AS-Interface gateway

VBG-DN-K20-DMD-BV

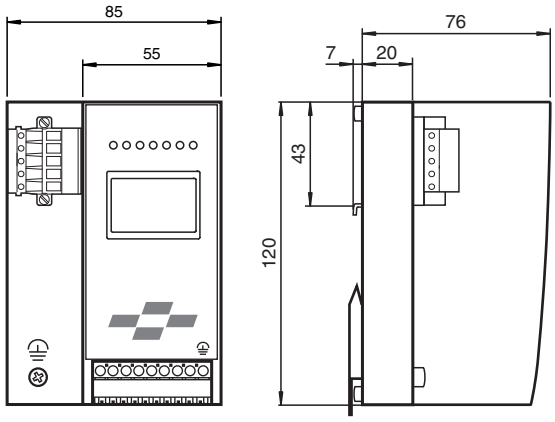
- Gateway compliant with AS-Interface specification 3.0
- 2 AS-Interface networks
- Earth fault detection
- AS-Interface noise detection
- Easy commissioning by graphic display
- Commissioning, locally on the gateway or via AS-i Control Tools software
- Fault diagnosis via LEDs and grafic display
- AS-Interface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

DeviceNet Gateway, double master for 2 AS-Interface networks

Function

The VBM-CTR-K20-R2 is a stand-alone master in AS-Interface specification 3.0 with IP20. The construction type is especially suited for use in a switch cabinet.
Address allocation, acceptance of the target configuration and setting the baud rate can be managed via buttons. There are 7 LEDs on the front panel, showing the current status of the AS-Interface line.
In the AS-Interface master with graphical display the commissioning of the AS-Interface circuit and the test of the connected periphery devices can be separated completely overriding bus systems and from programming. The on-site operation via the graphic display and the four push buttons make it possible to show all of the functions on the display, which, for all other AS-Interface masters, are covered by the software AS-Interface control tools.
PLC Functionality
For PLC functionality the VBM-CTR-K20-R2 provides 16 kB program memory, 8 kB data memory, 1024 counters and 1024 timers. This is sufficient capacity to process all data arriving at the AS-Interface. The master can, therefore, also be operated as "stand-alone". The programm processing for 1000 word commands is approx. 2 ms. The programming language is based on STEP5. In the extended mode the AS-Interface CTRL functions (upload, download, start, stop, read and write marker) can be utilized.

Dimensions



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

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Technical Data

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
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
Shock resistance		EN 61131-2
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

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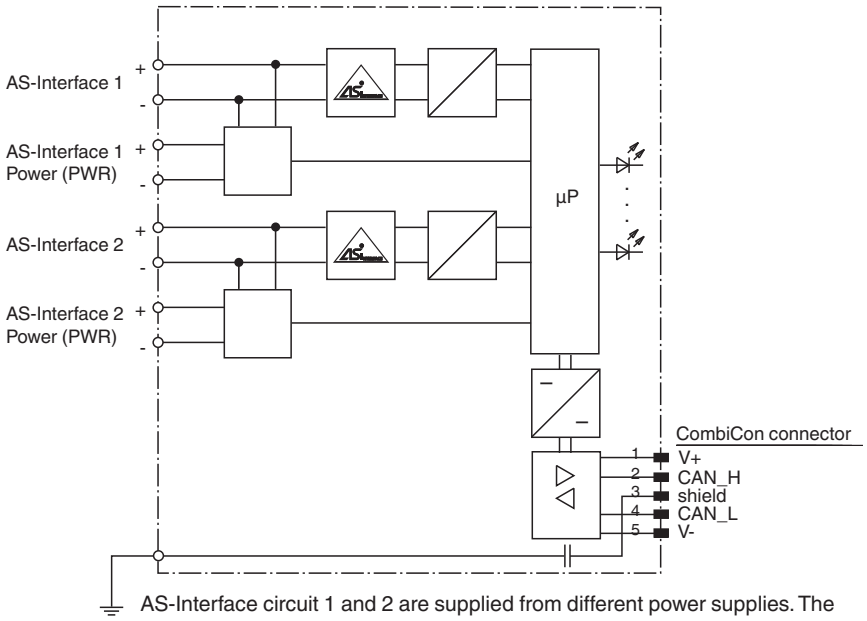
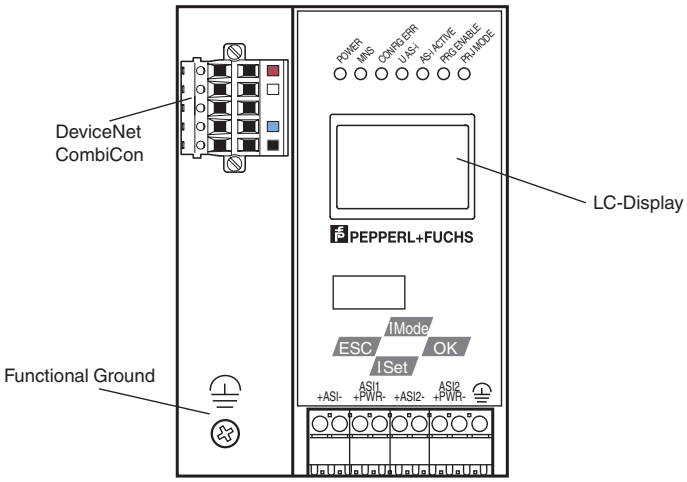
Connection



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.

Assembly



Accessories

	VAZ-SW-ACT32	Full version of the AS-I Control Tools including connection cable

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