

The TC Phone is an instabus component within a surface-mounted housing. It is suitable for connection to analogue telephone extension units. The TC Phone provides the combined functions of control, monitoring, alarm and dialling devices. It is operated via an MFV-equipped telephone or MFV hand-held transmitter. It receives switch commands via the telephone network or instabus telegrams and omits any functions relevant to content. Using the four conventional closing contacts, up to four independently operating load / consumption groups can be switched. Up to six independently operating load/consumption groups can be controlled via six instabus channels using instabus telegrams. In addition, the TC Phone also features four potential-free and two instabus signal inputs. Using these inputs it is possible, for example, to relay alarm signals in the form of text messages to any telephone line, should the need arise. In the event of an alarm, up to three phone numbers are each called anything up to four times. The text messages can be composed using a suitable headphone set (Order No.: 7590 00 09). Power supply is via the plug-in mains unit supplied as standard.

Technical Specification:

External power supply:

Voltage:

Primary: 230 V AC (+6%, -14%) 50 Hz, secondary: 48 V AC / 100 mA
2 x 12.5 V AC / 350 mA

Power consumption:

13 VA

Connection:

Permanent mains connection with plug-in power supply

Dimensions:

height:215 mm; width:185 mm; thickness:45 mm

instabus EIB power supply

Voltage:

24 V DC (+6 V/ -4 V)

Power consumption:

Max. 150 mW

Connection:

Via *instabus* connection and branch terminal

Input:

Quantity:

4

Signal voltage:

E-potential (earth / ground connection)

"0"-Signal:

Input open, +24 V

"1"-Signal:

Input switched against E-potential

Output:

Quantity:

4 (A1- A4) + 1 (ÖA)

Type of switch:

Rated voltage:

24 V DC

Minimum load:

Rated current:

50 mA, $\Sigma_{max} = 300$ mA

Connection:

Screw terminals

Protection class:

IP 20 acc. to DIN 40050

Test mark:

EIB

Reaction to voltage failure:

Bus voltage only

Relay setting of outputs remains

Mains voltage only

Relays switch off, interruption of alarm function

Bus and mains voltage

Relays switch off, interruption of alarm function

Reaction when reconnected

Bus voltage only

Relay setting of outputs remains

Mains voltage only

Relays come on briefly , alarm function discontinued

Bus and mains voltage

Relays come on briefly , alarm function discontinued

Ambient temperature:

-5 °C to 45 °C

Max. temperature of housing:

Storage / transportation temperature:

-25 °C to 70 °C

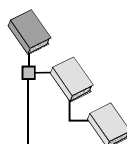
Installation position:

Preferably vertical

Fixing method:

Wall mounting (in accordance with operating instructions)

Product management



Gebr. Berker

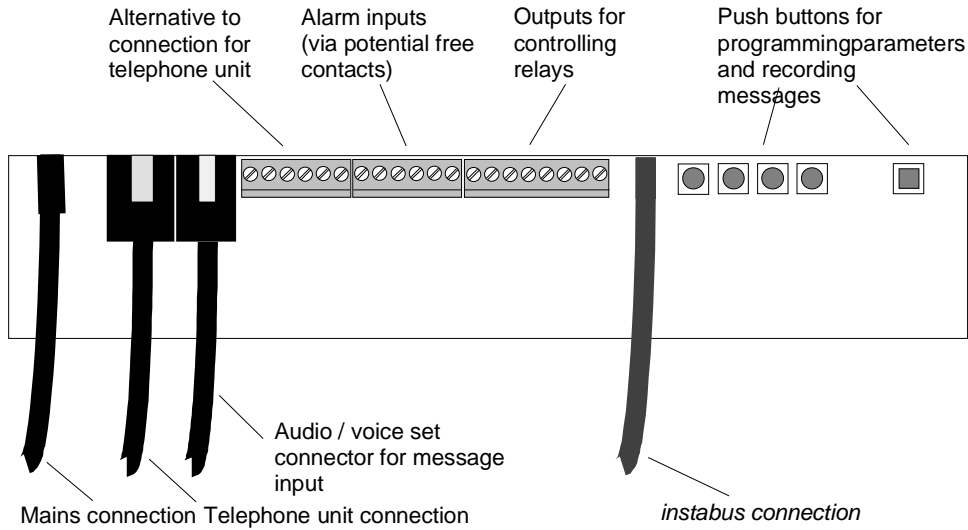
Communication

Modem

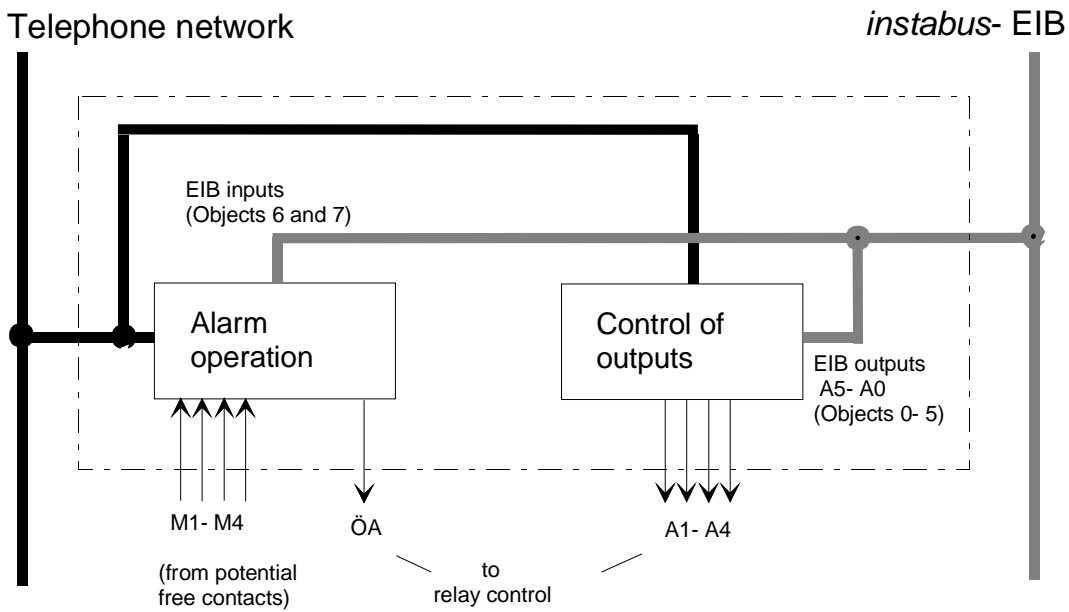
TC Phone 75730001

Application TC 800E01

Connection diagram:



Block diagram of functions:



Description of functions with factory-set parameters

Up to six 1-bit group telegrams (objects 0-5) can be sent from the TC.
Using two objects (Alarm function, objects 6 and 7) status readings from various units and devices can also be received and analysed in 1-bit form. The six EIB device functions can be switched on via the numbers on the phone keyboard 5, 6, 7, 8, 9 and 0, i.e. the first EIB device can be controlled using number 5. The four conventional contacts are switched on via the first four digits. Incoming calls are processed via two additional objects and relayed as alarm signals to the telephone network.

Number of addresses (max): 8
Number of allocations (max): 8

Communication objects:				
Object:	Function:	Name:	Type:	Flag:
0	Output 1 on/off	Dialed number 5	1 bit	C, R, W, T
1	Output 2 on/off	Dialed number 6	1 bit	C, R, W, T
2	Output 3 on/off	Dialed number 7	1 bit	C, R, W, T
3	Output 4 on/off	Dialed number 8	1 bit	C, R, W, T
4	Output 5 on/off	Dialed number 9	1 bit	C, R, W, T
5	Output 6 on/off	Dialed number 0	1 bit	C, R, W, T
6	Dial number 1	Set EIB input 6	1 bit	C, R, W, T
7	Dial number 2	Set EIB input 7	1 bit	C, R, W, T

Automatic telephone devices are suitable for routing alarm signals to help-centres via existing telephone lines. These devices feature digital storage of speech. The text must be recorded using an even tone of voice, at not too high a level and in a single uninterrupted flow. The German *Bundespost* (Federal Post Office) permits up to 4 phone numbers to be programmed into these devices. In the event of an alarm the numbers are dialled in sequence. If no response is obtained the process can be repeated.

Connect devices (A1 to A4 and ÖA) via relays as illustrated in connection diagram. Insert plug-in power supply into 230V socket outlet. Insert phone jack (TAE) of telephone line into telecommunications connection unit supplied by Telekom. (TAE, socket N).

Insert phone jack from a separate, connected telephone into TAE socket "F".

1. The phone dialler must be fitted in a dry environment near the telephone connection box. It is supplied with two dowels / pins and two screws, thus facilitating easy wall mounting.
2. Mark out drill holes vertically on wall at intervals of 17.5 cm.
3. Drill the holes (6mm diameter) and insert dowels / pins.
4. Insert uppermost screw so that screw-head protrudes by approx. 5 mm.
5. Hang phone dialler over screw using upper bracket.
6. Pull back the terminal cover on phone dialler.
Insert lower screw within the area surrounding the terminal.

The phone dialler provides five 24V outputs to which, in addition to the EIB functions, four standard devices and one local alarm box may be connected via 24V-relays. These relay outputs each have a capacity of 50mA and are short circuit-resistant.
Recommended: control relays with commutating switch (10A/250V).

The phone dialler is supplied with the following factory settings:

- Programming: 0
- Devices ID: none
- Activation at 2 calls
- Phone Number 1: none
- Phone Number 2: none
- Phone Number 3: none
- Code number: 0000
- Dialling method: IWV
- MFV signals: no

Operating principle:

Comments on Installation and connection:

Assembly:

Settings:

The power output features of the TC can be adjusted to suit user requirements. All settings are retained should the 230 V network experience a power failure. A few essential parameters must be programmed before first operating the device. Adjustments are made using the five push-buttons located near the terminals. These buttons have different functions, depending on how each is programmed. The functions for parameter programming and recording text are illustrated on the terminal cover.

Push-button	L	S	I	A	V
Parameter	Erase	Position	Change	Confirm	Interrupt
Text messages	Playback	Stop	Record	Confirm	Interrupt

Function of buttons:

Button **A** confirms and saves the current display and automatically switches to the next parameter or message. Each press of button **I** alters the position indicated by the cursor and increases each number displayed by a factor of one, varying between 0 and 1 in the case of digital signals.

When programming emergency telephone numbers, specific features can also be set using button **I**. These include **P** (2 sec. dialling pause), **E** (telephone exchange with earthed connection), and **W** (analyse dialling tone). When recording messages button **I** is used to start the recording. Pressing button **S** jumps the cursor one position to the right. When recording text it will halt the Record function.

The current display can be erased using button **L**. In the "Text" programming mode button **L** will begin playback of the most recently recorded text, shown by the message in the display. Button **V** enables the programming mode to be interrupted at any time, with the phone dialing unit returning to stand-by mode. Only those parameters and messages that have been saved using button **A** are accepted. If no buttons are pressed for a 20-second period the device will interrupt any setting.

The device parameters (ID of devices, calls until activated, emergency telephone numbers, code numbers and dialling methods) can all be programmed. The pre-recorded messages can also be replaced with those spoken by users themselves. The programming mode must therefore be selected prior to any actual input.

To do this, press **A** until you see the following display "Programming: 0" Value=0 Text=1
Select using **I** and/or confirm with **A**.

Identification number:

It is not necessary to set an identification number. The factory settings should not be altered.

Activation calls:

A "0" is programmed in for the number of calls. In this case, the phone dialler will not be set to receiving mode. Alarm signals however will be shut down.

Operation: Press button **A** until the message "Activate at 2 calls" is displayed.
Press button **I** until the message "0 calls" appears.
Press button **A** to continue or **V** to interrupt.

Emergency telephone numbers:

You can program three phone numbers consisting of up to 16 digits each and to which incoming alarm signals should be sent. Phone Number 1 is called first. Should the call not be acknowledged by a "*" symbol within one minute then Phone Number 2 is dialled. Should the call to this number not be acknowledged then Phone Number 3 is dialled after one minute. This process is repeated three times. A total of 12 dialling attempts are made.

Should there be no acknowledgement whatsoever then a built-in alarm is set off at the "OA" output and the message "Dialling unsuccessful" appears in the display.

Operating:

Press button **A** until the message "Phone Number 1" is displayed.
Press button **I** until correct digit appears.
Move cursor to next position using **S**.
Continue until correct phone number is displayed.
Press button **A** and enter "Phone Number 2".
Enter Phone Number 3 in the same way.
Press button **A** to continue or button **V** to interrupt.

Code number:

required in order to identify authorised users prior to carrying out any function via the telephone network

Dialling method:

The dialling method can be switched from Pulse Dialling (IWV) to Multifrequency Dialling (MFV). Should adjustment be required, proceed as follows:

- Press button A until message " Dialling method " is displayed.
- Press button I to set MFV.
- Press button A to continue (or V to interrupt).

Emitting MFV signals

When used as a phone dialler in conjunction with the Berker Radio-alarm system the factory settings must be retained.

Recording personalised messages:

Personalised messages can be recorded for each of the 4 message inputs M1 to M4. You have 3 seconds in which to record each message. The display will indicate which message contains which particular recorded item and will show a line underneath that gets shorter during recording and playback, thus indicating the time remaining for recording. The appendix at the back of the operating instructions contains a list of all possible messages after which entries can be made as to how the text has been altered.

To record voice messages you can connect the audio / voice set (accessory item) to the appropriately marked socket and speak into the microphone as when using the telephone.

Button I is used to start the recording and button S to stop it again.

The message can then be checked by pressing button L. If the recording is satisfactory it is confirmed and saved via button A.

Should a message time of 3 seconds be insufficient it is possible to spread the recording over several message inputs and then switch these to parallel mode. This will then offer a maximum recording time of 12 seconds.

Should any messages displayed remain unconfirmed after pressing the Star button on an MFV phone or transmitter then a local alarm output will be activated after a total of 12 dialling attempts and the dialler will display the message "Dialling unsuccessful".

Tips and advice:

The local (built-in) alarm will be activated after 12 unconfirmed dialling attempts and the message "Dialling unsuccessful" will be displayed. Should the TC Phone be dialled later there will be no alarm message. The local/ built-in alarm can then be acknowledged using the V button. Should the TC Phone receive a call and an instabus alarm object be reset before the alarm has been acknowledged by the TC Phone, the TC Phone will be unable to recognise the alarm. It is therefore recommended that any user transmitting alarm signals should send only ON telegrams. Nor should any OFF telegrams be transmitted should the alarm requirement not be met. After acknowledging an alarm with the * button or after turning off the local / built-in alarm the TC Phone will send an ON telegram to objects 6 and/or 7, followed immediately by an OFF telegram. The TC Phone will not recognise any switch states / factors that have been altered by any device other than the TC Phone itself. Such states / factors will be recognised during full analysis using the TC Phone (# button).