VAHLE

vCOM – COMMUNICATION SYSTEMS
POWERCOM

POWERCOM – KEY HIGHLIGHTS

EASY MAINTENANCE

VAHLE Powercom® 485 has an integrated transparent RS485 interface on the front that complies with the Profibus standard. Three LEDs provide information on the device's status. Due to the special VAHLE technology, a self-cleaning effect arises, which ensures fault-free operation.

UNINTERRUPTED DATA TRANSFER

VAHLE Powercom® 485– 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.

VAHLE COMPLETE SOLUTIONS

VAHLE Powercom® 485 offers simple and easy assembly and integration with other VAHLE systems to provide compact and efficient solutions in one package (plug and play).

QUICK AND TRANSPARENT

VAHLE Powercom® 485 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. VAHLE Powercom® 485 provides a direct data transfer.

POWERCOM – FUNCTION

VAHLE Powercom® 485 is specially designed for RS485-based bus systems with a transfer speed of 19.2 kbit/s for long distances.

The VAHLE Powercom® 485 unit is integrated into a compact top-hat rail housing with power supply. This makes it easier to choose the installation location, e.g. on electric monorail systems, and also facilitates the installation itself.

VAHLE Powercom® 485 has an integrated transparent RS485 interface on the front that complies with the Profibus standard. Under it are the connectors for a 230 V/50 Hz power supply (optionally, 115 V/60 Hz), as well as the 2-pin connector leading to the conductor system. Three LEDs provide information on the device's status.

VAHLE Powercom® 485 is a modem for reliable data transfer in RS485 bus systems over a conductor line and cables with a length of up to approx. 5000 m. It can be used together with installed switches, hubs, hub stations etc. The maximum transfer speed is 19.2 kbit/s with an internal lag of max. 3 bits.

The transfer speed of 19.2 kbit/s and low carrier frequencies have been designed for extremely long routes with a large number of switches, hubs, and hub stations.

It is possible to use the VAHLE Powercom® 485 transfer system on a single power rail. All conductor systems from the VAHLE catalogue can be used for reliable data transfer with VAHLE Powercom® 485.

Tree, ring, and linear structures with crossings, joints, etc. can be realised. This results in ideal operating conditions on electric monorail systems, rack feeders travelling along curved sections, as well as all rail-guided conveying equipment and collector ring bodies.

Areas of application:
- Crane systems
- Stacker cranes
- Transfer trolleys
- Electric monorail systems

POWERCOM – RANGE OF PRODUCTS

TECHNICAL DATA

ELECTRICAL DATA

Transfer mode .... Half-Duplex

Transfer speed.. 19.2 kBit/s

Number of subcribers .... According to specification of the bus system used

Suitable bus systems... All bus systems with decentralised intelligence, e. g.:

- Profibus-DP and FMS in acc. with EN 50170 Vol. 2
- PPI
- MPI (Multipoint Interface)
- Modbus
- Suconet-Bus
- Allen-Bradley DH485
- other 2-wire bus system with character length of 11 Bit
  (optional 10 Bit)

Wire type of point-to-point connection (connector on interface) .... Twisted pair data cables, shielded,

according to bus manufactor's specifications

Wire type (connection from and at the conductor line)............................. Shielded power cable

Displayes.. 3 status LEDs for power, RX und TX

Operating voltage .... 230 V / 50 Hz (115 V / 60 Hz optional)

Voltage drop.. ±10 % max.

MECHANICAL DATA

Housing dimensions .... 85 x 117 x 110 mm (B x H x T), installed vertically,

with ventilation slits at top and bottom,

minimum distance to other components: 30 mm

Protection type IP20

Weight .... 1100 g

Mounting type.. Installation on top-hat railEN 50-022-35,

installed in a central position on the back of the housing

AMBIENT CONDITIONS

Operating temperature .... –20°C ... +50°C

Storage temperature.. –20°C ... +50°C

RANGE OF PRODUCTS

Description	Transfer length	Devices per segment	Order No.
VAHLE Powercom® 485 230 V	up to 5000 m	64	910108*
VAHLE Powercom® 485 115 V	up to 5000 m	64	910109*
VAHLE Powercom® Double filter	-	-	910080
VAHLE Powercom® Terminal resistance	-	-	on request*

* Additional interfaces: Allen-Bradley DH 485, MODBUS. Type of terminal resitance bases on type of conductore line.
  Please contact our TechSales in any case of need.

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