · info@vahle.de

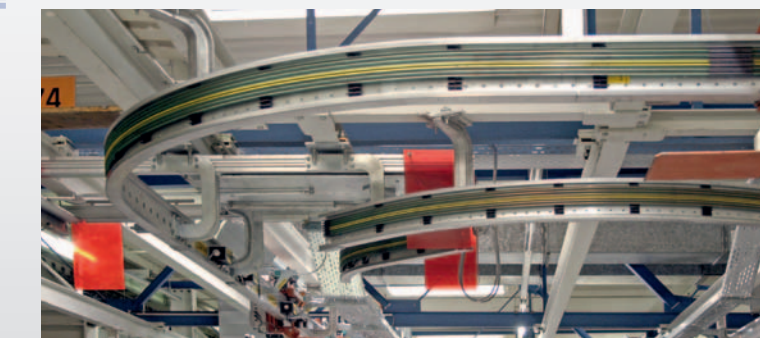
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**VAHLE**   
DATA IN MOTION!

**VAHLE Powercom®**  
Data transmission  
systems in conjunction  
with VAHLE conductor bars

**SYSTEMS IN MOTION**



# VAHLE Powercom®

VAHLE Powercom® – Data transmission systems in conjunction with VAHLE conductor bars or sliprings were developed for automated handling systems in material flow technology. They enable the uninterrupted and cost effective data transfer between the central control system and the accompanying automation devices on the conveying vehicles.

19.2 kbps



VAHLE Powercom® 485

- RS 485 Interface (transparent protocol)
- to be used in various BUS-Systems (see page 6)
- Transfer rate 19.2 kbps

187.5 kbps



VAHLE Powercom® 485 HD TWIN

- SRS 485 Interface (transparent protocol)
- ito be used in various BUS-Systems (refer to fould-out page)
- Transfer rate from 28.8 upto 187.5 kbps (adjustable)

## Other VAHLE data transmission systems

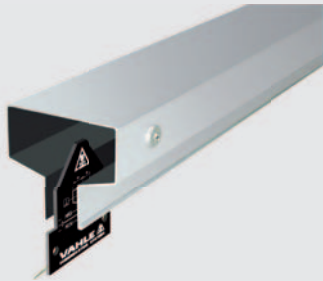
187.5 kbps



VAHLE Powercom® CPS®

- data transmission via CPS® system (inductive energy transfer)
- also available as stand alone solution
- for more information see Cat. CPS® (5a)

2 x 10 mbps



SMG (Slotted Microwave Guide)

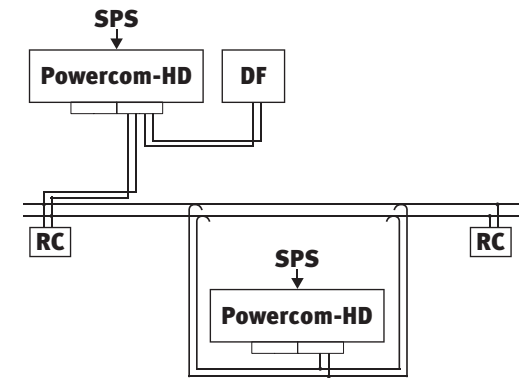
- interference free transmission via the slotted microwave guide
- also available as stand alone solution
- no interference by radio systems
- for more in information see Cat. SMG (6b)

## Advantages of VAHLE Powercom®

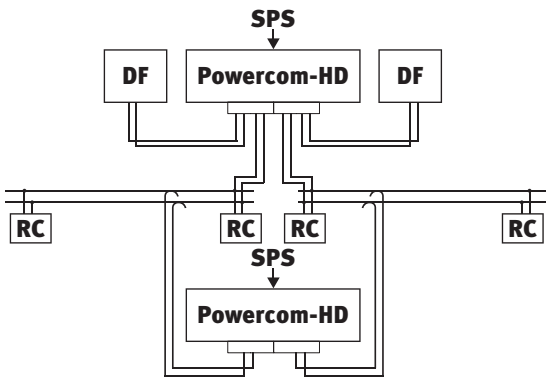
VAHLE Powercom® is a modem for reliable data transfer in half-duplex via conductor bars or slipring assemblies. It has a RS 485 interface as a standard, is transparent and does not require BUS-addressing.

- **reliable:** due to the special VAHLE technology, a self-cleaning effect arises, which ensures fault-free operation
- **fast:** direct data transfer (max. 2-3 bit delay)
- **simple:** install the VAHLE Powercom® 485 and begin data transfer (plug and play)
- **adapted:** VAHLE Powercom® 485 HD with VAHLE installation engineering and assembly

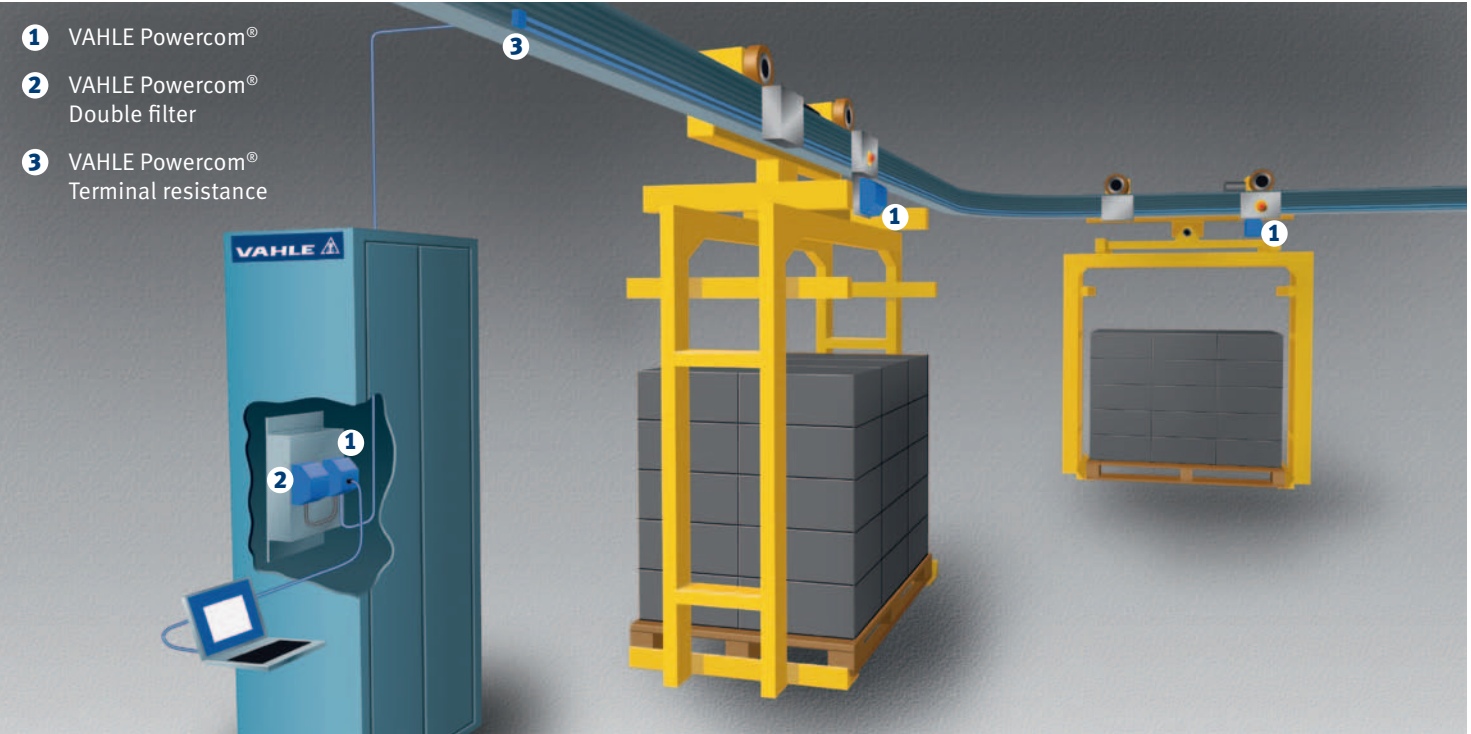
Powercom® HD TWIN for systems with one segment



Powercom® HD TWIN for systems with two or more segments



## Example of use



- 1 VAHLE Powercom®
- 2 VAHLE Powercom® Double filter
- 3 VAHLE Powercom® Terminal resistance

## Your benefit with VAHLE Powercom®



Transfer cars

- all types of conductor bars can be used (e.g. enclosed conductor systems)
- one conductor bar for power and data transmission
- highest availability even with the use of spring operated and motorized cable reels



Sewage installations

- cost-effective and reliable data transmission via conductor bars or spring-operated and motor powered cable reels
- interference-proof even in case of many parallel systems on the installation



Hangar systems

- highest availability for the use of powerail enclosed conductor systems (power and track) also for parallel routing
- good accessibility due to switch cabinet installation
- also in conjunction with the APOS® positioning system



Suspended tub trolley

- power and data transfer within one conductor system
- use of track switches unproblematic
- large installation lengths possible
- large number of consumers
- complex track layout possible
- also in conjunction with the APOS® positioning system



AS/RS Warehouse systems

- one conductor system for power, data and APOS® positioning
- no energy chain required
- no travel speed limitation
- high data transmission rate
- highest availability in difficult ambient conditions



EMS

- complete „C1“ conformity
- complex track layouts can be realised, also for track switches, lifting stations etc.
- segmenting, also for larger installation lengths
- high number of consumers
- highest availability
- also in conjunction with the APOS® positioning system
- insensitive to dirt