



### Model number

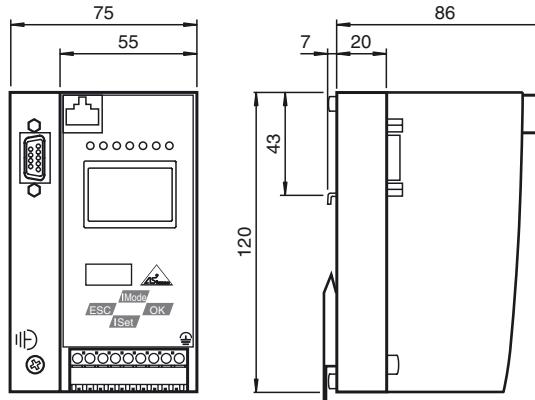
**VBG-PB-K20-DMD-EV1**

PROFIBUS Gateway, double master for 2 AS-Interface networks

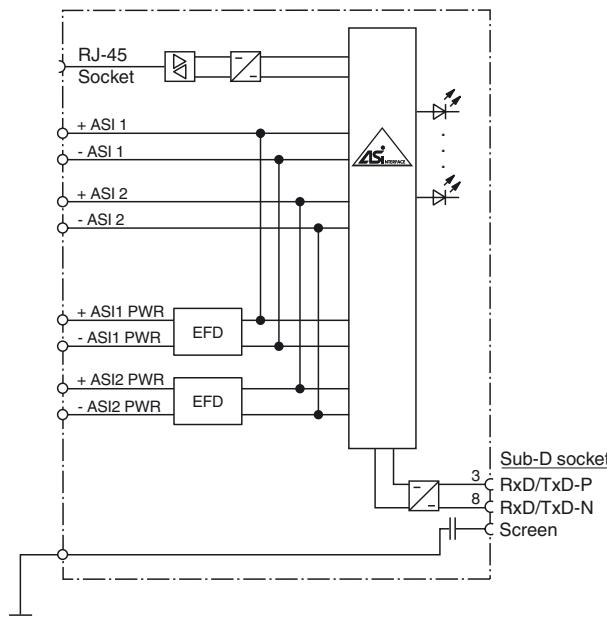
### Features

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

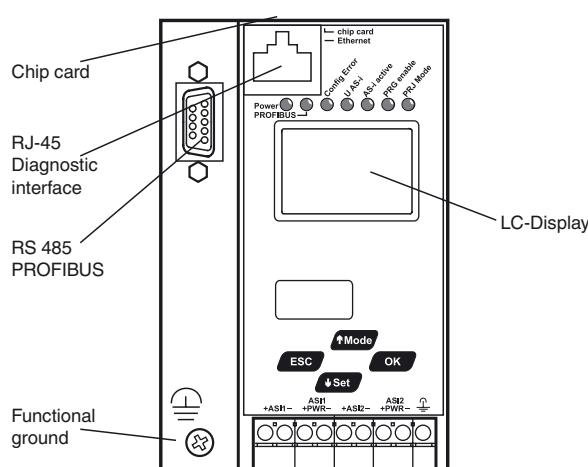
### Dimensions



### Electrical connection



### Indicating / Operating means



**Technical data****General specifications**

AS-Interface specification	V3.0
PLC-Functionality	activateable
Duplicate address detection	from AS-Interface slaves
Earth fault detection	EFD
EMC monitoring	integrated
Diagnostics function	integrated
UL File Number	Extended function via display
	E223772

**Indicators/operating means**

Display	Illuminated graphical LC display for addressing and error messages
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 green
LED POWER	voltage ON; LED green
LED PRJ MODE	projecting mode active; LED yellow
LED U AS-i	AS-Interface voltage; LED green
Button	4
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 <sub>i</sub>	≥ 500 V
Rated operating voltage	U <sub>e</sub>	from AS-Interface
Rated operating current	I <sub>e</sub>	≤ 200 mA off AS interface network 1 ≤ 200 mA off AS interface network 2 ≤ 270 mA in total

**Interface 1**

Interface type	RS-485
Protocol	PROFIBUS in accordance with IEC 61158/IEC 61784-1
Transfer rate	9.6 kB/s / 12 MBit/s, Automatic baud rate detection

**Interface 2**

Interface type	RJ-45 Ethernet Programming and diagnostics interface
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**Interface 3**

Interface type	Chip card slot
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**Connection**

PROFIBUS	Sub-D interface
Ethernet	RJ-45
AS-Interface	spring terminals, removable

**Directive conformity**

Electromagnetic compatibility	
Directive 2014/30/EU	EN 62026-2:2013 EN 61000-6-2:2005, EN 61000-6-4:2007

**Standard conformity**

Electromagnetic compatibility	EN 61000-6-2:2005, EN 61000-6-4:2007
Degree of protection	EN 60529:2000
AS-Interface	EN 62026-2:2013

**Ambient conditions**

Ambient temperature	0 ... 55 °C (32 ... 131 °F)
Storage temperature	-25 ... 85 °C (-13 ... 185 °F)

**Mechanical specifications**

Degree of protection	IP20
Material	
Housing	Stainless steel
Mass	460 g
Construction type	Low profile housing

**Notes**

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.

**Function**

The VBG-PB-K20-DMD-EV1 is a PROFIBUS gateway with a double master according to AS-Interface specification 3.0.

The design of the K20 in stainless steel with IP20 is particularly suited for use in switching cabinets for snap on mounting on the 35 mm mounting rail.

The gateway in accordance with the AS-Interface specification V 3.0 is used to connect AS-Interface systems to a higher-level net. It acts as a master for the AS-Interface segment and as a slave for the higher-level net. During cyclic data exchange, the digital data of an AS-Interface segment is transferred.

The address allocation and acceptance of the target configuration can be achieved via the keys. 7 LEDs fitted to the front panel indicate the actual state of the AS-Interface branch. With the graphical display, the commissioning of the AS-Interface circuits and testing of the connected peripherals can take place completely separately from the commissioning of the higher-level network and the programming. With the 4 switches, all functions can be controlled and visualized on the display.

The port provides a way of exporting data relating to the gateway, network and operation directly from the gateway for extended local diagnosis purposes.

Via the RJ-45 Ethernet diagnostic interface, up to 31 devices can establish a secure cross-communication.

The device has a card slot for a memory card for the storage of configuration data.

The redundant power supply guarantees that the double master remains in function and is diagnosticable, when a failure of a power supply unit in one of the two AS-interfaces circles occurs. Also communication with the superior field bus is not disturbed by the failure of a power supply.

**SPS Functionality**

Optionally the gateway is also available with PLC functionality. Therefor you can order a code key VAZ-CTR3 additionally. The programming language is ANSI-C. A compiler is available as plug-in for ECLIPSE environment.

**Accessories****VAZ-SW-ACT32**

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

**VAZ-PB-SIM**

PROFIBUS master simulator

**VAZ-PB-DB9-W**

PROFIBUS Sub-D Connector with switchable terminal resistance