



Model number

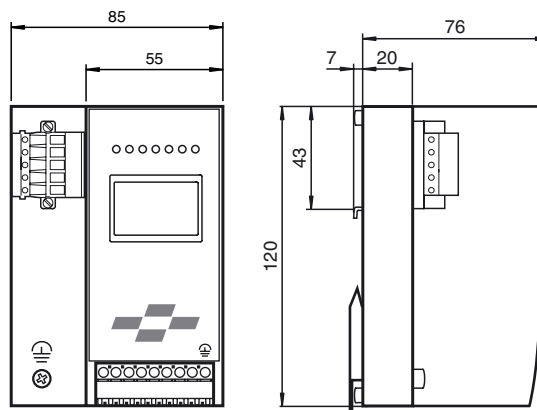
VBG-DN-K20-D

DeviceNet Gateway

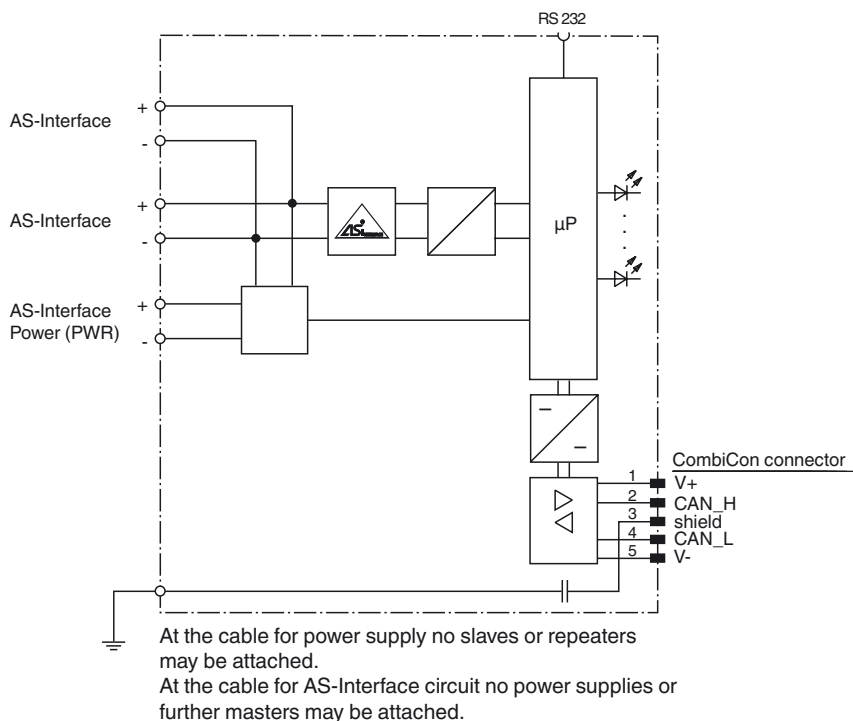
Features

- Gateway compliant with AS-Interface specification 3.0
- Duplicate addressing detection
- 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 graphic display
- AS-Interface monitor or extended AS-Interface diagnostic read via display
- Ethernet diagnostic interface

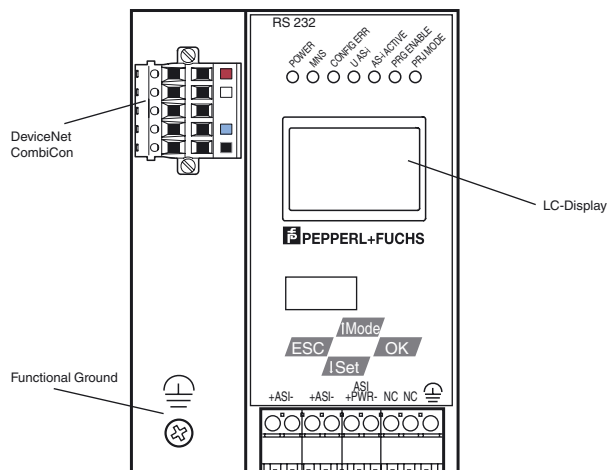
Dimensions



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 integrated
EMC monitoring	integrated
Diagnostics function	Extended function via display
UL File Number	E223772 only from low voltage, limited energy source (SELV or PELV) or listed Class 2 source

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

Interface 1

Protocol	DeviceNet
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Interface 2

Interface type	RS 232, serial Diagnostic Interface
Transfer rate	19,2 kBit/s

Connection

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

Directive conformity

Electromagnetic compatibility	
Directive 2014/30/EU	EN 62026-2:2013

Standard conformity

Electromagnetic compatibility	EN 61000-6-2:2005, EN 61000-6-4:2001, EN 50295:1999
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
Mass	520 g
Construction type	Low profile housing, Stainless steel

Approvals and certificates

EAC conformity	TR CU 020/2011
UL approval	An isolated source with a secondary open circuit voltage of ≤ 30 V _{DC} with a 3 A maximum over current protection. Over current protection is not required when a Class 2 source is employed. UL mark does not provide UL certification for any functional safety rating or aspects of the device.

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-DN-K20-D is a DeviceNet gateway 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. An additional RS 232 socket is available with the option to read out data directly from the gateway via gateway, network and function within the scope of an enhanced on-site diagnosis. Using the AS-i Control Tools package (not included), many functions can be remotely controlled via PC.

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. Therefore you can order a code key VAZ-CTR additionally.

Accessories**VAZ-SW-ACT32**

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

USB-0,8M-PVC ABG-SUBD9

Interface converter USB/RS 232