









# **Model number**

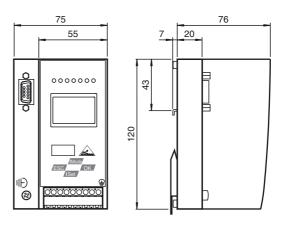
### VBG-PB-K20-DMD

PROFIBUS Gateway, double master for 2 AS-Interface networks

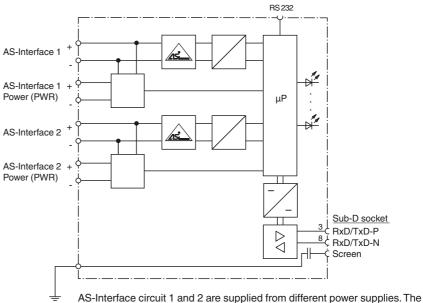
### **Features**

- Connection to PROFIBUS DP
- 2 AS-Interface networks
- PROFIBUS DP V1 support
- Easy commissioning and fault diagnosis via LEDs and graphic display
- Dublicate addressing detection
- Earth fault detection
- AS-Interface noise detection
- RS 232 diagnosis interface

## **Dimensions**



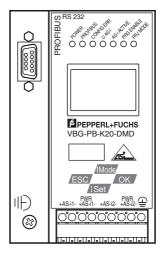
## **Electrical connection**



gateway is supplied from circuit 1. At the cable for power supply no slaves or repeaters may be attached.

At the cable for AS-Interface circuit no power supplies or further masters may

# **Indicating / Operating means**



**Technical data** 

#### General specifications V3.0 AS-Interface specification **PLC-Functionality** activateable Duplicate address detection from AS-Interface slaves Earth fault detection EFD integrated EMC monitoring integrated Diagnostics function Extended function via display **UL File Number** E223772 Functional safety related parameters $MTTF_d$ 80 a at 30 °C Indicators/operating means Display Illuminated graphical LC display for addressing and error mes-LED PROFIBUS PROFIBUS master detected; LED green LED AS-i ACTIVE AS-Interface operation normal; LED green LED CONFIG ERR configuration error; LED red LED PRG ENABLE autom. programming; LED greer LED POWER voltage ON: LED green LED PRJ MODE projecting mode active; LED yellow LEDUAS-i AS-Interface voltage; LED green Switch SET Selection and setting of a slave address OK button Mode selection traditional-graphical/confirmation **Button MODE** Mode selection PRJ-operation/save configuration/cursor ESC button Mode selection traditional-graphical/cancel **Electrical specifications** Insulation voltage U: > 500 V Rated operating voltage Ue from AS-Interface Rated operating current ≤ 180 mA from AS-Interface $I_e$ Interface 1 Interface type RS 485 PROFIBUS DP V1 Protocol Transfer rate 9.6 kBit/s / 12 MBit/s . Automatic baud rate detection Interface 2 Interface type RS 232, serial Diagnostic Interface Transfer rate 19,2 kBit/s Connection **PROFIBLIS** Sub-D interface AS-Interface spring terminals, removable **Ambient conditions** 0 ... 55 °C (32 ... 131 °F) Ambient temperature -15 ... 75 °C (5 ... 167 °F) Storage temperature **Mechanical specifications** Protection degree IP20 420 g Mass Construction type Low profile housing, Stainless steel Compliance with standards and directi-Standard conformity Electromagnetic compatibility EN 61326:2003 EN 50295:1999 AS-Interface

## **Notes**

Protection degree

In an AS-Interface network only one device can be operated earth fault detection. If there are many devices in an AS-Interface network, this can lead to the earth fault monitoring response threshold becoming less sensitive.

EN 60529:2000

### **Function**

The VBG-PB-K20-DMD is a PROFIBUS Gateway with 2 AS-Interface masters in accordance with AS-Interface Specification 3.0 in IP20. The design is especially suitable for use in the switch cabinet.

The VBG-PB-K20-DMD is a modular PROFI-BUS slave. This means that the user can use the PROFIBUS configuration tool to specify what data will be transferred via the PROFI-BUS. This makes it possible to adjust the amount of data to be transferred via PROFI-

In addition, this gateway supports acyclical communication of the PROFIBUSDP V1. These acyclical services can be used to access a mailbox in the gateway that provides access to all the data made available by the AS-Interface/PROFIBUS Gateway.

A push button can be used to accept the target configuration and to adjust the PROFI-BUS address and baud rate. There are 7 LEDs on the front panel, showing the current status of the AS-Interface line.

In the case of the AS-Interface Gateway with graphical display, the AS-Interface circuit can be placed in service and the test of the connected periphery can be kept entirely sepafrom the commissioning of the PROFIBUS and the programming. On-site operation with the aid of the graphical display and 4 push buttons makes it possible to show all functions on the display that are covered by the AS-i Control Tools software for other AS-Interface masters. An additional RS 232socket offers the option of reading data via gateway, network and function as part of advanced local diagnostics directly from the gateway.

#### **PLC functionality**

Optionally the gateway is also available with PLC-functionality. Therefor you can order a code key VAZ-CTR additionally.

### Software

The device is supplied with the configuration data files (GSD) as well as a restricted version of the AS-i Control Tools software. The software performs the addressing, programming and monitoring of the AS-Interface network. The full version of the AS-i Control Tool is available as an accessory and features an expanded diagnostics monitor as well as a larger program memory for AS-Interface Control which makes it possible to detect faulty & telegrams of slaves.

A GSD file can be easily created for the PROFIBUS DP using the GSD assistant, whereby the size of the I/O windows can be conveniently adapted to the AS-Interface circuit's load and the AS-Interface configuration can be stored within the GSD file. A text file is also created, which documents the status of AS-Interface data in the gateway's I/O window.

#### Note:

The VAZ-PB-SIM accessory is required for the AS-i Control Tool.



# Accessories

### **VAZ-SW-ACT32**

Full version of the AS-I Control Tools including connection cable

# **VAZ-PB-SIM**

PROFIBUS master simulator

## USB-0,8M-PVC ABG-SUBD9

Interface converter USB/RS 232

#### VAZ-PB-DB9-W

PROFIBUS Sub-D Connector with switchable terminal resistance