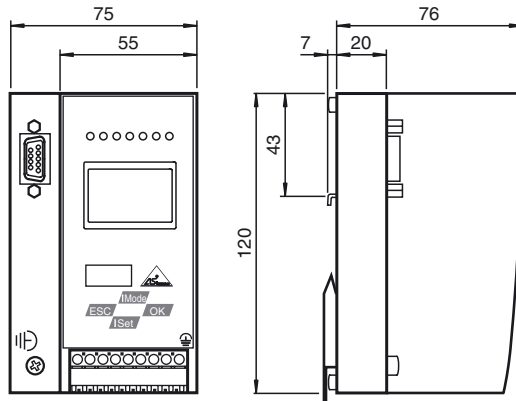
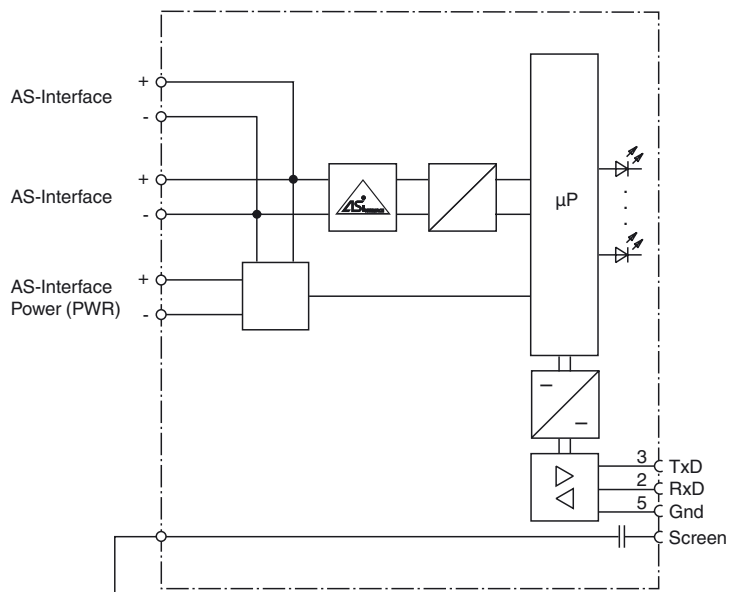




Dimensions



Electrical connection



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.

Model number

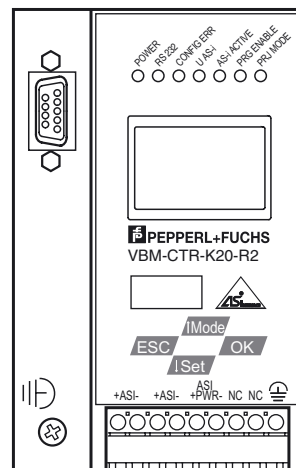
VBM-CTR-K20-R2-ACT32

Packet from the VBM-CTR-K20-R2 master and the VAZ-SW-ACT32 software

Features

- Stand alone master with PLC functionality and RS 232 interface
- Large, graphic LCD
- RS 232 diagnosis interface
- Easy commissioning and fault diagnosis via LEDs and graphic display
- Earth fault detection
- AS-Interface noise detection
- AS-i Control Tools Software included as standard

Indicating / Operating means



Release date: 2019-01-09 10:03 Date of issue: 2019-01-09 195380\_eng.xml

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	integrated
Earth fault detection	EFD integrated
EMC monitoring	integrated
Diagnostics function	Extended function via display

**Functional safety related parameters**

MTTF <sub>d</sub>	180 a at 30 °C
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**Indicators/operating means**

Display	Illuminated graphical LC display for addressing and error messages
LED RS 232	interface in operation; 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	$U_i$	$\geq 500$ V
Rated operating voltage	$U_e$	from AS-Interface
Rated operating current	$I_e$	$\leq 150$ mA

**Interface**

Interface type	RS 232
Transfer rate	1200, 2400, 4800, 9600, 19200, 28800, 38400, 57600 or 11500 Bit/s , Automatic baud rate detection
Cable length	max. 30 m

**Connection**

AS-Interface	spring terminals, removable
Serial interfaces	9-pin Sub-D socket

**Directive conformity**

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

**Standard conformity**

Electromagnetic compatibility	EN 61326
Degree of protection	EN 60529:2000
AS-Interface	EN 62026-2:2013

**Ambient conditions**

Ambient temperature	0 ... 55 °C (32 ... 131 °F)
Storage temperature	-15 ... 75 °C (5 ... 167 °F)

**Mechanical specifications**

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

**General information**

Scope of delivery	1 VBM-CTR-K20-R2 1x AS-I Control Tools software
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**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 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.

**Accessories****USB-0,8M-PVC ABG-SUBD9**

Interface converter USB/RS 232

**Matching system components****VBG-RIO-KHD2-R2**

Bus Coupler for Allen Bradley Remote I/O