Model number

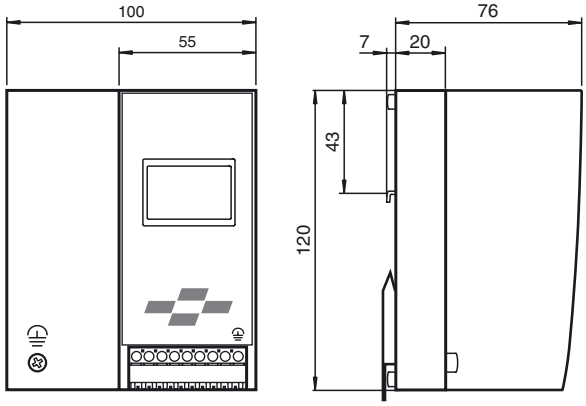
VBG-EN-K20-DMD

Ethernet/IP Gateway, double master for 2 AS-Interface networks

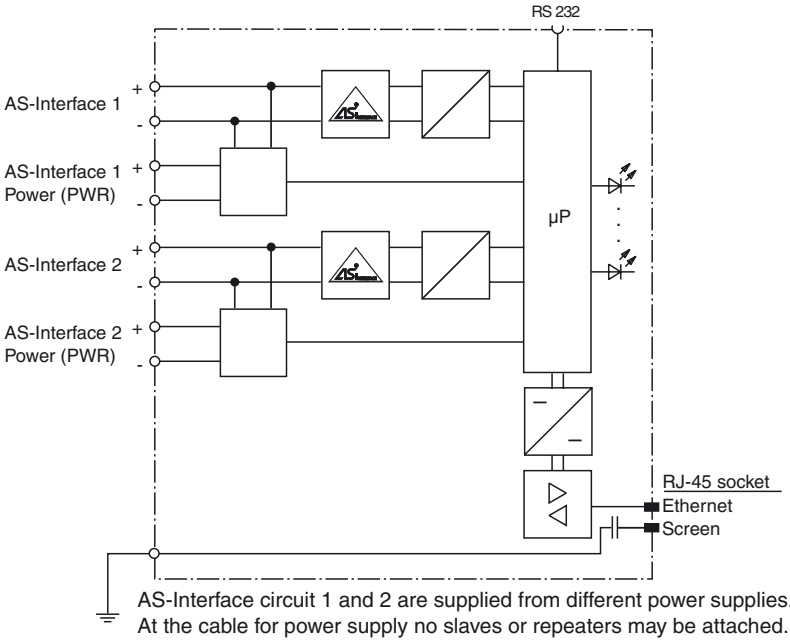
Features

- Gateway compliant with AS-Interface specification 3.0
- 2 AS-Interface networks
- Double adressing detection of von AS-Interface slaves
- Earth fault detection
- AS-Interface EMC monitoring
- 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
- Parallel diagnostic interface for monitoring during operation

Dimensions

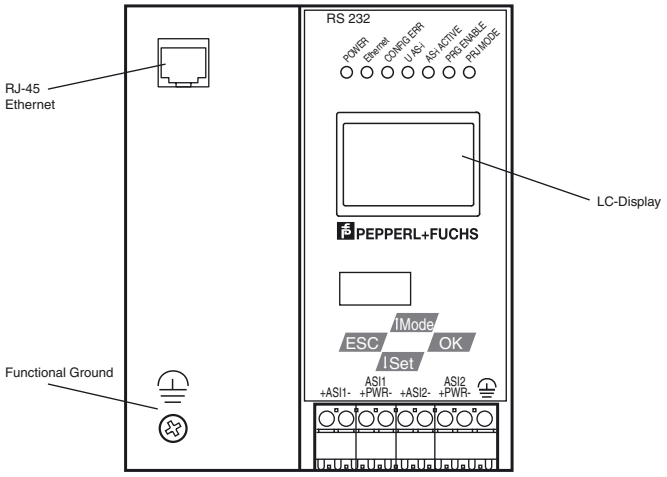


Electrical connection



AS-Interface circuit 1 and 2 are supplied from different power supplies.
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 be attached.

Indicating / Operating means



Release date: 2011-05-06 15:11 Date of issue: 2011-11-16 190323_eng.xml

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
Functional safety related parameters		
$MTTF_d$		80 a at 30 °C
Indicators/operating means		
Display		Illuminated graphical LC display for addressing and error messages
LED ETHERNET		ethernet active; 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
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 operational voltage	U_e	from AS-Interface
Rated operational current	I_e	≤ 200 mA from AS-Interface circuit 1 ≤ 70 mA from AS-Interface circuit 2
Interface 1		
Interface type		RJ-45
Protocol		Ethernet/IP
Interface 2		
Interface type		RS 232, serial Diagnostic Interface
Transfer rate		19,2 kBit/s
Connection		
Ethernet		RJ-45
AS-Interface		spring terminals, removable
Ambient conditions		
Ambient temperature		0 ... 55 °C (32 ... 131 °F)
Storage temperature		-25 ... 85 °C (-13 ... 185 °F)
Mechanical specifications		
Protection degree		IP20
Mass		550 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

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-EN-K20-DMD is an Ethernet/IP gateway with 2 AS-Interface masters in accordance with AS-Interface specification 3.0. This means that data can be transferred from 2 parallel AS-Interface branches via one IP address. The design in stainless steel with IP20 is particularly suited for use in switching cabinets for snap on mounting on the 35 mm mounting rail.
In the AS-Interface gateway with graphical display the commissioning of the AS-Interface circuit and the test of the connected periphery devices can be separated completely from the commissioning of the Ethernet and from programming. Operation on site via the graphic display and the 4 keys makes it possible to represent all functions on the display. 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. An additional RS 232 jack provides the option to read data about gateway, network and function directly from the gateway as part of an extended on site diagnosis. The gateway is supplied with power from the AS-Interface cable.
Using the software AS-i Control Tool (not included in the scope of delivery) many functions can be remotely controlled via PC.
Each gateway is supplied with a unique MAC-ID and supports the allocation of a static (via keypad) and dynamic IP address (DHCP, Dynamic Host Configuration Protocol).

PLC Functionality

Optionally the gateway is also available 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

USB-0,8M-PVC ABG-SUBD9
Interface converter USB/RS 232

Release date: 2011-05-06 15:11 Date of issue: 2011-11-16 190323_eng.xml