



DOOR & BUILDING COMMUNICATION

MADE IN GERMANY



20
YEARS
TCS

LEGEND



ADDITIONAL INFORMATION



TECHNICAL DATA



SETS + PACKS

CONTENT



02 20 YEARS OF TCS
Two decades of future -
the company's success
story 1995-2015



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SALES TERRITORIES**
The key to success

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20 YEARS OF TCS

20 YEARS OF FUTURE THE SUCCESS STORY

We open up new worlds. Since 1995 TCS AG develops and produces systems technology for building communications based on this principle - from simple door communication systems to complex systems for several hundreds of flats.

For us excellent service is as important as excellent technology. Combining both enables electricians to work smoothly and efficiently. That's why we invented, for example, the worldwide first software-controlled BUS system for door communication: TCS:BUS®. Or the patented system win:clip™ for opening front-door stations without any screws.

We are pioneers, and as such we consistently think of new ideas for the future. The internet as well as the mega trend to individual form and function offer millions of new possibilities for the building 4.0. Today we are a globally operating company putting associated innovations into practice.

The TCS AG has more than 250 employees in subsidiaries from Iceland to Australia and from Singapore to our headquarter in Genthin Germany. Our team of experts makes the life of electricians all over the world as easy as possible.



<p>1995</p> <p>FOUNDATION OF TCS GMBH by graduate engineers Otto Duffner and Joachim Frank</p>	<p>1996</p> <p>Market entrance of TCS:BUS facilities</p>	<p>1997</p> <p>First exports of TCS products: subsidiary in Austria, sales partner in Switzerland</p>	<p>1998</p> <p>Opening of first training center in Berlin</p>	<p>1999</p> <p>Company building moved to the historically preserved "Alte Hanfspinnerei" in Genthin</p>	<p>2001</p> <p>TCS Intelligent Building Technology Ltd. Shanghai</p> <p>The millionth indoor station sold.</p>
<p>2002</p> <p>Conversion of TCS GmbH into TCS AG: 60 employees</p>	<p>2007</p> <p>Second company location in Triberg</p> <p>TCS trainees are best trainees nation-wide and best examinees</p>	<p>2009</p> <p>Expansion of the sales network to 16 countries</p>	<p>2014</p> <p>Beginning of expansion in Genthin</p>	<p>2015</p> <p>150 employees in Germany and more than 120 employees in over 5 countries celebrate company anniversary</p> <p>20 YEARS OF TCS</p>	

OUR SERVICE PROMISE:

With our TCS service promise we provide electricians with more than just great technology. We support you with our unique experience with your daily work. So that projects can be implemented seamlessly and timesaving.

The team of our technical hotline in Sievershütten Germany



Initial operation as a service. Thanks to offices locations TCS service technicians are quickly at your service.



TCS accompanies electricians in planning, implementing and initial operation of projects providing a technical service hotline staffed by experienced technicians, experienced service technicians on-site, project specialists and IP application consultants.

We are also pioneers when it comes to these extraordinary services – like back then when we invented the 2-wire BUS technique. Because we always make visions come true.

We daily practice our inventiveness and our flexibility. The TCS principle convinces new customers instantly and existing customers time and time again, even after 20 years. Thus, we have grown with our customers and our customers have grown with us. Today, our experts always find optimal solutions for you.

A team of development engineers create own ideas when common standards are not sufficient. We support your projects with modern technologies and personal services. You can trust that TCS always has the right solution for you at hand. Because we know and understand the requirements of handicraft.

THE TCS SERVICE PROMISE

Technical service hotline +49 4194 9881-188
MON-FRI from 8 a.m. to 5 p.m.

Telephone information service at extension
-180 to -183

Video instructions on TCS YouTube channel

PDFs at www.tcsag.de/download

Service tools configo and service devices for efficient implementation

Time savings due to preconfigured systems and packages

Clearly structured quotes within 2 working days

Specifications including a wiring plan suitable for further processing

Service guarantee optional up to 6 years

Maintenance agreements including a response within 24 hours

Repair or exchange of old systems against a cost estimate




Headquarter
 TCS TürControlSysteme AG
 Geschwister-Scholl-Straße 7
 39307 Genthin
 Germany
 Phone +49 3933 879910
 Fax +49 3933 879911

THE KEY TO SUCCESS

OUR TRAINING PRINCIPLE

Knowing how to do it: TCS offers free seminars for electricians. With valuable tips and tricks from our experts. Thus, every installation and implementation works within a short amount of time.

Exploring new knowledge. Contents of the TCS seminars for beginners and experienced users are:

- > Planning TCS systems
- > Audio systems
- > Video systems
- > TCS over IP – door communication in a network
- > BCM – information event
- > TCS service



Seminar overview at www.tcsag.de
 You can look forward to an informative, interesting and practice-oriented seminar which is free for you.

THE TCS TRAINING PRINCIPLE
 Regular trainings in five TCS training locations
 On-site trainings in companies of the electrical wholesale trade
 Trainings for course participants of master schools for craftsmen, vocational schools etc.

OUR SALES DIVISION WORLDWIDE




Contact details of our international subsidiaries and partners are on > p. 150

OUR DOORS ARE ALWAYS OPEN FOR YOUR WISHES OUR PRODUCT RANGE

FRONT-DOOR STATIONS

AUDIO



SERIES PAK, surface-mount > p.18


SERIES PES, surface-mount > p.20

SERIES PUK, flush-mount > p.24

SERIES KTU, flush-mount > p.28

SERIES TCU, flush-mounting > p.32

VIDEO



SERIES AVC, surface-mount > p.34

SERIES AVE, surface-mount > p.36


SERIES AVU, flush-mount > p.40

SERIES AMI, flush-mount/freestanding > p.48

i p. 14

INDOOR STATIONS

AUDIO

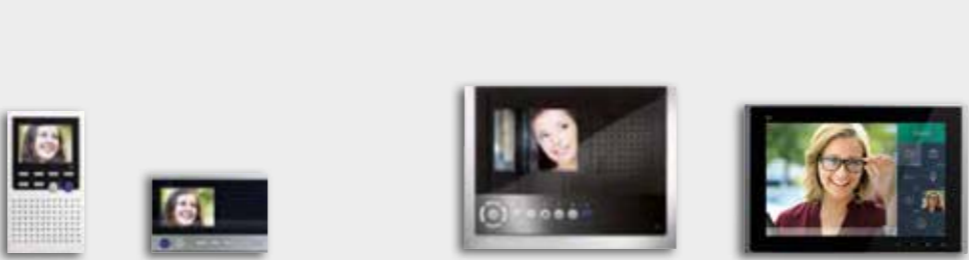


DOOR PHONE AND INDOOR STATION for hands-free talking > p.66

SERIES IMM > p.68

SERIES IMM > p.68

VIDEO



VIDEO DOOR PHONE > p.70

ECOOS > p.72

SKY > p.74


SKYLINE > p.76

SKYLINE:TEN BASIC > p.78

i p. 64

SETS + PACKS

ONE- AND TWO-FAMILY HOME




ECO-SETS VIDEO > p.86

HOME:PACKS AUDIO > p.88

HOME:PACKS VIDEO > p.90

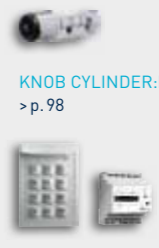
TWO-FAMILY HOME



PRE:PACKS AUDIO > p.92

PRE:PACKS VIDEO > p.94

ACCESS CONTROL



KNOB CYLINDER:PACK > p.98

CODE:PACK > p.99

i p. 84

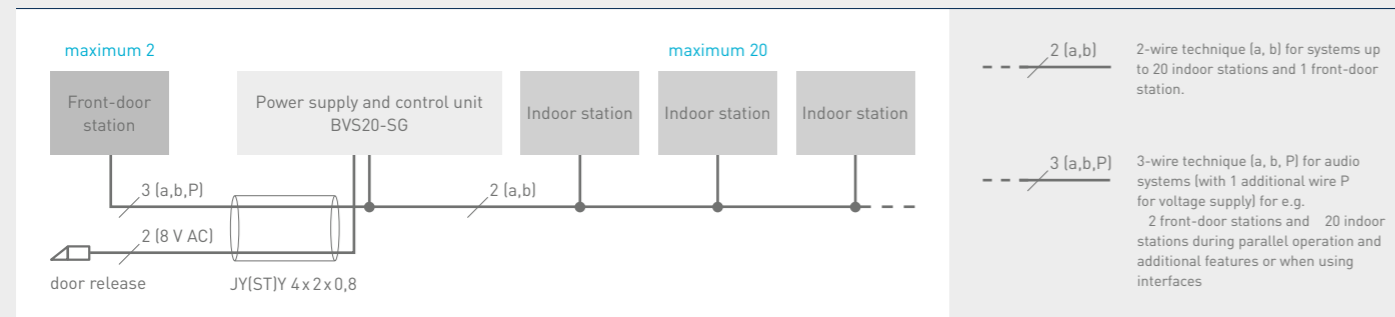
TECHNOLOGIES

AUDIO SYSTEMS WITH 2- OR 3-WIRE TECHNIQUE

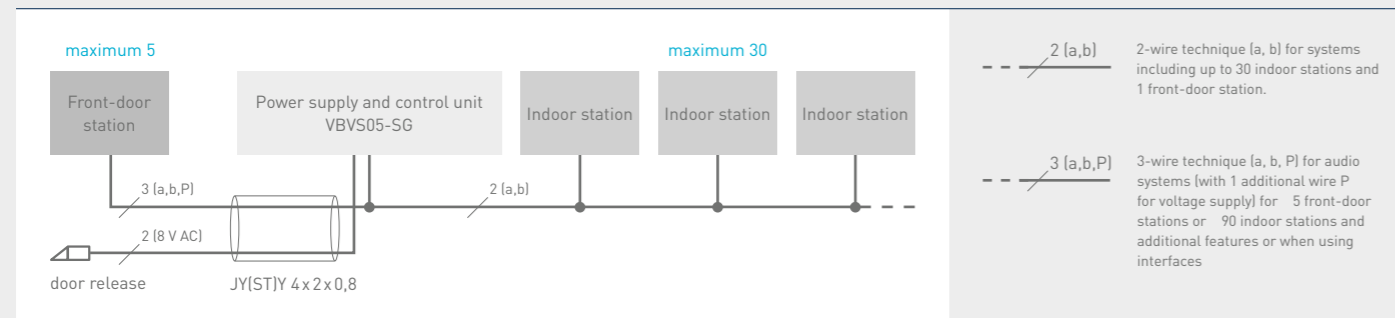
TCS:BUS® was invented for easy installation. This system enables the replacement of all signals for operating, controlling and monitoring via a two-core drilled copper line. This reduces the effort of wiring significantly. And one system can be implemented using only three components.

- > Initial operation by one person
- > Minimum effort for wiring
- > Ideal for renovation by wireline
- > Central exchangeable memory in front-door station
- > Simple configuration with TCS:configo or service device
- > Intelligent additional features programmable
- > Systems with mixed-use possible
- > Systems from three components onwards possible

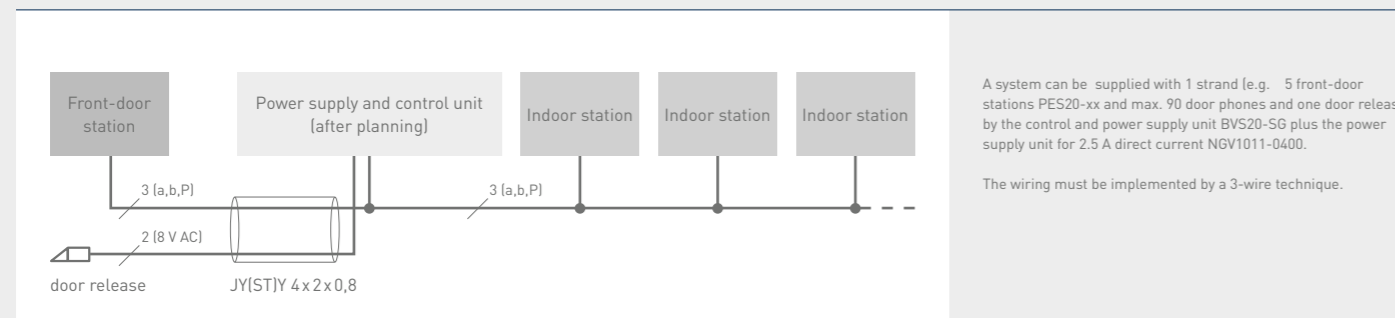
BLOCK DIAGRAM OF AUDIO SYSTEM



BLOCK DIAGRAM AUDIO "MEDIUM SYSTEM SIZE"



BLOCK DIAGRAM AUDIO "COMPLEX SYSTEM"

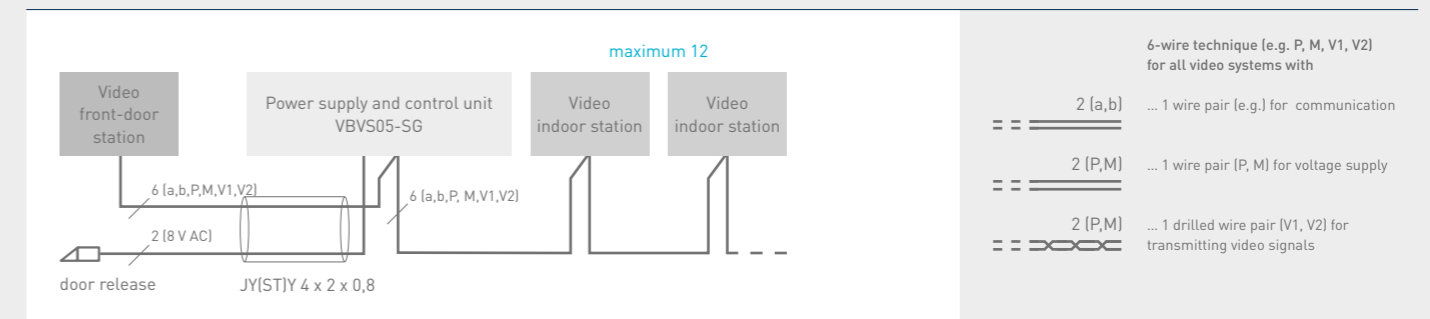


VIDEO SYSTEMS WITH 6-WIRE TECHNIQUE

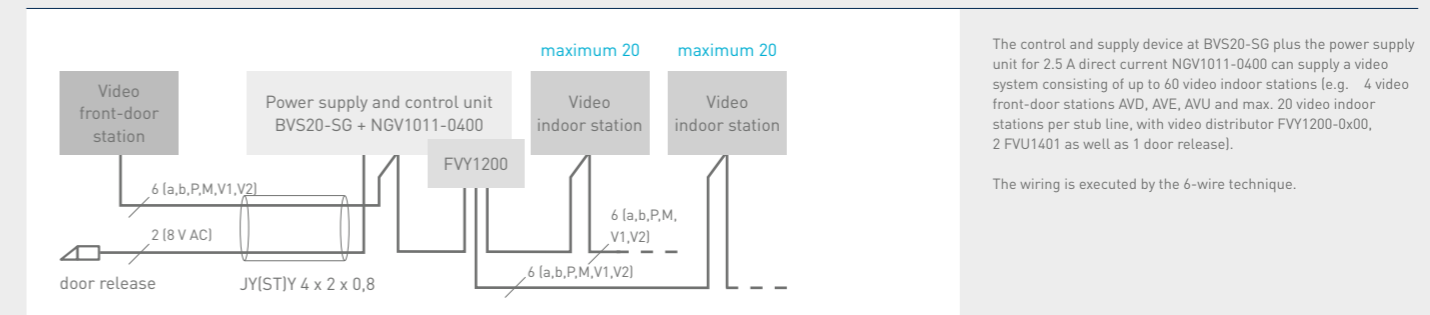
One technology for all video systems. Three pairs of wires fulfil three tasks. The two wires of TCS:BUS® transmit language and functions. Two wires provide the central power supply. And the video signal passes through two wires. Thus, you can implement systems with three components and more.

- > For video on TV or PC with TV tuner card
- > Transmission from video to twisted pair cables
- > Building monitoring possible
- > Distance up to kilometre range feasible

BLOCK DIAGRAM OF VIDEO SYSTEM



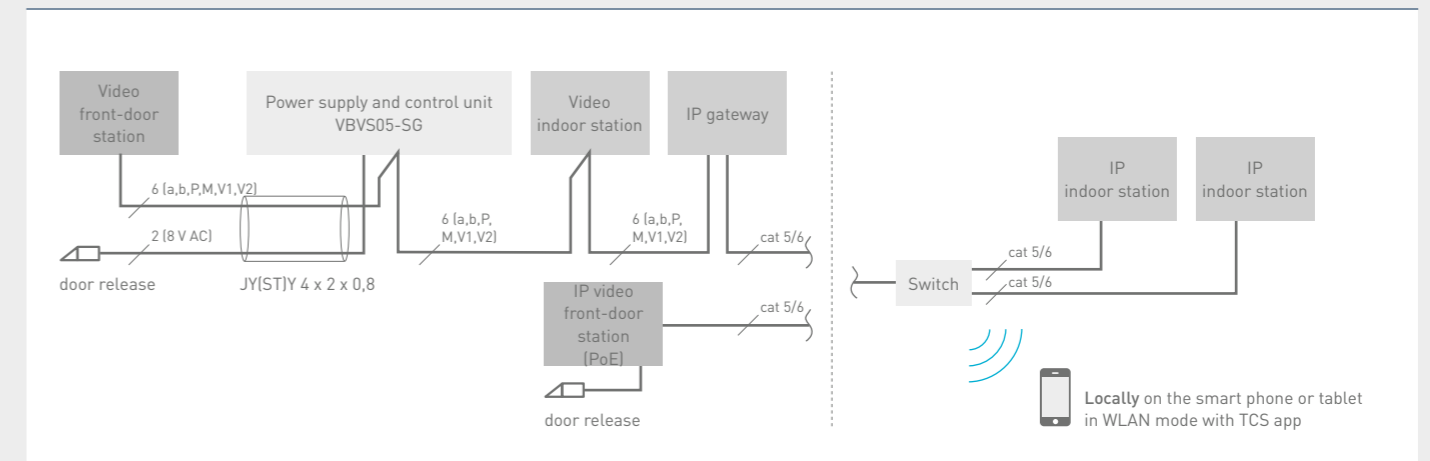
BLOCK DIAGRAM OF MEDIUM-SIZED VIDEO SYSTEM



TCS OVER IP

TCS over IP opens completely new possibilities for door communication. For example, an existing network with WLAN can be used, for example, if laying wires doesn't make sense. The signals of TCS:BUS® just have to be translated to the internet protocol by the TCS IP gateway. For a direct integration of the door communication into an IP network TCS offers IP front-door stations for up to 100 call destinations.

BLOCK DIAGRAM TCS OVER IP



PLANNING SYSTEMS

All components of a TCS system can be combined with each other - matching the building. With the modular series AMI you can design front-door stations with features based on your individual requirements.

AUDIO

	FRONT-DOOR STATION				CONTROL UNIT	INDOOR STATION		
	PAK	PES/PDS	PUK	KTU	AMI	TCU	BVS20-SG	BSP ISH3030-0140
	> p. 18	> p. 20	> p. 24	> p. 28	> p. 48	> p. 32	> p. 104	> p. 66
1 flat	x	x	x	individual	x	x	x	x
2 flats	x	x	x	individual	x	x	x	x
3 flats	x	x	x	individual	x	x	x	x
4 flats	x	x	x	individual	x	x	x	x
5 flats	x	-	x	individual	x	x	x	x
6 flats	x	x	x	x	x	x	x	x
7 flats	x	-	x	x	x	x	x	x
8 flats	x	x	x	x	x	x	x	x
9 flats	-	-	x	x	x	x	x	x
10 flats	-	x	x	x	x	x	x	x
11 flats	-	-	x	x	x	x	x	x
12 flats	-	x	x	x	x	x	x	x
13 flats	-	-	x	x	x	x	x	x
14 flats	-	x	x	x	x	x	x	x
15 flats	-	-	x	x	x	x	x	x
16 flats	-	x	x	x	x	x	x	x
17 flats	-	-	x	x	x	+ ASI21000	x	x
18 flats	-	x	x	x	x	+ ASI21000	x	x
19 flats	-	-	x	x	x	+ ASI21000	x	x
20 flats	-	x	x	x	x	+ ASI21000	x	x
> 20 flats	-	with extension up to 132	up to 30 or individual	individual	up to 1000	up to 208	enquire planning	optional

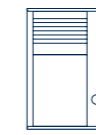
VIDEO

	FRONT-DOOR STATION				CONTROL UNIT	INDOOR STATION		
	AVC	AVE / AVD	AVU	Series AMI	TCU FVK220x-0300	VBVS05-SG	BVS20-SG+ NGV1011-0400	IWV2211-0140
	> p. 34	> p. 36	> p. 40	> p. 48	> p. 32	> p. 105	> p. 104	> p. 72
1 flat	x	x	x	x	x	x	←	x
2 flats	x	x	x	x	x	x	←	x
3 flats	x	x	x	x	x	x	←	x
4 flats	-	x	x	x	x	x	←	x
5 flats	-	-	x	x	x	x	←	x
6 flats	-	x	x	x	x	x	←	x
7 flats	-	-	x	x	x	x	←	x
8 flats	-	x	x	x	x	x	←	x
9 flats	-	-	x	x	x	x	←	x
10 flats	-	x	x	x	x	x	←	x
11 flats	-	-	x	x	x	x	←	x
12 flats	-	x	x	x	x	x	←	x
13 flats	-	-	x	x	x	-	x	x
14 flats	-	x	x	x	x	-	x	x
15 flats	-	-	x	x	x	-	x	x
16 flats	-	x	x	x	x	-	x	x
> 16 flats	-	with extension up to 128	up to 24 or individual	up to 1000	up to 208	enquire planning	enquire planning	optional

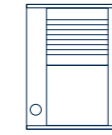


- Compact
- For all types of installation
- To be opened securely
- With chrome-plated bell buttons
- Easy to maintain

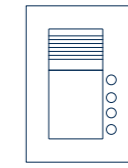
FRONT-DOOR STATIONS



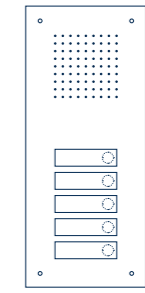
SERIES PAK
P. 18



SERIES PES
P. 20



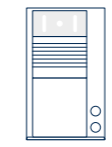
SERIES PUK
P. 24



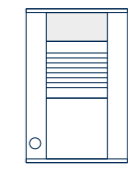
SERIES KTU
P. 28



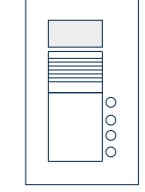
SERIES TCU
P. 32



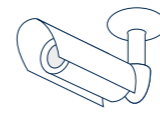
SERIES AVC
P. 34



SERIES AVE
P. 36



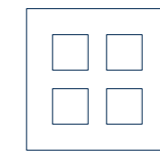
SERIES AVU
P. 40



CAMERAS
P. 44



ACCESS CONTROL
P. 46

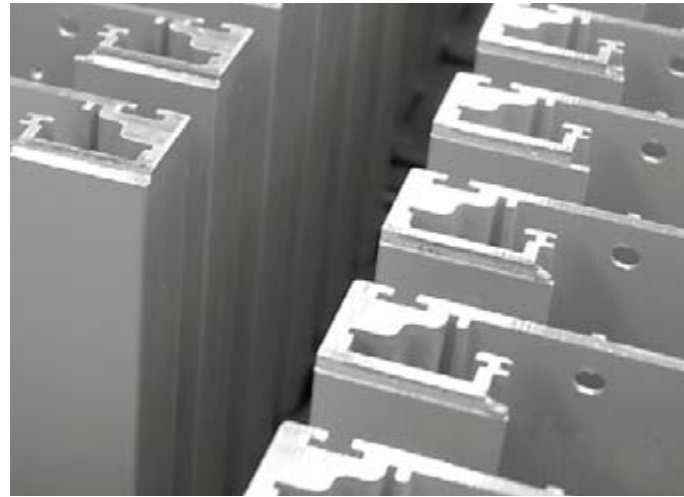


SERIES AMI
P. 48



TCS:INDIVIDUAL
P. 58

FUNCTIONALITY MEETS DESIGN OUR FRONT-DOOR STATIONS



MADE IN GERMANY: ROBUST AND DURABLE

All housing parts of the TCS front-door stations are made of precisely fit housings or front plates with minimum gaps. Front-door stations are made of robust aluminium strand profiles as it is a more durable material than plastics. For better functional safety and longer operating life.



RESISTENT

Material thicknesses up to 6 mm offer an optimal protection against vandalism and influences caused by weather. TCS front-door stations never lose their unobtrusive appearance, even after many years. The right decision: using aluminium or stainless steel.



EASY TO MAINTAIN

Whether covered, screwed or screwless – safe opening with patented win:clip™. TCS front-door stations can only be disassembled quickly by the win:clip key. New labelling the easy way - with foil shipment and name tag configurator at www.tcsag.de.



CLASSY AND VERSATILE

TCS can individually design front-door stations with a wide range of anodised colours and standard RAL colours. This provides the customer with unique copies which make an impression right at the door step.



BEAUTIFUL AND SOLID

Chrome-plated bell buttons made of full metal look as good as on the day of their installation. Daily use doesn't leave any traces. Solid quality which has established itself and has proved its value since many years.



CONSEQUENTLY COMPACT

Minimum construction heights and virtually wall-recessed flush-mounts adjust seamlessly to every architecture style. With the TCS front-door stations you can solve almost all structural challenges. Produced in standard sizes or according to individual dimensions.



TYPE OF INSTALLATION FOR ALL ENTRANCE SITUATIONS

Front-door stations and communication posts correspond with every architecture style. TCS front-door stations are available as a compact product and as a modular series. The functional module can be integrated into almost any area up to 2,500 mm and also in communication posts.



EXTENSIVE ACCESSORY

Information field modules, mounting plates and weather protection roofs matching the design of the front-door stations are selectable accessories. TCS also manufactures house numbers and individual labels using TCS Signage.

A FLAT DESIGN FITS TO ANY SURFACE

SERIES PAK

Thanks to their narrow dimensions it is recommended to use the series PAK for entrance areas with little space. Due to their low height of surface-mount it almost appears to be on the same level like the brickwork. Its width equals half a clinker brick. Thus, a front-door station can be mounted discreetly to the architecture.

 p. 140

 p. 88



For up to 8 flats

Minimum height of surface-mount of just 16 mm

Can be opened without screws by the patented application win:clip™

Name plates made of shatterproof acrylic glass

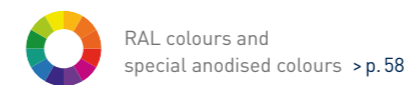
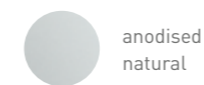
Name plates illuminated with energy-saving LEDs

Timeless design

Robust aluminium

Anodised natural

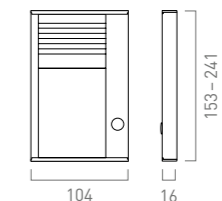
COLOURS



VARIANTS



DIMENSIONS (IN MM)



ACCESSORY



Mounting plates
Mounting plates are used for a clean surface-mount on uneven grounds.



Weather protection roof
The weather protection roof is simply mounted with adhesive for protection against climatic influences.



Key layout
Bell buttons can be arranged individually.
> p. 58

TCS:INDIVIDUAL

FRONT-DOOR STATIONS

1-8 KEYS	HxWxD in mm	Item no.
1 key, anodised natural	153 x 104 x 16	PAK01-EN
2 keys, anodised natural	153 x 104 x 16	PAK02-EN
3 keys, anodised natural	153 x 104 x 16	PAK03-EN
4 keys, anodised natural	153 x 104 x 16	PAK04-EN
5 keys, anodised natural	175 x 104 x 16	PAK05-EN
6 keys, anodised natural	197 x 104 x 16	PAK06-EN
7 keys, anodised natural	219 x 104 x 16	PAK07-EN
8 keys, anodised natural	241 x 104 x 16	PAK08-EN

Available immediately ex stock. Subject to prior sales.

ACCESSORY

	HxWxD in mm	Item no.
Mounting plate for PAK01-EN, anodised natural	247 x 170 x 3	ZAM1101-0010
Mounting plate for PAK02/03-EN, anodised natural	284 x 170 x 3	ZAM1102-0010
Mounting plate for PAK04/05/06-EN, anodised natural	338 x 170 x 3	ZAM1103-0010
Mounting plate for PAK07/08-EN, anodised natural	413 x 170 x 3	ZAM1104-0010
Weather protection roof for series PAK, anodised natural	Roof projection 50 mm	PAKDA-EN
win:clip key (10 pieces)	-	E03458

THE SPACE SAVER SERIES PES

Many bell buttons in the smallest space. The series PES makes this possible. Your bell buttons and name plates are compactly arranged. Thereby the series is also suitable for apartment buildings or commercial buildings with left and right staircases. Thanks to a monolithic design and a prewiring the installation is simple and time-saving.

p. 140



For up to 20 flats

Including bell button extensions PDT and PET up to 132 flats

Minimum height of surface-mount of just 20 mm.

Name plates illuminated with energy-saving LEDs

Extra-large Name plates up to 3 flats

Timeless design

Robust aluminium

Anodised natural, anodised bronze or white lacquered

Prewired

COLOURS



VARIANTS



EXTENSIONS



For setting up a front-door station with more than 20 bell buttons the series PES is extended by maximum 4 bell button extensions PDT or PET.

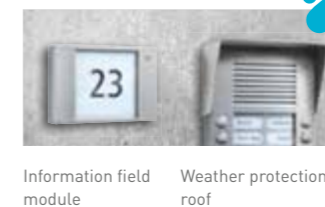
ACCESSORY



Front-door stations with integrated code lock
For up to 16 flats, opening and switching using up to 10 numeric codes, robust housing design for surface-mount.



Information field module



Weather protection roof

Information field module, weather protection roof or mounting plate easy to mount

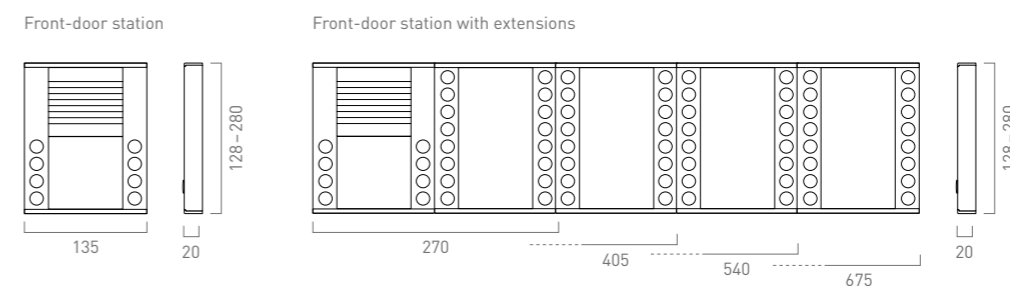
The backlit info field module can be flush-mounted or can also be placed on plaster in the format 72 x 74 mm. The weather protection roof is attached to the front-door station as an accessory using adhesive.



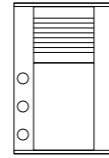
Mounting plate

The mounting plate for surface-mount of the front-door stations on uneven ground is available in individual length upon request.

DIMENSIONS (IN MM)

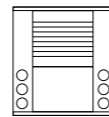


SERIES PES



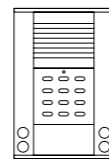
FRONT-DOOR STATIONS 1-3 KEYS

	HxWxD in mm	Item no.
1 key, white illumination	166 x 135 x 20	PDS01-.../04
2 keys, white illumination	166 x 135 x 20	PDS02-.../04
3 keys, white illumination	204 x 135 x 20	PDS03-.../04



FRONT-DOOR STATIONS 4-20 KEYS

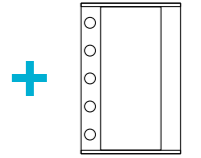
	HxWxD in mm	Item no.
4 keys, white illumination	128 x 135 x 20	PES04-.../04
6 keys, white illumination	147 x 135 x 20	PES06-.../04
8 keys, white illumination	166 x 135 x 20	PES08-.../04
10 keys, white illumination	185 x 135 x 20	PES10-.../04
12 keys, white illumination	204 x 135 x 20	PES12-.../04
14 keys, white illumination	223 x 135 x 20	PES14-.../04
16 keys, white illumination	242 x 135 x 20	PES16-.../04
18 keys, white illumination	261 x 135 x 20	PES18-.../04
20 keys, white illumination	280 x 135 x 20	PES20-.../04



FRONT-DOOR STATIONS WITH CODE LOCK 1 KEY AND 4-16 KEYS

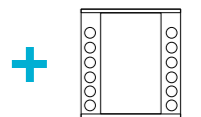
	HxWxD in mm	Item no.
1 key, anodised natural	242 x 135 x 20	ASD51010-0010
4 keys, anodised natural	204 x 135 x 20	ASE51040-0010
6 keys, anodised natural	223 x 135 x 20	ASE51060-0010
8 keys, anodised natural	242 x 135 x 20	ASE51080-0010
10 keys, anodised natural	261 x 135 x 20	ASE51100-0010
12 keys, anodised natural	280 x 135 x 20	ASE51120-0010
14 keys, anodised natural	299 x 135 x 20	ASE51140-0010
16 keys, anodised natural	318 x 135 x 20	ASE51160-0010

Decor designs: ...EN anodised natural, ...WS white lacquered, ...EB anodised bronze
Design ...EN available ex stock. Subject to intermediate sales | ...WS, ...EB with delivery time upon request



BELL BUTTON EXTENSIONS 4-5 KEYS

FOR FRONT-DOOR STATIONS 1-3 KEYS	HxWxD in mm	Item no.
4 keys, white illumination	166 x 135 x 20	PDT04-.../04
5 keys, white illumination	204 x 135 x 20	PDT05-.../04

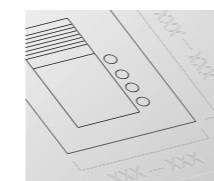


BELL BUTTON EXTENSIONS 12-28 KEYS

FOR FRONT-DOOR STATIONS 4-20 KEYS	HxWxD in mm	Item no.
12 keys, white illumination	128 x 135 x 20	PET12-.../04
14 keys, white illumination	147 x 135 x 20	PET14-.../04
16 keys, white illumination	166 x 135 x 20	PET16-.../04
18 keys, white illumination	185 x 135 x 20	PET18-.../04
20 keys, white illumination	204 x 135 x 20	PET20-.../04
22 keys, white illumination	223 x 135 x 20	PET22-.../04
24 keys, white illumination	242 x 135 x 20	PET24-.../04
26 keys, white illumination	261 x 135 x 20	PET26-.../04
28 keys, white illumination	280 x 135 x 20	PET28-.../04

ACCESSORY	HxWxD in mm	Item no.
Information field module, white backlit	90 x 135 x 20	PI135-.../04
Weather protection roof, aluminium		PRODA-EN
Mounting plate, aluminium		Mounting plate

TCS:INDIVIDUAL



Format
Tailored to the customer's demands: The height of the front-door station can be max. 1,000 mm. Recommended mounting height upper edge 2,000 mm. The width can be adjusted individually. > p.58



Key layout
If the front-door stations should reflect the building and living structure for better orientation the bell buttons can be arranged individually. > p.58

Decor designs: ...EN anodised natural, ...WS white lacquered, ...EB anodised bronze
Decor design ...EN available ex stock, subject to intermediate sales | ...WS, ...EB with delivery time upon request

FORM AND FUNCTION COMBINED SERIES PUK

Timeless design and modern technology at eye level. The discreet optics of the series PUK integrates seamlessly into the architecture – thanks to continuous front plates made of aluminium or stainless steel. They don't have any visible screws which prevents them from being disassembled.

 p. 140

 p. 88



For up to 30 flats

Flush-mount

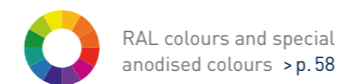
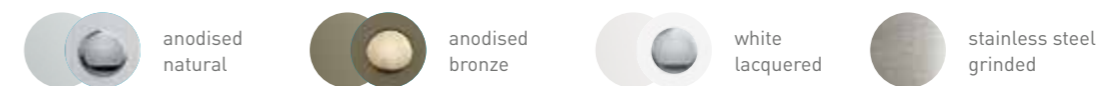
Can be opened without screws by the patented application win:clip™

Name plates illuminated with energy-saving LEDs

Timeless design

Aluminium or stainless steel

COLOURS | MATERIALS



VARIANTS

One-columned key layout
1 to 10 keys



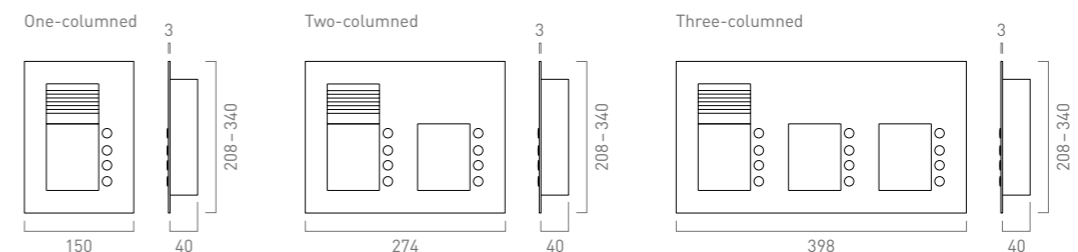
Two-columned key layout
with 8 to 20 keys



Three-columned key layout
with 12 to 30 keys

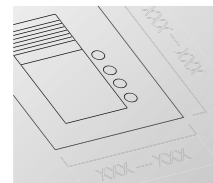


DIMENSIONS (IN MM)



SERIES PUK

TCS:INDIVIDUAL



Format

The series PUK can be integrated into the following front panel dimensions:
Maximum height: 2,000 mm
Maximum width: 1,000 mm



Key layout

If the front-door stations should reflect the building and living structure for better orientation bell buttons can be arranged individually. > p. 58



Finishing

Textures: grinded and sand-blasted
Coating: anodised, powder or PVD. Laser cut, laser engraving, milling engraving, foil plot or screen printing can be used to create fonts, characters or signets.
> p. 58



Extended function

Front-door stations can be complemented by installations such as fingerprint scanner or transponder reader with access control. > p. 58



ACCESSORY

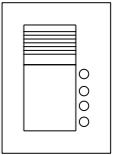
win:clip key (10 pieces)

HxWxD in mm

-

Item no.

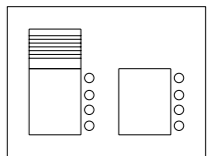
E03458



FRONT-DOOR STATIONS

1 – 10 KEYS ONE-COLUMNED

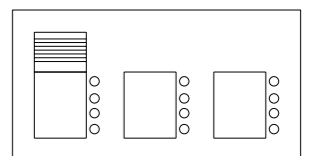
	Front panel HxWxD in mm	Flush-mount box HxWxD in mm	Item no.
1 key	208 x 150 x 3	159 x 126 x 40	PUK01/1-...
2 keys	208 x 150 x 3	159 x 126 x 40	PUK02/1-...
3 keys	208 x 150 x 3	159 x 126 x 40	PUK03/1-...
4 keys	208 x 150 x 3	159 x 126 x 40	PUK04/1-...
5 keys	230 x 150 x 3	181 x 126 x 40	PUK05/1-...
6 keys	252 x 150 x 3	203 x 126 x 40	PUK06/1-...
7 keys	274 x 150 x 3	225 x 126 x 40	PUK07/1-...
8 keys	296 x 150 x 3	247 x 126 x 40	PUK08/1-...
9 keys	318 x 150 x 3	269 x 126 x 40	PUK09/1-...
10 keys	340 x 150 x 3	291 x 126 x 40	PUK10/1-...



FRONT-DOOR STATIONS

8 – 20 KEYS TWO-COLUMNED

	Front panel HxWxD in mm	Flush-mount box HxWxD in mm	Item no.
8 keys	208 x 274 x 3	159 x 250 x 40	PUK08/2-...
10 keys	230 x 274 x 3	181 x 250 x 40	PUK10/2-...
12 keys	252 x 274 x 3	203 x 250 x 40	PUK12/2-...
14 keys	274 x 274 x 3	225 x 250 x 40	PUK14/2-...
16 keys	296 x 274 x 3	247 x 250 x 40	PUK16/2-...
18 keys	318 x 274 x 3	269 x 250 x 40	PUK18/2-...
20 keys	340 x 274 x 3	291 x 250 x 40	PUK20/2-...



FRONT-DOOR STATIONS

12 – 30 KEYS THREE-COLUMNED

	Front panel HxWxD in mm	Flush-mount box HxWxD in mm	Item no.
12 keys	208 x 398 x 3	159 x 374 x 40	PUK12/3-...
15 keys	230 x 398 x 3	181 x 374 x 40	PUK15/3-...
18 keys	252 x 398 x 3	203 x 374 x 40	PUK18/3-...
21 keys	274 x 398 x 3	225 x 374 x 40	PUK21/3-...
24 keys	296 x 398 x 3	247 x 374 x 40	PUK24/3-...
27 keys	318 x 398 x 3	269 x 374 x 40	PUK27/3-...
30 keys	340 x 398 x 3	291 x 374 x 40	PUK30/3-...

Decor designs: ...EN anodised natural, ...WS white lacquered, ...EB anodised bronze, ...ES stainless steel grinded
Decor design ...EN available ex stock, subject to intermediate sales | ...WS, ...EB, ...ES with delivery time upon request

FLEXIBLE FOR ALL PURPOSES

SERIES KTU

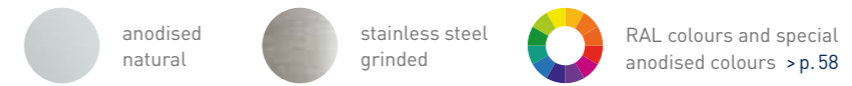
Fits everywhere. The series KTU is available in standard dimensions and custom dimensions. This is a benefit in case of existing wall openings. The size of the front plates as well as the amount and arrangement of the bell buttons can be determined individually. Thus you can, for example, clearly display flats by storey and by front and back building.



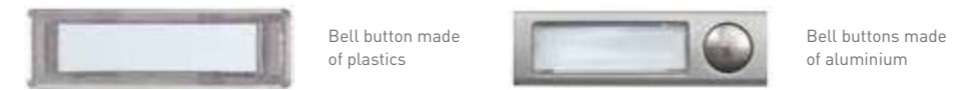
- In the standard dimension up to 21 flats
- Individually extendable in custom dimensions
- Size up to 800x2,000 mm
- Extendable by loudspeakers, camera, code lock or transponder reader
- Individual arrangement of bell buttons
- Front plate made of anodised aluminium, stainless steel or PVD brass
- Bell buttons made of plastics or aluminium
- Including flush-mount box

Bell button tableau with aluminium buttons

COLOURS | MATERIALS



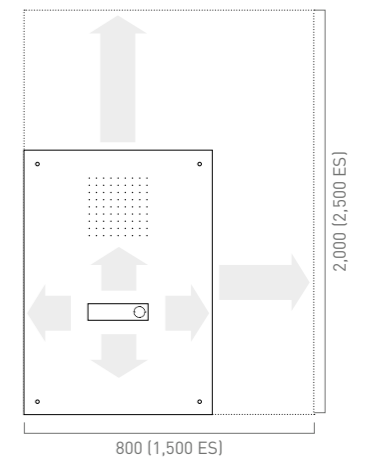
BELL BUTTONS



VARIANTS



DIMENSIONS (IN MM)

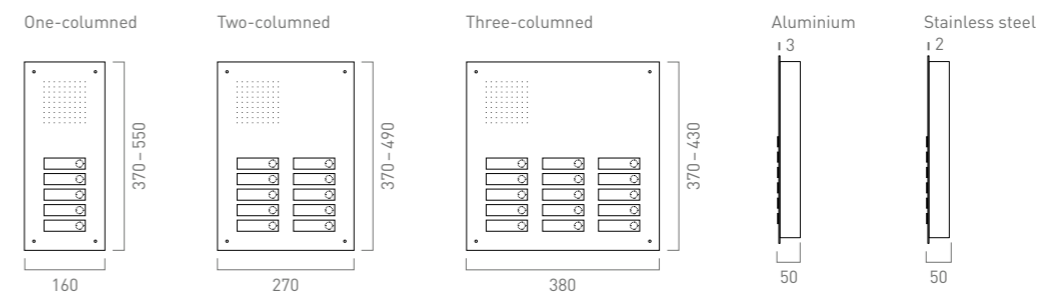


INSTALLATION



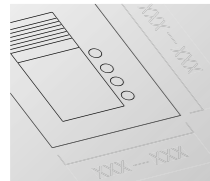
- Combination with built-in door loudspeaker**
Please complete these bell button tableaus with the built-in door loudspeaker to an integral front-door station. > p. 32
- Preconfigured systems with home- or pre-packs**
Please complete these bell button tableaus with the home-packs or pre-packs (variants with built-in door loudspeaker) to preconfigured systems up to 8 flats. > p. 92
- Preconfigured systems with configo-pack**
Please use our configuration offerings configo-pack for the factory-made systems and units configuration according to individual requirements and make the initial operation on-site easier for yourself. > p. 96

DIMENSIONS (IN MM)



SERIES KTU

TCS:INDIVIDUAL



Format
 Stainless steel: max. 2,500 x 1,500 mm,
 Aluminium, brass, bronze: max.
 2,000 x 800 mm
 Material thickness 3–5 mm
 > p. 58



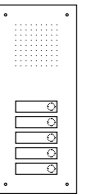
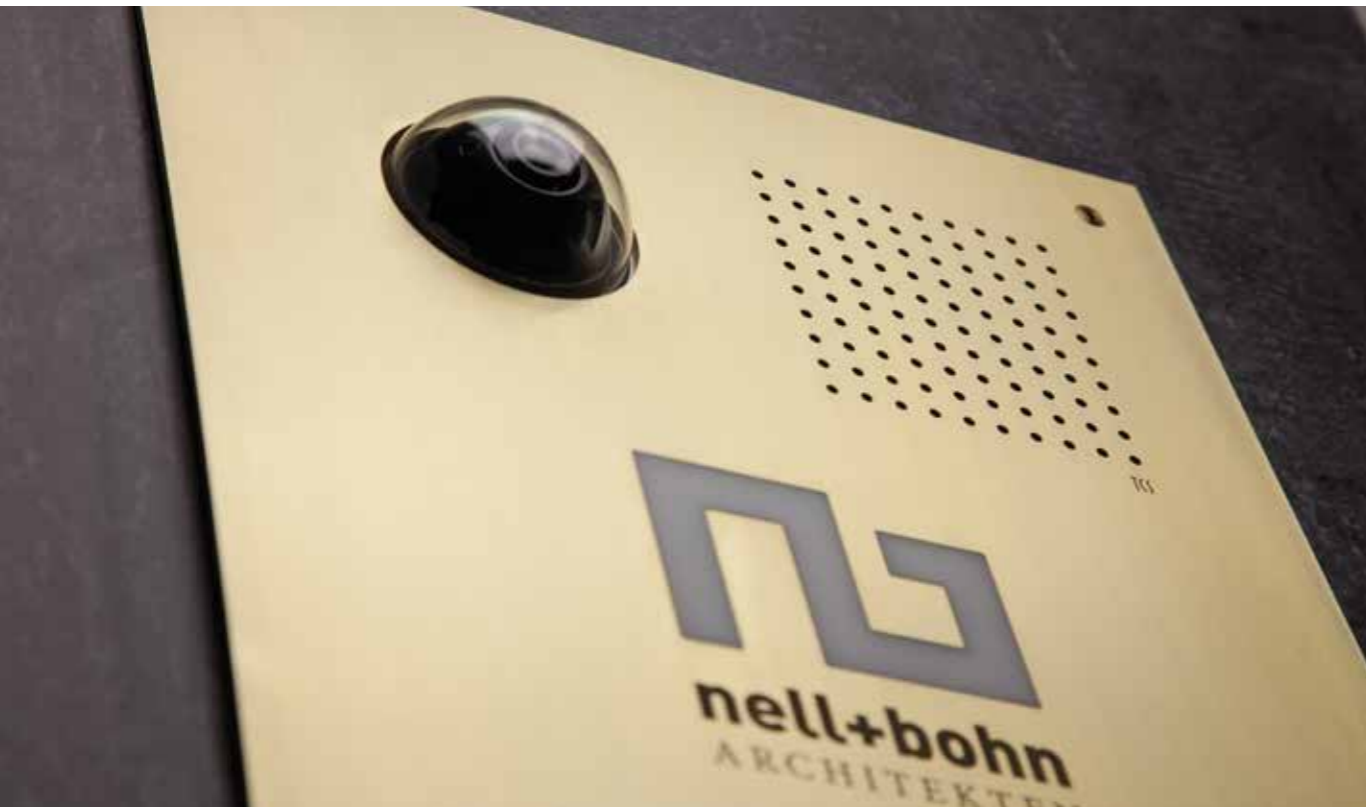
Key layout
 If the front-door stations should reflect the building and living structure for better orientation the bell buttons can be arranged individually. > p. 58



Finishing
 Textures: grinded and sand-blasted
 Coating: anodised, powder or PVD. Laser cut, laser engraving, milling engraving, foil plot or screen printing can be used to create fonts, signs and signets.
 > p. 58

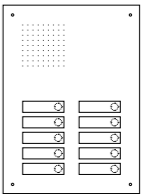


Extended function
 Front-door station can be supplemented with access control by installations such as fingerprint scanner or transponder reader. > p. 58



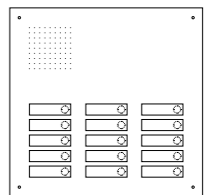
BELL BUTTONS TABLEAUS

5 – 12 KEYS ONE-COLUMNED	Front panel HxWxD in mm	Flush-mount box HxWxD in mm	Item no.
5 keys, anodised natural	370 x 160 x 3 mm (2 mm ES)	350 x 140 x 50 mm	KTU1105...-0010
6 keys, anodised natural	370 x 160 x 3 mm (2 mm ES)	350 x 140 x 50 mm	KTU1106...-0010
7 keys, anodised natural	430 x 160 x 3 mm (2 mm ES)	410 x 140 x 50 mm	KTU1107...-0010
8 keys, anodised natural	430 x 160 x 3 mm (2 mm ES)	410 x 140 x 50 mm	KTU1108...-0010
9 keys, anodised natural	490 x 160 x 3 mm (2 mm ES)	470 x 140 x 50 mm	KTU1109...-0010
10 keys, anodised natural	490 x 160 x 3 mm (2 mm ES)	470 x 140 x 50 mm	KTU1110...-0010
11 keys, anodised natural	550 x 160 x 3 mm (2 mm ES)	530 x 140 x 50 mm	KTU1111...-0010
12 keys, anodised natural	550 x 160 x 3 mm (2 mm ES)	530 x 140 x 50 mm	KTU1112...-0010



BELL BUTTONS TABLEAUS

10 – 20 KEYS TWO-COLUMNED	Front panel HxWxD in mm	Flush-mount box HxWxD in mm	Item no.
10 keys, anodised natural	370 x 270 x 3 mm (2 mm ES)	350 x 250 x 50 mm	KTU1210...-0010
12 keys, anodised natural	370 x 270 x 3 mm (2 mm ES)	350 x 250 x 50 mm	KTU1212...-0010
14 keys, anodised natural	430 x 270 x 3 mm (2 mm ES)	410 x 250 x 50 mm	KTU1214...-0010
16 keys, anodised natural	430 x 270 x 3 mm (2 mm ES)	410 x 250 x 50 mm	KTU1216...-0010
18 keys, anodised natural	490 x 270 x 3 mm (2 mm ES)	470 x 250 x 50 mm	KTU1218...-0010
20 keys, anodised natural	490 x 270 x 3 mm (2 mm ES)	470 x 250 x 50 mm	KTU1220...-0010



BELL BUTTONS TABLEAUS

15 – 21 KEYS THREE-COLUMNED	Front panel HxWxD in mm	Flush-mount box HxWxD in mm	Item no.
15 keys, anodised natural	370 x 380 x 3 mm (2 mm ES)	350 x 360 x 50 mm	KTU1315...-0010
18 keys, anodised natural	370 x 380 x 3 mm (2 mm ES)	350 x 360 x 50 mm	KTU1318...-0010
21 keys, anodised natural	430 x 380 x 3 mm (2 mm ES)	410 x 360 x 50 mm	KTU1321...-0010

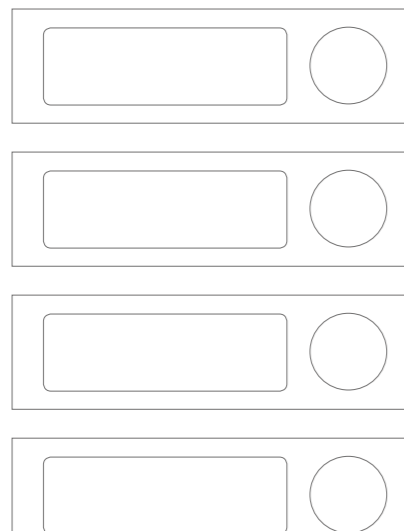
Product designs: ...0 plastic buttons, ...1 metal buttons, stainless steel tableaus upon request

INVISIBLE AND YET UNMISTAKEABLE SERIES TCU

The ear hears everything. The eyes sees nothing. Thanks to hidden technique. The built-in door loudspeaker of the series TCU was especially designed for installation behind the loudspeaker cover. Thus, an electric bell system – for example with historic letterboxes – can be upgraded while the existing design remains the same.

 p. 140

 p. 88



For up to 208 bell buttons

High volume for loud environments

Microphone can be separated

Resistant against feedbacks

Status display during installation and maintenance

PRODUCT OVERVIEW

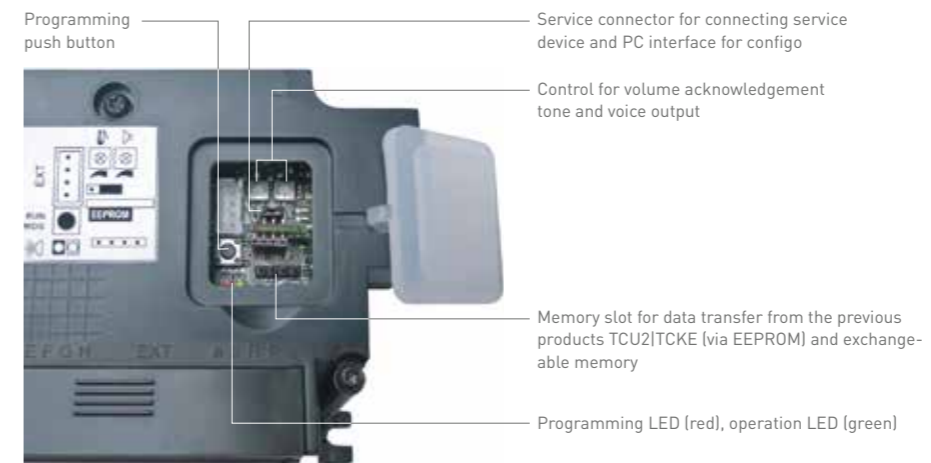


Built-in door loudspeaker for up to 16 keys

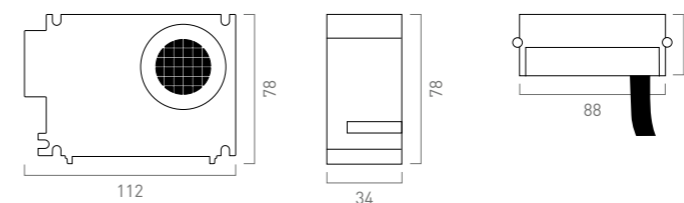


Bell button extension for the built-in door loudspeaker for up to 208 keys

DESIGN OF THE BUILT-IN DOOR LOUDSPEAKER



DIMENSIONS (IN MM)



INSTALLATION



Installation behind fronts and in letterboxes

The built-in door loudspeaker can be used in many ways. Please use the installation instruction with correct installation recommendations behind fronts and in letterboxes by ...

- > Renz
- > JU
- > Lippert
- > Max Knobloch

Installation instructions are available in the download area at www.tcsag.de.





	HxWxD in mm	Item no.
Built-in door loudspeaker for up to 16 keys	78 x 112 x 34	ASI11000-0000
Bell button extension for up to 32 bell buttons	56 x 88 x 30	ASI21000-0000

GREAT VIEW ON A VERY SMALL SPACE

SERIES AVC

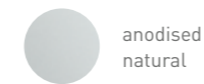
The world from the house's perspective. This is what the series AVC shows with its integrated video camera. Thanks to its compact dimensions it is ideal for one-family homes and narrow door soffits. It is immediately ready for use with its two drill holes and one cable connection.

 p. 140
 p. 86



- For up to 3 flats
- Compact dimensions
- Can be opened without screws by the patented application win:clip™
- Name plates made of shatter-proof acrylic glass
- Name plates backlit with backlight LED
- Minimum height of surface-mount of just 16 mm

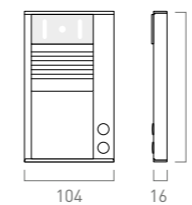
COLOUR



VARIANTS



DIMENSIONS (IN MM)



VIDEO-FRONT-DOOR STATIONS 1-3 KEYS

	HxWxD in mm	Item no.
1 key, anodised natural	175x104x16	AVC11010-0010
2 keys, anodised natural	175x104x16	AVC11020-0010
3 keys, anodised natural	175x104x16	AVC11030-0010

ACCESSORY

	HxWxD in mm	Item no.
win:clip key (10 pieces)	-	E03458

THE DOOR VIEWER SEES EVERYTHING

SERIES AVE

Fully displayed in the picture. The series AVE is the video version of the series PES. A flush-integrated colour camera provides comfort and safety. It captures an angle of 130 degrees. Due to an infrared mode it is perfectly suitable as a door viewer in the dark.

p. 140

p. 90



- For up to 16 flats
- Extendable up to 128 flats
- Camera with infrared modes for good night vision
- Name plates illuminated with energy-saving LEDs
- Extra-large Name plates up to 3 flats
- Timeless design
- Robust aluminium
- In anodised natural, anodised bronze or white lacquered
- Prewired

COLOURS



VARIANTS



EXTENSIONS



For setting up a video front-door station with more than 16 bell buttons the series AVE can be extended with maximum 4 bell bottom extensions PDT or PET.

ACCESSORY



Front-door stations with integrated code lock
For up to 12 flats, opening and switching using up to 10 numeric codes, robust housing design for surface-mount.



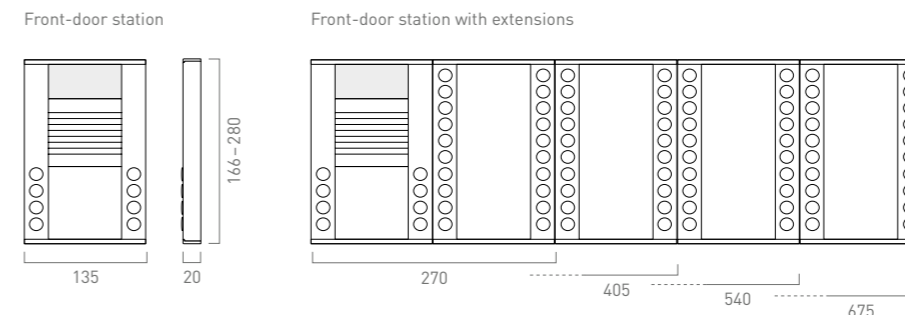
Information field module Weather protection roof

Information field module, weather protection roof or mounting plate easy to mount
The backlit info field module can be flush-mounted or can also be placed on plaster in the format 72 x 74 mm. The weather protection roof is attached to the front-door station as an accessory using adhesive.

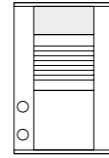


Mounting plate

DIMENSIONS (IN MM)

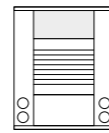


SERIES AVE



VIDEO-FRONT-DOOR STATIONS 1 – 3 KEYS

	HxWxD in mm	Item no.
1 key, white illumination	204 x 135 x 20	AVD14013-00...
2 keys, white illumination	204 x 135 x 20	AVD14023-00...
3 keys, white illumination	242 x 135 x 20	AVD14033-00...



VIDEO-FRONT-DOOR STATIONS 4 – 16 KEYS

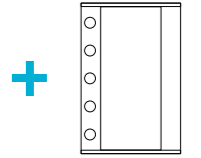
	HxWxD in mm	Item no.
4 keys, white illumination	166 x 135 x 20	AVE14043-00...
6 keys, white illumination	185 x 135 x 20	AVE14063-00...
8 keys, white illumination	204 x 135 x 20	AVE14083-00...
10 keys, white illumination	223 x 135 x 20	AVE14103-00...
12 keys, white illumination	242 x 135 x 20	AVE14123-00...
14 keys, white illumination	261 x 135 x 20	AVE14143-00...
16 keys, white illumination	280 x 135 x 20	AVE14163-00...

VIDEO-FRONT-DOOR STATIONS WITH CODE LOCK

1 KEY AND 4 – 12 KEYS	HxWxD in mm	Item no.
1 key, anodised natural	280 x 135 x 20	AVD54013-0010
4 keys, anodised natural	242 x 135 x 20	AVE54043-0010
6 keys, anodised natural	261 x 135 x 20	AVE54063-0010
8 keys, anodised natural	280 x 135 x 20	AVE54083-0010
10 keys, anodised natural	299 x 135 x 20	AVE54103-0010
12 keys, anodised natural	318 x 135 x 20	AVE54123-0010

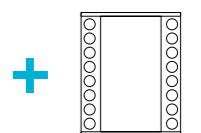
ACCESSORY	HxWxD in mm	Item no.
Information field module, white backlit	90 x 135 x 20	PI135-.../04
Weather protection roof, aluminium		PRODA-EN
Mounting plate, aluminium anodised natural		Mounting plate

Decor designs: ...10/...EN anodised natural, ...18/...WS white lacquered, ...12/...EB anodised bronze
Decor design ...10/...EN available ex stock, subject to intermediate sales | ...18/...WS, ...12/...EB with delivery time upon request



BELL BUTTON EXTENSIONS 5 KEYS FOR VIDEO FRONT-DOOR STATIONS 1 – 2 KEYS

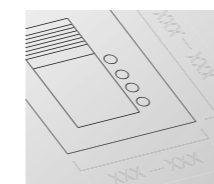
	HxWxD in mm	Item no.
5 keys, white illumination	204 x 135 x 20	PDT05-.../04



BELL BUTTON EXTENSIONS 16 – 28 KEYS FOR VIDEO FRONT-DOOR STATIONS 3 – 16 KEYS

	HxWxD in mm	Item no.
16 keys, white illumination	166 x 135 x 20	PET16-.../04
18 keys, white illumination	185 x 135 x 20	PET18-.../04
20 keys, white illumination	204 x 135 x 20	PET20-.../04
22 keys, white illumination	223 x 135 x 20	PET22-.../04
24 keys, white illumination	242 x 135 x 20	PET24-.../04
26 keys, white illumination	261 x 135 x 20	PET26-.../04
28 keys, white illumination	280 x 135 x 20	PET28-.../04

TCS:INDIVIDUAL



Format
Tailored to the customer's demands:
The height of the front-door station can be max. 1,000 mm. Recommended camera installation height of 1,600 mm. The width can be adjusted individually. > [p.58](#)



Key layout
If the front-door stations should reflect the building and living structure for better orientation the bell buttons can be arranged individually. > [p.58](#)

Decor designs: ...EN anodised natural, ...WS white lacquered, ...EB anodised bronze
Decor design ...EN available ex stock, subject to intermediate sales | ...WS, ...EB with delivery time upon request

FOR A SAFE VIEW THROUGH THE DOOR SERIES AVU

The best way to identify visitors is looking at their faces. Our series AVU – a video version of the series PUK – is the perfect solution. A flush-integrated colour camera provides comfort and safety. It captures an angle of 90 degrees and provides a clear image in the dark. The front-door station can also be used as a door viewer.

 p. 140

 p. 90



For up to 24 flats

Flush-mount

Can be opened without screws by the patented application win:clip™

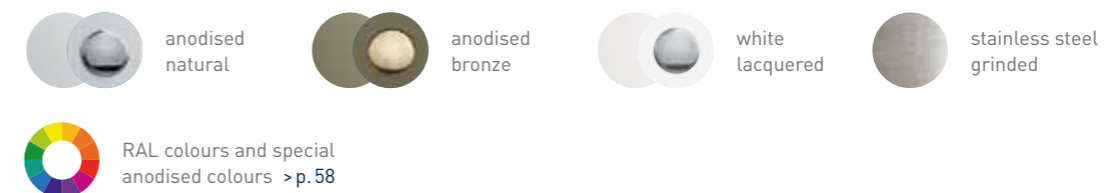
Name plates illuminated with energy-saving LEDs

Timeless design

Aluminium or stainless steel

Basic function like the series PUK

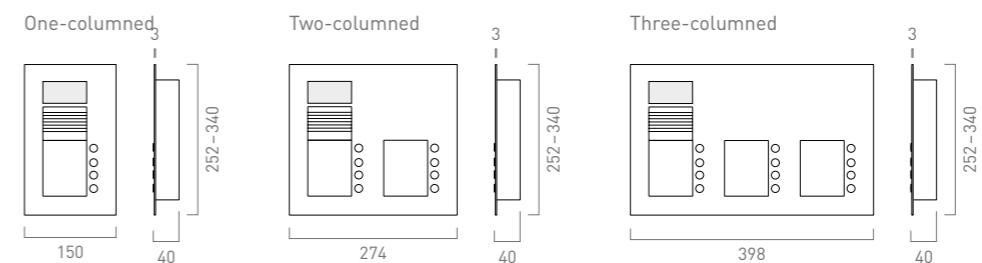
COLOURS | MATERIALS



VARIANTS

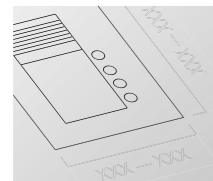


DIMENSIONS (IN MM)



SERIES AVU

TCS:INDIVIDUAL



Format
The series AVU can be integrated into the following front plate dimensions:
Maximum height: 2,000 mm
Maximum width: 1,000 mm
Recommended installation height for camera: 1600 mm > p. 58



Key layout
If the front-door stations should reflect the building and living structure for better orientation the bell buttons can be arranged individually > p. 58



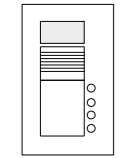
Finishing
Textures: grinded and sand-blasted Coating: anodised, powder or PVD. Laser cut, laser engraving, milling engraving, foil plot or screen printing can be used to create fonts, signs or signets.
> p. 58



Extended function
Front-door station can be supplemented with access control by installations such as fingerprint scanner or transponder reader. > p. 58

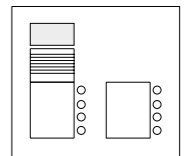


ACCESSORY	HxWxD in mm	Item no.
win:clip key (10 pieces)	-	E03458



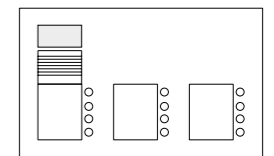
VIDEO FRONT-DOOR STATIONS

1 – 8 KEYS ONE-COLUMNED	Front panel HxWxD in mm	Flush-mount box HxWxD in mm	Item no.
1 key	252 x 150 x 3	203 x 126 x 40	AVU14010-00...
2 keys	252 x 150 x 3	203 x 126 x 40	AVU14020-00...
3 keys	252 x 150 x 3	203 x 126 x 40	AVU14030-00...
4 keys	252 x 150 x 3	203 x 126 x 40	AVU14040-00...
5 keys	274 x 150 x 3	225 x 126 x 40	AVU14050-00...
6 keys	296 x 150 x 3	247 x 126 x 40	AVU14060-00...
7 keys	318 x 150 x 3	269 x 126 x 40	AVU14070-00...
8 keys	340 x 150 x 3	291 x 126 x 40	AVU14080-00...



VIDEO FRONT-DOOR STATIONS

8 – 16 KEYS TWO-COLUMNED	Front panel HxWxD in mm	Flush-mount box HxWxD in mm	Item no.
8 keys	252 x 274 x 3	203 x 250 x 40	AVU15080-00...
10 keys	274 x 274 x 3	225 x 250 x 40	AVU15100-00...
12 keys	296 x 274 x 3	247 x 250 x 40	AVU15120-00...
14 keys	318 x 274 x 3	269 x 250 x 40	AVU15140-00...
16 keys	340 x 274 x 3	291 x 250 x 40	AVU15160-00...



VIDEO FRONT-DOOR STATIONS

12 – 24 KEYS THREE-COLUMNED	Front panel HxWxD in mm	Flush-mount box HxWxD in mm	Item no.
12 keys	252 x 398 x 3	203 x 374 x 40	AVU16120-00...
15 keys	274 x 398 x 3	225 x 374 x 40	AVU16150-00...
18 keys	296 x 398 x 3	247 x 374 x 40	AVU16180-00...
21 keys	318 x 398 x 3	269 x 374 x 40	AVU16210-00...
24 keys	340 x 398 x 3	291 x 374 x 40	AVU16240-00...

Decor designs: ...10 anodised natural, ...18 white lacquered, ...12 anodised bronze, ...30 stainless steel grinded
Decor design ...10 available ex stock, subject to intermediate sales | ...18, ...12, ...30 with delivery time upon request

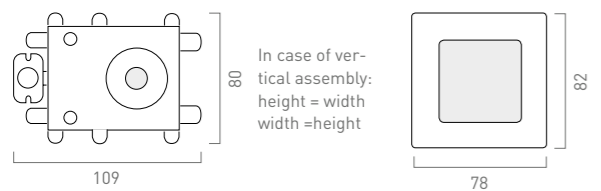
VIDEO CAMERAS

BUILT-IN CAMERA AND ASSEMBLY FRAME



Camera features	
Detection angle	90°
Camera type	colour
Suitable for day and night use	yes
Image sensor	0,8 cm (1/3") Sony CCD
Resolution	420 TVL
Light sensitivity	0,1 Lux with F 2.0
Focal length f	3,6 mm
Type of installation	behind loud speaker cover, vertical/horizontal (camera), flush-mount (with assembly frame)
Swivel and incline range (only with VKR frame)	mechanically adjustable 7° (swivel) 7° (incline)

Dimensions (HxWxD in mm)



Camera	80 x 109 x 35
Assembly frame	82 x 78 x 5
Mounting dimensions	76 x 72
Front panel thickness	max. 5 mm
Cut-out in the front panel	> ø 25 (camera), 76 x 72 (assembly frame)

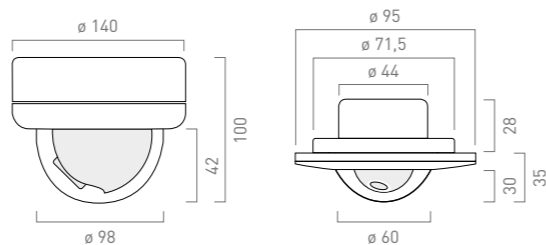
	Item no.
Built-in camera, horizontal installation	FVK2200-0300
Built-in camera, vertical installation	FVK2201-0300
Assembly frame, anodised nat.	VKR10-EN
Assembly frame, white	VKR10-WS
Assembly frame, stainless steel	VKR10-ES

DOME CAMERAS



Camera features	FVK4212-0	FVK4221-0
Detection angle	30° – 65°	83°
Camera type	colour	colour
Suitable for day and night use	yes	yes
IR illumination	yes	no
Image sensor	8,5 mm (1/3") SONY Super HAD II CCD	8,5 mm (1/3") SONY-Advanced CCD Chip
Resolution	600 TVL	540 TVL
Light sensitivity	0,1 Lux with F 1.4	0,002 Lux with F 1.2
Focal length f	4,0 to 9,0 mm (vario focus)	3,6 mm
Type of installation	surface-mount	flush-mount
Swivel and incline range	3-axis swivel frame (manual)	
Degree of protection	IP 66	IP 66
Scope of delivery	two-wire video transmitter FVW2,000-0600	

Dimensions (HxWxD in mm)



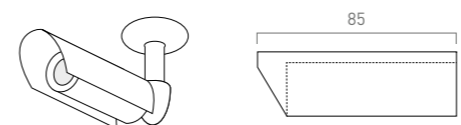
Housing (d x H)	ø 140 x 100	ø 95 x 63
Dome camera with IR LEDs, surface-mount	FVK4212-0	
Dome camera, flush-mount		FVK4221-0

CYLINDER CAMERA



Camera features	
Detection angle	110° (wide angle) 80° (standard)
Camera type	45° (tele photo) 25° (super tele)
Image sensor	colour
Resolution	0,8 cm (1/3") Sony CCD
Light sensitivity	500 TVL (colour)
Focal length f	2,9 mm wide angle 4,3 mm standard 8,0 mm tele photo 16,0 mm super tele
Type of installation	surface-mount
Swivel and incline range	mechanically adjustable 360° (swivel) 90° (incline)
Degree of protection	IP 68
Scope of delivery	two-wire video transmitter FVW2,000-0600

Dimensions (HxWxD in mm)



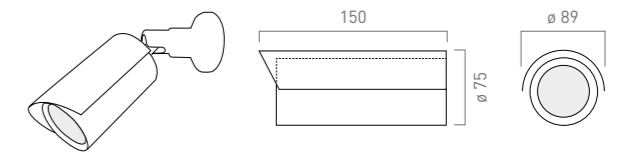
	Item no.
Camera	ø 21 x 77
Camera with protection roof	ø 30 x 85
Cylinder camera, wide angle	FVK3210-0
Cylinder camera, standard	FVK3220-0
Cylinder camera, tele photo	FVK3230-0
Cylinder camera, super tele	FVK3240-0

VARIOFOCUS CAMERA



Camera features	
Detection angle	30° – 105°
Camera type	colour b/w by night
Suitable for day and night use	automatic permanently adjustable
IR illumination	yes
IMax. distance in case of IR	40 m
Image sensor	0,8 cm (1/3") Sony CCD
Resolution	650 TVL (colour) 700 TVL (s/w)
Focal length f	from 2,8 mm to 12,0 mm
Camera settings (to OSC menu)	backlight compensation wide Dynamic Range, electronic shutter digital noise suppression
Type of installation	surface-mount
Swivel and incline range	mechanically adjustable 360° (swivel) 90° (incline)
Degree of protection	IP 66
Scope of delivery	two-wire video transmitter FVW2,000-0600

Dimensions (HxWxD in mm)



including wall bracket	120 x 100 x 240
Variofocus camera	FVK1202-0

PTZ INTERFACE



- > data transmission via RS485 connection .. in plastic housing
- > supports RS485 protocol types from Samsung and Peico P/D
- > video input (asymmetrical): 75 Ohm
- > output level for 2-wire video signal: -3 to 9 dB (manually adjustable)

	Item no.
PTZ Interface, for surface-mount	FBI4500-0100

ACCESS CONTROL

CODE LOCK



System and installation functions

Wiring technique (amount of wires)	3 (a/b, P)
Amount of usable numeric codes	up to 10
Protection function	tamper switch
Stand-alone operation possible	yes (with transformer)
Configuration options	manual with configo

Triggering functions

Door release	code lock (with potential-free relay contact, two-way contact 24V, DC/2A)
Switching	general specific

Functions which can be (de) activated

Acknowledgement	acoustical visual
-----------------	---------------------

Selection | settings

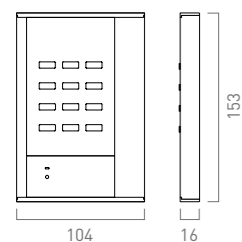
Lengths of numeric codes	1 to 6 digits
Door release time (ex works)	3s (changeable factory setting)
Light switching function	#-key

Displays

Status display	LED red LED green
----------------	---------------------

Housing and installation

Type of installation	surface-mount
Material and colour	aluminium anodised natural
Opening principle	win:clip
Installation and operation room	H 153 x W 104



Item no.

Code lock cPAKL [AZC50000-0010](#)

CODE LOCK12



System and installation functions

Wiring technique (amount of wires)	3 (a/b, P)
Amount of usable numeric codes	up to 10
Configuration options	manual with configo

Triggering functions

Door release	code lock
Control of a door release relay	on integrated R contact (FAA1100 usable)
Switching	general specific

Functions which can be (de) activated

Acknowledgement	acoustical visual
-----------------	---------------------

Selection | settings

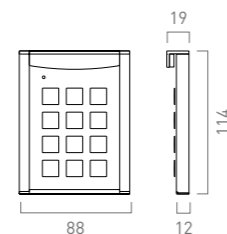
Lengths of numeric codes	1 to 6 digits
Door release time (ex works)	3s (changeable factory setting)
Light switching function	#-key

Displays

Status display	LED red LED green
Key illumination	LEDs (indirect blue)

Housing and installation

Type of installation	surface-mount
Material and colour	aluminium anodised natural
Opening principle	concealed screws
Installation and operation room	H 228 x W 88



Item no.

Code lock12 [AZF50000-0010](#)

TRANSPONDER READER



IR remote control from the scope of delivery

System and installation functions

Wiring technique (amount of wires)	2-wire / 3-wire operation switchable
Amount of usable MKeys MCards	up to 250
Protection function	tamper switch
Configuration options	programming MIFARE® classic compatible transponder > max. 10 per master transponder > max. 50 per IR remote control > max. 250 (TCS:BUS) per configo

Triggering functions

Door release	transponder reader (with potential-free relay contact, two-way contact 24V DC/2A)
Switching	general specific

Selection | settings

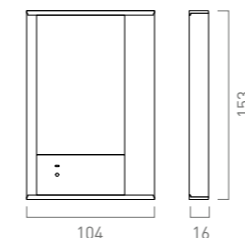
Door release time (ex works)	3s (changeable factory setting)
Setup of a master transponder	with IR remote control

Displays

Status displays	LED red LED green LED orange
Acknowledgement during reading	acoustic and visual

Housing and installation

Size of information field	see cPAKL
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Item no.

Transponder reader tPAKL [AZC41000-0010](#)

Transponderkey* [MKEY01](#)

Transponder card* [MCARD01](#)

* graduated prices from 5 pcs. onwards upon request

Dimensions in mm

FINGERPRINT SCANNER



System and installation functions

Integration in flush-mounts	as individualized fitting
Operating mode	standalone
Amount of fingerprints or users	memory for up to 99
Configuration options	manually on the control unit

Triggering functions

Door release	yes (potential-free relay contact, two-way contact 42V AC/DC / 2A)
Switching	yes (e.g. light switch)

Functions which can be (de) activated

Acknowledgement	visual
-----------------	--------

Displays

Status display	LED
----------------	-----

Housing and installation

Type of installation	installation in front-door stations PUK or AVU
Material and colour	stainless steel cover, plastics black
Recommended installation height	bottom edge > 1.550 mm
Installation site	protection against precipitation in the inside and in the outside area

Technical features

Functional principle	line sensor
Recognition time	1-4 s (depending on the amount of saved fingerprints)
Security	security code for configuration, tamper-proof, no data loss in case of voltage breakdown

In order to easily integrate the fingerprint scanner you will find forms in the download area at www.tcsag.de. For further information on process handling please also contact our project consultant.



AN ENTRANCE WITH MORE OPTIONS

SERIES AMI

Welcome your visitors individually - the series AMI offers various functional modules and design options in this area. And this system is uniquely flexible during installation. All elements can be integrated also in non-standardized formats and posts.

 p. 140



Combined or individual installation

For up to 1,000 call destinations

Front panels made of grinded stainless steel

modules made of anodised aluminium

For flush-mount or free-standing communication posts

Individual combination online in a browser

Configurable with configo and service device

COLOURS | MATERIALS



stainless steel grinded



front panel in aluminium and special anodized material > p. 58

BUILT-IN VARIANTS



Installation in front panels

The individual solution for one- or multi-family homes and functional buildings. The front panels made of grinded stainless steel are available in 8 standard sizes. Individual formats are configurable. > p. 50



Installation in communication posts

All functional modules of the series AMI can be integrated in communication posts for an exclusive reception. They can be implemented in standard sizes and other design variants. The posts are made of robust aluminium. > p. 51

FUNCTIONAL MODULES



Door communication as team work. The individually usable functional modules of the series AMI are made of durable aluminium and available in black and anodised silver. The functional modules can be used for systems consisting of up to 1000 flats. > p. 52 ff.

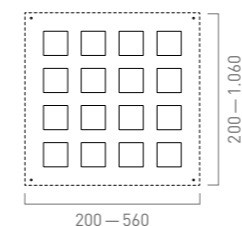
COMPILING AMI ONLINE

The modules can be used individually or can be combined freely. The online configurator allows an easy and quick combination of different functions.

The series AMI can be composed online at www.tcs-konfigurator.de.



TCS:INDIVIDUAL



Format

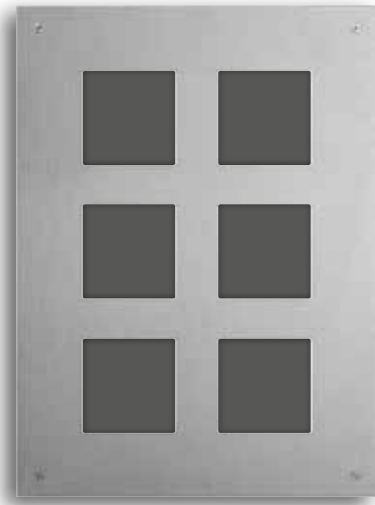
The size of the front panels for the series AMI can be configured individually. > p. 58



Finishing

Textures: grinded and sand-blasted. Coating: anodised, powder or PVD. Laser cut, laser engraving, milling engraving, foil plot or screen printing can be used to create fonts, characters or signets > p. 58

SERIES AMI FRONT PANELS



Flush-mount sets made of front panels and flush-mount boxes

3mm stainless steel front panel grinded and brushed

8 standard sizes

Individual sizes projectable

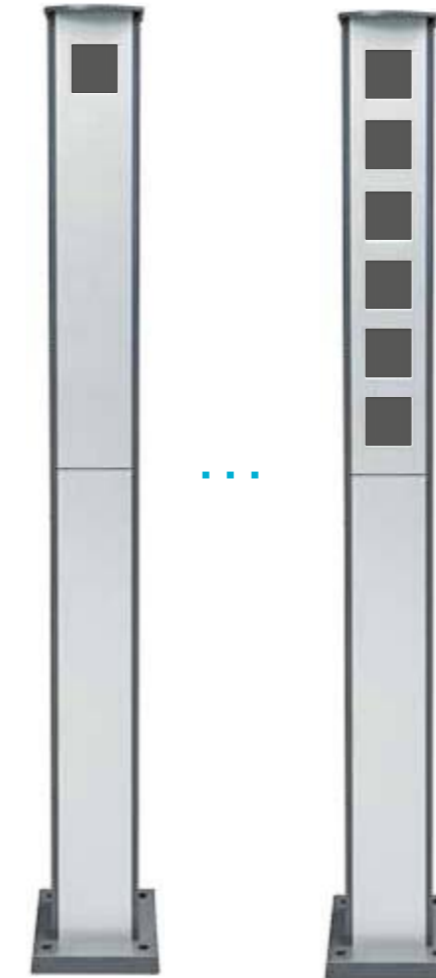
Holding hinges for easy initial operation and maintenance

Housing | installation | extended functions

Type of installation	flush-mount
Material and colour	3 mm stainless steel front panel grinded and brushed incl. metal flush-mount box
Front panel cut-out	82x82 mm
Functionally extendable with	front-door stations series AMI
Opening principle	visible screws from the front
Modules integration	screw connection on thread bolts
Planning of special formats	see planning forms online

FLUSH-MOUNT SETS	Front panel HxWxD in mm	Flush-mount box HxWxD in mm	Item no.
for 1 AMI module	200x200x3	180x180x50	ZAU2001-0030
for 2 AMI modules, one-columned layout	320x200x3	300x180x50	ZAU2002-0030
for 3 AMI modules, one-columned layout	440x200x3	420x180x50	ZAU2003-0030
for 4 AMI modules, one-columned layout	560x200x3	540x180x50	ZAU2004-0030
for 5 AMI modules, one-columned layout	680x200x3	660x180x50	ZAU2005-0030
for 6 AMI modules, one-columned layout	800x200x3	780x180x50	ZAU2006-0030
for 2x2 AMI modules, two-columned layout	320x320x3	300x300x50	ZAU2007-0030
for 2x3 AMI modules, two-columned layout	440x320x3	420x300x50	ZAU2008-0030

COMMUNICATION POSTS



Post corpus made of aluminium, powder coated

3 mm aluminium front panel

The communication posts with their timeless design are made of aluminium. The corpus is powder coated with micaceous iron ore DB 703. The front panel consists of robust 3 mm thick aluminium.

Housing | installation | extended functions

Type of installation	free-standing
Material and colour	post corpus: aluminium, powder coated, micaceous iron ore DB 703 front panel: 3 mm aluminium anodised natural
Front panel cut-out(s)	82x82 mm
Functionally extendable with	front-door station modules series AMI
Opening principle	screw connection from above
Modules integration	screw connection on thread bolts
Planning of special format	see planning forms online

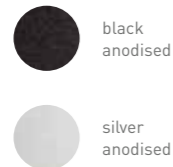
Note

The communication posts and the installations are exclusively approved for safety extra low voltage of safe isolation (SELV) and protective extra low voltage of safe isolation (PELV).

COMMUNICATION POSTS	Front panel HxWxD in mm	Post corpus HxWxD in mm	Item no.
for 1 AMI module	788,5 x 134 x 3	1.700 x 225 x 225	K31AS
for 2 AMI modules	788,5 x 134 x 3	1.700 x 225 x 225	K32AS
for 3 AMI modules	788,5 x 134 x 3	1.700 x 225 x 225	K33AS
for 4 AMI modules	788,5 x 134 x 3	1.700 x 225 x 225	K34AS
for 5 AMI modules	788,5 x 134 x 3	1.700 x 225 x 225	K35AS
for 6 AMI modules	788,5 x 134 x 3	1.700 x 225 x 225	K36AS
for 1 AMI module	788,5 x 134 x 3	1.300 x 225 x 225	K31AP
for 2 AMI modules	788,5 x 134 x 3	1.300 x 225 x 225	K32AP
for 3 AMI modules	788,5 x 134 x 3	1.300 x 225 x 225	K33AP
for 4 AMI modules	788,5 x 134 x 3	1.300 x 225 x 225	K34AP

SERIES AMI

TCS:BUS SPEAKING MODULE



System and installation functions

Connection for bell button module	via 4-pin service connector
Connection of bell buttons provided by customer	plug-in screw terminals for up to 16 bell buttons (4x4 key matrix)
Amount of built-in bell button extensions	max. 6 (ASI21000-0000)
Max. amount bell buttons	208

Triggering functions

Light switching function	on bell button provided by customer
--------------------------	-------------------------------------

Selection | settings

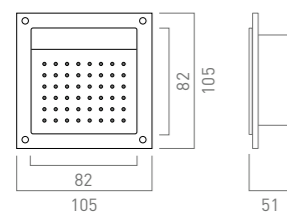
Full duplex voice transmission	yes (for indoor stations with handset)
Allocations per bell button	max. 2 indoor stations
Volume output acknowledgement tone	manually adjustable
Voice communication in door call standby time	adjustable
Memory	plugged in so it can be exchanged

Ports | extended functions

Type of installation	flush-mount
Microphone	integrated and removable
Extended function door release	can be connected to R-terminals

Note

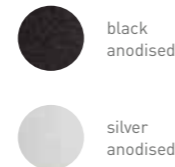
The TCS:BUS speaking module can only be combined with bell button modules or/and the display module LCD graphics, 3 keys. The TCS:BUS speaking module is used for front-door stations with display module LCD graphics. All other modules can be combined freely.



Item no.

TCS:BUS speaking module [AMI11110-00-...](#)

BELL BUTTON MODULE WITH 1-4 KEYS



Triggering functions

Light switch function switch function	programmable per call button
Door call function (2 x)	programmable per call button

Displays

Programming mode error	via different flashing modes
Illumination of name plates	white (LED)

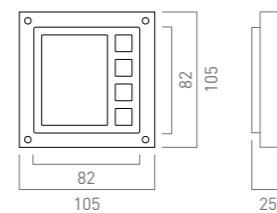
Connectors

4-pin service socket	for connection to display module/ to built-in door loud speaker
4-pin service socket	for additional bell button module

Installation

Type of installation	front-flush flush-mount behind 3 mm or 1.5 mm up to 2.5 mm front panels (with attached spacer plates)
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Opening principle win:clip

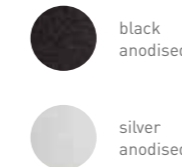


Item no.

Bell button module, 1 key	AMI10901-00...
Bell button module, 2 keys	AMI10902-00...
Bell button module, 3 keys	AMI10903-00...
Bell button module, 4 keys	AMI10904-00...

Decor designs: ...57 black anodised, ...10 silver anodised

DISPLAY MODULE LCD GRAPHICS, 3 KEYS



System and installation functions

Max. amount call destinations	256
Operation Input	on 3 keys with Smart Key Function

Triggering functions

Door call	on call button
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Displays

Display type and size	graphical LCD (160x104 pixels)
Call destination	resident list in alphabetical order
Start screen	individually configurable

Selection | settings

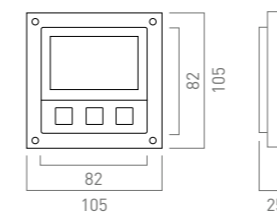
Operation (alternatively to 3 keys)	selection of call destination also possible on jog wheel module
Quick selection (with keyboard module)	input of apartment number on keyboard module

Installation | extended functions

Type of installation	flush-mount
----------------------	-------------

Note

The display module LCD graphics, 3 keys can be combined with the jog wheel module (AMI10410-...) and/or the code lock module, but cannot be combined with the keyboard module and jog wheel module (AMI10400-...).

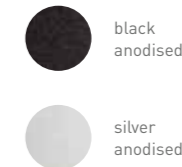


Item no.

Display module LCD graphics, 3 keys [AMI11603-00...](#)

Decor designs: ...57 black anodised, ...10 silver anodised

CAMERA MODULE



Camera features

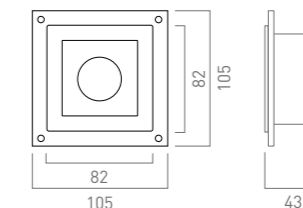
Camera type	built-in colour camera
Detection angle	90° diagonal
Image sensor	0,8 cm (1/3") Sony CCD
Resolution	420 TVL (colour)
Light sensitivity	0,2 Lux with F 2.0
Focal length f	3,6 mm

Installation

Recommended installation height for camera	1.600 mm
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Note

The camera module must not be exposed to the direct sunlight!



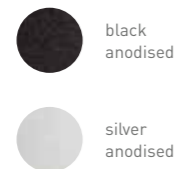
Item no.

Camera module [AMI10500-00...](#)

Decor designs: ...80 black anodised, ...10 silver anodised

SERIES AMI

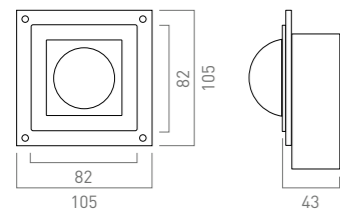
DOME CAMERA MODULE



Camera features	
Camera type	built-in colour camera
Detection angle	90°
Image sensor	0,8 cm (1/3") DPS
Resolution	540 TVL (with PIXIM technology)
Light sensitivity	0,1 Lux with F 1.4
Focal length f	3,6 mm
Swivel and incline range	± 60° swivel / incline (manual)

Housing installation extended functions	
Type of installation	front-flush flush-mount behind 3 mm or 1.5 mm up to 2.5 mm front panels (with attached spacer plates)
Material and colour	aluminium, anodised black silver
Integrated two-wire video transmitter	yes, type FW2,000-0600

Note
The camera module must not be exposed to the direct sunlight or oriented towards it!

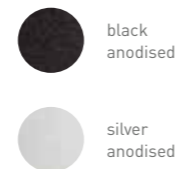


Item no. [AMI110600-00...](#)

Dome camera module

Decor designs: ...57 black anodised, ...10 silver anodised

CODE LOCK MODULE



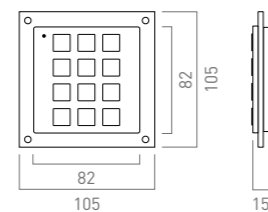
System and installation functions	
Wiring technique (amount of wires)	3 (a/b, P)
TCS:BUS compatible	yes
Amount of access codes	20 (with individual triggering functions)

Triggering functions (via access code)	
Door release function	with potential-free relay contact
Control functions	general specific

Displays	
Status display	LED
Acknowledgement code input	visual acoustical

Initial operation and maintenance	
Programming	manual
Master code	for maintenance / configuration

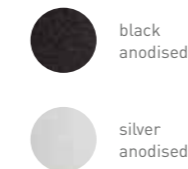
Housing installation extended functions	
Type of installation	front-flush flush-mount behind 3 mm or 1.5 mm up to 2.5 mm front panels (with attached spacer plates)
Material and colour	aluminium, anodised black silver



Item no. [AMI11200-00...](#)

Code lock module

FINGERPRINT SCANNER MODULE

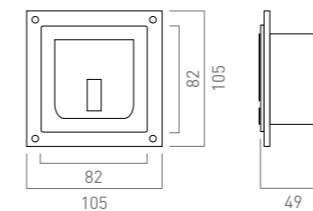


System and installation functions	
Integration in flush-mounts	as individualized fitting
Operating mode	standalone
Amount of fingerprints or users	memory for up to 99
Configuration options	manually on control unit
Security	security code for configuration, tamper-proof, no data loss in case of voltage breakdown

Triggering functions	
Door release and switching	yes (potential-free relay contact)

Displays	
Status display	LED

Housing installation extended functions	
Type of installation	front-flush flush-mount behind 3 mm or 1.5 mm up to 2.5 mm front panels (with attached spacer plates)
Recommended installation height	bottom edge > 1.200 mm
Installation site	in the inside and in the outside area protected against precipitation
Material and colour	aluminium, anodised black silver
Scope of delivery	fingerprint scanner module, control unit, transformer NWW1000-0400

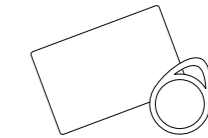


Item no. [AMI110800-00...](#)

Fingerprint scanner module

Decor designs: ...57 black anodised, ...10 silver anodised

TRANSPONDER READER MODULE



MCards | MKeys > p. 47

Features of transponder reader	
Wiring technique (amount of wires)	2-wire/3-wire operation, switchable
Amount of usable MKeys MCards	max. 250
Configuration options	programming MIFARE® classic compatible transponder > max. 10 per master transponder > max. 50 per IR remote control > max. 250 (TCS:BUS) per configo

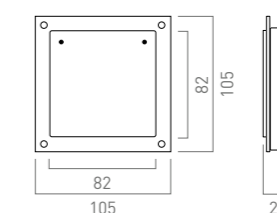
Triggering functions	
Door release	transponder reader (with potential-free relay contact, two-way contact 24V AC/DC / 2A)
Switching	yes

Functions which can be (de) activated	
Acknowledgement during reading and program train	acoustical and visual

Selection settings	
Installation of a master transponder	with IR remote control

Displays	
Status displays	LEDs red, green, orange

Housing installation extended functions	
Type of installation	flush-mount (see fingerprint scanner module)
Material and colour	plastics, black



Item no. [AMI12300-0080](#)

Transponder reader module

SERIES AMI

KEY SWITCH MODULE / ILLUMINATION MODULE



System and installation functions

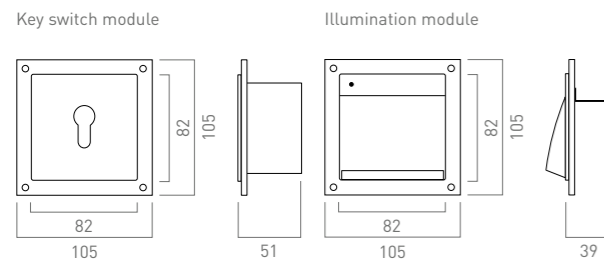
Key switch module	for opening doors and gates
Illumination module	for illumination directed illumination

Housing | installation | extended functions

Type of installation	front-flush flush-mount behind 3 mm or 1.5 mm up to 2.5 mm front panels (with attached spacer plates)
Material and colour key switch module	aluminium, anodised black silver
Material and colour illumination module	aluminium, anodised black silver

Note

The key switch module is only approved for safety extra low voltage (SELV) and protective extra low voltage (PELV).



	Item no.
Key switch module	AMI110700-00...
Illumination module	AMI111400-00...

Decor designs: ...57 black anodised, ...10 silver anodised

INFORMATION MODULE / DUMMY MODULE

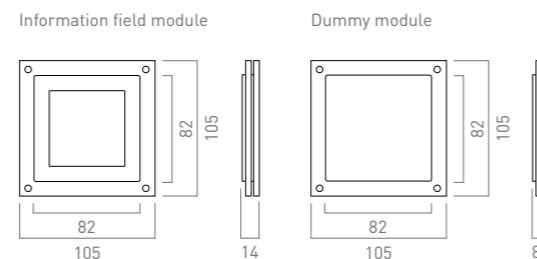


System and installation functions

Information field module	backlit with LED (white)
Dummy module	for filling a module cut-out

Housing | installation | extended functions

Type of installation	front-flush flush-mount behind 3 mm or 1.5 mm up to 2.5 mm front panels (with attached spacer plates)
Material and colour Information field module	plastics, transparent and black
Material and colour dummy module	plastics, black



	Item no.
Information field module	AMI11300-0000
Dummy module	AMI11000-0080

KEYBOARD MODULE / JOG WHEEL MODULE



System and installation functions

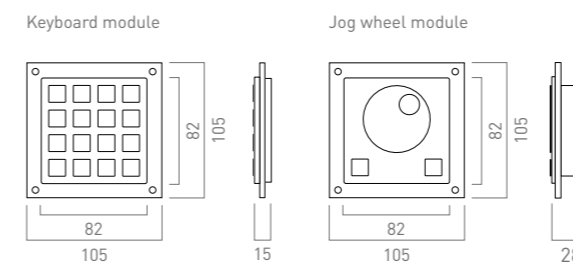
Keyboard module	selection destination calls, input of apartment number or numeric codes
Jog wheel module	selection call destinations

Triggering functions

Call destination	with display module LCD graphics
Operation Input	on 16 keys on jog wheel and keys
Code lock funktion (only keyboard module)	with up to 3 numeric codes

Extended functions

Combinable with	display module LCD graphics and loud speaker module required
-----------------	--



	Item no.
Keyboard module	AMI110300-00...
Jog wheel module	AMI110410-00...

Decor designs: ...57 black anodised, ...10 silver anodised

COMBINATION OF MODULES LC DISPLAY AND LOUDSPEAKER MODULE



System and installation functions

Max. amount call destinations	1.000
Operation Input	key board module jog wheel module

Ports on loud speaker module

Integrated microphone	yes
Port (for PC keyboard)	PS/2

Triggering functions

Door call	on keyboard or jog wheel module
-----------	---------------------------------

Displays

Display type and size	graphical LCD (160x160 pixels)
Call destination	resident list in alphabetical order

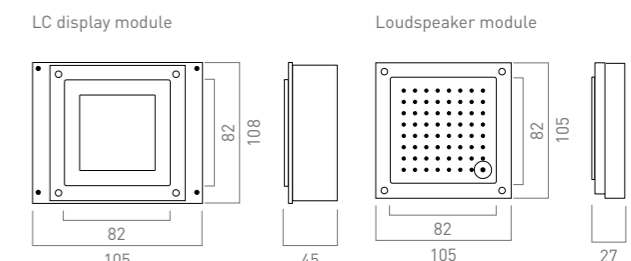
Quick selection (with keyboard module)	input of apartment number
Date and time (outside temperature)	yes (optional)
Start screen	can be configured individually

Selection | settings

Multilingual operating guidance	D, GB, F, DK, NL, TR, SRB, I, ES, P and many more
---------------------------------	---

Note

The camera module must not be exposed to the direct sunlight or aimed at it! The key switch module is only approved for safety extra low voltage (SELV) and protective extra low voltage (PELV).



	Item no.
LC display and loudspeaker module	AMI110105-07...



OPEN FOR YOUR OWN IDEAS
WITH TCS:INDIVIDUAL

An individual character makes the difference. Therefore, demanding architects, private house builders and building operators attach special importance to a unique door communication system. TCS:Individual offers almost unlimited options for the entrance design – regarding size, material, colour and labelling.

This is a huge benefit for you as an electrician as you can fulfil the individual demands of your customers. TCS produces custom-made front-door stations and also single ones. Thus, you always have the right solution for any customer. With TCS:Individual shapes, colours and functions can be selected custom-tailored to the relevant object.

Of course, gravures of names, street names, house numbers and company signets can be created. No matter what, all custom-made products have the same excellent quality. TCS only uses refined metal surfaces with maximum precision. This ensures durability as well as a perfect design.

You can find a check list and the TCS:Individual brochure at www.tcsag.de. Please contact our hotline to get your individual offer.

+49 4194 9881-166
offer@tcsag.de



MATERIALS

You can choose between stainless steel, aluminium, brass and bronze. In terms of colour, materials can be fitted to the architecture or your corporate identity according to the RAL standard.

Available for front-door stations in the series PAK, PES, PUK, KTU, AVE, AVU und AMI.



REFINEMENT

Coatings like anodised aluminium, powder or PVD as well as brushed or sand-blasted textures can be used. Gravures, laser cut, milling gravure, foil plotting or screen printing can be used to create fonts, signs and signets.

Available for front-door stations of the series PAK, KTU, AVU, AMI.



KEY LAYOUT

The dimensions of the front panel or posts can be selected freely and the keyboard layout can be determined accordingly.

Available for front-door stations of the series PAK, PES, PUK, KTU, AVE, AVU.



ADDITIONAL FUNCTIONS

Functions can be added according to your individual preference. From access control and illumination to special buttons.

Available for front-door stations of the series PUK, KTU, AVU.



INSTALLATIONS

Whether in posts or free-standing letterboxes - TCS:INDIVIDUAL offers the right solution for every structural condition.

Carus

The Art of Communication

The brand Carus offers you selected products with an individual design and a clear form language, made of solid aluminium. It is added by distinctive surfaces with hand-made grinding and elaborate finishing. The door communication systems of the Carus program are compatible with the TCS technique.



You can find the entire range of CARUS products, all variants and colours, article numbers and prices at www.carus-concepts.com.

CARUS TCS'S LUXURY MANUFACTURER

IRIS



Audio/video front-door stations in TCS:BUS technology Carus-IRIS – this is durable quality, manufactured from the most modern materials and unique design. Available in anodised silver or anodised black. Additional features are a 180° camera and illuminated bell buttons. New is also a design for TCS AMI modules.



ADAPTO



Audio/video indoor stations in TCS:BUS technology Carus ADAPTO is available as a table or wall device. It offers a solid housing and keys as well as high resolution 3.5 inch displays and up to 20 function keys for calling, switching and controlling.



ORIGO



Compact video indoor stations with TCS:BUS technology The device offers various comfort functions, in solid housings. Available as a table and wall station.

ARGOS



IP front-door station with special features:

- > Intuitive operation of 5.7 inch touchscreen
- > Voice transmission via the SIP protocol
- > Integrated RFID reader with MIFARE® technology
- > Code lock via keypad

TAVOLA



SIP phone with a variety of features and an integrated door communication system. Additional features:

- > 10.1 inch touchscreen
- > Operating system: Android 4.2
- > Cordless DECT handset for mobile communication

SIGNA



Carus labels for house numbers and pictograms in 200 x 200 mm and 200 x 300 mm.

CAELA



Module technology in Carus design with integrated weather instrument (hygrometer, thermometer, barometer), clocks and a combination of instruments.



Intuitive operation

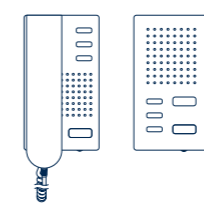
Comfort functions

Functionally extendable

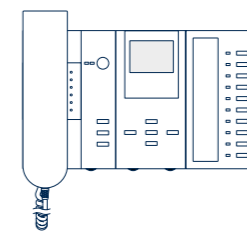
Modern design

Excellent audio quality

INDOOR STATIONS



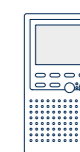
DOOR PHONE,
INDOOR STATION
FOR HANDS-FREE
TALKING
P. 66



SERIES IMM
P. 68



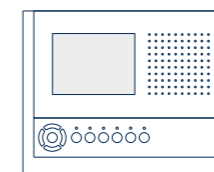
VIDEO
DOOR PHONE
P. 70



ECOOS
P. 72



SKY
P. 74



SKYLINE
P. 76



SKYLINE:TEN BASIC
P. 78

LANGUAGE TALENTS DOOR PHONE | INDOOR STATION FOR HANDS-FREE TALKING

Two friendly hosts which are an enjoyable experience for your eyes, ears and fingers. Both indoor stations have ergonomically formed buttons. All functions can be distinguished intuitively. A magnetic handset holder makes it easier to hang up a door phone. Built-in call relays and radio transmitter board of the radio signal unit can easily be integrated.



p. 140
 p. 88



- Selective opening of front door and floor door
- Automatic door release for practices
- Internal call of indoor stations to indoor stations
- Call diversion to second station
- 13 ring tones
- Ring tone volume adjustable up to 90 decibel.
- Adjustable conversation volume
- Call distinction between front-door, flat-door and internal calls
- Extendable with additional signalling information

FUNCTIONS AND EXTENDED FUNCTIONS



Magnetic handset holder
A magnetic handset holder makes it easier to hang up a door phone.



Cover cap
White plastic panel – the right foundation in case of renovation. In addition to the series in the spare parts list. > p. 144



Combined volume control
Adjustable conversation volume with 8 levels. Ring tone volume adjustable up to 90 decibel.



Installation slots for extended functions
1) for call relay TRE1-EB in order to call signal units provided by customer
2) for radio transmitter board of the radio signal unit FFL2000-0 in order to use the TCS radio gong



COMFORT FUNCTIONS

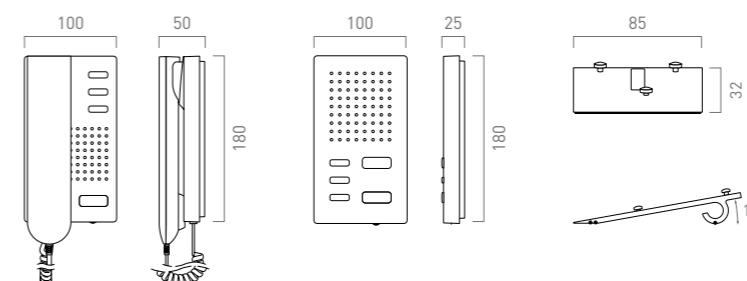
Call diversion
For diverting a door call to a second indoor station of the system. The function key of the indoor station activates a call diversion.

Floor door release function
For opening a main entrance door as well as a floor door with the door release button. The indoor station selects the door to be opened depending on the origin of the door call.

Automatic door release
For an automatic opening of the front-door following a door call. The function key of the indoor station is manually activated for this function. It is easier for visitors especially in practices and offices to enter the building during business hours.

Internal call
For the communication between two indoor stations in a TCS system. The function key of the indoor station triggers the internal call.
Functions can be configured with configo and service device.

DIMENSIONS (IN MM)



COLOUR



INDOOR STATION FOR DUPLEX COMMUNICATION OR HANDS-FREE TALKING

	HxWxD in mm	Item no.
Door phone, standard functions	180 x 100 x 50	ISH3030-0140
Indoor station for hands-free talking, standard functions	180 x 100 x 50	ISW3030-0140
Door phone, comfort functions	180 x 100 x 50	ISH3130-0140
Indoor station for hands-free talking, comfort functions	180 x 100 x 50	ISW3130-0140

ACCESSORY	HxWxD in mm	Item no.
Desktop accessory (aluminium, natural)*	168 x 86 x 27	ZIT3030-0010

* connecting cable with a length of 3 m and RJ45 connecting plug

THE INDOOR STATION AS A COMMUNICATION CENTRE

SERIES IMM

On-service call and style. Whether for hands-free talking, using a handset or via video – the series IMM provides convenient functions like an automatic door release or multiple internal call destinations which can be selected via comfort keys. The extended version of the device is a perfect communication centre for practices and offices.



 p. 140

Optional with single and dual comfort key pad

Up to 21 internal call destinations

Specific calls from the front-door stations

Light switch

Duplex communication or hands-free talking

Optional with 6.0 cm (2.4") TFT colour display

Central image buffer (FVM1000) usable in basic module

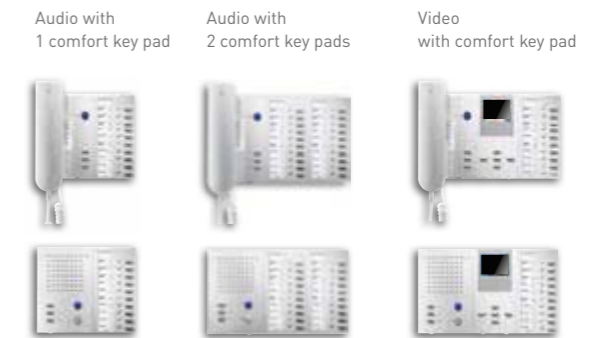
Camera control via keys with PTZ cameras

White or silver

COLOURS



VARIANTS

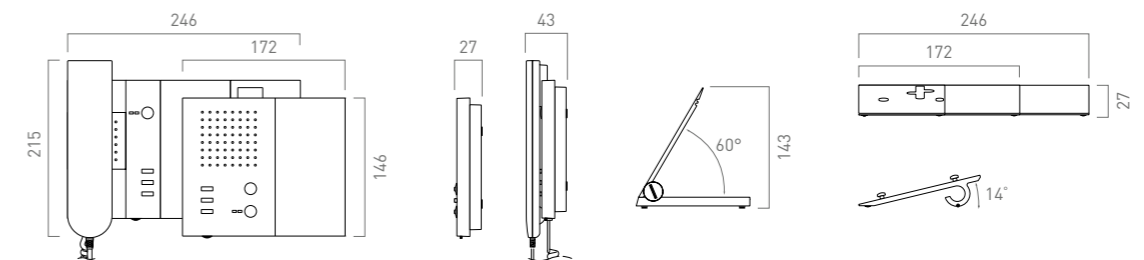


ACCESSORY



IMM2310-0140 for desktop accessory video IMM1100-0140 for desktop accessory audio

DIMENSIONS (IN MM)



[VIDEO] INDOOR STATIONS FOR DUPLEX COMMUNICATION OR HANDS-FREE TALKING

	HxWxD in mm	Item no.
Phone, 1 comfort key pad	215 x 172 x 43	IMM1100-0140
Indoor station for hands-free talking, 1 comfort key pad	146 x 172 x 27	IMM2100-0140
Phone, 2 comfort key pads	215 x 246 x 43	IMM1110-0140
Indoor station for hands-free talking, 2 comfort key pads	146 x 246 x 27	IMM2110-0140
Video phone, comfort key pad	215 x 246 x 43	IMM1310-014..
Video indoor stat. for hands-free talking, comfort key pad	146 x 246 x 27	IMM2310-0140

-0 finish in white plastics, -4 finish in silver plastics

ACCESSORY

	HxWxD in mm	Item no.
Desktop accessory audio, 2-columned, alum. anodised natural*	128 x 95 x 27	ZIT1301-0010
Desktop accessory audio, 3-columned, alum. anodised natural*	128 x 166 x 27	ZIT1302-0010
Desktop accessory video, 3-columned, alum. anodised black**	128 x 240 x 27	ZIT1312-0016

* connecting cable with a length of 3 m and RJ45 connecting plug
 ** connecting cable with a length of 2.5 m and RJ45 connecting plug

A SIMPLY SECURE VIDEO DOOR COMMUNICATION VIDEO DOOR PHONE

NEW

Seeing who is coming. The video door phone with basic functions provides you with a new level of security and more quality of living at an excellent price. The new standard product for secure living.

p. 140

p. 86



8.9 cm (3.5") digital display

Simple basic functionality

For a discreet duplex communication

Ring tone mute

Intuitive operation

With function key

COLOUR



FUNCTIONS



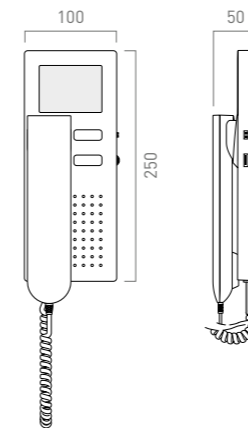
Volume control

The ring tone volume can be controlled continuously. It can be adjusted at the jog wheel on the side of the station at any time.

Function key

For individual programming with a switching or control function (image activation = factory setting, light switch, calling the communication centre).

DIMENSIONS (IN MM)



VIDEO INDOOR STATION

HxWxD in mm

Item no.

Video door phone

100 x 250 x 50

IVH3222-0140

The quality of the video image of installed units may deviate from the quality of the video image in the picture.

MORE THAN JUST A WINDOW FOR THE DOOR

ECOOS

Looking at your visitors first provides security. Therefore, ecoos – the video indoor station for hands-free talking – is equipped with a digital display. You can adjust the ring tone, ring tone volume as well as colour, brightness and contrast of the display via the screen. You can also retrieve images from multiple cameras.

 p. 140

 p. 90



8.9 cm (3.5") digital display

On-screen display for convenient operation

Central image buffer (FVM1000) usable in comfort mode

Receipt of TCS:BUS text messages

Surface-mount

Optional desktop accessory for setup

COLOUR



white

FUNCTIONS AND EXTENDED FUNCTIONS

Receipt of text messages

For the receipt of centrally sent text messages. Display in OSC menu. Unread messages are displayed separately.

Image storage

New recordings are displayed via a green LED. The recording contains a date and time stamp. In case of an incoming door call single images or an image series can be stored automatically. The recording function can be (de)activated. > p. 114

Sub-door calls

At the indoor station up to 4 bell buttons of the front-door station can trigger 4 different ring tones. If the bell buttons are labelled accordingly the resident can hear who is called by the triggered ring tone.

Adjusting audio and video parameters

The ring tone volume and the ring tone itself are selected in the icon menu of the display in stand-by mode. In case of an activated video image brightness, contrast and saturation can be adjusted in 8 levels.

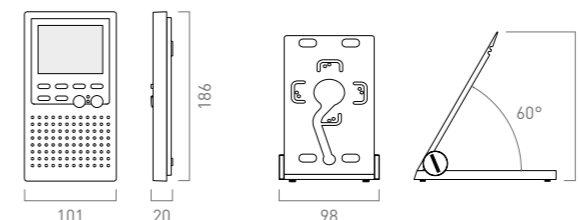


ACCESSORY



ecoos on desktop accessory

DIMENSIONS (IN MM)



VIDEO INDOOR STATION	HxWxD in mm	Item no.
ecoos	186 x 101 x 20	IWW2211-0140

ACCESSORY	HxWxD in mm	Item no.
Desktop accessory (aluminium, anodised black)	143 x 98 x 140	ZIT1700-0016

The quality of the video image of installed units may deviate from the quality of the video image in the picture.

TIMELESS ELEGANCE WITH VARIABLE APPEARANCE SKY

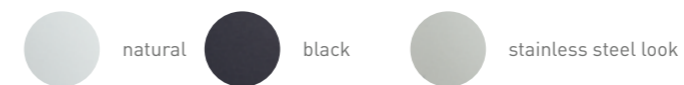
Timeless in every aspect. The video indoor station sky presents door communication at its most attractive side. It combines black high-gloss acrylic glass with anodised aluminium. With the on-screen display you can adjust tone and image in a very user-friendly way. Optionally the unit with desktop accessory is available for setup.



p. 140

- 8.9 cm (3.5") digital display
- 10 switching functions and 10 call destinations
- Receipt of TCS-BUS text messages
- Polyphonic ring tones
- Aluminium anodised natural, stainless steel look or black
- Central image buffer (FVM1000) usable in comfort mode
- Surface-mount on flush-mount box
- Optional desktop accessory for setup

COLOURS



FUNCTIONS AND EXTENDED FUNCTIONS

Receipt of text messages

For the receipt of centrally sent text messages. Display in OSC menu. Unread message are displayed separately.

Image storage

New recordings are displayed via a green LED. The recording contains a date and time stamp. In case of an incoming door call single images or an image series can be stored automatically. The recording function can be (de)activated. > p. 114

10 switching functions and 10 call destinations

In the OSD menu up to 10 switching functions for the light and the door drive are triggered. The switching states (ON/OFF) are indicated by a particular colour. Additional 10 internal call destinations can be saved for hobby room, attic storey or garage.

Sub-door calls

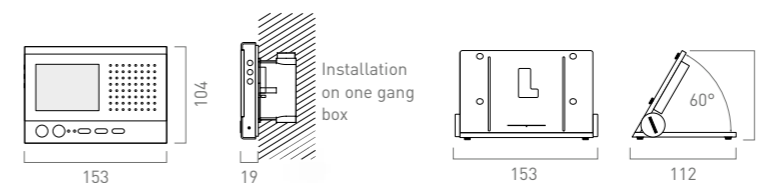
Up to 4 bell buttons of the front-door station can trigger 4 different ring tones on the indoor station. If the bell buttons are labelled accordingly the resident can hear who is called by the triggered ring tone.

ACCESSORY



sky on desktop accessory

DIMENSIONS (IN MM)



VIDEO INDOOR STATIONS

	HxWxD in mm	Item no.
sky [aluminium, anodised natural]	104 x 153 x 19	IWW2221-0153
sky [aluminium, anodised black]	104 x 153 x 19	IWW2221-0155
sky [aluminium, anodised stainless steel look]	104 x 153 x 19	IWW2221-0160

ACCESSORY

	HxWxD in mm	Item no.
Desktop accessory [aluminium, anodised black]	96 x 153 x 112	ZIT1800-0016

A DISPLAY IS WORTH A THOUSAND WORDS SKYLINE

Excellence in design and function. Tone and image can be adjusted in a user-friendly way on the on-screen display. With the help of the communication centre with up to ten switching functions the light and garage door can be switched or controlled as well. Ten internal call destinations – for example for basement or attic storey – can be assigned freely.



14.5 cm (5.7") digital display

10 switching functions and 10 call destinations

Receipt of TCS:BUS text messages

Polyphonic ring tones

Aluminium natural and black anodised

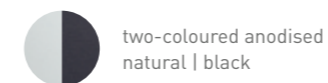
Image provided with date and time stamp

Central image buffer (FVM1000) usable in comfort mode

Angles and zoom can be controlled with an appropriate camera

Surface-mount and flush-mount

COLOURS



VARIANTS



skyline for flush-mount

skyline for surface-mount

COMFORT FUNCTIONS

Receipt of text messages

For the receipt of centrally sent text messages. Display in OSC menu. Unread message are displayed separately.

Image storage

New recordings are displayed via a green LED. The recording contains a date and time stamp. In case of an incoming door call single images or an image series can be saved automatically. The recording function can be (de)activated. > p.114

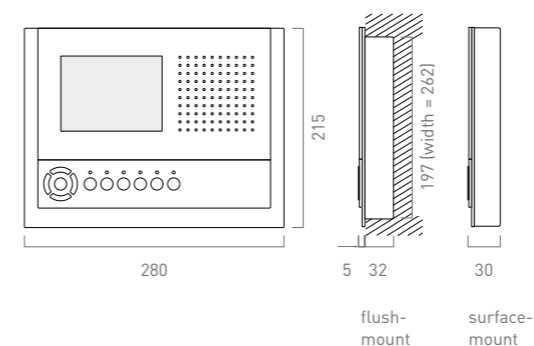
10 switching functions and 10 call destinations

In the OSD menu up to 10 switching functions for light and door operator are triggered. The switching states (ON/OFF) are indicated by a particular colour. Additional 10 internal call destinations can be saved for hobby room, attic storey or garage.

Camera control

A prerequisite for the image zoom is the connection of a zoomable video camera. When connecting a PTZ camera (pan-tilt-zoom) the image cut-out which is visible on the display can be modified through horizontal swivelling and vertical inclining as well as through zooming. Due to the enlarged detection area multiple building sides can be monitored by video with only one camera.

DIMENSIONS (IN MM)



VIDEO INDOOR STATIONS

HxWxD in mm

Item no.

skyline, for surface-mount	215 x 280 x 30	IWW3012-0110
skyline, for flush-mount	215 x 280 x 5 (+32 flush-mount)	IWW3012-0210

SURE INSTINCT FOR VISITORS SKYLINE:TEN BASIC

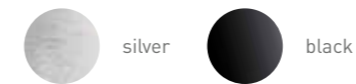
The sense of touch is satisfied as the 10.1" touch display of this indoor station allows an intuitive control – similar to a tablet or a smartphone. Furthermore, it has over four shortcut keys and easy-to-understand icons. Tone, photos and videos can be saved on an integrated SD card. A personal gallery in standby mode converts the display into a digital picture frame.



- Touch display with of 25.6 cm (10.1") diagonal
- Resolution 1280 x 800 pixel
- Intuitive operation
- 4 shortcut keys
- Integrated SD card for storing tone, photo and video
- Receipt of TCS:BUS text messages
- Gallery display in standby mode
- Weather display

p. 140

COLOURS



OPERATING SURFACE



Variable arrangement of the following function keys: specific camera selection, ring tone stopper, call diversion, door release, communication centre ON, communication centre OFF, 20 internal calls, automatic door release, light switch function, elevator release. 20 additional switching functions can be configured individually (garage door operator, door operator, outside light ...).

FUNCTIONAL SCOPE

Receipt of text messages

For the receipt of centrally sent text messages. Unread message are displayed separately.

Up to 20 switching functions adjustable

Triggering of 20 commands (door operator, garage door operator, outside light).

Up to 20 internal calls adjustable

20 internal calls can be saved (hobby room, attic storey, garage ...).

Internal image and video memory storage

Manually and after door call. Maximum 500 images or 50 video sequences with a maximum length of 10 seconds.

24 different ring tones

13 ISH/ISW ring tones, 11 music ring tones, individual ring tones (mp3).

PTZ function

Facilitates the video monitoring of multiple building sides with only one PTZ camera.

Gallery display

Slideshow with files from SD card. Individual background music (mp3).

Comfort

Time display, location-based weather display, calendar, app favourites.

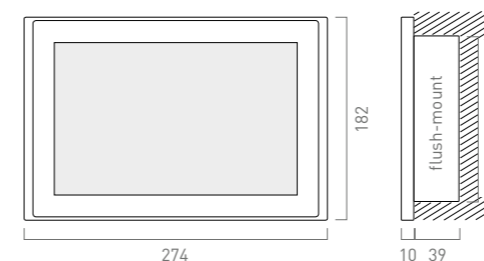
Phone book

For 20 indoor stations and 20 front-door stations

Proximity sensor

Display is activated in case of proximity.

DIMENSIONS (IN MM)



VIDEO INDOOR STATIONS

HxWxD in mm

Item no.

skyline:ten BASIC (aluminium, anodised silver)	182x274x10 (+39 flush-mount)	IWW9010-0261
skyline:ten BASIC (aluminium, anodised black)	182x274x10 (+39 flush-mount)	IWW9010-0262

SETTING SIGNS WITH SIGNAGE



NEW

The pictogram family Signage offers everything you need for upscale labelling in a building: modern graphics, a generous format and authentic material. With our signage service you are also able to use our product Signage for putting your own ideas into practice.



A modern sign system

Holders made of 3 mm stainless steel with vertical grinding

Can be used for your own content

Extra flat surface-mount



www.tcsag.de

SIGNAGE FOR HYGENIC AREAS



Pictogram holder
bath room man/woman
PT01MF-ES

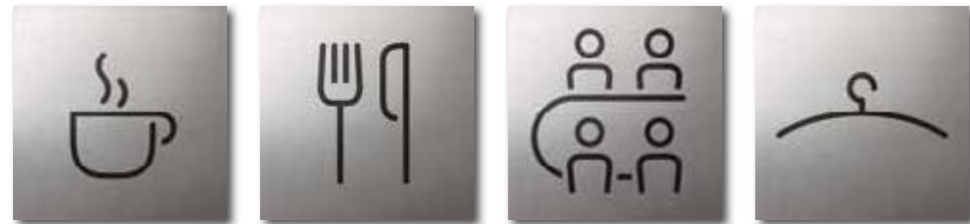
Pictogram holder
bath room man
PT01M-ES

Pictogram holder
bath room woman
PT01F-ES

Pictogram holder
diaper changing table
PT02-ES

Pictogram holder
wheel chair
PT03-ES

SIGNAGE FOR GASTRONOMY & HOTEL BUSINESSES



Pictogram holder
cafe
PT04-ES

Pictogram holder
restaurant
PT05-ES

Pictogram holder
conference
PT06-ES

Pictogram holder
wardrobe
PT07-ES



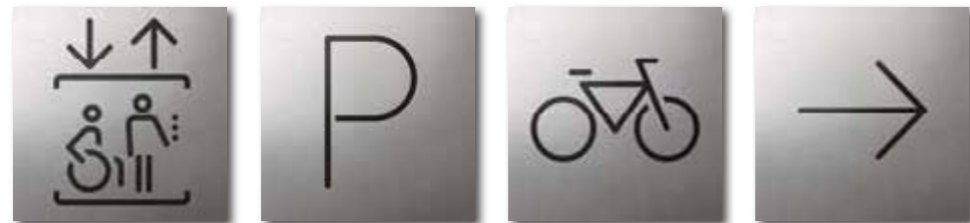
Pictogram holder
information
PT08-ES

Pictogram holder
smoking area
PT09-ES

Pictogram holder
ban on smoking
PT10-ES

Pictogram holder
laundry
PT14-ES

SIGNAGE FOR TRAFFIC AND DIRECTION INDICATION



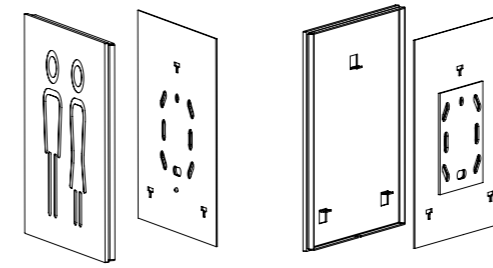
Pictogram holder
elevator
PT11-ES

Pictogram holder
parking
PT12-ES

Pictogram holder
bike room
PT13-ES

Pictogram holder
arrow left PT15L-ES
arrow right PT15R-ES
arrow up PT15U-ES
arrow below PT15D-ES

INSTALLATION



The pictogram holder is installed on a mounting plate which was mounted on the wall and adjusted beforehand.

Due to a rear suspension the pictogram holder can be placed and positioned precisely on the mounting plate. Subject to technical changes.

PICTOGRAM HOLDER

MADE OF STAINLESS STEEL FOR SURFACE-MOUNT

HxWxD in mm

Item no.

Pictogram holder with motive

180 x 180 x 10

PT... -ES

Graduated prices upon request.

EMPTY HOLDER

FOR INDIVIDUAL GRAVURES AND CUTS

HxWxD in mm

Item no.

Pictogram holder without motive

180 x 180 x 10

PT00-ES

Basis for a signage service with provided motive.

SIGNAGE SERVICES

FOR INDIVIDUAL SIGNAGE

Item no.

Gravure service

Gravure on a pictogram holder made of provided processable vector graphics in file format .ai, .cdr, or .dxf

BLS001

Foliation service

Coloured pasting film on a pictogram holder in the colour spectrum Oracal Exhibition Cal 631, cut from a provided processable vector graphics in file format .ai, .cdr or .dxf.

FBK001

Individual dimensions

The pictogram holder can be produced also according to individual dimensions. You can choose from stainless steel or other materials. For detailed information about the selection please refer to www.tcsag.de/design/dekore.



Ready to go

Variable

Extendable

Cost-conscious

Preconfigured

SETS + PACKS

ONE- AND TWO-FAMILY HOME

eco:sets video	86
home:packs audio	88
home:packs video	90

MULTI-FAMILY HOME

pre:packs audio	92
pre:packs video	94

CONFIGURATION SERVICE

configo:pack	96
--------------	----


ACCESS CONTROL

code:pack	98
cylinder knob:pack	99

COST-CONSCIOUS COMFORT


ECO:SETS VIDEO

1x FRONT-DOOR STATION




Video front-door station for surface-mount series AVC
> p. 34

1-2x INDOOR STATION




Video door phone for surface-mount IVH3222-0140
> p. 70

OR



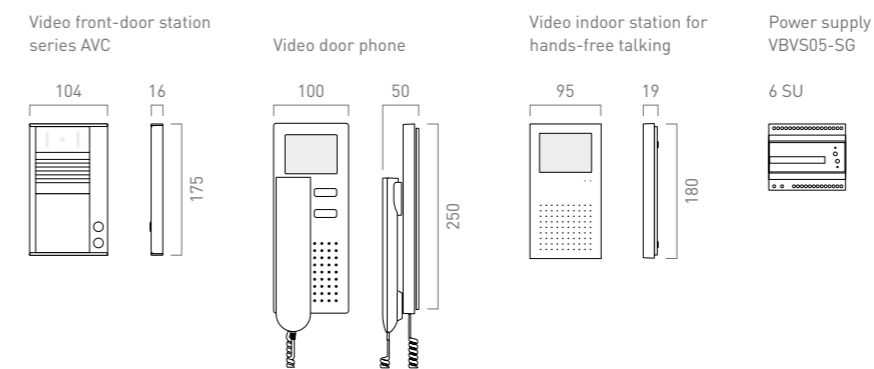
Video indoor station for hands-free talking for surface-mount



1x CONTROL UNIT

Power supply VBVS05-SG
> p. 105

DIMENSIONS (IN MM)



Note

Please include a video distributor in case of star-shaped wiring. Up to two video distributors can be supplied additionally.

Entry with a great outlook. The new eco:sets contain a complete video door communication for modern homes. This includes a solid front-door station and an indoor station with digital display – optionally with handset or with touch field and for hands-free talking. All systems are preconfigured for easy installation and initial operation.

Preconfigured video door communication systems

For duplex communication or hands-free talking with basic functions

Video indoor stations with 8.9cm (3.5") digital display

Video front-door stations for surface-mount

Expandable to a certain extend with additional components



VIDEO FRONT-DOOR STATIONS (SURFACE-MOUNT) SERIES AVC

		Item no.
With video door phone	one-family home	PVC1410-0010
	two-family home	PVC1420-0010
With indoor station for hands-free talking	one-family home	PVC1310-0010
	two-family home	PVC1320-0010

READY TO SPEAK HOME:PACKS AUDIO

1x FRONT-DOOR STATION



OR

OR



Front-door station for surface-mount, series PAK
> p. 18



Front-door station for flush-mount, series PUK
> p. 24



Built-in door loudspeaker series TCU
> p. 32

1-2x INDOOR STATION



OR



Door phone for surface-mount ISH3130-0140
> p. 66



Indoor station for hands-free talking for surface-mount ISW3130-0140
> p. 66

1x CONTROL UNIT

Power supply BVS20-SG > p. 104

Two in one sounds perfect. The home:packs audio for a one-family home contain a front-door station and an indoor station. They are also suitable for offices or practices and can be extended by a radio gong or radio bell. Optionally, there is a front-door station for surface-mount, flush-mount or built-in installation. All systems are preconfigured for easy installation and initial operation.

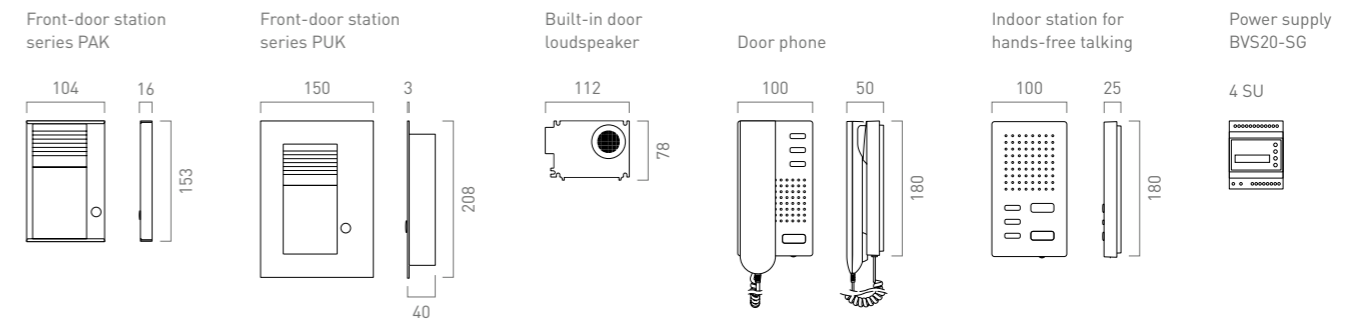
For your own home




Preconfigured door communication systems

Front-door station for all types of installation

For duplex communication or hands-free talking

DIMENSIONS (IN MM)



	Item no. with door phone	Item no. with hands-free talking device
 AUDIO FRONT-DOOR STATION (SURFACE-MOUNT), SERIES PAK	one-family home	PSC2110-0000 PSC2210-0000
	two-family home	PSC2120-0000 PSC2220-0000
 AUDIO FRONT-DOOR STATION (SURFACE-MOUNT), SERIES PUK	one-family home	PSU2110-0000 PSU2210-0000
	two-family home	PSU2120-0000 PSU2220-0000
 BUILT-IN DOOR LOUDSPEAKER	one-family home	PSI2110-0000 PSI2210-0000
	two-family home	PSI2120-0000 PSI2220-0000

READY TO SEE AND SPEAK HOME:PACKS VIDEO

1x FRONT-DOOR STATION

OR

Video front-door station for surface-mount series AVE

> p. 36

Video front-door station for surface-mount series AVU

> p. 40

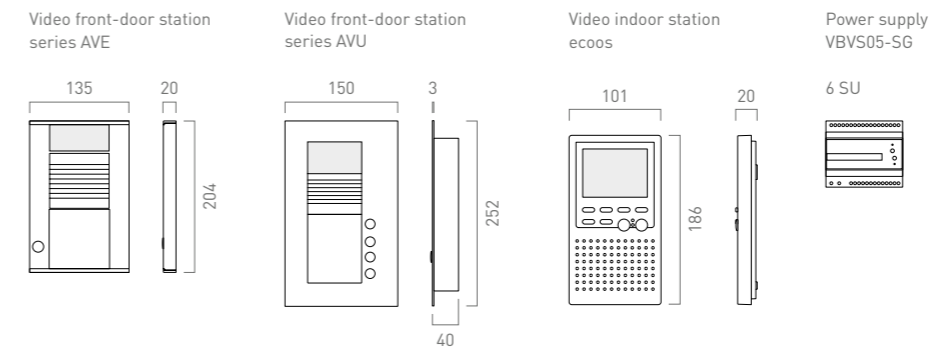
1-2x INDOOR STATION

ecoos

> p. 72

1x CONTROL UNIT Power supply VBVS05-SG > p. 105

DIMENSIONS (IN MM)



Note

Please include a video distributor in case of star-shaped wiring. Up to two video distributors can be supplied additionally.

Everything at a glance. The home:packs video contain a front-door station with camera and an indoor station with digital display. They are ideally suitable for own homes, offices or practices - and can be extended by radio gong or radio bell. Optionally there is a front-door station for surface-mount and flush-mount. All systems are preconfigured for easy installation and initial operation.

For your own home

Preconfigured video door communication systems

Front-door stations for surface-mount and flush-mount

Video indoor station with 8.9cm (3.5") digital display

For hands-free talking



VIDEO FRONT-DOOR STATION (SURFACE-MOUNT), SERIES AVE

	Item no.
one-family home	PVE1410-0010
two-family home	PVE1420-0010



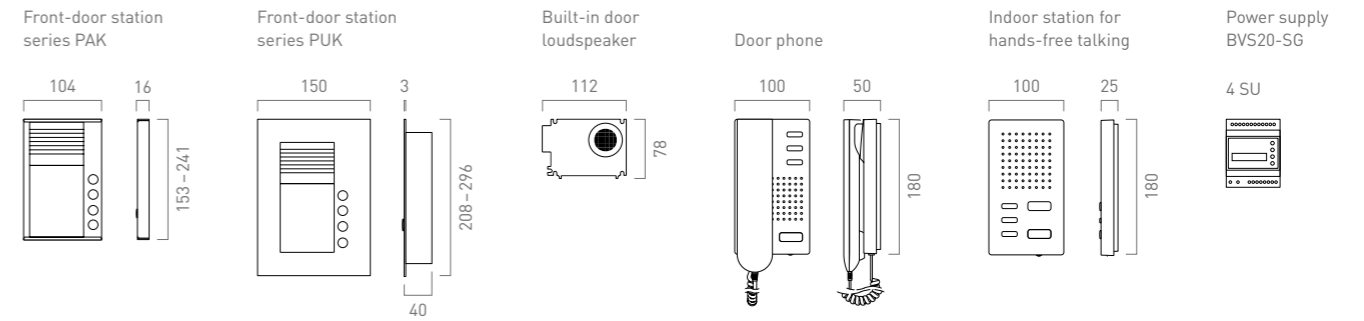
VIDEO FRONT-DOOR STATION (FLUSH-MOUNT), SERIES AVU

	Item no.
one-family home	PVU1410-0010
two-family home	PVU1420-0010

SIMPLICITY IS ALWAYS THE RIGHT CHOICE

PRE:PACKS AUDIO

DIMENSIONS (IN MM)



1x FRONT-DOOR STATION



Front-door station for surface-mount, series PAK > p. 18

OR

Front-door station for flush-mount, series PUK > p. 24

OR

Built-in door loudspeaker series TCU > p. 32

3-8x INDOOR STATION



Door phone for surface-mount ISH3030-0140 > p. 66

OR

Indoor station for hands-free talking for surface-mount ISW3030-0140 > p. 66

1x CONTROL UNIT

Power supply BVS20-SG > p. 104

Preconfigured video door communication systems

For 3 to 8 flats front-door station

Front-door station for all types of installation

Indoor stations for duplex communication or with hands-free talking

Not too much and not too little. The pre:packs audio are complete door communication systems for multi-family homes. Thanks to a reduction to the most important functions the operation is easy to understand. Optionally there is a front-door station for surface-mount, flush-mount or built-in installation. All systems are pre-configured for easy mounting and initial operation.



AUDIO FRONT-DOOR STATION (SURFACE-MOUNT), SERIES PAK

	Item no. with door phone	Item no. with hands-free talking device
3 flats	PPA03-EN/02	PPAF03-EN/02
4 flats	PPA04-EN/02	PPAF04-EN/02
5 flats	PPA05-EN/02	PPAF05-EN/02
6 flats	PPA06-EN/02	PPAF06-EN/02
7 flats	PPA07-EN/02	PPAF07-EN/02
8 flats	PPA08-EN/02	PPAF08-EN/02



AUDIO FRONT-DOOR STATION (SURFACE-MOUNT), SERIES PUK

	Item no. with door phone	Item no. with hands-free talking device
3 flats	PPU03-EN/02	PPUF03-EN/02
4 flats	PPU04-EN/02	PPUF04-EN/02
5 flats	PPU05-EN/02	PPUF05-EN/02
6 flats	PPU06-EN/02	PPUF06-EN/02
7 flats	PPU07-EN/02	PPUF07-EN/02
8 flats	PPU08-EN/02	PPUF08-EN/02



BUILT-IN DOOR LOUDSPEAKER

	Item no. with door phone	Item no. with hands-free talking device
3 flats	PPI03	PPIF03
4 flats	PPI04	PPIF04
5 flats	PPI05	PPIF05
6 flats	PPI06	PPIF06
7 flats	PPI07	PPIF07
8 flats	PPI08	PPIF08

SEEING WHAT IS ESSENTIAL PRE:PACKS VIDEO

NEW

1x FRONT-DOOR STATION

OR

Video front-door station for surface-mount series AVE > p. 36

Video front-door station for surface-mount series AVU > p. 40

3-8x INDOOR STATION

OR

Video door phone for surface-mount IVH3222-0140 > p. 70

Video indoor station for hands-free talking for surface-mount > p. 70

1x CONTROL UNIT Power supply VBVS05-SG > p. 105

Simply everything and everything simple. The pre:packs audio are complete door communication systems for multi-family homes. Thanks to front-door stations with cameras and indoor stations with digital displays they provide additional security. Optionally, they can include a front-door station for surface-mount and flush-mount. All systems are preconfigured for easy installation and initial operation.

Preconfigured video door communication systems

For 3 to 8 flats

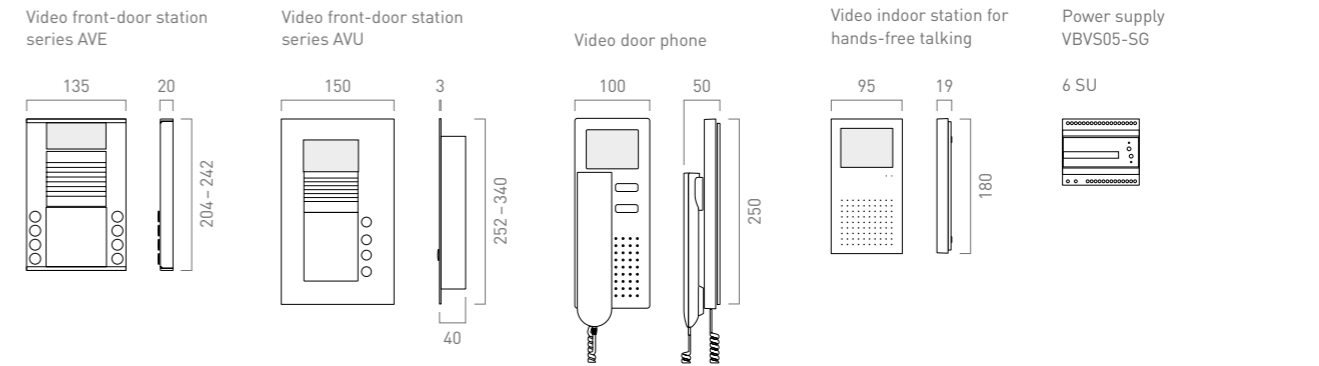
Video indoor station with 8.9cm [3.5"] Digital display

Front-door station for surface-mount or flush-mount

For duplex communication or hands-free talking

Up to two video distributors can be supplied additionally

DIMENSIONS (IN MM)



Note

Please include a video distributor in case of star-shaped wiring. Up to two video distributors can be supplied additionally.



VIDEO FRONT-DOOR STATION (SURFACE-MOUNT), SERIES AVE

	Item no. with video door phone	Item no. with hands-free talking device
3 flats	PVE1530-0010	PVE1630-0010
4 flats	PVE1540-0010	PVE1640-0010
5 flats	PVE1550-0010	PVE1650-0010
6 flats	PVE1560-0010	PVE1660-0010
7 flats	PVE1570-0010	PVE1670-0010
8 flats	PVE1580-0010	PVE1680-0010



VIDEO FRONT-DOOR STATION (FLUSH-MOUNT), SERIES AVU

	Item no. with video door phone	Item no. with hands-free talking device
3 flats	PVU1630-0010	PVU1730-0010
4 flats	PVU1640-0010	PVU1740-0010
5 flats	PVU1650-0010	PVU1750-0010
6 flats	PVU1660-0010	PVU1760-0010
7 flats	PVU1670-0010	PVU1770-0010
8 flats	PVU1680-0010	PVU1780-0010

SAVING VALUABLE WORKING TIME CONFIGO:PACK

Just connect everything and it works immediately – thanks to configo:packs. TCS handles the complete configuration of systems for you according to individual requirements. Thus, only a single person can perform the implementation even without experience in BUS technology. The configuration file for the installation is available upon request. Thus, it can be modified and adjusted later.

The quick and easy way to a perfectly configured system

The factory-provided configuration service configo:pack allows the installer to easily and quickly install the TCS system. The bell button assignment on the front-door station is configured with any indoor station according to specifications provided by the installer. He is taking care of the installation on-site, connects the line, and the system works right away. An installation without any timing risk by only a single person, no experience in BUS technology required.



Simply using configo:pack

- 1 The staff of our technical service hotline will need information of the planned project in order to make you an adequate offer. Our hotline is reachable Monday to Friday from 8 a.m. to 5 p.m. under **+49 4194 9881-166**. The TCS sales representatives or the commercial agencies in the relevant region support the installer upon request. The configo:pack planning form is available on the internet.
- 2 The installer will receive an offer via email including the configuration number/order number.
- 3 The items will be ordered via the electrical wholesales trade, configured by TCS and sent to the installer.

The system documentation will be created via a programming table which is part of the scope of delivery. TCS will deliver the configuration file for the installation upon request. Thus, the installer will always be able to modify and adjust the system later.

Planning form

Download and complete the planning form at tcsag.de/download



Send planning form via email or fax to TCS. TCS will send you back an offer including the configuration number.

Fax **+49 4194 9881-199**

Email **offer@tcsag.de**

Preconfigured BUS technology

Saves time

No experience in BUS technology required for installation

Price per bell button

Including system documentation as a programming table

With configuration files upon request for later modifications

Optional TCS wiring plan service

* Except for display front-door stations

MORE SECURITY ON LESS SPACE CODE:PACK

OPENENING WITH TRANSPONDER CARDS CYLINDER KNOB:PACK

1x CODE LOCK



Code lock
AZF50000-0010
[code lock I2]

> p. 46

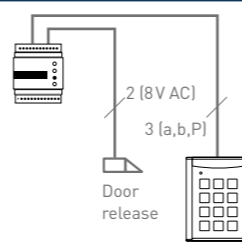
1x CONTROL UNIT

Power supply NBV2001-0400




Installation

The cheapest package contains a small stand-alone system for access control. Due to additionally available products the code:pack can be extended to a TCS BUS system with corresponding functions (door release or actuator switching). Depending on the likelihood of a simultaneous use, multiple code locks can be operated with the integrated power supply.



DIMENSIONS (IN MM)

Code lock AZF50000-0010	Power supply NBV2001-0400
88	4 SU
114	
19	
12	

Big in a small size. There is always space for the compact code lock with up to 10 numeric codes – either outside or inside. You can use it to release doors, to switch the light on and off or to release the outdoor sockets or activate the door drive. The keyboard is illuminated by an LED for a good sight even in the dark. The code:pack contains code lock plus power supply and is ready to be installed instantly.

- Compact
- For outside and inside
- Up to 10 numeric codes
- Made of anodised aluminium
- Releases doors and garage doors and switches the light on and off
- Blue LED key illumination

	Item no.
Small system for access control with numeric codes	PZF5000-0010



1x locking cylinder (three-part)



3x MIFARE® transponder tag, black



1x programming card
1x uninstalling card
1x battery replacement card

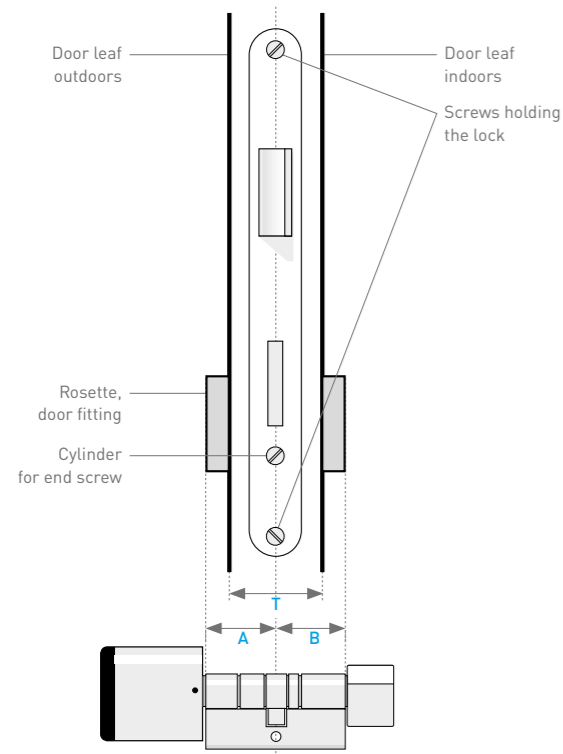
- Comfortable opening and closing with transponder cards
- Suitable for all profile cylinder locks
- No drilling and cable required
- Protected against power failure by battery operation
- For inside and outside
- For doors without electrical door release

Open for technology. Single doors can be easily equipped with an electronic lock system due to cylinder knob:packs – no drilling or wiring required. Suitable for all profile cylinder locks. Compared to traditional keys the three main benefits include more security, more comfort and lower operating costs. There is no need for an expensive repurchase if keys get lost. This makes them especially interesting for commercial buildings like hotels. The insurance protection of an existing building contents insurance is maintained.

DIMENSIONS (IN MM)

External knob	length = 42.7 d = 40.0
Internal knob	length = 20.0 d = 29.5
Profile cylinder	lengths = 30/30 to 70/70

PRODUCT OVERVIEW



- T Door thickness
- A Locking side: Measurements external with rosette or door fitting
- B Knob side: Measurements internal with rosette or door fitting

INSTALLATION

The locking cylinder is delivered three-part consisting of an external knob, a profile cylinder and an internal knob. The minimum measurement of the profile cylinder is 30/30mm, each side prolongable in 5 mm steps. The packs can be ordered as an item variant with a total lengths of the profile cylinder of up to 140mm or a maximum lengths up to 70mm for each side.



When selecting the lengths A and B please note that the profile cylinder can be integrated in both directions. The couplings for the internal and external knobs are identical.

OPERATING MODE

Operating mode stand-alone for transponder reader

The transponder reader of the cylinder knob:packs are operated in stand-alone mode. The transponder IDs are saved locally in the reader. The access is only granted by reading out this transponder ID. The transponders are imported by means of a programming card in the programming mode.

System and installation functions

Maximum amount	up to 96 technically possible
Key or locking rights	up to 10 virtually recommended rights
Transponder reader	read function, battery-operated
Transponder	passive, battery-free (card or tag)
Cylinder knob	without electrical contact
Areas of application	installation in PZ locks or possible on fire doors (no mounting holes or wiring required)

Operating modes

Stand-alone operation	yes
-----------------------	-----

Selection | Settings | Programming

Configuration	with programming card
Installation	by locking the external and internal knob into place in the profile cylinder
Uninstallation	with uninstallation card
Uninstallation with discharged battery	can be supplied externally by battery adapter
Battery replacement (opening the cover)	with battery replacement card

Displays

Status display	LED red LED green
Programming mode	visual and acoustic

Housing | Installation

Material and colour	brass nickel-plated with hard plastic cover
Type of installation	integrated into the door

Technical features

Technology, carrier frequency	Mifare® DESFire EV1, (13.56 MHz)
Type of battery	2 batteries CR2 lithium 3V
Battery runtime	up to 35,000 activities possible (approx. the last 1,000 possible activities are acoustically signalled)
Degree of protection	IP55 IP66 (suitable for indoor and outdoor use)
Acceptable temperature range	-20 °C to 65 °C



CYLINDER KNOB:PACKS

Item no

For the area of application IP55

811-003- A B

lengths A (mm)



Prices on request

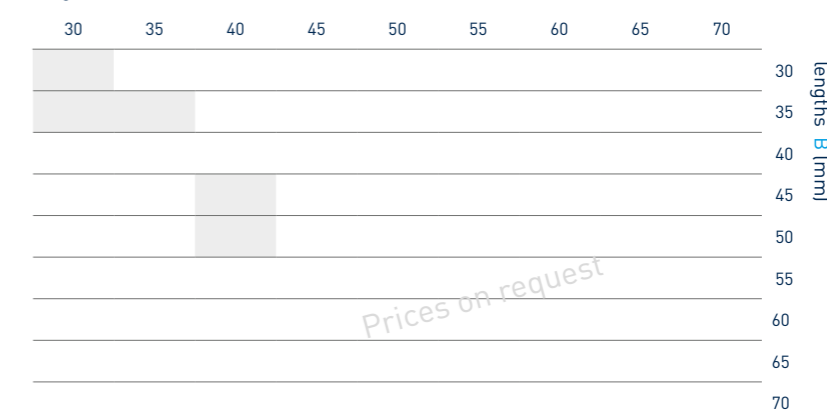
CYLINDER KNOB:PACKS

Item no

For the area of application IP66

817-003- A B

lengths A (mm)



Prices on request

preferred variants with a lead time of 1 week, all other items with a lead time of 4 weeks

ACCESSORY

Item no.

Mifare® transponder tag, black	806-000-2001
Mifare® transponder tag, white	806-000-2004
Tool to de-install BCM logo plates	701-003-0001
BCM opening tool, 5 pieces	701-000-0005
BCM battery adapter	701-000-0007
BCM replacement programming card stand-alone Mifare®	711-003-3000

Transponder tags and cards with 1 week delivery time | accessory with 4 weeks delivery time



POWER SUPPLIES + EXTENDED FUNCTIONS

Power supplies and control units	104
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- Supplying
- Extending
- Combining
- Maintaining
- Configuring

FOR AUDIO AND VIDEO SYSTEMS

POWER SUPPLY AND CONTROL UNIT

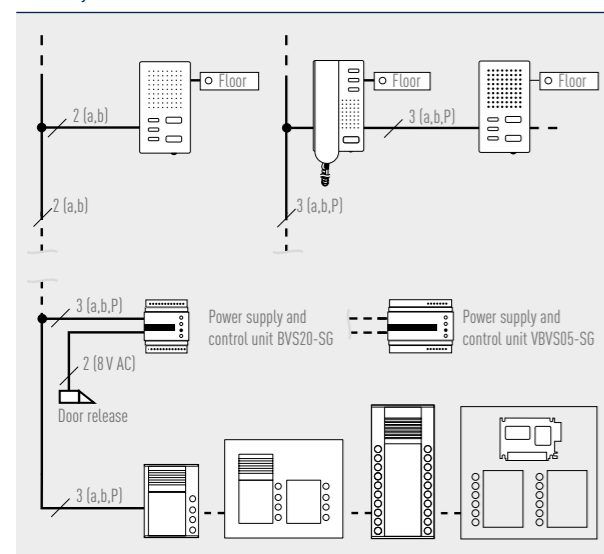


For audio systems on 1 strand

- > 1 TCS:BUS connection
- > Potential-free switching output (closing contact, max. capacity 24V DC/1A) for automatic light switch units
- > Internally switched voltage to release doors 12V/50/60Hz, max. 2A
- > Max. output current A-terminal: I (a) max = 40 mA
- > Max. output current P-terminal: I (a) max = 60 mA

Indoor stations	2-wire technique (a/b)	3-wire technique (a/b, P)
ISx3030-0140	up to 20	up to 20
ISx3130-0140	up to 15	up to 20
IMMx100-014x		up to 4

Audio system with BVS20-SG or VBVS05-SG



HxWxD in mm	Item no.
90 x 72 x 70 (4 SU)	BVS20-SG

COMBINATION OF UNITS



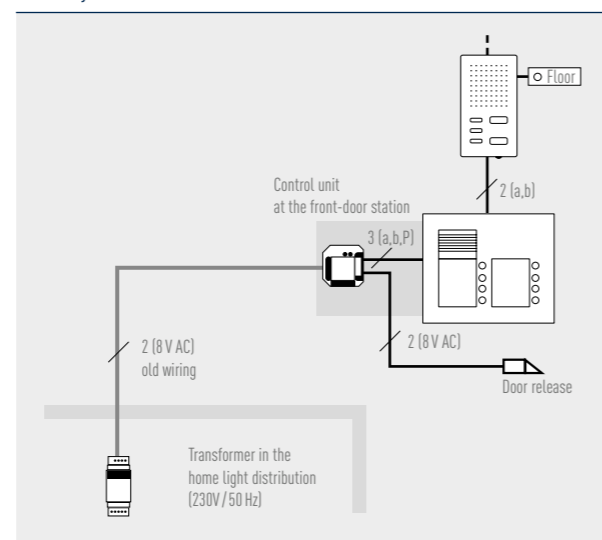
For audio systems on 1 strand

- > 1 TCS:BUS connection
- > Potential-free switching output (closing contact, max. capacity 24V DC/1A) for automatic light switch units
- > Internally switched voltage to release doors 12V / 50/60Hz, max. 2A
- > Max. output current A-terminal: I (a) max = 40 mA
- > Max. output current P-terminal: I (a) max = 60 mA

Front-door stations Information about supply line apply for 1 front-door station PAK, PUK (max. 2-sp.), PES or ASI with up to 24 keys. Front-door stations are always connected by the 3-wire technique.

Parallel operation 2 indoor stations can be called simultaneously using the supply and control units BVS20-SG and NBV1000 and up to 8 indoor stations using the supply and control unit VBVS05-SG.

Audio system with NBV1000



HxWxD in mm	Item no.
2 SU 52x52x23	NBV1000

POWER SUPPLY AND CONTROL UNIT

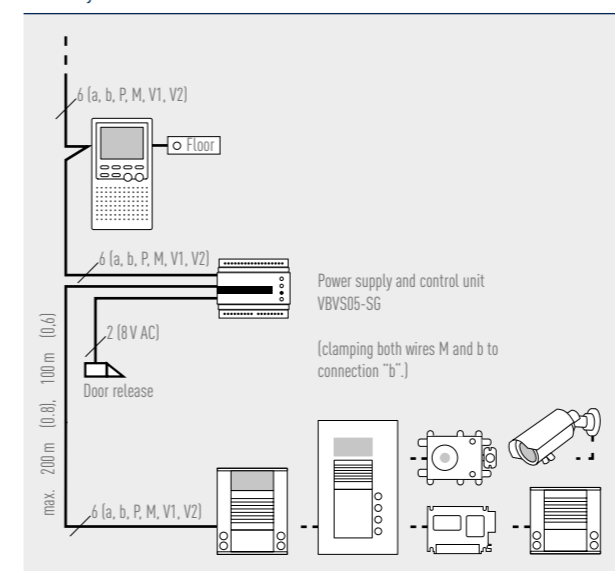


For audio and video systems on 1 strand

- > 1 TCS:BUS connection and one video connection port
- > Potential-free switching output (closing contact, max. capacity 24V DC/1A)
- > Switchable voltage to release doors 12V / 50/60Hz, max. 2A
- > Max. output current A-terminal: I (a) max = 60 mA
- > Max. output current P-terminal: I (a) max = 600 mA

(Video) indoor stations	2-wire (a/b)	3-wire (a/b, P)	6-wire (a/b, P, M, V1, V2)
ISx3030-0140	up to 30	up to 90	
ISx3130-0140	up to 20	up to 90	
IMMx100-014x		up to 60	
IMMx300-014x			up to 30
IMMx310-014x			up to 20
IVH3222-0140			up to 20
ecoos IWV2211-...			up to 12
sky IWV2221-...			up to 12
skyline IWV3012-...			up to 12
skyline:ten IWV9010-...			up to 01

Video systems with VBVS05-SG



H x W x D in mm	Item no.
90 x 105 x 70 (6 SU)	VBVS05-SG

DC POWER SUPPLY



For DC power supply

- > Output current terminal 29: I(+) = 2.5A
- > Input voltage: 230V (196 to 265V), 50/60Hz
- > Output voltage: 26V DC
- > (+)-terminal is short-circuit protected

HxWxD in mm	Item no.
93x 140x 66 (8 SU)	NGV1011-0400

TRANSFORMER



For AC power supply

- > Supply unit for AC 8V, 50/60Hz
- > Output current terminal: I(+) = 2.0A
- > Input voltage: 230V (220 to 240V), 50/60Hz

HxWxD in mm	Item no.
90x 35x 60 (2 SU)	NWV1000-0400

SIGNALLING

RADIO SIGNAL UNIT



Consisting of built-in call relay TRE1-EB/1, dropping resistor, built-in transmitter RTS17E, socket radio gong RCP04E
1-channel, white

Socket radio gong RCP04E

- > For visual and acoustic display of incoming door calls
- > For use or operation in Schuko socket in the protected indoor area
- > 3 different songs can be selected as a ring tone
- > Duration of ring tone 7s to 1 min can be selected individually
- > 2 volumes
- > Power consumption 0.3W stand-by mode
- > Power outlet Schuko socket
- > Max. contact load: mains voltage (not switchable), 10A/230V AC
- > Receiving frequency: 868.0 MHz (1 channel)
- > Acceptable ambient temperature: -20°C to +35°C

Built-in call relay TRE1-EB/1

- > p. 107
- > For specific controlling of the built-in transmitter RTS17E for the socket radio gong RCP04E in case of an incoming door call
- > Suitable for installation and connection in TCS indoor stations, see product information
- > Potential-free relay contact (closing contact: 24V DC/2A)
- > Switch time ex works: 3s/adjustable manually 0.5 to 25s
- > No programming required

Built-in transmitter RTS17E

- > Conversion of the door call signal in a radio telegram and for a diversion of max. 10s to socket radio gong RCP04E
- > Voltage supply TCS:BUS
- > +15...+27V, alternatively 6V-32V DC, 5V-24V AC
- > Frequency: 868.0 MHz (1 channel)
- > Acceptable ambient temperature: -5°C to +40°C

NOTE: The combination of units must only be operated as part of a TCS:BUS door communication system!

HxWxD in mm (radio gong)	Item no.
120 x 50 x 75	FLL2000-0

SIGNAL BELL FOR THE TCS:BUS



For the visual acoustic additional signalling of door and internal calls

- > With LED illumination for additional signalling
- > Amount of ring tones: 39 (in 3 sound profiles ISH1030-..., ISH3030-..., skyline)
- > Call distinction for front-door, floor door and internal call
- > Ring tone distinction of up to 2 front-door stations (with 4 sub ring tones)
- > Visual error indication and indication of operation status by red LED
- > Call OFF switch
- > Push button (in hole matrix) for loading the factory setting
- > Automatic announcement to multiple signal bells
- > Volumes for ring tone and announcement adjustable (digital in 8 levels)
- > Error detection, visual error indication
- > Parallel allocation with service device, configo or IR remote control
- > 2-wire operation (up to 2 device parallel) and 3-wire operation possible
- > Colour | material: white | plastic

HxWxD in mm	Item no.
98 x 98 x 17	FIL1101-0140

EMPTY HOUSING



Accessory

- > Colour | material: white | plastic

HxWxD in mm	Item no.
98 x 98 x 15	ZFA4000-0140

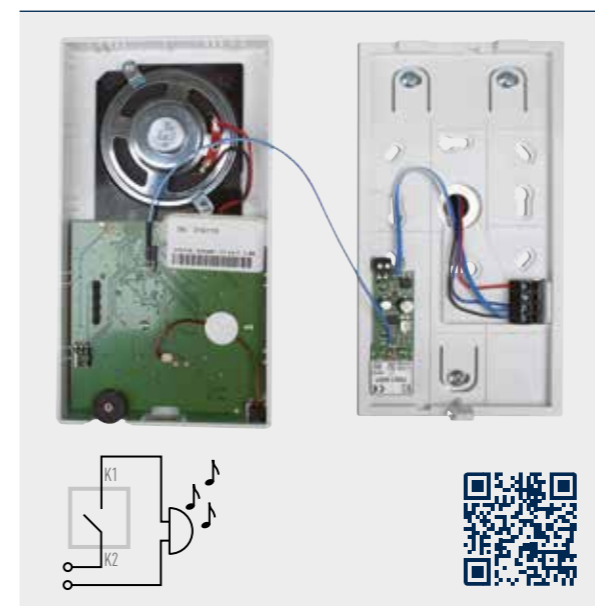
CALLING SIGNALING UNIT

BUILT-IN CALL RELAY FOR INDOOR STATION

For specific controlling of signal units provided by customer

- > Suitable for the installation of the door phone | indoor station for hands-free talking ISx3030
- > For connecting to a terminal of the indoor station
- > Potential-free relay contact (closing contact: 24V DC/2A)
- > Switch time ex works: 3s, manually adjustable (1-8s)
- > Acceptable ambient temperature: 0°C to 40°C
- > No programming required

Installation into the lower cover of the indoor station ISx3x30-0140



HxWxD in mm	Item no.
64 x 21 x 18	TRE1-EB

CALL RELAY FOR THE TCS:BUS (FLUSH-M.)



For specific controlling of signal units provided by customer

- > For installation in the one gang box, protection against moisture
- > Potential-free relay contact (closing contact): 24V DC/2A)
- > For location-independent installation
- > Analysis of a control function adjustable with service device
- > Switch time ex works: 1 s, adjustable with service device
- > 2- or 3-wire technique possible (max. 10 devices with 2-wire technique)
- > Input current (2-wire): I(+) = 1.1 mA
- > Input current (3-wire): I(a) = 0.4 mA, I(P) = 0.5 mA
- > Max. input current (3-wire): I(Pmax) = 12 mA
- > Max. line diameter: 0.8 mm
- > Acceptable ambient temperature: -20°C to 50°C
- > Degree of protection: IP20 (installation in one gang box, protection against moisture)
- > Programming with service device, optionally manually

HxWxD in mm	Item no.
52 x 52 x 23	TRE2-EB

DOOR RELEASE

BUILT-IN DOOR RELEASE RELAY



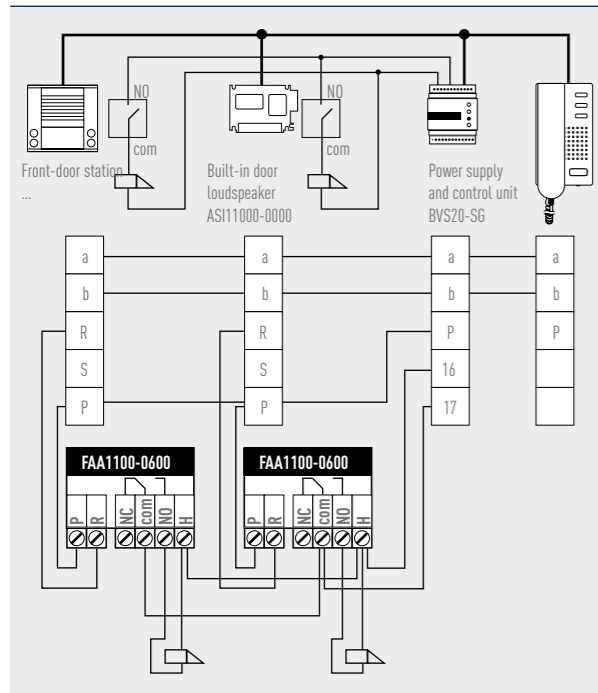
For a specific door release in case of more than one front-door station

- > For connecting to the R- and P-terminal of the indoor stations
- > Potential-free relay contact (closing contact: 24V DC/2A)
- > Installation recommendation: in front-door stations PES, PUK or behind PAK
- > No programming required

Installation in a front-door station



Sample application



HxWxD in mm	Item no.
34x28x8.5	FAA1100-0600

DOOR RELEASE RELAY (FLUSH-MOUNT)



For specific door release in case of more than one front-door station

- > Programming only with service device/ configo
- > Degree of protection: IP20 (installation in one gang box, protection against moisture)
- > For a location-independent installation
- > Alternatively control functions are evaluated as well
- > Door release time ex works: 1s, adjustable with service device or configo
- > 2- or 3-wire technique possible (max. 10 devices with 2-wire technique)
- > Maximum 10 TOER2 devices usable with 2-wire technique
- > Input current (2-wire): I(a) = 0.9 mA in resting position
- > Input current (3-wire): I(a) = 0.4 mA, I(P) = 0.5 mA in resting position I(Pmax) = 12 mA
- > Max. line diameter: 0.8 mm
- > Acceptable ambient temperature: -20°C to 50°C

HxWxD in mm	Item no.
52x52x23	TOER2-EB

DOOR RELEASE RELAY (DIN-RAIL MOUNT)



For a specific door release in case of more than one front-door station (FAA1250-0400: up to 32 flats)

- > Potential-free relay contact (closing contact: 24V DC/2A)
- > For location-independent installation
- > Evaluation of control functions
- > Door release time ex works: 3s/with service device and configo adjustable
- > Programming with TCSK/ configo
- > Status indication by yellow LED
- > 3-wire technique
- > Input current (3-wire): I(a) = 0.4 mA, I(P) = 0.8 mA in resting position I(Pmax) = 16 mA
- > Acceptable ambient temperature: -5°C to 40°C

HxWxD in mm	Item no.
85x17.5x60 (1 SU)	FAA1200-0400
85x17.5x60 (1 SU)	FAA1250-0400

LIGHT SWITCHING

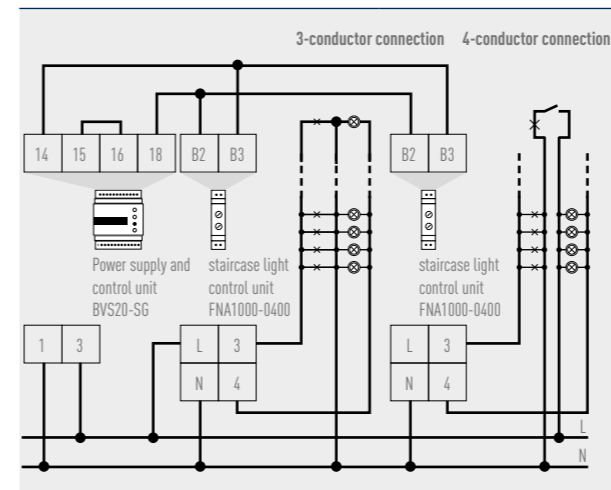
STAIRCASE LIGHT CONTROL UNIT



Multi-purpose device with 10 selectable functions

- > Light control of 0.5 min to 20 min continuously adjustable
- > Readjustable immediately
- > Automatic detection of 3- or 4-conductor circuits
- > Long-term function 60 min
- > Alter before switch-off according to DIN18015-2 by blinking twice for 30s before the end of the preset time span
- > Zero crossing circuit
- > Mains voltage: 220-240V, 50/60 Hz
- > Additional control input: 8-240V AC/DC
- > Glow lamp voltage max.150 mA/230V, 50/60 Hz
- > Protection category II (during intended installation)
- > Acceptable ambient temperature: 0°C to 40°C

3-conductor / 4-conductor connection



Dimensions	Item no.
1 SU (DIN-rail)	FNA1000-0400

SWITCHING/DETECTING

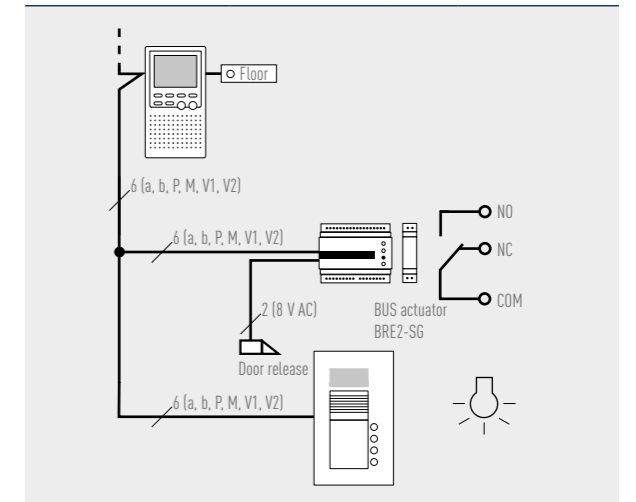
COMBINED DEVICE WITH BINARY IN/OUT



Output for switching functions and input for triggering control functions

- > Input differentiates between opening and closing
- > Input requires connection of a potential-free switch
- > Potential-free relay contact (closing contact: 230V, 50/60 Hz/3A)
- > Features that cannot be changed without auxiliary means:
 - Switch time ex works: 1s/manually and with BRE configurator adjustable
 - Triggering the switch time by: bell button of any front-door station, floor push-button/door release button on any indoor station
- > Input current (binary input): (2.5 mA)
- > Input current (3-wire): I(a) = 0.4 mA, I(P) = 1.4 mA without load
- > Max. input current: I(Pmax) = 30 mA
- > Max. line diameter: 1.4 mm
- > Parameter can be adjusted with BRE-configurator
- > 3-wire technique required
- > Acceptable ambient temperature: -20°C to 50°C
- > Status indication for input/output

Sample application



HxWxD in mm	Item no.
85x17.5x60 (1 SU)	BRE2-SG

MELDEN

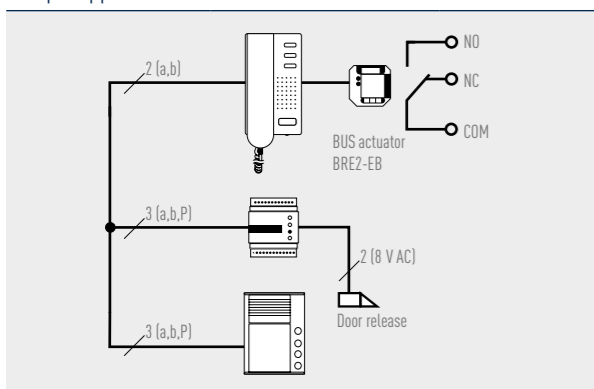
COMBINED DEVICE WITH BINARY IN/OUT



Features like BRE-SG, deviating from that:

- > Input current (2-wire): I(a) = 1.5 mA without load
- > Input current (3-wire): I(a) = 0.4 mA, I(P) = 2.8 mA without load
- > Max. input current (3-wire): I(Pmax) = 4.4 mA
- > Maximum line diameter: 0.8 mm (M+, M-, A-, B-, P-terminal)
- > Acceptable ambient temperature: -20 °C to 50 °C

Sample application



HxWxD in mm	Item no.
52 x 52 x 23	BRE2-EB

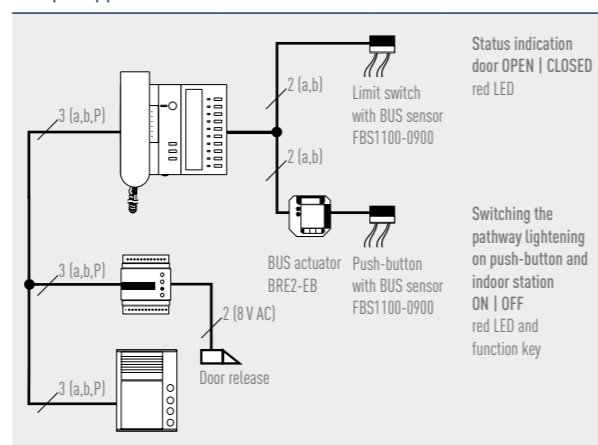
SENSOR WITH BINARY INPUT SINGLE



For connecting sensors like light barriers, twilight switches on TCS front-door stations. For transmitting additional switching functions, e.g. garage doors and shutter controls in conjunction with BRE-xx. The sensor is not compatible with systems for assisted living or with special call function.

- > Input differentiates between opening and closing as well as the duration of the keystroke
- > Input requires connection of a potential-free switch
- > 2- or 3-wire technique possible
- > Maximum 10 devices usable with 2-wire technique
- > Input current (binary input): 0.4 mA (use appropriate contacts)
- > Input current (2-wire): I(a) = 1.3 mA (input not activated)
- > Input current (3-wire): I(a) = 0.4 mA, I(P) = 1.0 mA without load
- > Max. input current (2-wire): I(a) = 1.7 mA (input activated)
- > Max. input current (3-wire): I(a) = 2.3 mA (input activated)
- > Maximum length of input connecting line: 2 m
- > Integrated connecting line with 8 cm length, 0.8 mm diameter
- > Acceptable ambient temperature: -20 °C to 50 °C
- > Degree of protection: IP20 (installation in one gang box, protection against moisture)

Sample application



HxWxD in mm	Item no.
17 x 26 x 8	FBS1100-0900

SENSOR WITH BINARY INPUT DOUBLE (FM)



Input for triggering control functions, double

- > Input differentiates between opening and closing
- > Input requires connection of a potential-free switch
- > 2- or 3-wire technique possible
- > For use in systems for assisted living | with special call function
- > Maximum 10 devices usable with 2-wire technique
- > Input current (binary input): 0.4 mA (use suitable contacts)
- > Input current (2-wire): I(a) = 1.1 mA without load
- > Max. input current (2-wire): I(a) = 2.5 mA (both inputs activated)
- > Maximum length of input connecting line: 2 m
- > Max. line diameter: 0.8 mm
- > Acceptable ambient temperature: -20 °C to 50 °C
- > Degree of protection: IP20 (installation in one gang box, protection against moisture)

HxWxD in mm	Item no.
52 x 52 x 23	BMN2-EB

FLOOR CALL GENERATOR



For up to 4 floor calls

- > 1 TCS:BUS protocol programmable per channel
- > Supply of the module via TCS:BUS in 3-wire technique (loop through possible)
- > Can be used multiple times on one floor
- > Programming mode can be switched on directly on the device
- > Indication of the operation mode by yellow LED
- > Call distinction
- > Supply voltage: 26 V DC ± 8 %
- > Supply output: (2 mA)
- > Acceptable ambient temperature: -20 °C to 50 °C

HxWxD in mm	Item no.
52 x 52 x 23	FIS1100-0600

BUILT-IN DOOR RELEASE TRANSMITTER



Configurable sensor for triggering a function on TCS:BUS

- > Input for triggering door release, floor call, light and control functions
- > Input differentiates between opening and closing
- > Input requires connection of a potential-free switch
- > 2- or 3-wire technique possible
- > Configuration with configuration software configu (starting with version 1.6)
- > Not for use in systems with special call functions
- > Maximum 10 devices usable with 2-wire technique
- > Input current (binary input): (0.4 mA) use appropriate contacts
- > Input current (2-wire): I(a) = 1.3 mA (input not activated)
- > Input current (3-wire): I(a) = 0.4 mA, I(P) = 1.0 mA without load
- > Max. input current (2-wire): I(a) = 1.7 mA without load
- > Max. input current (3-wire): I(a) = 1.5 mA (input activated)
- > Maximum length of input connecting line: 2 m
- > Integrated connecting lines with 8 cm length, 0.8 mm diameter
- > Acceptable ambient temperature: -20 °C to 50 °C
- > Degree of protection: IP64 (for installation in one gang box)

HxWxD in mm	Item no.
17 x 26 x 8	FBS1105-0900

DISTRIBUTING

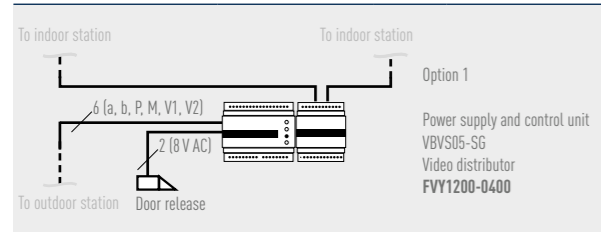
VIDEO DISTRIBUTOR DOUBLE



The video distributor serves as a splitter of video strands and is equipped with active amplifiers which decouple the video signal. Depending on the power supply multiple video distributors can be used in one system.

- > Brightness and contrast adjustable per strand: 0 to +12 dB
- > Input current I(a) = 0.0 mA, I(P) = 60 mA (stand-by mode/without load)
- > Maximum input: I(Pmax) = 70 mA
- > Input voltage: 26 V DC (from P-wire)
- > Input, output impedance: 100 Ohm balanced
- > Acceptable ambient temperature: 0°C to 40°C

Sample application



Dimensions	Item no.
4 SU (DIN-rail)	FVY1200-0400

VIDEO DISTRIBUTOR DOUBLE (FLUSH-MT.)



An alternative to the installation in a one gang box and with the features like FVY1200-0400, deviating from this:

- > Only brightness can be adjusted
- > Output level can be adjusted jointly: 0 to +12 dB
- > Input current I(a) = 0.0 mA, I(P) = 40 mA (in resting position/without load)
- > Maximum input: I(Pmax) = 60 mA
- > Degree of protection: IP20 (installation in one gang box, protecting against moisture)

HxWxD in mm	Item no.
52x52x23	FVY1200-0600

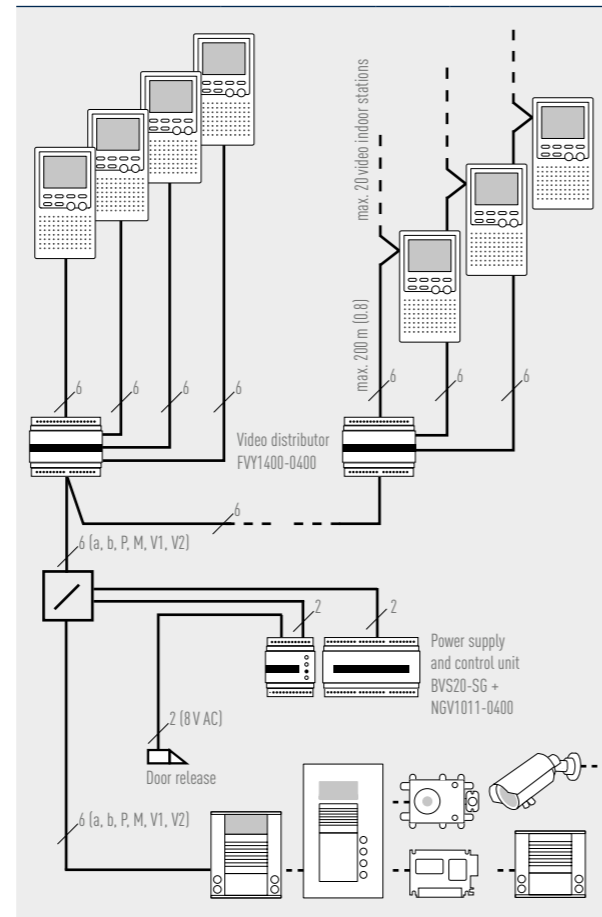
VIDEO DISTRIBUTOR QUADRUPLE



The video distributor serves as a splitter of video strands and is equipped with active amplifiers which decouple the video signal. Depending on the power supply multiple video distributors can be used in one system.

- > For the supply of up to 4 strands with video signals
- > Output level per strand from -3 dB to 9 dB/can be adjusted manually
- > Input current I(a) = 0.0 mA, I(P) = 90 mA
- > Maximum input: I(Pmax) = 120 mA
- > Input voltage: 26 V DC (from P-wire)
- > Input, output impedance: 100 Ohm balanced
- > Acceptable ambient temperature: 0°C to 40°C

Sample application



Dimensions	Item no.
6 SU (DIN-rail)	FVY1400-0400

SWITCHING

VIDEO SWITCH DOUBLE (FLUSH-MOUNT)



- For a specific selection of 1 of 2 cameras
- > AS addresses ex works: 1, 2 / can be adjusted manually and by service device
 - > Control and indication of the operation modes of the system
 - > Not cascadable
 - > Acceptable ambient temperature: -20°C to 50°C
 - > Degree of protection: IP20 (installation in one gang box, protection against moisture)

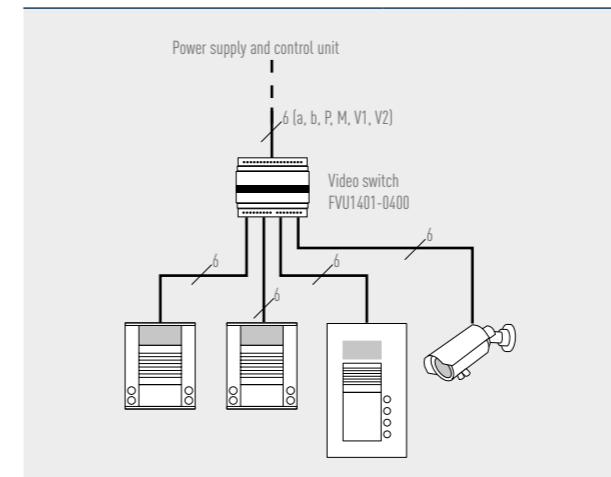
HxWxD in mm	Item no.
52x52x23	FVU1210-0600

VIDEO SWITCH QUADRUPLE



- For specific selection of 1 of 64 cameras
- > Interconnection of up to 16 FVU1401-0400 possible
 - > For selection of 1 out of maximum 64 cameras
 - > Input current P-terminal: I(a) = 21 mA without load
 - > AS addresses ex works: 1, 2, 3, 4 / can be adjusted manually and through service device
 - > Acceptable ambient temperature: 0°C to 40°C

Sample application



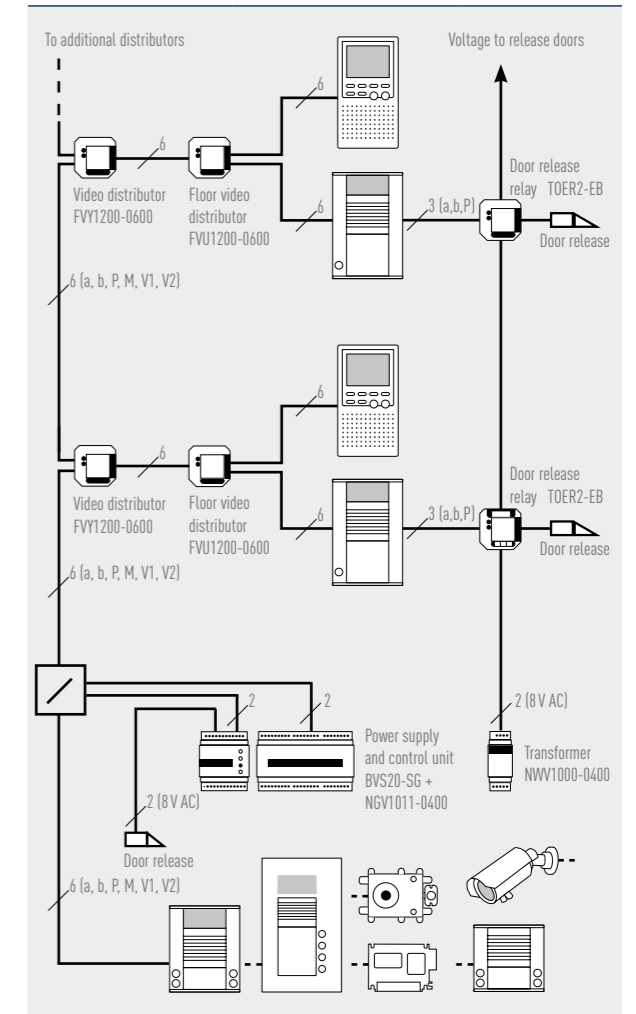
Dimensions	Item no.
6 SU (DIN-rail)	FVU1401-0400

FLOOR VIDEO SWITCH (FLUSH-MOUNT)



- The floor video switch serves as a specific change-over between floor video front-door station and main video front-door stations on a video indoor station. It is only permitted in conjunction with a video signal distributor.
- > Max. loop impedance: 20 Ohm
 - > Input current: I(a) = 0.4 mA, I(P) = 9 mA
 - > Programming with service device, optionally manually
 - > Control and indication of the operation modes of the system
 - > Acceptable ambient temperature: 0°C to 40°C
 - > Degree of protection: IP20 (installation in one gang box, protection against moisture)

Sample application



HxWxD in mm	Item no.
52x52x23	FVU1200-0600

RECORDING

CENTRAL IMAGE BUFFER



As an extended function for retrofitting current video indoor stations

- > Image recording: single image | image series
- > Image resolution: 720x576 pixel (colour)
- > Image buffer: on SD card
- > Image encoding (optional)
- > 2 video indoor stations can be programmed per flat
- > Acoustic and visual error indication
- > Input current: I(a) = 0.4 mA
- > Input current: I(P), stand-by mode 65 mA
- > Input current: I(Pmax), max. 120 mA
- > Input voltage: 26V DC
- > Input, output impedance: 100 Ohm
- > 2-wire video signal dB output level (manually adjustable from ... to ...)

... the following 3 modes of operation can be adjusted:

One-family home mode

- > Image buffer for up to 2,048 images
- > Configuration of the serial numbers not required
- > Operation through image button or function key
- > Snapshot after door call on video indoor station possible
- > Without discretion restriction (reproduction of all recordings on all video indoor stations)

Basic mode

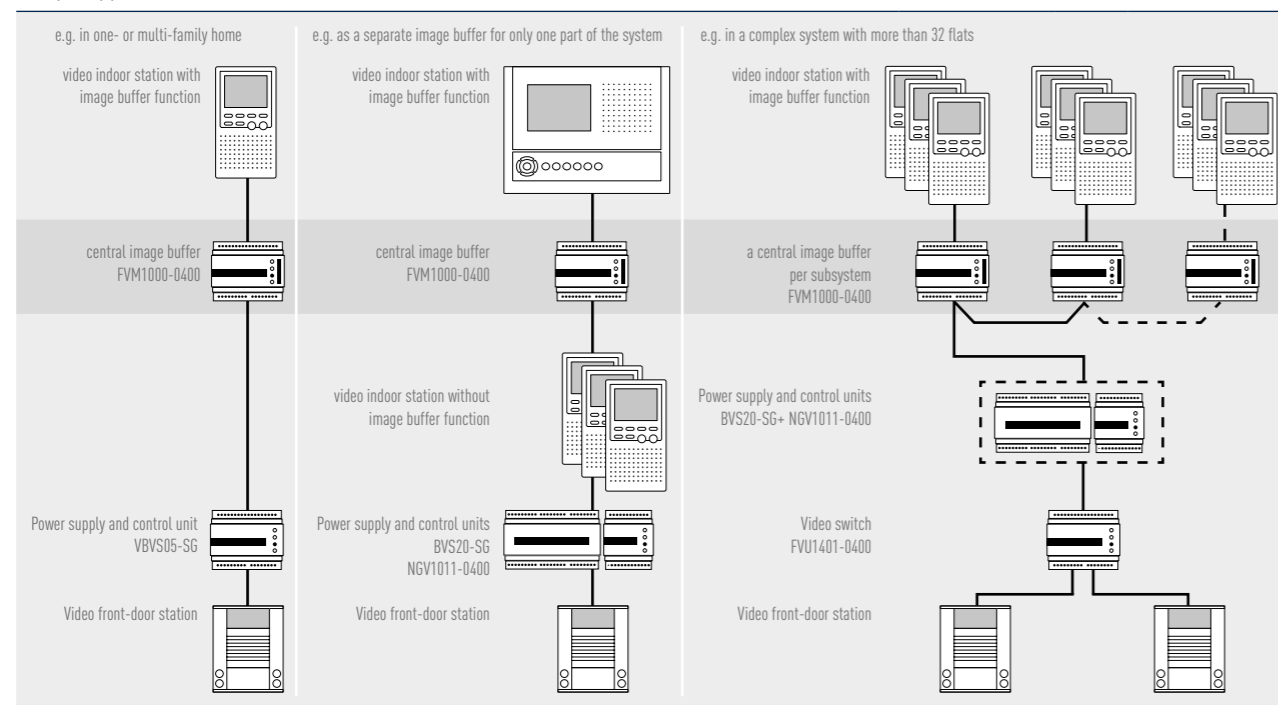
- > For maximum 32 flats w. storage of up to 64 images per flats
- > Configuration of serial numbers required
- > Operation through image button and function key
- > Snapshot possible after door call on video indoor station
- > Discretion restriction (image recording and indication of door calls aimed solely at a particular flat)

Comfort mode

- > For maximum 32 flats w. storage of up to 64 images per flats
- > Operation through OSD menu on the video indoor station
- > LED-display on the video indoor station
- > Setting date/time on the video indoor station
- > Automatic recording (can be deactivated and activated)
- > Discretion restriction (image recording and indication of door calls aimed solely at a particular flat)

The central image buffer can be used with the current TCS video indoor stations, also for retrofitting existing systems. The image buffer is either operated by a button or via the OSD menu of the video indoor station. A discretion restriction controls the individual access to stored image files for use in multi-family homes. You can store up to 64 images per video indoor station with date and time stamp.

Sample applications



Dimensions

6 SU (DIN-rail)

Item no.

FVM1000-0400

SENDING/RECEIVING

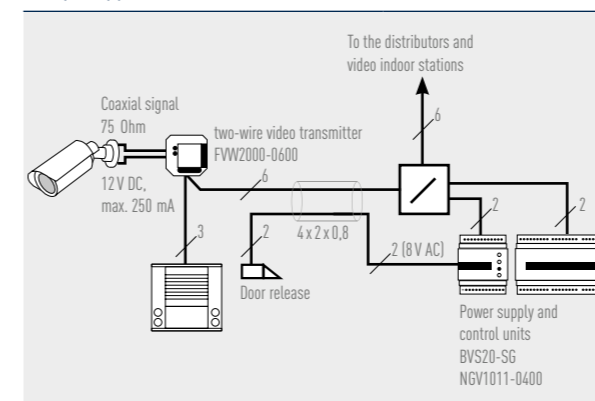
TWO-WIRE VIDEO TRANSMITTER (FM)



For an interface connection of cameras from other manufacturers to the TCS video systems. The two-wire video transmitter converts the FBAS signal (75 Ohm) of the camera for conversion into a 2-wire signal.

- > Output level for 2-wire video signal from -3dB to 9dB / can be adjusted manually
- > Integrated voltage supply of the camera
- > Camera supply: 12V DC maximum 250 mA
- > Input voltage: 26V DC (from P-wire)
- > Maximum input: I(Pmax) = 300 mA
- > Input impedance: 75 Ohm unbalanced
- > Output impedance: 100 Ohm balanced
- > Acceptable ambient temperature: -20°C to 50°C
- > Degree of protection: IP20 (installation in one gang box, protecting against moisture)

Sample application



HxWxD in mm

52 x 52 x 23

Item no.

FWV2000-0600

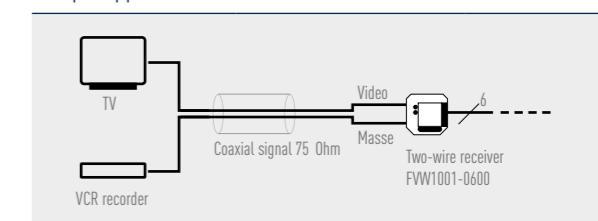
TWO-WIRE VIDEO RECEIVER (FLUSH-MT.)



For a conversion of a symmetrical video input signal (100 Ohm 2-wire performance up to approx. 1,000 m) into an asymmetrical video signal (75 Ohm coaxial cable). The coaxial cable can be connected via BNC or chinch connector to every 75 Ohm video input of e.g. TV, video recorder and monitors. An adjustment for optimizing of the outgoing video signal is possible.

- > Input voltage: 26V DC (supply through P-wire)
- > Input current: I(Pmax) = 22.5 mA
- > Brightness video output level can be adjusted
- > Acceptable ambient temperature: 20°C to 40°C
- > Degree of protection: IP20 (installation in one gang box, protection against moisture)

Sample application



HxWxD in mm

52 x 52 x 23

Item no.

FWV1001-0600

BROADBAND AUDIO-VIDEO MODULATOR



For the conversion of video signals to antenna signals. The broadband audio-video-modulator with LED-display VHF05-GH is suitable for the connection to a TV set or for the feed-in into a communal system. It converts a (F)BAS video signal (e.g. of a video camera) to an antenna signal (UHF/VHF) which can be received by a TV set.

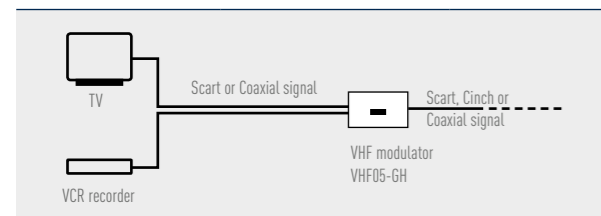
RF-part

- > Input frequency range: 45 ... 862 MHz
- > Input IEC, coaxial socket 75 Ohm
- > Output frequency range: 45 ... 862 MHz
- > Channels for output: CH 2-12; S01-S03; S1-S41; CH 21-69
- > Output IEC, coaxial plug 75 Ohm

audio/video part

- > Input: 1x video cinch, 2x audio cinch (RCA), 1x scart
- > Output: scart (loop-through)
- > Video input impedance: 75 ... 1.3 K Ohm
- > Video S/N 40 dB min
- > Input impedance audio: 10 k Ohm
- > Voltage supply: 9... 12V DC

Sample application



HxWxD in mm	Item no.
40 x 108 x 85	VHF05-GH

INFRARED

INFRARED TRANSCEIVER



The IR-transceiver serves as an interface for infrared-controlled devices like TV, air-condition, garage doors or observation systems.

- > Trigger door release or switch light via TV remote control
- > Control shadowing or air-conditioner on indoor station

HxWxD in mm	Item no.
80 x 80 x 27	FBI4100-0600

PUBLIC ADDRESS SYSTEM

ELA INTERFACE



- > Volume control ring tone and language
- > Single announcement after internal call
- > Grouped alerting and announcement
- > Output for the NF signal (galvanically separated) and for ELA activation

HxWxD in mm	Item no.
90 x 72 x 70 (4 SU)	FBI5100-0400

TELEPHONY

INTERFACE FOR TC-SYSTEMS



Interface for the connection to TC-systems via analogy port/for up to 64 call destinations (with 16-digit call number)

- > Interface for a TC connections to front-door and indoor stations
- > Connection via a regular a/b-phone connection of an analogy telephone switchboard
- > Sensor for triggering a connection establishment/separate call-number memory
- > Sensor requires connection to a potential-free switch
- > 4, 16, 32, 64 call-number memory with maximum 16-digit call number, delivery state 16 call-number memory
- > Phone keypads of standard telephones and mobile phones switch door release and light, and create control functions via multi-frequency dialling
- > Specific door calls to 53 front-door stations standard phone
- > Specific internal call from up to 3 indoor stations with standard phone
- > Specific triggering of up to 10 actuators per call-number memory with standard phone
- > Day/night switchover; call diversion; actuator, potential-free relay contact (two-way contact: 24V DC/1A) – switch time of the relay ex works: 10s/via multi-frequency dialling adjustable
- > Up to 64 TC-interfaces can be connected to one TCS:BUS
- > Status indication for operating modes und transmission mode
- > Error indication
- > Configuration via multi-frequency dialling
- > Configuration via configuration software configo (as of version 1.6)
- > 3-wire technique required
- > Input voltage: 26 V DC
- > Input current: I(a) = 0.03 mA, I(P) = 9 mA in stand-by mode
- > Maximum input: I(Pmax) = 50 mA
- > Acceptable ambient temperature: 0°C to 40°C

Dimensions	Item no.
6 SU (DIN-rail)	FBO1100-0400

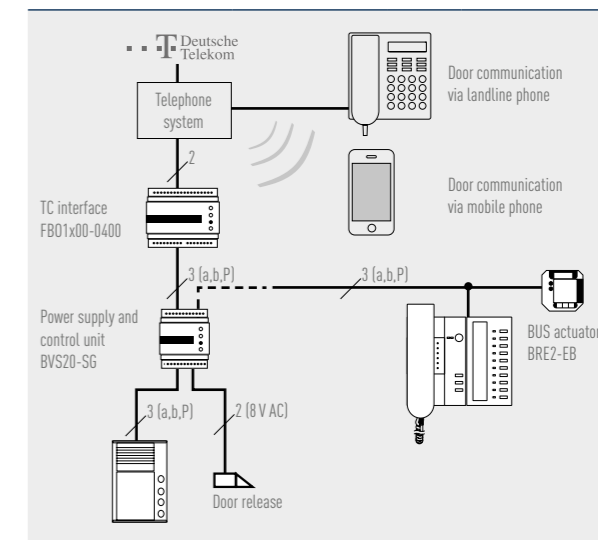
INTERFACE FOR TC-SYSTEMS



Interface for the connection to TC-systems for internal communication with more than 64 call destinations (with 5-digit call number)

- > Technical details upon request

Sample application



Dimensions	Item no.
6 SU (DIN-rail)	FBO1200-0400

SERVICE

SERVICE DEVICE



Designed for the time-saving initial operation of standard systems the service device also supports a quick system check. It is inexpensive, easy to use but only as big as a handset. The service device is simply connected to the BUS via a service plug in the front-door station enabling a central programming of the basic functions of the devices via the front-door station. The power supply is delivered directly via the BUS. The TCS system is very easy to program, configure and maintain saving the user a lot of time.

Functions and benefits

1. Programming bell buttons

Bell buttons can easily be programmed on the service device without the need of a second person.

2. Special functions

Implementation of specific functions like a programming lock. The system cannot be reprogrammed by mistake. The lock can be removed by the service device.

3. Testing the voice communication

By means of the service device voice communications to the front-door and the indoor stations can be tested.

4. Reviewing the :BUS installation in service mode

The service device indicates multiple TCS:BUS parameters like e.g. :BUS voltages, :BUS commands etc.

5. Call suppression

During an activated call suppression calls from the house or front-door and flat door are suppressed. Thus, all basic functions can be tested, and the user is not bothered by frequent bell ringing. Unintentional operation of the system by the tenant is not applicable.

Service device in use



Item no.

TCSK-02

SERVICE PRODUCT CASE



Hard shell cases for storage of the service device or the maintenance package

- > Colour: blue
- > Cover of the case with knob foam and compartment for product information
- > Base plate and use of PU foam

HxWxD in mm

Item no.

270 x 185 x 76 (inner dim.)

0031987

SERVICE PRODUCT CASE



Hard case cover incl. service device TCSK-02, manual TCSK-02, 1 ball head screwdriver, 2 win:clip key

- > Colour: blue
- > Cover of the case with knob foam and compartment for product information
- > Base plate and use of PU foam

HxWxD in mm

Item no.

270 x 185 x 76 (inner dim.)

0034228

MAINTENANCE

MAINTENANCE PACKAGE, USB

The maintenance package consists of a maintenance interface and auxiliary software. It is used for the configuration, analysis and maintenance of individual product features and also of the entire system.

- > Consists of a maintenance interface and maintenance software as well as the following maintenance auxiliary software:
 - Configuration software configo
 - ADx configurator
 - PFS configurator
- > Contains a full version – restricted for demonstration reasons – for application programs which require a registration key subject to a key
- > Is only approved for auxiliary software

Scope of delivery

- > TCS-CD
- > Maintenance interface with USB port
- > Adapter plate
- > Handset for testing voice communications
- > Connection lines



Item no.

FBI1210-0

CONFIGURATION

CONFIGURATION SOFTWARE CONFIGO



BUS technique made easy. It is also possible to configure a system on a PC using configo. configo facilitates an easy allocation of the indoor stations to the bell buttons via mouse click. configo is also useful for installed systems because it allows for example that serial numbers of all devices of the system are read out during maintenance.

Location-independent configuration of the system by only one person

- > Creating projects on the PC, without connecting to a door communication system
- > Drag-and-drop-allocation of the devices and activation of extended functions

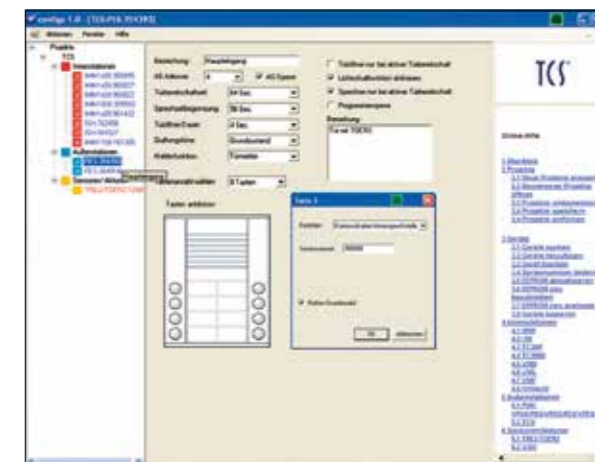
Simplified maintenance of existing systems

- > Reading out devices, their functions and connections
- > Processing read out configuration

Clear system documentation

- > Free download of the software and demo movies available at www.tcsag.de
- > The maintenance interface from the maintenance package is required for a data transmission from a PC to a TCS system

Screenshot "Configuration of bell buttons"



Item no.

SKX7000-0

NEW COMFORT IN HOMES AND OFFICES WITH TCS OVER IP

Using TCS over IP TCS combines all applications which make TCS:BUS systems network-compatible. It also provides a range of IP-capable front-door stations enabling a direct LAN-integration. AVU9 as a standard variant and Carus ARGOS for the more upmarket requirements.

Our technical service hotline and our TCS IP application consultants support IP projects regarding planning, implementation and support.

+49 4194 9881-188

offer@tcsag.de



TCS over IP opens up completely new possibilities for door communication. An existing LAN network can be used in case the installation of lines makes no sense. The signals of TCS:BUS® only have to be translated to the internet protocol by the TCS IP gateway in the control cabinet. And consequently TCS IP front-door stations can be controlled via a smart phone by the TCS:App.

IP is a future-proof standard which prevents complex cabling and facilitates the control via smart phone, tablet and PC.

For functional buildings and with the solution TCS:Softphone TCS offers an option to operate the door communication directly at a workplace. Due to IP Gateway Basic all TCS front-door stations are network-compatible. For a direct integration into the LAN there are two IP front-door stations including up to 100 available call destinations.



DOOR TO DOOR WITH THE INTERNET IP GATEWAY BASIC

The new TCS IP gateway convinces with its extensive compatibility and easy integration into the IP network. It is possible to connect existing TCS:BUS systems with the IP network. After the installation in the control cabinet the IP gateway is connected to the TCS:BUS and the network.



Factory preconfigured

Simple interface with audio and video

Connection of IP front-door stations to TCS:BUS indoor stations

Connection of TCS:BUS front-door stations to network-compatible indoor stations

With internal SIP registrar

Planning form

Download and complete the planning form at tcsag.de/download



Send planning form via email or fax to TCS. TCS will send you back an offer including the configuration number.

Fax +49 4194 9881-199

offer@tcsag.de

IP GATEWAY BASIC

For connecting IP front-door stations to TCS:BUS indoor stations (only audio) or TCS:BUS front-door stations to network-compatible indoor stations.
SIP-TN: 10, SIP registrar 10 clients

IP GATEWAY ADVANCED

For connecting IP front-door stations to TCS:BUS indoor stations (only audio) or TCS:BUS front-door stations to network-compatible indoor stations.
SIP-TN: 90, SIP registrar 340 clients

IP GATEWAY DATA

For connecting TCS:BUS and IP network. Conversion of e.g. unencoded emails or RSS feeds in TCS short messages. Can be combined with TCS:BUS products supporting the function TCS:Message.

IP VIDEO FRONT-DOOR STATION CARUS ARGOS



For an upscale residential construction and a commercial use we offer the high-quality IP video front-door station ARGOS with up to 100 available call destinations. It wins over by its clear design and its unique functional variety.

- > Bright 5.7" LC display
- > SIP compatible
- > Full duplex voice transmission
- > 100° camera with 2 megapixel CMOS sensor
- > Intuitively operable touch screen
- > High-quality echo suppression
- > Integrated RFID reader with MIFARE® technology
- > Code lock via keypad
- > Power supply via PoE (IEEE 802.3af and 802.3at) or DC (24V)

IP VIDEO FRONT-DOOR STATION AVU9



An own LAN connection directly integrates up to 4 bell buttons into the IP network. An integrated colour video camera flush with adjacent area completes the flush-mount front-door station of anodised aluminium.

- > SIP compatible
- > Half duplex voice transmission
- > 56° camera with 0.3 megapixel CMOS sensor
- > Illuminating diodes for night vision
- > Video streaming via MJPEG, H.263 and H.264
- > 2 independently programmable switch relays
- > Power supply via PoE (IEEE 802.3af and 802.3at) or DC (12-30V)

TCS:SOFTPHONE



TCS:Softphone is a Windows-based client software enabling VoIP communication and providing video and audio file connections within the network of a one-family home or office. It enables the user to operate the automatic door release and switch off the ring tone by clicking on a button. This function can be accessed worldwide via an external SIP server service.

TCS:APP FOR SMARTPHONE / TABLET

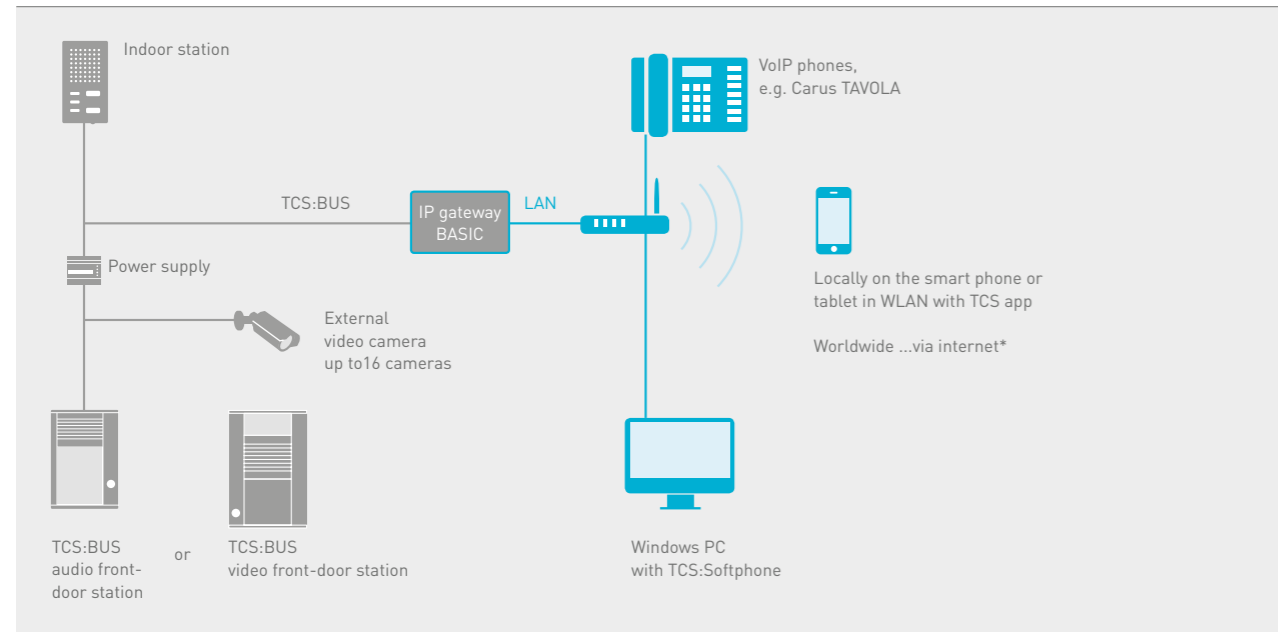
The TCS:App* facilitates the operation of the door communication on a smartphone and tablet. Thus, the door can easily be kept under control in a local WLAN. The TCS:App*, which is available for free for iOS and Android, provides the operating surface. Missed door calls are clearly shown in a call list. In order to have control over your house and property multiple cameras can be integrated via the IP gateway into the network and retrieved via a specific app.

TCS OVER IP

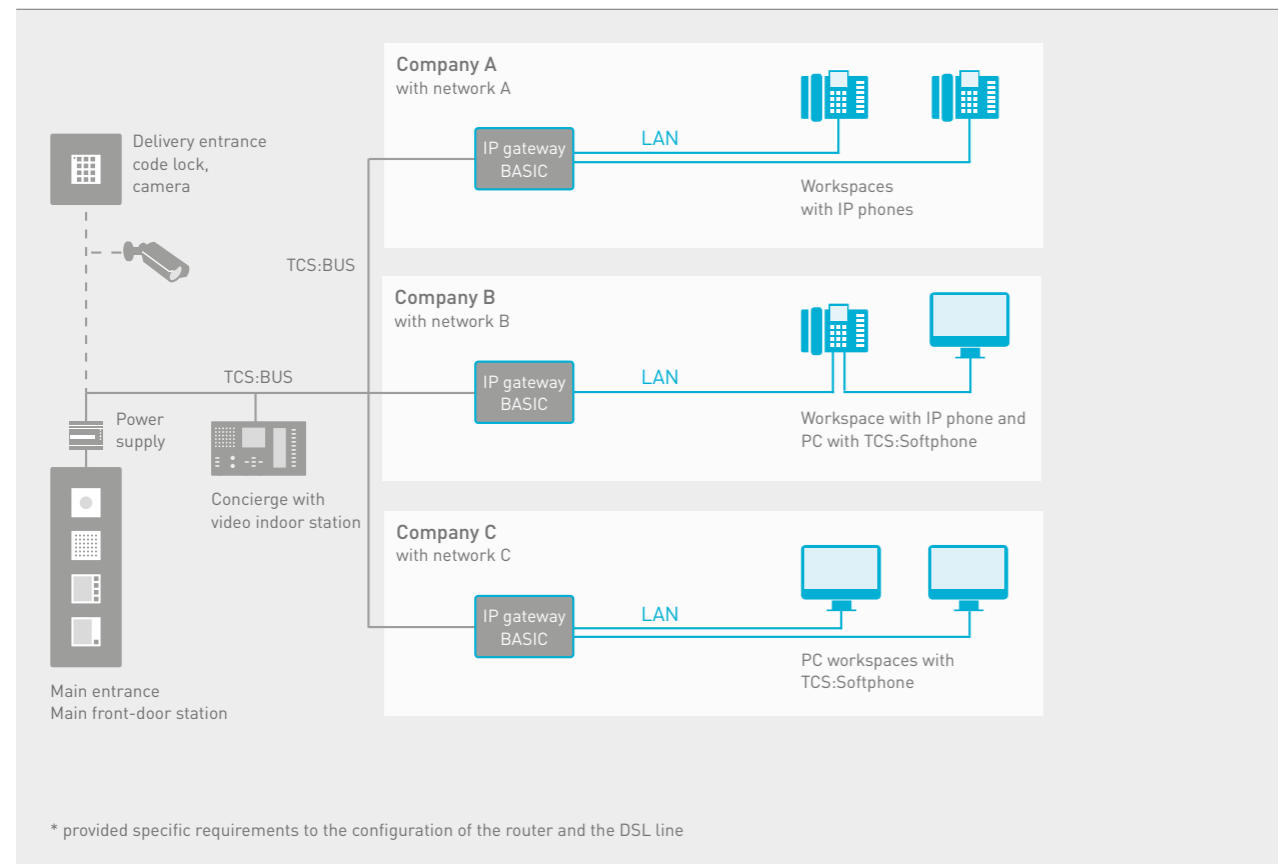
	Item no.
IP gateway BASIC (6 separating units)	FBI6119-0400
IP gateway ADVANCED (6 separating units)	FBI6122-0400
IP gateway DATA (2 separating units)	FBI6131-0400
IP video front-door station Carus ARGOS, (H x W x D) 343 x 192 x 13.5 mm (+38 mm flush-mount)	CAE3000-IP-0150
IP video front-door station AVU9, (H x W x D) 252 x 150 x 3 mm (+40 mm flush-mount)	AVU940x0-0010
TCS:Softphone, application program for PC (Windows)	SAX5000-0

IP GATEWAY BASIC

IP GATEWAY BASIC IN A ONE-FAMILY HOME

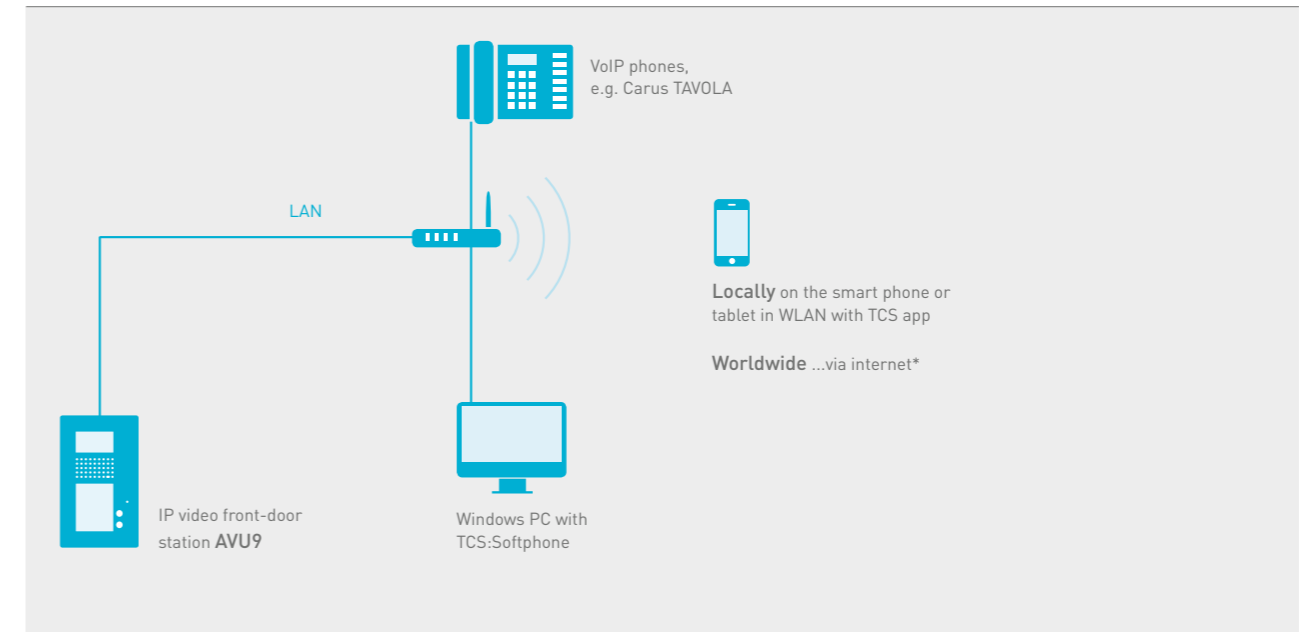


IP GATEWAY BASIC IN FUNCTIONAL BUILDING

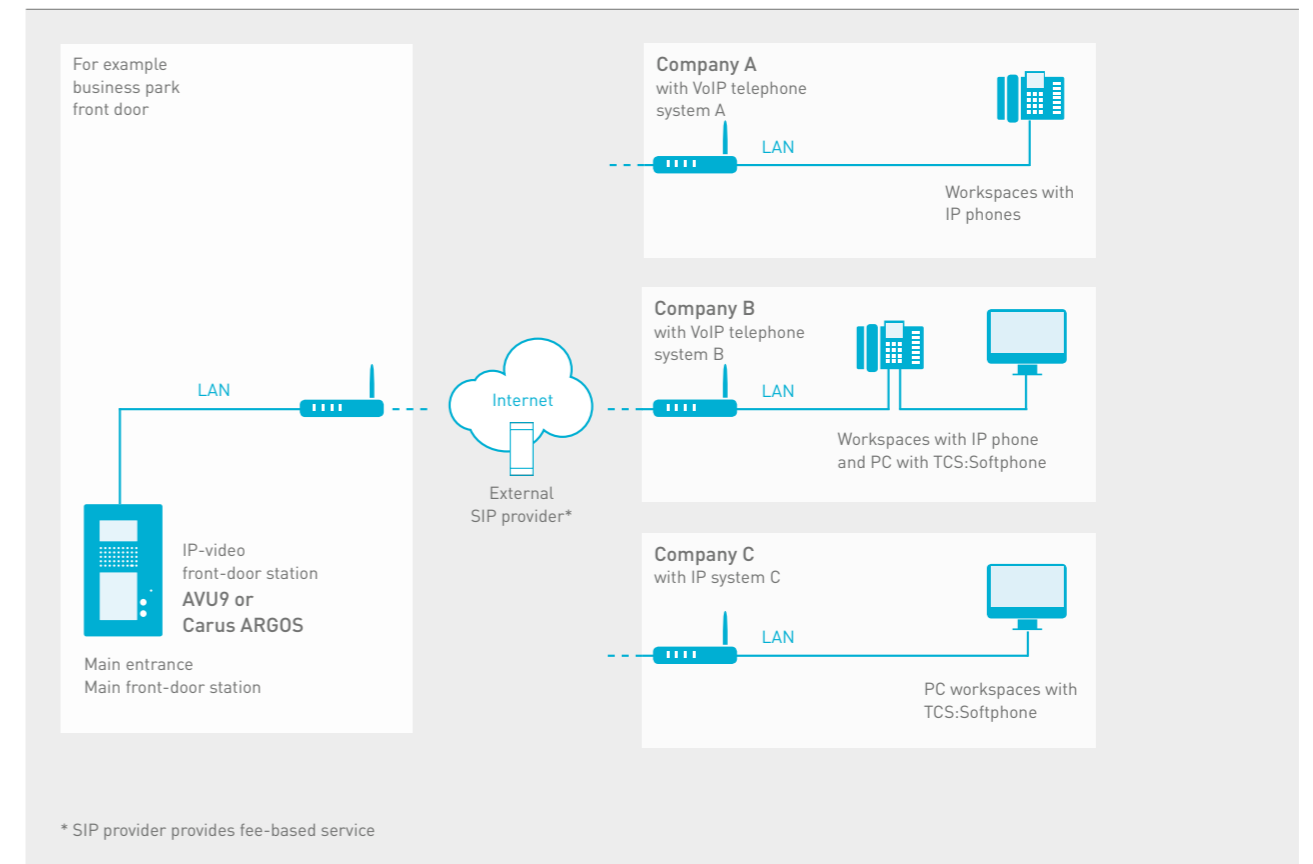


IP FRONT-DOOR STATIONS

IP FRONT-DOOR STATIONS IN A ONE-FAMILY HOME



IP FRONT-DOOR STATIONS IN FUNCTIONAL BUILDING





Inform

Act

Protect

Communicate

Control

SYSTEM SOLUTIONS

SOLUTIONS FOR THE HOUSING INDUSTRY

Resident information and key management	128
Resident information in special cases	130
Door communication without barriers	132

SOLUTIONS FOR FUNCTIONAL BUILDINGS

Assisted living	134
Gate keeper, concierge and parking garage facilities	135
Schools and kindergartens	136
Communication in medical offices	137
Hotels, guesthouses and vacation homes	138



RESIDENT INFORMATION AND KEY MANAGEMENT

BCM applications significantly reduce the costs of housing organizations and operators for resident information and name management. The key management manages BCM:ACCESS within a few seconds offering a new level of comfort to the tenants.

GOOD NEWS FOR RESIDENTIAL BUILDINGS: ELECTRONIC RESIDENTIAL INFORMATION

The times of the bulletin boards in large residential complexes are long gone. The concierge or property manager can inform tenants quicker and more specifically about meter reading appointments or visits from handicraftsmen – via a video indoor station. It is recommended to use the web interface of BCM:Message for sending out text messages enabling you to send emails to TCS video indoor

stations or to an information panel in the entrance area. Simply via browser, a tool to manage flats as well. An LED display can indicate an incoming message – depending on the indoor station.

BCM:MESSAGE FOR GENERAL RESIDENT INFORMATION

- > Central reception of text messages on video front-door stations
- > Reception of personal text messages on video front-door stations
- > Display of consumption data...

BCM:NAME FOR A CENTRAL NAME MANAGEMENT

- > Digital name display on front-door stations, letterboxes, floor bells
- > Remote access to name display by PC via web browser
- > Central name management across locations: No pasting over, no staff assignment on-site

BCM:NAME FOR CENTRAL KEY MANAGEMENT

- > Management of access rights by PC
- > Access by numeric code or web browser
- > Input device and reader on all doors
- > Type of operation: online, offline
- > Stand-alone: only local access
- > Release of online access area and rights
- > Wireless offline use and management of access rights

RESIDENT INFORMATION IN SPECIAL CASES



Whether fire or other catastrophes – TCS door communication systems in building complexes provide support in particular situations. They can be used to inform all residents – by acoustic signals, direct announcements or recorded announcements.

SUPPORTIVE SYSTEM EXTENSION

A TCS door communication system can be extended by a fire brigade announcement unit FDE or by the use of a display front-door station with announcement function. The fire brigade announcement unit FDE is suitable for all system sizes.

However, the display front-door station with announcement function is mainly used in bigger systems with many residents. Door communication systems with the extended function "fire brigade announcement" require appropriate (video) indoor stations.

Acoustic signals and recorded automatic announcements as well as direct announcements

High volume up to 90 decibel

Simultaneous announcements to all indoor stations or single floors possible

Vandal-proof and lockable

Also suitable for outdoor installation

1 fire brigade announcement unit FDE suitable for all installation sizes

Safe in case of failure of indoor stations due to optional strand structure

THE FIRE BRIGADE ANNOUNCEMENT UNIT FDE



FDE is planned in advance with the local fire brigade with regards to specific projects and the German Technical Control Board (TÜV), performed and installed in an area which can easily be accessed by the fire brigade – in the internal or rain-protected external area. The control panel is designed so that up to 51 available buttons correspond to the requirements of the fire brigade and can easily be selected and operated if required.

DISPLAY FRONT-DOOR STATION WITH INTEGRATED FIRE BRIGADE ANNOUNCEMENT



Instead of a separate FDE its function can also be installed in one display front-door station. The fire brigade announcement mode is converted by a fire brigade key. The software allows to group single residents or call destinations in specific areas of a building. Up to 64 groups can be retrieved via the program.

INDOOR STATIONS WITH INTEGRATED ANNOUNCEMENT FUNCTION

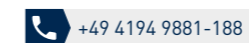


Door communication systems with a fire brigade announcement function require specific video indoor stations. The indoor station ISx3230-0140 or the video indoor station IWV2212-0140 can be used by an FDE (AFP10000) or a display front-door station for single and grouped announcements in addition to the door communication with front-door stations. The (video) indoor station is allocated to three potential groups via config. The acoustic signal, the announcement or the automatic announcement are always put out with maximum volume.

You will find additional information about the system solution for resident information in cases of emergency at www.tcsag.de under applications.



Consultation
We would be happy to consult you!
Call our hotline.



REFERENCE PROJECTS

In the past years TCS has equipped more than 4,000 flats with fire brigade announcement systems in German cities such as Berlin, Magdeburg, Leipzig, Jena, Greifswald and Rostock.



DOOR COMMUNICATION WITHOUT BARRIERS

Especially older residents benefit from more comfort and safety in daily life by age-based assistance systems, in short AAL. Useful extensions of TCS door communication systems make life easier in old age.

NEW QUALITY OF LIFE IN YOUR OWN HOME

The demographic change poses major challenges on building organizations. Tenants would like to stay in their familiar environment and landlords would like to enable them to do so. Simple system extensions for an additional and visual signalling of a door call in their flat provide helpful support for them. Shutters, light and door release

can be operated via remote control. A resident can call his neighbour or the facility manager internally. The TCS project consultant plans and implements the system according to individual requirements and in cooperation with the operators.

Consultation
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Mobile door gong

Light signals in case of hearing impairment

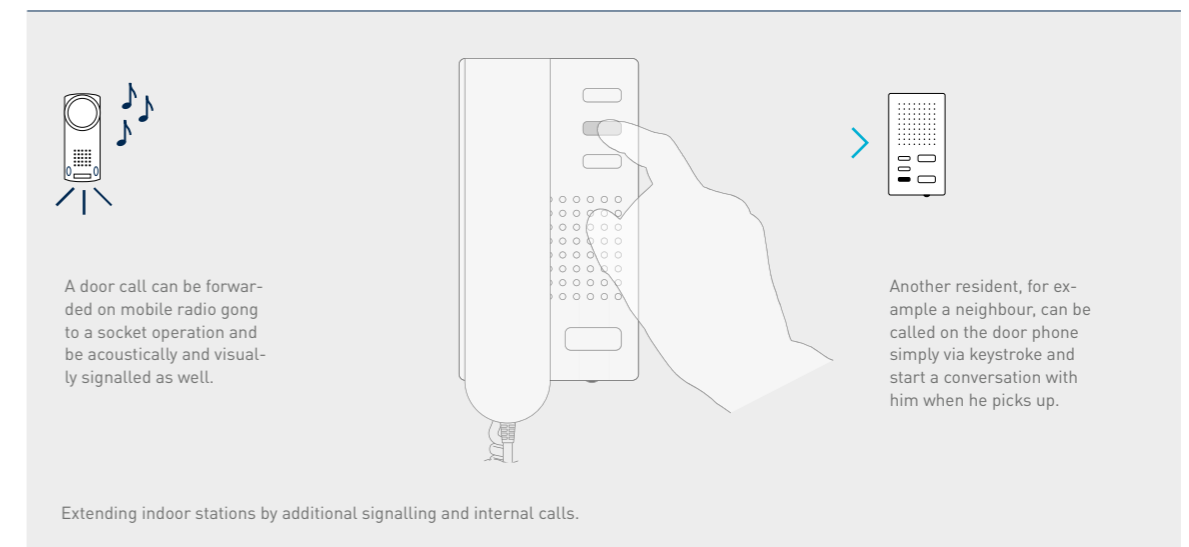
Internal call to neighbours

Concierge call in case of malfunctions

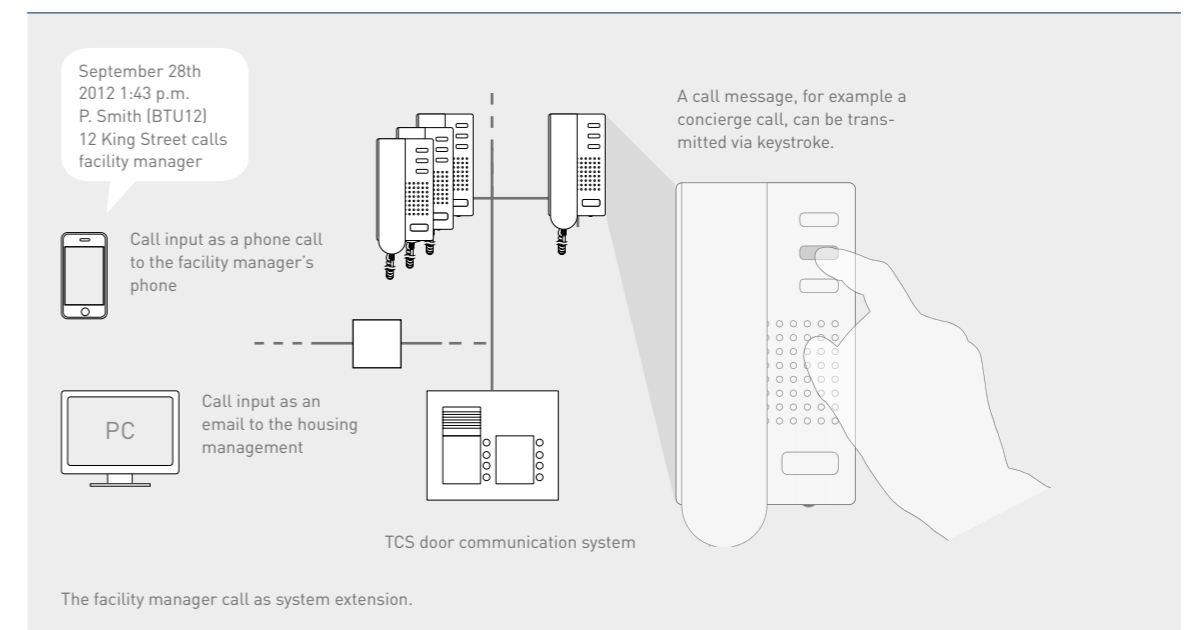


Mobile radio gong radio signal unit
> p. 106

SYSTEM EXAMPLE ASSISTENCE SYSTEM



SYSTEM EXAMPLE CONCIERGE CALL





CONCIERGE AND PARKING GARAGE SYSTEMS

TCS plans the optimal solution for many requirements in functional and commercial buildings such as the door communication over longer distances and call functions.

ASSISTED LIVING

Due to demographic changes also age-adjusted living environments like assisted living are increasingly being developed. TCS has developed an application-optimized product system for those kinds of facilities consisting of indoor stations with special call functions and a software for the required communication centres.

INDOOR STATIONS WITH EXTENDED FUNCTIONS

Indoor stations with special functions in residential facilities can complement call control centres in managing calls and announcements. Special calls and central announcements for resident information are supported for example.

The indoor station with special call function ISW3330-0140 has an extra-large call button. The resident receives a clear visual feedback by a red LED display for triggering calls.

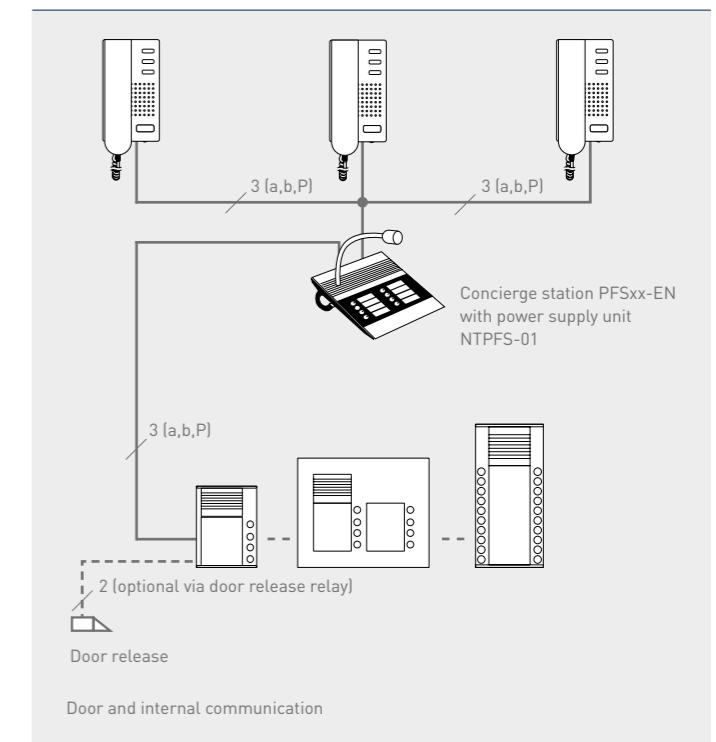
The indoor station can be extended by a radio sensor in a wristband or necklace. Thus, the resident can trigger the call in a mobile way.

- Call control centre as software for computer
- Listening and speaking in rooms
- Central announcements to the residents
- Filing resident data
- Recording events
- Light signals in case of impaired hearing
- Internal call to neighbours
- Concierge call in case of failures

Indoor station with special call function, wristband and necklace with radio sensor.



SYSTEM EXAMPLE DOORMAN AND CONCIERGE SYSTEM



DOOR AND INTERNAL COMMUNICATION, BARRIER OPERATION

TCS implements individual solutions with application-specific products for building communication as well as for call and announcement management in functional buildings. The concierge station can be complemented by specific front-door stations or a built-in door loudspeaker, particularly for systems in commercial buildings, retail and in parking garages where the building structure requires high line lengths. The use of PC software would be ideal for larger systems.



Concierge station PFSxx-EN



PC software

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SAFETY IN SCHOOLS AND KINDERGARTENS

Kindergartens and schools are facing a daily conflict for safety. Building communication has to be controlled and a quick internal communication has to be guaranteed.



You will find additional information about the system solution for schools and kindergartens in cases of emergency at www.tcsag.de under applications.

www.tcsag.de

ROOM-TO-ROOM CONVERSATIONS, SIGNAL TONES, ANNOUNCEMENTS, ROOM MONITORING, ACCESS CONTROL

TCS indoor stations facilitate a trouble-free room-to-room communication. Class rooms, offices, faculty room and gyms are connected with each other. Thus, users have a direct way of communicating across the entire building and can reach colleagues and children at any time. Teachers and educators can communicate between single rooms. Specific announcements in single rooms are possible without the need of taking any calls.

The acoustic room monitoring offers an additional safety standard. The room-to-room communication is not bound to a fixed workspace. The internal communication can be added by a central announcement function. Users can use the output of signal tones or announcements either via an existing PA system (ELA) or TCS indoor stations or signal bells. TCS door communication solutions with access control provide safety at the door.



Door communication room-to-room conversations, announcements and risk alerts
> p. 70, > p. 106



Telephony connection switch and display function
> p. 68-69



Video monitoring and access control
> p. 44 und 46

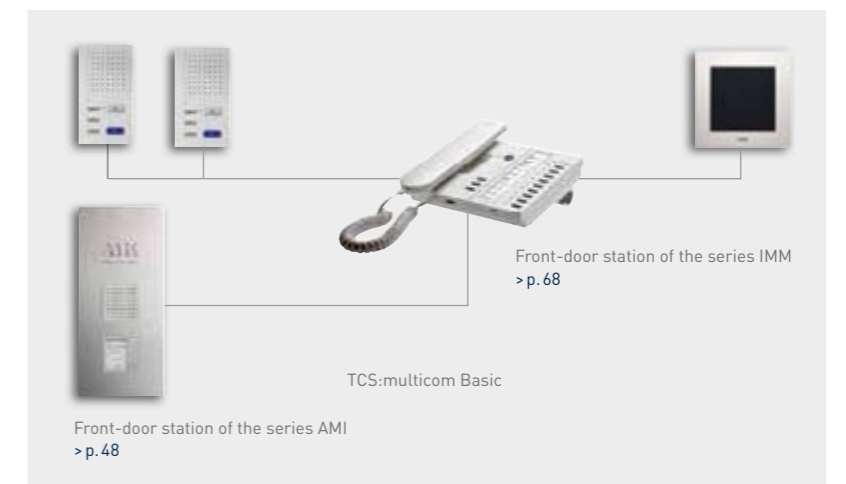


COMMUNICATION IN MEDICAL OFFICES

Medical offices have different types of work to do. TCS supports an efficient practice organization and now WHD does so as well by delivering custom-made communication and audio solutions.

INTERCOM FUNCTION BASIC

Due to an integrated intercom function, the basic version allows voice announcements, broadcasts and room-to-room conversations in multiple treatment rooms. The door communication is also operated by the indoor station of the series IMM and allows speaking freely. The outdoor station of the series AMI has a big display for practice information and can be added by additional functional modules.



You will find additional information about the system solution for communication in medical offices at www.tcsag.de under applications.



www.tcsag.de

Consultation
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HOTELS, GUESTHOUSES AND VACATION HOMES

A modern rental management makes your vacation start earlier. Due to the diversion of a door call to a specific phone the operator of a hotel, guesthouse or vacation home can communicate with his guests and can release the door via a keystroke on his phone. Without actually being on-site. Alternatively code locks and transponder cards grant access.

You can find additional information about system solutions for hotels, guest houses and vacation homes at www.tcsag.de under applications.



Telephony connection for the communication with guests in case of absence

Individual access codes for tenants

Day/night switchover for a diversion of door calls

Internal communication for better availability on the go

Detection and switching functions for door release and switching on the go

TELEPHONY CONNECTION FOR MORE FLEXIBILITY



Interface for telecommunication systems
> p. 117

The TCS door communication system can be connected to an existing telephone system. This leads to new potential uses like a diversion of door calls to land line or mobile phones. If somebody presses the bell button at the door the telecommunication interface creates a voice communication to a call number which was saved beforehand. Cascade calls can also be set up which allows – in case of no answer or a busy tone – that other call numbers can be dialled one after the other until the call is accepted.

VIDEO MONITORING FOR MORE SAFETY



The TCS door communication system can easily be extended by video monitoring. TCS provides solutions of different scale types starting with the video monitoring of one single input up to a large-scale area monitoring of residential and functional buildings. Video front-door stations with discreetly integrated cameras and separate cameras can be applied here. Combinations with a central image buffer or the connection of PTZ cameras open up solutions on a high technical level. > p. 44

ACCESS CONTROL FOR MORE FREEDOM



The electronic access control is the smart alternative to the traditional door release with a mechanical cylinder lock system. The benefit of electronic keys or codes is obvious especially in case of loss and imminent threat: codes can be exchanged quickly and electronic keys or cards can be replaced cost-efficiently. There is no need for cost- or time-intensive changes of lock cylinders anymore. > p. 46

BCM:Access facilitates also a modern location-independent rights management via internet browser. All BCM:application. www.tcsag.de and > p. 129

FEATURES SETS AND PACKS

(VIDEO) FRONT-DOOR STATIONS / INPUT DEVICE AND READER


	Series PAK	Series PUK	Built-in door loudspeaker	Series AVC	Series AVE	Series AVU	KZP IP55 I IP66	PZF5000- 0010	
System and installation functions	allocation per bell button	2	2	2	2	2			
	amount of usable numeric codes or transponder						96	10	
Trigger functions	door call	•	•	•	•	•			
	light switching	•	•	•	•	•		•	
	door release			•			•	•	
	controlling of door release relay	•	•	•	•	•		•	
	integrate switching			•				•	
(De) activated functions	acknowledgement tone	•	•	•	•	•	•	•	
Selection and settings	volume voice output	•	•	•	•	•			
	volume acknowledgement tone			•					
	microphone sensitivity	•	•	•	•	•			
	door call standby time	56 s	56 s	56 s	56 s	56 s			
	door release	56 s	56 s	56 s	56 s	56 s			
	door call time on R-terminal	4 s	4 s	4 s	4 s	4 s		4 s	
	call time	4 s	4 s	4 s	4 s	4 s			
Displays	status indication		•				•	•	
	key illumination							•	
Housing and installation	type of installation	surface-mount	flush-mount	built-in	surface-mount	surface-mount	flush-mount	built-in	surface-mount
	material and colour	chrome-platedes full metal	chrome-platedes full metal		chrome-platedes full metal	chrome-platedes full metal	chrome-platedes full metal	plastics	aluminium, anodised natural
	opening principle	win:clip™	win:clip™		win:clip™	concealed screws	win:clip™	concealed locking	concealed screws
	memory of the system configuration	•	•	•	•	•	•	•	
	functionally extendable with	FAA1100-... FAA1200-... TOER2-EB	FAA1100-... FAA1200-... TOER2-EB	FAA1100-... FAA1200-... TOER2-EB	FAA1100-... FAA1200-... TOER2-EB	FAA1100-... FAA1200-... TOER2-EB	FAA1100-... FAA1200-... TOER2-EB		FAA1100-... FAA1200-... TOER2-EB
Video camera	detection angle			90°	130°	90°			
	camera type			colour	colour	colour			
	suitable for day and night use			•	•	•			
	IR-illumination max. distance in case of IR-illumination			•	• 1 m				
	image sensor			CCD	CMOS	CCD			
	resolution in TVL			380	380	420			
	light sensitivity			0,2 with F2.0	0,2 with F2.5	0,2 with F2.0			
	focal length f			3,6 mm	2,0 mm	3,6 mm			

(VIDEO) INDOOR STATIONS

	ISH3030-0140	ISW3030-0140	ISH3130-0140	ISW3130-0140	IWH3222-0140	IWW9030-0140	
System and installation functions	voice transmission	duplex com.	hands-free talking	duplex com.	hands-free talking	duplex com.	hands-free talking
	audio and video privacy function, automatic call cut-off	•	•	•	•	•	•
Trigger functions	door release	•	•	•	•	•	•
	light switching	•	•	•	•	•	•
	integrate switching	o	o	•	•	•	•
	internal call			•	•		•
	selective integrate switching						3
	selective internal calls						10
	image activation, camera selection				•		•
(De) activated functions	simplex communication		•		•		•
	automatic hands-free talking after internal call		•		•		
	ring tone mute	•	•	•	•	•	•
	parallel allocation	•	•	•	•	•	•
	call diversion			•	•		•
	door release			•	•		•
	floor door release function			•	•		•
Selection and settings	amount of selectable ring tones	13	13	13	13	7	13 polyphon
	amount of acoustic call distinctions	4	4	4	4	4	10
	ring tone volume	•	•	•	•	•	•
	conversation volume	•	•	•	•		
	colour intensity, brightness (contrast)					•	•
Displays	ring tone mute	•	•	•	•	•	•
	display of busy line	•	•	•	•	•	•
	door and internal calls (short-time memory)	•	•	•	•		•
	call diversion or automatic door release			•	•		•
Housing and installation	material and colour	plastics, white	plastics, white	plastics, white	plastics, white	plastics, white	plastics, white silber
	type of installation	surface-mount, on table	surface-mount, on table	surface-mount, on table	surface-mount, on table	surface-mount	surface-mount
	functionally extendable with	TRE1-EB FFL2000-0 FBI4200-...	TRE1-EB FFL2000-0 FBI4200-...	TRE1-EB FFL2000-0 FBI4200-...	TRE1-EB FFL2000-0 FBI4200-...	TRE1-EB FFL2000-0	FFL2000-0
	magnetic hand-set cradle	•		•			
Video display	display size in cm (inch) and display type					8,9 [3,5] digital TFT	8,9 [3,5] digital TFT
	resolution in pixels					320 x 240	320 x 240

SPARE PARTS

VIDEO KITS FOR SYSTEM EXTENSION

	Item no.
 <p>Video:kit 1 > With built-in door loudspeaker ASI11000 > With built-in camera FVK2200 > Vertical holder > Incl. power supply and control unit VBVS05-SG</p>	VK01
 <p>Video:kit 2 > With built-in door loudspeaker ASI11000 > Cylinder camera, standard FVK3220 > incl. power supply and control unit VBVS05-SG</p>	VK02
 <p>Video:kit 3 > With built-in door loudspeaker ASI11000 > Flush-mount dome camera FVK4221 > Incl. power supply and control unit VBVS05-SG</p>	VK03
 <p>Video:kit 4 > With built-in door loudspeaker ASI11000 > Dome camera module AMI10600 > Incl. power supply and control unit VBVS05-SG</p>	VK04

FOR FRONT-DOOR STATIONS SERIES PES/PET

	Item no.
Blind PES V2 EN complete	E04518
Blind PES V3 EN complete	E10248
Blind PES V4 EN complete	E35627
Loudspeaker complete (PES V2)	E04170
Loudspeaker complete (PES V3)	E20370
Microphone complete PES V2 / PUK	E06598
Microphone complete PES V3	E10247

FOR FRONT-DOOR STATIONS SERIES PES/PET

	Item no.
Name plate glass for PES04..	EGE04-...*
Name plate glass for PES06..	EGE06-...*
Name plate glass for PES08..	EGE08-...*
Name plate glass for PES10..	EGE10-...*
Name plate glass for PES12.., PET12..	EGE12-...*
Name plate glass for PES14.., PET14..	EGE14-...*
Name plate glass for PES16.., PET16..	EGE16-...*
Name plate glass for PES18.., PET18..	EGE18-...*
Name plate glass for PES20.., PET20..	EGE20-...*
Name plate glass for PET22..	EGE22-...*
Name plate glass for PET24..	EGE24-...*
Name plate glass for PET26..	EGE26-...*
Name plate glass for PET28..	EGE28-...*

FOR FRONT-DOOR STATIONS SERIES PDS/PDT

	Item no.
Name plate glass for PDSA1	EGDA1-...*
Name plate glass for PDS01	EGD01-...*
Name plate glass for PDS02..	EGD02-...*
Name plate glass for PDS03.. PDT03..	EGD03-...*
Name plate glass for PDS04.. PDT04..	EGD04-...*
Name plate glass for PDS05.. PDT05..	EGD05-...*

* standard models:
 - GK for front-door stations in aluminium anodised natural or white coated
 - BR for front-door stations in aluminium anodised bronze

FOR FRONT-DOOR STATIONS SERIES PAK

	Item no.
Name plate glass for PAK01..	EGA01-GK
Name plate glass for PAK02..	EGA02-GK
Name plate glass for PAK03..	EGA03-GK
Name plate glass for PAK04..	EGA04-GK
Name plate glass for PAK05..	EGA05-GK
Name plate glass for PAK06..	EGA06-GK
Name plate glass for PAK07..	EGA07-GK
Name plate glass for PAK08..	EGA08-GK

FOR FRONT-DOOR STATIONS SERIES PAK | PSK

	Item no.
Microphone complete	E05917
Loudspeaker complete	E05937

FOR FRONT-DOOR STATIONS SERIES PUK

	Item no.
Name plate glass for PUK01..	EGU01-GK
Name plate glass for PUK02..	EGU02-GK
Name plate glass for PUK03..	EGU03-GK
Name plate glass for PUK04..	EGU04-GK
Name plate glass for PUK05..	EGU05-GK
Name plate glass for PUK06..	EGU06-GK
Name plate glass for PUK07..	EGU07-GK
Name plate glass for PUK08..	EGU08-GK
Name plate glass for PUK09..	EGU09-GK
Name plate glass for PUK10..	EGU10-GK

Loudspeaker complete	E21080
Microphone complete PES V2 / PUK	E06598
Printed circuit board (PCB) PUK Main ordered with loudspeaker	E23207
Printed circuit board (PCB) PUK ERW 1 order	E04741
Button board PUK10 complete	E04940
Button board PUK09 complete	E04941
Button board PUK08 complete	E04942
Button board PUK07 complete	E04943
Button board PUK06 complete	E04944
Button board PUK05 complete	E04945
Button board PUK04 complete	E04946

Connecting cable PUK PUK extension [E05593](#)

FOR FRONT-DOOR STATIONS SERIES PAK | PUK | AVU

	Item no.
win:clip key (10 pieces)	E03458
Key front-door station and indoor station	E32649

FOR TCP/IP NETWORKS

	Item no.
Spare part SD card 2 GB	E35393

FOR BUILT-IN DOOR LOUDSPEAKER TCU/TCKE

	Item no.
TCU2-GH Microphone complete	E02693
Printed circuit board (PCB) for TCU2-GH	E-0002599

FOR BUILT-IN DOOR LOUDSPEAKER ASI11000-0000

	Item no.
Base section + loudspeaker + adhesive	E31276
Upper part complete	E31277
Microphone complete	E31958
EEPROM	E31288
Rubber plate set	E31280
Connecting terminal set	E31423
10 pieces of rubber plates Renz-RSA2	E32520

FOR FRONT-DOOR STATIONS, SERIES AMI

	Item no.
Name plate glass AMI-bell button module	E34178
Built-in camera (ADU3 as well)	E14148

FOR INDOOR STATIONS

	Item no.
10 pcs. lower cover for housing for ISx3xxx-x140	E32431
1 pcs. lower cover for housing for ISW4210-0147	E30040
IVH3222-x140 lower cover for housing (10 pieces)	E35350
Cover panel for indoor stations (10 pieces)	E24340

FOR TRANSPONDER READER

	Item no.
USB MIFARE® reader	E35042
IR remote control	E23253

FOR SERVICE DEVICE TCSK-01

	Item no.
BUS connecting cable black	E02104
Connecting cable grey	E03481
Adapter board	E03262

INITIAL OPERATION AND MAINTENANCE

(VIDEO) FRONT-DOOR STATIONS

		Series PAK	Series PES	Series PUK	Built-in door loudspeaker	Series AVC	Series AVE	Series AVU	Series AMI
Memory	exchangeable plugged-in	•	•	•	•	•	•	•	
Parameter which can be changed manually	call destinations or light switch function	•	•	•	•	•	•	•	
	volume voice output	•	•	•	•	•	•	•	
	volume acknowledgement tone				•				
	microphone sensitivity	•	•	•		•	•	•	
Parameter which can be changed with service device TCSK	call destinations or light switch function	•	•	•	•	•	•	•	
	length of call	56 s	56 s	56 s	56 s	56 s	56 s	56 s	
	changing/locking AS addresses	•	•	•	•	•	•	•	
	talking in case of door standby	•	•	•	•	•	•	•	
Parameter which can be changed with software	acknowledgement tone selection	•	•	•	•	•	•	•	
	call destinations or light switch function	•	•	•	•	•	•	•	
	length of call	56 s	56 s	56 s	56 s	56 s	56 s	56 s	
	door call standby time	56 s	56 s	56 s	56 s	56 s	56 s	56 s	
	door call time	4 s	4 s	4 s	4 s	4 s	4 s	4 s	
	call time	4 s	4 s	4 s	4 s	4 s	4 s	4 s	
	changing/locking AS addresses	•	•	•	•	•	•	•	
	talking in case of door standby	•	•	•	•	•	•	•	
	door release only during voice communication	•	•	•	•	•	•	•	
	door call time on R-terminal	•	•	•	•	•	•	•	
master code		•*					•*		
loading ground state	•	•	•	•	•	•	•		

• available and activatable feature * with integrated code lock on front-door stations (ASx1 or AVx5...)



You will find technical data of different functional modules in the download area at www.tcsag.de

INPUT DEVICE AND READER FOR ACCESS CONTROL

		Code lock AZF50000-0010	Code lock AZC50000-0010	Transponder reader AMI12300-... AZC41000-...
Parameter which can be changed manually	program train of codes (codes via master code)	•	•	
	program train of keys (transponder and master transponder with IR remote control)			•
	light switch function	•	•	•
	relay switch time or switch time for R-contact	•	•	•
	AS addresses	•	•	•
	loading ground state	•	•	•
	changing master code	•	•	•
Parameter which can be changed with software	program train of codes and transponders	•	•	•
	relay switch time or switch time for R-contact	•	•	•
	trigger function door release control function	•	•	•
	changing/locking AS addresses	•	•	•
	master code	•	•	•
	loading ground state	•	•	•

(VIDEO) INDOOR STATIONS

		ISx3030-0140	ISx3130-0140	IMM11x0-014x	IMM21x0-014x	IMM1310-014x	IMM2310-014x	IVH3222-0140	ecoos	sky	skyline	skyline:ten BASIC
Operation indication	OSD menu								•	•	•	
	LED (blue)										•	
Error indication	visual acoustic (total error indication on LED)	•	•						•	•	•	
	conversation volume	•	•							•		•
Parameter which can be changed manually	ring tone volume	•	•	•	•	•	•	•	•	•	•	•
	ring tone selection	•	•	•	•	•	•	•	•	•	•	•
	ring tone mute	•	•	•	•	•	•	•	•	•	•	•
	internal call			•	•	•	•					•
	control function				•	•	•					•
	call diversion			•	•	•	•					•
	door release			•	•	•	•					•
	parallel call			•	•	•	•					•
	colour saturation					•	•	•	•	•	•	•
	brightness					•	•	•	•	•	•	•
	contrast						•	•	•	•	•	•
	loading factory setting				•	•	•	•	•	•	•	•
	Parameter which can be changed with service device TCSK	light switch function	◦	◦	◦	◦	◦	◦	•	•	•	•
parallel call		•	•	•	•	•	•	•	•	•	•	
internal call (on function key)				•	•	•	•		•	•	•	
call diversion (on function key)				•	•	•	•		•	•	•	
door release (on function key)				•	•	•	•		•	•	•	
control function (on function key)			•	•	•	•	•	•	•	•	•	
Parameter which can be changed with software config	simplex communication	•	•			•	•		•	•	•	
	ring tone volume	•	•	•	•	•	•	•	•	•	•	•
	internal call(s)			•	•	•	•		•	•	•	
	parallel call	•	•	•	•	•	•	•	•	•	•	
	call diversion			•	•	•	•		•	•	•	
	door release			•	•	•	•		•	•	•	
	floor door release function			•	•	•	•		•	•	•	
	control function(s)			•	•	•	•	•	•	•	•	
	display function(s) (for comfort key pad)				•	•	•	•				
	automatic hands-free talking after internal call	•	•			•	•		•	•	•	
	changing audio AS-addresses (threshold ring tone AS)	•	•	•	•	•	•	•	•	•	•	•
	loading ground state	•	•	•	•	•	•	•	•	•	•	•
	sending the sender serial number internal calls			◦	◦	•	◦	•		•	•	•
unlimited call time	•	•						•	•	•		

• available and activatable feature ◦ only on product version for hands-free talking ◦ fixed factory settings

ELECTRICAL FEATURES

(VIDEO) FRONT-DOOR STATIONS / INPUT DEVICE AND READER FOR ACCESS CONTROL

	Series PAK	Series PES	Bell button extensions	Series PUK	Built-in door loudspeaker	Series AVC	Series AVE	Series AVU	Series AMI 11100-00xx	Series AMI 1090x-00xx	Series AMI 11603-00xx	AZC50000-0010	AZF50000-0010	AZC41000-0010	AMI12300-0080
Input current I(a)	0.4	0.4	+ 0.8 ¹ + 1.2 ²	0.4 ¹ 0.8 ² 1.2 ³	0.1	0.4	0.4	0.4 ¹ 0.8 ² 1.2 ³	0.1	0.3	11	0.4	0.4	0.1	0.1
Input current I(P), in resting position	11	26	+ 12 ¹ + 23 ²	19 ¹ 36 ² 53 ³	4.4	140	60	120 ¹ 135 ² 150 ³	4.4	4.5	19.5	1.6	14	17	11
Input current I(Pmax), maximum	21	46	+ 12 ¹ + 23 ²	36 ¹ 40 ² 58 ³	140	156	80	135 ¹ 150 ² 165 ³	140		85	36	59	40	25
Supply voltage	24/26V ± 8%														
Additional terminal R	extended function door release														
Additional terminal S	triggering door release -, light, switch function or door call														
Additional connections	USB-B RS485														
Wiring technique (amount of wires)	2-wire possible														
	3-wire														
	6-wire														

Bell button extensions
¹ for bell button extensions with up to 20 bell buttons
² for bell button extensions with more than 20 bell buttons

PUK I AVU
¹ one-columned
² two-columned
³ three-columned

* 2-/3-wire operation switchable

(VIDEO-) INDOOR STATIONS

	ISx3030-0140	ISx3130-0140	IMM1100-014x	IMM1110-014x	IMM2100-014x	IMM2110-014x	IVH3222-0140	IMM1300-014x	IMM1310-014x	IMM2300-014x	IMM2310-014x	ecooS	sky	skyline	skyline-ten BASIC	
Input current I(a)	in 2-wire operation, in mA		1	1.4												
	in 3-wire operation, in mA		0.2	0.2	0.4	0.5	0.5	0.5								
	in 6-wire operation, in mA						0.2	0.4	0.4	0.4	0.5	0.04	0.03	0.4	0.5	
Input current I(P), in resting position in mA	0.8	1.2	4.4	7.1	4.7	7.4	4	4.4	7.1	4.7	7.4	14	8.5	16	100	
Input current I(Pmax), maximum	75	72	90	102	112	124	90	133	145	155	167	136	210	240	450	
Video image activation	AS-dependent															
Additional connections	for floor push-button															
Supply voltage	24 /26V ± 8%															
Wiring technique (amount of wires)	2-wire possible															
	3-wire															
	6-wire															

VIDEO CAMERAS

	Built-in camera FYK220x-0300	Dome cameras FYK4212-0	Dome cameras FYK4221-0	Cylinder cameras FYK32x0-0	Vario focus camera FYK1202-0	PTZ interface FBI4500-0100	Camera module AMI10500-00xx	Dome camera module AMI10600-00xx
Input current I(a)	0	0	0	0	0	0,4	0	0
Input current I(P), in resting position	120	57 157*	60	100	75 265*	25	90	60
Input current I(Pmax)	120	57 157*	60	100	75 265*	35	90	60
Supply voltage	in V DC							
	18-28	12	12	12	12	26	12	12
Wiring technique	6 (a/b, P, M, V1, V2)							

*with infrared illumination

EXTENDED FUNCTIONS

	FFL2000-0	FIL1101-0140	TRE1-EB	TRE2-EB	FAA1100-0600	FAA1200-0600	TOER2-EB	FNA1000-0400	BRE2-SG	BRE2-EB	FBS1100-0900	FBS1105-0900	BMNZ-EB	FIS1100-0600	FVY1200-0400	FVY1200-0600	FVY1400-0400	FVU1210-0600	VSW04-SG	FVU1200-0600	FVM1000-0400	FVW2000-0600	FVW1001-0600	VHF05-GH		
Input current I(a)	in 2-wire operation, in mA		1.5	0.4	1.2		1.2		1.5	1.3	1.3															
	in 3-wire operation, in mA		0.4	0.2	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.2		
	in 6-wire operation, in mA																									
Input current I(P), in resting position	2	1.3	0.8	0.8	0.8	0.8	1.4	2.8	1	1	1.1	5	60	40	90	2	21	0.4	70	17						
Input current I(Pmax), maximum	7.5	70	5.6	6.5	5.6	16	6.5	30	4.4	1.5	1.5	2.5	12	70	60	120	10	0.0	9	130	300	25				
Supply voltage	in V																									
	230	26	26	26	26	26	26	230	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	9-12
Wiring technique (amount of wires)	2-wire possible																									
	3-wire																									
	6-wire																									

INTERFACES

	TK-interfaces FBO1x00-0400	ELA-interface FBI5100-0400	IR-transceiver FBI4100-0400	IP-gateway FBI6119-0400	IP-gateway FBI6122-0400	IP-message receiver FBI6131-0400
Input current I(a)	in 2-wire operation, in mA					
	in 3-wire operation, in mA					
	in 6-wire operation, in mA					
Input current I(P), in resting position	9	1.9	18	200	200	20
Input current I(Pmax), maximum	50	40	24	250	250	20
Supply voltage	in V					
	26	26	26	26	26	20
Wiring technique (amount of wires)	3-wire					
	6-wire					

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TCS TürControlSysteme AG
Geschwister-Scholl-Straße 7
39307 Genthin
Germany

Phone +49 3933 8799-10
Fax +49 3933 8799-11
Email info@tcsag.de
Web www.tcsag.de

TCS Österreich GmbH
Gewerbepark 21
2821 Lanzekirchen
Austria

CONSULTATION

Phone +49 4194 9881-188
Fax +49 4194 9881-29
Email hotline@tcsag.de

QUOTES

Phone +49 4194 9881-166
Fax +49 4194 9881-199
Email offer@tcsag.de

SALES

Phone +49 3933 8799-500
Fax +49 3933 8799-80
Email sales@tcsag.de



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