

ZETTLER®

Medicall® 800 -
Addressable
nurse call and
care communication
system

Equipment
description
and typical rooms
225 902
950.1000E

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1 PRELIMINARY REMARKS

1.1 General preliminary remarks

The ZETTLER® Medicall® 800 system is used as the basic product. Completion of the Statement of Requirements set out below is mandatory. Alternative bids are permitted and must be submitted as an electronically produced Appendix to the Statement of Requirements. All of the user facilities of the basic product must be provided by the alternative product, even if no equipment with these user facilities is included in the enclosed equipment list. It must be possible to add unlisted equipment at any later stage. The bidder must declare this expressly in the letter accompanying the bid and in detailed technical appendices. To enable comparability, the order of the points of the Statement of Requirements must be followed.

1.2 Operating and maintenance instructions

The customer must be provided with the operating and maintenance instructions at least 2 weeks prior to acceptance. For safety reasons, a mandatory inspection with a service engineer of the manufacturer must be carried out prior to the acceptance. The configuration and functional capacity of the system must be checked with the customer and the operator. The result of the inspection must be recorded in a test report, which must be signed by all parties concerned. The test report is a prerequisite for acceptance of the system.

1.3 Regulations

The latest versions of the regulations, recommendations and guidelines specified below must be noted and adhered to.

- The nurse call system must correspond to VDE 0834, Application area II, DIN 41050, Parts 1 and 2.
- The nurse call system must be set up in accordance with VDE 0800 and VDE 0100. The recommendations of VDE 0228 must be noted.
- Medical supply units, in which parts of the nurse call system are housed, must correspond to VDE 0750 Part 211.
- The distances from components of a lightning protection system specified in VDE 0185 must be maintained. Lines and equipment of the nurse call system must be incorporated in a state-of-the-art graduated lightning protection system.
- The respective latest version of the insert to DIN/VDE 0107 §25 paragraph 4 of the construction and industrial safety regulations for hospitals.
- Accepted engineering practice
- Provisions of the local power supply company
- Provisions of Deutsche Telekom

1.4 System description

A building may be divided up into as many as 250 sections; up to 5 groups may be formed within each section.

The call type (6-digit), the section or group designation (8-digit) and the bed or resident text (8-digit) are available to identify a call and its origin. All of these designations can be freely programmed in accordance with the requirements of the operator and it must be possible to display them

alphanumerically on the equipment provided for this purpose.

1.4.1 Call types

ZETTLER® Medicall® 800 provides the following standard call types, which can be produced with suitable call activation.

equipment:

- Telephone call, to signal incoming telephone calls in the nurse call system
- Assistance call, allowing nursing staff to summon specific staff, e.g. transport service
- Service call, allowing the patient to summon non-medical services
- Plug removed call, automatic call as soon as a call-activating unit is inadvertently unplugged
- Patient call, allowing nursing staff to be alerted by the patient, upgradable in 3 stages
- Infusion call, allowing calls to be activated by medical equipment, e.g. infusion pumps
- WC call, allowing nursing staff to be alerted by the patient in the WC
- Nurse emergency call, allowing nursing staff to summon a second nurse
- Diagnosis call, allowing calls to be activated by medical monitoring equipment
- WC emergency call, allowing nursing staff in the WC to summon a second nurse
- Doctor emergency call, allowing nursing staff to alert a doctor
- Fire alarm, for direct, discrete alerting of all nursing staff in the event of a fire
- Cardiac alarm, allowing nursing staff to alert the resuscitation team

It must be possible to assign any required designations and priorities to calls.

1.4.2 Presences

ZETTLER® Medicall® 800 provides two presence categories, which can be clearly identified on all displays either by colour-coding or by a display text. Specific call categories can be transmitted to a specific presence category only.

1.4.3 Signalling, answering and cancelling

The call light always indicates the most important call in the room; the same applies even if the most important call is a stored call.

The presence light indicates the presence of nursing staff in the room. Calls are transferred audibly to rooms with marked presence. For call transfer, it must be possible to adjust the volume of the ringing tone in three stages from a central point, either temporarily or permanently for individual areas of the system. The patient must be made aware of a fault in his call line. To do this, his reassurance light flashes with the fault cadence.

Calls can be cancelled at the call location using the presence button or a special cancel button. Calls can be answered on the universal terminal and on communications terminals with extension answering. Normal calls can then be cancelled or stored, whereas emergency calls can only be stored. Stored calls are cancelled at the call location using the presence button. Stored calls are repeated after a definable time. If the call

is stored, the patient must be made aware of this by the slow flashing of the reassurance light.

1.4.4 Voice communications

Voice communication for call answering operates in duplex mode:

- As free, ex-room communications on the communications terminals in the rooms
- Via a telephone handset on the universal terminal
- As free voice communication on communications terminals with extension answering. The call type and call location are indicated on the display

1.4.5 Announcements

Announcements can be made on the universal terminal on a section or group basis, or to all rooms with activated presence. Listening in to rooms is not possible here.

1.4.6 Calling a room with presence

Calls can be made on a targeted basis to any room with a communications terminal and activated presence.

1.4.7 Safety system

Constant monitoring of all components with fault indication. Every section display must be able to monitor up to 65 bus components. Faults in individual rooms must be signalled both on displays and in the defective room itself. Faults must not be signalled as calls.

Timed forwarding of calls and faults to further groups and sections, with different programming for 2 forwarding categories.

1.4.8 Special functions

Any required events can be fed via interface modules and volt-free contacts into the nurse call system, where they are displayed. Any required text can be defined for any given contact. A volt-free output can be assigned via output modules to every event for signal transfer to other systems.

1.4.9 System structure

The logical division of the bus components is completely independent of the physical structure of the wiring. All installation units must be suitable for solder-free and screwless connection systems. Surface-mounting and flush-mounting installation must be available as standard.

1.4.10 System components

1.4.10.1 Room signal light

The room signal light is the control unit for a room and at the same time the distributor for all lines in the room. It registers all calls, displays them in the corridor with coloured lights and forwards them via the bus to other bus components. It receives calls forwarded from other rooms and indicates these to an attending nurse in the form of audible signals. In conjunction with a set presence, all calls which can be activated by the patient are transmitted as emergency calls.

1.4.10.2 Universal display

The universal display must be configured to perform the following tasks:

- Section display

The section display is the central control unit for a section. It manages all calls and presences, as well as other events within the section. It indicates all calls from a section in the associated duty room. Several pre-programmed interconnections with other groups or sections can be activated or de-activated. The section display can monitor up to 65 bus components provided for that purpose.

- Group display
The group display serves to indicate all calls from a defined group of rooms in the associated duty room. Several pre-programmed interconnections with other groups or sections can be activated or de-activated.
- Central display
If the central display function is used, all the required information can be displayed at a central point, e.g. display of all faults on a central display in the technical equipment room.
- Parallel display
The parallel display serves as an additional display device for specific calls and information at any point in the system.

1.4.10.3 Display modules

Display modules serve to indicate calls, faults and messages in the rooms.

1.4.10.4 Communications terminals

Communications terminals are required in patients' rooms and function rooms for free, ex-room two-way communications. They are equipped with additional operating components, depending on the application involved:

Call and presence button
Call and presence button, display for call indication and facility for extension answering and making calls from rooms with presence.

1.4.10.5 Universal terminal

It must be possible to configure the universal terminal to perform the following functions:

- Section answering
Section answering is used for central call answering in the section. Further functions include announcements and calls from rooms with presence. In addition, it is the central control unit for a section. It manages all calls and presence and other events within the section and indicates all calls from the section. Several pre-programmed interconnections with other groups or sections can be activated or de-activated. The section terminal can monitor up to 65 bus components provided for that purpose.
- Group answering
Group answering serves to indicate and answer all calls from a defined group of rooms in the associated duty room. Several pre-programmed interconnections with other groups or sections can be activated or de-activated.
- Central answering
If the central answering function is used, selected calls from the entire system are displayed and can be answered. Examples include:
 - Display and answering of service calls in the hospital shop
 - Display and answering of cardiac alarms for the resuscitation team

- Central indication of all faults in the technical equipment room.
- Parallel answering
Parallel answering offers an additional display and answering facility for specific calls and information at any point in the system.

1.4.10.6 Repeaters

Repeaters serve to regenerate data signals and to divide the system bus into individual segments.

1.4.10.7 Routers

Routers act as repeaters and also serve to control the data traffic on the system bus.

1.4.10.8 Power supply units

24V, 10A power supply units are used for the power supply. The optional uninterruptible power supply has a stored energy time of at least 3 hours.

1.4.10.9 Corridor displays

Corridor displays serve to indicate calls and messages queued in the system. It must be possible to display the time and special texts. The displays alphanumeric and self-lighting with a minimum digit height of 50 mm.

1.4.10.10 Section lights and group lights

Section lights and group lights in each case indicate the most important call within a section or group. Direction lights guide staff to rooms or areas which are not immediately visible. They are activated by "Receivers for light control".

1.4.11 Essential user facilities

In addition to the characteristics described above, the following user facilities must be provided:

- The nurse call system must represent the state of the art.
- The system to be installed must be designed to provide maximum flexibility and expandability.
- It must be possible to present information from other systems, e.g. fire alarm system, fault alarm system and the like, on the displays of the nurse call system, thereby providing nursing staff with all required information in clear text.
- Transparent data transmission via the light call bus must be possible, independent of the operation of the nurse call system. This must not affect the safety requirements of the nurse call system.
- In order to minimise the cost of maintenance and diagnosis in the event of a fault, it must be possible in agreement with the operator, to test, diagnose and configure all system functions remotely via a modem link. It must likewise be possible to download, set up and activate new program versions by modem.
- Light call emergency mode which offers the basic light call functions "Call display on the room signal light" and "Call transfer to other rooms" must be guaranteed without additional components and with only two room signal lights. Furthermore, all call information must be shown on the displays with text and call location.
- The nurse call system must offer the facility to transfer call information via an interface to a PABX system suitable for this purpose and display it on suitable PABX terminals. Calls can be processed on PABX terminals equipped for this purpose (store or delete).

- The nurse call system must be able to forward all or selected calls and information to a wireless paging system (PSA) or DECT server. The assignment of rooms to nursing groups and PSA receivers must be freely configurable.
- If the organisation is changed, it must be possible to adapt the nurse call system without wiring work.
- For installation units such as switches and operating components, a uniform system solution must essentially be provided which, for safety reasons, is distinct from conventional switches (DIN/VDE 41050). For the units (panels) in the patients'/residents' rooms, standard cover panels from the leading switch manufacturers must be provided.
- All components of the patients' and staff rooms (panels, displays, room signal lights) must be installed in standard switchboxes. System-specific sockets from the manufacturer are not permitted.
- The entire wiring must be implemented using conventional telecommunications cable. Special system cables are not permitted, even for parts of the system.
- It must be possible to transmit five radio programmes from the radio system via dedicated screened lines, or 4 radio programmes and 1 TV programme per bed.
- Automatic forwarding of calls, when the programmed queuing time lapses, to locations specified by the operator, regardless of the call category.
- Calls which are activated when presence is set must be signalled audibly in the caller's own room. The signals must be clearly distinguishable from normal call transfer.
- Call transfer to locations specified by the operator, according to 2 different stages.
- Recovery of stored calls at the end of the time specified by the operator
- Display of all faults in a fault list, which can be viewed on the section display
- Optional indication of a fault on corridor displays and group or section lights
- Automatic storage of calls and presences for at least 10 minutes in the event of a power failure
- Automatic emergency light call operation if a fault occurs in system components
- The nurse call system must enable discrete alarm transmission from the fire alarm system to nursing staff via an interface or direct link-up to the room electronics.
- Freely configurable assignment of rooms to nursing groups and PSA receivers in nursing group mode
- Clear text display of the call type of the call selected for processing. Display of calls arranged by priority or in chronological order
- Section interconnection as required up to max. 15 sections
- Assignment of text and priority for each call type in accordance with the operator's requirements
- Assignment of texts for every call line in accordance with the operator's requirements. It must be possible to accommodate an alphanumeric text comprising at least 8 digits.

1.5 Notes

In the following tables, abbreviations are used in the case of some units for the functions and operating components. The meanings are as follows:

- A Doctor emergency call (button)

PRES	Presence (button)		093.332x	Dynamic headphones	27
DI-St4	4-pol. socket for diagnosis call		093.375x	Plug for diagnosis call 4-p	27
H	Cardiac alarm (button)		093.381x	Housing	27
IE	Equipment for installation unit (medical supply equipment)		093.550x	PS base module motherboard	35
			093.551x	Adapter module medifon 2010/2000	35
LT	Light button		093.552x	Adapter module medifon CLS	35
P	Patient call (button)		093.553x	Adapter module Universal	35
PS	Assistance call (button)		093.554x	Adapter module Optakust W	35
R	Call (button) general		093.555x	Adapter module Medicall 800	35
St6	6-pol. socket for pear push		110.087x	Adapter board E1	43
St28	28-pol. socket for patient's handset or pear push		110.088x	Adapter board for flush-mounting box E2	43
			125.410x	Adapter S1	46
Su	Audible signal generator (buzzer)		125.411x	Adapter S2	46
WC	WC call		125.420x	Mounting frame S1	46
6-p	Unit with 6-pol. plug		125.421x	Mounting frame S2	46
28-p	Unit with 28-pol. plug		125.530x	Pear push standard1ST/1LT	25
			125.531x	Pear push standard2LT	25
			125.540x	Pear push standard1LT	25
			125.550x	Pear push standard	25
			125.800xS	Buzzer	12
			125.810xS	Presence panel 1PB	10
			125.811xS	Presence panel 1PB/Bu	9
			125.812xS	Call panel	13
			125.812xS	Call panel	18
			125.813xS	Cancel panel	18
			125.814xS	Doctor call button	13
			125.815xS	Service call button	13
			125.816xS	Assistance call button	13
			125.820xS	Presence panel 2PB	10
			125.821xS	Presence panel 2PB/Bu	9
			125.822xS	Call presence panel	11
			125.823xS	Call presence panel Bu	9
			125.824xS	Call cancel panel	18
			125.825xS	Doctor call presence panel	12
			125.826xS	Service call presence panel	12
			125.827xS	Assistance call presence panel	11
			125.830xS	Call cancel panel Sub-D 15-pol.	19
			125.830xS	Call cancel panel Sub-D 15-pol.	22
			125.831xS	Call service call panel Sub-D 15-pol.	21
			125.832xS	Call doctor call panel Sub-D 15-pol.	23
			125.840xS	Call panel Sub-D 15-pol.	20
			125.841xS	Cancel panel Sub-D 15-pol.	20
			125.842xS	Service call panel Sub-D 15-pol.	21
			125.843xS	Doctor call panel Sub-D 15-pol.	22
			125.850xS	Socket Sub-D 15-pol.	20
			125.860xS	Pull cord panel	19
			125.861xS	Pneumatic call panel	19
			125.891xS	Call presence panel Sub-D 15-pol./Bu	10
			125.892xS	Assistance call presence button 2PB	11
			125.893xS	Doctor call presence button 2PB	12
			130.910x	Push-to-clamp terminal set,400 terminals	43
			130.911x	Terminal resistor 120Ohm	36
			130.920x	Mounting kit for distributor	42
			130.9440	XFM Modem Interface Module	38
			130.950x	Glass base lamp 24V/3W, clear W2, 1x9,5d	42
			130.952x	Glass base lamp 24V/3W, red W2, 1x9,5d	42
			130.954x	Glass base lamp 24V/3W, green W2, 1x9,5d	42
			130.956x	Glass base lamp 24V/3W, amber W2, 1x9,5d	42
			130.980x	LON Router RS 485 – RS 485	38

☞ In this equipment description, order numbers are indicated for all units. The fourth digit after the full stop is identical to the version number of the unit and is replaced below by an "x".

☞ Order numbers ending with an "S" designate "material sets", which simplify planning and ordering.

1.6 Equipment list, sorted by order number

001.05xx	Flush-mounting box E1 (no-fines concrete)	44
001.11xx	Flush-mounting box E1 (masonry)	44
001.12xx	Flush-mounting box E2 (masonry)	44
001.13xx	Flush-mounting box E3 (masonry)	44
001.150x	Flush-mounting box E1 (cavity wall)	45
001.160x	Flush-mounting box E2 (cavity wall)	45
010.513xS	Direction signal light, 1part	33
010.514xS	Group signal light, 2part	33
010.515xS	Group signal light, 4part	33
010.516xS	Group signal light, 6part	33
010.517xS	Group signal light, 8part	34
010.518xS	Group signal light, 10part	34
013.018x	Festoon lamp 24V/3W, clear	42
013.022x	Festoon lamp 24V/5W, clear	42
015.001x	Power supply unit 230VAC/24VDC-10A	39
015.005xS	Emergency power supply 230VAC/24VDC	39
015.011x	Snap-on attachment for power supply unit	40
015.050x	S-transformer 230/24VAC-25	40
015.051x	S-transformer 230/24VAC-100	40
015.052x	S-transformer 230/24VAC-250	40
015.053x	S-transformer 230/24VAC-400	40
092.421x	Plug-in device, bed, 28-p	24
092.441x	Plug-in device, bed, IE/28-p	24
093.135x	Call panel H	14
093.191x	Switchbox (masonry)	45
093.192x	Switchbox (cavity wall)	45
093.193x	Switchbox (no-fines concrete)	45
093.194x	Double switchbox (masonry)	46
093.195x	Double switchbox (cavity wall)	46
093.301x	Patient's handset	26
093.302x	Multiple pear push 1LT/6-p	27
093.303x	Multiple pear push 2LT/28-p	26
093.304x	Pneumatic call panel 28-p	26
093.308x	Multiple pear push 1LT/28-p	26
093.330x	Patient's handset (Voice/TV)	27

138.010xS	Room signal light without electronics	8	Call cancel panel Sub-D 15-pol.	125.830xS	22
138.110xS	Room signal light with electronics	7	Call doctor call panel Sub-D 15-pol.	125.832xS	23
138.150xS	Room electronics without light	7	Call panel	125.812xS	13
138.160xS	Display module S1	15	Call panel	125.812xS	18
138.161xS	Display module with button S2	15	Call panel H	093.135x	14
138.170xS	Communications terminal S2	16	Call panel Sub-D 15-pol.	125.840xS	20
138.171xS	Communications terminal with button S2	16	Call presence panel	125.822xS	11
138.172xS	Communications terminal with button/NA-LCD S3	17	Call presence panel Sub-D 15-pol./Bu	125.891xS	10
138.310xS	Universal display	28	Call presence panel Bu	125.823xS	9
138.361xS	Universal answering station with display	29	Call service call panel Sub-D 15-pol.	125.831xS	21
138.362xS	Universal answering station with display (Desktop terminal)	30	Cancel panel	125.813xS	18
138.510xS	Repeater without electrical isolation	36	Cancel panel Sub-D 15-pol.	125.841xS	20
138.511xS	Repeater with electrical isolation	36	Communications terminal S2	138.170xS	16
138.530xS	Receiver for lamp control	32	Communications terminal with button S2	138.171xS	16
138.531xS	Speech control unit	36	Communications terminal with button/NA-LCD S3	138.172xS	17
138.550xS	Corridor display kit, single-sided	32	Configuration tools Zettler	230.975x	38
138.570xS	Corridor display kit, double-sided	32	Corridor display kit, double-sided	138.570xS	32
138.650xS	LON-radio clock node	36	Corridor display kit, single-sided	138.550xS	32
138.690xS	Interface module RS 232	37	Direction signal light, 1 part	010.513xS	33
138.721xS	Loudspeaker module S1	17	Display module S1	138.160xS	15
138.970xS	PC connection set	38	Display module with button S2	138.161xS	15
140.193x	Relay set	32	Doctor call button	125.814xS	13
140.405xS	Telephone call relay	32	Doctor call panel Sub-D 15-pol.	125.843xS	22
201.41xx	Surface-mounting frame E1	46	Doctor call presence button 2PB	125.893xS	12
205.601x	Sound monitor "Dormophon" 24 V DC / E1	14	Doctor call presence panel	125.825xS	12
230.6001	D-SW for PSA and DECT	37	Double switchbox (cavity wall)	093.195x	46
230.6400	D-SW for data interface (DIF)	37	Double switchbox (masonry)	093.194x	46
230.970x	Installation tools Zettler	38	D-SW for data interface (DIF)	230.6400	37
230.975x	Configuration tools Zettler	38	D-SW for PSA and DECT	230.6001	37
530.112x	Battery 12V, 2 Ah for emergency alarm systems	41	Dynamic headphones	093.332x	27
531.032x	Battery 12V, 24 Ah for emergency alarm systems	41	Emergency power supply 230VAC/24VDC	015.005xS	39
570.095x	Battery 12V, 6,4 Ah for emergency alarm systems	41	Festoon lamp 24V/3W, clear	013.018x	42
			Festoon lamp 24V/5W, clear	013.022x	42
			Flush-mounting box E1 (cavity wall)	001.150x	45
			Flush-mounting box E1 (masonry)	001.11xx	44
			Flush-mounting box E1 (no-fines concrete)	001.05xx	44
			Flush-mounting box E2 (cavity wall)	001.160x	45
			Flush-mounting box E2 (masonry)	001.12xx	44
			Flush-mounting box E3 (masonry)	001.13xx	44
			Glass base lamp 24V/3W, amber W2, 1x9,5d	130.956x	42
			Glass base lamp 24V/3W, clear W2, 1x9,5d	130.950x	42
			Glass base lamp 24V/3W, green W2, 1x9,5d	130.954x	42
			Glass base lamp 24V/3W, red W2, 1x9,5d	130.952x	42
			Group signal light, 10part	010.518xS	34
			Group signal light, 2part	010.514xS	33
			Group signal light, 4part	010.515xS	33
			Group signal light, 6part	010.516xS	33
			Group signal light, 8part	010.517xS	34
			Housing	093.381x	27
			Installation tools Zettler	230.970x	38
			Interface module RS 232	138.690xS	37
			LON Router RS 485 – RS 485	130.980x	38
			LON-radio clock node	138.650xS	36
			Loudspeaker module S1	138.721xS	17
			Mounting frame S1	125.420x	46
			Mounting frame S2	125.421x	46
			Mounting kit for distributor	130.920x	42

1.7 Equipment list, sorted by equipment name

Adapter board for flush-mounting box E2	110.088x	43
Adapter board E1	110.087x	43
Adapter module Medicall 800	093.555x	35
Adapter module medifon 2010/2000	093.551x	35
Adapter module medifon CLS	093.552x	35
Adapter module Optakust W	093.554x	35
Adapter module Universal	093.553x	35
Adapter S1	125.410x	46
Adapter S2	125.411x	46
Assistance call button	125.816xS	13
Assistance call presence button 2PB	125.892xS	11
Assistance call presence panel	125.827xS	11
Battery 12V, 2 Ah for emergency alarm systems	530.112x	41
Battery 12V, 24 Ah for emergency alarm systems	531.032x	41
Battery 12V, 6,4 Ah for emergency alarm systems	570.095x	41
Buzzer	125.800xS	12
Call cancel panel	125.824xS	18
Call cancel panel Sub-D 15-pol.	125.830xS	19

Equipment description

Preliminary remarks - Equipment list, sorted by equipment name

Multiple pear push 1LT/28-p	093.308x	26
Multiple pear push 1LT/6-p	093.302x	27
Multiple pear push 2LT/28-p	093.303x	26
Patient's handset	093.301x	26
Patient's handset (Voice/TV)	093.330x	27
PC connection set	138.970xS	38
Pear push standard	125.550x	25
Pear push standard1LT	125.540x	25
Pear push standard1ST/1LT	125.530x	25
Pear push standard2LT	125.531x	25
Plug for diagnosis call 4-p	093.375x	27
Plug-in device, bed, 28-p	092.421x	24
Plug-in device, bed, IE/28-p	092.441x	24
Pneumatic call panel	125.861xS	19
Pneumatic call panel 28-p	093.304x	26
Power supply unit	015.001x	39
230VAC/24VDC-10A		
Presence panel 1PB	125.810xS	10
Presence panel 1PB/Bu	125.811xS	9
Presence panel 2PB	125.820xS	10
Presence panel 2PB/Bu	125.821xS	9
PS base module motherboard	093.550x	35
Pull cord panel	125.860xS	19
Push-to-clamp terminal set,400 terminals	130.910x	43
Receiver for lamp control	138.530xS	32
Relay set	140.193x	32
Repeater with electrical isolation	138.511xS	36
Repeater without electrical isolation	138.510xS	36
Room electronics without light	138.150xS	7
Room signal light with electronics	138.110xS	7
Room signal light without electronics	138.010xS	8
Service call button	125.815xS	13
Service call panel Sub-D 15-pol.	125.842xS	21
Service call presence panel	125.826xS	12
Snap-on attachment for power supply unit	015.011x	40
Socket Sub-D 15-pol.	125.850xS	20
Sound monitor "Dormophon" 24 V DC / E1	205.601x	14
Speech control unit	138.531xS	36
S-transformer 230/24VAC-100	015.051x	40
S-transformer 230/24VAC-25	015.050x	40
S-transformer 230/24VAC-250	015.052x	40
S-transformer 230/24VAC-400	015.053x	40
Surface-mounting frame E1	201.41xx	46
Switchbox (cavity wall)	093.192x	45
Switchbox (masonry)	093.191x	45
Switchbox (no-fines concrete)	093.193x	45
Telephone call relay	140.405xS	32
Terminal resistor 120Ohm	130.911x	36
Universal answering station with display	138.361xS	29
Universal answering station with display (Desktop terminal)	138.362xS	30
Universal display	138.310xS	28
XFM Modem Interface Module	130.9440	38

2 EQUIPMENT OVERVIEW

2.1 Room signal light

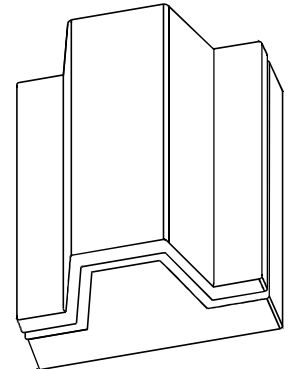
Room signal light with electronics

Rectangular plastic base with opal-coloured light holder, control electronics and distributor for all room functions, to be fitted on a switchbox or Flush-mounting box E1, with 4 illuminated sections for display in the corridor of presences, calls and call line faults. With six programmable call lines for calls from the following call locations: WC, beds and rooms according to VDE 0834. One separately controlled reassurance light for clear identification of the call location in the room. The room electronics register two presences, calls and faults and forward the information to the allocated section display or, in degraded mode, to all available bus components.

Comprising:

- 1 Plastic base, rectangular
- 1 Light holder, made of opal-coloured plastic
- 4 Illuminated sections with light holders
- 1 Electronic control system equipped for:
 - 6 call lines for selective bed display
 - 2 presence lines
- 1 Support frame
- 4 Glass base lamps

Dimensions (WxHxD) 90x110x60 mm
with 20 plug-in terminals

138.110xS

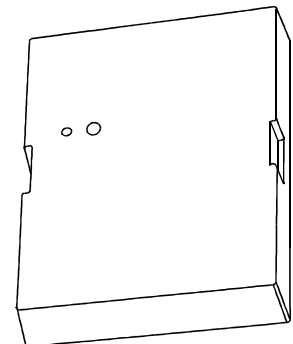
Room electronics without light

In plastic housing for wall mounting, control electronics and distributor for all room functions, to be fitted on a switchbox or Flush-mounting box E1, with 4 outputs for activation of external room signal lights in the corridor for presences, calls and call line faults. With six programmable call lines for calls from the following call locations: WC, beds and rooms according to VDE 0834. One separately controlled reassurance light for clear identification of the call location in the room. The room electronics register two presences, calls and faults and forward the information to the allocated section display or, in degraded mode, to all available bus components.

Comprising:

- 1 Plastic base, rectangular
- 1 Electronic control system equipped for:
 - 6 call lines for selective bed display
 - 2 presence lines
 - 4 light outputs
- 1 support frame for room signal light

Dimensions (WxHxD) 90 x 110 x 30 mm
with 20 plug-in terminals

138.150xS

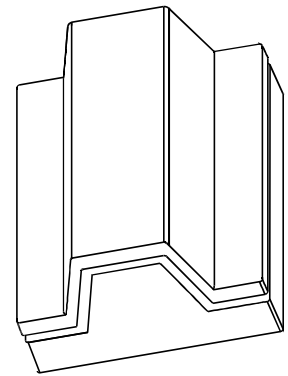
Room signal light without electronics

Rectangular plastic base with opal-coloured light holder for the display of four functions in the corridor, to be fitted on a switchbox or Flush-mounting box E1.

Comprising:

- 1 Plastic base, rectangular
- 1 Light holder, made of opal-coloured plastic
- 4 Illuminated sections with light holders
- 4 Glass base lamps
- 1 Surface-mounting frame

Dimensions (WxHxD) 90 x 110 x 60 mm
with 5 plug-in terminals

138.010xS

2.2 Room equipment**2.2.1 Panel combinations****Presence panel 1PB/Bu****125.811xS**

For flush-mounting in one conventional switchbox, with cover panel 80x80 mm, prepared for cover panels from the leading switch program manufacturers.

Facility for subsequent function modification.

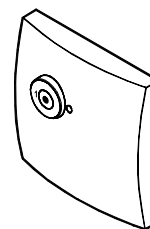
Audible signalling unit volume adjustable in two steps.

Colour pure white similar to RAL 9010, with snap attachment; contains:

1 Presence button 1, green, with symbol and monitoring LED

1 Audible signalling unit

with 5 plug-in terminals

**Presence panel 2PB/Bu****125.821xS**

For flush-mounting in one conventional switchbox, with cover panel 80x80 mm, prepared for cover panels from the leading switch program manufacturers.

Facility for subsequent function modification.

Audible signalling unit volume adjustable in two steps.

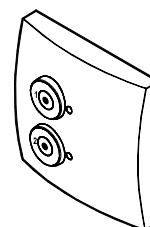
Colour pure white similar to RAL 9010, with snap attachment; contains:

1 Presence button 1, green, with symbol and monitoring LED

1 Presence button 2, green, with symbol and monitoring LED

1 Audible signalling unit

with 6 plug-in terminals

**Call presence panel Bu****125.823xS**

For flush-mounting in one conventional switchbox, with cover panel 80x80 mm, prepared for cover panels from the leading switch program manufacturers.

Facility for subsequent function modification.

Implementation of a freely definable special call.

Line monitoring with optional activation and de-activation.

Audible signalling unit volume adjustable in two steps.

Dual function of LED reassurance light as locating light.

Activation or de-activation of the locating light.

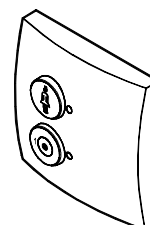
Colour pure white similar to RAL 9010, with snap attachment; contains:

1 Nurse call button, red, for patient call, with symbol and reassurance indication via LED

1 Presence button 1, green, with symbol and monitoring LED

1 Audible signalling unit

with 7 plug-in terminals



Call presence panel Sub-D 15-pol./Bu

125.891xS

For flush-mounting in two conventional switchboxes, with cover panel 80x80 mm, prepared for cover panels from the leading switch program manufacturers.

Facility for subsequent function modification.

Implementation of a freely definable special call.

Line monitoring with optional activation and de-activation.

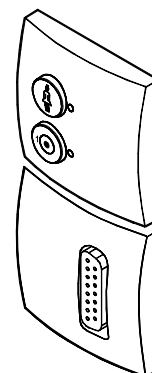
Audible signalling unit volume adjustable in two steps.

Dual function of LED reassurance light as locating light.

Activation or de-activation of the locating light.

Colour pure white similar to RAL 9010, with snap attachment; contains:

- 1 Call button, red, for patient call or WC call, with symbol and reassurance indication via LED
- 1 Presence button 1, green, with symbol and monitoring LED
- 1 Audible signalling unit
- 1 Socket, Sub-D 15-pol., for optional connection of pear push and multiple pear push panels, for activation of patient calls or for connection of diagnostic equipment, for activation of a diagnostic call or for connection of infusion equipment for activation of an infusion call.
- 1 Electronic control system for activation of a disconnection call, if a connection cable is unplugged with 16 plug-in terminals



Presence panel 1PB

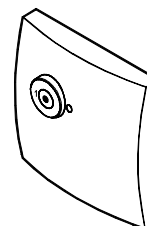
125.810xS

For flush-mounting in one conventional switchbox, with cover panel 80x80 mm, prepared for cover panels from the leading switch program manufacturers.

Facility for subsequent function modification.

Colour pure white similar to RAL 9010, with snap attachment; contains::

- 1 Presence button 1, green, with symbol and monitoring LED with 4 plug-in terminals



Presence panel 2PB

125.820xS

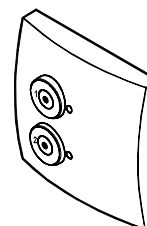
For flush-mounting in one conventional switchbox, with cover panel 80x80 mm, prepared for cover panels from the leading switch program manufacturers.

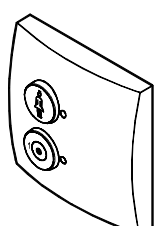
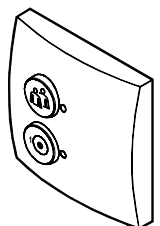
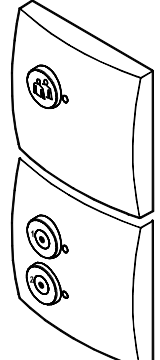
Facility for subsequent function modification.

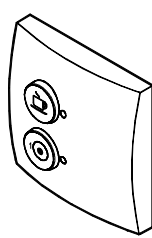
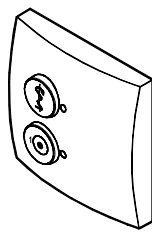
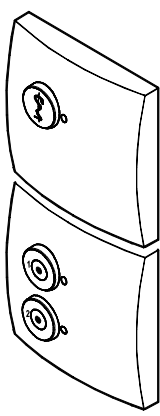
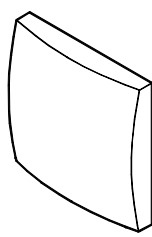
Audible signalling unit volume adjustable in two steps.

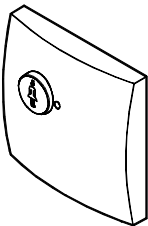
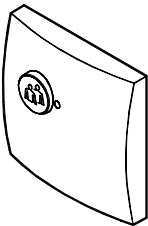
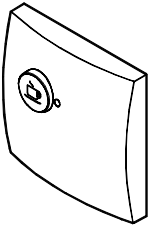
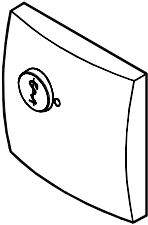
Colour pure white similar to RAL 9010, with snap attachment; contains:

- 1 Presence button 1, green, with symbol and monitoring LED
- 1 presence panel 2, amber, with symbol and monitoring LED with 6 plug-in terminals



Product	Ordering data	Illustrations
<p>Call presence panel</p> <p>For flush-mounting in one conventional switchbox, with cover panel 80x80 mm, prepared for cover panels from the leading switch program manufacturers.</p> <p>Facility for subsequent function modification.</p> <p>Implementation of a freely definable special call.</p> <p>Line monitoring with optional activation and de-activation.</p> <p>Dual function of LED reassurance light as locating light.</p> <p>Activation or de-activation of the locating light.</p> <p>Colour pure white similar to RAL 9010, with snap attachment; contains:</p> <ul style="list-style-type: none"> 1 Nurse call button, red, for patient call, with symbol and reassurance indication via LED 1 Presence button 1, green, with symbol and monitoring LED with 6 plug-in terminals 	125.822xS	
<p>Assistance call presence panel</p> <p>For flush-mounting in one conventional switchbox, with cover panel 80x80 mm, prepared for cover panels from the leading switch program manufacturers.</p> <p>Facility for subsequent function modification.</p> <p>Implementation of a freely definable special call.</p> <p>Line monitoring with optional activation and de-activation.</p> <p>Dual function of LED reassurance light as locating light.</p> <p>Activation or de-activation of the locating light.</p> <p>Colour pure white similar to RAL 9010, with snap attachment; contains:</p> <ul style="list-style-type: none"> 1 Assistance call button, red, with symbol and reassurance indication via LED 1 Presence button 1, green, with symbol and monitoring LED with 6 plug-in terminals 	125.827xS	
<p>Assistance call presence panel 2PB</p> <p>For flush-mounting in two conventional switchboxes, with cover panel 80x80 mm, prepared for cover panels from the leading switch program manufacturers.</p> <p>Facility for subsequent function modification.</p> <p>Implementation of a freely definable special call.</p> <p>Line monitoring with optional activation and de-activation.</p> <p>Dual function of LED reassurance light as locating light.</p> <p>Activation or de-activation of the locating light.</p> <p>Colour pure white similar to RAL 9010, with snap attachment; contains:</p> <ul style="list-style-type: none"> 1 Assistance call button, red, with symbol and reassurance indication via LED 1 Presence button 1, green, with symbol and monitoring LED 1 Presence button 2, amber, with symbol and monitoring LED with 12 modular terminals, 1-pol. 	125.892xS	

Product	Ordering data	Illustrations
<p>Service call presence panel</p> <p>For flush-mounting in one conventional switchbox, with cover panel 80x80 mm, prepared for cover panels from the leading switch program manufacturers.</p> <p>Facility for subsequent function modification.</p> <p>Implementation of a freely definable special call.</p> <p>Line monitoring with optional activation and de-activation.</p> <p>Dual function of LED reassurance light as locating light.</p> <p>Activation or de-activation of the locating light.</p> <p>Colour pure white similar to RAL 9010, with snap attachment; contains:</p> <ul style="list-style-type: none"> 1 Service call button, grey, with symbol and reassurance indication via LED 1 Presence button 1, green, with symbol and monitoring LED with 6 plug-in terminals 	125.826xS	
<p>Doctor call presence panel</p> <p>For flush-mounting in one conventional switchbox, with cover panel 80x80 mm, prepared for cover panels from the leading switch program manufacturers.</p> <p>Facility for subsequent function modification.</p> <p>Implementation of a freely definable special call.</p> <p>Line monitoring with optional activation and de-activation.</p> <p>Dual function of LED reassurance light as locating light.</p> <p>Activation or de-activation of the locating light.</p> <p>Colour pure white similar to RAL 9010, with snap attachment; contains:</p> <ul style="list-style-type: none"> 1 Doctor call button, red, with symbol and reassurance indication via LED 1 Presence button 1, green, with symbol and monitoring LED with 6 plug-in terminals 	125.825xS	
<p>Doctor call presence panel 2PB</p> <p>For flush-mounting in two conventional switchboxes, with cover panel 80x80 mm, prepared for cover panels from the leading switch program manufacturers.</p> <p>Facility for subsequent function modification.</p> <p>Implementation of a freely definable special call.</p> <p>Line monitoring with optional activation and de-activation.</p> <p>Dual function of LED reassurance light as locating light.</p> <p>Activation or de-activation of the locating light.</p> <p>Colour pure white similar to RAL 9010, with snap attachment; contains:</p> <ul style="list-style-type: none"> 1 Doctor call button, red, with symbol and reassurance indication via LED 1 Presence button 1, green, with symbol and monitoring LED 1 presence panel 2, amber, with symbol and monitoring LED with 12 plug-in terminals 	125.893xS	
<p>Buzzer</p> <p>For flush-mounting in one conventional switchbox, with cover panel 80x80 mm, prepared for cover panels from the leading switch program manufacturers.</p> <p>Facility for subsequent function modification.</p> <p>Audible signalling unit volume adjustable in two steps.</p> <p>Colour pure white similar to RAL 9010, with snap attachment; contains:</p> <ul style="list-style-type: none"> 1 Audible signalling unit with 2 plug-in terminals 	125.800xS	

Product	Ordering data	Illustrations
<p>Call panel</p> <p>For flush-mounting in one conventional switchbox, with cover panel 80x80 mm, prepared for cover panels from the leading switch program manufacturers.</p> <p>Facility for subsequent function modification.</p> <p>Implementation of a freely definable special call.</p> <p>Line monitoring with optional activation and de-activation.</p> <p>Dual function of LED reassurance light as locating light.</p> <p>Activation or de-activation of the locating light.</p> <p>Colour pure white similar to RAL 9010, with snap attachment; contains:</p> <p>1 Nurse call button, red, for patient call and WC call, with symbol and reassurance indication via LED</p>	<p>125.812xS</p>	
<p>Assistance call button</p> <p>For flush-mounting in one conventional switchbox, with cover panel 80x80 mm, prepared for cover panels from the leading switch program manufacturers.</p> <p>Facility for subsequent function modification.</p> <p>Implementation of a freely definable special call.</p> <p>Line monitoring with optional activation and de-activation.</p> <p>Dual function of LED reassurance light as locating light.</p> <p>Activation or de-activation of the locating light.</p> <p>Colour pure white similar to RAL 9010, with snap attachment; contains:</p> <p>1 Assistance call button, red, with symbol and reassurance indication via LED</p> <p>with 4 plug-in terminals</p>	<p>125.816xS</p>	
<p>Service call button</p> <p>For flush-mounting in one conventional switchbox, with cover panel 80x80 mm, prepared for cover panels from the leading switch program manufacturers.</p> <p>Facility for subsequent function modification.</p> <p>Implementation of a freely definable special call.</p> <p>Line monitoring with optional activation and de-activation.</p> <p>Dual function of LED reassurance light as locating light.</p> <p>Activation or de-activation of the locating light.</p> <p>Colour pure white similar to RAL 9010, with snap attachment; contains:</p> <p>1 Service call button, grey, with symbol and reassurance indication via LED</p> <p>with 4 plug-in terminals</p>	<p>125.815xS</p>	
<p>Doctor call button</p> <p>For flush-mounting in one conventional switchbox, with cover panel 80x80 mm, prepared for cover panels from the leading switch program manufacturers.</p> <p>Facility for subsequent function modification.</p> <p>Implementation of a freely definable special call.</p> <p>Line monitoring with optional activation and de-activation.</p> <p>Dual function of LED reassurance light as locating light.</p> <p>Activation or de-activation of the locating light.</p> <p>Colour pure white similar to RAL 9010, with snap attachment; contains:</p> <p>1 Doctor call button, red, with symbol and reassurance indication via LED</p> <p>with 4 plug-in terminals</p>	<p>125.814xS</p>	

Product

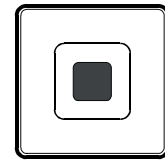
Ordering data

Illustrations

Call panel H

093.135x

For flush-mounting in one conventional switchbox, with cover panel 90x90 mm, colour pure white similar to RAL 9010, with paper insert to identify the call activation, with screw fitting; contains:
 1 Call button with monitoring LED for cardiac alarm complete with end-of-line resistor for call line monitoring.



Sound monitor "Dormophon" 24 V DC / E1

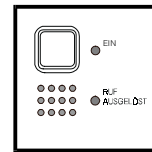
205.601x

For sound-activated calls.
 With square cover panel, 89x89 mm, colour similar to RAL 1013, with screw fitting, for insertion into Flush-mounting box E1.

Contains on PCB:

- 1 Microphone with amplifier
- 1 Adjuster for response sensitivity
- 1 Adjuster for time delay
- 1 LED display, "Call activated"
- 1 Switch, "On/Off"
- 1 LED display, "On/Off"
- 1 Connection panel, 5-pol.

Operating components with inscription

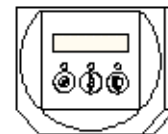


2.2.2 Communications and display equipment**Display module S1****138.160xS**

Door combination with display, in ABS plastic, white, similar to RAL 9010

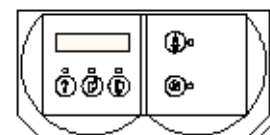
comprising:

- 1 Display module H10, containing:
 - 1 illuminated LC display for call indication, alphanumeric 2x16-digit
 - 1 Presence button, green, with monitoring LED, amber, and "Presence symbol" monitoring
 - 1 Call button, red, to activate a patient call or nurse emergency call with monitoring LED, amber, and "Nurse symbol" label, including locating light.
 - 1 Scroll button, light grey, to indicate further calls, with monitoring LED, amber, and "Scroll symbol" label
 - 1 Audible signalling unit for call transfer
 - 1 Surface-mounting frame S1
 - 1 Terminal set for display H10 + H10/NA
- for installation on a switchbox or E1 box
Dimensions (WxHxD): 112x130x25 mm

**Display module with button S2****138.161xS**

Door combination with display, in ABS plastic, white, similar to RAL 9010, for horizontal or vertical assembly, comprising:

- 1 Display module H10, containing:
 - 1 illuminated LC display for call indication, alphanumeric 2x16-digit
 - 1 button, light grey, to select the function menu, with monitoring LED, amber, and "? symbol" label
 - 1 Scroll button, light grey, to indicate further calls, with monitoring LED, amber, and "Scroll symbol" label
 - 1 Store button, light grey, to store answered calls, with monitoring LED, amber, and "Store symbol" label
 - 1 Call presence panel, containing:
 - 1 Presence button, green, with monitoring LED, amber, and "Presence 1 symbol" label
 - 1 Call button red, to activate a patient call or nurse emergency call with monitoring LED, amber, and "Nurse symbol" label, including locating light.
 - 1 Audible signalling unit for call transfer
 - 1 Surface-mounting frame S2
 - 1 Adapter S1
 - 1 Terminal set for display H10 + H10/NA
- for installation in a double switchbox or Flush-mounting box E2
Dimensions (WxHxD): 112x225x25 mm,
with 6 plug-in terminals



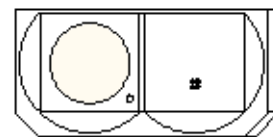
Communications terminal S2**138.170xS**

for free, ex-room communications,
in ABS plastic, white, similar to RAL 9010, for horizontal or vertical
assembly,

comprising

- 1 loudspeaker module with built-in broadband loudspeaker and monitoring LED, amber, to display "Audio active"
- 1 microphone module with built-in electret microphone and speech circuit
- 1 Surface-mounting frame S2 for installation on a double switchbox or E2 box

Dimensions (WxHxD): 112x225x25 mm,
with 6 plug-in terminals

**Communications terminal with button S2****138.171xS**

for free, ex-room communications, with operating button,
in ABS plastic, white, similar to RAL 9010, for horizontal or vertical
assembly,

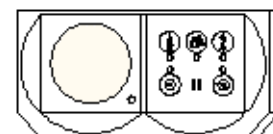
comprising:

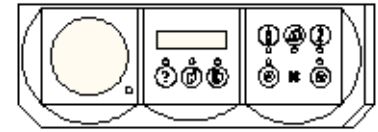
- 1 Loudspeaker module with built-in broadband loudspeaker and monitoring LED, amber, to display "Audio active"
- 1 Operating module with built-in electret microphone and speech circuit, containing:
 - 1 Presence button, green, with monitoring LED, amber, and "Presence 1 symbol" label
 - 1 Presence button, amber, with monitoring LED, amber, and "Presence 2 symbol" label
 - 1 Call button red, to activate a patient call or nurse emergency call with monitoring LED, amber, and "Nurse symbol" label, including locating light
 - 1 Call button red, to activate a staff call with monitoring LED, amber, and "Assistance symbol" label
 - 1 Call button red, to activate a doctor call with monitoring LED, amber, and "Doctor symbol" label

1 Audible signalling unit for call transfer

1 Surface-mounting frame S2 for installation on a double switchbox or E2 box

Dimensions (WxHxD): 112x225x25 mm,
with 15 plug-in terminals

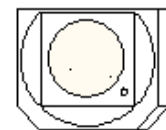


**Communications terminal
with button/NA-LCD S3****138.172xS**

for free, ex-room communications, with operating button and extension answering with display
in ABS plastic, white, similar to RAL 9010, for horizontal or vertical assembly,
comprising:

- 1 loudspeaker module with built-in broadband loudspeaker and monitoring LED, amber, to display "Audio active"
- 1 illuminated LC display for call display and extension answering, alphanumerical 2x16-digit, containing:
 - 1 Answer button, light grey, for extension answering of queued calls, with monitoring LED, amber, and "Answer symbol" label
 - 1 Scroll button, light grey, to indicate further calls, with monitoring LED, amber, and "Scroll symbol"
 - 1 Store button, light grey, to store answered calls, with monitoring LED, amber, and "Store symbol" label
- 1 Operating module with built-in electret microphone and speech circuit, containing:
 - 1 Presence button, green, with monitoring LED, amber, and "Presence 1 symbol" label
 - 1 Presence button, amber, with monitoring LED, amber, and "Presence 2 symbol" label
 - 1 Call button red, to activate a patient call or nurse emergency call with monitoring LED, amber, and "Nurse symbol" label, including locating light.
 - 1 Call button red, to activate a staff call with monitoring LED, amber, and "Assistance symbol" label
 - 1 Call button red, to activate a doctor call with monitoring LED, amber, and "Doctor symbol" label
- 1 Audible signalling unit for call transfer
- 1 Cover frame S3
- 1 Trough S3
- 1 Terminal set for display H10 + H10/NA for installation on a double switchbox,

Dimensions (WxHxD): 112x320x26 mm,
with 15 plug-in terminals

Loudspeaker module S1**138.721xS**

in ABS plastic, white, similar to RAL 9010
comprising:

- 1 Loudspeaker module
- 1 Surface-mounting frame S1

for installation on a switchbox or E1 box

Dimensions (WxHxD): 112x130x25 mm

2.3 WC equipment**Call panel****125.812xS**

For flush-mounting in one conventional switchbox, with cover panel 80x80 mm, prepared for cover panels from the leading switch program manufacturers.

Facility for subsequent function modification.

Implementation of a freely definable special call.

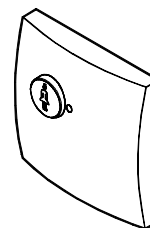
Line monitoring with optional activation and de-activation.

Dual function of LED reassurance light as locating light.

Activation or de-activation of the locating light.

Colour pure white similar to RAL 9010, with snap attachment; contains:

- 1 Nurse call button, red, for patient call and WC call, with symbol and reassurance indication via LED with 4 plug-in terminals

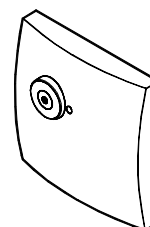
**Cancel panel****125.813xS**

For flush-mounting in one conventional switchbox, with cover panel 80x80 mm, prepared for cover panels from the leading switch program manufacturers.

Facility for subsequent function modification.

Colour pure white similar to RAL 9010, with snap attachment; contains:

- 1 Cancel button, green, with symbol and monitoring LED with 4 plug-in terminals

**Call cancel panel****125.824xS**

For flush-mounting in one conventional switchbox, with cover panel 80x80 mm, prepared for cover panels from the leading switch program manufacturers.

Facility for subsequent function modification.

Implementation of a freely definable special call.

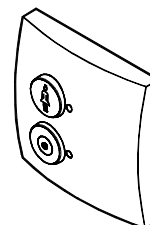
Line monitoring with optional activation and de-activation.

Dual function of LED reassurance light as locating light.

Activation or de-activation of the locating light.

Colour pure white similar to RAL 9010, with snap attachment; contains:

- 1 Nurse call button, red, for patient call and WC call, with symbol and reassurance indication via LED
- 1 Cancel button, green, with symbol and monitoring LED with 6 plug-in terminals



Call cancel panel Sub-D 15-pol.

For flush-mounting in one conventional switchbox, with cover panel 80x80 mm, prepared for cover panels from the leading switch program manufacturers.

Facility for subsequent function modification.

Implementation of a freely definable special call.

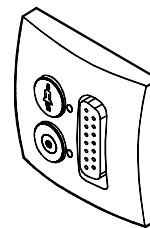
Line monitoring with optional activation and de-activation.

Dual function of LED reassurance light as locating light.

Activation or de-activation of the locating light.

Colour pure white similar to RAL 9010, with snap attachment; contains:

- 1 Call button, red, for patient call and WC call, with symbol and reassurance indication via LED
- 1 Cancel button, green, with symbol and monitoring LED
- 1 Socket, Sub-D, 15-pol., for optional connection of pear pushes and multiple pear pushes for activation of patient calls or for connection of diagnostic equipment for activation of a diagnostic call or for connection of infusion equipment for activation of an infusion call.
- 1 Electronic control system for activation of a disconnection call, if a connection cable is unplugged with 9 plug-in terminals

125.830xS**Pull cord panel**

For flush-mounting in one conventional switchbox, with cover panel 80x80 mm, prepared for cover panels from the leading switch program manufacturers.

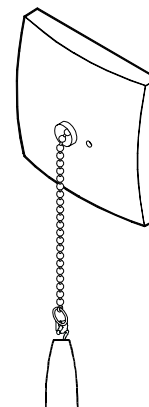
Facility for subsequent function modification.

Implementation of a freely definable special call.

Line monitoring with optional activation and de-activation.

Colour pure white similar to RAL 9010, with snap attachment; contains:

- 1 Pull cord panel for call activation, with reassurance indication via LED
- 1 Pull cord 1.6 m with grip with 4 plug-in terminals

125.860xS**Pneumatic call panel**

For flush-mounting in one conventional switchbox, with cover panel 80x80 mm, prepared for cover panels from the leading switch program manufacturers.

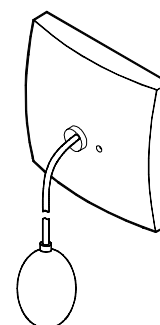
Facility for subsequent function modification.

Implementation of a freely definable special call.

Line monitoring with optional activation and de-activation.

Colour pure white similar to RAL 9010, with snap attachment; contains:

- 1 Pneumatic panel for call activation, with reassurance indication via LED
- 1 Actuation ball with tube 2 m with 4 plug-in terminals

125.861xS

2.4 Bedside equipment**2.4.1 Call button with plug-in device****Socket Sub-D 15-pol.****125.850xS**

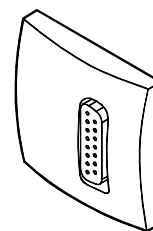
For flush-mounting in one conventional switchbox, with cover panel 80x80 mm, prepared for cover panels from the leading switch program manufacturers.

Facility for subsequent function modification

Line monitoring with optional activation and de-activation

Colour pure white similar to RAL 9010, with snap attachment; contains:

- 1 Socket, Sub-D 15-pol., for optional connection of pear pushes and multiple pear pushes for activation of patient calls or for connection of diagnostic equipment for activation of a diagnostic call or for connection of infusion equipment for activation of an infusion call.
- 1 Electronic control system for activation of a disconnection call, if a connection cable is unplugged with 7 plug-in terminals

**Call panel Sub-D 15-pol.****125.840xS**

For flush-mounting in one conventional switchbox, with cover panel 80x80 mm, prepared for cover panels from the leading switch program manufacturers.

Facility for subsequent function modification

Implementation of a freely definable special call

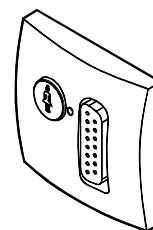
Line monitoring with optional activation and de-activation

Dual function of LED reassurance light as locating light

Activation or de-activation of the locating light

Colour pure white similar to RAL 9010, with snap attachment; contains:

- 1 Call button, red, for patient call, with symbol and reassurance indication via LED
- 1 Socket, Sub-D 15-pol., for optional connection of pear pushes and multiple pear pushes for activation of patient calls or for connection of diagnostic equipment for activation of a diagnostic call or for connection of infusion equipment for activation of an infusion call.
- 1 Electronic control system for activation of a disconnection call, if a connection cable is unplugged with 7 plug-in terminals

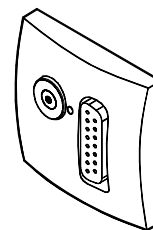
**Cancel panel Sub-D 15-pol.****125.841xS**

For flush-mounting in one conventional switchbox, with cover panel 80x80 mm, prepared for cover panels from the leading switch program manufacturers.

Facility for subsequent function modification.

Colour pure white similar to RAL 9010, with snap attachment; contains:

- 1 Cancel button, green, with symbol and monitoring LED
- 1 Socket, Sub-D 15-pol., for optional connection of pear pushes and multiple pear pushes for activation of patient calls or for connection of diagnostic equipment for activation of a diagnostic call or for connection of infusion equipment for activation of an infusion call.
- 1 Electronic control system for activation of a disconnection call, if a connection cable is unplugged with 7 modular terminals, 1-pol.



Service call button Sub-D 15-pol.**125.842xS**

For flush-mounting in one conventional switchbox, with cover panel 80x80 mm, prepared for cover panels from the leading switch program manufacturers.

Facility for subsequent function modification

Implementation of a freely definable special call

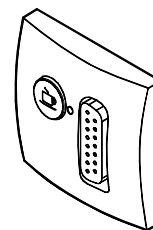
Line monitoring with optional activation and de-activation

Dual function of LED reassurance light as locating light

Activation or de-activation of the locating light

Colour pure white similar to RAL 9010, with snap attachment; contains:

- 1 Service call button, grey, with symbol and reassurance indication via LED
- 1 Socket, Sub-D 15-pol., for optional connection of pear pushes and multiple pear pushes for activation of patient calls or for connection of diagnostic equipment for activation of a diagnostic call or for connection of infusion equipment for activation of an infusion call.
- 1 Electronic control system for activation of a disconnection call, if a connection cable is unplugged with 7 plug-in terminals

**Call service call panel Sub-D 15-pol.****125.831xS**

For flush-mounting in one conventional switchbox, with cover panel 80x80 mm, prepared for cover panels from the leading switch program manufacturers.

Facility for subsequent function modification

Implementation of a freely definable special call

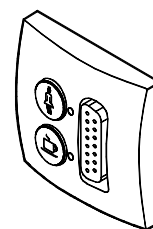
Line monitoring with optional activation and de-activation

Dual function of LED reassurance light as locating light

Activation or de-activation of the locating light

Colour pure white similar to RAL 9010, with snap attachment; contains:

- 1 Call button, red, for patient calls, with symbol and reassurance indication via LED
- 1 Service call button, grey, with symbol and reassurance indication via LED
- 1 Socket, Sub-D 15-pol., for optional connection of pear pushes and multiple pear pushes for activation of patient calls or for connection of diagnostic equipment for activation of a diagnostic call or for connection of infusion equipment for activation of an infusion call.
- 1 Electronic control system for activation of a disconnection call, if a connection cable is unplugged with 9 plug-in terminals



Doctor call panel Sub-D 15-pol.

125.843xS

For flush-mounting in one conventional switchbox, with cover panel 80x80 mm, prepared for cover panels from the leading switch program manufacturers.

Facility for subsequent function modification

Implementation of a freely definable special call

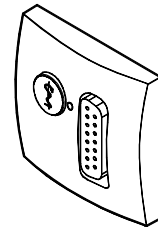
Line monitoring with optional activation and de-activation

Dual function of LED reassurance light as locating light

Activation or de-activation of the locating light

Colour pure white similar to RAL 9010, with snap attachment; contains:

- 1 Doctor call button, red, with symbol and reassurance indication via LED
- 1 Socket, Sub-D 15-pol., for optional connection of pear pushes and multiple pear pushes for activation of patient calls or for connection of diagnostic equipment for activation of a diagnostic call or for connection of infusion equipment for activation of an infusion call.
- 1 Electronic control system for activation of a disconnection call, if a connection cable is unplugged with terminals.



Call cancel panel Sub-D 15-pol.

125.830xS

For flush mounting in once conventional switchbox, with cover panel 80x80 m, prepared for cover panels of the leading switch program manufacturers.

Facility for subsequent function modification

Implementation of a freely definable special call

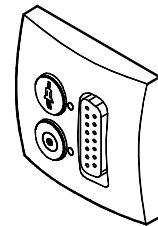
Line monitoring with optional activation and de-activation

Dual function of LED reassurance light as locating light

Activation or de-activation of the locating light

Colour pure white similar to RAL 9010, with snap attachment; contains:

- 1 Call button, red, for patient call and WC call, with symbol and reassurance indication via LED
- 1 Cancel button, grey, with symbol and monitoring LED
- 1 Socket, Sub-D 15-pol., for optional connection of pear pushes and multiple pear pushes for activation of patient calls or for connection of diagnostic equipment for activation of a diagnostic call or for connection of infusion equipment for activation of an infusion call.
- 1 Electronic control system for activation of a disconnection call, if a connection cable is unplugged with 9 plug-in terminals



Call doctor call panel Sub-D 15-pol.

For flush-mounting in one conventional switchbox, with cover panel 80x80 mm, prepared for cover panels from the leading switch program manufacturers.

Facility for subsequent function modification

Implementation of a freely definable special call

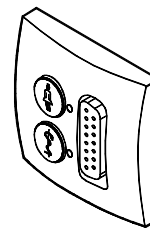
Line monitoring with optional activation and de-activation

Dual function of LED reassurance light as locating light

Activation or de-activation of the locating light

Colour pure white similar to RAL 9010, with snap attachment; contains:

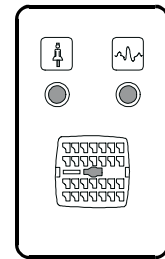
- 1 Call button, red, for patient calls, with symbol and reassurance indication via LED
- 1 Doctor call button, red, with symbol and reassurance indication via LED
- 1 Socket, Sub-D 15-pol., for optional connection of pear pushes and multiple pear pushes for activation of patient calls or for connection of diagnostic equipment for activation of a diagnostic call or for connection of infusion equipment for activation of an infusion call.
- 1 Electronic control system for activation of a disconnection call, if a connection cable is unplugged with 9 plug-in terminals

125.832xS

2.4.2 Plug-in device**Plug-in device, bed 28-p****092.421x**

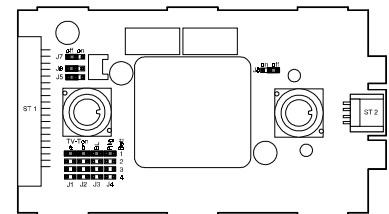
For ex-room or ex-bed call identification, for installation in an Flush-mounting box E2, with cover panel 89x145 mm, colour pure white, similar to RAL 9010, with snap attachment, with symbols for patients' and diagnosis call; contains:

- 1 Socket, 28-pol., for patient's handset, multiple pear push, pneumatic call button etc.
- 1 Socket 6-pol., green, for connection of pear pushes and multiple pear pushes
- 1 Socket 4-pol., pol.k, for diagnosis call/infusion call from patient monitoring equipment
- 1 Electronic control system for activation of a disconnection call, if a connection cable is unplugged
incl. bed selection and call line monitoring
complete with terminals.

**Plug-in device, bed IE/28-p****092.441x**

For ex-room or ex-bed call identification, for on-site insertion into one installation unit, with ribbon cable line system; contains:

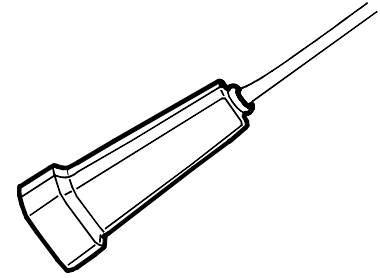
- 1 Socket, 28-pol., for patient's handset, multiple pear push, pneumatic call button etc.
- 1 Socket 6-pol., green, for connection of pear pushes and multiple pear pushes
- 1 Socket 4-pol., pol.k, for diagnosis call/infusion call from patient monitoring equipment
- 1 Electronic control system for activation of a disconnection call, if a connection cable is unplugged
incl. bed selection, call line monitoring and 40-pol. connection for ribbon cable.



2.4.3 Pear push and patients' handsets**Pear push standard****125.550x**

For patient call, prepared for disconnection call functionality.
In ABS plastic housing, colour pure white, similar to RAL 9010.
With 3 m flexible connection cable with the facility to adapt the cable routing for horizontal or vertical installation and plug Sub-D 15-pol.; contains:

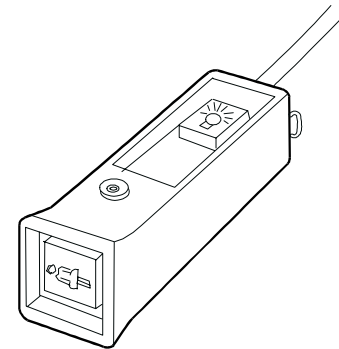
- 1 Call button, red, for patient call
- 1 Plug, Sub-D 15-pol., with a special housing shape which allows disconnection in all directions.

**Pear push standard 1LT****125.540x**

For patient call and for switching one light on and off, prepared for disconnection call functionality.

In ABS plastic housing, colour pure white, similar to RAL 9010.
With 3 m flexible connection cable with the facility to adapt the cable routing for horizontal or vertical installation and plug Sub-D 15-pol.; contains:

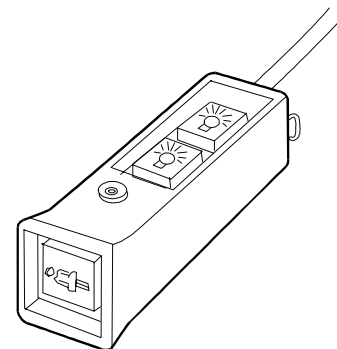
- 1 Call button, red, for patient call
- 1 LED reassurance indication, white
- 1 Light button, amber, volt-free, to activate one remote control switch according to VDE 0637 with 24V low voltage
- 1 Plug, Sub-D 15-pol., with a special housing shape which allows disconnection in all directions.

**Pear push standard 2LT****125.531x**

For patient call and for switching two lights on and off, prepared for disconnection call functionality.

In ABS plastic housing, colour pure white, similar to RAL 9010.
With 3 m flexible connection cable with the facility to adapt the cable routing for horizontal or vertical installation and plug Sub-D 15-pol.; contains:

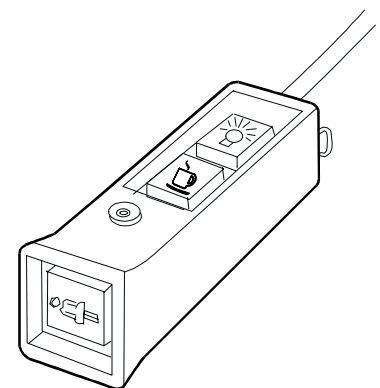
- 1 Call button, red, for patient call
- 1 LED reassurance indication, white
- 2 Light button, amber, with symbols, volt-free, to activate one remote control switch according to VDE 0637 with 24V low voltage
- 1 Plug, Sub-D 15-pol., with a special housing shape, allowing disconnection in all directions.

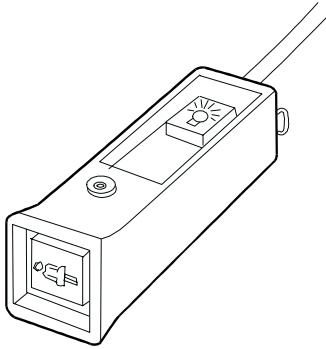
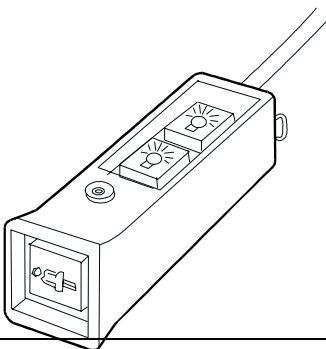
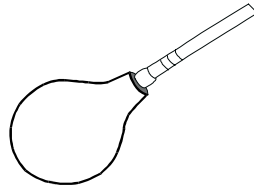
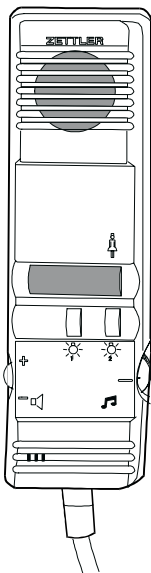
**Pear push standard 1ST/1LT****125.530x**

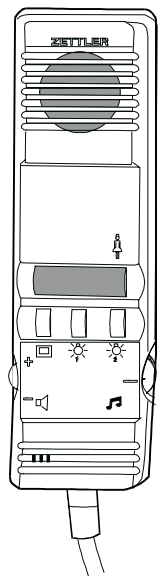
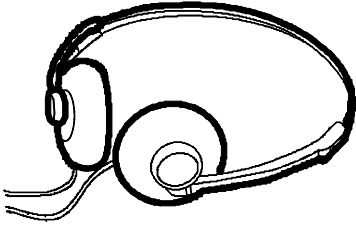
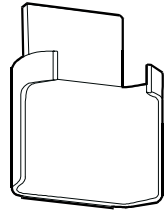
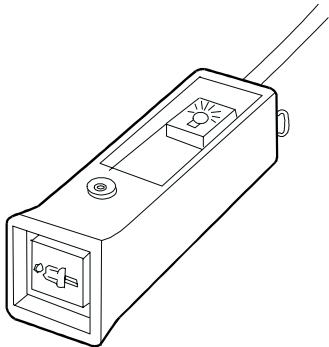

For patient call and for switching one light on and off and for activation of a service call, prepared for disconnection call functionality.

In ABS plastic housing, colour pure white, similar to RAL 9010.
With 3 m flexible connection cable with the facility to adapt the cable routing for horizontal or vertical installation and plug Sub-D 15-pol.; contains:

- 1 Call button, red, for patient call
- 1 Call button, grey, for service call
- 1 LED reassurance indication, white
- 1 Light button, amber, volt-free, to activate one remote control switch according to VDE 0637 with 24V low voltage
- 1 Plug, Sub-D 15-pol., with a special housing shape, allowing disconnection in all directions.

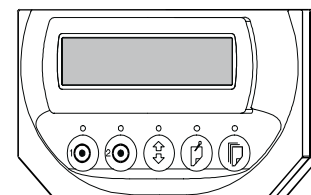


Product	Ordering data	Illustrations
<p>Multiple pear push 1LT/28-p</p> <p>For patient call and for switching one light on and off, in plastic ABS housing, colour pure white, similar to RAL 9010, with 3 m flexible connection cable and plug, 28-pol.; contains:</p> <ul style="list-style-type: none"> 1 Call button, red (patient call) 1 Reassurance light, white 1 Light button amber, volt-free, to activate one remote control switch according to VDE 0637 with 24V low voltage. 	<p>093.308x</p>	
<p>Multiple pear push 2LT/28-p</p> <p>For patient call and for switching two lights on and off, in plastic ABS housing, colour pure white, similar to RAL 9010, with 3 m flexible connection cable and plug, 28-pol.; contains:</p> <ul style="list-style-type: none"> 1 Call button, red (patient call) 1 Reassurance light, white 2 Light button amber, volt-free, to activate 2 remote control switches according to VDE 0637 with 24V low voltage. 	<p>093.303x</p>	
<p>Call panel, pneumatic, 28-p</p> <p>For insertion into the 28-pol. socket of a plug-in device to activate a patient call through actuation of a pneumatic switch ball, with 2 m tube.</p>	<p>093.304x</p>	
<p>Patient's handset</p> <p>In plastic housing, colour white similar to RAL 9010, operating components with symbols, for insertion into a casing on the bedside table; contains:</p> <ul style="list-style-type: none"> 1 Call button, red for patient call 1 LED, red with light/dark switch <ul style="list-style-type: none"> light = reassurance indication dark = night-time location aid 1 Light button, amber (reading light) 1 Light button, amber (room light) 1 Selector switch, amber, locking for 5 audio programmes 1 Volume control, amber, without locking 1 Loudspeaker <p>Dimensions (WxHxD): 60x200x37 mm</p> <p>complete with 2 m flexible connection cable and plug, for connection to the 28-pol. socket of a plug-in device with radio reception.</p>	<p>093.301x</p>	

Product	Ordering data	Illustrations
<p>Patient's handset (Voice/TV)</p> <p>In plastic housing, colour white similar to RAL 9010, operating components with symbols; contains:</p> <ul style="list-style-type: none"> 1 Call button, red for patient call 1 LED, red with light/dark switch <ul style="list-style-type: none"> light = reassurance indication dark = night-time location aid 1 Light button, amber (reading light) 1 Light button, amber (room lighting) 1 TV programme switch button, amber 1 Selector switch, amber, locking for 4 radio and 1 TV audio channels (4 Vrms) 1 Volume control, amber, without locking 1 Loudspeaker 1 Jack socket, 3.5 mm, for connection of dynamic headphones 1 Connection relay <p>complete with 2 m flexible connection cable and plug, for connection to the 28-pol. socket of a plug-in device with radio/TV reception.</p> <p>Dimensions (WxHxD): 60x200x37 mm</p>	<p>093.330x</p>	
<p>Dynamic headphones</p> <p>As one-way headphones for discrete listening to radio and TV programmes, with foam padding on the ear parts, complete with 1.5 m flexible connection lead and 3.5-mm jack plug.</p>	<p>093.332x</p>	
<p>Housing</p> <p>For patients' handsets; plastic, colour white similar to RAL 9010, for installation on the bedside table; complete with installation accessories.</p>	<p>093.381x</p>	
<p>Multiple pear push 1LT/6-p</p> <p>For patient call and for switching one light on and off, in plastic ABS housing, colour pure white, similar to RAL 9010, with 3 m flexible connection cable and plug, 6-pol., green; contains:</p> <ul style="list-style-type: none"> 1 Call button, red (patient call) 1 Reassurance light, white 1 Light button amber, volt-free, to activate one remote control switch according to VDE 0637 with 24V low voltage. 	<p>093.302x</p>	
<p>Plug for diagnosis call 4-p</p> <p>For connection of patient monitoring unit with NO or NC contact to the 4-pol. socket for diagnosis call (pol.k) of plug-in devices 092.xxxx; with built-in adaptation electronics and connection cable 3 m.</p> <p>Made from Duroplast, colour pearl white similar to RAL 1013, with colour code pol.k.</p>	<p>093.375x</p>	

2.5 Section equipment

Universal display

138.310xS


9010, with the following basic functions:

- Configurable as central display, section display, group display and parallel display
- Display of all calls received in the section or group according to their priority and in chronological order
- Scrolling through and processing of displayed calls
- Display of presences in the section, provided that no call is waiting to be answered
- Forwarding of calls and emergency calls to other sections after programmable times
- Monitoring of up to 40 bus components belonging to the section (active on a main terminal within a section only)
- Programmable as a central display to indicate selected call types only (e.g. faults, service call, cardiac alarm)
- Selective display and forwarding of faults which occur
- Activation of 2 presence lights
- 2 inputs for external presences
- 1 input for telephone call
- 1 output for external audible signalling unit
- 1 fault alarm output
- Performance of pre-programmed group and section interconnections
- Three-stage volume control for audible call transfer throughout the entire section
- Display of lists for: presences, messages, stored calls, faults

Comprising:

- 1 Illuminated LC display for call indication, alphanumeric 2x16-digit, character height 8 mm
- 1 Presence button, green, with monitoring LED, amber, and "Presence 1 symbol" label
- 1 Presence button, amber, with monitoring LED, amber, and "Presence 2 symbol" label
- 1 Function button, light grey, to select the function menu, with monitoring LED, amber, and "Function symbol" label
- 1 Scroll button, light grey, to indicate further calls, with monitoring LED, amber, and "Scroll symbol" label
- 1 Store button, light grey, to store answered calls, with monitoring LED, amber, and "Store symbol" label

for installation on a double switchbox (horizontal)

Dimensions: (WxHxD) 165x95x32.5 mm

with 8 plug-in terminals

Universal answering station with display

138.361xS

For wall or duct mounting, comprising:

- 1 Display module in ABS plastic, white, similar to RAL 9010, with the following basic functions:
 - Configurable as central display, section display, group display and parallel display
 - Display of all calls received in the section or group according to their priority and in chronological order
 - Scrolling through and processing of the displayed calls
 - Display of presences in the section, provided that no call is waiting to be answered
 - Forwarding of calls and emergency calls to other sections after programmed times
 - Monitoring of up to 65 bus components belonging to the section (active on a main terminal within a section only)
 - Programmable as a central display to indicate selected call types only (e.g. faults, service call, cardiac alarm)
 - Selective display and forwarding of faults which occur
 - Activation of 2 presence lights
 - 2 inputs for external presences
 - 1 output for external audible signalling unit
 - 1 fault alarm output
 - Performance of pre-programmed group and section interconnections
 - Three-stage volume control for audible call transfer throughout the entire section
 - Display of lists for: presences, messages, stored calls, faults

Comprising:

- 1 Illuminated LC display for call indication, alphanumeric 2x16-digit, character height 8 mm
- 1 Presence button, green, with monitoring LED, amber, and "Presence 1 symbol" label
- 1 Presence button, amber, with monitoring LED, amber, and "Presence 2 symbol" label
- 1 Function button, light grey, to select the function menu, with monitoring LED, amber, and "Function symbol" label
- 1 Scroll button, light grey, to indicate further calls, with monitoring LED, amber, and "Scroll symbol" label
- 1 Store button, light grey, to store answered calls, with monitoring LED, amber, and "Store symbol" label

Dimensions: (WxHxD) 165x95x32.5 mm

incl. plug-in terminals

- 1 Answering accessories in white ABS plastic, wall bracket for handset

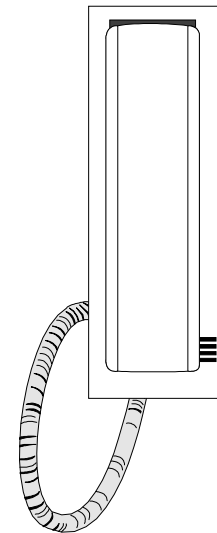
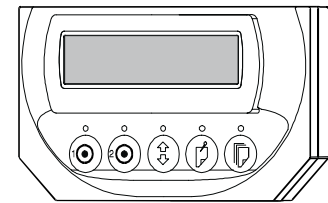
Comprising:

- 1 Door opener button with "Door opener symbol" label (contact rating: volt-free 24 V/500 mA)
- 1 Light button with "Light symbol" label (contact rating: volt-free 24 V/500 mA)
- 1 Hook switch for automatic call answering
- 1 Monitoring LED, amber, to display answered calls
- 1 Electronic control system with amplifier and connection panel
- 1 Handset with loudspeaker and electret microphone and interchangeable coiled connection cord

for installation on a switchbox

Dimensions (WxHxD): 90x230x62mm

with 20 plug-in terminals



**Universal answering station with display
(Desktop terminal)****138.362xS**

Comprising:

- 1 Display module for wall or duct mounting, in ABS plastic, white, similar to RAL 9010, with the following basic functions:
 - Configurable as central display, section display, group display and parallel display
 - Display of all calls received in the section or group according to their priority and in chronological order
 - Scrolling through and processing of the displayed calls
 - Display of presences in the section, provided that no call is waiting to be answered
 - Forwarding of calls and emergency calls to other sections after programmed times
 - Monitoring of up to 65 bus components belonging to the section (active on a main terminal within a section only)
 - Programmable as a central display to indicate selected call types only (e.g. faults, service call, cardiac alarm)
 - Selective display and forwarding of faults which occur
 - Activation of 2 presence lights
 - 2 inputs for external presences
 - 1 output for external audible signalling unit
 - 1 fault alarm output
 - Performance of pre-programmed group and section interconnections
 - Three-stage volume control for audible call transfer throughout the entire section
 - Display of lists for: presences, messages, stored calls, faults

Comprising:

- 1 Illuminated LC display for call indication, alphanumeric 2x16-digit, character height 8 mm
- 1 Presence button, green, with monitoring LED, amber, and "Presence 1 symbol" label
- 1 Presence button, amber, with monitoring LED, amber, and "Presence 2 symbol" label
- 1 Function button, light grey, to select the function menu, with monitoring LED, amber, and "Function symbol" label
- 1 Scroll button, light grey, to indicate further calls, with monitoring LED, amber, and "Scroll symbol" label
- 1 Store button, light grey, to store answered calls, with monitoring LED, amber, and "Store symbol" label for installation on a double switchbox (horizontal)

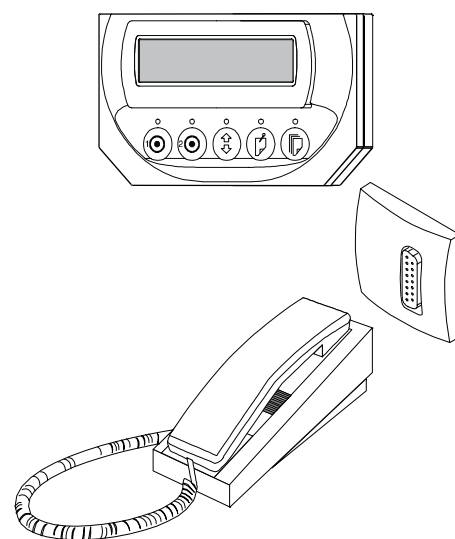
Dimensions: (WxHxD) 165x95x32.5 mm
with 15 plug-in terminals

- 1 Answering accessories in white ABS plastic, bracket for handset, answering station with display (Desktop terminal)

Comprising:

- 1 Door opener button with "Door opener symbol" label (contact rating: volt-free 24 V/500 mA)
- 1 Light button with "Light symbol" label (contact rating: volt-free 24 V/500 mA)
- 1 Hook switch for automatic call answering
- 1 Monitoring LED, amber, to display answered calls
- 1 Electronic control system with amplifier and connection panel
- 1 Handset with loudspeaker and electret microphone and interchangeable coiled connection cord
- 1 Flexible connection cord with plug, 15-pol., length approx. 2.5 m

Dimensions (WxHxD):90x230x125mm



Product

Ordering data

Illustrations

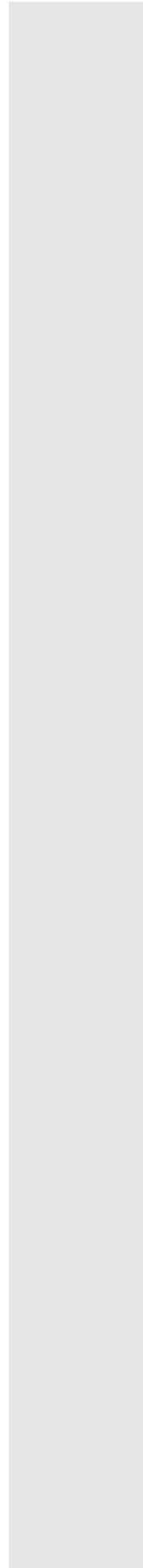
1 Wall connection combination

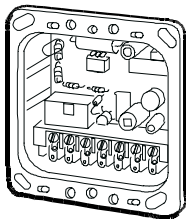
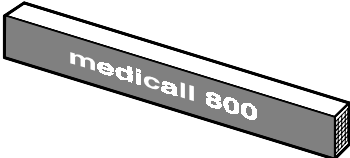
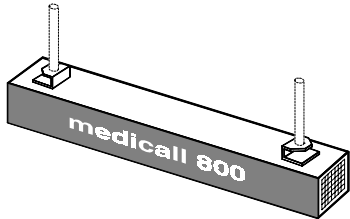
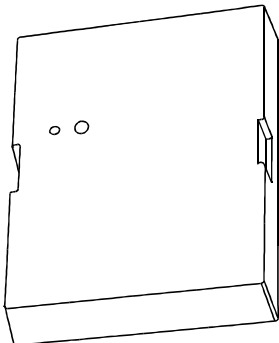
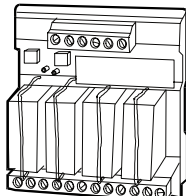
For flush-mounting in one conventional switchbox, with cover panel 80x80 mm, prepared for cover panels from the leading switch program manufacturers.

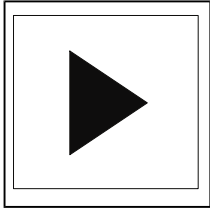
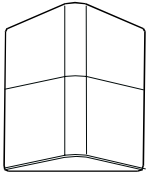
Colour pure white, similar to RAL 9010, with snap attachment;

Comprising:

1 Socket, Sub-D 15-pol.
with 19 plug-in terminals



Product	Ordering data	Illustrations
2.6 Telephone call transfer		
<p>Telephone call relay</p> <p>For forwarding telephone calls with the ringing cadence into the section, for installation in an Flush-mounting box E1; complete with 2 m flexible connection lead, TAE6 plug (coding N), for connection to the customer's existing connection socket for the telephone set.</p>	140.405xS	
2.7 Corridor displays		
<p>Corridor display kit, single-sided</p> <p>Installation kit for wall mounting, comprising:</p> <ul style="list-style-type: none"> 1 Corridor display, single-sided, character height 50 mm. The display serves to indicate calls and messages queued in the system, arranged according to priority and in chronological order. The display is alphanumeric with a self-illuminating LED. 1 Output module to connect the display to the system bus with fixing bracket and 10 plug-in terminals 	138.550xS	
<p>Corridor display kit, double-sided</p> <p>Installation kit for ceiling mounting, comprising:</p> <ul style="list-style-type: none"> 1 Corridor display, double-sided, character height 50 mm. The display serves to indicate calls and messages queued in the system, arranged according to priority and in chronological order. The display is alphanumeric with self-illuminating LED. 1 Output module to connect the display to the system bus 1 Ceiling suspension kit, white with 10 plug-in terminals 	138.570xS	
2.8 Group and direction lights		
<p>Receiver for lamp control</p> <p>In plastic housing for wall mounting and distributor assembly, Electronics module for activation of external relays, for up to 5 section, group or direction lights via the system bus. The display can be programmed for each light to indicate calls, emergency calls, messages and faults, either individually or in combination.</p> <p>Comprising:</p> <ul style="list-style-type: none"> 1 Universal module <p>Support frame</p> <ul style="list-style-type: none"> 1 Assembly kit for distributor assembly <p>Dimensions (WxHxD): 90x110x30 mm with 16 plug-in terminals</p>	138.530xS	
<p>Relay set</p> <p>4-way power driver, to switch heavier light loads, in module housing for distributor assembly, can be arranged without spacing on mounting rail 35x7.5 mm according to DIN EN 50022; contains:</p> <ul style="list-style-type: none"> 4 power switching relays, suitable for connection in each case of 16 x 24 V / 5 W lights 	140.193x	

Product	Ordering data	Illustrations
<p>Direction signal light, 1 part</p> <p>Direction indicator; with square plastic base and plastic opal-coloured trapezoidal light holder; with direction arrow, with 1 illuminated section and festoon lamp, 5 W, clear; for mounting on an Flush-mounting box E1. Dimensions: WxHxD = 90x90x75 mm including clear light</p>	<p>010.513xS</p>	
<p>Group signal light, 2-part</p> <p>For group or floor display of normal and emergency calls and special signals such as fire alarm, telephone call, entrance door etc.; with opal-coloured triangular plastic light holders, to hold translucent designation films, with 2 illuminated sections and 2 festoon lamps, 5W, white, and inscription insert film for mounting on an Flush-mounting box E1. Dimensions (WxHxD): 90x90x75 mm complete with inscription insert, reading from top to bottom: " " " " including clear light</p>	<p>010.514xS</p>	
<p>Group signal light, 4-part</p> <p>For group or floor display of normal and emergency calls and special signals such as fire alarm, telephone call, entrance door etc.; with opal-coloured triangular plastic light holders, to hold translucent designation films, with 4 illuminated sections and 4 festoon lamps, 5W, white, and inscription insert film for mounting on an Flush-mounting box E2. Dimensions (WxHxD): 90x180x75 mm complete with inscription insert, reading from top to bottom: " " " " " " " " including clear light</p>	<p>010.515xS</p>	
<p>Group signal light, 6-part</p> <p>For group or floor display of normal and emergency calls and special signals such as fire alarm, telephone call, entrance door etc.; with opal-coloured triangular plastic light holders, to hold translucent designation films, with 6 illuminated sections and 6 festoon lamps, 5W, white, and inscription insert film for mounting on an Flush-mounting box E3. Dimensions (WxHxD): 90x270x75 mm complete with inscription insert, reading from top to bottom: " " " " " " " " " " " " including clear light</p>	<p>010.516xS</p>	

Product

Ordering data

Illustrations

Group signal light 8-part

010.517xS

For group or floor display of normal and emergency calls and special signals such as fire alarm, telephone call, entrance door etc.; with opal-coloured triangular plastic light holders, to hold translucent designation films, with 8 illuminated sections and 8 festoon lamps, 5W, white, and inscription insert film for mounting on an Flush-mounting box E3.

Dimensions (WxHxD): 90x360x75 mm

complete with inscription insert, reading from top to bottom:

" "
 " "
 " "
 " "
 " "
 " "
 " "
 " "

including clear light

Group signal light 10-part

010.518xS

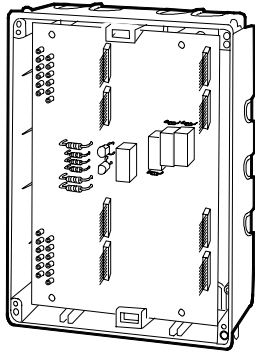
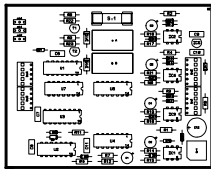
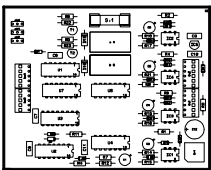
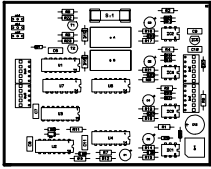
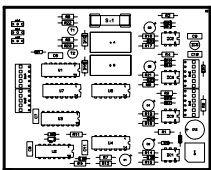
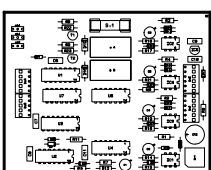
For group or floor display of normal and emergency calls and special signals such as fire alarm, telephone call, entrance door etc.; with opal-coloured triangular plastic light holders, to hold translucent designation films, with 10 illuminated sections and 10 festoon lamps, 5W, white, and inscription insert film for mounting on an Flush-mounting box E3.

Dimensions (WxHxD): 90x450x75 mm

complete with inscription insert, reading from top to bottom:

" "
 " "
 " "
 " "
 " "
 " "
 " "
 " "
 " "
 " "

including clear light

Product	Ordering data	Illustrations
<h2>2.9 Interconnection with other nurse call systems</h2>		
<p>PS base module motherboard</p> <p>Switching point for the connection of two nurse call systems with call forwarding in both directions for:</p> <ul style="list-style-type: none"> • Normal call • Emergency call <p>Comprising:</p> <ul style="list-style-type: none"> 1 base plate with slots for 2 PS PCBs (adapter module) 1 Installation box 093.581x 1 Cover panel 093.807x 1 Connection and assembly kit 	<p>093.550x</p>	
<p>Adapter module Medicall 800</p> <p>For insertion into the base module, for adaptation to the following system:</p> <ul style="list-style-type: none"> • Medicall 800 	<p>093.555x</p>	
<p>Adapter module medifon 2010/2000</p> <p>For insertion into the base module, for adaptation to the following systems:</p> <ul style="list-style-type: none"> • medifon 2010 • medifon 2000 	<p>093.551x</p>	
<p>Adapter module medifon CLS</p> <p>For insertion into the base module, for adaptation to the following system:</p> <ul style="list-style-type: none"> • medifon CLS 	<p>093.552x</p>	
<p>Adapter module Universal</p> <p>For insertion into the base module, for adaptation to the following system:</p> <ul style="list-style-type: none"> • Light call 62 • Light call 80 • Light call 800 • Signafon S 	<p>093.553x</p>	
<p>Adapter module Optakust W</p> <p>For insertion into the base module, for adaptation to the following system:</p> <ul style="list-style-type: none"> • Optakust W 	<p>093.554x</p>	

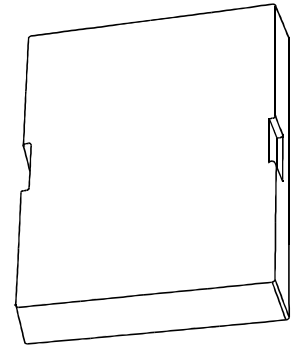
2.10 Network components

Repeater without electrical isolation

138.510xS

In plastic housing for wall mounting,
 For expansion of bus sections with more than 30 bus components,
 to refresh the data signals over distances > 1000 m and to branch
 the bus into spurs.

Dimensions (WxHxD): 90x110x31 mm
 with 8 plug-in terminals and 2 end-of-line resistors, 120 Ohm

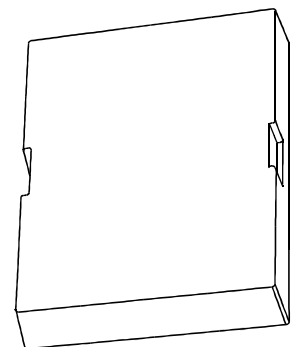


Repeater with electrical isolation

138.511xS

In plastic housing for wall mounting,
 to isolate bus sections fed by separate power supplies, for
 expansion of bus sections with more than 30 bus components, to
 refresh the data signals over distances > 1000 m, to branch the bus
 into spurs.

Dimensions (WxHxD): 90x110x31 mm
 with 8 plug-in terminals and 2 end-of-line resistors, 120 Ohm, and
 Support frame for wall mounting



Terminal resistor, 120Ohm

130.911x

To terminate bus segments at both ends.

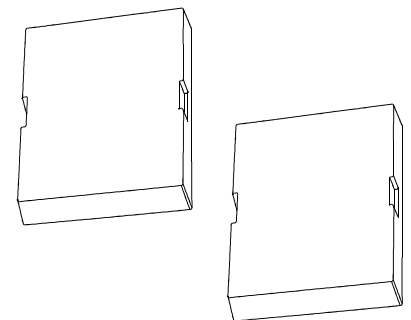
Speech control unit

138.531xS

For wall mounting and distributor assembly, comprising:

- 1 Universal module to manage communications within a section
 Dimensions (WxHxD): 90x110x31mm
- 1 Relay control module to control a VF speech path within a
 section (group) and control the multi-section speech paths in the
 case of section interconnection.
 Dimensions (WxHxD): 90x110x31mm

- 1 Support frame
 with 15 plug-in terminals and support frame for wall mounting



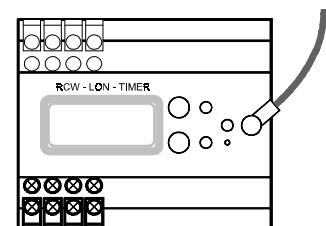
LON-radio clock node

138.650xS

For connection to the Medicall® 800 system bus at any point. This
 provides a clock time synchronised by the DCF77 standard time
 transmitter.

Comprising:

- 1 LON radio clock node 130.650x, in modular housing for snap-
 on attachment to a mounting rail according to DIN EN 50022.
 Dimensions: HxWxD = 90x105x60 mm
- 1 External DCF77 receiver 130.651x with connection cable
 Dimensions: 68x35x18 mm



2.11 Interface with other systems

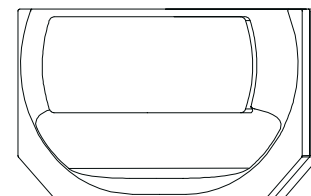
Interface module RS 232

138.690xS

Interface for connection of a wireless paging system or DECT system to the system bus. For forwarding calls from one or more groups and / or sections to the PSA or DECT system.

Comprising:

- 1 Interface module with plug-in base for PSA or DECT-specific software (EPROM) with 12 plug-in terminals



D-SW for PSA and DECT

230.6001

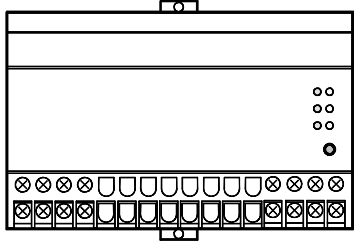
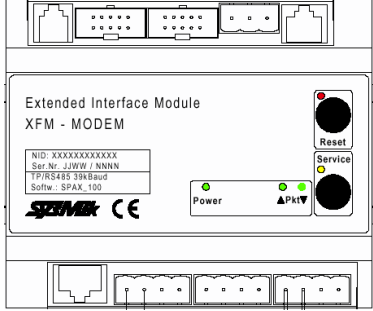
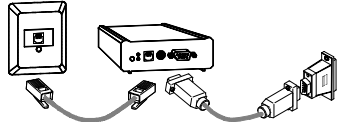
EPROM for insertion into the interface module RS 232, with adapted software for radiopaging systems.

Manufacturer	System	Description	Protocol
Alcatel	Alcatel 4400	PBX system	Alcatel 4400 Notificationserver
	Alcatel 4200	PBX system	ASCOM ESPA 4.4.4
Ascom	Paging: CTS 900 / T 940 Si / T942 Si	Paging system	ESPA 4.4.4. (ESPA Ascom)
	DECT: T 940 Si / T942 Si	PBX system DECT	ESPA 4.4.4. (ESPA Ascom)
	TK/DECT: BCS ASCOTEL	PBX system DECT	ATPC1
Ascom	TK/DECT: BCS ASCOTEL	PBX system DECT	ASCOTEL BCS Alarming
Blick	Aquarius Paging (AEN2)	Paging System	ESPA 4.4.4. (ESPA Blick)
	Aquarius DECT (AEN2)	PBX system DECT	ESPA 4.4.4. (ESPA Blick)
	Aquarius DECT (AEN2)	PBX system DECT	Serial Link protocol (KIRK DECT)
Bosch (ANT)	Paging: D 6100 NP	Pager / Receiver: D 6756/1 + D 6790 – 6+5 alpha D 6791 + D 6792 – 6+5 alpha/num	Bosch specific
	Paging: D 6500	Pager / Receiver: D 6756/1 + D 6790 – alpha D 6791 + D 6792 - alpha/num	Bosch specific
	Paging: D6801 ALPHA1		Bosch specific
	Paging: D6801 ALPHA2		Bosch specific
	Paging: RP 201		Bosch specific
	PBX system DECT		Bosch specific
DeTeWe	PBX system		DeTeWe specific
Ericsson (Nira)	Paging System: contactor 9000 (Ericsson) teletracer 2600 (Nira)	numeric Receiver 2 x 5	Protocol: PSP 800, PSP1800 or ESPA 4.4.4
	Paging System: contactor 9000 (Ericsson) teletracer 2600 (Nira)	alphanumeric Receiver 2 x 16	Protocol: PSP 800, PSP1800 or ESPA 4.4.4
Glenayre		Paging system	TAP
KIRK Telecom	KIRK DECT	PBX system DECT	Serial Link protocol (KIRK DECT)
Matracom	Matracom DECT	PBX system DECT	Serial Link protocol (KIRK DECT)
Multitone	Paging: Access 3000/1000	numeric MK6	MK 6
	Paging: Access 3000/1000	phast alphanumeric	MK6
	Paging: Access 3000/1000	Alphanumeric	MK 7
	Multitone DECT (KIRK)	Paging system / PBX system DECT	MK 7
	Multitone DECT (KIRK)	PBX system DECT	Serial Link Protocol (KIRK DECT)
Philips	Philips LBB 5800	Paging system numeric 5-characters	ESPA 4.4.4
	Philips LBB 5800 + ALPHA	Paging system alphanumeric. max 24 char.	ESPA 4.4.4
	Philips LBB 6000	Paging system alphanumeric. max 24 char.	ESPA 4.4.4
	Philips DECT	PBX system DECT	Philips ESPA
Scope	Paging	Paging system	Scope protocol
Tyco	Medifon 2010	nurse call system	Transparent

D-SW for data interface (DIF)

230.6400

Manufacturer	System	Description	Protocol
Siemens	PBX system HiCom	with Siemens DAKS	ESPA 4.4.4.
Siemens	PBX system Siemens HiCom	interface using Semens DAKS-Server	ESPA Plus
Tyco	MX/ZX	Fire-control-panel	Printer interface
Tyco	ZETFAS	Fire-control-panel	Printer interface

Product	Ordering data	Illustrations
<p>LON Router RS 485 - RS 485</p> <p>For division of larger systems with more than 200 bus components and for optimising data traffic. In modular housing for snap-on attachment to a mounting rail according to DIN EN 50022 or for screw-on attachment to a flat surface. Dimensions (WxHxD): 140x 90x60 mm Complete with fittings.</p>	<p>130.980x</p>	
<p>XFM Modem Interface Module</p> <p>Modem interface for nurse call and care communication systems Complete with: 1 Modem Interface Module XFM 1 Telephone cable (western 6 pin to TAE 6 pin)</p>	<p>130.9440</p>	
<p>PC connection set</p> <p>To connect a PC to the system bus, comprising: 1 PC programming cable 1 Adapter Sub-D 25-pol. to Sub-D 9-pol. 1 LON interface module RS232 - RS 485 1 LON programming cable 1 LON programming connection socket</p>	<p>138.970xS</p>	
<p>2.12 Installation programs</p>		
<p>Installation tools Zettler</p> <p>Software module to supply components on the system bus with their configuration data. The module runs under Windows™.</p>	<p>230.970x</p>	
<p>Configuration tools Zettler</p> <p>Software module for creating system-specific configuration data for the bus components. The module runs under Windows™.</p>	<p>230.975x</p>	

2.13 Power supplies

Power supply unit 230VAC/24VDC-10A

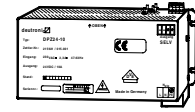
015.001x

To supply power to the decentralised equipment with safety extra-low voltage, adapted to the requirements of nurse call systems (e.g. start-up currents of the lights, defined response to system voltage dips, secure disconnection from the mains), primary-clocked and short-circuit-proof.

Technical data:

- Mains voltage 230 V/50 Hz
- Output voltage 24 V DC
- Output current 10 A
- Short-circuit current limitation 10.5 A
- Control precision 0.1 %
- Efficiency 85 %
- RFI suppression EN 55022, Cl. B
- Insulation voltage 4 kV_{rms}
- Protection type to DIN 400509 IP 20
- Ambient temperature 0...40 °C
- Sheet steel housing, colour pearl white, similar to RAL 1013

Dimensions(WxHxD) 232x140x91 mm



Emergency power supply 230VAC/24VDC

015.005xS

Uninterruptible power supply for the decentralised equipment with safety extra-low voltage, adapted to the requirements of nurse call systems (e.g. start-up currents of the lights, defined response to system voltage dips, secure disconnection from the mains), primary-clocked and short-circuit-proof.

Comprising:

- 1 Power supply unit 28 V, 8 A
- 1 Battery unit 24 V, 8 A
- 2 batteries 12 V/24 Ah for emergency alarm systems

Technical data power supply unit:

- Mains voltage 230 V/50 Hz
- Output voltage 27.6 V DC
- Output current 8 A
- Short-circuit current limitation 8.5 A
- Control precision 0.1 %
- Efficiency 85 %
- RFI suppression EN 55022, CL. B
- Isolation voltage 4 kV_{rms}
- Protection type to DIN 400509 IP 20
- Ambient temperature 0...40 °C
- Sheet steel housing, colour pearl white similar to RAL 1013

Dimensions (WxHxD) 232x140x91 mm

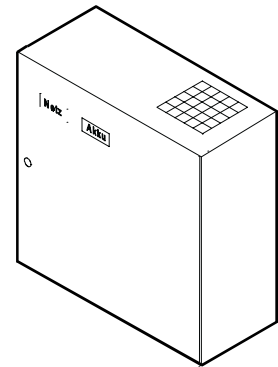
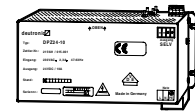
Technical data battery unit:

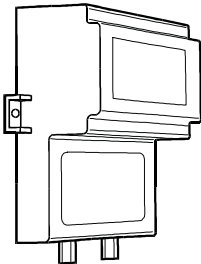
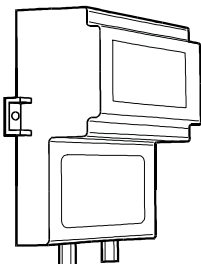
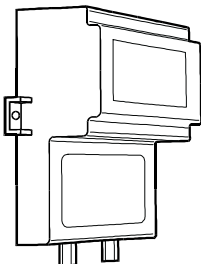
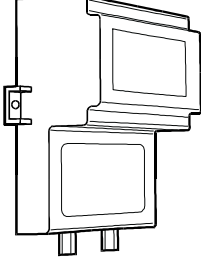
Display "Mains operation", green

Display "Battery operation", red

Battery undervoltage monitoring

Dimensions (WxHxD): 380x435x225 mm



Product	Ordering data	Illustrations
<p>Snap-on attachment for power supply unit</p> <p>Add-on for the power supply units for attachment to a mounting rail 35x7.5 mm according to DIN EN 50022.</p>	015.011x	
<p>S-transformer 230/24VAC-25</p> <p>According to VDE 0551, with fuse, for group signal lights, nursing group and direction lights, sealed in plastic housing.</p> <p>Technical data:</p> <ul style="list-style-type: none"> Rated output voltage 24 V AC Rated output power 25 VA Dimensions (WxHxD) 130x180x88 mm 	015.050x	
<p>S-transformer 230/24VAC-100</p> <p>According to VDE 0551, with fuse, for group signal lights, nursing group and direction lights, sealed in plastic housing.</p> <p>Technical data:</p> <ul style="list-style-type: none"> Rated output voltage 24 V AC Rated output power 100 VA Dimensions (WxHxD) 130x180x88 mm 	015.051x	
<p>S-transformer 230/24VAC-250</p> <p>According to VDE 0551, with fuse, for group signal lights, nursing group and direction lights, sealed in plastic housing.</p> <p>Technical data:</p> <ul style="list-style-type: none"> Rated output voltage 24 V AC Rated output power 250 VA Dimensions (WxHxD) 145x293x105 mm 	015.052x	
<p>S-Transformer 230/24VAC-400</p> <p>According to VDE 0551, with fuse, for group signal lights, nursing group and direction lights, sealed in plastic housing.</p> <p>Technical data:</p> <ul style="list-style-type: none"> Rated output voltage 24 V AC Rated output power 400 VA Dimensions (WxHxD) 190x270x125 mm 	015.053x	

Battery 12V, 24 Ah for emergency alarm systems**531.032x**

Rechargeable battery for insertion into the battery unit. Gasproof, leakproof and low-maintenance.

Technical data:

Rated voltage	12 V
Capacity	24 Ah
Dimensions (WxHxD)	166x125x175 mm
Weight	approx. 8.7 kg

Battery 12V, 6.4 Ah for emergency alarm systems**570.095x**

Rechargeable battery for insertion into the battery unit. Gasproof, leakproof and low-maintenance.

Technical data:

Rated voltage	12 V
Capacity	6.4 Ah
Dimensions (WxHxD)	150x100x64 mm
Weight	approx. 2.6 kg

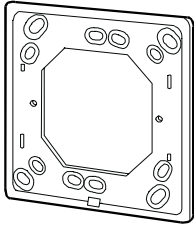
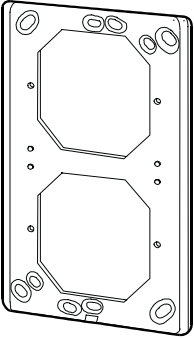
Battery 12V, 2 Ah for emergency alarm systems**530.112x**

Rechargeable battery for insertion into the battery unit. Gasproof, leakproof and low-maintenance.

Technical data:

Rated voltage	12 V
Capacity	2 Ah
Dimensions (WxHxD)	180x65x35 mm
Weight	approx. 0.9 kg

Product	Ordering data	Illustrations
2.14 Accessories		
<p>Mounting kit for distributor</p> <p>Accessories for attaching the room electronics, receiver for light control, repeaters etc. on a mounting rail 35x7.5 mm according to DIN EN 50022. (25-pack)</p>	130.920x	
<p>Festoon lamp 24V/3W, clear</p> <p>For insertion into group signal lights 010.514xS to 010.518xS and in direction light 010.513xS.</p>	013.018x	
<p>Festoon lamp 24V/5W, clear</p> <p>For insertion into group signal lights 010.514xS to 010.518xS and in direction light 010.513xS.</p>	013.022x	
<p>Glass base lamp 24V/3W, clear W2,1x9.5d</p> <p>For insertion into room signal lights 138.1xxxS, for visual signalling of: WC call</p>	130.950x	
<p>Glass base lamp 24V/3W, red W2,1x9.5d</p> <p>For insertion into room signal lights 138.1xxxS, for visual signalling of: Normal call Upgraded call Emergency call</p>	130.952x	
<p>Glass base lamp 24V/3W, green, W2,1x9.5d</p> <p>For insertion into room signal lights 138.1xxxS, for visual signalling of: Presence Stored call</p>	130.954x	
<p>Glass base lamp 24V/3W, amber, W2,1x9.5d</p> <p>For insertion into room signal lights 138.1xxxS, for visual signalling of: Telephone call from decentralised answering station Presence 2</p>	130.956x	

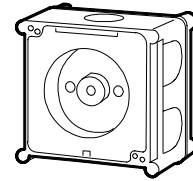
Product	Ordering data	Illustrations
<p>Adapter board E1</p> <p>For insertion in a switchbox combination with cover panel 80x80 mm in an Flush-mounting box E1, plastic, colour pearl white similar to RAL 1013. Dimensions (WxH): 89x89 mm</p>	110.087x	
<p>Adapter board for flush-mounting box E2</p> <p>For insertion in a switchbox combination with cover panel 80x145 mm in an Flush-mounting box E2, plastic, colour pearl white similar to RAL 1013. Dimensions (WxH): 89x145 mm</p>	110.088x	
<p>Push-to-clamp terminal set, 400 terminals</p> <p>For connection of ZETTLER® Medicall® 800 equipment, screwless, single-pole, for connection of up to 4 rigid wires. Terminal area: 0.6 to 1.0 mm^Ø Contains 400 terminals 141.584x</p>	130.910x	

2.15 Installation accessories

Flush-mounting box E1 (no-fines concrete)

001.05xx

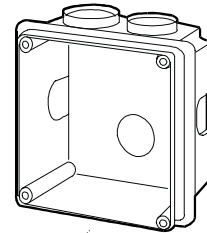
For flush mounting in no-fines concrete, Thermoplast.
 Dimensions (WxHxD): 90x85x55 mm



Flush-mounting box E1 (masonry)

001.11xx

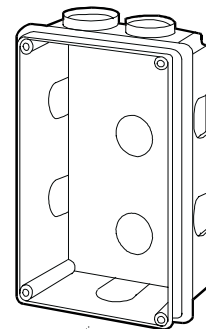
For flush mounting in masonry, Thermoplast, with plaster protection.
 Dimensions (WxHxD): 88x89x47 mm



Flush-mounting box E2 (masonry)

001.12xx

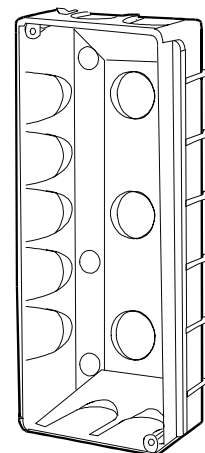
For flush mounting in masonry, Thermoplast, with plaster protection.
 Dimensions (WxHxD): 88x145x47 mm

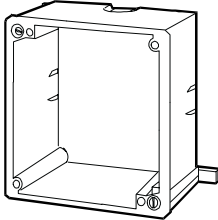
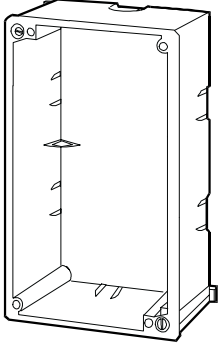
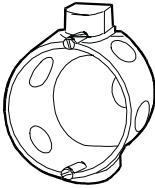
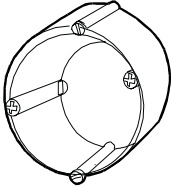
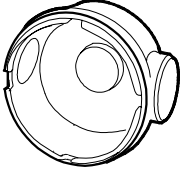


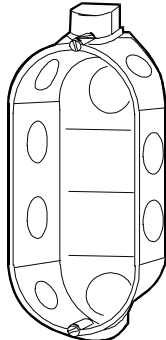
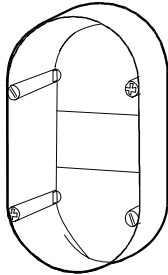
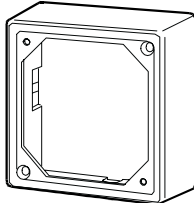
Flush-mounting box E3 (masonry)

001.13xx

For flush mounting in masonry, Duroplast, with plaster protection.
 Dimensions (WxHxD): 88x190x45 mm



Product	Ordering data	Illustrations
<p>Flush-mounting box E1 (cavity wall)</p> <p>For cavity wall installation, Thermoplast. Dimensions (WxHxD): 76x81x47 mm Wall recess (WxHxD): 78x83 mm</p>	<p>001.150x</p>	
<p>Flush-mounting box E2 (cavity wall)</p> <p>For cavity wall installation, Thermoplast. Dimensions (WxHxD): 76x137x47 mm Wall recess (WxHxD): 78x139 mm</p>	<p>001.160x</p>	
<p>Switchbox (masonry)</p> <p>For flush-mounting, Thermoplast. Dimensions (WxHxD): 65x80x42 mm</p>	<p>093.191x</p>	
<p>Switchbox (cavity wall)</p> <p>For cavity wall installation, Thermoplast. Dimensions (WxHxD): 70x47 mm Wall recess (D): 68 mm</p>	<p>093.192x</p>	
<p>Switchbox (no-fines concrete)</p> <p>For flush mounting in no-fines concrete, Thermoplast. Dimensions (WxD): 72x65 mm</p>	<p>093.193x</p>	

Product	Ordering data	Illustrations
<p>Double switchbox (masonry)</p> <p>For flush-mounting, Thermoplast. Dimensions (WxHxD): 70x 140x42 mm</p>	093.194x	
<p>Double switchbox (cavity wall)</p> <p>For cavity wall installation, Thermoplast. Dimensions (WxHxD): 70x 140x47 mm Wall recess (D): 2x68 mm</p>	093.195x	
<p>Adapter S1</p> <p>For installation of a Varioline combination with external dimensions 80x80 mm into an S1 surface-mounting frame, ABS plastic, colour white, similar to RAL 9010. Dimensions (WxH): 88x88 mm</p>	125.410x	
<p>Adapter S2</p> <p>For installation of 2 Varioline combinations with external dimensions 80x80 mm into an S2 surface-mounting frame, ABS plastic, colour white, similar to RAL 9010. Dimensions (WxH): 88x172 mm</p>	125.411x	
<p>Mounting frame S1</p> <p>Made from ABS plastic, white, similar to RAL 9010, for insertion of one module 88x88 mm, for installation on a conventional switchbox. Dimensions (WxHxD): 112x130x25 mm</p>	125.420x	
<p>Mounting frame S2</p> <p>Made from ABS plastic, white, similar to RAL 9010, for horizontal or vertical assembly, for insertion of 2 modules 88x88 mm, for installation on a double switchbox or E2 box. Dimensions (WxHxD): 112x225x25 mm</p>	125.421x	
<p>Surface-mounting frame E1</p> <p>For surface mounting of equipment with E1 dimensions, plastic, colour pearl white similar to RAL 1013. Dimensions (WxHxD): 98x98x42 mm</p>	201.41xx	

3 INSTALLATION CABLE

3.1 Telecommunications cable 2x2x0.6

IY(St)Y2x2x0.6 with static screen according to DIN 57815

3.2 Telecommunications cable 4x2x0.8

IY(St)Y4x2x0.8 with static screen according to DIN 57815

3.3 Telecommunications cable 4x2x0.6

IY(St)Y4x2x0.6 with static screen according to DIN 57815

3.4 Telecommunications cable 10x2x0.6

IY(St)Y10x2x0.6 with static screen according to DIN 57815

3.5 Installation cable NYM 2x1.5

NYM 2x1,5 qmm

4 SERVICES

4.1 Installation work at cost

141.731x

For work requested, charged on the basis of time and expenditure; part days are charged as full days.

4.2 Commissioning a section

141.732x

By the manufacturer of the nurse call system, including calibration, testing and programming of the system components in accordance with the operator's equipment specifications, once the installer has completed the installation work.

4.3 Assistance training

141.733x

In connection with all functions and operating processes of the nurse call system which are required to operate the system, including handover of the operating instructions and the report detailing the handover of the system to the operator.

5 TYPICAL ROOMS

will come soon

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Fax +49 (0)2 21 / 67 85-207
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Further information about
Tyco can be found on the
Internet at www.tycoint.com
and www.tepg.com

Company stamp:

tyco

Fire &
Security