



Technical Description

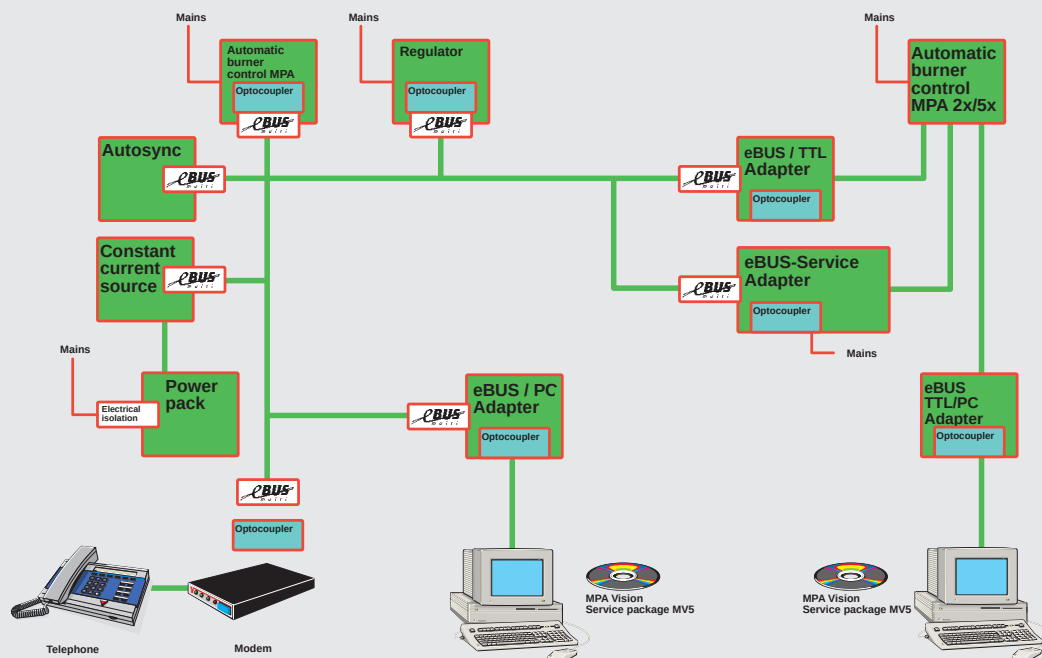
The electrical properties of the products correspond to the eBUS specification OSI level 1/2.

- Power pack 230 VAC / 24 VDC, 120 mA
- eBUS constant current source 120 mA
- Autosync generator
- eBUS service adapter
- eBUS/PC adapter
- eBUS/MPA adapter
- eBUS connection cable
- MPA/modem adapter
- Modem/PC adapter
- Power converter DLU 02
- eBUS modem interface
- Zero modem adapter
- Service package MV3 DOS
- Service package MV5 Win9x/NTTM

Application

eBUS system components make it possible for developers, service installation engineers and eBUS system users to set up and monitor eBUS systems.

Overview



eBUS/PC adapter

The eBUS/PC adapter allows you to connect a PC to the eBUS via a serial interface.

Optocouplers isolate the PC from the eBUS. Supply to the PC side occurs via an RS232 interface and to the eBUS side via the eBUS.

This can be used only with Windows 95/98TM together with MPA Vision 95 or MPA Vision 2000.

eBUS adapter/MPA

Automatic burner controls with „four wire BUS connection“ (5V,TxD,RxD and GND) can be connected to the eBUS with the MPA/eBUS adapter.

Optocouplers isolate the automatic burner control (MPA) from the eBUS. The supply to the MPA side takes place via the MPA and to the eBUS side via the eBUS.



Technical data

Supply voltage

eBUS side: via eBUS
PC side: via RS232 (DTR, RTS)

eBUS current consumption

at low level: approx. 1 mA
at high level: approx. 1 mA
Ambient temperature: 0 - 60 °C
Weight: 0.04 kg

Connection

eBUS side: MSTB 2.5/
2-G-5.08
PC side: 25-pin,
D-sub bushing

Technical data

Supply voltage

eBUS side: via eBUS
MPA side: 5 VDC

eBUS current consumption

at low level: approx. 1 mA
at high level: approx. 1 mA
Ambient temperature: 0 - 60 °C
Weight: 0.04 kg

Connection

eBUS side: MSTB 2.5/
2-G-5.08
MPA side: 4-pin,
RAST 2.5

Autosync generator

The autosync generator is required for generating the eBUS synchronization signal

„Autosync“ if such signal generation is not integrated in any other eBUS component.

Supply to the autosync generator occurs via the eBUS. A separate current supply is not required.



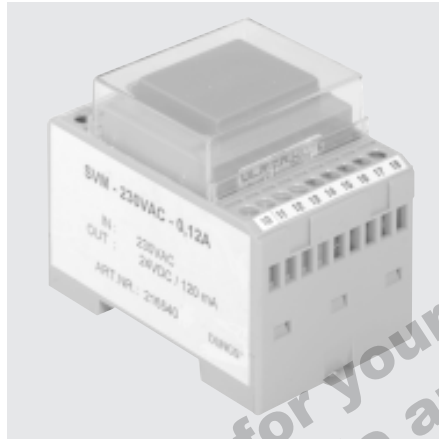
Technical data

Supply voltage: via eBUS
Autosync time: 30 ms
Ambient temperature: 0 - 60 °C
Housing type: EMG25
Weight: 0.04 kg
Connection terminals: AWG12
Attachment to installation rail
7.5 mm, as per DIN EN50022.

Power pack

The power pack supplies voltage to the eBUS constant current source.

A voltage regulator generates the output voltage of 24V DC/120 mA; low residual ripple due to filter capacitors.



Technical data

Input voltage: 230 VAC
Output voltage: 24V DC/
120 mA
Power draw: approx. 8 VA
Isolation: electrical
as per
VDE 0551
Ambient temperature: 0 - 60 °C
Housing type: EMG50
Weight: 0.30 kg
Connection terminals: AWG12
Attachment to installation rail
7.5 mm, as per DIN EN50022.

eBUS constant current source

A constant current of approx. 100 mA is supplied to an eBUS system by a constant current source. The constant current supply requires a supply voltage of 24 VDC/120 mA.

Depending on the size of the eBUS system, several current sources are required which can be connected to the eBUS in parallel.



Technical data

Input voltage: 24 VDC/
120 mA
Output current: 100 mA
+/-10%
Ambient temperature: 0 - 60 °C
Housing type: EMG25
Weight: 0.06 kg
Connection terminals: AWG12
Attachment to installation rail
7.5 mm, as per DIN EN50022.



If several eBUS supplies are switched on:

Pay attention to the polarity.

The maximum current surplus of 100 mA may not be exceeded.

MPA Vision service package MV3
Peer-to-peer

Service tool for parameterizing and visualizing automatic burner controls of the MPA appliance series.
MPA Vision MV3 is a DOS program and has been designed for peer-to-peer application. This tool is used for automatic burner controls which have implemented the software routines for supporting the eBUS, but offer only the TTL level (Rx/D, Tx/D) as a „four wire BUS connection“ in terms of hardware.

MPA/PC adapter MV3
Peer-to-peer

Automatic burner controls with „four wire BUS connection“ (5V,TxD,RxD and GND) can be connected directly to the PC with this adapter.
The PC is isolated from the automatic burner control (MPA) by optocouplers; the supply to the MPA side takes place via the MPA and to the PC side via the PC.
Peer-to-peer connection for service application Functions only under DOS together with MPAVision V3.00



- Scope of delivery**
- MPA/PC adapter
 - D-sub adapter 25-pin/9-pin
 - D-sub adapter 9-pin/15-pin
 - MV3 software
 - Configuration files
 - Operating instructions
 - Service case for MPA Vision

- Technical data**
- Supply voltage MPA side via MPA
 - Supply voltage PC side via RS 232 (DTR, RTS)
 - Ambient temperature: 0 - 60 °C
 - Weight: 0.04 kg
 - Connection: MTSB
 - PC 2.5/2-G-5.08
 - 25-pin
 - D-SUB
 - bushing

MPA Vision service package MV5

MPA Vision MV5 is the service tool for Windows9x/NT™ which is used for parameterizing and visualizing automatic burner controls of the MPA appliance series.

It is suitable for use both as peer-to-peer application and for full eBUS automatic burner controls.

MPA/PC adapter MV5

Automatic burner controls with „four wire BUS connection“ (5V,TxD,RxD and GND) can be connected directly to the PC with this adapter.

Optocouplers isolate the PC from the automatic burner control (MPA):

Supply to the MPA side takes place via the MPA and to the PC side via the PC.

Peer-to-peer connection for service application Functions only under Windows 9x/NT™ together with MPA Vision 2000 and eBUS driver from version V5.08 onwards.



MPA Vision service package MV5

Peer-to-peer connection for service application

Scope of delivery

MPA/PC adapter Win95
D-sub adapter 25-pin/9-pin
D-sub adapter 9-pin/15-pin
MV5 software
Configuration files
Installation instructions
Service case for MPA Vision

MPA Vision service package MV5 eBUS

For automatic burner controls which are integrated in a complete eBUS system.

Scope of delivery

eBUS/PC adapter
D-sub adapter 25-pin/9-pin
MV5 software
Configuration files
Installation instructions
Service case for MPA Vision

Technical data

Supply voltage MPA side
via MPA

Supply voltage PC side
via RS 232 (DTR, RTS)

Ambient temperature: 0 - 60 °C

Weight: 0.04 kg

Connection:

eBUS

MTSB

2.5/2-G-5.08

PC

25-pin

D-SUB

bushing

Accessories connection cable

eBUS 4-pin 400 mm

Connection cable between **EBK01**, **DLU02** and **automatic burner control** with 4-wire eBUS connection (RXD, TXD).



Technical data

Pin number: 4-pin
Length: 400 mm
Connection: RAST2.5

Power converter DLU02

Microprocessor-controlled power converter for adapting regulators or DDC systems with voltage or current interface (0 - 10 V, 4 - 20 mA) to eBUS-compatible automatic burner controls of the MPA series.

Conversion of analog power signals of external regulators or DCC systems into standardized eBUS telegrams. Conversion of eBUS information sent by the automatic burner control into analog voltage and current signals. Supplying the eBUS with integrated eBUS constant current source 20 mA, autosync generator and MPA/eBUS interface.



Technical data

Input voltage: 230 VAC
Degree of protection for the housing: IP 40
Voltage input: 0/2 ... 10 V
Ri = 4,7 kOhm
Current input: 0/4 ... 20 mA
Ri = 500 Ohm
Voltage output
Load: ≤ 500 Ohm
Weight: 0.45 kg
Connection: RAST5
RAST2.5

eBUS

4-wire electrically isolated
2-wire with 20 mA constant current

Ambient temperature: 0 - 60 °C
Weight: 0.45 kg
Connection: RAST5
RAST2.5

Zero modem adapter

For connecting the eBUS modem interface to a PC with RS232 interface.

eBUS modem interface

Can be used in two different configurations.

PC adapter: Connecting a PC to the eBUS via a serial interface.

In this case, the zero modem adapter is also required.

Modem interface: For connecting the eBUS to a modem with RS232 interface for data telemonitoring.

Optocouplers isolate the PC/modem from the eBUS: Supply occurs via the PC or the modem.

Supply to the eBUS side occurs via the eBUS.



Technical data

Coupling: DTE-DTE
Ambient temperature: 0 - 60 °C
Weight: 0.04 kg
Connection: both sides
25-pin,
D-sub
bushing

**Functions only under Windows 9x/
NTTM together with MPA Vision
2000 and eBUS driver from version
V5.08 onwards.**

Technical data

Ambient temperature: 0 - 60 °C
Degree of protection
for the housing: IP 40

PC/modem interface

Supply (PC): DTR, RTS,
GND
Supply (modem): DCD, DSR
RING, GND
Signal lines: TxD, RxD,
DCD, ring
Level: V24/RS232
Baud rate: 9600 Baud
Connection: both sides
25-pin,
D-SUB plug

eBUS interface

Current consumption: approx. 15 mA
Level: eBUS.Spec.
Electrical fuse isolation: 500 V
Connection: 2-pin
MSTB 2.5
2-G-5.08

Item name	Order no.
eBUS autosync generator	230 412
eBUS constant current source	230 411
eBUS power pack	216 540
eBUS/PC adapter	230 437
eBUS/MPA adapter	230 436
MPA/PC adapter MV3	230 447
MPA/PC adapter MV5	230 448
eBUS modem interface	238 651
Zero modem adapter	238 989
Power converter DLU02	230 878
eBUS connection cable 400 mm	232 613
MPA Vision service package MV3	on request, customized
MPA Vision service package MV5	on request, customized
MPA Vision service package MV5	on request, customized, peer-to-peer connection

We reserve the right to make changes in the interest of technical progress.

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