



**62**  
Spec 2.1

**Model Number**

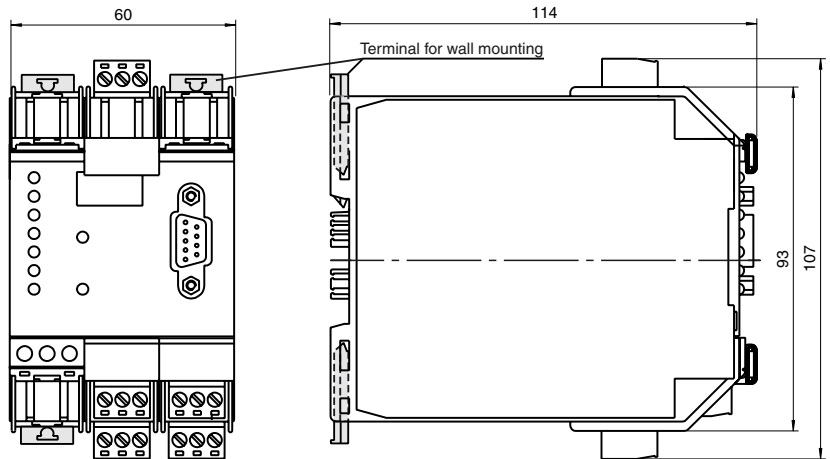
**VBM-CTR-KF-R2**

AS-Interface master RS 232 cabinet module

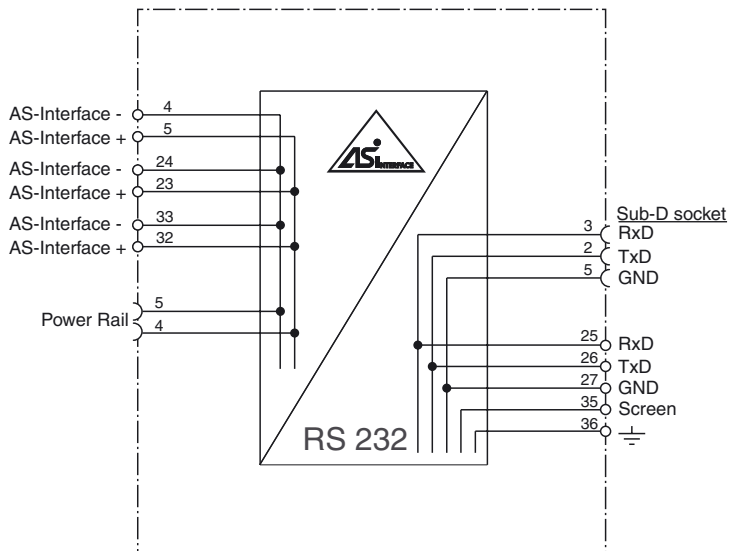
**Features**

- Stand-alone master with PLC functionality
- Two-digit LC display
- Voltage supply from AS-Interface
- Automatic baud rate detection
- Programmable slave addresses
- Display of detected slaves
- Fault diagnosis
- Parameterisation and monitor software
- Power Rail connection
- RS 232 interface

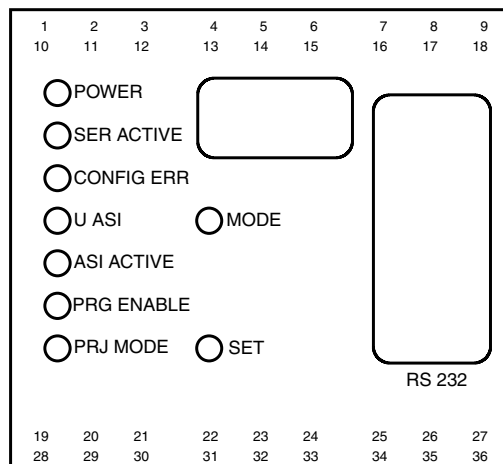
**Dimensions**



**Electrical connection**



**Indicating / Operating means**



Release date: 2007-07-30 09:48 Date of issue: 2007-07-30 129345\_ENG.xml

**Technical data****General specifications**

AS-Interface specification	V2.11
Diagnostics function	integrated

**Indicators/operating means**

Display	LC display, 2 digits, 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 ENERGY	voltage ON; LED green
LED PRJ MODE	projecting mode active; LED yellow
LED SER ACTIVE	interface in operation; LED green
LED U AS-i	AS-Interface voltage; LED green
Switch SET	Selection and setting of a slave address
Button MODE	Mode selection/save configuration

**Electrical specifications**

Insulation voltage	$U_i$	$\geq 500$ V
Rated operational voltage	$U_e$	from AS-Interface
Rated operational current	$I_e$	$\leq 150$ mA

**Interface**

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

**Connection**

AS-Interface	removable coded terminals, Power Rail
--------------	---------------------------------------

**Ambient conditions**

Ambient temperature	0 ... 55 °C (273 ... 328 K)
Storage temperature	-25 ... 70 °C (248 ... 343 K)

**Mechanical specifications**

Protection degree	IP20
Mass	420 g
Construction type	Low profile housing , plastic

**Compliance with standards and directives**

Standard conformity	
Electromagnetic compatibility	IEC 62026-2, EN 61326
Protection degree	EN 60529
Fieldbus standard	IEC 62026-2

**Function**

The VBM-CTR-KF-R2 is a stand-alone master with integrated PLC functionality. The design of this master is ideal for use in a cabinet. Its housing, only 60 mm wide, occupies little space in a cabinet installation. The VBM-CTR-KF-R2 is installed by snapping it onto the 35 mm DIN Rail per EN 50022, with the integrated Power Rail. The AS-Interface signal is transmitted through conductors, which are integrated into the Power Rail. Thus all cabinet modules in KF housing can be connected to the AS-Interface cable by simply snapping them onto the DIN Rail. Removable terminals for leading the AS-Interface cable through the cabinet are available. These terminals are coded and allow "online" maintenance, i. e. while the system is under power. The connection to the AS-Interface power supply is established through these terminals which can also be used for the serial interface. A 9-pin Sub-D connector is also available. Power to the master is supplied by the AS-Interface cable. Two push buttons are used for address assignment of the AS-Interface slaves and acceptance of the desired configuration. In configuration mode, all detected AS-Interface slaves are displayed on the 2-digit LCD. In normal operation, the LCD is blank unless the master detects a faulty AS-Interface slave. There are 7 LEDs on the front panel, showing the current status of the AS-Interface line.

**PLC functionality**

The VBM-CTR-KF-R2 provides 16 kB of program memory (approx. 2500 single binary commands), 8 kB of data memory, 1024 counters and 1024 timers for PLC functionality. These capacities suffice to process data on the AS-Interface. Thus the master can also be operated in "stand-alone" mode. The program processing time is approximately 1000 word commands every 2 ms. The programming language is based upon the STEP5® programming language.

**Software**

The AS-i Control Tools software is supplied as restricted version together with the documentation. The software performs addressing, programming and monitoring of the AS-Interface network. In addition, it contains an editor that creates programs for the integrated PLC functionality. The full version of the AS-i Control Tool is available as an accessory and features an expanded diagnostics monitor as well as a larger program memory for AS-Interface Control which makes it possible to detect faulty telegrams of slaves.

**Accessories**

**VAZ-SW-ACT32**  
AS-Interface software

**UPR-05**  
Universal Power Rail

**UPR-E**  
End cap