Dimensions

Terminal for wall mounting

60   114   93   107
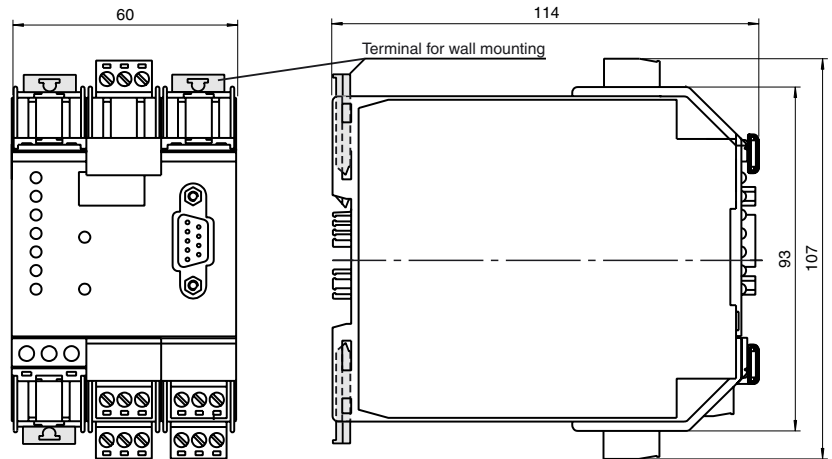
Model Number

VAM-CTR-KF-R3

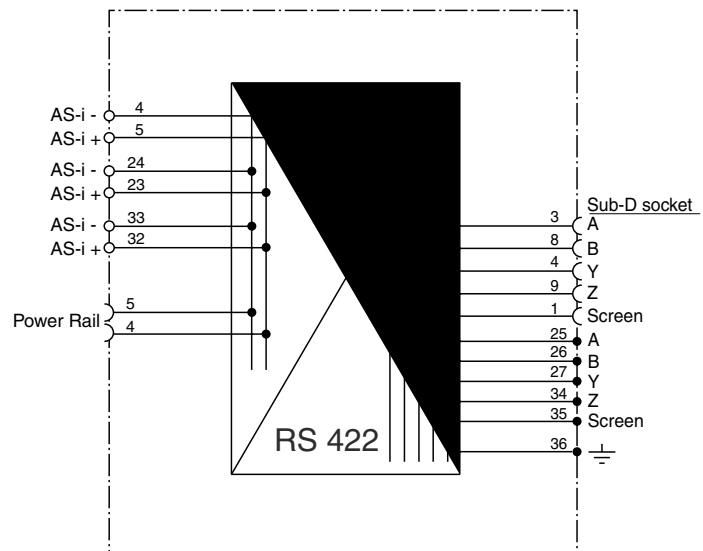AS-Interface master RS 422 cabinet module

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
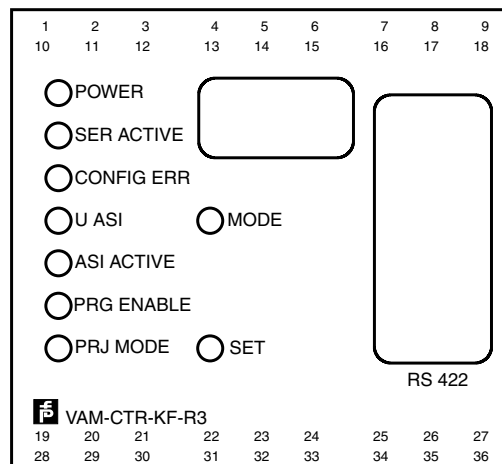- Power Rail connection
- RS 422 interface

Electrical connection

Terminal	Signal
AS-i −	4
AS-i +	5
AS-i −	24
AS-i +	23
AS-i −	33
AS-i +	32
Power Rail	5
Power Rail	4

Sub-D socket

3	A
8	B
4	Y
9	Z
1	Screen
25	A
26	B
27	Y
34	Z
35	Screen
36	⏚

RS 422

Indicating / Operating means


```
1   2   3    4   5   6    7   8   9
10  11  12   13  14  15   16  17  18

◯ POWER
◯ SER ACTIVE
◯ CONFIG ERR
◯ U ASI        ◯ MODE
◯ ASI ACTIVE
◯ PRG ENABLE
◯ PRJ MODE     ◯ SET
                              RS 422
VAM-CTR-KF-R3
19  20  21   22  23  24   25  26  27
28  29  30   31  32  33   34  35  36
```

Technical data

General specifications

AS-Interface specification	V2.0
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 PRG 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 422
Transfer rate	1200 , 2400 , 4800 , 9600 , 19200 , 38400 or 57600 Bit/s , Automatic baud rate detection

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	
Protection degree	EN 60529

Function

The VAM-CTR-KF-R* 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 VAM-CTR-KF-R* 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 SubD 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 VAM-CTR-KF-R* provides 16 kBytes of program memory, 8 kBytes of main 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