

COMBICOM



GB INSTRUCTION MANUAL USB Serial Converter

Mat.No.	Rev.
CH580EB-K000	1C





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1. Introduction

1.1 General information

Before working with the unit the user must become familiar with it. This includes especially the knowledge and observance of the safety and warning directions. The pictographs used in this instruction manual have following meaning:



Danger Indicates danger to life by electric current.



Warning Indicates possible danger to life or danger of injury.



Note Indicates tips and additional information.

1.2 Validity

This manual as well as the specified hardware and software are developments of the Karl E. Brinkmann GmbH. Errors and omissions excepted! The Karl E. Brinkmann GmbH have prepared the documentation, hardware and software to the best of their knowledge, however, no guarantee is given that the specifications will provide the efficiency aimed at by the user. The Karl E. Brinkmann GmbH reserves the right to change the specifications without prior notification or further obligation. All rights reserved.

The information contained in the technical documentation, as well as any user-specific advice in spoken and written and through tests, are made to best of our knowledge and information about the application. However, they are considered for information only without responsibility. This also applies to any violation of industrial property rights of a third-party.

Inspection of our units in view of their suitability for the intended use must be done generally by the user. Inspections are particularly necessary, if changes are executed, which serve for the further development or adaption of our products to the applications (hardware, software or download lists). Inspections must be repeated completely, even if only parts of hardware, software or download lists are modified.



Inspection by the user

Application and use of our units in the target products is outside of our control and therefore exclusively in the area of responsibility of the user.



Use under special conditions

The used semiconductors and components of KEB are developed and dimensioned for the use in industrial products. If the KEB COMBIVERT is used in machines, which work under exceptional conditions or if essential functions, life-supporting measures or an extraordinary safety step must be fulfilled, the necessary reliability and security must be ensured by the machine builder.

1.3 Qualification

All work from the transport, to installation and start-up as well as maintenance may only be done by qualified personnel (IEC 364 and/or CENELEC HD 384 or DIN VDE 0100 and note national safety regulations). According to this manual qualified staff means those who are able to recognise and judge the possible dangers based on their technical training and experience and those with knowledge of the relevant standards and who are familiar with the field of power transmission (VDE 0100, VDE 0160 (EN 50178), VDE 0113 (EN 60204) as well as those who note the valid local regulations).



Danger by high voltage

KEB electronic components contain dangerous voltages, which can cause death or serious injury. Depending on the protective system they can have live parts, bright parts, if necessary also moving parts, as well as hot surfaces during operation.

Care should be taken to ensure correct and safe operation to minimise risk to personnel and equipment.

1.4 Order data

USB serial Converter	00.58.060-0020
USB cable type A → type B, 3 m (included)	00.F5.0C4-1030
Adapter DSUB9 to RJ45	00.F5.0C0-0020

1.5 Product description

The USB serial converter is used for the connection of KEB inverters, operators or controls with DIN66019 interface or interface HSP5 at the USB port of personal computers. It represents a virtual COM interface on PC side.

The USB serial converter is not a standard USB serial converter. It can be used exclusively for the communication with KEB units with the interfaces specified above.

The converter must be plugged directly on the interface. A 0.2 m, 1:1 cable can be used as extension. Use adapter DSUB9 to RJ45 (00.F5.0C0-0020) to connect the HSP5 interface by RJ45 socket.

Hardware

2. Hardware

2.1 Description of USB serial converter

	The serial side supports: DIN66019 (RS 232)/HSP5 (TTL level)
	
	USB socket type B

2.5 Technical data

General	
Dimension (HxBxL)	20 mm x 35 mm x 88 mm
Weight	30 g
Ambient conditions during operation	-10°...45°C
Ambient conditions at storage	-25°...70°C
Climatic category (EN60721-3-3)	3 K 3
Notice	Voltage supply via interface

3. Software

The serial side supports:

- DIN66019 (RS 232)
- HSP5 (TTL level)

The type of interface is automatically detected.

If the DIN66019 protocol is used on the serial side, the "DIN66019 protocol USB" is only physically converted to "DIN66019 protocol RS232" in the USB serial converter and the log data remains unchanged.

If the HSP5 protocol is used on the serial side, the "DIN66019 protocol USB" is converted to "HSP5 protocol TTL level" in the USB serial converter.

The following KEB services are supported (see protocol description HSP5):

0	Read / write the parameter value (extended set-addressing)
1	Read / write the parameter value (default set-addressing)
18	Read process data telegram type 3 (Timestamp, 2x32, 2x16 Bit)

No automatic baud rate search is supported. The baud rate is adjusted via the used program e. g. COMBIVIS. The baud rate can be adjusted in the range of 2400Baud...115.2kBaud.



The default value of 38.4 kBaud should not be changed.



The baud rate of the connected unit (see unit parameter) and the driver setting for the used COM port must be adjusted equal.

Installation:

1.	The *.inf-file must be assigned once to the system on the PC.
	 The installation must be made separately for each USB port.
2.	The assistant for new hardware opens automatically, if the converter is connected to a not yet configured for USB serial converter.
3.	The USB-inf-file can be downloaded under www.keb.de → Download → Search for: „USBSerial Adapter“. Alternatively, if installed: [COMBIVIS 6 Installation directory]\Drivers
4.	Set the path in which the "kebcdc_win7.inf" file is found.
5.	Continue installation. Ignore the warning for the Windows compatibility test and „continue installation“.
6.	Finish



Computers with Windows 7 do not ask for a driver because a ST Electronic driver is automatically installed by the system. The function is given, but is recognized as USB converter, not as KEB unit. If required it can be replaced manually.



With the KEB-USB converter the parameter files can not be read out by COMBIVIS 5 from F5.



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