Dimensions

Electrical connection

	CombiCon connector
1	V+
2	CAN_H
3	shield
4	CAN_L
5	V-

AS-Interface circuit 1 and 2 are supplied from different power supplies. The gateway is supplied from circuit 1. At the cable for power supply no slaves or repeaters may be attached.
At the cable for the AS-Interface circuits no power supplies or further masters may be attached.
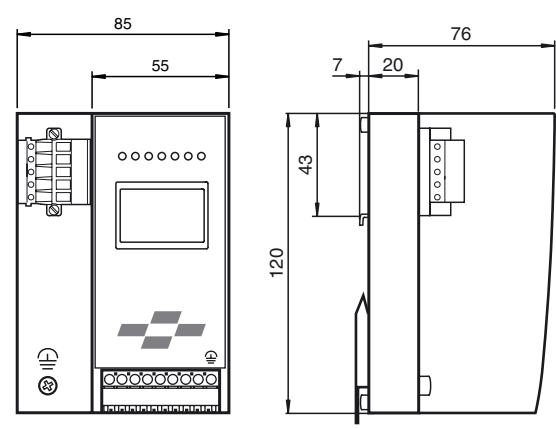
Model number

VBG-DN-K20-DMD-BV

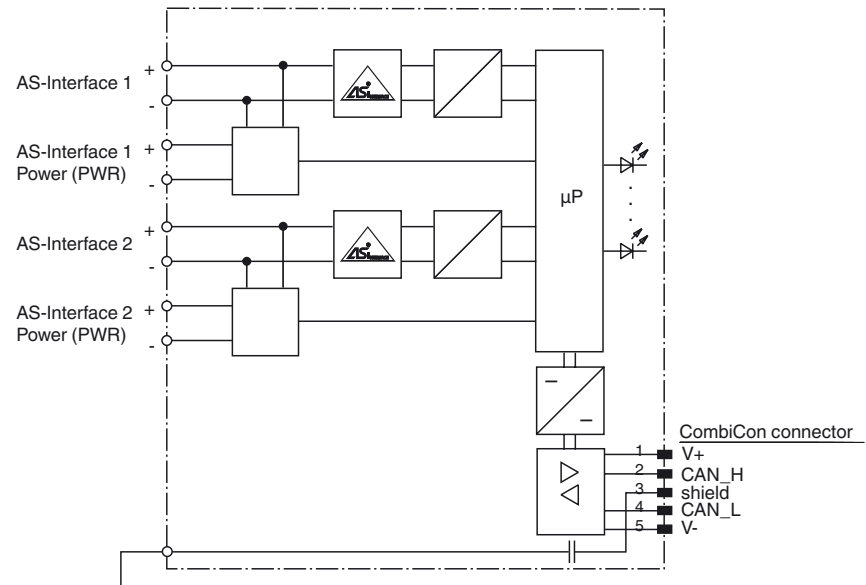DeviceNet Gateway, double master for 2 AS-Interface networks

Features

- Gateway compliant with AS-Interface specification 3.0
- 2 AS-Interface networks
- Earth fault detection
- AS-Interface noise detection
- Easy commissioning by graphic display
- Commissioning, locally on the gateway or via AS-i Control Tools software
- Fault diagnosis via LEDs and grafic display
- AS-Interface monitor or extended AS-Interface diagnostic read via display

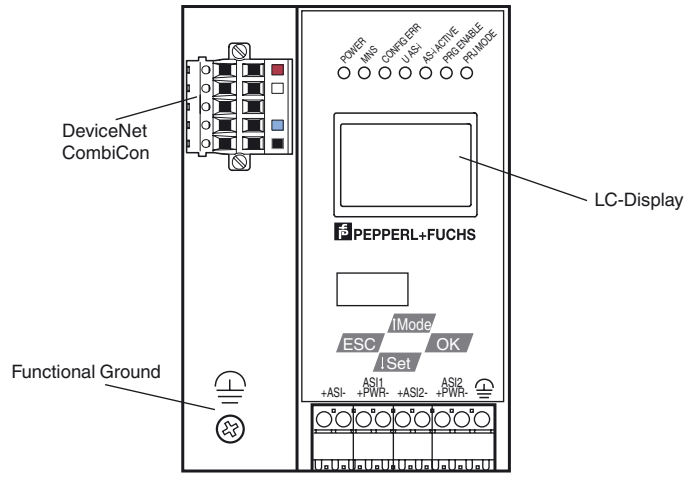## Indicating / Operating means

DeviceNet CombiCon

LC-Display

Functional Ground

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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Technical data

General specifications

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

Indicators/operating means

Display	Illuminated graphical LC display for addressing and error messages
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
LED MNS	Module/net status; LED green/red
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_i	≥ 500 V
Rated operating voltage	U_e	from AS-Interface
Rated operating current	I_e	≤ 200 mA from AS-Interface circuit 1 ≤ 70 mA from AS-Interface circuit 2

Interface

Protocol	DeviceNet

Connection

AS-Interface	spring terminals, removable
DeviceNet	5-pin CombiCon connector according to DeviceNet specification

Ambient conditions

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

Mechanical specifications

Protection degree	IP20
Mass	520 g
Construction type	Low profile housing , Stainless steel

Compliance with standards and directives

Standard conformity	
Electromagnetic compatibility	EN 61000-6-2:2005, EN 61000-6-4:2001, EN 50295:1999
AS-Interface	EN 50295
Protection degree	EN 60529
Shock and impact resistance	EN 61131-2

Function

The VBG-DN-K20-DMD-BV is a DeviceNet gateway with two AS-Interface masters compliant with AS-Interface specification 3.0. The variant in an IP20 stainless steel housing is particularly suitable for use in the switching cabinet for snapping onto 35mm mounting rails.

The gateway is a 100% DeviceNet slave (group 2 slave) and, as a listed product, directly addressable through the DeviceNet device manager. Communication between the AS-Interface and DeviceNet is implemented by the gateway with no additional programming effort.

For the AS-Interface gateway with graphic display, the commissioning of the AS-Interface circuit as well as the test of the connected periphery can be completely separated from the commissioning of the DeviceNet as well as the programming. On-site operation using the graphical display and the four buttons make it possible to perform all functions on the display. Address assignment and transfer of the expected configuration can be done with the buttons. There are 7 LEDs on the front panel, showing the current status of the AS-i line.

The gateway draws its power from the AS-interface cable. The connection of the AS-Interface gateway to the DeviceNet uses the 5pin CombiCon plug according to the DeviceNet specification. There are self-opening device terminals available for all other connections.

PLC Functionality

Furthermore, the gateway can optionally be delivered with PLC functionality. Therefor you can order a code key VAZ-CTR additionally.

Accessories

VAZ-SW-ACT32

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