# SSS **SIEDLE**

Planning Manual 1+n technology

lssue 2006/2007

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	For complex systems or special requirements, technical advisors are available to assist you in the Siedle exhibition and
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	<ul> <li>Technical additions</li> <li>or printing errors do not constitute grounds for</li> </ul>
	compensation claims.

## 1+n system System description

### Wire-saving 1+n system

## Configuration

The wire-saving 1+n system is based on an installation with a common core and a number of call cores. The common core is designated "1", the call cores are designated "n", giving rise to the designation "1+n system". All the functions for calling, speech, door release and switching functions are transmitted on the two cores per in-house telephone. Installation of the two cores must take place in the same cable.

Interfaces to the telephone network are available with the DoorCom family for analogue and ISDN connection.

A storey call button "ERT" can be connected to each in-house telephone. This permits a call to be placed from a button placed on the staircase into the apartment.

In the 1+n system, up to 8 door stations can be operated in parallel.

The door release is always actuated only from the door station from which the call was placed.

There is one speech channel available within the 1+n system; Using suitable controllers, this number can be increased. No programming of the system/devices is required.



1+n system

### The 1+n system can be combined with video. Transmission of the video signal takes place via a

Configuration

Wire-saving 1+n system with video transmission

standard commercially available coaxial cable 75 Ohm. The door station is supplemented by a camera, the in-house telephones are equipped with an integrated colour monitor. In each in-house telephone with colour monitor there is a video distributor integrated which allows the video signal to be looped from one device to the next. Side circuit or starshaped installation is naturally also possible using the relevant video distributors. All in-house telephones with colour monitor and each video door station must be supplied via two additional cores. This supply is provided by a central video line rectifier in the main distributor board. After a door call, the door loudspeaker actuates the camera module, causing activation of the monitor in the in-house telephone, which displays the visitor's picture.



1+n system with video

## **Performance features**

Performance features	Siedle 1+n system with HTS/HTC 811
Calling/Speech/Door release/ Audio privacy device/ Storey call with call differentiation	•
Light control	without additional installation
Secondary signal unit	via NS 711 or standard available signal unit required via NSC 602 Supplementary installation required
Door release time	fixed at 3 secs
Number of door stations	max. 8
Total number of users	max. 500
Speech channels	1
Call silencing	•
Call volume regulation infinitely variable	•
Video link	via HTSV/HTCV 811
Storey call loudspeaker with call differentiation	via ETC 602
Internal communication	with HTC/HTCV 811 max. 6 devices via GC 612
Switching/control function	via HTC/HTCV 811 with SFC 602
Digital call input possible (COM/DRM)	RC/RCE 602 required

## Remarks on audio installation

#### **Conductor routing**

In order to comply with the general safety regulations for telecommunication systems in accordance with VDE 0100 and VDE 0800, and to prevent electrical interference, ensure separate routing of heavy and light current conductors. A distance of 10 cm must be adhered to. The conductor from the door loudspeaker must be laid directly without branching from the main iunction box. or where applicable can also be looped via other door loudspeakers.

When using several cables to the in-house telephones, terminal "1" **must** be routed in each cable and connected. The wires for terminal "1" must all be connected at the **same door loudspeaker** as the call conductors.

## Conductor length for audio application

## **Conductor material**

Telecommunication or light current conductors can be used for installation: JY(ST)Y twisted pair conductors, shielded A2Y(ST)2Y buried telecommunication cable YR light currentconductors

The required number of cores can be determined from the cable size diagrams. Reserve cores must be taken into consideration for possible retrofit requirements. The following ranges always refer to the previously described conductor material with a **core diameter of 0.8 mm.** 

Max. 500 m from the most distant door station to the most distant in-house telephone.
Max. 100 m from the line rectifier to the most distant door station

• In systems with several door stations, the laid conductor network to the door stations must be no more than 500 m. • Range at the group controller: Max. 100 m between the GC 612-... and each HTC/HTCV 811-... • The wiring from the GC 612-... to the connected system telephones HTC/HTCV 811-... must be in star formation The conductor network (cables) laid throughout the entire system bus must not exceed 2500 m.

In the case of conductor material with a core diameter of 0.6 mm the range is halved.

## Procedure during planning

The 1+n system from Siedle covers the requirements of many different systems. Depending on the security requirements, the system can be planned and executed as an audio, video or mixed system. In drawing up the planning documentation, we have used a systematic approach which applies throughout the entire planning process.

We consider the most logical **procedure** is to start with planning the **door area** then to work on the **living area** and to finish with the **distribution**.

Distribution encompasses not only the power supply devices but also control devices which execute **supplementary functions** . An additional supplementary installation is also required for instance between an additional light button or movement sensor module and the distributor.

In each area, i.e. door, living area and distribution, first the audio and then the video components are described. In the 1+n system, the video signal is transmitted via a coaxial cable 75 Ohm.

## General

The design of the door area can differ considerably. For standard applications, the door area design is simple to put together using the Siedle purchase order catalogue. The planning documents refer exclusively to the electrical components required to ensure that the system functions reliably.

Additional functions and design elements have to be taken into consideration during planning and subsequently at the installation stage. When planning the door station, pay attention to the mounting height, in particular when a video camera is being used.

#### Recommended mounting height appr. 1.60 m to centre camera

#### Vario bus

Other control functions can be performed via the Vario bus. Here, controllers are actuated using the Vario input modules COM/ ELM/FPM 611-... in order to initiate a door call or switching function. Door calls can also be entered / placed via the COM/ DRM 611-... See page 31

#### Door area

The door area offers wide scope for creative design. The door station can be equipped, for instance, with: Siedle Vario Siedle Classic Siedle Steel or the custom-fit door loudspeaker for mounting in an existing intercom compartment.

#### Living area

A wide selection of variants is also available for the living area.

#### Advice

Variants and versions are illustrated in our order catalogue. Our exhibition and training centres are available to offer detailed advice. See page 35 Customer service

## Supplementary functions in the 1+n system

#### Parallel door stations

Up to 8 door stations can be connected in parallel without the need for any further accessories. The door loudspeakers become synchronized one with the other via terminals TLn.

### Parallel in-house telephones or accessories

Up to 2 in-house telephones can be operated in parallel. Secondary signal unit NS 711-..., secondary signal controller NSC 602-... and DoorCom Analog DCA 612-... also count as parallel devices.

#### Storey call ERT

Every in-house telephone has a terminal ERT for a storey call button. The storey call button is used in properties encompassing several apartments to ring from the apartment door into the apartment.

#### Storey door station

Instead of a storey call button ERT a door station is also possible on a storey. To connect a storey door station, the storey controller ETC 602-... is required.

## Switching and control functions

Switching and control functions can be initiated from the deluxe in-house telephone HTC/HTCV 811-... To implement control functions, the switching/remote controller SFC 602-... and 2 additional cores from the door station to the distributor are required.

#### Link to a telephone system

One or more 1+n technology door stations can be connected using the DoorCom Analog DCA 612-... to the analog PBX extension of a telephone system. In this case, a DCA 612-... is installed instead of an in-house telephone HTS/HTC.

## Door telephony with audio privacy function

Single and multiple family homes 1 door station

#### Cable size diagram ÜV-Ta-64/1

1 door station (Siedle Vario, Siedle Classic, Siedle Steel or Siedle custom-fit door loudspeaker), any optional number of in-house telephones HTS 811-..., HTC 811-... at the side circuit.

## Mode of operation

Calling and speech between the door station and connected in-house telephones HTS/HTC 811-... An existing call cannot be listened in to from other inhouse telephones. Door release button for the door release function, light button for the light switching function. Illuminated light button at the door station with potential-free switching contact. Connection of a storev call button (ERT) for calling from an apartment door. Different ring tones for calls from the front door or storey door.

To ensure tamper-proof connection of the door release, the door release controller CTÖ 602-... has to be used. Additional cores are required for this.

## Remarks

Door release and light contact in the door loudspeaker max. 24 V AC, 2 A

ERT Storey call button n Number of call buttons (DL)



## Parallel door stations

Up to 8 door stations can be connected in parallel without the need for any further accessories. The door loudspeakers become synchronized one with the other via terminals TLn.

## Parallel in-house telephones or accessories

Up to 2 in-house telephones can be operated in parallel. Secondary signal unit NS 711-..., secondary signal controller NSC 602-... and DoorCom Analog DCA 612-... also count as parallel devices.

## Storey call ERT

Every in-house telephone has a terminal ERT for a storey call button. The storey call button is used in properties encompassing several apartments to ring from the apartment door into the apartment.

### Storey door station

Instead of a storey call button ERT a door station is also possible on a storey. To connect a storey door station, the storey controller ETC 602-... is required.

## Switching and control functions

Switching and control functions can be initiated from the deluxe in-house telephone HTC/HTCV 811-... To implement control functions, the switching/remote controller SFC 602-... and 2 additional cores from the door station to the distributor are required.

## Link to a telephone system

One or more 1+n technology door stations can be connected using the DoorCom Analog DCA 612-... to the analog PBX extension of a telephone system. In this case, a DCA 612-... is installed instead of an in-house telephone HTS/HTC. Up to three call buttons can dial a PBX extension in the telephone system or a telephone number.

## Door telephony with audio privacy function

Single and multiple family homes 2 door stations

#### Cable size diagram ÜV-Ta-64/2

2 door stations (Siedle Vario, Siedle Classic, Siedle Steel or Siedle custom-fit door loudspeaker), any optional number of in-house telephones HTS 811-..., HTC 811-... at the side circuit.

#### Mode of operation

Calling and speech between 2 door stations and connected in-house telephones HTS/HTC 811-... An existing call cannot be listened in to from other inhouse telephones. Door release button for the door release function, light button for the light switching function. These functions are assigned to the door by ringing. Illuminated light button at the door station with potential-free switching contact.

Connection of a storey call button (ERT) for calling from an apartment door.

Different ring tones for calls from the front door or storey door.

To ensure tamper-proof connection of the door release, the door release controller CTÖ 602-... has to be used. Additional cores are required for this.



## Remarks

Door release and light contact in the door loudspeaker max. 24 V AC, 2 A ERT Storey call button n Number of call buttons (DL)

## Door telephony with audio privacy function

Single and multiple family homes 3 door stations

## Cable size diagram ÜV-Ta-64/3...8

3 to 8 door stations (Siedle Classic, Siedle Steel or Siedle custom-fit door loudspeaker), any optional number of inhouse telephones HTS 811-..., HTC 811-... at the side circuit.

## Mode of operation

Calling and speech between 3 - 8 door stations and connected in-house telephones HTS/HTC 811-... An existing call cannot be listened in to from other inhouse telephones. Door release button for the door release function, light button for the light switching function. These functions are assigned to the door by ringing. Illuminated light button at the door station with potential-free switching contact.

Connection of a storey call button (ERT) for calling from an apartment door. Different ring tones for calls from the front door or apartment door.

To ensure tamper-proof connection of the door release, the door release controller CTÖ 602-... has to be used. Additional cores are required for this.



## Remarks

Door release and light contact in the door loudspeaker max. 24 V AC, 2 A ERT Storey call button n Number of call buttons (DL)

## **Door and in-house telephony with audio privacy function**, 1 door station



## Cable size diagram ÜV-Ta-74/1

1 door station (Siedle Vario, Siedle Classic, Siedle Steel or Siedle custom-fit door loudspeaker), 2-6 in-house telephones HTC 811-... with group controller GC 612-... for internal calls

## Mode of operation

Calling and speech between the door station and connected in-house telephones HTC 811-...

An existing call to the door station cannot be listened in to from other in-house telephones. Internal speech communication between the HTC 811-... units connected to the GC 612-... Dialling the user with the call buttons on the telephones. Door release button for the door release function, light button for the light switching function. Illuminated light button at the door station with potential-free switching contact. Connection of a storey call button (ERT) for calling from an apartment door. Different ring tones for calls from the front door, storey door or for internal calls.

To ensure tamper-proof connection of the door release, the door release controller CTÖ 602-... has to be used. Additional cores are required for this.

## Door calls to GC 612-...

**Max. 6** telephones can be selectively called from a door via a GC 612-...

## The wiring from the

GC 612-... to the HTC 811-... must be in star formation.

#### Remarks

Door release and light contact in the door loudspeaker max. 24 V AC, 2 A

- ERT Storey call button
- n Number of call buttons (DL)

#### Parallel door stations

Up to 8 door stations can be connected in parallel without the need for any further accessories. The door loudspeakers become synchronized one with the other via terminals TLn.

## Switching and control functions

Switching and control functions can be initiated from the deluxe in-house telephone HTC/HTCV 811-... To implement control functions, the switching/remote controller SFC 602-... and 2 additional cores from the door station to the distributor are required

cores from the door station to the distributor are required.

## Door telephony with audio privacy function

1 main and storey door station



## Cable size diagram ÜV-Ta-84/1

1 door station (Siedle Vario, Siedle Classic, Siedle Steel or Siedle custom-fit door loudspeaker) in the side circuit with an optional number of inhouse telephones HTS 811-..., HTC 811-...

1 storey door loudspeaker with an optional number of system telephones HTS 811-..., HTC 811-...

#### Mode of operation

Calling and speech between the door station and connected in-house telephones HTS/HTC 811-...

An existing call cannot be listened in to from other inhouse telephones. Door release button for the door release function, light button for the light switching function. These functions are assigned to the door by ringing. Illuminated light button at the door station with potential-free switching contact.

Storey door station for the functions calling, speech and door release from one storey door station. Several storey door stations can be connected in parallel.

Connection of a storey call button (ERT) for calling from an apartment door. Different ring tones for calls from the front door or storey door. To ensure tamper-proof connection of the door release, the door release controller CTÖ 602-... has to be used. Additional cores are required for this.

#### Remarks

у

Door release and light contact in the door loudspeaker max. 24 V AC, 2 A

- ERT Storey call button
- n Number of call buttons (main-side circuit DL)
- r Number of call lines behind the storey controller x Number of call lines

Number of call lines at the storey controller Number of remaining telephones in the side circuit

#### Parallel door stations

Up to 8 door stations can be connected in parallel without the need for any further accessories. The door loudspeakers become synchronized one with the other via terminals TLn.

## Parallel in-house telephones or accessories

Up to 2 in-house telephones can be operated in parallel. Secondary signal unit NS 711-..., secondary signal controller NSC 602-... and DoorCom Analog DCA 612-... also count as parallel devices.

## Storey call ERT

Every in-house telephone has a terminal ERT for a storey call button.

The storey call button is used in properties encompassing several apartments to ring from the apartment door into the apartment.

## Storey door station

Instead of a storey call button ERT a door station is also possible on a storey. To connect a storey door station, the storey controller ETC 602-... is required.

## Switching and control functions

Switching and control functions can be initiated from the deluxe in-house telephone HTC/HTCV 811-... To implement control functions, the switching/remote controller SFC 602-... and 2 additional cores from the door station to the distributor are required.

## Link to a telephone system

One or more 1+n technology door stations can be connected using the DoorCom Analog DCA 612-... to the analog PBX extension of a telephone system. In this case, a DCA 612-... is installed instead of an in-house telephone HTS/HTC.

## Door telephony with audio privacy function,

1 main and storey door station, with internal speech operation within the storey



## Cable size diagram ÜV-Ta-85/1

1 door station (Siedle Vario, Siedle Classic, Siedle Steel or Siedle custom-fit door loudspeaker) at the side circuit with an optional number of inhouse telephones HTS 811-..., HTC 811-...

1 storey door loudspeaker with max. 6 in-house telephones HTC 811-... and internal speech operation

## Mode of operation

Calling and speech between the door station and connected in-house telephones HTS/HTC 811-...

An existing call cannot be listened in to from other inhouse telephones. Internal speech communication between the HTC 811-..., which is connected to the GC 612-... . Dialling the user with the call buttons on the telephones. Door release button for the door release function, light button for the light switching function. These functions are assigned to the door by ringing. Illuminated light button at the door station with potential-free switching contact.

Storey door station for the functions calling, speech and door release from one storey door station. Several storey

## door stations can be connected

in parallel. Connection of a storey call button (ERT) for calling from an apartment door. Different ring tones for calls from the front door, storey door or for internal calls.

To ensure tamper-proof connection of the door release, the door release controller CTÖ 602-... has to be used. Additional cores are required for this.

## Door calls to GC 612-...

**Max. 6** telephones can be selectively called from a door via a GC 612-...

The wiring from the GC 612-... to the HTC 811-... must be in star formation.

### Remarks

Door release and light contact in the door loudspeaker 24 V AC / 2 A

- ERT Storey call button
- n Number of call buttons (main-side circuit DL)
- r Number of call lines behind the storey controller
- x Number of call lines at the storey controller
   y Number of remaining telephones in the side circuit

#### Parallel door stations

Up to 8 door stations can be connected in parallel without the need for any further accessories. The door loudspeakers become synchronized one with the other via terminals TLn.

## Parallel in-house telephones or accessories

Up to 2 in-house telephones can be operated in parallel in the side circuit. Secondary signal unit NS 711-..., secondary signal controller NSC 602-... and DoorCom Analog DCA 612-... also count as parallel devices.

## Storey call ERT

Every in-house telephone has a terminal ERT for a storey call button. The storey call button is used in properties encompassing several apartments to ring from the apartment door into the apartment.

### Storey door station

Instead of a storey call button ERT a door station is also possible on a storey. To connect a storey door station, the storey controller ETC 602-... is required.

## Switching and control functions

Switching and control functions can be initiated from the deluxe in-house telephone HTC/ HTCV 811-... To implement control functions, the switching/ remote controller

SFC 602-... and 2 additional cores from the door station to the distributor are required.

### Link to a telephone system

One or more 1+n technology door stations can be connected using the DoorCom Analog DCA 612-... to the analog PBX extension of a telephone system. In this case, a DCA 612-... is installed instead of an in-house telephone HTS/HTC.

## Door and in-house telephony with audio privacy function

1 door station with internal speech communication within the group



## Cable size diagram ÜV-Ta-94/1

1 door station (Siedle Vario, Siedle Classic, Siedle Steel or Siedle custom-fit door loudspeaker), any optional number of in-house telephones HTS 811-..., HTC 811-... at the side circuit. 2-6 in-house telephones HTC 811-... with group controller GC 612-... for internal calls

### Mode of operation

Calling and speech between the door station and connected in-house telephones HTS/HTC 811-... An existing call cannot be listened in to from other in-house telephones. Internal speech communication between the HTC 811-..., which is connected to the GC 612-.... Dialling the user with the call buttons on the telephones. Door release button for the door release function, light button for the light switching function. Illuminated light button at the door station with potential-free switching contact.Connection of a storey call button (ERT) for calling from an apartment door. Different ring tones for calls from the front door, storey door or for internal calls.

**Door calls to GC 612-... Max. 6** telephones can be selectively called from a door via a GC 612-...

# The installation from the GC 612-... to the in-house telephones HTC 811-0 -... must be in star formation.

If the door release is required to be tamper-proof, i.e. not connected at the door loudspeaker, the CTÖ 602-... must be used. Additional cores are required for this.

In multiple family homes, any optional number of group controllers GC 612-... with additional line rectifier NG 602-... and downstream HTC 811-... units for internal telephony can be used.

## Remarks

Door release and light contact in the door loudspeaker 24 V AC / 2 A

- ERT Storey call button
- n Number of call buttons (DL)
- x Number of call lines to the group y Number of remaining
  - Number of remaining telephones in the side circuit

## Parallel door stations

Up to 8 door stations can be connected in parallel without the need for any further accessories. The door loudspeakers become synchronized one with the other via terminals TLn.

## Parallel in-house telephones or accessories

Up to 2 in-house telephones can be operated in parallel in the side circuit. Secondary signal unit NS 711-... and secondary signal controller NSC 602-... count as parallel devices.

## Storey call ERT

Every in-house telephone has a terminal ERT for a storey call button. The storey call button is used in properties encompassing several apartments to ring from the apartment door into the apartment.

### Storey door station

Instead of a storey call button ERT a door station is also possible on a storey. To connect a storey door station, the storey controller ETC 602-... is required.

## Switching and control functions

Switching and control functions can be initiated from the deluxe in-house telephone HTC/HTCV 811-... To implement control functions, the switching/remote controller SFC 602-... and 2 additional cores from the door station to the distributor are required.

## Link to a telephone system

One or more 1+n technology door stations can be connected using the DoorCom Analog DCA 612-... to the analog PBX extension of a telephone system. In this case, a DCA 612-... is installed instead of an in-house telephone HTS/HTC.

## More than 1 door station



#### Cable size diagram ÜV-Ta-...> 1 DL

1 - 8 door stations (Siedle Vario, Siedle Classic, Siedle Steel or Siedle custom-fit door loudspeaker), any optional number of in-house telephones HTS 811-..., HTC 811-...

## m-fit door can be connected optional circuit. telephones

#### Mode of operation

Calling and speech between one or several door stations and the connected in-house telephones HTS/HTC 811-... The calling door loudspeaker is automatically actuated by the call. **No switchover devices are required**. An existing call cannot be listened in to from other inhouse telephones. Up to 8 door loudspeakers can be connected at the side circuit.

## More than 1 door station with door releases featuring tamper-proof connection



### Cable size diagram ÜV-Ta-...> 1 DL with CTÖ

1 - 8 door stations (Siedle Vario, Siedle Classic, Siedle Steel or Siedle custom-fit door loudspeaker), 1 CTÖ 602-... any optional number of inhouse telephones HTS 811-..., HTC 811-...

#### Mode of operation

Calling and speech between several door stations and the connected in-house telephones HTS/HTC 811-... The calling door loudspeaker is automatically actuated by the

## call. No switchover devices are required.

An existing call cannot be listened in to from other inhouse telephones. The door release is required to be tamper-proof, i.e. should not be connected at the door loudspeaker; consequently the CTÖ 602-... must be used once. Additional cores are required for this.

# Up to 8 door loudspeakers can be connected at the side circuit.

## Different configurations per residential unit



### Cable size diagram ÜV-Ta-... with GC 612-... and ETC 602-...

Several door stations (Siedle Vario, Siedle Classic, Siedle Steel or Siedle custom-fit door loudspeaker), at the side circuit with an optional number of in-house telephones HTS 811-..., HTC 811-... 2-6 in-house telephones HTC 811-... with group controller GC 612-... for internal calls 1 storey door loudspeaker with an optional number of system telephones HTS/HTC 811-...

**Mode of operation** Group 1 as described in ÜV-Ta-94/1, group 2 as described in ÜV-Ta-84/1. but with several door loudspeakers. All calls have audio privacy. In general, each storey can be equipped with a different configuration.

For detailed advice, for instance when designing complex systems and combinations of different system types, our customer service will be pleased to assist you.

## Remarks on video installation

#### Conductor routing

In order to comply with the general safety regulations for telecommunication systems in accordance with VDE 0100 and VDE 0800, and to prevent electrical interference, ensure separate routing of heavy and light current conductors. A distance of 10 cm must be adhered to

The conductor from the door loudspeaker must be laid directly without branching from the main junction box, or where applicable can also be looped via other door loudspeakers.

When using several cables to the in-house telephones, terminal "1" **must** be routed in each cable and connected. The wires for terminal ...1" must all be connected at the same door loudspeaker as the call conductors.

#### Conductor material

Telecommunication or light current conductors can be used for installation: JY(ST)Y twisted pair conductors, shielded A2Y(ST)2Y buried telecommunication cable YR light currentconductors

Required conductor material for video transmission. **Coaxial cable** 75 Ohm e.g. RG 59 or equivalent, bandwidth of the video signal: max 5 MHz video signal according to CCIR/ PAL, 1 Vss/ 75 Ohm Attenuation between the camera and monitor: max. 5 dB

## Most specifications contained in the coaxial cable data sheets refer to frequencies > 50 MHz.

Long supply lines to side circuit conductors should be avoided. If spur lines are unavoidable, video branch amplifiers are required, e.g. VMO 511-2 or VMO 602-4. Ensure that coaxial cables are correctly laid.

## video installations

**Ranges for** 

#### Ranges

The following ranges always refer to the **core diameter** 0.8 mm.

The conductor network (cables) laid throughout the entire system bus must not exceed 2500 m

• In-house telephones – door loudspeakers

• max. 500 m between the door station and the most distant in-house telephone with colour monitor

• Door loudspeaker line rectifier

max 100 m between the line rectifier and the most distant door station

 Distance between the most distant door loudspeakers (TLn core): Each max. 500 m.

#### • Range Group controller in-house telephone

The distance between GC 612-... and each HTC/HTCV 811-... may not exceed 100 m.

• The wiring from the GC 612-... to the connected inhouse telephones with colour monitor HTC/HTCV 811-... must be in star formation. The coaxial cable is also installed in star formation.

## Coaxial cable range

Apartment station camera The range when using standard available coaxial cable (75 Ohm) is appr. 500 m. With greater distances, use a coaxial cable with lower attenuation

Where ranges of 500 m are involved and standard coaxial cable is used for internal installation (appr. 2 dB/100m) up to 20 HTSV/HTCV 811-... units can be connected. With more than 20 HTSV/HTCV

### Coaxial cable types

The range with cable type 0.4/2.5 can be up to appr. 150 m, with cable type 2.7/17.3 up to appr. 800 m.

units, additional side circuit conductors must be included in the planning and for ranges over 300 m an additional standard available video amplifier (appr. 3 dB) is required.

### Admissible attenuation

between camera and monitor max. 5 dB.

#### Line rectifier monitors

1 monitor appr. 200 m 2 monitors in parallel operation appr. 100 m

with audio and video privacy function. 5 monitors appr. 130 m 10 monitors appr. 100 m

By doubling the number of cores (power supply) the range can be increased accordingly.

Video transmission bandwidth appr. 5 MHz Attenuation max. 5 dB Throughput attenuation VMO = 0.08 dB

Cable type	0.4/2.5	0.6 L/3.7	0.6/3.7	0.8/4.9 Dz	1.0/6.6	1.1 L/7.3	1.1/7.3	1.7/11.5	2.7/17.3
Configuration									
Inner conductor dia. (mm) appr.	0.4	0.6	0.6	0.8	1.0	1.1	1.1	1.7	2.7
Insulation dia. (mm) appr.	2.5 PE	3.7 PE	3.7 PE	5.1 PE	6.6 PE	7.3 PE	7.3 PE	11.5 PE	17.3 PE
Sheath dia. (mm) appr.	4.1 PVC	6.0 PVC	6.0 PVC	7.5 PVC	9.0 PVC	10.3 PVC	10.3 PVC	15 PVC	22.0 PVC
Smallest bend. radius (mm)	20	30	30	35	45	50	50	80	110
Electrical characteristics									
Attenuation at 5 MHz (dB/100 m) appr.	3.5	3.1	2.3	1.8	1.4	1.6	1.3	0.9	0.55

Single and multiple family home 1 door station with audio and video privacy function



## Cable size diagram ÜV-TVKa-64/1/1

1 video door station (Siedle Vario, Siedle Classic, Siedle Steel), 2...n in-house telephones with colour monitor HTSV/ HTCV 811-... at the side circuit

## Mode of operation

Calling, speech and vision between the door station and the connected in-house telephones with colour monitor HTSV/HTCV 811-...

It is not possible to listen in to or view an existing call from other in-house telephones. The image of the visitor is automatically switched to the called monitor when the bell is rung. The dwell period of the picture is 30 secs or for as long as the call continues plus 30 secs after the end of the call Door release button for the door release function, light button for the light switching function, monitor button for manual actuation of the camera image (only possible with additional core). Illuminated light button at the door station with potential-free switching contact. Connection of a storey call button (ERT) for calling from an apartment door.

Different ring tones for calls from the front door or storey door.

To ensure tamper-proof connection of the door release, the door release controller CTÖ 602-... has to be used. Additional cores are required for this.

#### Remarks

Door release and light contact in the door loudspeaker 24 V AC / 2 A

ERT Storey call button n Number of call buttons (DL)

## Video distributor

Side circuit or star formation installation of in-house telephones with colour monitor requires VMO 511-2 / VMO 602-4, and where several cameras are installed, VKA 511-4 is required.

In addition, a junction box 100 x 100 mm must be provided in each case in addition to the customary storey distributors for the video coaxial distributor on the staircase.







<u>−</u>⊖\_ = Coax

## Additional functions

## Parallel in-house telephones or accessories

Up to 2 in-house telephones can be operated in parallel. Secondary signal unit NS 711-..., secondary signal controller NSC 602-... and DoorCom Analog DCA 612-...also count as parallel devices.

## Storey call ERT

Every in-house telephone has a terminal ERT for a storey call button. The storey call button is used in properties encompassing several apartments to ring from the apartment door into the apartment.

#### Storey door station

Instead of a storey call button ERT a door station is also possible on a storey. To connect a storey door station, the storey controller ETC 602-... is required.

## Switching and control functions

Switching and control functions can be initiated from the deluxe in-house telephone HTC/HTCV 811-... To implement control functions, the switching/remote controller SFC 602-... and 2 additional cores from the door station to the distributor are required.

## Link to a telephone system

One or more 1+n technology door stations can be connected using the DoorCom Analog DCA 612-... to the analog PBX extension of a telephone system. In this case, a DCA 612-... is installed instead of an in-house telephone HTSV/HTCV. Up to three call buttons can dial a PBX extension in the telephone system or a telephone number. Additional components are required for video interfacing: DCSF 600-0. MO 950-01/10 C. VMO 511-2, AD 110-01

Single and multiple family home 2 door station with audio and video privacy function



Installation looped through from one device to the next

## Cable size diagram ÜV-TVKa-64/2/2

2 video door stations (Siedle Vario, Siedle Classic, Siedle Steel), 2...n in-house telephones with colour monitor HTSV/ HTCV 811-... at the side circuit

## Mode of operation

Calling, speech and vision between the calling door station and the connected inhouse telephones with colour monitor HTSV/HTCV 811-... It is not possible to listen in to or view an existing call from other in-house telephones. The image of the visitor is automatically switched to the called monitor when the bell is rung. The dwell period of the picture is 30 secs or for as long as the call continues plus 30 secs after the end of the call Door release button for the door release function, light button for the light switching function, monitor button for manual actuation of the camera image (only possible with additional core). These functions are assigned to the door by ringing. Illuminated light button at the door station with potential-free switching contact. Connection of a storev call button (ERT) for calling from an apartment door. Different ring tones for calls

## from the front door or storey door.

To ensure tamper-proof connection of the door release, the door release controller CTÖ 602-... has to be used. Additional cores are required for this.

## Remarks

Door release and light contact in the door loudspeaker 24 V AC / 2 A

ERT Storey call button n Number of call buttons

## (DL)

**Video distributor** If the in-house telephones with

colour monitor are installed using a side circuit or star formation, the VMO 511-2 / VMO 602-4 is required.

In addition, a junction box 100 x 100 mm must be provided in each case in addition to the customary storey distributors for the video coaxial distributor on the staircase.

#### **Additional functions**

## Parallel in-house telephones or accessories

Up to 2 in-house telephones can be operated in parallel. Secondary signal unit NS 711-..., secondary signal controller NSC 602-... and DoorCom Analog DCA 612-... count as parallel devices.

## Storey call ERT

Every in-house telephone has a terminal ERT for a storey call button. The storey call button is used in properties encompassing several apartments to ring from the apartment door into the apartment.

### Storey door station

Instead of a storey call button ERT a door station is also possible on a storey. To connect a storey door station, the storey controller ETC 602-... is required.

## Switching and control functions

Switching and control functions can be initiated from the deluxe in-house telephone HTC/HTCV 811-... . To implement control functions, the switching/remote controller SFC 602-... and 2 additional cores from the door station to the distributor are required.

## Link to a telephone system One or more 1+n technology

door stations can be connected using the DoorCom Analog DCA 612-... to the analog PBX extension of a telephone system. In this case, a DCA 612-... is installed instead of an in-house telephone HTSV/HTCV. Up to three call buttons can dial a PBX extension in the telephone system or a telephone number. Additional components are required for video interfacing: DCSF 600-0. MO 950-01/10 C. VMO 511-2, AD 110-01

Single and multiple family home 3 door stations with audio and video privacy function



Installation looped through from one device to the next

## Cable size diagram ÜV-TVKa-64/3/3

3 video door stations (Siedle Vario, Siedle Classic, Siedle Steel), 2...n in-house telephones with colour monitor HTSV/ HTCV 811-... at the side circuit

## Mode of operation

Calling, speech and vision between the calling door station and the connected inhouse telephones with colour monitor HTSV/HTCV 811-... It is not possible to listen in to or view an existing call from other in-house telephones. The image of the visitor is automatically switched to the called monitor when the bell is rung. The dwell period of the picture is 30 secs or for as long as the call continues plus 30 secs after the end of the call Door release button for the door release function, light button for the light switching function, monitor button for manual actuation of the camera image (only possible with additional core). These functions are assigned to the door by ringing. Illuminated light button at the door station with potential-free switching contact. Connection of a storey call button (ERT) for calling from an apartment door. Different ring tones for calls from the front door or storey door.

To ensure tamper-proof connection of the door release, the door release controller CTÖ 602-... has to be used. Additional cores are required for this.

#### Remarks

Door release and light contact in the door loudspeaker max. 24 V AC / 2 A

- ERT Storey call button
- n Number of call buttons (DL)

### Video distributor

If the in-house telephones with colour monitor are installed using a side circuit or star formation, the VMO 511-2 / VMO 602-4 is required.

In addition, a junction box 100 x 100 mm must be provided in each case in addition to the customary storey distributors for the video coaxial distributor on the staircase.

## **Additional functions**

## Parallel in-house telephones or accessories

Up to 2 in-house telephones can be operated in parallel. Secondary signal unit NS 711-..., secondary signal controller NSC 602-... and DoorCom Analog DCA 612-...also count as parallel devices.

## Storey call ERT

Every in-house telephone has a terminal ERT for a storey call button. The storey call button is used in properties encompassing several apartments to ring from the apartment door into the apartment.

### Storey door station

Instead of a storey call button ERT a door station is also possible on a storey. To connect a storey door station, the storey controller ETC 602-... is required.

## Switching and control functions

Switching and control functions can be initiated from the deluxe in-house telephone HTC/HTCV 811-... . To implement control functions, the switching/remote controller SFC 602-... and 2 additional cores from the door station to the distributor are required.

using the DoorCom Analog DCA 612-... to the analog PBX extension of a telephone system. In this case, a DCA 612-... is installed instead of an in-house telephone HTSV/HTCV. Up to three call buttons can dial a PBX extension in the telephone system or a telephone number. Additional components are required for video interfacing: DCSF 600-0. MO 950-01/10 C. VMO 511-2,

AD 110-01

Link to a telephone system

One or more 1+n technology

door stations can be connected

## Video door and in-house telephony

1 door station, with audio and video privacy function



## Cable size diagram ÜV-TVKa-74/1/1

1 video door station (Siedle Vario, Siedle Classic, Siedle Steel or Siedle custom-fit door loudspeaker), 2 - 6 inhouse telephones with colour monitor HTCV 811-... with group controller GC 612-... for internal calls

## Mode of operation

Calling, speech and vision between the door station and the connected in-house telephones with colour monitor HTSV/HTCV 811-... An existing call to the door station cannot be listened in to or viewed from other in-house telephones. The image of the visitor is automatically switched to the called monitor when the bell is rung. The dwell period of the picture is 30 secs or for as long as the call continues plus 30 secs after the end of the call.

Internal speech communication between the HTCV 811-..., which is connected to the GC 612-... Dialling the user with the call buttons on the telephones. Door release button for the door release function, light button for the light switching function. Illuminated light button at the door station with potential-free switching contact. Connection of a storey call button (ERT) for calling from an apartment door. Different ring tones for calls from the front door, storey door or for internal calls.

To ensure tamper-proof connection of the door release, the door release controller CTÖ 602-... has to be used. Additional cores are required for this.

#### **Door call at the GC 612-0 Max. 6** in-house telephones can be selectively called from a door via a GGC 612-...

The wiring from the GC 612-... to the HTCV 811-... must be in star formation. The coaxial cable for video transmission is also installed in star formation.

## Remarks

Door release and light contact in the door loudspeaker max. 24 V AC / 2 A

In systems with more than 10 in-house telephones with colour monitor or parallel operation of in-house telephones HTSV/HTCV 811-..., the current consumption of all devices must be taken into account.

## Additional functions

## Switching and control functions

Switching and control functions can be initiated from the deluxe in-house telephone HTC/HTCV 811-... To implement control functions, the switching/remote controller SFC 602-... and 2 additional cores from the door station to the distributor are required.

Main and storey door station, with audio and video privacy function



## Cable size diagram ÜV-TVKa-84/1/1

1 video door station (Siedle Vario, Siedle Classic, Siedle Steel) in the side circuit with an optional number of inhouse telephones with colour monitor HTSV/HTCV 811-... 1 video storey door station with an optional number of inhouse telephones HTSV/ HTCV 811-...

### Video distributor

Side circuit or star formation installation of in-house telephones with colour monitor requires VMO 511-2 / VMO 602-4, and where several cameras are installed, VKA 511-4 is required.

In addition, a junction box 100 x 100 mm must be provided in each case in addition to the customary storey distributors for the video coaxial distributor on the staircase.

The storey door stations are controlled and supplied from the sub-distributors on the relevant storeys.

## Mode of operation

Call, speech and vision between the main door station and any optional number of inhouse telephones with colour monitor HTSV/HTCV 811-... and between storey door stations and the relevant inhouse telephones with colour monitor. With the HTSV/HTCV 811-... in the side circuit, a connection can only be made to the main door station. It is not possible to listen in to or view an existing call from other inhouse telephones. **No internal** speech communication is possible between the in-house telephones.

The image of the visitor is automatically switched to the called monitor when the bell is runa. The dwell period of the picture is 30 secs or for as long as the call continues plus 30 secs after the end of the call In-house telephones without colour monitor can also be optionally connected. Door release button for the door release function. light button for the light switching function, monitor button for manual actuation of the camera image (only possible with additional core). These functions are assigned to the door by ringing. Illuminated light button at the door station with potential-free switching contact.

A call from the main door station to an in-house telephone **before** the storey controller ETC 602-... is possible simultaneously with a call from the storey door station to a connected in-house telephone. Different ring tones for calls from the front door or storey door. To ensure tamper-proof connection of the door release, the door release controller CTÖ 602-... has to be used. Additional cores are required for this.

#### Remarks

Door release and light contact in the door loudspeaker max. 24 V AC, 2 A

- ERT Storey call button
- n Number of call buttons (main-side circuit DL) r Number of call lines behind the storey Controller
- x Number of call lines at the storey controller
- y Number of remaining telephones in the side circuit

### **Additional functions**

## Parallel in-house telephones or accessories

Up to 2 in-house telephones can be operated in parallel. Secondary signal unit NS 711-..., secondary signal controller NSC 602-... and DoorCom Analog DCA 612-...also count as parallel devices.

## Switching and control functions

Switching and control functions can be initiated from the deluxe in-house telephone HTC/HTCV 811-... To implement control functions, the switching/ remote controller SFC 602-... and 2 additional cores from the door station to the distributor are required.

### Link to a telephone system

One or more 1+n technology door stations can be connected using the DoorCom Analog DCA 612-... to the analog PBX extension of a telephone system. In this case, a DCA 612-... is installed instead of an in-house telephone HTS/HTC.

Up to three call buttons can dial a PBX extension in the telephone system or a telephone number. Additional components are required for video interfacing: DCSF 600-0, MO 950-01/10 C, VMO 511-2, AD 110-01

## Video door and in-house telephony

Main and storey door loudspeaker with audio and video privacy function, with internal speech operation in the storey



## Cable size diagram ÜV-TVKa-85/1/1

1 video door station (Siedle Vario, Siedle Classic, Siedle Steel) in the side circuit with an optional number of inhouse telephones with colour monitor HTSV/HTCV 811-... 1 video storey door loudspeaker with max. 6 in-house telephones with colour monitor HTCV 811-... and internal speech operation

### Video distributor

Side circuit or star formation installation of in-house telephones with colour monitor requires VMO 511-2 / VMO 602-4, and where several cameras are installed. VKA 511-4 is required. In addition, a junction box 100 x 100 mm must be provided in addition to the customary storey distributors for the video coaxial distributor on the staircase. The storey door station is controlled and supplied by the sub-distributor on the relevant storey.

### Mode of operation

Call, speech and vision between the main door station and an optional number of in-house telephones with colour monitor HTSV/HTCV 811-... and between storey door stations and the relevant in-house telephones with colour monitor.With the HTSV/ HTCV 811-... in the side circuit, a connection can only be made to the main door station. It is not possible to listen in to or view an existing call from other in-house telephones. **No internal** speech communication is possible between the in-house telephones.

The image of the visitor is automatically switched to the called monitor when the bell is runa. The dwell period of the picture is 30 secs or for as long as the call continues plus 30 secs after the end of the call. In-house telephones without colour monitor can also be optionally connected. Door release button for the door release function, light button for the light switching function, monitor button for manual actuation of the camera image (only possible with additional core). These functions are assigned to the door by ringing. Illuminated light button at the door station with potential-free switching contact. Several calls simultaneously

For each storey controller with downstream group controller, a call is possible from the storey or main / side circuit door loudspeaker or internal speech operation is possible at a group controller. If an in-house telephone which is currently conducting an internal call is called from a door, the door call has priority; i.e. the existing call is immediately interrupted and the engaged signal is triggered.After replacing the receiver and picking up again immediately, the door connection is established.

Different ring tones for calls from the front door, storey door or internal calls.

### Door calls to GC 612-...-0

Max. 6 in-house telephones can be selectively called from a door via a GC 612-...

To ensure tamper-proof connection of the door release, the door release controller CTÖ 602-... has to be used. Additional cores are required for this.

#### The wiring from the

GC 612-... to the HTCV 811-... must be in star formation. The coaxial cable for video transmission is also installed in star formation. Remarks

Door release and light contact in the door loudspeaker max. 24 V AC 2 A

- ERT Storey call button
- n number of call buttons (main-side circuit DL)
- r Number of call lines behind the storey controller
- x Number of call lines at the storey controller
- y Number of remaining telephones in the side circuit

## For additional functions, see the next page.

## Video door and in-house telephony with call differentiation, audio and video privacy function, internal speech operation in the group



## Cable size diagram ÜV-TVKa-94/1/1

1 video door station (Siedle Vario, Siedle Classic, Siedle Steel) in the side circuit with any optional number of in-house telephones with colour monitor HTSV/ HTCV 811-... and max. 6 inhouse telephones with colour monitor HTCV 811-... at the group controller GC 612-... for internal speech operation.

### Video distributor

Side circuit or star formation installation of in-house telephones with colour monitor requires VMO 511-2 / VMO 602-4, and where several cameras are installed, VKA 511-4 is required.

In addition, a junction box 100 x 100 mm must be provided in each case in addition to the customary storey distributors for the video coaxial distributor on the staircase. The storey door stations are

controlled and supplied from the sub-distributors on the relevant storeys.

## Mode of operation

Calling, speech and vision between the video door station and any optional number of inhouse telephones with colour monitor HTSV/HTCV 811-... and max. 6 HTCV 811-... units at the group controller for internal speech operation. It is not possible to listen in to or view an existing call from other in-house telephones.

## Internal speech operation

between the in-house telephones at the GC 612-... is simultaneously possible. If an in-house telephone which is currently conducting an internal call is called from a door, the door call has priority; i.e. the existing call is immediately interrupted and the engaged signal is triggered. After replacing the receiver and picking up again immediately, the door connection is established.

The image of the visitor is automatically switched to the called monitor when the bell is rung. The dwell period of the picture is 30 secs or for as long as the call continues plus 30 secs after the end of the call. In-house telephones without colour monitor can also be optionally connected. Door release button for the door release function, light button for the light switching function, monitor button for manual actuation of the camera image (only possible with additional core). Illuminated light button at the door station with potential-free switching contact.

Different ring tones for calls from the front door, storey door or internal calls.

## Door calls to GC 612-...-0

Max. 6 in-house telephones can be selectively called from a door via a GC 612-... To ensure tamper-proof connection of the door release, the door release controller CTÖ 602-... has to be used. Additional cores are required for this.

The wiring from the GC 612-... to the HTCV 811-... must be in star formation. The coaxial cable for video transmission is also installed in star formation.

### Remarks

Door release and light contact in the door loudspeaker 24 V AC / 2 A

- ERT Storey call button
- n Number of call buttons (main-side circuit DL)
- r Number of call lines behind the storey controller
- y Number of remaining telephones in the side circuit

## Additional functions

## Parallel in-house telephones or accessories

Up to 2 in-house telephones can be operated in parallel. Secondary signal unit NS 711-..., secondary signal controller NSC 602-... and DoorCom Analog DCA 612-...also count as parallel devices.

## Switching and control functions

Switching and control functions can be initiated from the deluxe in-house telephone HTC/HTCV 811-... For implementation of the control functions, the switching/remote controller SFC 602-... and 2 additional cores are required from the door station to the distributor.

## Link to a telephone system

One or more 1+n technology door stations can be connected using the DoorCom Analog DCA 612-... to the analog PBX extension of a telephone system. In this case, a DCA 612-... is installed instead of an in-house telephone HTS/HTC.

Up to three call buttons can dial a PBX extension in the telephone system or a telephone number. Additional components are required for video interfacing: DCSF 600-0, MO 950-01/10 C, VMO 511-2, AD 110-01

## More than one video door station with tamper-proof connected door releases



## Cable size diagram ÜV-TVKa-...> 1 DL with CTÖ

1 - 8 video door stations (Siedle Vario, Siedle Classic, Siedle Steel), 1 CTÖ 602-... and any optional number of inhouse telephones with colour monitor HTSV/HTCV 811-...

#### Video distributor

Side circuit or star formation installation of in-house telephones with colour monitor requires VMO 511-2 / VMO 602-4, and where several cameras are installed, VKA 511-4 is required.

In addition, a junction box 100 x 100 mm must be provided in each case in addition to the customary storey distributors for the video coaxial distributor on the staircase. The storey door stations are controlled and supplied from the sub-distributors on the relevant storeys.

## Mode of operation

Calling, speech and vision between the door station and any optional number of inhouse telephones with colour monitor HTSV/HTCV 811-.... The image of the visitor is automatically switched to the called monitor when the bell is rung. For additional information on functional characteristics.

functional characteristics, please refer to the relevant circuit diagram.

Up to 8 door loudspeakers can be connected at the side circuit.

#### **Additional functions**

### Parallel in-house telephones or accessories

Up to 2 in-house telephones can be operated in parallel. Secondary signal unit NS 711-..., secondary signal controller NSC 602-... and DoorCom Analog DCA 612-...also count as parallel devices.

#### Storey call ERT

Every in-house telephone has a terminal ERT for a storey call button. The storey call button is used in properties encompassing several apartments to ring from the apartment door into the apartment.

#### Storey door station

Instead of a storey call button ERT a door station is also possible on a storey. To connect a storey door station, the storey controller ETC 602-... is required.

## Switching and control functions

Switching and control functions can be initiated from the deluxe in-house telephone HTC/HTCV 811-... For implementation of the control functions, the switching/remote controller SFC 602-... and 2 additional cores are required from the door station to the distributor.

#### Link to a telephone system

One or more 1+n technology door stations can be connected using the DoorCom Analog DCA 612-... to the analog PBX extension of a telephone system. In this case, a DCA 612-... is installed instead of an in-house telephone HTS/HTC.

Up to three call buttons can dial a PBX extension in the telephone system or a telephone number. Additional components are required for video interfacing: DCSF 600-0, MO 950-01/10 C, VMO 511-2, AD 110-01

## Door area audio components Device description

#### TLM 612-...

With potential-free light current light button with illuminated symbol. With integrated automatic synchronization in installations with several door loudspeakers and potential-free working contacts for door release and light. Actuation takes place without additional wiring directly from the in-house telephone via the wire-saving side circuit installation. Volume controller for loudspeaker Integrated video interfacing and connection facility for SFC 602-... and CTÖ 602-... • Contact load light (LI), door release (DR) 24 V 1A DC/AC ON time: fixed at DR 3 secs. and LI 0.8 secs.

### TM 612-...

As 1st, 2nd, 3rd, 4th call button module with integrated electronic circuit and supplied terminal block. They can be used in all Siedle Vario door intercom systems. The call buttons are **offset** from the illuminated inscription field and have a back-lit bell symbol.

- LED lighting
- 12 V AC 25 mA

• Optimum inscription facility through the Siedle inscription service (see page 36).

## TLE 061-0

Custom-fit door loudspeaker for the 1+n system which is used in existing intercom departments, door constructions, letterbox systems already installed on site. With integrated automatic synchronization in installations with several door loudspeakers and potential-free working contacts for door release and light. Easy installation due to universal fixing facility with accessory ZTL 051-0, if using louvre ZJ 051-0 can be screwed onto the louvre directly. Volume controller for loudspeaker • Contact load LI. DR 24 V 1A DC/AC

## ON time: fixed at DR 3 secs. and LI 0.8 secs.

For operation of the TLE 061-..., the accessory diode ZD 061-10 is required for connecting the user's own or existing call buttons.

## ZD 061-10

Accessory diode for connection of the user's own or existing call buttons to the wire-saving 1+n system with the custom-fit door loudspeaker TLE 061-... A ZD 061-10 is required for each started group of 10 call buttons. The accessory can be mounted in row on all sides by means of guides. It can be inserted in the intercom / bell compartment, glued to a smooth surface or fastened using screws.

#### CL A xx N CL V xx N C 01

Door station with different front surfaces for the 1+n system with flush-mount housing. Door loudspeaker, xx call button/s with backlit name plate, exchangeable from the front. With potential-free working

contacts for door release and light.

#### Siedle Classic and Siedle

**Steel** with stainless steel front panel is always supplied as a complete external unit and cannot be subsequently extended.

## Door area video components **Device description**

## Application/General

Video cameras operating in the Vario system or externally in the background provide an unobtrusive method of surveillance in the entrance area. The visitor's picture appears on one or more of the in-house telephones with colour monitor. Call, speech and release operation take place via the called in-house telephone.

with our system. Several within one system with switchover facility. customer service.

Possible applications include single and multiple family homes, private/commercial premises, practices and surgeries, administrative buildings etc.

Other video components for special applications such as powered zoom, swivel-tilt fixture etc. can be combined cameras can also be operated For detailed advice, see our



Diagram to determine the required focal length of the camera CEC 612-... with image pick-up chip 1/3" The object height is calculated from the object width x 0.75.



#### Location of the video camera

CMC 612-...

vertica

1<u>60 cm</u>

Selection of the most suitable camera and its location is decisive to ensure good picture quality. The camera must not be directed towards:

- Direct backlight
- Direct sunlight
- Picture backgrounds with a high degree of brightness • Highly reflective walls
- Lamps or light sources etc.

CMC 612-...

ca. 143 cm

ca. 84 cm

horizonta



12.00 10,00 8,00 Object width in m (a) 6,00 8,0 4.00 2,00 40,0 mm 0,00 6 8 10 12 2 4 Object distance in m (h)

Diagram to determine the required focal length of the camera KA/WG 950-0/... c with image pick-up chip 1/4"

The object height is calculated from the object width x 0.75.

Pick-up range of the cameras in all standard housings.

106 cm

The dotted line shows the entire horizontal pick-up range of the CMC 612-...



Diagram to determine the required focal length of the camera CEC 612-0 -... with image pick-up chip 1/3"

The object height is calculated from the object width x 0.75.

## Door area video components Device description

### Vario module camera

External camera

## CMC 612-0

Colour camera module for video surveillance in the 1+n system. For mounting in Siedle Vario 611-... housing. Transmission of the video signal via coaxial cable 75 Ohm.

• Colour system PAL

• Image pick-up CCD sensor 1/3" 752 x 582 pixel (horizontal/vertical)

- Lens attachment 2.9 mm
- Automatic day/night switchover at appr. 4 lux (from colour to black and white) for optimum picture quality
- Pick-up angle vertical appr. 60°, horizontal 80°
- Additional mechanical adjustment range by appr. 30° on the horizontal and vertical
- Horizontal resolution 450 TV lines
- Video output 1 Vss to 75 Ohm
- Integrated infrared lighting
  2-stage heating 12 V AC
- max. 100 mA
- Temperature range -20°C to +  $40^{\circ}$ C
- Power supply 20 30 V DC
- Protection system IK: > 10
- Current consumption max. 120 mA
- Dimensions width x height x build-up height 99 x 99 x 32 mm
- Mounting height appr.
- 1.60 m

CEC 612-0
Day/night CCD video camera for external mounting, with sun shade, wall arm with ball head and internal wiring.
Image pick-up colour CCD sensor 1/3"; 752 (H) x 582 (V) 440,000 pixel
Manual zoom lens attachment 3.8-9.5 mm, F 1,3, with IR filter, automatic quivel action

filter, automatic swivel action
Horizontal angle of vision
74° – 30°

• Light sensitivity 0.5 Lux in colour mode and 0.24 Lux in monochrome mode, each at F 1.3

- Backlight compensation
- Automatic white balance
- Horizontal resolution 480 TV
- lines • Video signal 1 Vss FBAS at 75
- Ohm • Temperature range -20°C to
- + 40°C
- Power supply 10.5 -30 V/DC max. 250 mA
- Protection system IP 66
- Connecting cable 1.5 m long
- Measurements with wall arm: W x H x D 62 x 96.5 x 187.5 mm

### Note!

External camera CEC 612-... always requires a separate, standard commercially available connection / junction box for connection.

## KA/WG 950-0/3.8 - 83C

External colour CCD video camera for external mounting with weather proof housing and sun shade, wall arm with ball head and internal wiring. • Image pick-up colour CCD

- sensor 1/4"; 752 (H) x 582 (V) 440,000 pixel
- Manual zoom lens
   attachment
- 3.8 83 mm with autofocus
- Aperture angle 50° 2.5°
- Light sensitivity 0.8 Lux at F 1 2
- Horizontal resolution
   480 TV lines
- Video signal 1 Vss FBAS at
- 75 Ohm
- Cable connection in wall arm
- Temperature range
- -30 °C to +40 °C
- Power supply
- 20-30 V AC/DC max. 250 mA
- Electronically controlled 12 V
- AC/DC heating appr. 7 W
- Protection system IP 66
- Colour white
- Dimensions:
- dia. 90 x 388 mm length with wall arm, dia. 113 x 420.5 mm with wall arm and sun shade

### ZNF 950-0

Line rectifier foot accessory for cameras KA/WG 950-..., for supply from the 230 V mains. The cameras are connected by means of plug-in connectors.

- Power supply 230 V/50 Hz.
- Protection system IP 66

## Living area audio Device description

#### HTS 811-0

Standard in-house telephone for door telephony in the 1+n system with door loudspeakers TLM 612-..., STLM 612-..., TLE 061-... / CL A 01 N Door release and light button integrated. With basic functions calling, speech, door release and storey call.

### **Performance features**

- Hearing protection and audio privacy device integrated
- Parallel switching of max. 2 in-house telephones
- Electronic call generator with 2-tone call for storey calls and 3-tone call for door calls
- Call volume max. 86 dB A
- Call volume infinitely variableIntegrated call silencing (call
- volume button to furthest lefthand position)
- After a completed call, the connection to the calling door loudspeaker can be picked up within 30 seconds.
- Door release/light at any time
- Plug-in spiral cord with onesided detachment facility for simple installation
- Dimensions: W x H x D 90 x 200 x 45 mm

## Call tones when connecting to a side circuit installation • Door call: 3-tone call

Main/storey door loudspeaker:

Call current max. 190 mA

• Usable as a table or desk-

mounted unit with the table

HTS 811-... is downward-

compatible with HTS 711

top accessory ZTS 811-...

but cannot be combined

with a monitor

Storey call: 2-tone call

Storev call: 2-tone call

to ETC 602-...

3-tone call

#### ing HTC 811-0 Deluxe in-house telephone for

door or door and in-house telephony (with GC 612-...) in the 1+n system with door loudspeakers TLM 612-..., STLM 612-..., TLE 061-... or CL A 01 N also in conjunction with storey door. Integrated door release and light button. With basic functions calling, speech, door release and storey call.

## Performance features as for the HTS 811-0, but in addition:

- Internal speech operation with max. 5 in-house telephones via GC 612-...
- 3-tone chime
- (with G terminal)
- 2 light diodes for display (e.g. door open), separately wired
- 7 integrated function keys for use without additional installation as:
- Call buttons with GC 612-...
  Initiators for switching and control functions in
- conjunction with SFC 602-...
- Integrated inscription field for function keys
- 2 buttons for use as potential-free buttons
- Call differentiation for internal calls
- Dimensions: W x H x D
- 105 x 200 x 45 mm

## Call tones when connecting to a side circuit installation:

Door call: 3-tone chime (without G terminal)
or 3-tone chime (with G terminal)
Storey call: 2-tone call

## to GC 612-...

• Door call: 3-tone chime Internal call: 3-tone call Storey call: 2-tone call

## to ETC 602-...

Main/side circuit door loudspeaker 3-tone call Storey door loudspeaker: 3-tone chime Storey call: 2-tone call • Call current max 190 mA

- Call volume max. 86 dB A
- Usable as a table or deskmounted unit with the table top accessory ZTC 811-...

HTC 811-... is downwardcompatible to HTC 711 and predecessors!

### NS 711-01 W Colour white Secondary signal unit in lowprofile surface mount design with loudspeaker, externally adjustable volume regulation and electronic call generator. For connection to the 1+n system

**Call tones:** Door call, 3 tone call (without G terminal) or chime (with G terminal), storey call, 2-tone call. Parallel switch of a **second** NS or telephone is not **possible.** 

• Call current max. 190 mA - Call volume steplessly adjustable from the outside up to max. 86 dB(A). Dimensions W x H x D 107 x 107 x 25 mm

## NSC 602-0

Secondary signal controller for door calls for connection of a secondary signal unit with its own power supply to HTS/HTC 811-... With screwtype terminals for connection, 2 contacts with a common reference point, max. 24 V 1A. To fit a size 55 switch box under the in-house telephone. Protection system IP 20 Dimensions: 51 dia. x D 23 mm

## DoorCom Analog DCA 612-... Device description

### DCA 612-...

DoorCom Analog for the 1+n system in a 6-grid switch panel housing.

The universal a/b interface links Siedle door and in-house telephony with public network telephony. It must always be connected to the standardized a/b output of the telecommunication system (as

per TBR-21) or directly to the public network.

With two-line alphanumerical display, 16 characters per line, 6 buttons for convenient configuration. It behaves in relation to the door in the same way as a system telephone.

## **Performance features**

- Door release and light system functions by means of DTMF dialling
- 3 door call inputs

• Up to 6 control functions can be executed via SFC 602-... by DTMF dialling, corresponding to an HTC 811-...

• Selective dialling of max. 3 door loudspeakers when using interface DCSF 600 and additional wiring.

- Doormatic function for 1 call input, with/without previous door call signalling
- Freely assignable call possibilities (max. 22-digit):

- Direct calls
- Selective user call
  Group calls, collective calls
  (depending on existing on-site
- TC system) - Calls to PBX extensions, to

the public network or mobile phones

• Chain calls

- In case of no answer or engaged

- Call rerouting to central switchboard (concierge)
- Day/night switching to alternative call destinations (depending on existing on-site TC system)

• Switching from door intercom to telephone mode

- Several DCA units in one intercom system or one TC system possible
- Ring and call duration adjustable

• Signalizing door calls prior to call acceptance

• Call differentiation for doors or call inputs (max. 2) by identifying tone after lifting the receiver

• PIN protection can be activated, e.g. for programming, switching functions and actuation of other functions

• Time-controlled activation / deactivation of e.g.: Doormatic, call rerouting, day/night switching etc. via accessory DCSF -... and on-site existing time switch

- Supply voltage: 12 V AC
- Operating current: max. 100 mA
- DCSF 600-... can be used

The facility to utilize individual performance features may differ depending on the TC system used.

## DCSF 600-...

DoorCom switching/remote control interface, usable in DCA 612-... with:

## 3 potential-free outputs

- freely programmable e.g. for • Decentral door release, light • Secondary signal unit/time-
- dependent video control
- Button or switch
- Selective door dialling in the 1+n system; additional installation required
- Actuation of monitors (direct assignment to call inputs)

#### 3 inputs

freely programmable for e.g. code inputs to:

• Initiation of switching functions, DR/LI via SFC in the Siedle System

• Activation/deactivation of functions, e.g. via an existing time switch, for instance chain calls, Doormatic, day/night switching (concierge) etc.

- Dialling of call numbers to
- signal events with signal tones: - Selective user call
- Group calls, collective calls (depending on existing on-site TC system)

• Calls to PBX extensions, to the public network or mobile phones

Code and call number functions combinable
Video / light actuation via

Muero right actuationBMM etc.Power supply via the

DCA 612-... • Operating current: max.

100 mA

For video interfacing in conjunction with the DCA 612-..., additional components are required: DCSF 600-0, MO 950-01/10 C, VMO 511-2, AD 110-01 or AD 120-0

## Range NG - DCA

The maximum range between NG 602-... and DCA 612-... is 20 m with an 0.8 mm core diameter. With larger distances the DCA 612-... must be separately supplied via an additional NG/TR 602/603-... . If several DCA 612-... units exist in the system, each must be supplied separately. The supply line must be laid directly from the NG to the DCA.

## MO 950-01/10 C

Colour monitor with 25 cm (10") screen diagonal in tabletop version.On/Off switch and setting elements are located on the front panel

- 2x input signal (F) BAS 1 Vss at 75 Ohm
- Resolution max. 300 TV lines
- Electromagnetic deflection
- Video standard PAL/NTSC,
- automatic
- Automatic line termination with 75 Ohm
- Brightness, contrast and colour contrast
- Power supply 90 to
- Power supply 90 to 254 V AC / 50/60 Hz
- Current consumption max.
- 55 W
- Ambient temperature
- $0^{\circ}$  to +40°C
- Housing version: Sheet steel
- The X rays occurring in the
- device are sufficiently shielded
- Dimensions: W x H x D 240 x 260 x 338 mm
- **AD 110-01** White
- Flush or surface mounted junction box, suitable for monitor MO 950-... to fit in a size 55 switch box. Dimensions: W x H x D 80 x 80 x 38 mm

## Additionally with monitor

AD 120-0 White

Surface or flush mounted junction box, suitable for systems featuring several monitors MO 950-... or one monitor and several connection points, with amplifier, to fit a size 55 switch box. Dimensions: W x H x D 80 x 80 x 38 mm

## Living area video Device description

#### HTSV 811-0

Standard in-house telephone with colour monitor, as surface-mounted device, for door telephony with video monitoring of the entrance area, made of high-grade antistatic plastic. Door telephony is possible with door loudspeakers TLM/ STLM 612-..., TLE 061-... / CL A ... N. The picture appears on the integrated 2.5" colour display.

With the functions calling, speech, vision, door release, light control and storey call.

## Performance features

• Hearing protection, audio privacy and video privacy device integrated

- Call silencing
- Parallel switching of max. 2 HTSV units
- Electronic call generator with 2-tone call for storey calls and 3-tone call for door calls
- Call volume infinitely variable
- Door release/light function possible at any time
- Picture connection possible with a separate button via an additional installation.
- Colour saturation and brightness can be adjusted from the front by potentiometer
- Plug-in spiral cord for simple assembly of the telephone receiver
- During installation, it is possible to loop through from one device to another without additional distributor

Usable as a table or deskmounted unit with the table top accessory ZTSV 811-...
Dimensions: W x H x D

90 x 261 x 45 mm

## HTCV 811-0

Deluxe in-house telephone with colour monitor, as surface-mounted device, for door telephony and internal telephony with video monitoring of the entrance area, made of high-grade antistatic plastic. Door telephony is possible with door loudspeakers BTLM/ STLM 612-..., TLE 061-... / CL A ... N. The picture appears on the integrated 3.5" colour display.

Alongside the basic functions calling, speech, door release, light control and storey call, internal calls and communication are possible. Performance features

• Hearing protection, audio privacy and video privacy device integrated

- Call silencing
- Parallel switching of max. 2 HTCV units

 Electronic call generator with
 2-tone call for storey calls, 3tone calls and 3-tone chime
 (with G terminal) for door calls
 Call volume can be infinitely

adjusted down to "0" from the front • Door release/light function

possible at any timePicture connection possible

with a separate button via an additional installation.

• Colour saturation and brightness can be adjusted from the front by potentiometer

• Plug-in spiral cord for simple assembly of the telephone receiver

• During installation, it is possible to loop through from one device to another without additional distributor

- Video memory function for 28 pictures
- Max. 255 pictures can be stored using an SD card (not part of the delivery)
  5-way control button for operation of the video memory, zoom, brightness, colour saturation and date/time

setting

- 7 integrated function keys for use without additional installation as:
- Call buttons with GC 612-...
- Initiators for switching and control functions in conjunction with SFC 602-...
- Integrated inscription field for function keys
- 2 buttons for use as
- potential-free buttons
- Usable as a table or desk-
- mounted unit with the table top accessory ZTCV 811-...
- Dimensions: W x H x D 105 x 261 x 45 mm

## NS 711-01

Secondary signal unit in lowprofile surface mount design with loudspeaker, externally adjustable volume regulation and electronic call generator. Can be connected to HTS/HTC/HTSV/HTCV 811-... **Call tones:** Door call, 3-tone call (without G terminal) or chime (with G terminal), storey call, 2-tone call, **No** parallel switching of a **second** NS or telephone is possible.

- Call current max. 190 mA - Call volume steplessly adjustable from the outside up to max. 86 dB(A). Dimensions: W x H x D 107 x 107 x 25 mm

## NSC 602-0

Secondary signal controller for door calls for connection of a secondary signal unit with its own power supply to HTSV/HTCV 811-... With screw-type terminals for connection, 2 contacts with a common reference point, max. 24 V 1A. To fit a size 55 switch box under the in-house telephone. Protection system IP 20 Dimensions: 51 dia. x D 23 mm

## Audio supply and control devices Device description

#### NG 602-01

Line rectifier in 6-grid switch panel housing for door and inhouse telephony. Thermal fuses on the secondary side. Specifications: Primary: 230 V AC, 50/60 Hz, +6% -10% Secondary: 12 V AC 1.6 A and 23.3 V DC 0.3 A stabilized Protection system IP 20 Dimensions: W x D x D 107 x 89 x 60 mm

### TR 603-0

Transformer in 3-grid switch panel housing for power supply to e.g. the module lighting or door release. Thermal fuses on the primary side. Specifications: Primary: 230 V AC, 22 VA, 50/60 Hz, +/-10% Secondary: 12 V AC 1.3 A protection system IP 20 Dimensions: W x H x D 107 x 89 x 60 mm

### Door release

Standard commercially available door release units 12 V AC, min. 20 Ohm can be connected. Siedle door release units are high-resistance 20 Ohm and provide operating reliability even over long ranges.

If the door release is required to be tamper-proof, i.e. not connected at the door loudspeaker, the CTÖ 602-... must be used. Additional cores are required for this.

## GC 612-0

Group controller in 6-grid switch panel housing for internal speech communication for the connection of max. 6 in-house telephones HTC/HTCV 811-... and speech connection to the door loudspeaker. The call buttons in the HTC/HTCV 811-... can be additionally assigned with control functions. Separate power supply through NG 602-...

Any optional number of groups with internal speech operation can be connected to a door loudspeaker, as long as the maximum number of 500 inhouse telephones is not exceeded.

### Performance features

• 6 door calls can be selectively assigned

• Call differentiation for door, storey and internal calls, all calls protected by audio privacy function.

- Connection facility of the SFC 602 for control functions
- Connection facility for secondary signal unit with its own power supply; assigned to call input 1
- Audible tones for Free and Engaged
- 8 DIL switch for
- programming.
- Downward compatible to the GC 602-0
- Power supply 23.3 V DC
- Current consumption max.

I 300 mA Max. contact load for secondary signal unit 24 V, 2 A AC/DC Dimensions: W x H x D 107 x 89 x 60 mm

## ETC 602-0

The storey controller in a 6-grid switch panel housing for connection of an additional storey door loudspeaker to the respective in-house telephones HTS/HTC 811-0. A maximum of 7 storey door

loudspeakers and 1 or more inhouse telephones can be connected.

Scope for application of several storey controllers in a single system.

Several calls are possible simultaneously, e.g. from the main entrance door loudspeaker to a telephone and simultaneously from a storey door loudspeaker to an assigned in-house telephone. For each storey door loudspeaker ETC 602-... an NG 602-... is always required. An internal speech connection

between the storey telephones is not possible in the AS-Ta 84-... circuit. If this is required, **a GC 612-... and the in-house telephones HTC 811-...** (max. 6) must be connected to the ETC 602-...

connected to the ETC 602-... See also product information ETC 602-... Separate power supply through

NG 602-...

## Performance features

Potential-free changeover

contact WT/ WO/ WE, e.g. from the door to the storey camera Max. contact load 24 V, 2A AC/DC

• Power supply for data interface 12 V AC, max. 30 mA

Power supply 23.3 - V DC
Current consumption max.
60 mA

## СТÖ 602-0

Controller door release in a 3grid housing for actuation of a door release which for safety reasons should not be connected directly to the door loudspeaker. In the case of several door loudspeakers with door releases, the CTÖ 602-... can be used once per door loudspeaker or once per system.

Power supply 12 V AC
Current consumption max.
70 mA
Max. contact load 24 V. 2A

• Door release time fixed at 3 secs

## SFC 602-0

Switching/remote controller in 3-grid switch panel housing for execution of a maximum of 4 central switching/control functions (connection at the DL) or 4 local switching/control functions (connection at the GC 612-... or door loudspeaker of the ETC 602-...) 1 relay with changeover contact and 3 relays with working contact each. The "LI" and "DR" functions can be actuated from all inhouse telephones, but actuation of the 4 switching contacts only from the HTC/HTCV 811-... The function of keys 1- 6 can be set using the DIL switch as switches or timers. • Outputs 1 and 2 can be set in steps of 3 seconds up to 20 minutes via a BCD switch. • Output 3 and 4, setting fixed at 3 seconds. Contact load max. 24 V/ 2 A AC/DC Power supply 12 V AC, • Current consumption max. 250 mA

## Additional supply and control units for video Device description

#### VNG 602-02

### Video line rectifier in 10-grid switch panel housing for central supply of video door intercom systems with function LED: Primary 230 V AC, 50/60 Hz, 10% % Secondary 30 V DC, 1.1 A stabilized. Protection system IP 20 Dimensions: W x H x D 180 x 89 x 60 mm

The video line rectifier VNG -... supplies a direct voltage of 30 V DC max. 1100 mA. In systems with more than 10 inhouse telephones or parallel operation of in-house telephones HTSV/HTCV 811-... the current consumption of all units must be taken into consideration.

Device	0	perating	Idl	е
	cu	rrent	cui	rrent
CMC 612		120 mA	10	) mA
CEC 612-		250 mA	10	) mA
HTSV 811		200 mA	10	) mA
HTCV 811		200 mA	60	) mA
VMO 511	-2	25 mA	25	5 mA
VMO 602	-4	90 mA	90	) mA
VKA 511-	4	55 mA	55	5 mA

## VAR 602-0

Video interfacing relay in 3-grid switch panel housing with function LED for actuation of external cameras and video distributor VKA. Can be used for 1+n technology with HTSV/ HTCV 811-... power supply 20-30 V DC, max. 60 mA. • Control voltage 4 – 30 V/DC max. 20 mA Max. contact load 12-30 V DC/AC, 2A Protection system IP 20 Dimensions: 53.5 x 89 x 60 mm

## AR 402-0

Actuating relay in 3-grid switch panel housing for special circuits with 4 light current switchover contacts, control voltage 6 - 12 V AC/DC Switching output 12 - 24 V AC 1 A Protection system IP 20 Dimensions: W x H x D 53.5 x 89 x 60 mm

## ZR 502-0

Time relay ZR 502-0 in a 3-grid housing with electronic control. particularly suitable for use as a light time switch with LED function display, continuous light switch and 2 potentialfree changeover contacts. Suitable for incandescentfluorescent lamps. To fit customary Siedle switch panel mounting devices. No parallel compensated fluorescent lamps may be used. Specifications: Operating voltage 10-15 V AC/DC Control voltage 230 V AC and/or 10-15 V AC/DC, galvanically isolated by optocouplers. OFF delay adjustable from 15 secs up to 12 mins. ± 30 %. Repeat accuracy  $\pm 1\%$ , retriggerable. Duty cycle 100 % • Temperature range 0° to +40°C Glow lamp load max. 25 mA rated current Contact load max. 230 V AC/5 A and 24 V AC/DC; 5 a Incandescent-fluorescent lamps up to 600 W Protection system IP 20 Dimensions: W x H x D 53.5 x 89 x 60 mm

## VMO 511-2

Video distributor with amplifier, suitable for monochrome or colour systems for coaxial cable with 1 input, 1 output and 1 throughput for mounting in 70 mm junction box or distributor. This amplifier is required if several monitors are operated in one system and the coaxial cable is laid as a side circuit, e.g. in a multiple family home Operating voltage 8-30 V DC/25 mA Dimensions: W x H x D 60 x 43 x 27 mm

## VMO 602-4

Video distributor with 3 amplifiers, suitable for monochrome or colour systems for coaxial cable with 1 input, 3 outputs and 1 throughput. For mounting in iunction boxes 100 x 100 mm or in the distributor. This amplifier is required if the coaxial cable is laid in star formation to the monitors or for in-row connection of several rising mains. Cast housing. Operating voltage 8-30 V DC/90 mADimensions: W x H x D 94 x 62 x 30 mm

### VKA 511-4

Video distributor with amplifier suitable for monochrome or colour systems for connection of 4 cameras with 4 inputs and 1 output. Cast housing. Operating voltage 8-30 V DC/55 mA Dimensions: W x H x D 94 x 62 x 30 mm Notes

## Vario bus

#### General

Different input and control units can be connected to the Siedle Vario bus. It comprises 4 cores and serves as an:

## Electronic access control system

Control functions e.g. door release can be actuated by means of fingerprint, code lock or electronic key reading modules. For this purpose, an Easikey controller EC 602-... or door controller IP TCIP 603-... is required.

#### **Digital call input**

Connected telephones are called by means of code lock or display call module (electronic name list). For this, the call controller RC 602-... is required in the 1+n system.

## Example

A Vario door loudspeaker can be combined in any optional configuration in respect of its input unit. Direct call buttons, for example for the caretaker, can be additionally be connected.

## Usable in the Vario bus

#### Input units

Maximum configuration 8 FPM 611-... + 8 ELM 611-... + 8 COM 611-... + 8 DRM 611-...

#### Controller and supply units

• EC/ECE 602-0 Easikev controller/extension • RC/RCF 602-0 Call controller/extension • TCIP 603-0 Door controller IP • FSM 740-0 Control and remote control module • SCE 640-0 Switching controller extension • TR 602-01 Transformer to supply input devices • VNG 602-02 Line rectifier for door controller IP

## Software

- PRI 602-0 USBPRI 602-0
- PRS 602-0
- VBPS 602-01
- (see description page 34)

## Input possible with:

Code lock module
COM 611-... for call number input or for actuating switching functions;
Display call module

DRM 611-... as a name register and/or for placing door calls; • Electronic key read module ELM 611-... as an access control system for opening the door using the electronic key/card (EK/EKC 601-0) . Max. 999 electronic keys EK 601-0, EKC 601-0 possible • Fingerprint module FPM 611-... as an access control system for opening the door by fingerprint. Max. 100 fingerprints can be managed.

Up to 100 codes and an additional max. 999 characteristics can be managed from the EC 602-... with ECE 602-... These characteristics can comprise electronic keys EK/EKC 601-0 or fingerprints. For instance 100 codes and up to 999 EK/EKC 601-0 units or 100 codes, 899 EK/EKC 601-0 units and up to 100 fingerprints can be managed in mixed operation.

## Conductor material

For Vario bus installation, telecommunication cable with a 0.8 mm core diameter must be used.

JY(ST)Y twisted pair conductors, shielded

### Ranges in the Vario bus

The range depends on the type of installation, the core diameter and the connected load values "AW" of the connected devices. One TR 602-... supplies 5 connected load values.

With star formation installation

Max. **260 m** using 0.8 mm core diameter and with connected load value "AW1".

A second connected load value in the same line halves the range. Bus installation When mounting max. 5 connected load values in row, a maximum length of 40 m results with a 0.8 mm core diameter. Other devices connected to the bus require their own completely separate supply with TR/NG 602-... These may not be switched in parallel on the secondary side.

The conductor network laid throughout the entire Vario bus must not exceed 2000 m.

Connected load value t	able
Designation	AW
FPM 611-01	
ELM 611-0	1
COM 611-01	1
DRM 611-0	1
EC 602-02	1
EC 602-02 + ECE 602-0	2
RC 602-0	1
RC 602-0+ RCF 602-0	2

### Supply device

The TR 602/... is available as a supply device for 5 connected load values each.

## Cable size diagram for Vario bus Cable size diagram for access control



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## Vario bus input module Device description

### COM 611-02

## DRM 611-0

Code lock module as an input unit for placement of codes for door calls and control functions in conjunction with the Siedle Vario bus and at the TCIP 603-....

With keypad, for calls in conjunction with the call controller RC 602-..., for control in conjunction with the Easikev controller EC 602... . A C button for deleting incorrect inputs and a DR button for direct door release. This door release function can be additionally controlled by a time switch provided on site. A mounted LED can be used as a status display via an external potential-free contact. Operating voltage 12 V AC from TR 602-... Current consumption max. 100 mA

Display call module as an input unit with display for placement of door calls in conjunction with call controller RC 602-... In the display, the customerspecific data stored in the RC 602-... is indicated. There are two buttons available for scrolling through the name register. When the required name is displayed, pressing the call button with bell symbol places the door call. An external DR button can be connected. In order to execute the door function via the external DR button, an EC 602-... is always required in the system. The DRM 611-... can also be used in combination with the COM 611-... in order to display the input via the DRM 611-.... Operating voltage 12 V AC from e.g. TR 602-... Current consumption max. 200 mA

#### ELM 611-0

Electronic key read module as no-contact access control system with function LED. Optionally standalone or in conjunction with the controller EC 602-... and at the TCIP 603-... As a reading unit for electronic keys or cards for release of doors, gates etc. In standalone operation, a maximum of 9. or in conjunction with the EC 602-... max. 999 electronic keys or cards can be used. Operating voltage 12 V AC from TR 602-... Current consumption max. 120 mA Contact load 24 V / 1 A

## EK 601-0

Electronic key in conjunction with the electronic key read module ELM 611-... Each electronic key is unique, totally encapsulated and works without battery. Reading distance appr. 2.5 cm

#### EKC 601-0

Electronic key card in conjunction with the electronic key read module ELM 611-... Each electronic card is unique, totally encapsulated and works without battery. Reading distance appr. 8 cm

## FPM 611-01

Fingerprint module as an access control system with function LED's. Suitable for standalone operation or in conjunction with controller EC 602-... at the Vario bus and at the TCIP 603-... Reading unit for scanned-in fingerprints for release of doors, gates etc. A maximum of 100 users (user fingerprints) can be scanned in. Operating voltage 12 V AC from TR 603-... Contact load max. 24 V 2 A Current consumption max. 250 mA

### EC 602-02

Easikev controller as electronic evaluation unit and control unit in conjunction with modules FPM/COM or ELM 611-... The EC 602-... is a switch panel mounting unit and manages up to 8 COM 611-..., 8 ELM 611-... and 8 FPM 611-... units **simultaneously**. The EC 602 provides two changeover contacts as switching outputs as well as two inputs. It can be upgraded with the ECE 602-... by a further 4 working contacts. Programming takes place on a display-supported basis using the integrated buttons or via the programming interface PRI 602-... with an IBMcompatible PC and software PRS 602-... Operating voltage 12 V AC

from e.g. TR 602-... Contact load 24 V / 2 A Current consumption max. 150 mA with ECE 602-... max. 400 mA

### ECE 602-0

Easikey controller extension in a switch panel housing. Upgrades the EC 602-... by a further 6 working contacts. This allows up to 8 control functions to be executed via a COM 611-..., FPM 611-... or ELM 611-... Supply via the ribbon cable from the EC 602-... Easikey controller extension: Contact load 24 V / 2 A

Contact load 24 V / 2 A Current consumption EC and ECE together max. 400 mA

#### TCIP 603-...

Door controller IP for control and management of an extensive access control system with input modules:

- Code lock module
  COM 611-...
  Electronic key module
  ELM 611-...
- Fingerprint module
- FPM 611-... The modules are connected using the Siedle Vario bus (terminals Da/Db). Up to eight modules can be operated in each case at the TCIP 603-... (This means that 1 entrance door can be made up of COM 611-..., FPM 611-... and ELM 611-... ). Max. configuration at the
- TCIP 603-...
- 8 doors with 8
- COM/ELM/FPM units each
- 500 users
- 40 access groups
- 20 time profiles
- 40 days vacation/public holidays
- 5 potential-free inputs
- 4 potential-free outputs as changeover contacts

## **Specifications:**

- Power supply TCIP 10 -36 V DC
- Current consumption max. 700 mA
- Network connection 10/100
- Base-T, UTP CAT5 RJ45
- Protection system IP 20

• Dimensions: L x W x H 131 x 111 x 52 mm The number of inputs and outputs can be increased with the control and remote switching module FSM 740-.../ SCE 640-.... In this case, up to 10 additional outputs and 3 additional inputs are possible.

## FSM 740-0

Control and remote switching module in conjunction with the TCIP 603-0 in order to extend the switching contacts (outputs).

It is equipped with 2 switching relays and 3 control inputs and is linked via the Siedle Vario bus directly to the TCIP 603-0. With the aid of a switching contact extension module SCE 640-0, the number of available switching contacts can be extended by a further 6 to a total of 8 switching contacts. The assignment of contacts takes place via the configuration software of the TCIP 603-0. Dimensions: W x H x D 107 x 89 x 60 mm

## SCE 640

is an extension module in a 3-grid switch panel housing, to match various switching controllers such as SFM 740-0.., CLK 640-... etc. It encompasses 8 switching contacts which are actuated by the relevant switching controller. Connection to the switching controller takes place via the ribbon cable. Depending on the control unit, a maximum of 16 SCE 640-0 units can be switched in series (cascaded). Contact load capability max. 30V 1A DC, ohmic load Dimensions: W x H x D 53.5 x 89 x 60 mm

## RC 602-0

Call controller in switch panel housing, for placing coded calls to switching contacts in conjunction with code lock module COM 611-... or display call module DRM 611-... Up to 8 Siedle vario door loudspeakers for code calls can be connected to an RC 602-... The call is initiated from a door loudspeaker via the keypad of a code lock module COM 611-... and/or a display call module DRM 611-... The RC 602-... converts the code calls and makes available 8 call outputs for 8 users. By connecting up to 31 RCE 602-... units in row, a maximum of 504 call outputs/users can be connected At the door loudspeaker, direct calls can also be placed using call buttons. Programming of the RC 602-... takes place at a PC on site or using the Siedle programming service (tel. +49 7723/63-445).

Operating voltage 12 V AC

from e.g. TR 602-... Current consumption max. 180 mA Contact load 24 V / 1 A

## RCE 602-0

Call controller extension in a switch panel housing for extension of the call controller RC 602-... in systems with more than 8 users. The RCE 602-... makes available a further 16 call outputs. A maximum of 31 RCE 602-... units can be mounted in row at an RC 602-... and consequently a maximum of 504 call outputs connected. The connection to the RC 602-... takes place via the provided ribbon cable.

- Supply via the ribbon cable from the RC 602-...
- Contact load 24 V / 1 A

## ZRCE 602-0

Ribbon cable (appr. 35 cm long) fitted at each end with a plug.

To connect extension units CCE/ RCE/ECE 602-... to the relevant upstream unit with a distribution line skip.

## RCC 602-0

The call controller card is used as a storage medium for customer-specific data of the RC 602-... The data can be saved with a Windows PC (serial interface) via a chip card terminal. Software PRS 602-0 is required for programming.

## Chip card terminal on request.

#### PRI 602-0

The programming interface links a Windows PC with the Vario bus system. The conversion electronics are equipped with a bilateral connecting cable from the sub-D plug to the 6-pin Telecom/Western connecting plug (total length appr. 3.5 m). The relevant programming software PRS 602-... is enclosed. A 6-pin Telecom&Western junction box must be provided on site with connection to the Vario bus system. Dimensions W x H x D 53.5 x 89 x 60 mm

## PRI 602-0 USB

The programming interface PRI 602-... USB in a 3-grid switch panel housing links a Windows PC to the Siedle Vario bus via the USB port. 12 V AC supply from TR 602-... via screw terminals. Interface to the Vario bus / inhome bus via 8-pin Western junction box or screw terminals Dimensions: W x H x D 53.5 x 89 x 60 mm From version 4.00, the Vario bus can be additionally programmed.

#### PRS 602-0

Programming software, capable of running from Windows 2000, XP or higher.Suitable for programming the RC/ RCE 602-... or EC/ECE 602-... in conjunction with a Windows PC with serial interface. For programming the RC/ RCE 602-..., either the PRI 602-... or a chip card reader is required. Programming the EC/ ECE 602-... takes place via the PRI 602-...

#### VBPS 602-0

Vario bus protocol software for monitoring the control functions executed via EC/ ECE 602-.. e.g. access control. Up to 4 EC 602-... units with ECE can be monitored simultaneously. System requirements: • Windows PC • Operating system from WIN 2000, XP or NT 4 • Per EC 602-..., 1

programming interface PRI 602-...-0

### TR 602-01

Transformer in a 6-grid switch panel housing. To supply Vario bus components for 5 connected load units each. Thermal fuses on the secondary side. Primary: 230 V AC, 50/60 Hz, +6% -10% Secondary: 12 V AC, max. 2.5 A Protection system IP 20 Dimensions: W x H x D 107 x 89 x 60 mm

#### VNG 602-02

Video line rectifier in 10-grid switch panel housing for central supply of video door intercom systems and the TCIP 603-... equipped with function LED:603 Primary 230 V AC, 50/60 Hz, 10% % Secondary 30 V DC, 1.1 A stabilized. Protection system IP 20 Dimensions: W x H x D 180 x 89 x 60 mm

Devices SM cover	Unit	width/
EC 602	6	(ZN 402)
ECE 602-0	3	(ZAP 502)
RC 602	6	(ZN 402)
RCE 602-0	3	(ZAP 502)
TR 602	6	(ZN 402)
VNG 602	10	(ZAP 10)

Notes

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