2

Tehnički
katalog

SISTEM KUĆNE AUTOMATIKE

Stambeni objekti • Poslovni objekti • Hotelski objekti

DOMINA plus

SISTEMA DOMOTICO AVANZATO

COMPASSO D'ORO

Winner of
"Qualitec design award"

Top selection innovation
"Innovation design award"

DESIGN Index

Ave proizvodi jesu savremeni tehnički uređaji koje mora instalirati obučeno osoblje u skladu sa važećim normama i propisima, instrukcijama i uputstvima za upotrebu.

Napomena

Informacije koje se nalaze u ovom katalogu mogu biti netčne, nepotpune ili mogu sadržati štamparske greške. Sve informacije su podložne izmenama ili dopunama bez prethodnog upozorenja. AVE S.p.A zadržava pravo da u bilo kom trenutku i bez prethodnog upozorenja izvrši izmenu i/ili unapredi proizvode i/ili programe opisane u ovom katalogu.

SISTEM KUĆNE AUTOMATIKE

Technical Catalogue
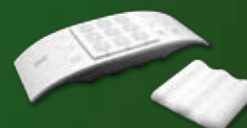
Installation Notes:
General rules for installation

The general rules for installation are those provided for by the standard in force, in particular those on distances with other systems or appliances.

Ducts are generally laid after the other systems such as heating/air conditioning, hydraulic and sanitary systems, central vacuum system, etc.

In the case of a floor-mounted heating system, ducts are laid before it and under the heating pipes to prevent overheating of cables.

All cables must be installed in compliance with the project instructions of the system and the standards in force to guarantee proper insulation between power supply cables and signal cables to prevent disturbances.

Provided that they are not in conflict with the directions above, the following instructions must also be followed:

- cables must be laid in a way to reduce interfereces and disturbances;
- keep the greatest possible distance between interfearing cables (for ex. EMF, antennas, etc.) and AVEbus cables which must not be subject to interference;
- do not install disturbing cables and cables which must not be subject to disturbance side by side and in case of intersection it must be made perpendicularly;
- use twisted and shielded signal wires to limit electromagnetic emissions and increase immunity, bus cable supplied by AVE S.p.A. item CVAVEBUS;
- Wiring must be carried out properly in compliance with the rules for traditional systems and provided for by the current standards.

The sizing of the system must take account of the following:

- The maximum number of domotic devices installed on the bus line must not be greater than C=300 (maximum load of the bus line, for sizing refer to table page 101 and the technical sections at www.ave.it);
- the total capacity of the devices connected to the line must not be greater than 150nF (500 devices on the same bus line);
- the maximum distance between AVEbus power supply unit and the farthest away device must not be greater than 300 m.

Maximum distance 300 m   Maximum distance 300 m

**53ABR4**   **53BSA**   **442ABTC1**
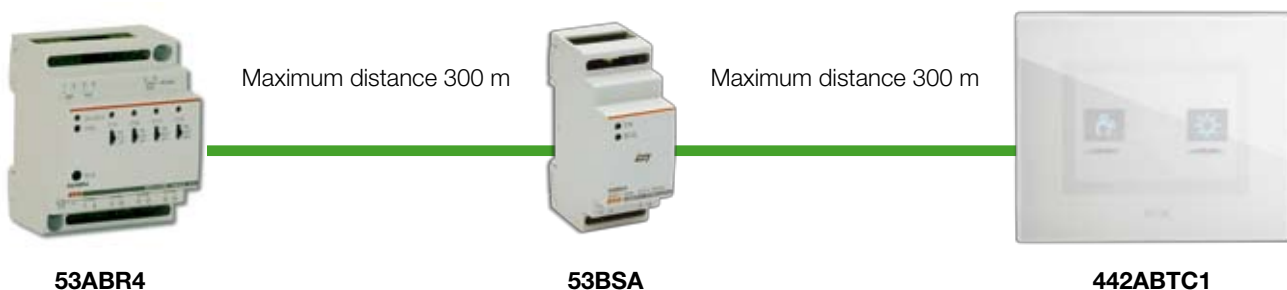
Topology of connections

Connections among AVEbus elements can be carried out as follows:

- linear structure: there is only one open backbone network, where all elements are connected to;

| **53ABR4** | **442ABT1**
442ABT2 | **53BSA** | **442ABTC1** | **ABR01** |

- star structure: each element is connected to a central point (1) (connection near the AVEbus power supply unit is recommended);

442ABT1
442ABT2

53ABR4

ABR01

53BSA

442ABTC1

- loop structure

53BSA

ABR01

53ABR4

442ABTC1
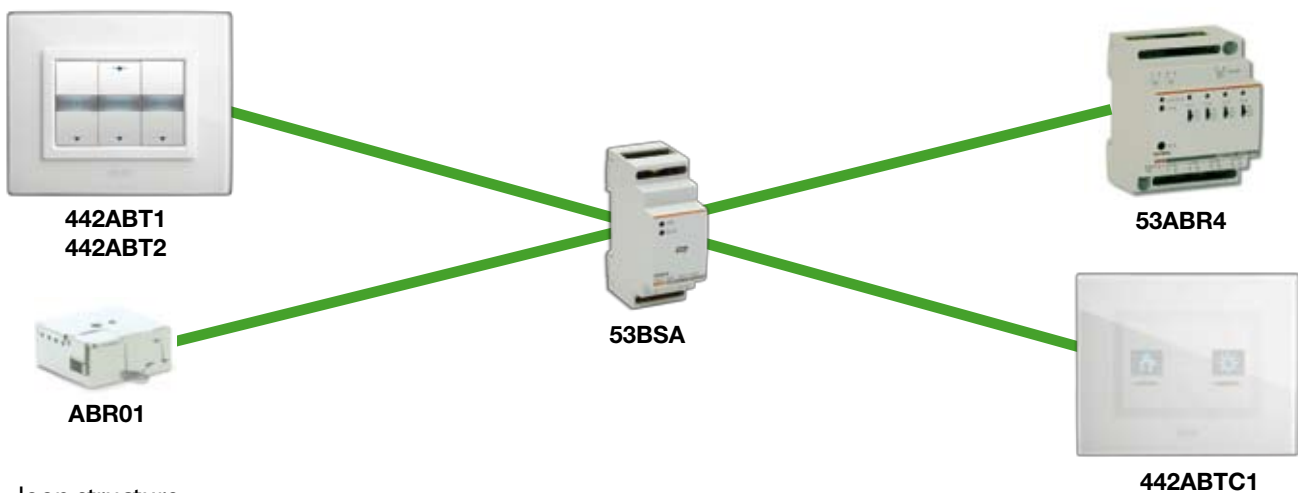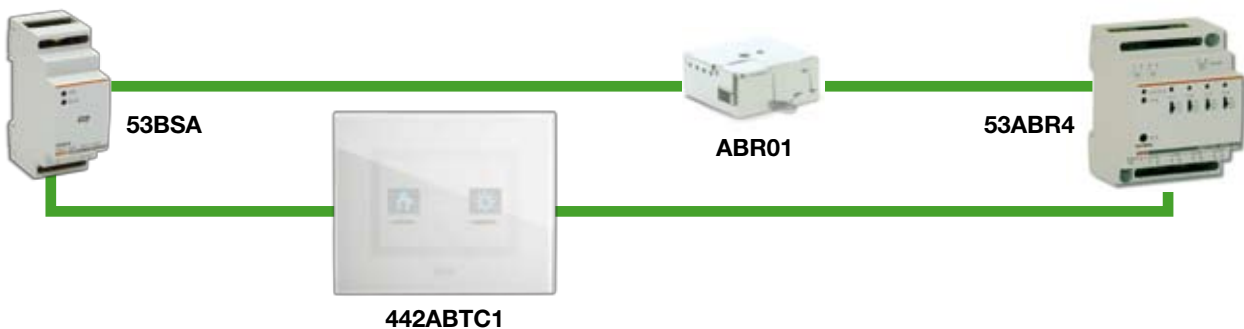
- free structure: combination of all the above-mentioned structures.

In any case, use only the bus cable supplied by AVE S.p.A. item CVAVEBUS.

Use of cable item CVAVEBUS:

Green + Black pair,
used for AVEbus connection.

Red + Black pair,
used for auxiliary power supply 12Vdc for devices.

Note 1: It is recommended that the bus power supply unit item 53BSA is used as star centre.
Note: AVE Spa reserves the right to update and/or change the content of this document without prior notice to the user.
Please check for updates at www.ave.it

Installation notes for Domina PLUS Touch Screen

Wall installation

- The device must be installed on a flush-mounting box installed in the wall in horizontal position

TS03B – TS03N		TS04		TS05
Masonry walls	art. BL06	Masonry walls	art. BL18TS04	Flush mounting box included in the package
Hollow walls	art. BL06CG	Hollow walls	art. BL18TS04CG	

- Do not expose the device to direct sun light;

- The temperature of the wall where the device is installed must not be greater than 30°C and therefore the areas around the device (both faces of the wall) must be free of heat sources (fan coil units, radiators, chimneys, cooking stoves, etc.)

- The temperature of the room where the device is installed must be between 5 and 30°C;

- For proper operation of the Touch Screen device, ducts with diameter 32 mm must be installed to guarantee the correct air circulation between the embedded box the device and the room of installation.

- The devices item TS03B and TS03N must be installed using the special spacer frame supplied (a prerequisite for product warranty).

Electric installation

The wiring of the device must be from downward and the required connections are the following:

- The AVEbus line (only for Touch Screen device in server mode) must be connected using the cable item CVAVEbus (Green + Black pair);

- the 12Vdc power supply must be connected via a dedicated power supply unit item 53ABAUX12V using a cable with proper section according to the distancefrom the power supplier (minimum requirement cable 2x1.5mm², according to the standards in force the power supply line must not be longer than 3 m).

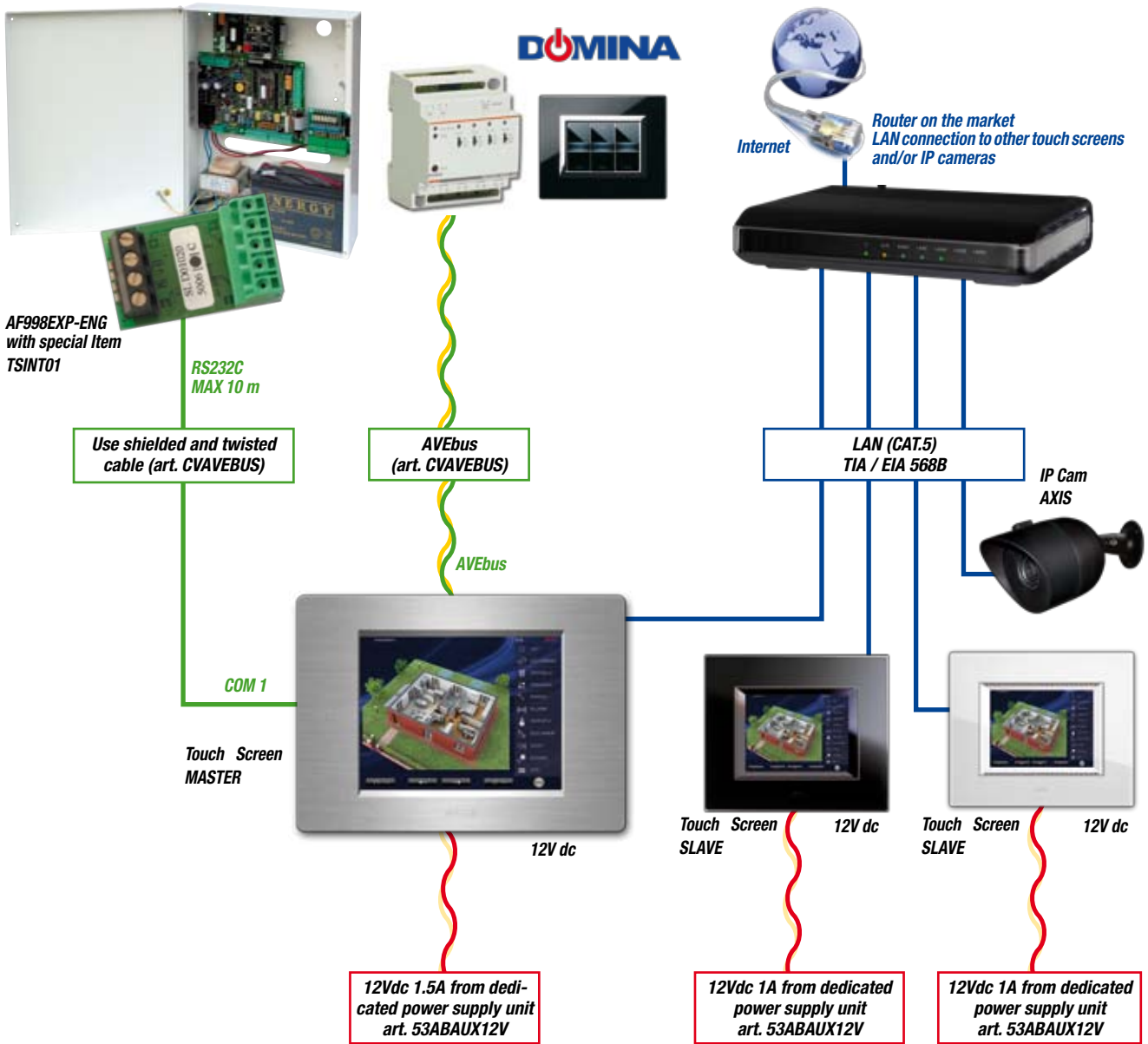In both cases the use of a power supply dedicated line with UPS protection is recommended;

- The Touch Screen devices must be powered between 12 Vdc and 13 Vdc and this voltage must be adjusted before connecting the device when all devices are disconnected.

- The connection to the anti-intrusion control unit item AF998EXP-ENG (by interface item TSINT01) must be made from the touch screen device, using dedicated pipes and using the cable item CVAVEBUS. The maximum distance is 10 m (shield must be connected to the neutral terminal of the battery of the burglar-alarm control unit);

- The LAN connection between all different devices must be carried out with cable and wiring as according to TIA / EIA 568B standard;

The remote assistance service is available throughout the product warranty provided that an internet connection is carried out (refer to warranty notes on the commercial catalogue).

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INSTALLATION DIAGRAM

**AF998EXP-ENG
with special Item
TSINT01**

**RS232C
MAX 10 m**

**Use shielded and twisted
cable (art. CVAVEBUS)**

**AVEbus
(art. CVAVEBUS)**

AVEbus

COM 1

**Touch   Screen
MASTER**

12V dc

Internet

**Router on the market
LAN connection to other touch screens
and/or IP cameras**

**LAN (CAT.5)
TIA / EIA 568B**

**IP Cam
AXIS**

**Touch   Screen
SLAVE**   **12V dc**

**Touch   Screen
SLAVE**   **12V dc**

**12Vdc 1.5A from dedi-
cated power supply unit
art. 53ABAUX12V**

**12Vdc 1A from dedicated
power supply unit
art. 53ABAUX12V**

**12Vdc 1A from dedicated
power supply unit
art. 53ABAUX12V**

Connection

**ATTENTION:
Power supply of Touch Screen devices
must be between
12,00 Vdc and 13,00 Vdc.**
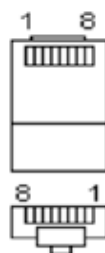
TIA/EIA 568B Wiring

1		White and Orange
2		Orange
3		White and Green
4		Blue
5		White and Blue
6		Green
7		White and Brown
8		Brown

47

DOMINAbus
12" colour touch screen display

TS04

The touch screen DOMINAbus is a monitoring system which can be aesthetically combined with all AVE accessories.

The device is equipped with AVEbus connection and is made using the most recent information technologies. It allows to manage all the domotic functions of the DOMINA system: from a simple action such as switching on or off a light to managing the whole system via web.

The application software includes several customizable pages where the user inserts and configures the icons of the application he wants to manage. These pages contain a graphic image of the rooms or the system that needs to be monitored. This graphic image, which is totally customizable, can be a photograph of the room, a 2D layout or a 3D rendering made by the architect or the designer.

Through the touch screens the user can "surf" the rooms:
- by means of a general map of the whole house;
- by means of a detailed maps of each room which are graphically represented on a page; the user can either display all the available functions or select the type of function to be displayed by means of a "function filter";

- or by an "easy" menu display with graphic icons used for customizations and for managing the system by sub-assemblies (lighting, temperature control, burglar alarm system, etc).

Technical data
- Touch screen device: 12"
- Flush-mounting box: BL18TS04 / BL18CGS04 (372x258x75) mm (WxHxD)
- Power supply: 12Vdc 1.5A by dedicated line
- Surfing using a pull-down menu and customizable graphic maps or easy menu with graphic icons
- Backlit colour display with 800x600 pixel resolution
- Possibility of managing the scenarios by AVEbus
- Virtual simulation of AF983 keyboard and related functions
- Display of technical alarms with information that could be helpful for the user to manage the event
- Possibility of managing thermoregulation
- Display of the alarms of the anti-intrusion alarm control unit item AF998EXP-ENG
- Managing of video-control by means of IP cameras
- Programming by PC

Connections
- Terminal 1: AVEbus positive
- Terminal 2: GND
- Terminal 3: 12V power supply positive
- Terminal 4: GND power supply
- LAN: LAN connection for ethernet service
- RS232C connection for monitoring of anti-intrusion system
- USB: USB connections for data transfer

FUNCTIONS AND OPERATING MODES

LIGHTING

LIGHTS WITH BRIGHTNESS CONTROL

TECHNICAL ALARMS

ANTI-INTRUSION ALARM SYSTEM

ROLLER SHUTTER CONTROL

*****SOUND DIFFUSION**

*****REMOTE CONTROL**

WATERING CONTROL

TEMPERATURE CONTROL

IP CAM

LOAD CONTROL

SCENARIOS CONTROL

*** *For use and prices please contact the sales network.**

Code	Description	Mod.	Info
TS05	15" colour LCD touch screen for monitoring of domotic system and anti-intrusion alarm system with AF998EXP-ENG control unit.		
TS04	12" colour LCD touch screen for monitoring of domotic system and anti-intrusion alarm system with AF998EXP-ENG control unit.		
BL18TS04	Special box for masonry walls for installation of TS04 Dimensions (WxHxD) 372x258x75 mm		
BL18CGTS04	Special box for hollow walls for installation of TS04 Dimensions (WxHxD) 372x258x75 mm		
TSINT01	Interface for touch screen device. Allows to connect AVE Touch Screens to AF998EXP-ENG alarm control unit.		

TS05

TS04

Attention:
For installation refer to the installation notes above.

Note:
In addition to the touch screen devices shown in this catalogue, other devices are available on demand. For further information please contact Ave sales network.

Cover plates for TS04

Code	Description
PATS04ALS	Aluminium plate – brushed finishing (colour Allumia)
PATS04ANS	Aluminium plate – brushed finishing (Anthracite colour)
PATS04B	Technopolymer plate –RAL 9010 white – clear finishing

PATS04ALS

WIRING DIAGRAM AND EXAMPLE OF USE   **Dimensions:** Area Touch 12"

Web

IP Cameras

RS232C

AVEbus

AF998EXP-ENG control unit with special TSINT01 interface

DOMINAbus
5.7" colour touch screen display

TS03N
TS03B

The touch screen device DOMINAbus is a monitoring system which can be aesthetically combined with all accessories by AVE.
The device is equipped with the AVEbus connection and is made using the most recent information technologies. It allowsto manage all the domotic functions of the DOMINA system: from a simple action such as switching on or off a light to managing the whole system via web.
The application software includes several customizable pages where the user inserts and configures the icons of the application he wants to manage. These pages contain a graphics image of the rooms or the system that needs to be monitored. This graphic image, which is totally customizable, can be a photograph of the room, a 2D layout or a 3D rendering made by the architect or the designer.
The touch screen enables the user to "surf" the rooms:
- by means of a general map of the whole house;
- by means of a detailed maps of each room which are graphically represented on a page; the user can either display all available functions or select the type of function to be displayed by means of a "function filter";
- or by means of an "easy" menu display with graphic icons used for customizations and for managing the system by sub-assemblies (lighting, temperature control, burglar alarm system, etc).

Technical data
• Touch screen device: 5.7"
• Flush-mounting box: BL06 and BL06CG
• Power supply: 12Vdc by 1A dedicated line
• Surfing using a pull-down menu and customizable graphic maps or easy menu with graphic icons
• Backlit colour display with 800x600 pixel resolution
• Possibility of managing the scenarios by means of AVEbus
• Display of technical alarms with information that could be helpful for the user to manage the event
• Virtual simulation of AF983 keyboard and related functions
• Display of the alarms of the anti-intrusion alarm control unit item AF998EXP-ENG
• Possibility of managing thermoregulation
• Managing of video-control by means of IP cameras
• Programming by PC

Connections
• Terminal 1: AVEbus positive
• Terminal 2: GND
• Terminal 3: 12Vdc power supply positive
• Terminal 4: GND power supply
• LAN: LAN connection for ethernet service
• RS232C connection for monitoring of anti-intrusion system
• USB: USB connections for data transfer

FUNCTIONS AND OPERATING MODES

LIGHTING

LIGHTS WITH BRIGHTNESS CONTROL

TECHNICAL ALARMS

ANTI-INTRUSION ALARM SYSTEM

ROLLER SHUTTER CONTROL

*SOUND DIFFUSION

*REMOTE CONTROL

WATERING CONTROL

TEMPERATURE CONTROL

IP CAM

LOAD CONTROL

SCENARIOS CONTROL

50

***For use and prices please contact the sales network.**

TS03N

Cover plates

44PV12BL

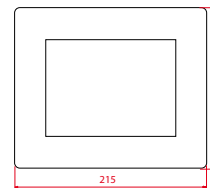| Code	Description	Mod.	Info
TS03N	5.7" colour LCD touch screen for monitoring of domotic system and anti-intrusion alarm system with AF998EXP-ENG control unit. - Colour: Glossy Black		
TS03B	As above – Colour: Clear White		
TSINT01	Interface for touch screen. Allows TS03-.. to be connected to the AF998EXP-ENG control unit.		

Attention:
For installation refer to the notes instructions above.

Note:
In addition to the touch screen devices shown in this catalogue, other devices are available on demand. For further information please contact Ave sales network.

Code	Description
44PV12NAL	Glass plate – colour: absolute black - glossy finishing - 12(6+6) modules
44PV12BL	Glass plate – colour: white RAL9010 -clear finishing 12(6+6) modules
44PA12ALS	Brushed natural aluminium plate - 12(6+6) modules
44PA12ANS	Brushed anthracite aluminium plate - 12(6+6) modules

Note: remove the inner frame before installing the plates described above

OVERALL DIMENSIONS

182
215

WIRING DIAGRAM AND EXAMPLE OF USE

Dimensions: Area Touch 5.7'

Web

IP Cameras

RS232C

AVEbus

DOMINA

AF998EXP-ENG control unit with special TSINT01 interface
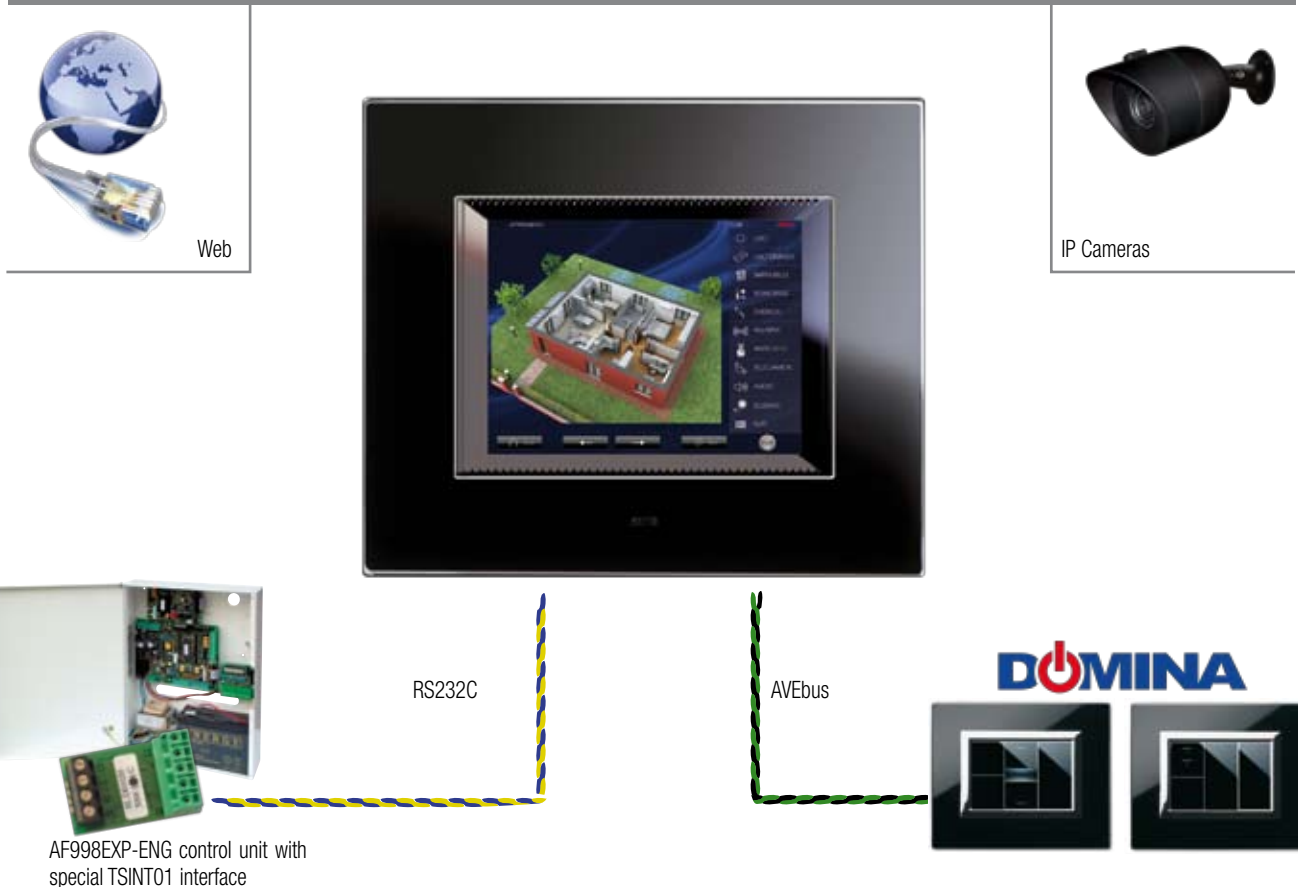
DOMINAbus
5.7" monochrome touch screen display

TS02-ENG

The TS02-ENG touch screen is an LCD which can be operated by simply touching it with a finger or a pen. It can be connected to the burglar alarm system via the RS232C bus output and to the AVEbus domotic system by means of a dedicated output. It enables sending commands to the two systems and display the performed action.

With the TS02-ENG touch screen device the room map is available on the display. In the initial page with the general map of the rooms the user can select a room where all the detectors installed are shown in form of an icon. By selecting the icons, a screen is displayed with the status of the detector.
If an alarm occurs, the alarm area will flash on the map.
To enable the user to manage the system (connection, disconnection, partial connection) a virtual keyboard can be recalled at any moment by means of a special command.

If connected to the AVEbus system, the touch screen allows to control all the domotic functions that can be managed through this system: light control, motorised roller shutters or curtain control, thermoregulation, control of scenarios (that is, the multifunction control such as the night command: lights off, night temperature control, activation of burglar alarm, closing of roller shutters).
The TS can be programmed by means of a special SW (SFW DOMINA) which allows not only to define the layouts but also the programming parameters for communication with AVEbus devices and the Anti-intrusion control unit.

Technical data
• Dimensions: 190x130x40
• Monobloc structure for installation on BL06P box
• Installation with dedicated plate of YES series (45PY-015BB-TS) and Vera series (45PV15VL-TS)
• Surfing using a pull-down menu and customizable graphic maps
• Backlit monochromatic blue display with 320x240 pixel resolution
• Power supply: by means of RS232C (12Vdc) line or AVEbus line
• Electrical input: 130 mA when backlighting is off; 230 mA when backlighting is on.
• Possibility of managing the scenarios AVEbus
• Virtual simulation of AF983 keyboard and related functions
• Display of the alarms of the anti-intrusion alarm control unit
• Possibility of managing thermoregulation
• Programming by PC

Connectioi
• Terminal 1: power supply positive
• Terminal 2: RS232C (A) bus
• Terminal 3: RS232C (B) bus
• Terminal 4: power supply negative (GND)
• Terminal 5: AVEbus positive
• Terminal 6: AVEbus negative
• Terminal 7: auxiliary power supply positive (12Vcc)
• Terminal 8: auxiliary power supply negative (GND)

Diagram of Programming cable

FUNCTIONS AND OPERATING MODES

LIGHTING

LIGHTS WITH BRIGHTNESS CONTROL

TECHNICAL ALARMS

ANTI-INTRUSION ALARM SYSTEM

ROLLER SHUTTER CONTROL

***SOUND DIFFUSION**

***REMOTE CONTROL**

WATERING CONTROL

TEMPERATURE CONTROL

IP CAM

LOAD CONTROL

SCENARIOS CONTROL
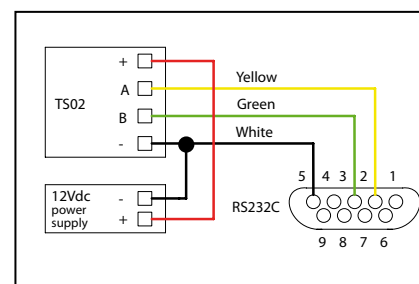
TS02-ENG

| Code	Description	Mod.	Info
TS02-ENG	5.7" LCD monochrome touch screen for monitoring of domotic system and anti-intrusion alarm system with AF998EXP-ENG control unit.		
TSINT01	Interface for touch screen. Allows TS02-ENG to be connected to the AF998EXP-ENG control unit.		
ABTTINT01	Interface for connecting Ave bus to Tutondo sound systems with TS02-ENG.		

Cover plates

45PV15BL-TS

Code	Description
45PV15BL-TS	White- clear finish – hard cut
45PV15VO-TS	Water green – frosted finish – hard cut
45PV15GO-TS	Silver grey – frosted finish – hard cut
45PV15RPL-TS	Pompeian red – shiny finish – hard cut
45PV15NAL-TS	Absolute black – clear finish – hard cut
45PY015BB-TS	Banquise white – Yes plate made of technopolymer

WIRING DIAGRAM AND EXAMPLE OF USE   **Dimensions:** Area Touch 5.7'

RS232C   AVEbus
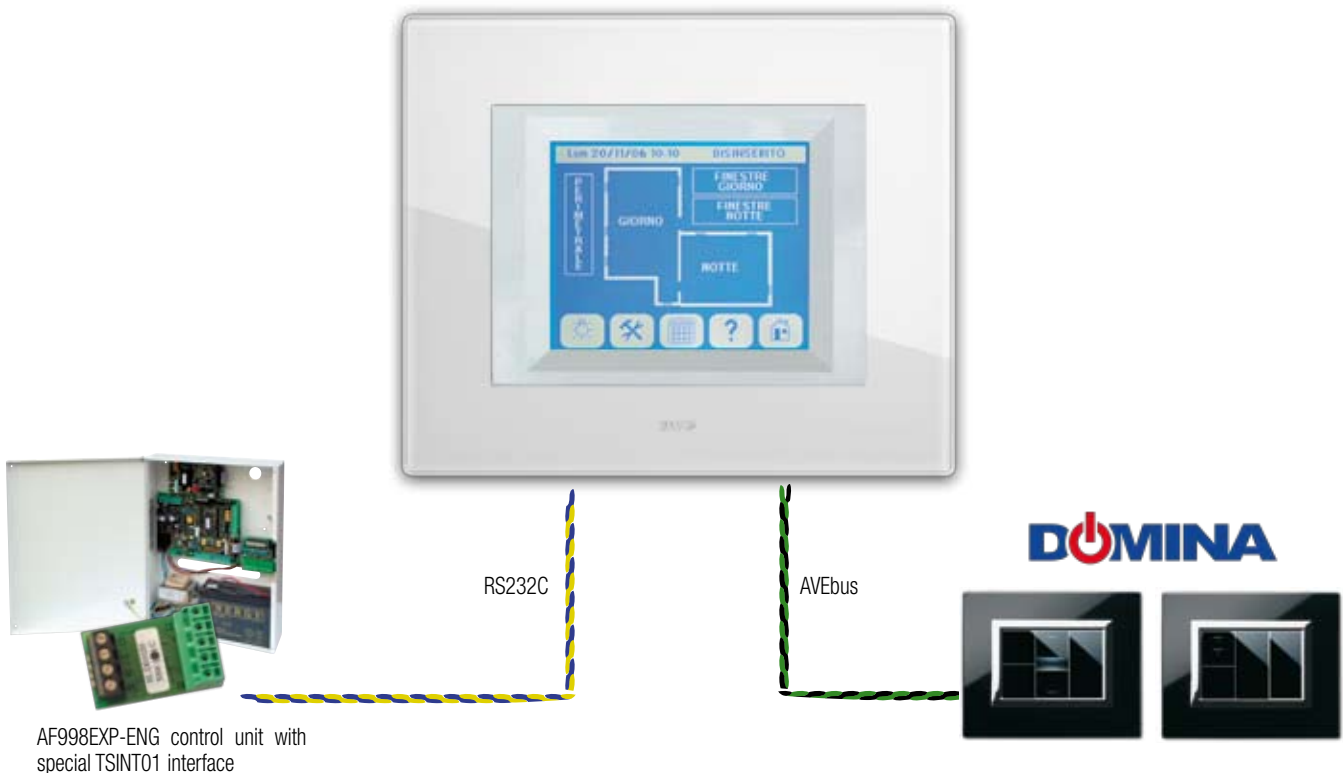
AF998EXP-ENG control unit with special TSINT01 interface

Domotic Video door-station

VSABTC-NAL
VSABTC-BL

The VSABTC-... video-station is an indoor glass video door-phone station with hands free technology and touch screen commands available in two colours, clear absolute black and clear white, which perfectly fit the Sistema44 series. Because of the interoperability of the AVE devices and the video door entry systems B-Twin by Bitron Video, the video door entry system and the domotic system AVEbus can be integrated and so become an integral part of the Domina system.
Besides all the classical functions of video door entry systems it allows:
- making <u>intercommunicating</u> calls in the apartment or outside it and add up to 32 users by means of the telephone book;
- informing that nobody is in.
- if the user is out, setting the video door entry answe-

ring machine through which an audio/video message can be recorded;
- interacting with the scenarios function of the Touch screen;
- interacting with the domotic function of temperature monitoring;
- managing door opening commands from AVEbus devices.

Technical data
- Dimensions: 140 x 184 x 56.5 mm
- Monobloc structure for installation on BL05 and BL-05CG box
- Installation with AVE plates 44P912.../ VS or 44PV12.../VS
- Backlit colour screen
- Protection degree: IP40 if installed in its flush-mounting frame
- Installation can be completed with Ave plates 44P912.../VS or 44PV12.../VS
- Extractable bus terminals: 2 poles 10A 250V

- Possibility of managing the scenarios AVEbus
- Possibility of interacting with the temperature control

Connections
- Terminal BUS IN: video door entry system bus connection
- Terminal BUS IN: video door entry system bus connection
- Terminal BUS OUT: connection to the next video door entry system (in and out connection)
- Terminal BUS OUT: connection to the next video door entry system (in and out connection)
- Terminal S +: repetition of call (OUT)
- Terminal S -: repetition of call (OUT)
- Terminal P: Floor call (IN)
- Terminal P: Floor call (IN)
- Terminal AVEbus +: AVEbus positive
- Terminal AVEbus -: AVEbus negative

FUNCTIONS

- **Scenarios control**
- **Temperature control display**
- **Door opening by AVEbus**
- **Video door entry answering machine**
- **Melody selection**
- **Intercom calls**
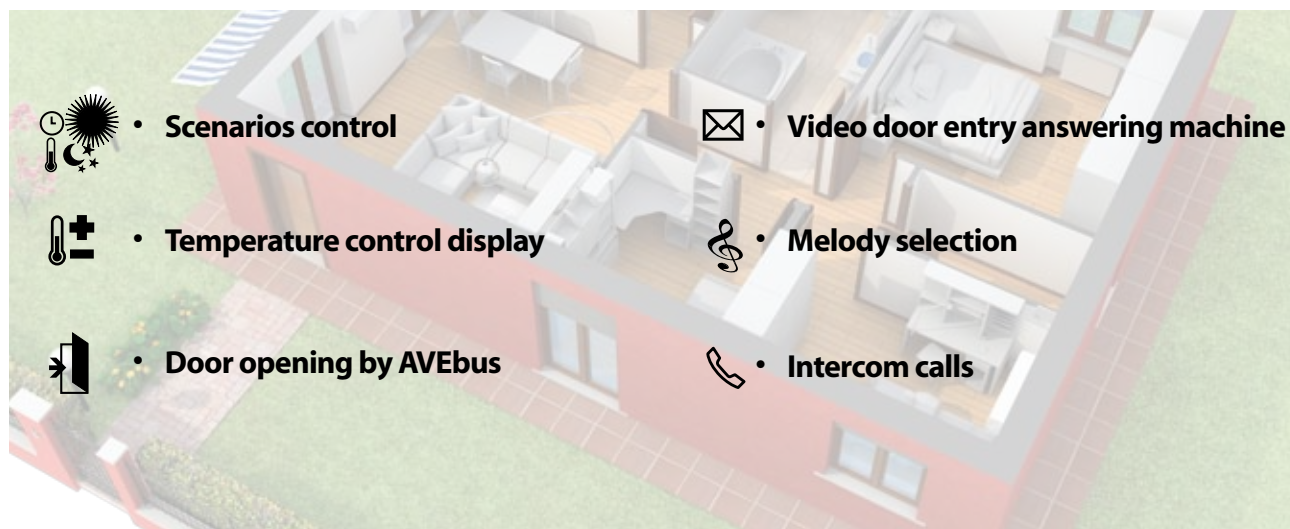
DESCRIPTION OF THE FRONT SIDE
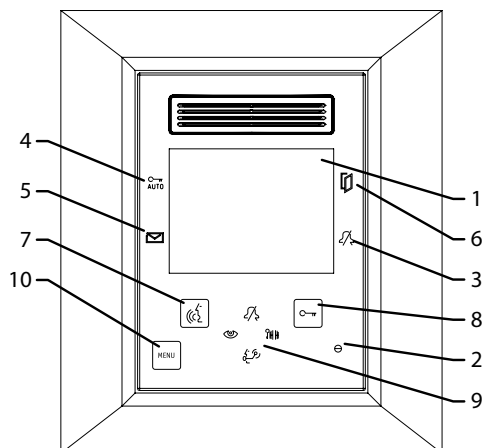
1 – Display

2 – Microphone

3 – Mute call indicator ON (green LED)

4 – Indicator automatic door opening device ON (green LED)

5 – Indicator presence of messages (green LED)

6 – Indicator door open or user out (red LED)

7 – Speakerphone ON/OFF push-button

8 – Door opening push-button

9 – Push-button for surfing, automatic activation, call to switchboard, gate opening, mute ringbell

10 – Menu push-button

VSABTC-BL

VSABTC-NAL

Code	Description	Mod.	Info
VSABTC-BL	Indoor video door entry station with hands free technology and domotic functions – Colour: Clear white		
VSABTC-NAL	As above – Colour: Clear absolute Black		

Cover plates

44PV12NAL/VS	Glass plate – colour: absolute black – clear finish		
44PV12BL/VS	Glass plate – white RAL9010 – clear finish		
44P912AO/VS	Metal plate – colour: mat silver		
44P912BMC/VS	Metal plate – colour: michalized white		
44P912GSM/VS	Metal plate – colour: metallic dark grey		
44P912NAL/VS	Metal plate – colour: clear absolute black		
44P912PERS/VS	Metal plate – paintable surface		

Flush mounting box for VideoStation

BL05CG

BL05P	Flush mounting box for masonry walls, 168x137x73mm (W H D)		
BL05CG	Flush mounting box for hollow walls, 144x162x59mm (W H D)		

Plates for VideoStation

44PV12BL

44PA12ALS/VS	Natural brushed Aluminium plate, 215x182 (W H)		
44PA12ANS/VS	Natural brushed Aluminium plate, anthracite colours, 215x182 (W H)		
44PV12NAL/VS	Clar Absolute black glass plate, 215x182 (W H)		
44PV12BL/VS	Clear white RAL9010 glass plate, 215x182 (W H)		
44P912ALS/VS	Zama plate, Aluminium colour, 215x182 (W H)		
44P912AO/VS	Zama plate matt silver colour, 215x182 (W H)		
44P912BMC/VS	Zama plate, clear michalized white colour, 215x182 (W H)		
44P912GSM/VS	Zama plate, dark metal grey colour, 215x182 (W H)		
44P912NAL/VS	Zama plate, cclear absolute black colour, 215x182 (W H)		
44P912PERS/VS	Zama plate with treated paintable surface, 215x182 (W H)		

Note: before installing the plates remove the inner frame.

Control devices

The control devices (transmitters) of Domina system can be divided into three main groups:
1. with "touch" electronic push-button suitable to any type of command
2. with one or two simple push-buttons suitable to step-by-step command for lighting, activation of scenarios, etc.
3. with one or two toggle push-buttons suitable for dimming control, roller shutters, door and windows control, etc.

A bus connection enables these devices to control the user points and the actuators connected to it; each control device must be set and logically connected to an actuator which will be chosen according to the user point to be controlled.

After deciding which actuator has to be used and the function to be associated to the control device, the device must be completed with:
1. special glass plate for "touch" control item 442ABTC1;
2. activating element item 44..ELA01 for simple push-button control;
3. activating element item 44..ELA02 for toggle push-button control;
Each activating element or plate can be customized with special symbols (see following examples).

"TOUCH" ELECTRONIC CONTROL WITHOUT CUSTOMIZATION

**Aesthetical detail of plate colour
NAL clear absoluteblack**

442TC13...
Hidden blank inserts supplied
with the plate

2503MG
Flush-mounting box

44A03
S44 standard frame

442ABTC1
Hidden controls

44PVTC0...
"Ave Touch" plates for hidden
controls
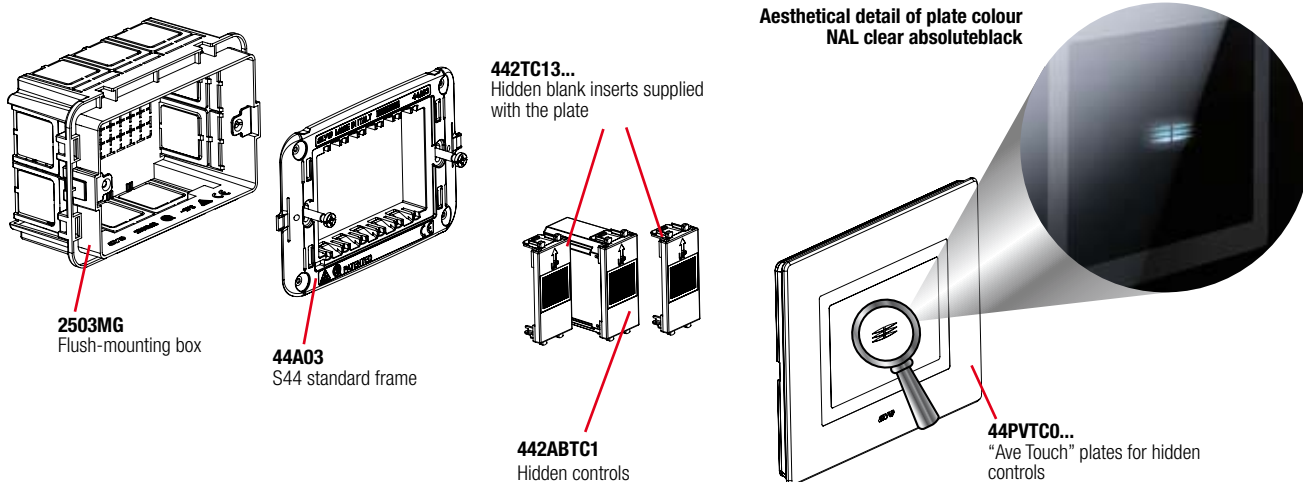
"TOUCH" ELECTRONIC CONTROL WITH CUSTOMIZATION

**Aesthetical detail of plate colour
NAL clear absoluteblack**

442ABTC1
Hidden controls

2503MG
Flush-mounting box

44A03
S44 standard frame

442TC13...
Hidden blank inserts
supplied with the plate

**ETI16
ETI16GR**
Interchangeable labels for
customization

44PVTC0.../P
"Ave Touch" plates for hidden
controls with windows for cu-
stomizable labels

ETI16
ETI16GR

SIMPLE PUSH-BUTTON CONTROL

2503MG
Flush-mounting box

44A03
S44 standard frame

442ABT1
single-channel transmitter

44..013
Blank inserts

44..ELA01
single-function activating element

Aesthetical detail, plate colour V0 Water green

44PV3...
"Vera 44" plates for traditional controls

TOGGLE PUSH-BUTTON CONTROL

2503MG
Flush-mounting box

44A03
S44 standard frame

442ABT1
1-channel transmitter

44..013
Blank inserts

44..ELA02
2-function activating element

Aesthetical detail, plate colour V0 Tourquoise green

44PV3...
"Vera 44" plates for traditional controls

APPLICATION OF IDENTIFICATION LABELS

1

Click
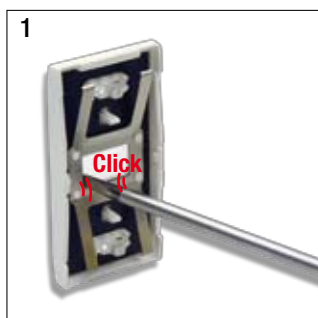
Remove the central transparent plate

2
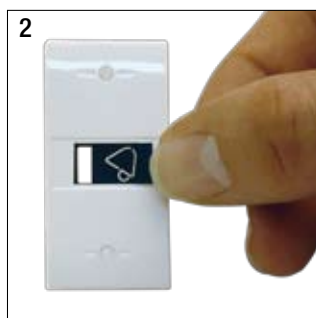
Insert the identification label supplied with the activating element in the front

3
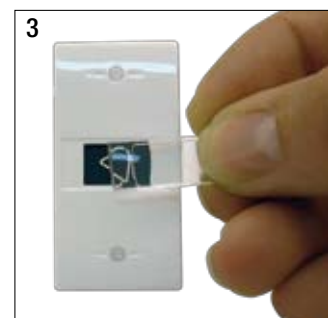
Insert the transparent plate frontally

AVE Touch 1 channel transmitter

442ABTC1

The 442ABTC1 device is a single-channel bus transmitter with Ave Touch technology which can control all the receivers of the AVEbus family by simply touching the glass plate. According to the operating mode assigned, the most suitable push-button (with central fulcrum or asymmetric) can be installed frontally.

Technical data

• Enclosure: 1 S.44 "hidden module (22.5 w x 45 h x 46.5 d) mm to complete with a glass plate.

• Protection degree: IP41 if completed with plate and installed in the corresponding flush-mounting support.

• Reference temperature and relative humidity: 25°C RH 65%

• Operating amb. temp. range: -10°C to +50°C
• Maximum Relative Humidity: 90% at 35°C
• Max. Height: 2000 m a.s.l.
• Auxiliary power supply
  Voltage rating: 12Vac/dc
  Allowed variation: 10.5V ÷ 14V
  Electrical input at 12Vdc: 6.6 mA MAX
  Electrical input at 12Vac: 12 mA MAX
• Possibility to set the operating sensitivity of the device: when touching the plate or at 4 mm from the plate
• Temporary inhibition for cleaning the plate
• By a slight touch of the finger on the entire front side of the device, a command message is sent and the status of the associated receiver is signalled
• Front LED for identification in the dark:

By putting a hand closer, the LED sends a stronger light.
Note: if the led light is dazzling, it is recommended that the blue label contained in the set code ETI16 is applied on the device front side (back of plate).

Connections
• Terminal 1: BUS positive
• Terminal 2: BUS GND
• Terminal 3: auxiliary power supply positive
• Terminal 4: auxiliary power supply GND

FUNCTIONS AND OPERATING MODES

	Function 1:	ON		Function 10:	ON	(With indication of associated receiver status)
	Function 2:	OFF		Function 11:	OFF	(With indication of associated receiver status)
	Function 3:	STEP		Function 12:	STEP	(With indication of associated receiver status)
	Function 4:	ON + OFF		Function 13:	ON + OFF	(With indication of associated receiver status)
	Function 5:	DIMMER		Function 14:	DIMMER	(With indication of associated receiver status)
	Function 6:	ROLLER SHUTTER		Function 15:	ROLLER SHUTTER	(With indication of associated receiver status)
	Function 7:	DOORS / WINDOWS		Function 16:	DOORS / WINDOWS	(With indication of associated receiver status)
	Function 8:	SUN BLADE		Function 17:	SUN BLADE	(With indication of associated receiver status)
	Function 9:	VENTILATION		Function 18:	VENTILATION	(With indication of associated receiver status)

Parameter 1	1	Indication of associated receiver status, normally off upon restoration of electric power
	2	IIndication of associated receiver status, normally on upon restoration of electric power

Parameter 2	1	Touch sensitivity Minimum level (0mm)
	2	Touch sensitivity Maximum level (4mm)

Parameter 3	1	Acoustic feedback disabled
	2	Acoustic feedback enabled

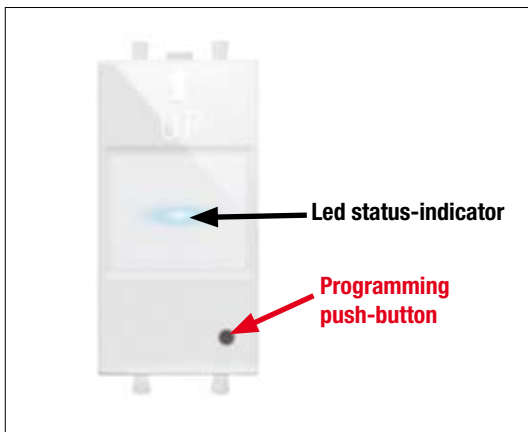| Code	Description	Mod.	Info
442ABTC1	AVE Touch single-channel transmitter To use with AVE Touch plate		

442ABTC1

Installation steps

DETAILS

Led status-indicator

Programming push-button
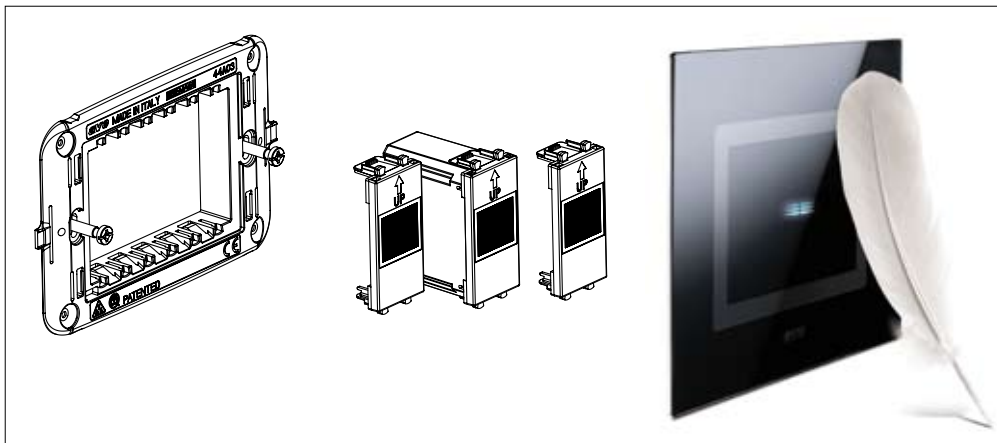
WIRING DIAGRAM AND EXAMPLE OF USE   **Dimensions:** 1 System 44 (22.5 w x 45 h x 46.5 d) "hidden" module

Art. 442ABTC1

BUS AUX

AVEbus line
art. CVAVEBUS
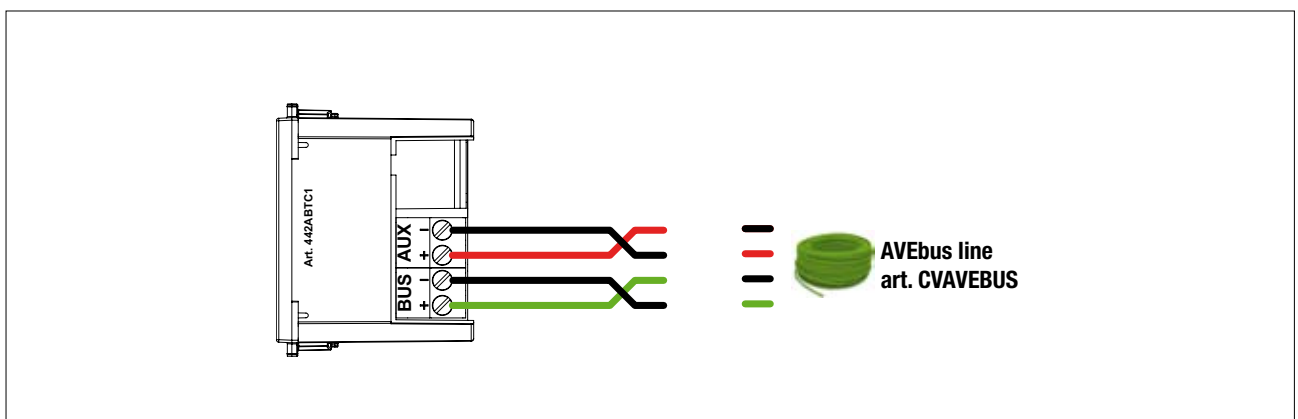
1-channel transmitter

442ABT1

The 442ABT1 device is a single-channel bus transmitter which can control all the receivers of the AVEbus family. According to the operating mode assigned, the most suitable activating element (with central fulcrum or asymmetric) can be installed on the front side.

Technical data

• Enclosure: 1 System 44 module (22.5 w x 45 h x 46.5 d) mm to complete with activating element Item 44...ELA01 or 44...ELA02.

• Protection degree: IP41 if completed with plate and installed in the corresponding flush-mounting support.

• Reference temperature and relative humidity: 25°C RH 65%

• Operating amb. temp. range: -10°C to +50°C
• Maximum Relative Humidity: 90% at 35°C
• Max. Height: 2000 m a.s.l.
• Auxiliary power supply
   Voltage rating: 12Vac/dc
   Allowed variation: 10.5V ÷ 14V
   Electrical input at 12Vdc: 15.2 mA MAX
   Electrical input at 12Vac: 14.4 mA MAX

Connections

• Terminal 1: BUS positive
• Terminal 2: BUS GND
• Terminal 3: auxiliary power supply positive
• Terminal 4: auxiliary power supply GND

Description of the front side

Several optical signals are visible on the front side to enable the user to locate the device in the dark and, if properly set, they show the status of the associated receiver.

Installation of activating element

Once programming has ended, the corresponding activating elements must be applied on the front side of the device.
• 44...ELA02 for DIMMER, ROLLER SHUTTERS, DOORS/WINDOWS and SUN BLADE controls
• 44...ELA01 for ON, OFF, ON+OFF and STEP controls

FUNCTIONS AND OPERATING MODES

	Function 1:	ON
	Function 2:	OFF
	Function 3:	STEP
	Function 4:	ON + OFF
	Function 5:	DIMMER
	Function 6:	ROLLER SHUTTER
	Function 7:	DOORS / WINDOWS
	Function 8:	SUN BLADE
	Function 9:	VENTILATION

Function 10:	ON	(With indication of associated receiver status)
Function 11:	OFF	(With indication of associated receiver status)
Function 12:	STEP	(With indication of associated receiver status)
Function 13:	ON + OFF	(With indication of associated receiver status)
Function 14:	DIMMER	(With indication of associated receiver status)

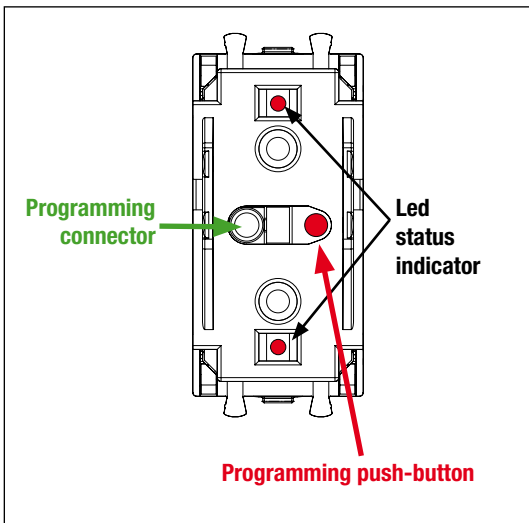| Parameter 1	1	Indication of associated receiver status, normally off upon restoration of electric power
	2	Indication of associated receiver status, normally on upon restoration of electric power

Code	Description	Mod.	Info
442ABT1	1-channel transmitter		
	To complete with activating element 44...ELA01 or 44...ELA02		

442ABT1

DETAILS

Programming
connector →

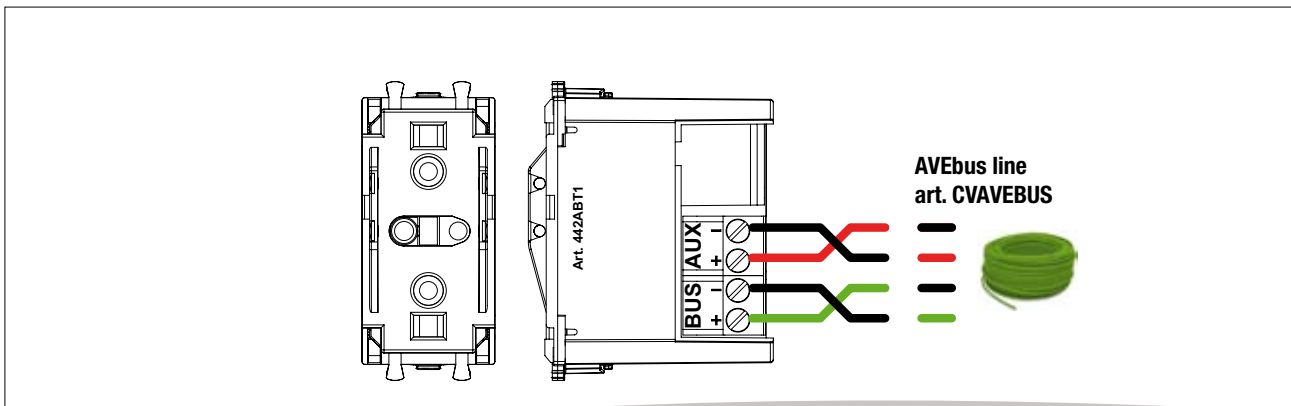Led
status
indicator

Programming push-button

SELECTING THE MOST SUITABLE ACTIVATING ELEMENT

44..ELA01

Light control

Activation of scenarios

44..ELA02

Dimmer control

Activation of roller shutters

WIRING DIAGRAM AND EXAMPLE OF USE   **Dimensions:** 1 System 44 (22.5 w x 45 h x 46.5 d) module

Art. 442ABT1

BUS AUX

**AVEbus line
art. CVAVEBUS**

2-channel transmitter

442ABT2

The 442ABT2 device is a two-channel bus transmitter which can control all the receivers of the AVEbus family. According to the operating mode assigned the most suitable activating element (with central fulcrum or asymmetric) can be installed on the front side

Technical data

• Enclosure: 2 System 44 modules (45 w x 45 h x 46.5 d) mm to complete with activating element Item 44...ELA01 or 44...ELA02.

• Protection degree: IP41 if completed with plate and installed in the corresponding flush-mounting support.

• Reference temperature and relative humidity: 25°C RH 65%

• Operating amb. temp. range: -10°C to +50°C
• Maximum Relative Humidity: 90% at 35°C
• Max. Height: 2000 m a.s.l.
• Auxiliary power supply
  Voltage rating: 12Vac/dc
  Allowed variation: 10.5V ÷ 14V
  Electrical input at 12Vdc: 13.7 mA MAX
  Electrical input at 12Vac: 14.4 mA MAX

Connections

• Terminal 1: BUS positive
• Terminal 2: BUS GND
• Terminal 3: auxiliary power supply positive
• Terminal 4: auxiliary power supply GND

Description of the front side

Several optical signals are visible on the front side to enable the user to locate the device in the dark and, if properly set, show the status of the associated receiver.

Installation of activating element

Once programming has ended, the corresponding activating element must be applied on the front side of the device.

• 44...ELA02 for DIMMER, ROLLING SHUTTERS, DOORS/WINDOWS and SUN BLADE controls
• 44...ELA01 for ON, OFF, ON+OFF and STEP controls

FUNCTIONS AND OPERATING MODES

	Function 1:	ON
	Function 2:	OFF
	Function 3:	STEP
	Function 4:	ON + OFF
	Function 5:	DIMMER
	Function 6:	ROLLER SHUTTER
	Function 7:	DOORS / WINDOWS
	Function 8:	SUN BLADE
	Function 9:	VENTILATION

Function 10:	ON	(With indication of associated receiver status)
Function 11:	OFF	(With indication of associated receiver status)
Function 12:	STEP	(With indication of associated receiver status)
Function 13:	ON + OFF	(With indication of associated receiver status)
Function 14:	DIMMER	(With indication of associated receiver status)

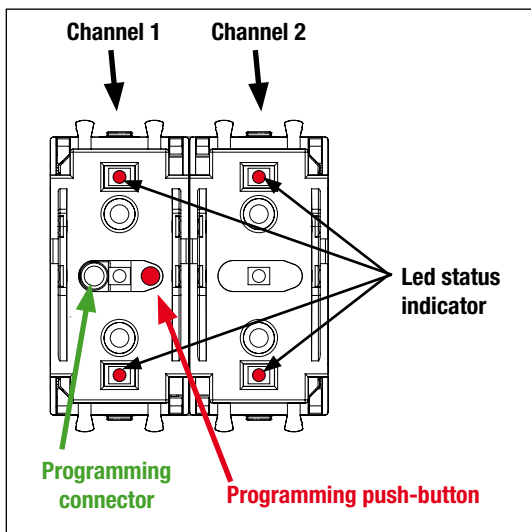|		
Parameter 1	1	Indication of associated receiver status, normally off upon restoration of electric power
	2	Indication of associated receiver status, normally on upon restoration of electric power

Code	Description	Mod.	Info
442ABT2	Two-channel transmitter- to complete with activating element 44...ELA01 or 44...ELA02		

442ABT2

DETAILS

Channel 1   **Channel 2**

Led status indicator

Programming connector

Programming push-button

SELECTING THE MOST SUITABLE ACTIVATING ELEMENT

44..ELA01

Light control

Activation of scenarios

44..ELA02

Dimmer control

Activation of roller shutters

WIRING DIAGRAM AND EXAMPLE OF USE

Dimensions: 2 System 44 (45 w x 45 h x 46.5 d) modules

BUS
+ −

AUX
− +

Art. 442ABT2

AVEbus line art. CVAVEBUS
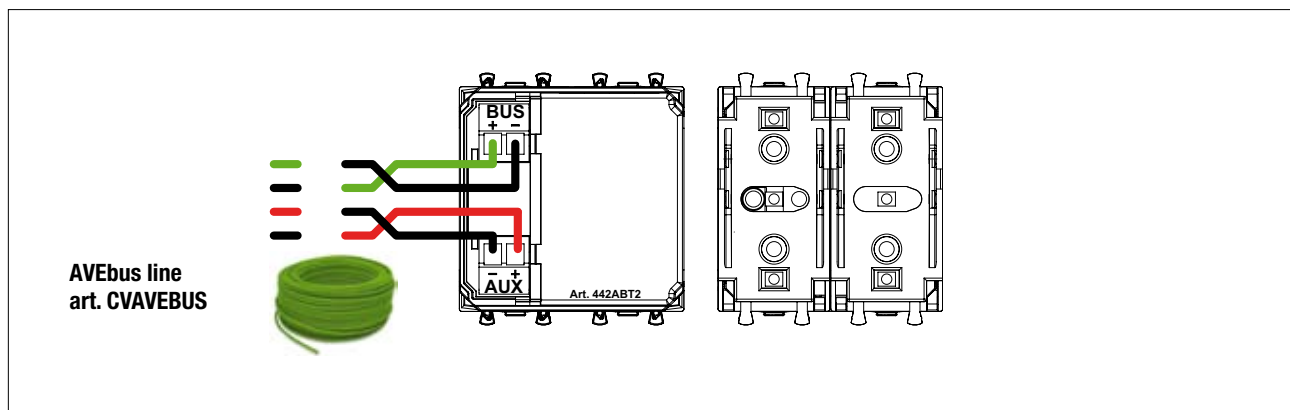
2-channel contact interface

44..ABIN

The 44..ABIN device is a transmitter that can send the command of two NO contacts, mounted outside the device, on two independent channels of the AVEbus system.

Technical data
• Enclosure: 1 System 44 module (22.5 w x 45 h x 46.5 d) mm
• Protection degree: IP41 if completed with plate and installed in the corresponding flush-mounting support.
• Reference temperature and relative humidity: 25°C RH 65%

• Operating amb. temp. range: -10°C to +50°C
• Maximum Relative Humidity: 90% at 35°C
• Max. Height: 2000 m a.s.l.
• Auxiliary power supply
   Voltage rating: 12Vac/dc
   Allowed variation: 10.5V ÷ 14V
   Electrical input at 12Vdc: 2.2 mA MAX
   Electrical input at 12Vac: 5.8 mA MAX

Connections
• Terminal 1: BUS positive
• Terminal 2: BUS GND
• Terminal 3: auxiliary power supply positive
• Terminal 4: auxiliary power supply GND
• Terminal 5: Ch1 input
• Terminal 6: Ch2 input

Description of the front side
One optical signal is visible on the front side indicating the operating and programming status of the device.

FUNCTIONS AND OPERATING MODES

	Function 1:	ON
	Function 2:	OFF
	Function 3:	STEP
	Function 4:	ON + OFF
	Function 5:	DIMMER
	Function 6:	ROLLER SHUTTER
	Function 7:	DOORS / WINDOWS
	Function 8:	SUN BLADE
	Function 9:	VENTILATION

WARNING: The closing time of the contact must be at least 100 ms.

	0	The input, with functions 5 to 9 controls: ON command (up, open) and OFF command (down, close) INCREASE and DECREASE commands (light intensity or position)
Parameter 1	1	The input, with functions 5 to 9 controls: Only ON command (up, open)
	2	The input, with functions 5 to 9 controls: Only OFF command (down, close)

Code	Description	Mod.	Info
442ABIN	2-channel contact interface –Life Touch series	1	
441ABIN	2-channel contact interface –Domus Touch series	1	
443ABIN	2-channel contact interface –Allumia Touch series	1	

443ABIN

442ABIN

441ABIN

OVERALL DIMENSIONS
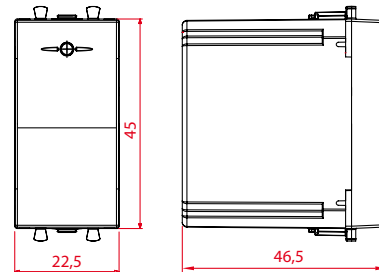
45

22,5

46,5

WIRING DIAGRAM AND EXAMPLE OF USE	**Dimensions:** 1 System 44 (22.5 w x 45 h x 46.5 d) module

CH 2
CH 1

From switch or
NO contact

From switch or
NO contact

Art. 44..ABIN02

IN 1
IN 2

MAX 10m

AUX
–
+

BUS
–
+

AVEbus line
art. CVAVEBUS
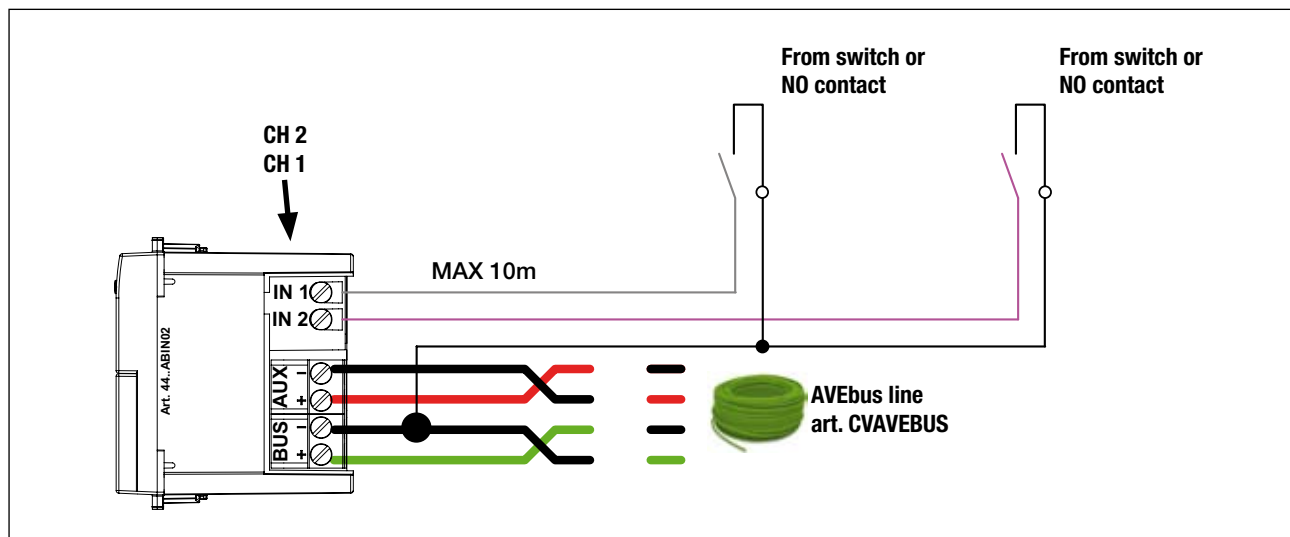
Attention:
Contacts must be interfaced using a shielded and twisted cable.

1-channel alarm transmitter

44..ABTA

The 44..ABTA device is a 1-channel alarm transmitter with two inputs, one (IN input) always active and the second one (RESET) can be used only for some of the programmable operating modes. This device enables the user to detect the status of the IN input, send an alarm message (for example a "bathroom call") and at the same time control a 44..ABR1 or 44..ABR2 receiver for optical/luminous signal, if any).

Technical data

• Enclosure: 1 System 44 module (22.5 w x 45 h x 46.5 d) mm
• Protection degree: IP41 if completed with plate

and installed in the corresponding flush-mounting support.
• Reference temperature and relative humidity: 25°C RH 65%
• Operating amb. temp. range: -10°C to +50°C
• Maximum Relative Humidity: 90% at 35°C
• Max. Height: 2000 m a.s.l.
• Auxiliary power supply
    Voltage rating: 12Vac/dc
    Allowed variation: 10.5V ÷ 14V
    Electrical input at 12Vdc: 2.2 mA MAX
    Electrical input at 12Vac: 5.8 mA MAX

Connections
• Terminal 1: BUS positive
• Terminal 2: BUS GND
• Terminal 3: auxiliary power supply positive
• Terminal 4: auxiliary power supply GND
• Terminal 5: IN input
• Terminal 6: RESET input

Description of the front side
One optical signal is visible on the front side indicating the operating and programming status of the device.

FUNCTIONS AND OPERATING MODES

	Function 1:	BINARY INPUT
	Function 2:	N.O. input without memory with sending of ALARM command
	Function 3:	N.O. input without memory with sending of ON command
	Function 4:	N.O. input without memory with sending of OFF command
	Function 5:	N.O. input without memory with sending of STEP command
	Function 6:	N.O. input without memory with sending of ON+OFF command
	Function 7:	N.C. input without memory with sending of ALARM command
	Function 8:	N.C. input without memory with sending of ON command
	Function 9:	N.C. input without memory with sending of OFF command
	Function 10:	N.C. input without memory with sending of STEP command
	Function 11:	N.C. input without memory with sending of ON+OFF command
	Function 12:	N.O. input with memory with sending of ALARM command
	Function 13:	N.O. input with memory with sending of ON command
	Function 14:	N.O. input with memory with sending of OFF command
	Function 15:	N.O. input with memory with sending of STEP command
	Function 16:	N.O. input with memory with sending of ON+OFF command
	Function 17:	N.C. input with memory with sending of ALARM command
	Function 18:	N.C. input with memory with sending of ON command
	Function 19:	N.C. input with memory with sending of OFF command
	Function 20:	N.C. input with memory with sending of STEP command
	Function 21:	N.C. input with memory with sending of ON+OFF command

Parameter 1	Address 00	Sending of configured command to the same address of the device
	Address 01..FF	Sending of configured command to the set address

Code	Description	Mod.	Info
442ABTA	1-channel transmitter for alarm signals Life Touch series	1	
441ABTA	1-channel transmitter for alarm signals Domus Touch seriese	1	
443ABTA	1-channel transmitter for alarm signals Allumia series	1	

442ABTA   **441ABTA**

443ABTA

EXAMPLES OF USE

Compatible with:

RG1-M

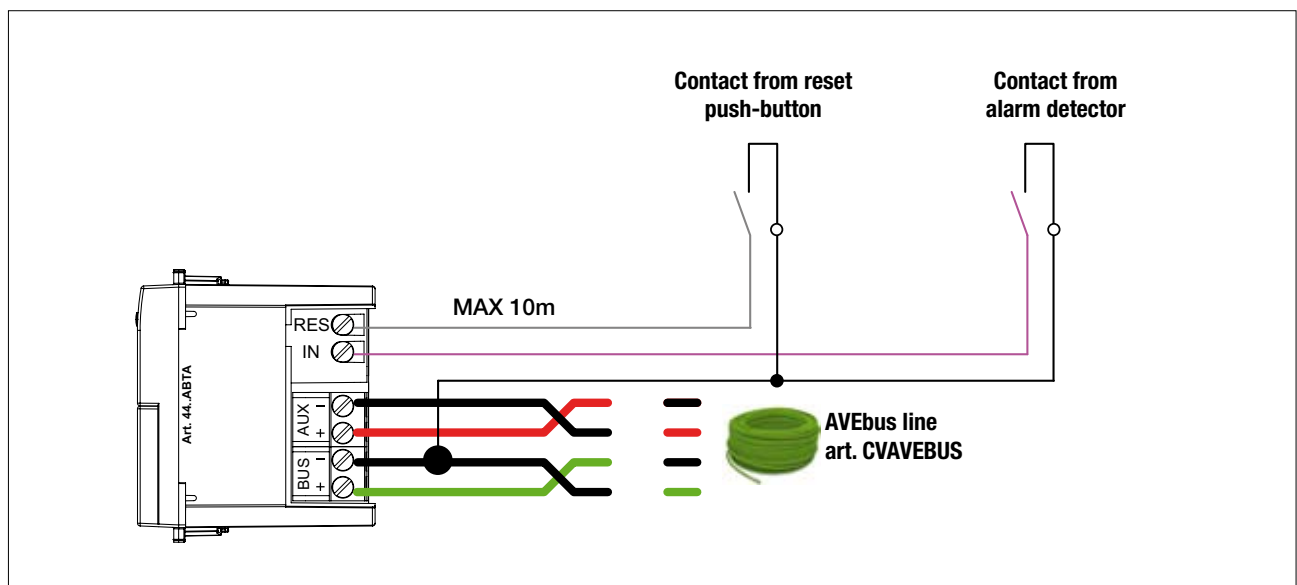for detection of gas leaks in the house

459RA

for detection of water leaks

AF44..062

for detection of presence

AC9C1-IS

for fire alarm repetition

WIRING DIAGRAM AND EXAMPLE OF USE   **Dimensions:** 1 System 44 (22.5 w x 45 h x 46.5 d) module

Contact from reset push-button

Contact from alarm detector

Art. 44.ABTA

RES

IN

MAX 10m

AUX −
+

BUS −
+

AVEbus line
art. CVAVEBUS

Attention:
Contacts must be interfaced using a shielded and twisted cable.

1-channel passive infrared transmitter

44..AB68

The 44..AB68 device is a passive infrared volumetric presence detector which includes a digital pyroelectric sensor and Fresnel lens. It is combined with a twilight sensor which can be adjusted by turning the potentiometer placed on the front side.

Technical data

• Enclosure: 1 System 44 module (22.5 w x 45 h x 46.5 d) mm

• Protection degree: IP41 if completed with plate and installed in the corresponding flush-mounting support.

• Reference temperature and relative humidity: 25°C RH 65%

• Operating amb. temp. range: -10°C to +50°C

• Maximum Relative Humidity: 90% at 35°C

• Max. Height: 2000 m a.s.l.

• Auxiliary power supply
Voltage rating: 12Vac/dc
Allowed variation: 10.5V ÷ 14V
Electrical input at 12Vdc: 2.5 mA MAX
Electrical input at 12Vac: 6.9 mA MAX

Connections

• Terminal 1: BUS positive
• Terminal 2: BUS GND
• Terminal 3: auxiliary power supply positive
• Terminal 4: auxiliary power supply GND

Volumetric coverage

• Scanned angle: 150° horiz. – 50° vert.
• No. of sectors: 12 on 2 floors (6+6 scanned sectors)
• Max range: 12 metres
(See fig. page 69)

Description of the front side

One optical signal is visible on the front side indicating the operating and programming status of the device.
The device enables the user to adjust the twilight sensor through the potentiometer on the front side of the device (end of rotation clockwise, twilight sensor disabled with motion detection always active).
The maximum adjustment is 100 lx and the minimum is 1 lx.

Operating modes and parameters

The device has two operating modes:
• Motion sensor and twilight sensor.
• Installation test mode: short timing and twilight sensor control disabled to allow the user to position and start the device.

Several devices may have the same address to control the same receiver and several transmitters may control the same receiver by the only on and off messages. The device that controls the same receiver must have the same timing. A device can also be programmed with a family or broadcast-type address to control several receivers at the same time.

The device controls the timing of the associated receiver by managing the delays between the sending of the on message and that of the off message. The delay can be set by setting the function of the device as shown in table below:

FUNCTIONS AND OPERATING MODES

Function 1:	10 s	
Function 2:	20 s	
Function 3:	30 s	
Function 4:	45 s	
Function 5:	1 min	
Function 6:	1 min 30 sec	
Function 7:	2 min	
Function 8:	2 min 30 s	
Function 9:	3 min	Time elapsing between sending the actuator activation control and the actuator disconnection control with parameter 2 set at 1 or 3
Function 10:	3 min 30 s	
Function11:	4 min	
Function 12:	4 min 30 s	
Function 13:	5 min	
Function 14:	5 min 30 s	
Function 15:	6 min	
Function 16:	6 min 30 s	
Function 17:	7 min	
Function 18:	7 min 30 s	
Function 19:	8 min	

	0	Maximum coverage distance of motion sensor 12 m
	1	Maximum coverage distance of motion sensor 11 m
	2	Maximum coverage distance of motion sensor 10 m
	3	Maximum coverage distance of motion sensor 9 m
	4	Maximum coverage distance of motion sensor 8 m
Parameter 1	5	Maximum coverage distance of motion sensor 7 m
	6	Maximum coverage distance of motion sensor 6 m
	7	Maximum coverage distance of motion sensor to 5 m
	8	Maximum coverage distance of motion sensor 4 m
	9	Maximum coverage distance of motion sensor 3 m
	10	Maximum coverage distance of motion sensor 2 m

	0	Sending ON command
Parameter 2	1	Sending ON and OFF command
	2	Sending DIMMER 100% command
	3	Sending of DIMMER 0% (OFF) and 100% (ON) command

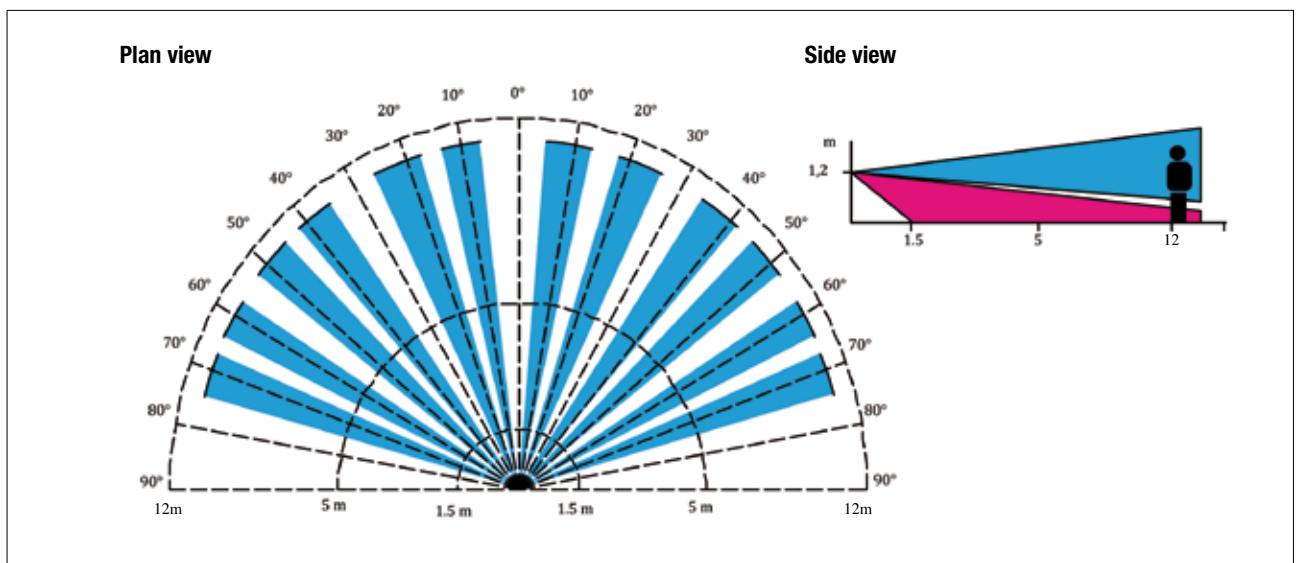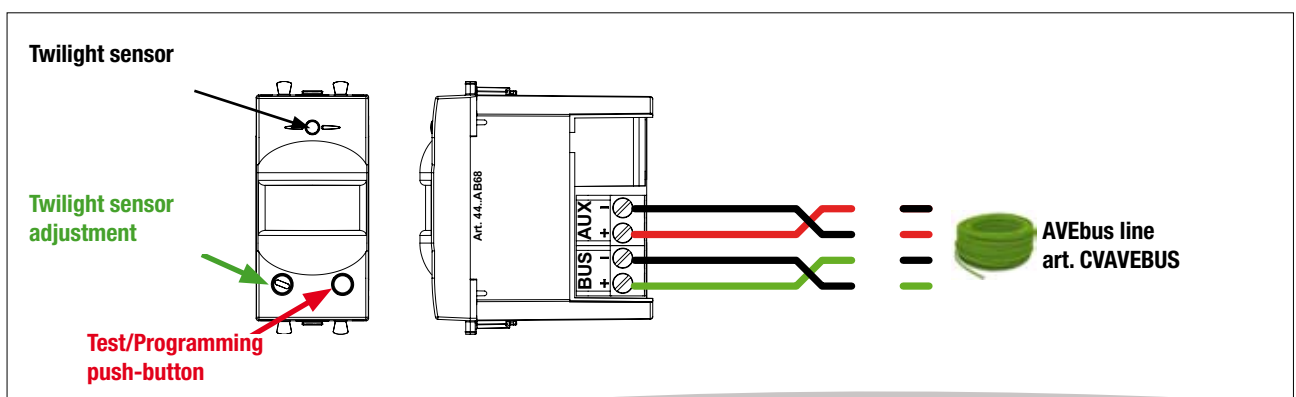| Code	Description	Mod.	Info
442AB68	LUCE AMICA passive infrared detector Life Touch series	1	
441AB68	LUCE AMICA passive infrared detector Domus Touch series	1	
443AB68	LUCE AMICA passive infrared detector Allumia series	1	

442AB68

441AB68

443AB68

OVERALL DIMENSIONS
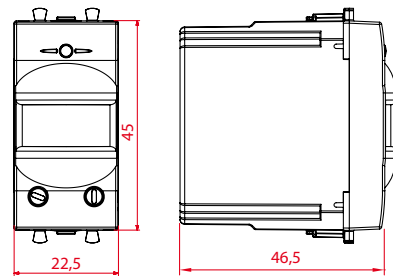
45

22,5

46,5

VOLUMETRIC COVERAGE

Plan view

Side view

20° 10° 0° 10° 20°
30° 30°
40° 40°
50° 50°
60° 60°
70° 70°
80° 80°
90° 90°

12m 5 m 1.5 m 1.5 m 5 m 12m

m
1,2
1.5 5 12

WIRING DIAGRAM AND EXAMPLE OF USE

Dimensions: 1 System 44 (22.5 w x 45 h x 46.5 d) module

Twilight sensor

Twilight sensor adjustment

Test/Programming push-button

Art. 44..AB68

BUS | AUX

AVEbus line
art. CVAVEBUS

1-channel actuator

44..ABR1

The 44..ABR1 device is a 1-channel bus receiver able to control electric loads by means of potential-free contacts.

Technical data

• Enclosure: 1 System 44 module (22.5 w x 45 h x 46.5 d) mm
• Protection degree: IP41 if completed with plate and installed in the corresponding flush-mounting support.
• Reference temperature and relative humidity: 25°C RH 65%
• Operating amb. temp. range: -10°C to +50°C
• Maximum Relative Humidity: 90% at 35°C
• Max. Height: 2000 m a.s.l.
• Auxiliary power supply
   Voltage rating: 12Vac/dc
   Allowed variation: 10.5V ÷ 14V
   Electrical input at 12Vdc: 3.4 mA MAX
   Electrical input at 12Vac: 6.5 mA MAX

Connections

• Terminal 1: BUS positive
• Terminal 2: BUS GND
• Terminal 3: auxiliary power supply positive
• Terminal 4: auxiliary power supply BUS
• Terminal 5: relay contact
• Terminal 6: relay contact

Characteristics of controllable electric load

• Noninductive load (cosφ 1): 10A at 230 Vac
• Incandescent load : 4A at 230Vac
• Inductive load (cosφ 0.6): 4A at 230Vac
• Power factor correction in fluorescent load: 1A at 230Vac

Description of the front side

One optical signal is visible on the front side indicating the operating and programming status of the device.

Operating modes and parameters

The receiver operates according to three base parameters:
• the delay set on the receiver
• the command received from the transmitter
• parameter 1, which determines the output operating mode:
-   instantaneous
-   delayed
-   blinking

FUNCTIONS AND OPERATING MODES

		Parameter 1 = 0,1,2 (delay)	Parameter 1=3 (blinking)
	Function 1:	Instantaneous	0.4 s
	Function 2:	1 s	0.6 s
	Function 3:	3 s	0.8 s
	Function 4:	5 s	1 s
	Function 5:	10 s	1.4 s
	Function 6:	20 s	1.8 s
	Function 7:	30 s	2.4 s
	Function 8:	45 s	3 s
	Function 9:	1 min	4 s
	Function 10:	2 min	6 s
	Function 11:	3 min	8 s
	Function 12:	4 min	10 s
	Function 13:	5 min	16 s
	Function 14:	6 min	20 s
	Function 15:	7 min	24 s
	Function 16:	8 min	30 s

Parameter 1	0	Delay on ON and OFF
	1	1 Delay only on ON
	2	2 Delay only on OFF
	3	3 Blinking enabling

Parameter 2	0	Normally Open Contact upon restoration of electric power
	1	Normally Closed Contact upon restoration of electric power

442ABR1

441ABR1

443ABR1
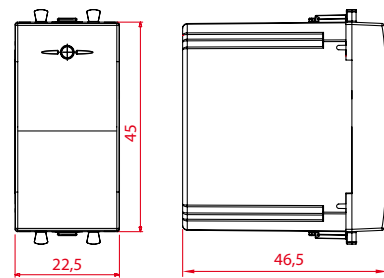
Code	Description		Mod.	Info
442ABR1	1-channel actuator	–Life Touch series	1	
441ABR1	1-channel actuator	–Domus Touch series	1	
443ABR1	1-channel actuator	–Allumia Touch series	1	

OVERALL DIMENSIONS

45

22,5

46,5

WIRING DIAGRAM AND EXAMPLE OF USE   **Dimensions:** 1 System 44 (22.5 w x 45 h x 46.5 d) module

230V~

N

F

Art. 44.ABR1

BUS | AUX
– +
– +

AVEbus line
art. CVAVEBUS
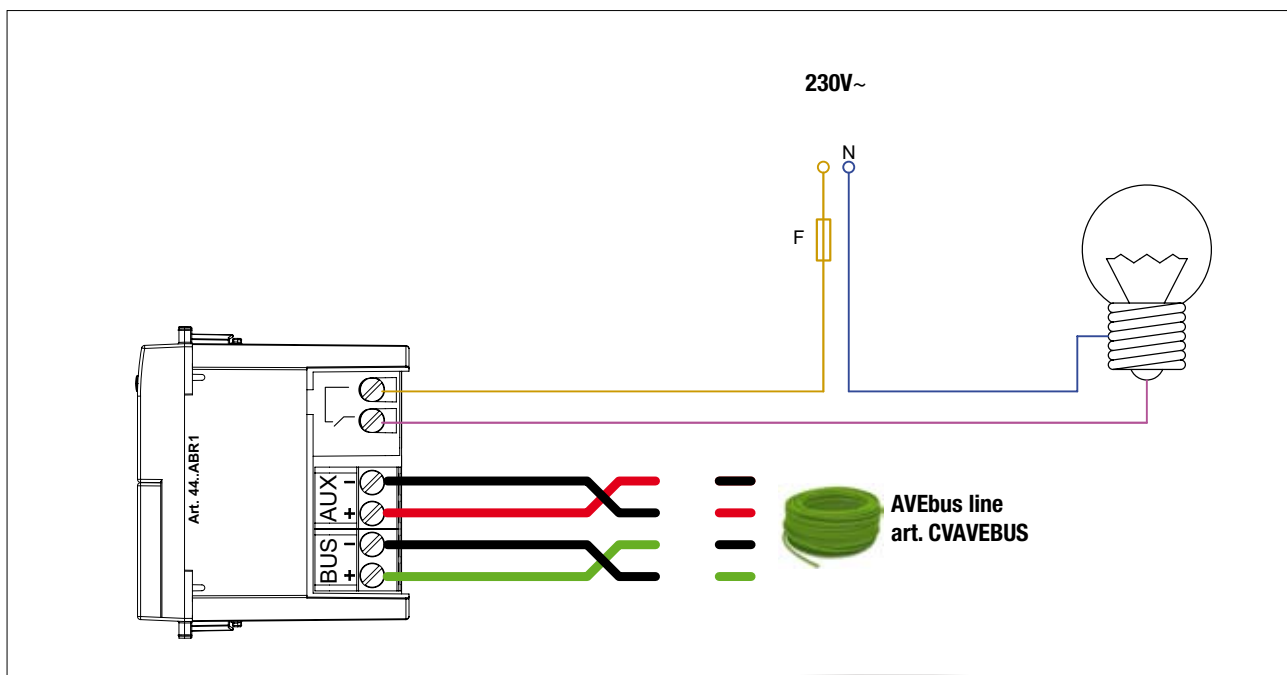
1-channel actuator
with status memory

44..ABR1-M

The 442ABR1 device is a 1-channel bus receiver able to control electric loads by means of potential-free contacts.

Technical data

• Enclosure: 1 System 44 module (22.5 w x 45 h x 46.5 d) mm
• Protection degree: IP41 if completed with plate and installed in the corresponding flush-mounting support.
• Reference temperature and relative humidity: 25°C RH 65%
• Operating amb. temp. range: -10°C to +50°C
• Maximum Relative Humidity: 90% at 35°C
• Max. Height: 2000 m a.s.l.
• Auxiliary power supply
    Voltage rating: 12Vac/dc
    Allowed variation: 10.5V ÷ 14V
    Electrical input at 12Vdc: 3.4 mA MAX
    Electrical input at 12Vac: 6.5 mA MAX

Connections

• Terminal 1: BUS positive
• Terminal 2: BUS GND
• Terminal 3: auxiliary power supply positive
• Terminal 4: auxiliary power supply GND
• Terminal 5: relay contact
• Terminal 6: relay contact

Characteristics of controllable electric load

• Noninductive load (cosφ 1): 10A at 230 Vac
• Incandescent load : 4A at 230Vac
• Inductive load (cosφ 0.6): 4A at 230Vac
• Power factor correction in fluorescent load: 1A at 230Vac

Description of the front side

One optical signal is visible on the front indicating the operating and programming status of the device.

Operating modes and parameters

The receiver operates according to four base parameters:
• the delay set on the receiver
• the command received from the transmitter
• parameter 1, which determines the output operating mode:
-   instantaneous
-   delayed
-   blinking
• Parameter 2 which determines management upon restoration of electric mains.

FUNCTIONS AND OPERATING MODES

	Parameter 1 = 0,1,2 (delay)	Parameter 1=3 (blinking)
Function 1:	Instantaneous	0.4 s
Function 2:	1 s	0.6 s
Function 3:	3 s	0.8 s
Function 4:	5 s	1 s
Function 5:	10 s	1.4 s
Function 6:	20 s	1.8 s
Function 7:	30 s	2.4 s
Function 8:	45 s	3 s
Function 9:	1 min	4 s
Function 10:	2 min	6 s
Function 11:	3 min	8 s
Function 12:	4 min	10 s
Function 13:	5 min	16 s
Function 14:	6 min	20 s
Function 15:	7 min	24 s
Function 16:	8 min	30 s

Parameter 1	0	Delay on ON and OFF
	1	Delay only on ON
	2	Delay only on OFF
	3	Blinking enabling

Parameter 2	0	Normally Open Contact upon restoration of electric power
	1	Normally Closed Contact upon restoration of electric power
	2	Status memory at restoration of electric power

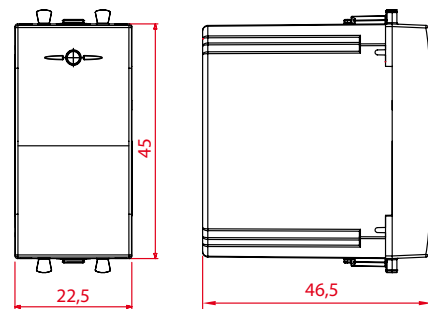| Code	Description	Mod.	Info
442ABR1-M	1-channel actuator –Life Touch series	1	
441ABR1-M	1-channel actuator –Domus Touch series	1	
443ABR1-M	1-channel actuator –Allumia series	1	

442ABR1-M

441ABR1-M

443ABR1-M

Device with status memory
It allows restoration of load status as it was prior to power failure

OVERALL DIMENSIONS

45

22,5

46,5

WIRING DIAGRAM AND EXAMPLE OF USE   **Dimensions:** 1 System 44 (22.5 w x 45 h x 46.5 d) module

230V~
N

F

Art. 44.ABR1-M

BUS | AUX
–
+
–
+

**AVEbus line
art. CVAVEBUS**
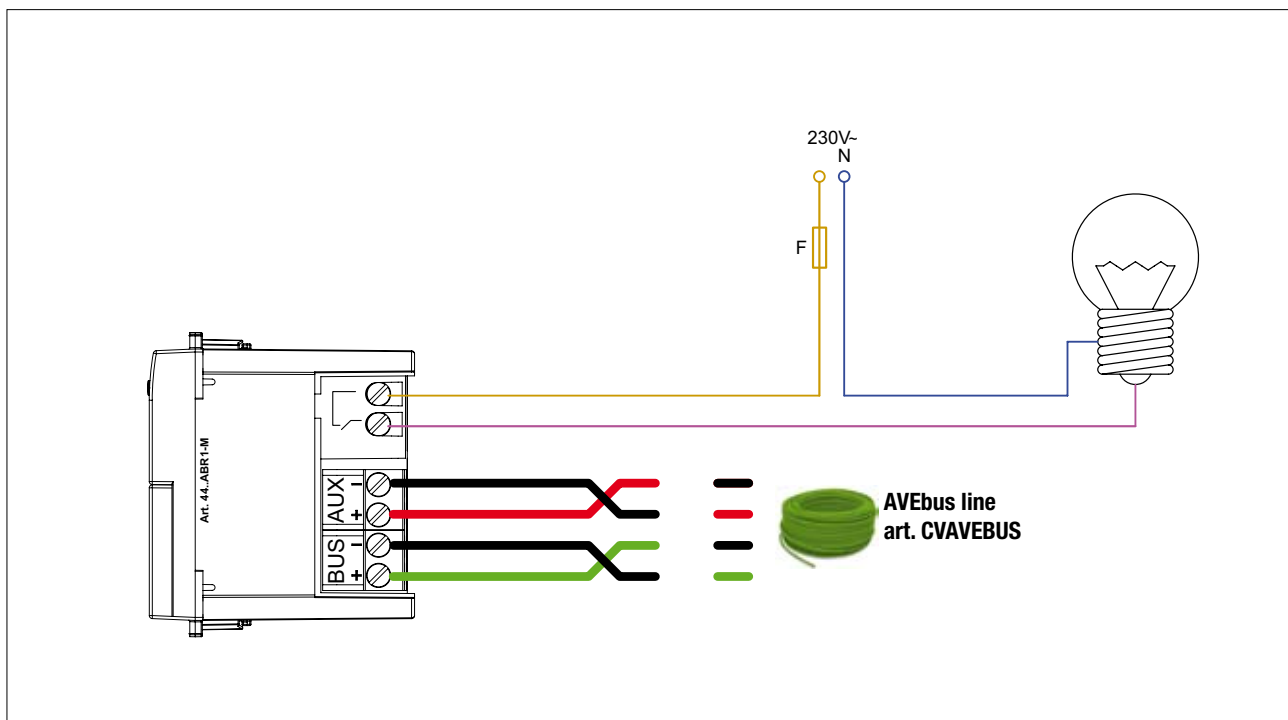
1-channel actuator with local control

44..ABR1CL

The 44-ABR1CL device is a 1-channel bus receiver with local control able to control electric loads by means of potential-free contacts.

Technical data
• Enclosure: 2 System 44 modules (45 w x 45 h x 46.5 d) mm
• Protection degree: IP41 if completed with plate and installed in the corresponding flush-mounting support.
• Reference temperature and relative humidity: 25°C RH 65%
• Operating amb. temp. range: -10°C to +50°C
• Maximum Relative Humidity: 90% at 35°C
• Max. Height: 2000 m a.s.l.
• Auxiliary power supply
  Voltage rating: 12Vac/dc

Allowed variation: 10.5V ÷ 14V
Electrical input at 12Vdc: 16.5 mA MAX
Electrical input at 12Vac: 16.5 mA MAX

Connections
• Terminal 1: BUS positive
• Terminal 2: BUS GND
• Terminal 3: auxiliary power supply positive
• Terminal 4: auxiliary power supply GND
• Terminal 5: relay contact
• Terminal 6: relay contact

Characteristics of controllable electric load
• Noninductive load (cosφ 1): 10A at 230 Vac
• Incandescent load : 4A at 230Vac
• Inductive load (cosφ 0.6): 4A at 230Vac
• Power factor correction in fluorescent load: 1A at 230Vac

Description of the front side
One optical signal is visible on the front side indicating the operating and programming status of the device.

Operating modes and parameters
The receiver operates according to three base parameters:
• the delay set on the receiver
• the command received from the transmitter
• parameter 1, which determines the output operating mode:
- instantaneous
- delayed
- with blinking

FUNCTIONS AND OPERATING MODES

	Parameter 1 = 0,1,2 (delay)	Parameter 1=3 (blinking)
Function 1:	Instantaneous	0.4 s
Function 2:	1 s	0.6 s
Function 3:	3 s	0.8 s
Function 4:	5 s	1 s
Function 5:	10 s	1.4 s
Function 6:	20 s	1.8 s
Function 7:	30 s	2.4 s
Function 8:	45 s	3 s
Function 9:	1 min	4 s
Function 10:	2 min	6 s
Function 11:	3 min	8 s
Function 12:	4 min	10 s
Function 13:	5 min	16 s
Function 14:	6 min	20 s
Function 15:	7 min	24 s
Function 16:	8 min	30 s

Parameter 1	0	Delay on ON and OFF
	1	Delay only on ON
	2	Delay only on OFF
	3	blinking enabling

Parameter 2	0	Local control managed in STEP mode
	1	Local control managed in ON + OFF mode

Parameter 3	0	Normally Open Contact upon restoration of electric power
	1	Normally Closed Contact upon restoration of electric power

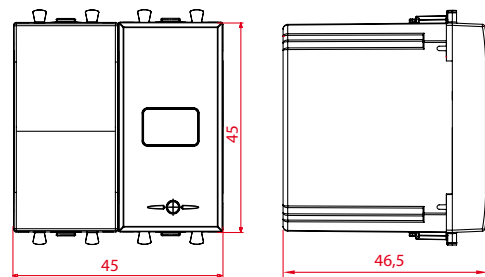| Code	Description	Mod.	Info
442ABR1CL	1-channel actuator with local control Life Touch series	2	
441ABR1CL	1-channel actuator with local control Domus Touch series	2	
443ABR1CL	1-channel actuator with local control Allumia series	2	

442ABR1CL

441ABR1CL

443ABR1CL

OVERALL DIMENSIONS

45
45
46,5

WIRING DIAGRAM AND EXAMPLE OF USE

Dimensions: 2 System 44 (45w x 45 h x 46.5 d) modules

AVEbus line art. CVAVEBUS

BUS
+ −

AUX
− +

Art. 44..ABR1CL

230V~
N
F
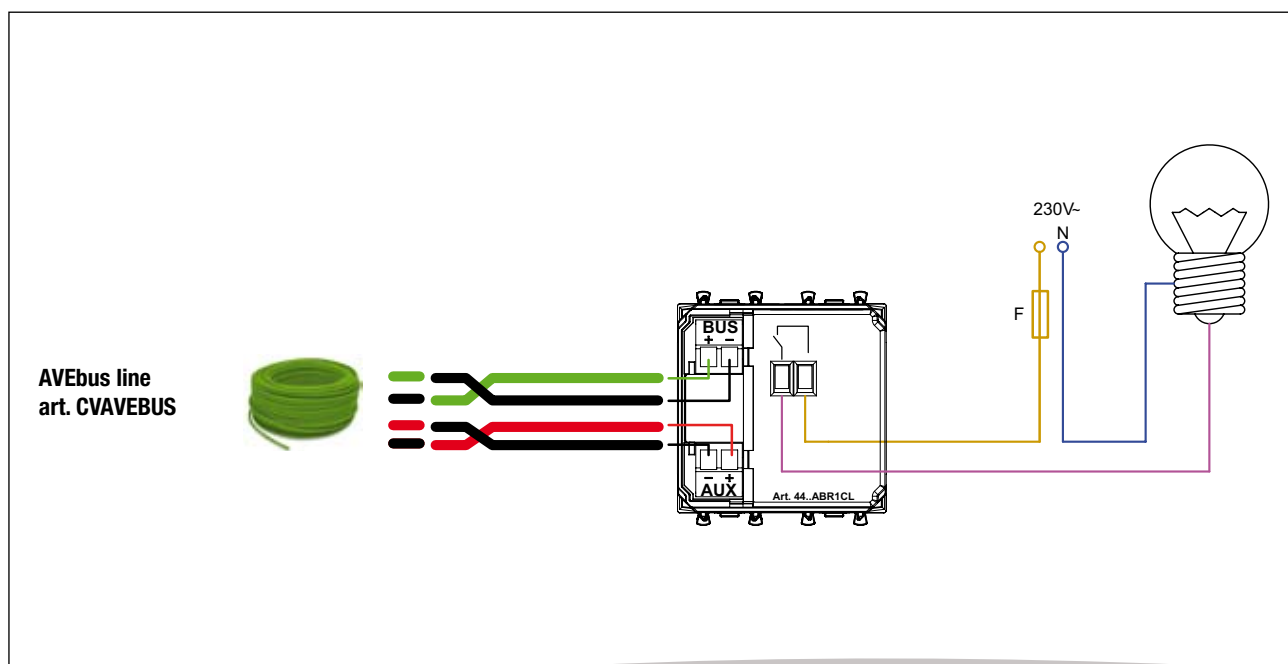
2-channel actuator

44..ABR2

The 44..ABR2 device is a 2-channel bus receiver able to control electric loads by means of potential-free contacts.

Technical data

• Enclosure: 2 System 44 modules (45 w x 45 h x 46.5 d) mm
• Protection degree: IP41 if completed with plate and installed in the corresponding flush-mounting support.
• Reference temperature and relative humidity: 25°C RH 65%
• Operating amb. temp. range: -10°C to +50°C
• Maximum Relative Humidity: 90% at 35°C
• Max. Height: 2000 m a.s.l.
• Auxiliary power supply
    Voltage rating: 12Vac/dc
    Allowed variation: 10.5V ÷ 14V
    Electrical input at 12Vdc: 7.5 mA MAX
    Electrical input at 12Vac: 80.0 mA MAX

Connections

• Terminal 1: BUS positive
• Terminal 2: BUS GND
• Terminal 3: auxiliary power supply positive
• Terminal 4: auxiliary power supply GND
• Terminal 5: Ch1relay contact
• Terminal 6: Ch1 relay contact
• Terminal 7: Ch2 relay contact
• Terminal 8: Ch2 relay contact

Characteristics of controllable electric load

• Noninductive load (cosφ1): 10A at 230 Vac
• Incandescent load : 4A at 230Vac
• Inductive load (cosφ0.6): 4A at 230Vac
• Power factor correction in fluorescent load: 1A at 230Vac

Description of the front side

One optical signals are visible on the front side indicating the operating and programming status of each channel of the device.

Operating modes and parameters

The receiver operates according to three base parameters, which are totally independent for each channel:
• the delay set on the receiver
• the command received from the transmitter
• parameter 1, which determines the output operating mode:
- instantaneous
- delayed
- blinking

FUNCTIONS AND OPERATING MODES

		Parameter 1 = 0,1,2 (delay)	Parameter 1=3 (blinking)
	Function 1:	Instantaneous	0.4
	Function 2:	1 s	0.6
	Function 3:	3 s	0.8
	Function 4:	5 s	1.0 s
	Function 5:	10 s	1.4
	Function 6:	20 s	1.8
	Function 7:	30 s	2.4
	Function 8:	45 s	3.0 s
	Function 9:	1 min	4.0 s
	Function 10:	2 min	6.0 s
	Function 11:	3 min	8.0 s
	Function 12:	4 min	10 s
	Function 13:	5 min	16 s
	Function 14:	6 min	20 s
	Function 15:	7 min	24 s
	Function 16:	8 min	30 s

Parameter 1	0	Delay on ON and OFF
	1	Delay only on ON
	2	Delay only on OFF
	3	Blinking enabling

Parameter 2	0	Normally Open Contact upon restoration of electric power
	1	Normally Closed Contact upon restoration of electric power

Code	Description	Mod.	Info
442ABR2	2-channel actuator – Life Touch series	2	
441ABR2	2-channel actuator –Domus Touch seriesh	2	
443ABR2	2-channel actuator –Allumia series	2	

442ABR2
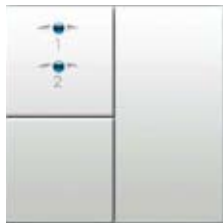
441ABR2

443ABR2

OVERALL DIMENSIONS
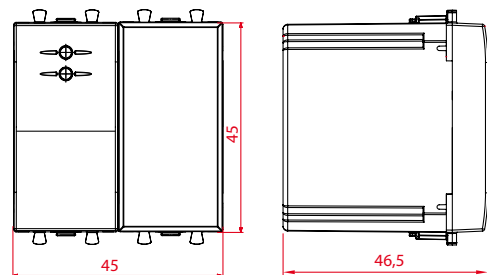
45

45

46,5

WIRING DIAGRAM AND EXAMPLE OF USE

Dimensions: 2 System 44 (45 w x 45 h x 46.5 d) modules

AVEbus line
art. CVAVEBUS

BUS
CH1 CH2
AUX
Art. 44..ABR2

CH2

230V~
N
F

CH1
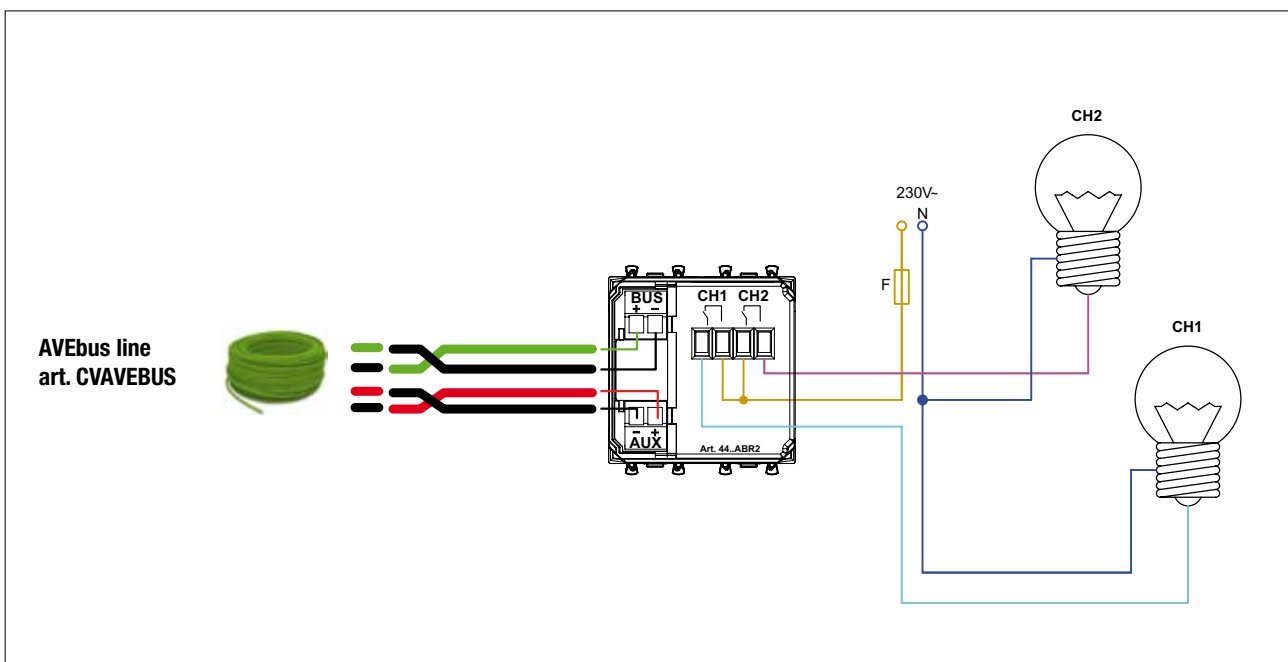
1-channel
Dimmer Actuator

44..ABDI

The 44..ABDI device is a dimmer interface between the AVEbus line and an analog output which is able to control any type of light control device based on standard 1 – 10V (10% minimum brightness, 100% maximum brightness). The device is also equipped with a relay output for direct control of switching on/off operations. The 44..ABDI dimmer receiver is suitable for controlling the AVE 53DIM010 dimmer.

Technical data
• Enclosure: 2 System 44 modules (45 w x 45 h x 46.5 d) mm
• Protection degree: IP41 if completed with plate and installed in the corresponding flush-mounting support.
• Reference temperature and relative humidity: 25°C RH 65%
• Operating amb. temp. range: -10°C to +50°C
• Maximum Relative Humidity: 90% at 35°C
• Max. Height: 2000 m a.s.l.
• Auxiliary power supply
   Voltage rating: 12Vac/dc
   Allowed variation: 10.5V ÷ 14V
   Electrical input at 12Vdc: 4.7 mA MAX
   Electrical input at 12Vac: 6.5 mA MAX

Connections
• Terminal 1: BUS positive
• Terminal 2: BUS GND
• Terminal 3: auxiliary power supply positive
• Terminal 4: auxiliary power supply GND
• Terminal 5: 1-10V analogue output positive
• Terminal 6: 1-10V analogue output negative
• Terminal 7: relay contact
• Terminal 8: relay contact

Characteristics of controllable electric load
• Noninductive load (cosφ 1): 10A at 230 Vac
• Incandescent load : 10A at 230Vac
• Inductive load (cosφ 0.6): 4A at 230Vac
• Power factor correction in fluorescent load: 4A at 230Vac
• Maximum number of controllable electronic reactors: no. 100 item 53DIM010

Description of the front side
One optical signal is visible on the front side indicating the operating and programming status of the device.

53DIM010

The 53DIM010 device is a lamp controller for incandescent lamps, ferromagnetic transformers.
Command and control are managed by means of input with 1-10V analog interface.

Technical data
• Enclosure: 2 DIN modules (35 x 89 x 65) mm
• Protection degree: IP20
• Supply voltage: 230V ~ 50Hz
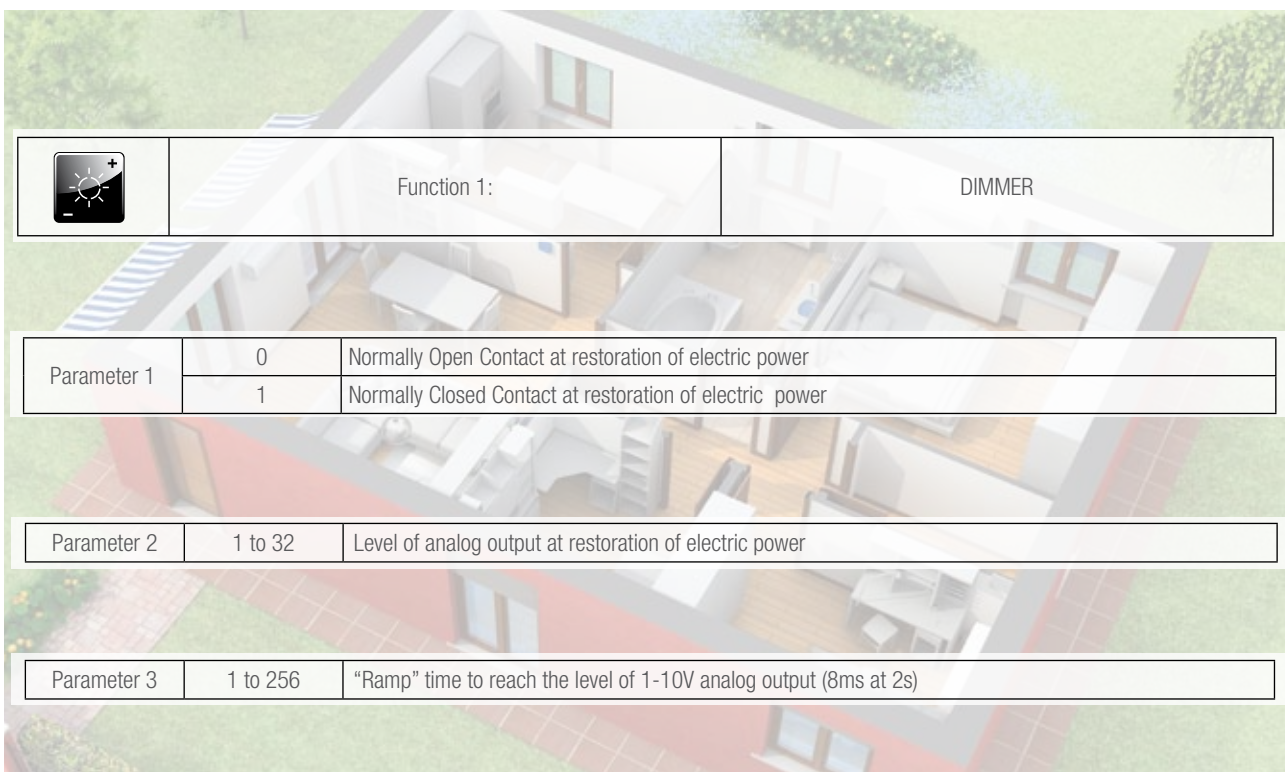
Characteristics of controllable electric load
• Incandescent and halogen lamps (40-500 W 230V~50Hz)
• Ferromagnetic transformers for low voltage halogen lamps (40-300 VA 230V~50Hz).

Connections
• Terminal 1: Dimmed output
• Terminal 2: 230V~ N Line
• Terminal 3: 230V~ N Line
• Terminal 4: 230V~ L Line
• Terminal 5: Jumper input
• Terminal 6: Jumper input
• Terminal 7: 1-10V adjustment negative input
• Terminal 8: 1-10V adjustment positive input

FUNCTIONS AND OPERATING MODES

	Function 1:	DIMMER

Parameter 1	0	Normally Open Contact at restoration of electric power
	1	Normally Closed Contact at restoration of electric power

Parameter 2	1 to 32	Level of analog output at restoration of electric power

Parameter 3	1 to 256	"Ramp" time to reach the level of 1-10V analog output (8ms at 2s)

442ABDI

441ABDI

443ABDI

53DIM010

Code	Description	Mod.	Info
442ABDI	Dimmer actuator. It controls "dimmer" type commands it receives from transmitters Life Touch series	2	
441ABDI	Dimmer actuator. It controls "dimmer" type commands it receives from transmitters Domus Touch series	2	
443ABDI	Dimmer actuator. It controls "dimmer" type commands it receives from transmitters Allumia series	2	
53DIM010	Dimmer for incandescent and halogen lamps 40÷500W, toroidal and laminated transformers 40÷300VA 230Vac 50Hz – Can be adjusted by means of a 10kΩ potentiometer (not supplied) or by 0÷10Vdc signal from Domina 44..ABDI actuator	2DIN	

OVERALL DIMENSIONS

45

45

46,5

WIRING DIAGRAM AND EXAMPLE OF USE

Dimensions: 2 System 44 (45 w x 45 h x 46.5 d) modules

AVEbus line
art. CVAVEBUS

230V~
L   N

F

BUS

1-10V
– +

Art. 44..ABDI

AUX

1   2   3   4
U   N   N   L

Art. 53DIM010

1-10V
electronic controller

1-10V
– +
5   6   7   8

1-channel
roller shutter control actuator

44..ABRT01

The 44...ABRT01 deviceis an interface between an AVEbus line and two interblocked ON/OFF outputs for controlling electrical roller shutter by means of potential-free relays.

Technical data

• Enclosure: 2 System 44 modules (45 w x 45 h x 46.5 d) mm
• Protection degree: IP41 if completed with plate and installed in the corresponding flush-mounting support.
• Reference temperature and relative humidity: 25°C RH 65%
• Operating amb. temp. range: -10°C to +50°C
• Maximum Relative Humidity: 90% at 35°C
• Max. Height: 2000 m a.s.l.
• Auxiliary power supply
    Voltage rating: 12Vac/dc
    Allowed variation: 10.5V ÷ 14V
    Electrical input at 12Vdc: 18.6 mA MAX
    Electrical input at 12Vac: 18.5 mA MAX

Connections

• Terminal 1: BUS positive
• Terminal 2: BUS GND
• Terminal 3: auxiliary power supply positive
• Terminal 4: auxiliary power supply GND
• Terminal 5: relay contact for ascend command
• Terminal 6: relay contact common
• Terminal 7: relay contact common
• Terminal 8: relay contact for descend command

Characteristics of controllable electric load

• Noninductive load (cosφ 1): 10A at 230 Vac
• Inductive load (cosφ 0.4): 4A at 230Vac

Description of the front side

One optical signal is visible on the front side indicating the operating and programming status of the device.

Operating modes and parameters

The receiver operates according to two base parameters:
• activation time (full closing or opening of roller shutters) set on the receiver
• delay time of activation of the device relay set by means of parameter 1

FUNCTIONS AND OPERATING MODES

Function 1:	5 s
Function 2:	10 s
Function 3:	20 s
Function 4:	30 s
Function 5:	40 s
Function 6:	50 s
Function 7:	1 min
Function 8:	1 min 10 s
Function 9:	1 min 20 s
Function 10:	1 min 30 s
Function 11:	1 min 40 s
Function 12:	1 min 50 s
Function 13:	2 min
Function 14:	2 min 10 s
Function 15:	2 min 20 s

Function 16:	2 min 30 s
Function 17:	2 min 40 s
Function 18:	2 min 50 s
Function 19:	3 min
Function 20:	3 min 10 s
Function 21:	3 min 20 s
Function 22:	3 min 30 s
Function 23:	3 min 40 s
Function 24:	3 min 50 s
Function 25:	4 min
Function 26:	4 min 10 s
Function 27:	4 min 20 s
Function 28:	4 min 30 s
Function 29:	4 min 40 s
Function 30:	4 min 50 s
Function 31:	5 min

	1	No delay in relay activation
	2	5 s delay in relay activation
	3	10 s delay in relay activation
	4	15 s delay in relay activation
Parameter 1	...	...
	9	40 s delay in relay activation
	10	45 s delay in relay activation
	11	50 s delay in relay activation
	12	55 s delay in relay activation
	13	60 s delay in relay activation

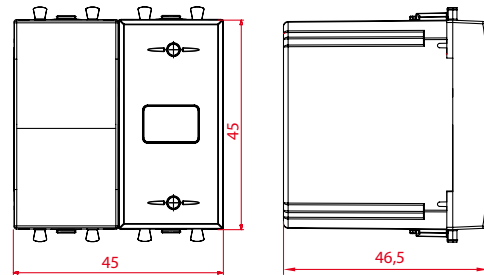| Code	Description	Mod.	Info
442ABRT01	Roller shutter control actuator with local control Life Touch series	2	
441ABRT01	Roller shutter control actuator with local control Domus Touch series	2	
443ABRT01	Roller shutter control actuator with local control Allumia series	2	

442ABRT01
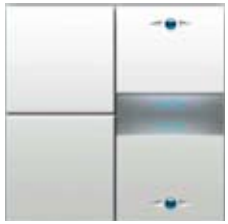
441ABRT01

443ABRT01

OVERALL DIMENSIONS

45

45

46,5

WIRING DIAGRAM AND EXAMPLE OF USE

Dimensions: 2 System 44 (45 w x 45 h x 46.5 d) modules

AVEbus line
art. CVAVEBUS

230V ~

N

F

BUS
+ −

AUX
− +

Art. 44..ABRT01

M
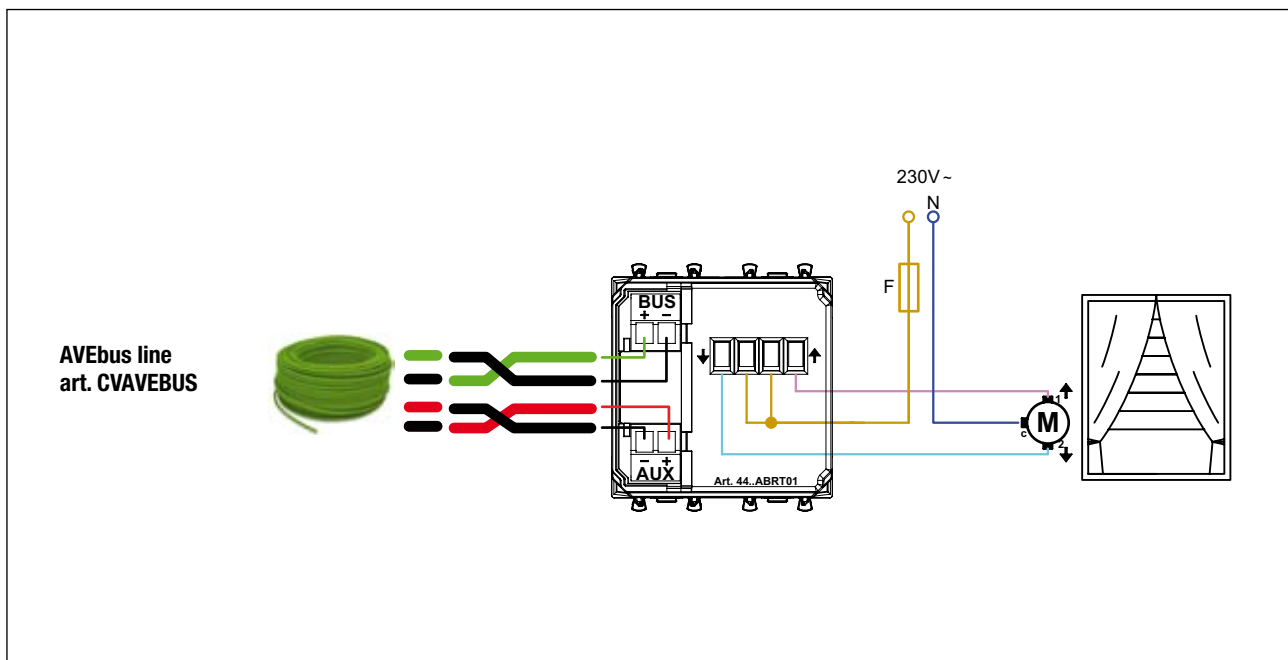
1-channel
room temperature thermostat

44..ABTM03

The 44..ABTM03 thermostat is designed to be used with home automation systems and AVEbus. If time programming is not required, the thermostat can be installed associated with a remote temperature control actuator only (44..ABRTM01) for independent operation. If, instead, time programming is required, this same device can be used associated with a Touch Screen which allows the user to choose any type of temperature and manage several zones (up to 15) for a central operation. The type of operation is automatically identified by the thermostat.

If used in combination with 53ABISO-1 it is possible to manage more than 15 thermic zones

Technical data
• Enclosure: 2 System 44 modules (45 w x 45 h x 46.5 d) mm
• Protection degree: IP40 if completed with plate and installed in the corresponding flush-mounting support.
• Reference temperature and relative humidity: 25°C RH 65%
• Operating amb. temp. range: -10°C to +50°C
• Maximum Relative Humidity: 90% at 35°C
• Max. Height: 2000 m a.s.l.
• Auxiliary power supply
  Voltage rating: 12Vac/dc
  Allowed variation: 10.5V ÷ 14V
  Electrical input at 12Vdc: 15.0 mA MAX
  Electrical input at 12Vac: 48.0 mA MAX

Connections
• Terminal 1: BUS positive
• Terminal 2: BUS GND
• Terminal 3: auxiliary power supply positive
• Terminal 4: auxiliary power supply GND

Characteristics of temperature control
• Temperature range: 0°C to 40°C
• Regulation range: 5°C to 35°C (independent operation) ±5°C compared to the set point set on the touch screen (central operation)
• Riproducibility error: 0.2°C max
• Consistency: 0.3°C max
•Bias: 0.2°C to 2.5°C adjustable

LCD DISPLAY AND KEYBOARD

1. Visible with central operation with Touch screen
2. Visible if keyboard locking is active
3. Visible if set on ON during "summer"
4. Visible if set on ON during "winter"
5. Visible if night operation function is active
6. Fan-coil unit speed
7. Visible if local forcing set to OFF
8. Visible if anti-freeze protection function is active
9. Indication of unit of measurement

1. Push-button
Press this push-button for backlight activation and to better read the measured temperature.

2. Push-buttons and
Press the increase/decrease push-buttons once to display the current set-point with no changes: press the push-buttons again to adjust the set-point value.

3. Push-button
Press this push-button once to display the current operating status of the thermostat; press the push-button again to select the operating status between ON – Night operation – OFF (the operating status NIGHT and OFF are indicated by the symbols: ☽ and OFF).
Note: when connected to a Touch screem the Night status is inhibited because it must be set from the Touch screen (TS02, TS03, TS04 and TS05).

442ABTM03

441ABTM03

443ABTM03
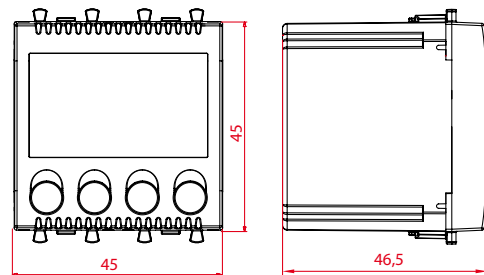
Code	Description	Mod.	Info
442ABTM03	Thermostat with display - Life Touch series	2	
441ABTM03	Thermostat with display – Domus Touch series	2	
443ABTM03	Thermostat with display – Allumia series	2	

OVERALL DIMENSIONS

45

45

46,5

WIRING DIAGRAM AND EXAMPLE OF USE
Dimensions: : 2 System 44 (45 w x 45 h x 46.5 d) modules

AVEbus line
art. CVAVEBUS

BUS
+ –

–
AUX +

Art. 44..ABTM03
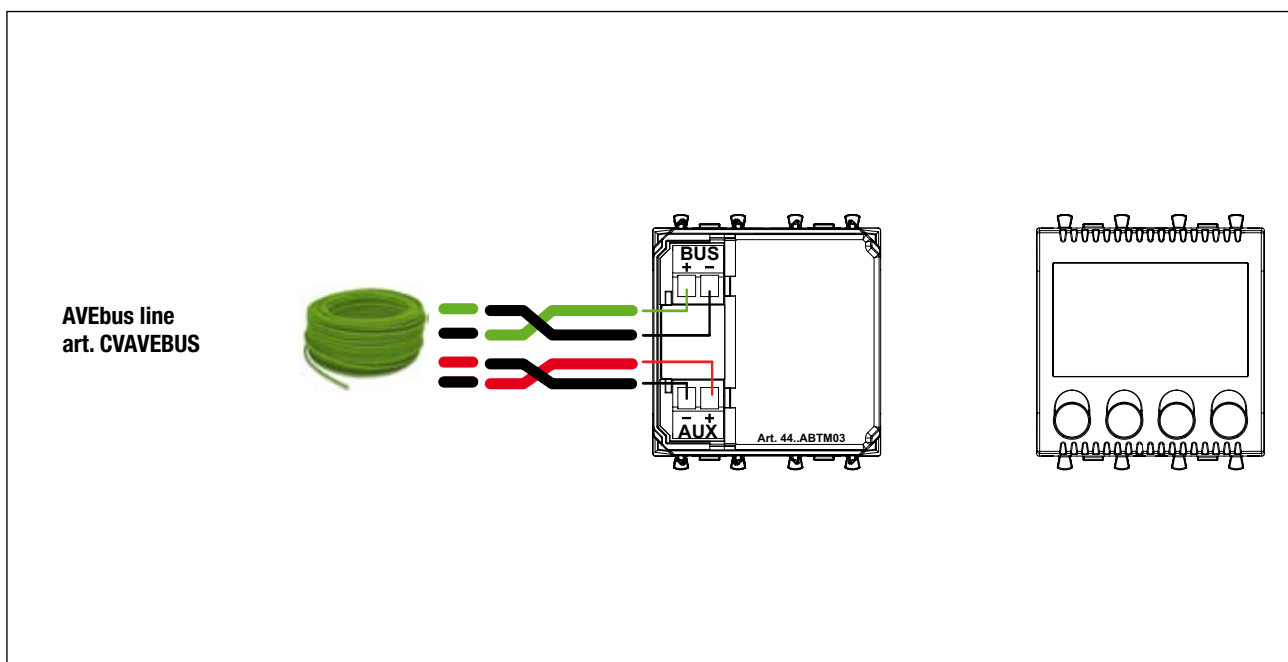
1-channel thermoregulation actuator

44..ABRTM01

The 44..ABRTM01 device is a 1-channel bus actuator for thermoregulation which can control the valves by means of a potential-free contact.

In thermoregulation systems the control activation depends on the configuration of the hydraulic air-conditioning system and in particular the valve or the pump must be controlled by zone, group of zones or central control. Moreover, the solenoid valve can be of several types (ON/OFF, OPEN/CLOSE, etc.). The domotic actuator allows to manage all of these functions through an advanced configuration of the programming parameters.

Technical data

- Enclosure: System 44 modules (22.5 w x 45 h x 46.5 d) mm
- Protection degree: IP41 if completed with plate and installed in the corresponding flush-mounting support.
- Reference temperature and relative humidity: 25°C RH 65%
- Operating amb. temp. range: -10°C to +50°C
- Maximum Relative Humidity: 90% at 35°C
- Max. Height: 2000 m a.s.l.
- Auxiliary power supply
  Voltage rating: 12Vac/dc
  Allowed variation: 10.5V ÷ 14V
  Electrical input at 12Vdc: 3.4 mA MAX
  Electrical input at 12Vac: 6.5 mA MAX

Connections

- Terminal 1: BUS positive
- Terminal 2: BUS GND
- Terminal 3: auxiliary power supply positive
- Terminal 4: auxiliary power supply GND
- Terminal 5: relay contact
- Terminal 6: relay contact

Characteristics of controllable electric load

- Noninductive load (cosφ 1): 10A at 230 Vac
- Inductive load (cosφ 0.4): 4A at 230Vac

Description of the front side

One optical signal is visible on the front indicating the operating and programming status of the device.

FUNCTIONS AND OPERATING MODES

Address of zone actuator	Description
10	Actuator of thermal zone no. 1
20	Actuator of thermal zone no. 2
30	Actuator of thermal zone no. 3
....	....
A0	Actuator of thermal zone no. A (10)
B0	Actuator of thermal zone no. B (11)
....	....
F0	Actuator of thermal zone no. F (15)

Function 1:	Summer/Winter operation with actuation ON/OFF type
Function 2:	Summer only operation with actuation ON/OFF type
Function 3:	Winter only operation with actuation ON/OFF type
Function 4:	Summer/Winter operation with actuation OPEN type
Function 5:	Summer only operation with actuation OPEN type
Function 6:	Winter only operation with actuation OPEN type
Function 7:	Summer/Winter operation with actuation CLOSE type
Function 8:	Summer only operation with actuation CLOSE type
Function 9:	Winter only operation with actuation CLOSE type

Code	Description	Mod.	Info
442ABRTM01	Actuator for thermoregulation Life Touch series	1	
441ABRTM01	Actuator for thermoregulation Domus Touch series	1	
443ABRTM01	Actuator for thermoregulation Allumia series	1	

442ABRTM01

441ABRTM01

443ABRTM01

OVERALL DIMENSIONS
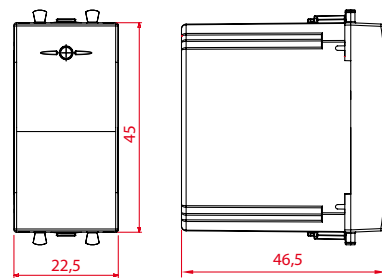
45

22,5

46,5

WIRING DIAGRAM AND EXAMPLE OF USE

Dimensions: 1 System 44 (22,5 w x 45 h x 46.5 d) module

230V~

N

F

Zone valve

1

2

Art. 44..ABRTM01

BUS AUX

−
+
−
+

AVEbus line art. CVAVEBUS
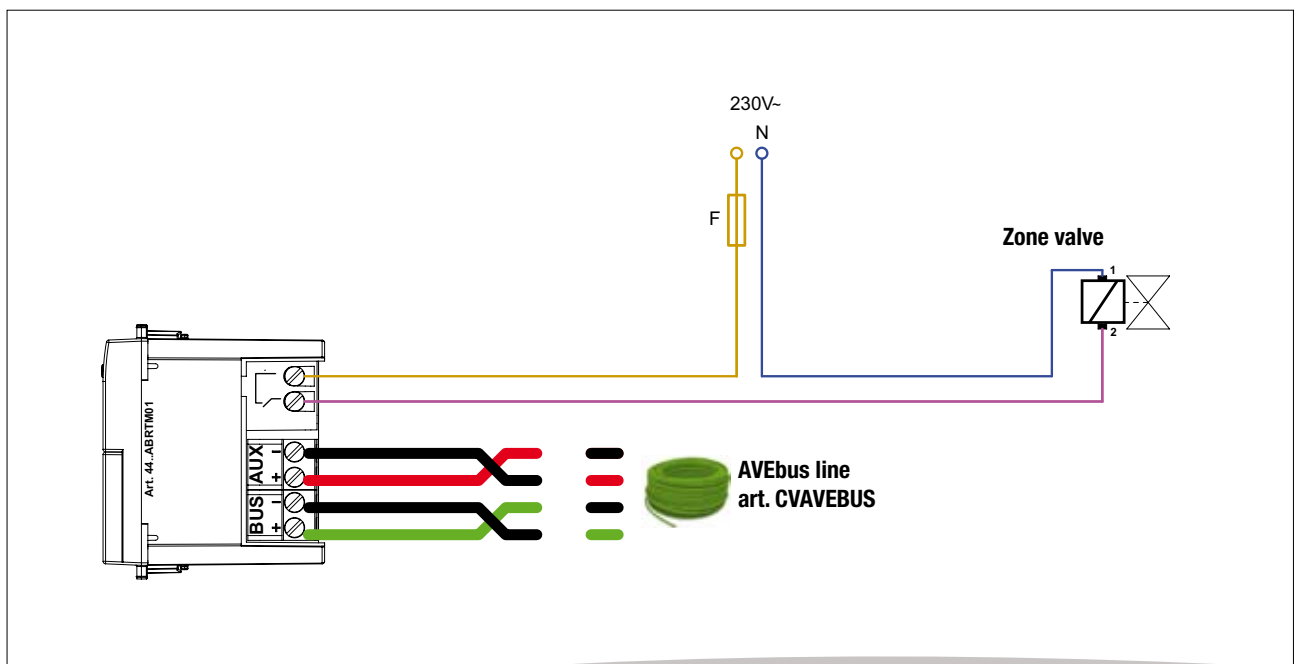
1-channel thermoregulation actuator for installation on the back of a box

ABRTM

The ABRTM device is a 1-channel bus actuator for thermoregulation which can control the valves by means of a potential-free contact. The device is housed in a compact enclosure which can be mounted anywhere such as a junction box or a false ceiling. It can be fixed by means of screws and the two fins, which can also be cut to reduce its dimensions.

Due to its dimensions, it can be inserted into a blank insert of the S44 or S45 series.

In thermoregulation systems the control activation depends on the configuration of the hydraulic air-conditioning system and in particular the valve or the pump must be controlled by zone, group of zones or central control. Moreover, the valve can be of several types (ON/OFF, OPEN/CLOSE, etc.). The domotic actuator allows to manage all of these functions through an advanced configuration of the programming parameters.

Technical data
- Enclosure: (54 w x 41 h x 18 d) mm
- Protection degree: IP20D
- Reference temperature and relative humidity: 25°C RH 65%
- Operating amb. temp. range: -10°C to +50°C
- Maximum Relative Humidity: 90% at 35°C
- Max. Height: 2000 m a.s.l.
- Power supply from bus line 3,4mA

Characteristics of controllable electric load
- Noninductive load (cosφ 1): 2A at 230 Vac
- Incandescent load: 2A at 230Vac
- Inductive load (cosφ 0.6): 2A at 230Vac

Connections
- Terminal 1: BUS positive
- Terminal 2: BUS GND
- Cn1: output contact (white cable)
- Cn2: output contact (white cable)

Description
An optical signal is visible on the upper side indicating the operating and programming status of the device.

FUNCTIONS AND OPERATING MODES

Address of zone actuator	Description
10	Actuator of thermal zone no. 1
20	Actuator of thermal zone no. 2
30	Actuator of thermal zone no. 3
....	....
A0	Actuator of thermal zone no. A (10)
B0	Actuator of thermal zone no. B (11)
....	....
F0	Actuator of thermal zone no. F (15)

|	
Function 1:	Summer/Winter operation with actuation ON/OFF type
Function 2:	Summer only operation with actuation ON/OFF type
Function 3:	Winter only operation with actuation ON/OFF type
Function 4:	Summer/Winter operation with actuation OPEN type
Function 5:	Summer only operation with actuation OPEN type
Function 6:	Winter only operation with actuation OPEN type
Function 7:	Summer/Winter operation with actuation CLOSE type
Function 8:	Summer only operation with actuation CLOSE type
Function 9:	Winter only operation with actuation CLOSE type

Code	Description	Mod.	Info
ABRTM	Actuator for thermoregulation system for installation in the back of a box		

ABRTM

OVERALL DIMENSIONS
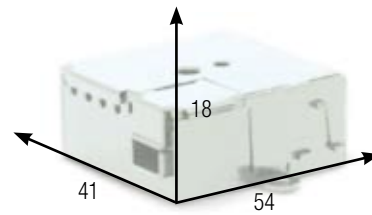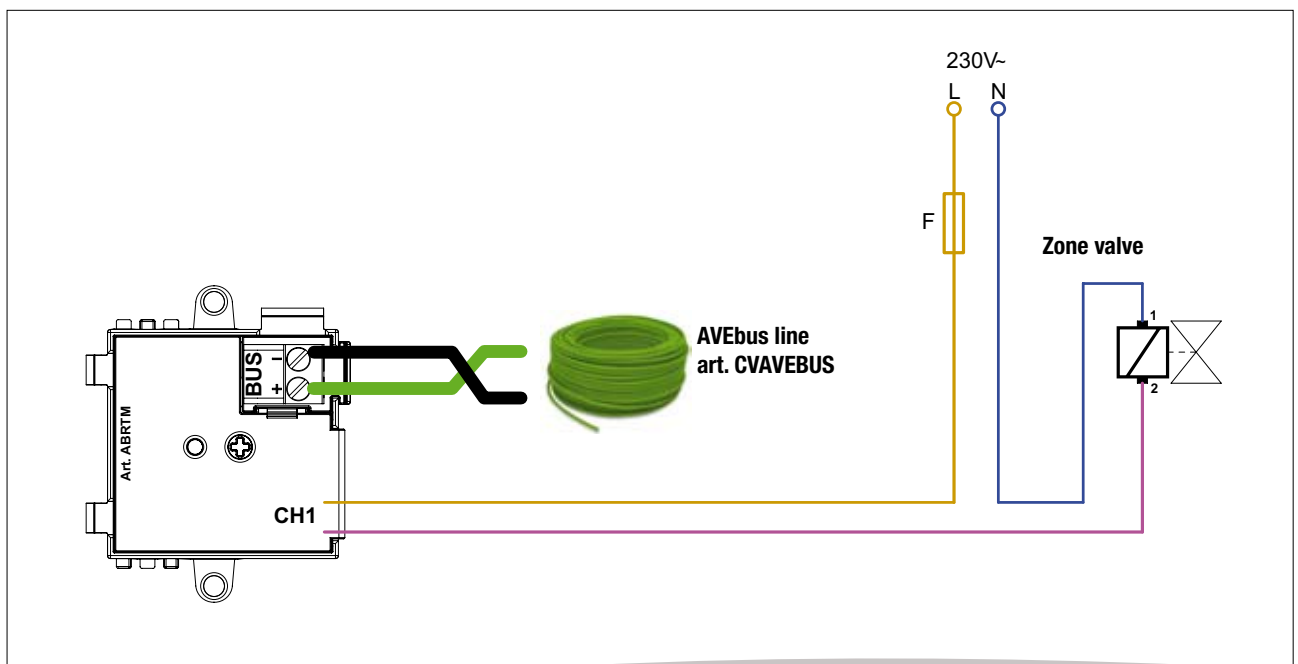
18

41

54

WIRING DIAGRAM AND EXAMPLE OF USE

230V~

L   N

F

Zone valve

BUS

Art. ABRTM

**AVEbus line
art. CVAVEBUS**

CH1

1

2

2-channel contact interface
for installation in the back of a box

ABIN02

The ABIN02 device indicates a transmitter which can send the command of two NO contactswhich are mounted outside the device via two independent channels of AVEbus system. The device is housed in a compact enclosure which can be mounted anywhere, such as a junction boxor a false ceiling. It can be fixed by means of screws and the two fins, which can also be cut to reduce its dimensions.
Due to its dimensions, it can be inserted in a blank insert of the S44 or S45 series.

Technical data
- Enclosure: 54 w x 41 h x 18 d mm
- Protection degree: IP20D
- Reference temperature and relative humidity: 25°C RH 65%
- Operating amb. temp. range: -10°C to +50°C
- Maximum Relative Humidity: 90% at 35°C
- Max. Height: 2000 m a.s.l.
- Power supply from bus line 2,2mA

Connections
- Terminal 1: BUS positive
- Terminal 2: BUS GND
- Cn1: Ch1 input (grey cable)
- Cn2: GND (black cable)
- Cn3: Ch2 input (blue cable)
- Cn4: GND (black cable)

Description
An optical signal is visible on the upper side indicating the operating and programming status of the device.

FUNCTIONS AND OPERATING MODES

	Function 1:	ON
	Function 2:	OFF
	Function 3:	STEP
	Function 4:	ON + OFF
	Function 5:	DIMMER
	Function 6:	ROLLER SHUTTER
	Function 7:	DOORS / WINDOWS
	Function 8:	SUN BLADE
	Function 9:	VENTILATION

ATTENTION: Closing time of contact must be at least 100 ms.
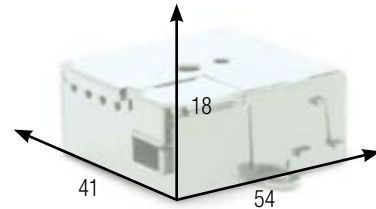
Parameter 1	0	The input, with functions 5 to 9 controls: ON command (up, open) and OFF command (down, close) INCREASE and DECREASE commands (light intensity or position)
	1	The input, with functions 5 to 9 controls: Only ON command (up, open)
	2	The input, with functions 5 to 9 controls: Only OFF command (down, close)

Code	Description	Mod.	Info
ABIN02	Two-channel contact interface for installation in the back of a box		

ABIN02

OVERALL DIMENSIONS

18

41

54

INSTALLATION EXAMPLE IN CASE OF RENOVATION
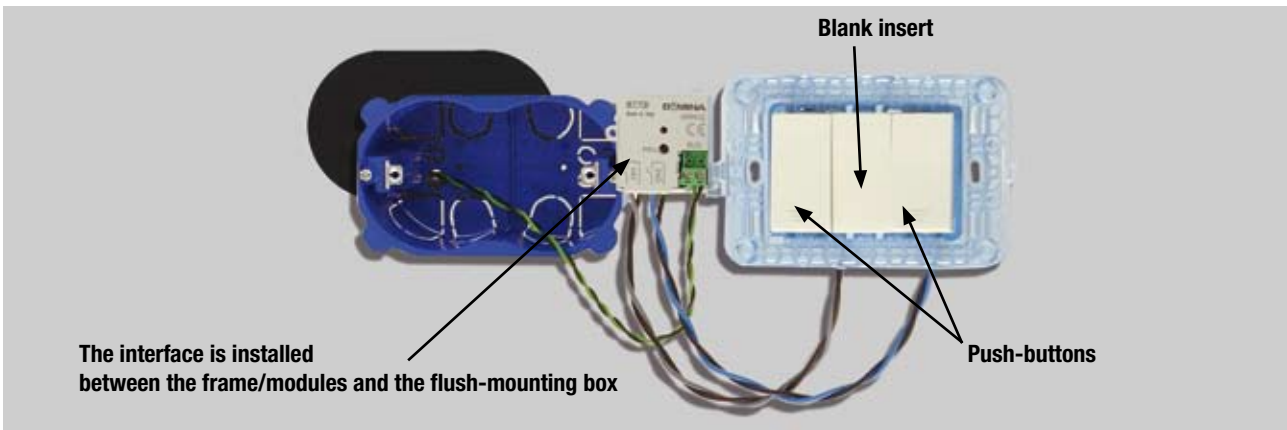
Blank insert

**The interface is installed
between the frame/modules and the flush-mounting box**

Push-buttons

WIRING DIAGRAM AND EXAMPLE OF USE

**From switch or NO
contact**

**From switch or NO
contact**

BUS − +

**AVEbus line
art. CVAVEBUS**

CH2

CH1

MAX 10m
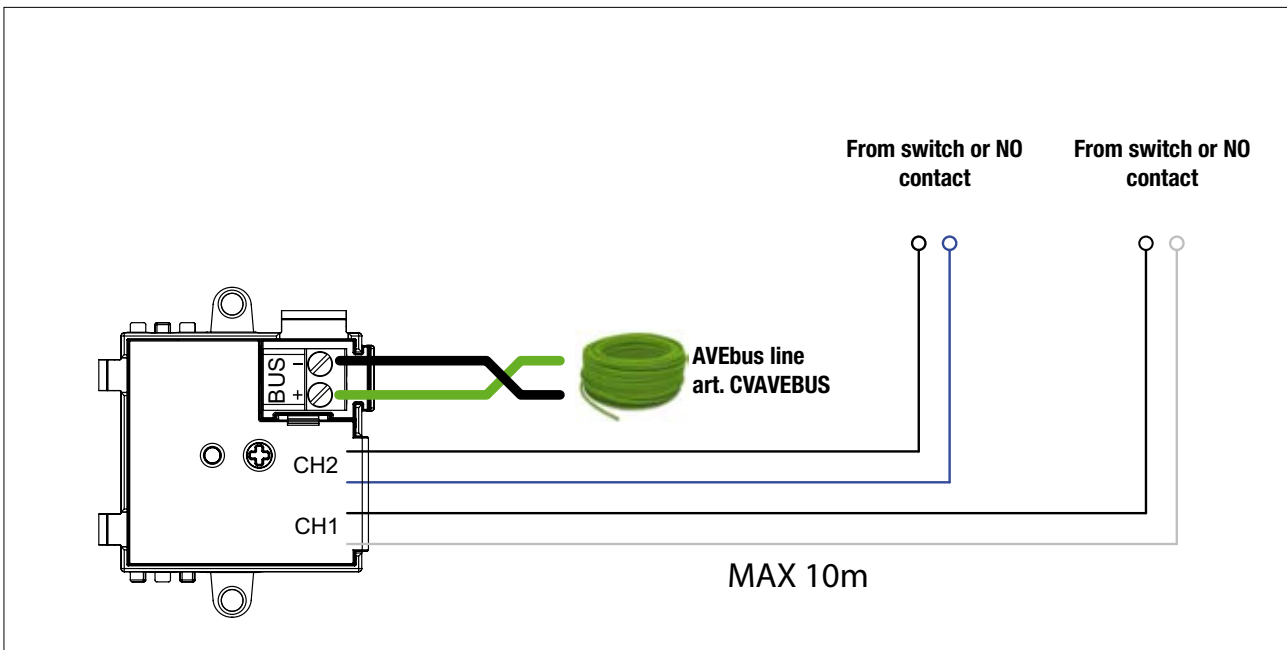
Attention:
Contacts must be interfaced using a shielded and twisted cable

1-channel actuator
for installation in the back of a box

ABR01

The ABR01 device is a 1-channel bus actuator which can control electric loads by means of a potential-free contact. The device is housed in a compact enclosure which can be mounted anywhere, such as a junction box or a false ceiling. It can be fixed by means of screws and the two fins, which can also be cut to reduce its dimensions.
Due to its dimensions, it can be inserted in a blank insert of the S44 or S45 series.

Technical data
- Enclosure: (54 w x 41 h x 18 d) mm
- Protection degree: IP20D
- Reference temperature and relative humidity: 25°C RH 65%
- Operating amb. temp. range: -10°C to +50°C
- Maximum Relative Humidity: 90% at 35°C
- Max. Height: 2000 m a.s.l.
- Power supply from bus line 3,4mA

Characteristics of controllable electric load
- Noninductive load (cosφ 1): 2A at 230 Vac
- Incandescent load: 2A at 230Vac
- Inductive load (cosφ 0.6): 2A at 230Vac

Connections
- Terminal 1: BUS positive
- Terminal 2: BUS GND
- Cn1: output contact (white cable)
- Cn2: output contact (white cable)

Description
An optical signal is visible on the upper side indicating the operating and programming status of the device.

Operating modes and parameters
The receiver operates according to three base parameters:
- the delay set on the receiver
- the command mode received from the transmitter
- parameter 1, which determines the output operating mode:
  - instantaneous
  - delayed
  - blinking

FUNCTIONS AND OPERATING MODES

	Parameter 1 = 0,1,2 (delay)	Parameter 1=3 (blinking)
Function 1:	Instantaneous	0.4 s
Function 2:	1 s	0.6 s
Function 3:	3 s	0.8 s
Function 4:	5 s	1 s
Function 5:	10 s	1.4 s
Function 6:	20 s	1.8 s
Function 7:	30 s	2.4 s
Function 8:	45 s	3 s
Function 9:	1 min	4 s
Function 10:	2 min	6 s
Function 11:	3 min	8 s
Function 12:	4 min	10 s
Function 13:	5 min	16 s
Function 14:	6 min	20 s
Function 15:	7 min	24 s
Function 16:	8 min	30 s

Parameter 1	0	Delay on ON and OFF
	1	Delay only on ON
	2	Delay only on OFF
	3	blinking enabling

Parameter 2	0	Normally Open Contact upon restoration of electric power
	1	Normally Closed Contact upon restoration of electric power

Code	Description	Mod.	Info
ABR01	1-channel actuator for installation in the back of a box		

ABR01

OVERALL DIMENSIONS

18

41

54

WIRING DIAGRAM AND EXAMPLE OF USE

230V~

L N

F

BUS − +

Art. ABR01

CH1

AVEbus line
art. CVAVEBUS
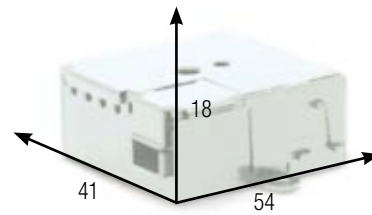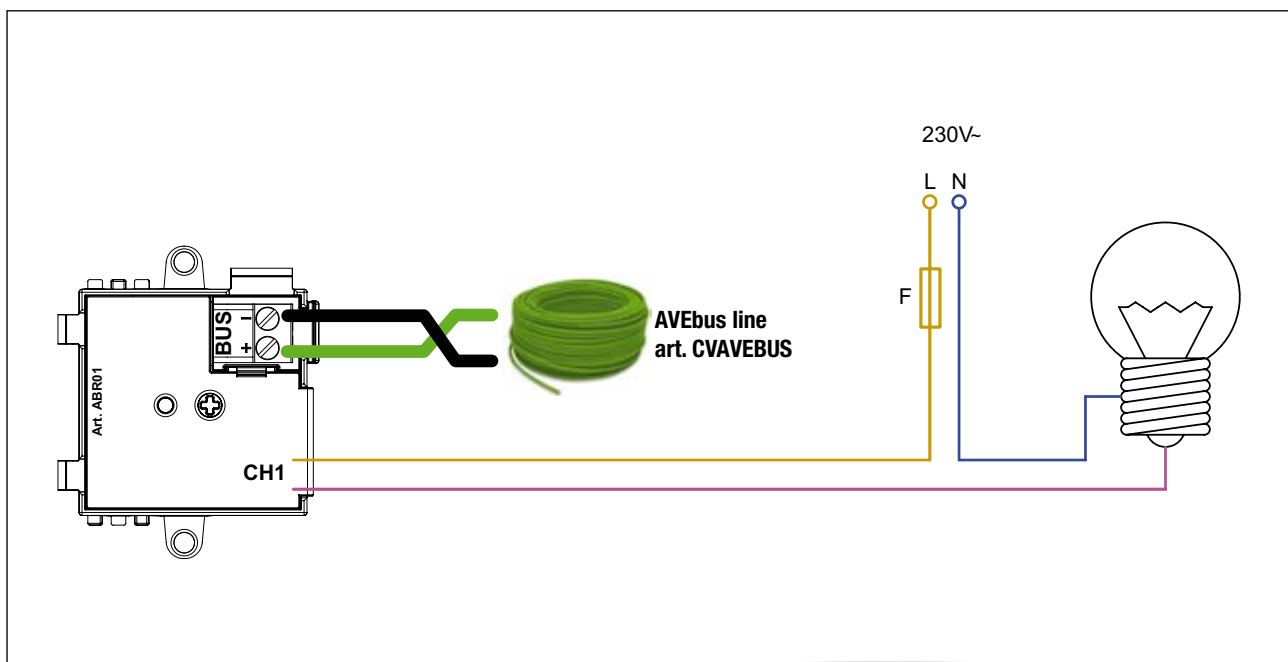
Bus power supply unit

Auxiliary power supply unit

Line isolator

53BSA

The 53BSA device is a stabilised power supply unit designed to power an AVEbus system. The AVEbus system can be powered using on eor two 53BSA power supply units in parallel.

Technical data

- Enclosure: 2 DIN modules (35 x 59 x 90) mm
- Protection degree: IP40
- Power supply: 230Vac
- Tolerance: -15% + 10%
- Output voltage: 15Vdc
- Tolerance: ±2%
- Operating temperature: -5°C to 40°

Connections

- Terminal 1-2: bus line (1 positive – 2 GND)
- Terminal 3-4: power supply (230Vac)

Description of the front side
- Green LED "ON":
  ON: normal operation
  OFF: failure or power failure
- Red LED "limit":
  Flashing: transmission on bus
  ON: short circuit or bus overloaded
  OFF: normal operation

AF53892B

The AF53892B device is a stabilised power supply unit which output voltage can be adjusted by means of a special trimmer. By adjusting the output voltage it allows charging the lead-acid batteries and can be used as an auxiliary power supply unit for anti-intrusion burglar alarm systems and also as an auxiliary power supply unit for AVEbus devices of S44 series. Two AF53892B power supply units can be connected in parallel and obtain an output current of 2 A.

Technical data

- Enclosure: 2 DIN modules (35 x 90 x 59) mm
- Supply voltage: 230 Vac
- Allowed variation: 195 to 265
- Power supply frequency: 50-60 Hz
- Output voltage: can be adjusted by means of a trimmer (Pt1) from 13 to 18 Vdc
- Rated output current: 1 A
- Short circuit current: 1.1 A
- Permanent protection against overload and short circuit at the output
- Overvoltage or undervoltage protection (160Vac) at input
- Safety protection from internal failure on primary side with T 800 mA fuse
- Protection against internal overtemperature: 125°C
- Possibility of parallel connection with identical power supply unit

53ABISO

The 53ABIS0 device is a galvanic isolator between two sections of the domotic system which allows a logical communication among the different devices installed in the two sections and to expand the line length and limit any possible failures.

Technical data

- Enclosure: 1 DIN module (17.5 x 89 x 66) mm
- Protection degree: IP20D
- Reference temperature and relative humidity: 25°C RH 65%
- Operating amb. temp. range: -10°C to +50°C
- Maximum Relative Humidity: 90% at 35°C
- Max. Height: 2000 m a.s.l.
- Auxiliary power supply from 10.5 to 19Vcc
- Electrical input 15.2mA

Connections

- Terminal 1: Auxiliary power supply positive (segment 1)
- Terminal 2: GND (segment 1)
- Terminal 3: BUS positive (segment 1)
- Terminal 4: BUS positive (segment 2)
- Terminal 5: GND (segment 2)
- Terminal 6: Auxiliary power supply positive (segment 2)

MATCHING CONTROL PANELS, WIRING ACCESSORIES AND DOMOTICA SERIES

Life black colour

Code	Description	Mod.	Info
53BSA	Bus power supply unit	2 DIN	
53ABISO-1	IProgrammable logic line isolator	1 DIN	
53ABISO	Line isolator	1 DIN	
AF53899	Switching power supply unit. Output voltage 12Vdc. Power supply 230Vac. Deliverable current: 2.2A	6 DIN	
53ABAUX12V	Switching power supply unit for auxiliary line for home automation systems. Output voltage 12Vdc. Power supply 230Vac. Deliverable current: 2A	2 DIN	

53BSA   **5ABAUX12V**

53ABISO   **53ABISO-1**

Can be installed in the NEW BL07CGDOM junction box with DIN rail

WIRING DIAGRAM 53ABISO

230V~ N L

5 6
L N
230V~

1 2 3
+ − +
AUX BUS

○ ON
○ BUS

○ ON
○ BUS

5 6
L N
230V~

Art. 53BSA

53ABAUX12V

Art. 53ABISO

Art. 53BSA

53ABAUX12V

BUS 230V~
+ − L N
1 2 3 4

AUX
+ −

BUS AUX
+ − +
4 5 6

BUS 230V~
+ − L N
1 2 3 4

AUX
+ −

AVEbus Section 1   AVEbus Section 2
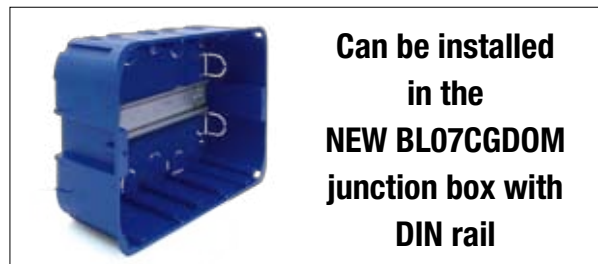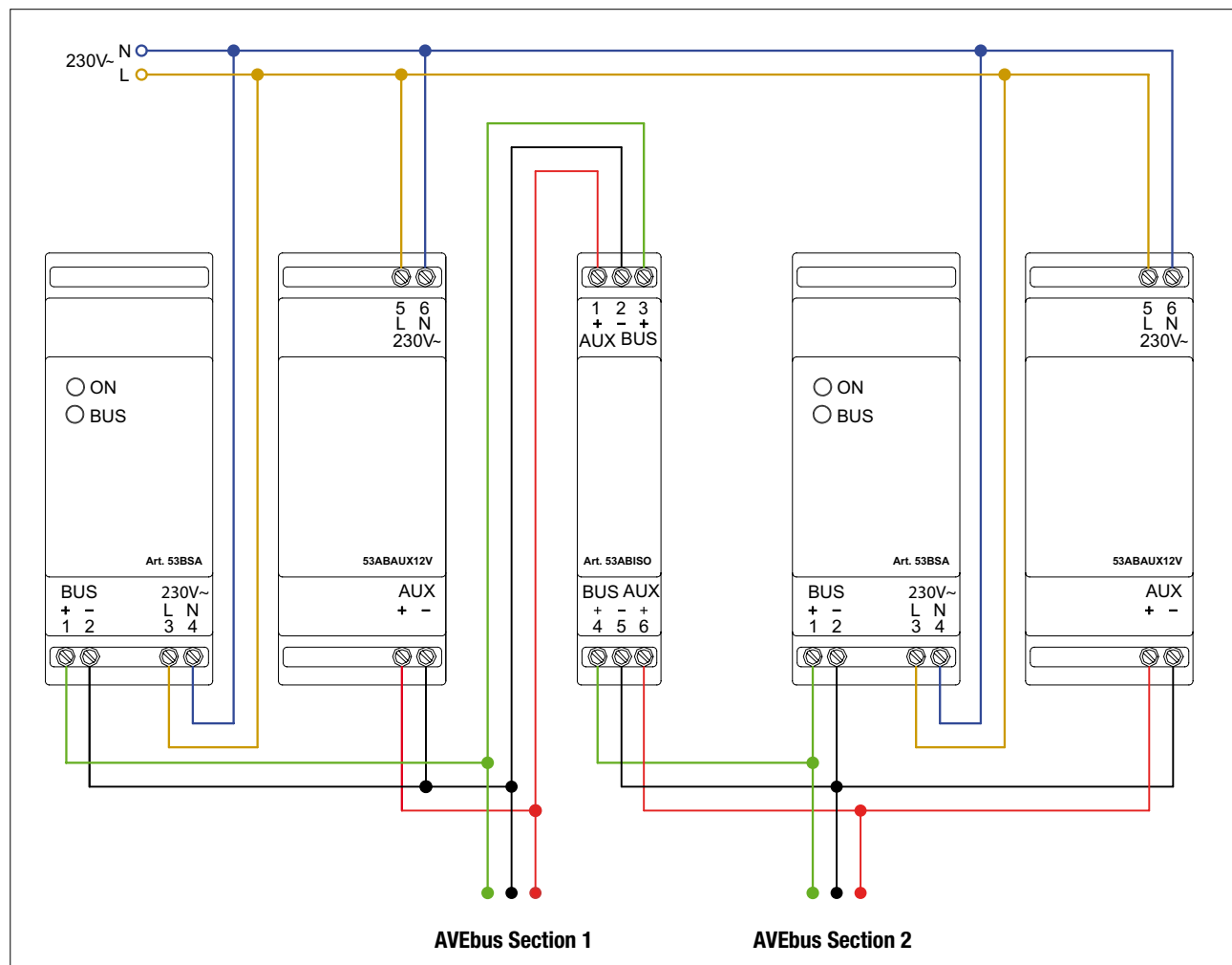
4-channel actuator

53ABR4

The 53ABR4 device is an actuator provided with four ON/OFF outputs made with potential-free relay contacts. It must be powered by an auxiliary power supply source or 230V ac power line. Outputs can also be manually set by means of micro-switches placed on the front side.

Technical data
• Enclosure: 4 DIN modules (70 x 89 x 66) mm
• Protection degree: IP20 (IP 30D for special enclosures)
• Auxiliary power supply from SELV source: 12Vac/dc
• Allowed variation: 17Vdc ÷ 19Vdc
• Electrical input at 12Vdc : 2,5mA(stand-by) 130mA max (4 relays ON)
• Power supply from the 230Vac line
• Allowed variation: 190Vac ÷253Vac
• Electrical input at 230Vac: 15mA (stand-by), 25mA max (4 relays ON)
• Reference temperature and relative humidity: 25°C RH 65%
• Operating amb. temp. range: -10°C to +50°C
• Maximum Relative Humidity: 90% at 35°C
• Max. Height: 2000 m a.s.l.

Characteristics of controllable electric load
• Noninductive load (cosφ 1): 8A at 240 Vac – 5A at 30Vdc
• Incandescent load: 8A at 240Vac
• Inductive load (cosφ 0.6): 5A at 264Vac
• Capacity load: 140µF: 5A at 240Vac

Connections
• Terminal 1: BUS positive
• Terminal 2: BUS GND
• Terminal 3: Aux. power supply positive
• Terminal 4: Aux. power supply GND
• Terminal 5: 230 V ~ aux. power supply
• Terminal 6: 230 V ~ aux. power supply
• Terminal 7: CH1 contact output
• Terminal 8: CH1 contact output
• Terminal 9: CH2 contact output
• Terminal 10: CH2 contact output
• Terminal 11: CH3 contact output
• Terminal 12: CH3 contact output
• Terminal 13: CH4 contact output
• Terminal 14: CH4 contact output

FUNCTIONS AND OPERATING MODES

	Parameter 1 = With delay	Parameter 1= With blinking
Function 1:	Instantaneous	0.4
Function 2:	1 s	0.6
Function 3:	3 s	0.8
Function 4:	5 s	1.0 s
Function 5:	10 s	1.4
Function 6:	20 s	1.8
Function 7:	30 s	2.4
Function 8:	45 s	3.0 s
Function 9:	1 min	4.0 s
Function 10:	2 min	6.0 s
Function 11:	3 min	8.0 s
Function 12:	4 min	10 s
Function 13:	5 min	16 s
Function 14:	6 min	20 s
Function 15:	7 min	24 s
Function 16:	8 min	30 s

Parameter 1	0	Delay on ON and OFF
	1	Delay only on ON
	2	Delay only on OFF
	3	blinking enabling

Parameter 2	0	Normally Open Contact upon restoration of electric power
	1	Normally Closed Contact upon restoration of electric power
	2	Status memory upon restoration of electric power

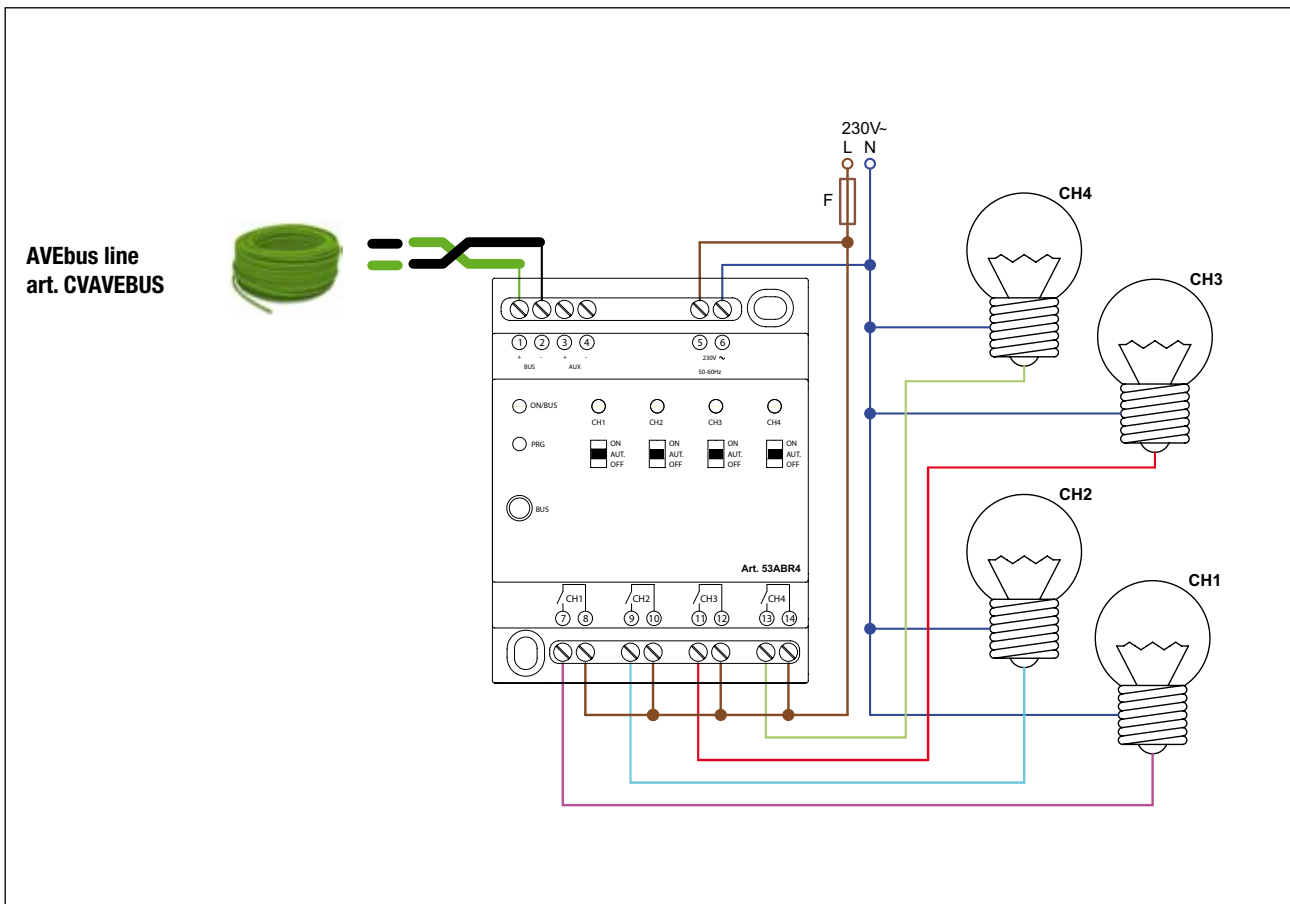| Code	Description	Mod.	Info
53ABR4	4 independent channel actuator – 8A resistive and incandescent lamps 4A (cosφ 0.6) inductive loads	4 DIN	

53ABR4

Can be installed in the NEW BL07CGDOM junction box with DIN rail

WIRING DIAGRAM AND EXAMPLE OF USE OF 53ABR4

AVEbus line
art. CVAVEBUS

230V~
L   N

F

CH4
CH3
CH2
CH1

① ② ③ ④   ⑤ ⑥
+   +   230V ~
BUS AUX 50-60Hz

ON/BUS

CH1   CH2   CH3   CH4

PRG

ON   ON   ON   ON
AUT.   AUT.   AUT.   AUT.
OFF   OFF   OFF   OFF

BUS

Art. 53ABR4

CH1   CH2   CH3   CH4
⑦ ⑧   ⑨ ⑩   ⑪ ⑫   ⑬ ⑭

Thermoregulation actuator
for fan coil units

53ABRTM

The 53ABRTM device is a 4-channel bus actuator for Thermoregulation able to control four valves or one valve and a three speed fan coil unit. It is also provided with an input for a 53GA91-T probe used to measure the delivery temperature to prevent starting ventilation when the liquid in the heat exchanger has not reached the operating temperature: if the probe is not connected, the function is not performed. The threshold temperature can be set both for summer and winter cycle.
In temperature control systems the control activation depends on the configuration of the hydraulic air-conditioning system and in particular the valve or the pump must be controlled by zone, group of zones or central control. Moreover, the valve can be of several types (ON/OFF, OPEN/CLOSE, etc.). The domotic actuator allows to manage all of these functions through an advanced configuration of the programming parameters.

Technical data
• Enclosure: 2 DIN modules (35 w x 89 h x 64.5 d) mm
• Protection degree: IP20 (IP30 with the special terminal covers supplied).
• Auxiliary power supply from SELV source: 12Vdc
Allowed variation: 10.5V ÷ 14Vcc
Electrical input at 12Vdc: 2mA (stand-by) 65mA max (4 relays ON)
• Auxiliary power supply from 230Vac line:
Allowed variation: 190Vac÷ 253Vac
Electrical input at 230V~: 9 mA (stand-by) 12mA~ max (4 relays ON)
• Reference temperature and relative humidity: 25°C RH 65%
• Operating amb. temp. range: -10°C to +50°C
• Maximum Relative Humidity: 90% at 35°C
• Max. Height: 2000 m a.s.l.

Electric load controllable from each output
• Noninductive load (cosφ 1): 1A at 230Vac
• Motor load: 1A at 230Vac

Connections
• Terminal Aux: SELV auxiliary power supply positive
• Terminal -: GND
• Terminal BUS: BUS positive
• Terminal -: GND
• Terminal IN: water probe input
• Terminal EV: valve or Ch1 contact output
• Terminal V1: V1 speed or Ch2 contact output
• Terminal V2: V2 speed or Ch3 contact output
• Terminal V3: V3 speed or Ch4 contact output
• Terminal L: output contacts common and 230V~ auxiliary power supply phase
• Terminal N: 230V~ auxiliary power supply neutral

Description of the front side
A series of optical signals is visible on the front side indicating the operating and programming status of the device.

FUNCTIONS AND OPERATING MODES

Type of command		
Function 1:	Summer/Winter operation (ON/OFF valves/fan coil units)	
Function 2:	Summer only Operation (ON/OFF valves/fan coil units)	
Function 3:	Winter only operation (ON/OFF valves/fan coil units)	
Function 4:	Summer/Winter operation (OPEN valves)	
Function 5:	Summer only operation (OPEN valves)	
Function 6:	Winter only operation (OPEN valves)	
Function 7:	Summer/Winter operation (CLOSE valves)	
Function 8:	Summer only operation (CLOSE valves)	
Function 9:	Winter only operation (CLOSE valves)	

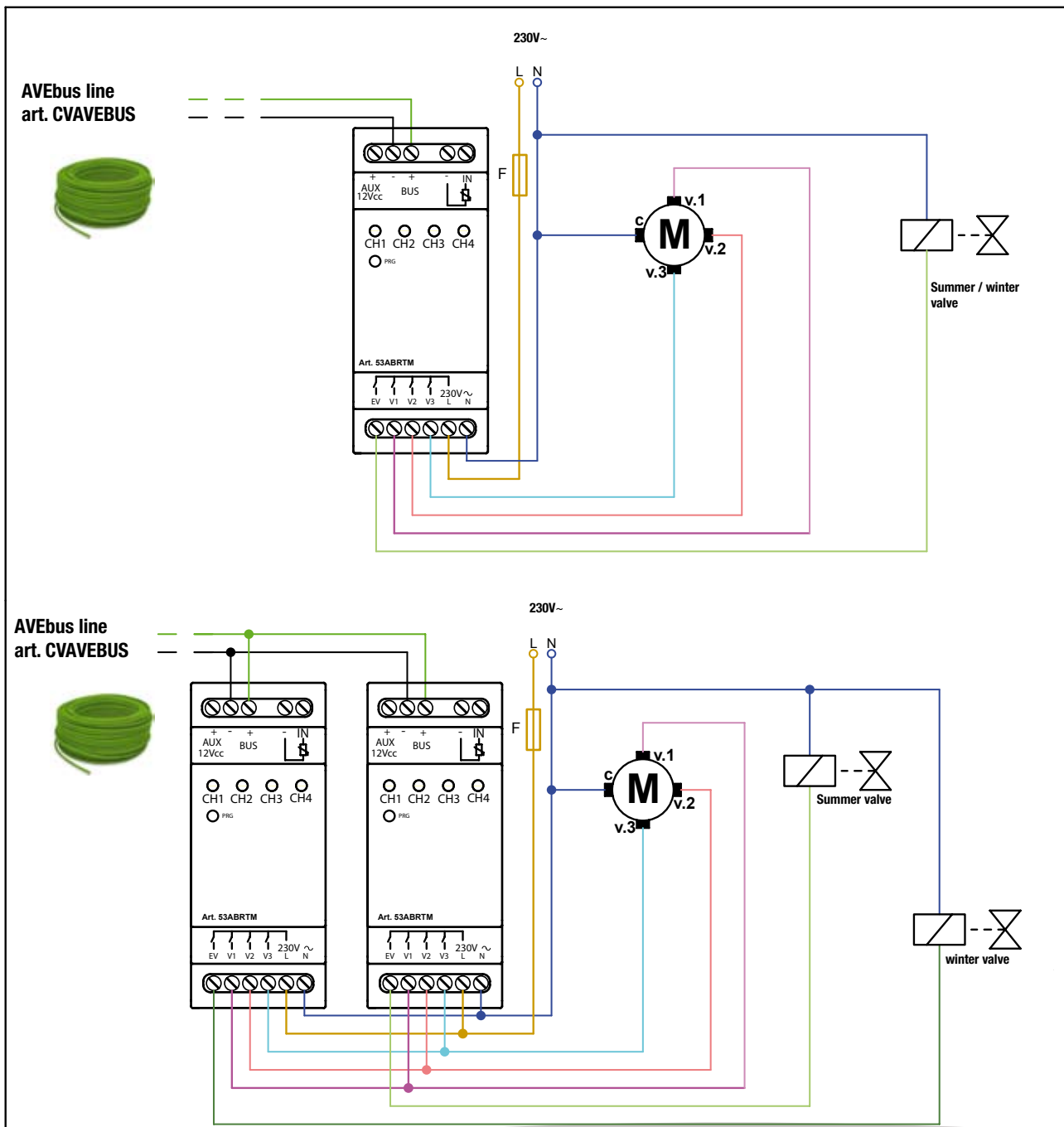| Fan coil unit modes		
Parameter 1	0	Summer temperature probe disabled
	1	Fan operating in summer with Temp.probe < 13°C
	2	Fan operating in summer with Temp.probe < 14°C
	...	...
	9	Fan operating in summer with Temp.probe < 21°C
	10	Fan operating in summer with Temp.probe < 22°C
	11	Fan operating in summer with Temp.probe < 23°C
Parameter 2	0	Winter temperature probe disabled
	1	Fan operating in winter with Temp.probe > 31°C
	2	Fan operating in winter with Temp.probe > 32°C
	...	...
	9	Fan operating in winter with Temp.probe > 39°C
	10	Fan operating in winter with Temp.probe > 39°C
	11	Fan operating in winter with Temp.probe > 41°
Parameter 3	1	Only speed 1 can be enabled
	2	Speeds 1 and 2 can be enabled
	3	Speeds 1, 2 and 3 can be enabled

Code	Description	Mod.	Info
53ABRTM	Actuator for temperature control for fan coil units	2 DIN	

53ABRTM

WIRING DIAGRAM AND EXAMPLE OF USE

AVEbus line
art. CVAVEBUS

230V~

Art. 53ABRTM

Summer / winter valve

AVEbus line
art. CVAVEBUS

230V~

Art. 53ABRTM

Summer valve

winter valve

Energy saver for
Energy Management

53AB-ECO

The energy saver item 53AB-ECO is a domotic device which prevents the activation of the current limiting switch for overloading and accounts the electric energy consumptions. By accounting water and gas consumptions compared with the values measured by the temperature probes, it also allows to account the heating consumptions.

Through domotic actuators it can control up to 8 loads or load groups based on the electric current requirement measured by the CT. Each one of the 8 load groups (8 channels of the domotic system) must be given a priority to fix its order of disconnection. In case of overload, loads are disconnected according to the given order to prevent the current limiting switch from activating.

Loads can be set for activation in predetermined time periods selected by means of an optional external time or weekly programmer.

Technical data
- Enclosure: 4 DIN modules
- Size: (LxHxD) 70 x 109 x 64 mm
- Protection degree: IP20 (IP 30D in special enclosures)
- Weather conditions: 0° at +50°C − 2000 m a.s.l.
- Rated voltage: 230Vac
- Electrical input at 230Vac: 60mArms

Connections
- Terminal 230Vac (P, N): Phase and Neutral for power supply
- Terminal TA (•): CT measure connection (Start of winding)
- Terminal TA: CT measure connection (End of winding)
- Terminal TA Tamper: Not used
- Terminal TEMP (T1, GND): Temperature probe 1
- Terminal TEMP (T2, GND): Temperature probe 2
- Terminal (1, 2): Meter input 1 (Water)
- Terminal (3, 4): Meter input 2 (Gas)
- Terminal (5, 6): Meter input 3
- Terminal (7, 8): Meter input 4
- Terminal TIMER (IN, GND): ECO consent input
- Terminal AVEbus (GND, +)

FUNCTIONS AND OPERATING MODES

Function 1:	LOAD CONTROL
Function 2:	TEMPERATURE Reading
Function 3:	PULSE COUNT Reading
Function 4:	TEMPERATURE + PULSE COUNT Reading
Function 5:	LOAD CONTROL + TEMPERATURE Reading
Function 6:	LOAD CONTROL + PULSE COUNT Reading
Function 7:	LOAD CONTROL + TEMPERATURE Reading + PULSE COUNT Reading

Parameter 1	10	Maximum capacity of the system 1 KW
	…	…
	100	Maximum capacity of the system 10 KW

Parameter 2	…-…	Address of 1st actuator disconnected in case of overload
	…-…	Address of …th actuator disconnected in case of overload
	…-…	Address of 8th actuator disconnected in case of overload

Parameter 3	……	Power controlled by 1st actuator	Note: 7th and 8th loads are fixed at 2KW
	……	Power controlled by …th actuator	
	……	Power controlled by 6th actuator	

Parameter 4	0	Direct disconnection of loads at rated value
	…	…
	15	Direct disconnection of loads with 30% of rated value exceeded

Parameter 5	0	Direct disconnection
	…	…
	15	5 min overload before disconnection (within the limits of parameter 4)

Parameter 6	10	Re-connection of loads with 10% hysteresis
	…	…
	90	Re-connection of loads with 90% hysteresis

Code	Description	Mod.	Info
53AB-ECO	Energy saver for Energy Management	4 DIN	

53AB-ECO
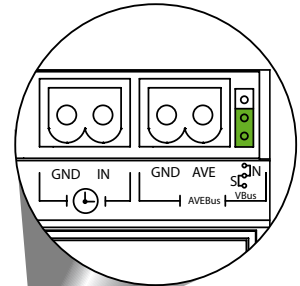
Set the jumper on "S" to enable the function "AVEbus power supply" (max deliverable current 37mA).
WARNING: do not use in parallel with 53BSA!

GND   IN   GND   AVE   IN
AVEBus   VBus

EXAMPLE OF USE

AVEbus line
art. CVAVEBUS

230V~
from the required
protections

L   N

Pulse metering devices
(water and/or gas reading)

External enabling

Jumper in S position

Art. 53ABR4

Temperature probes
art. 53GA91-T

Line 230V~ for electric loads
from the provided protections

L

N
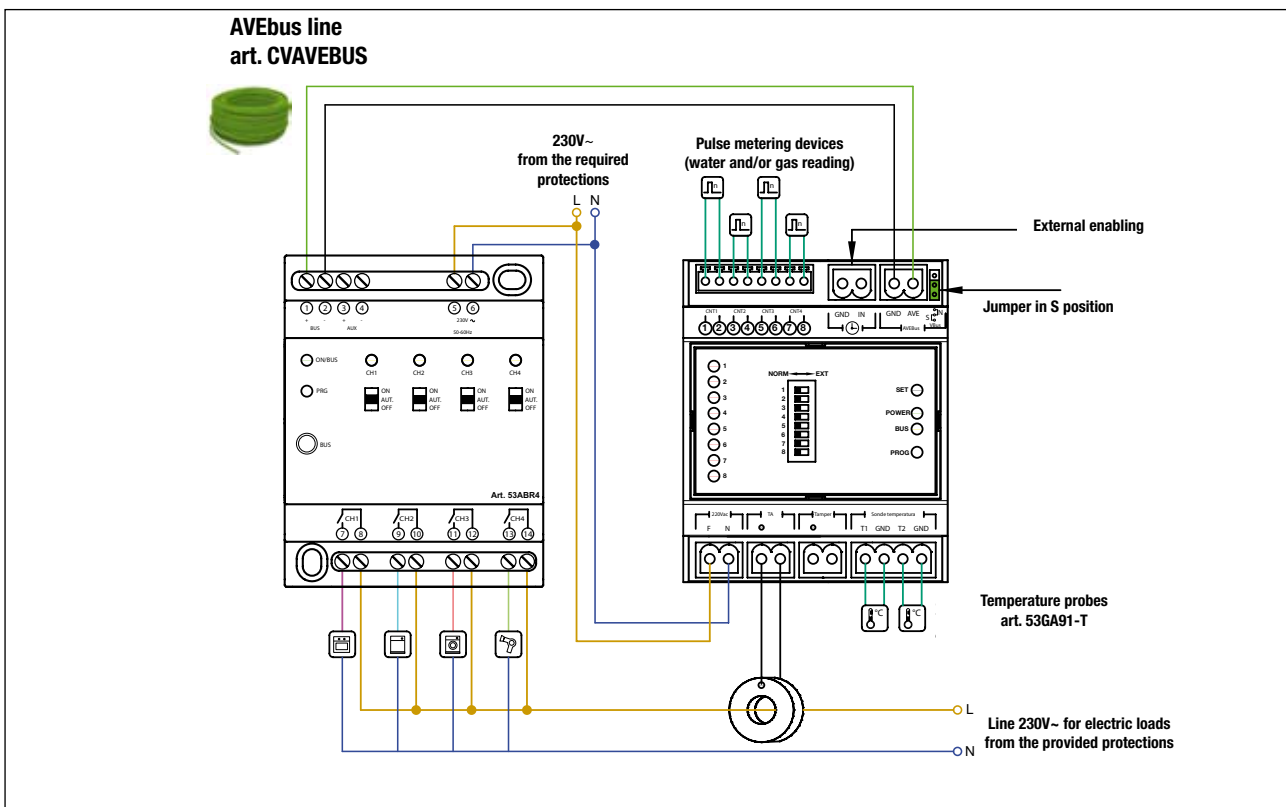
AVEbus interface

BSA-USB

The BSA-USB device is an interface allowing a personal computer (PC) to be connected to the bus used by the devices of Domina series (AVEbus) by means of a USB port.

Combined with SFW-BSA software, it allows the user to programme and/or check all programmed Domina devices which are installed on the bus. It can also be used together with BaSiCa system (2008 or following versions) to check and/or control an AVEbus-based network.

Technical data

• Desktop enclosure also suitable for wall installation or in 3-module flush-mounting box
• Protection degree: IP40
• Power supply: from USB

Connections

• USB standard connector (Type B) for connection to a USB port of a personal computer.
• AVEbus cable ending with a 3mm standard jack for connection of AVEbus line.

Description of the front side

The BSA-USB interface supplies the user with information by LED signals. The LEDs are physically placed in different positions as the information supplied is completely different. The information supplied by the right section (with two LEDs) concerns the traffic relating to the USB interface while the left section (with three LEDs) supplies information on the traffic and the status of the AVEbus interface.

PC drive installation

Upon first connection of the BSA-USB interface, the installation of the communication drivers (CDM_Setup) is requested between the PC and the BSA-USB interface. These drivers are contained in the installation CD of the SFW-BSA software supplied as a bundle with the BSA-USB interface.

The installation process is very simple: by starting the CMD Setup file and following the instructions on the screen a serial port (called VCOM) is virtually installed on the PC which is available every time the BSA-USB interface is connected to the computer through the USB cable supplied. At the end of the installation process communication with the BSA-USB interface is possible through the SFW-BSA software (or BaSiCa).

EXAMPLE OF USE

	Code	Description	Mod.	Info
	BSA-USB	AVEbus-USB interface (supplied with SFW-BSA software compatible with Windows Vista, Windows 7 32 or 64 bits)		
	53BSA232	AVEbus-RS232 interface	3DIN	

BSA-USB

TABLE FOR SYSTEM CONFIGURATION

DEVICE		C (2-WIRE BUS)	C (4-WIRE BUS)	I[mA] (AUX LINE ELECTRICAL INPUT)	Cap [nF]
442ABTC1	Touch transmitter	5,0	0,2	12,0	0,3
442ABT1	1-ch transmitter	3*	0,3	15,2	0,3
442ABT2	2-ch transmitter	3,3**	0,3	13,7	0,3
442ABIN	Contact interface	2,7	0,3	2,2	0,3
442ABTA	1-ch alarm transmitter	2,7	0,3	2,2	0,3
442ABR1	1-ch actuator	4,6	0,3	3,4	0,3
442ABR2	2-ch actuator	7,9	0,3	7,5	0,3
442ABR1CL	1-ch actuator with local control	5,8	0,3	16,5	0,3
53ABR4	4-ch actuator for DIN rail bar	0,7	0,3	210	0,3
442ABRT01	Roller shutter actuator with local control	7,3	0,7	18,6	0,3
442ABDI	1-10V dimmer actuator	4,8	0,3	4,7	0,3
442AB68	LUCE AMICA passive infrared detector	2,4	0,3	15,2	0,3
442ABRTM01	Temperature control actuator	4,6	0,3	3,4	0,3
442ABTM03	Room thermostat	14,0	0,3	15,0	0,3
ABIN02	2-ch contact interface for installation in the back of a box	2,7			0,3
ABR01	1-ch receiver for finstallation in the back of a box	4,6			0,3
ABRTM	Temperature control receiver for installation in the back of a box	4,6			0,3

Note: the maximum electrical input is c=300 deliverable by no. 2 item 53BSA in parallel connection
** With two active status signals
* With active status signal

PRAB01

PRAB01 device is a portable device used for programming all AVEbus devices such as transmitters and receivers. With PRAB01, the address and specific operating mode can be set for each device.

Technical data
• Power supply: 9V/6LR61/MN1604 alkaline battery
• Battery life: 1 year appr. (400 hours)
• Operating amb. temp. range: -10°C to +50°C
• Reference temperature and relative humidity: 25°C RH 65%
• Maximum Relative Humidity: 90% at 35°C
• Max. Height: 2000 m a.s.l.

Description of front side
• L1: green led signalling the status of the device and the programming mode; it can display the following status:
Short flashing: programmer connected to the bus
Fixed light: device connected to the bus and programming under way
Led off: programmer not connected to the bus or bus voltage not present
• Cn1: connector for interfacing the PRAB01 programming device to AVEbus line
• P1 (CHANNEL SELECTION): allows to display the configuration of next channel of the device being programmed; if the channel displayed is the last one, by pressing again the first channel is displayed. Keep it pressed to quickly scroll all the channels.
• P2 (FUNCTION SELECTION): it allows to choose the function associated with the selected channel among all functions compatible with the device being programmed; if the displayable function is the last settable one, by pressing the push-button again the first compatible function is displayed. Keep the push-button pressed to increase the function number.
• P3 (ADDRESS INCREASE): to increase by one unit the address to be associated with one of the selected channels of the device being programmed; if the selected address is the last one, by pressing again the push-button the first settable address is displayed. Keep the push-button pressed to increase the address
• P4 (CONFIGURATION READING): allows to read the current configuration of the device to be programmed or already programmed.
• P5 (CONFIGURATION WRITING): allows to store the new configuration on the device being programmed.
• P6 (ADDRESS DECREASE): allows to decrease by one unit the address to be associated with one of the selected channels of the device being programmed; if the displayed address is the first one available, by pressing the push-button again the last settable address will be displayed. Keep the push-button pressed to quickly decrease the address.
• P7 (START/STOP/TEST): allows to start and stop the PRAB01 programmer by quickly pressing the push-button.

Note: if no configuration has been set, the push-buttons for configuration writing, channel and function selection, address increment/decrement are not working.

Display reading
The PRAB01 programmer has a display which allows to show, one channel at a time, the configuration of the device being programmed or already programmed through 6 figures divided in 2 groups. If no configuration has been set, a series of fragments is displayed. When the configuration is received by the device, three groups of figures appear on the display:

operating mode associated with the channel (in decimal format)

address associated with the channel (in hexadecimal format)

number of selected channel (in decimal format)
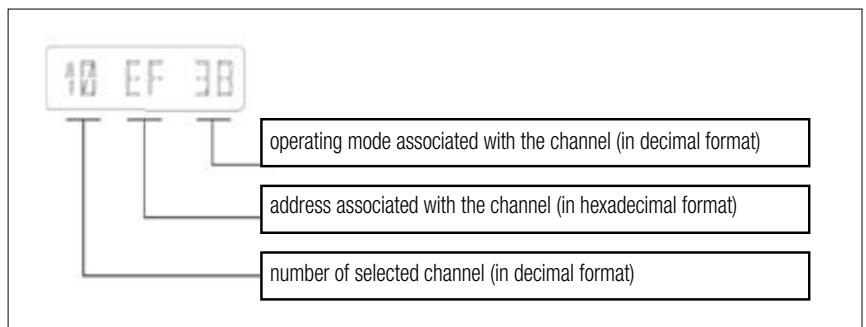
Note:
For the available "operating modes" see the section which refers to the device to be programmed.

Acoustic signals
The PRAB01 programmer is provided with a buzzer that makes its use easier by a number of acoustic signals:

• 1 short beep which is sent out when the device is switched on/off
• 2 short beeps meaning that programming has been successful
• 1 long beep, meaning that programming has not been successful or the battery is almost flat (only during testing)

Display and battery test
Keep the ON/OFF push-button pressed to check if all segments of the display turn on as well as the battery status.

If the measured value is greater than 7V, the following writing appears after the display segments have been checked

or the following message is displayed

If the test indicates the battery is flat, this must be immediately replaced

PRAB01

Code	Description	Mod.	Info
PRAB01	Programmer for AVEbus devices		

PROGRAMMING THE DEVICES USING PRAB01

Radio systems

The growing demand for expanding electrical systems in homes and in the tertiary sector to install new controls or add automation functions often means having to undertake masonry work, with all its inconveniences. Thanks to a series of radio-connected devices the electrical system can be modified to introduce all functionalities which modern living increasingly requires, with the possibility to control them from any fixed or mobile position. This can be done whilst avoiding the need to modify the building's structure.

The need to insert a new control for an existing light source can be solved using the R1R receiver. Thanks to the output with a potential-free exchange contact, it can be installed in place of a 2-way switch and controlled via radio, by a AF940R remote control or a T4R transmitter as shown in the picture.

The R1R receiver communicates with all the transmitter devices of the AVE radio range, burglar alarm systems and volumetric and perimeter detectors. This allows the replication of the alarm coming from the control panel or from a single detector to one's liking, for example on the opening of a door or the act of a person walking through a protected area.

| AF926 | AF979R-DB | AF968R-DB | AF913R-DB | AF941R AF940R | R1R |

REMOTE CONTROL
Black push-button remote control in step by step mode

2-way switch

Radio receiver

PUSH BUTTON for local control in step by step mode
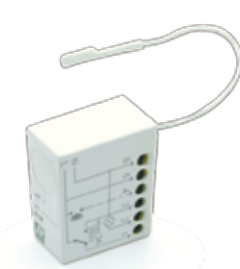
4-CHANNEL TRANSMITTER
4 channels, inputs 3 and 4 remote control in step by step mode
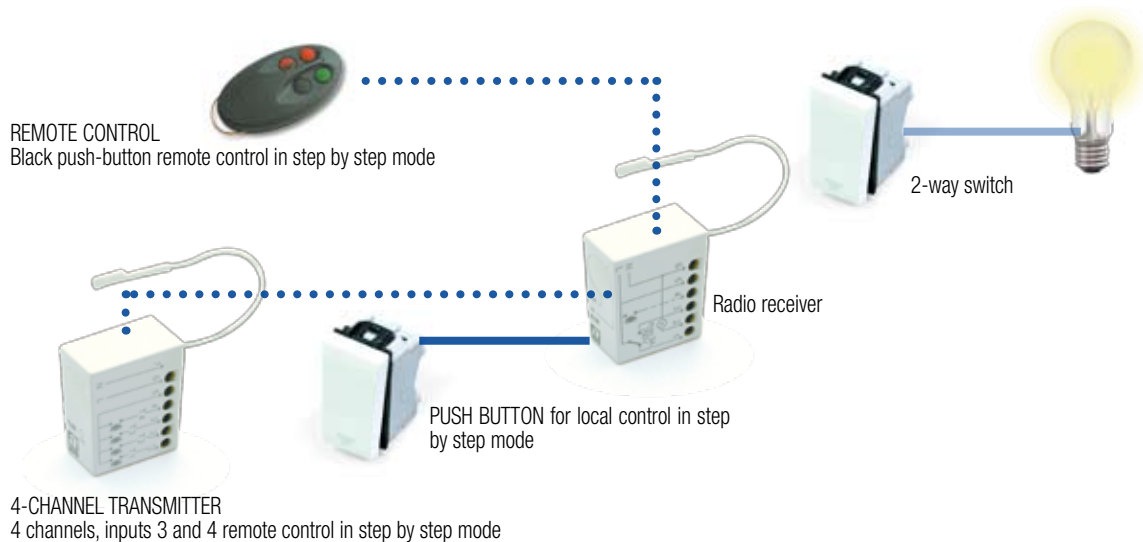
The RT1R receiver for motor control allows the radio-controlled ascent and descent of a roller shutter or curtain by sending the command signal by the TR4 transmitter or the AF940R remote control. The picture below shows a mixed application: control of two light sources and one roller shutter.

TX4

RT1R
ASCEND
DESCEND

R1R

R1R

1
2
3
4
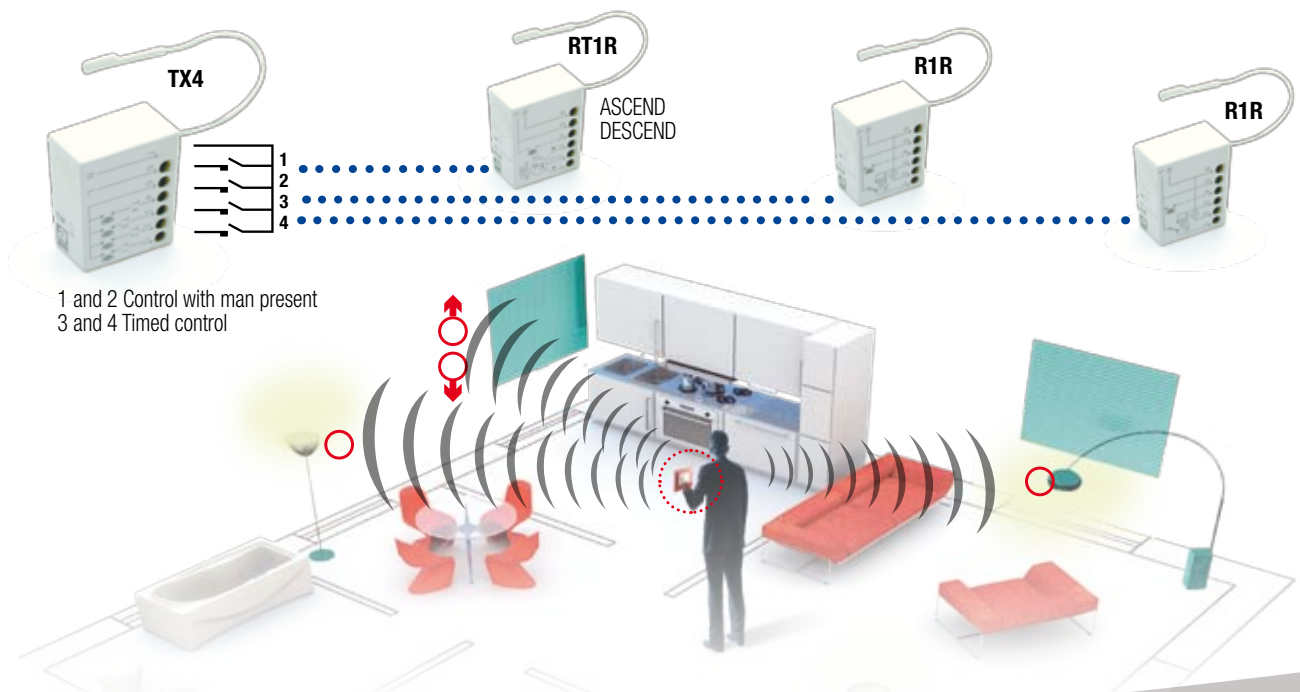
1 and 2 Control with man present
3 and 4 Timed control

104

Code	Description	Mod.	Info

T4R

4-channel transmitter. It allows the transmission of 4 radio commands to R1R and RT1R receivers.
• Power supply 230Vac
• Monofrequency radio transmission (433 Mhz)
• Commands that can be sent to the R1R receiver:
    -Input 1: ON+OFF (command with man present)
    -Input 2: ON+OFF (command with man present)
    -Input 3: Step by step or timed
    -Input 4: Step by step or timed
• Commands that can be sent to the RT1R receiver:
    -Input 1: Descend ON+OFF (command with man present)
    -Input 2: Ascend ON+OFF (command with man present)
    -Input 3: Descend in timed mode
    -Input 4: Ascend in timed mode
• Can be installed on a DR7225 blank cover of the Domus44, VL7204 and Life44 series as well as VT7204 of Allumia series or in a junction box
• Dimensions: 40x18x33
• Operating temperature: from -20° to 55°
• Range: 100 m in open air and 20m inside buildings

T4R

R1R

1-channel radio receiver. Thanks to the output with a potential-free changeover contact, it can be installed in place of a normal two-way switch and controlled via radio. It can be used to broaden the normal light points in radio mode. It communicates with the T4R transmitter carrying out the command received. In addition, it communicates with all the transmitting devices of the AVE radio burglar system range (remote controls, keyboards, detectors and control panels).
• Power supply 230Vac
• Monofrequency radio transmission (433 Mhz)
• Local control (step by step) via external button
• Programming via button on board
• Possibility to programme execution of command as:
    - ON+OFF (command with man present)
    - Step by step
    - Timed
• Can be installed on a DR7225 blank cover of the Domus44, VL7204 of Life44 series as well as VT7204 of Allumia series or in a junction box
• Contact range: 1000W/500VA to 230Vac
• Dimensions: 40x18x33
• Operating temperature: from -20° to 55°
• Range: 100 m in open air and 20m inside buildings

R1R

RT1R

1-channel radio receiver for control of roller shutter or curtain motor.
Output with 2 interrupted phase interlocked contacts. Communication with the T4R transmitter carrying out the commands received. In addition, communication with all transmitter devices from the AVE radio burglar alarm system range (remote controls, keyboards, detectors and control panels).
• Power supply 230Vac
• Monofrequency radio transmission (433 Mhz)
• Local control for sequential ascend/descend activation with man present
• Programming via button on board
• Possibility to programme the fulfilment of the ascend and descend command in a timed mode or in ON+OFF mode (command with man present)
• Can be installed on a DR7225 blank cover of the Domus44, VL7204 of Life44 series as well as VT7204 of Allumia series or in a junction box
• Contact range: 1000W/500VA to 230Vac
• Dimensions: 40x18x33
• Operating temperature: from -20° to 55°
• Range: 100 m in open air and 20m inside buildings

RT1R

INSTALLATION EXAMPLE

The transmitter or receiver module can be housed in a special blank end cap of the Domus44, Life44, Allumia or Touch series and fixed on the corresponding frame.
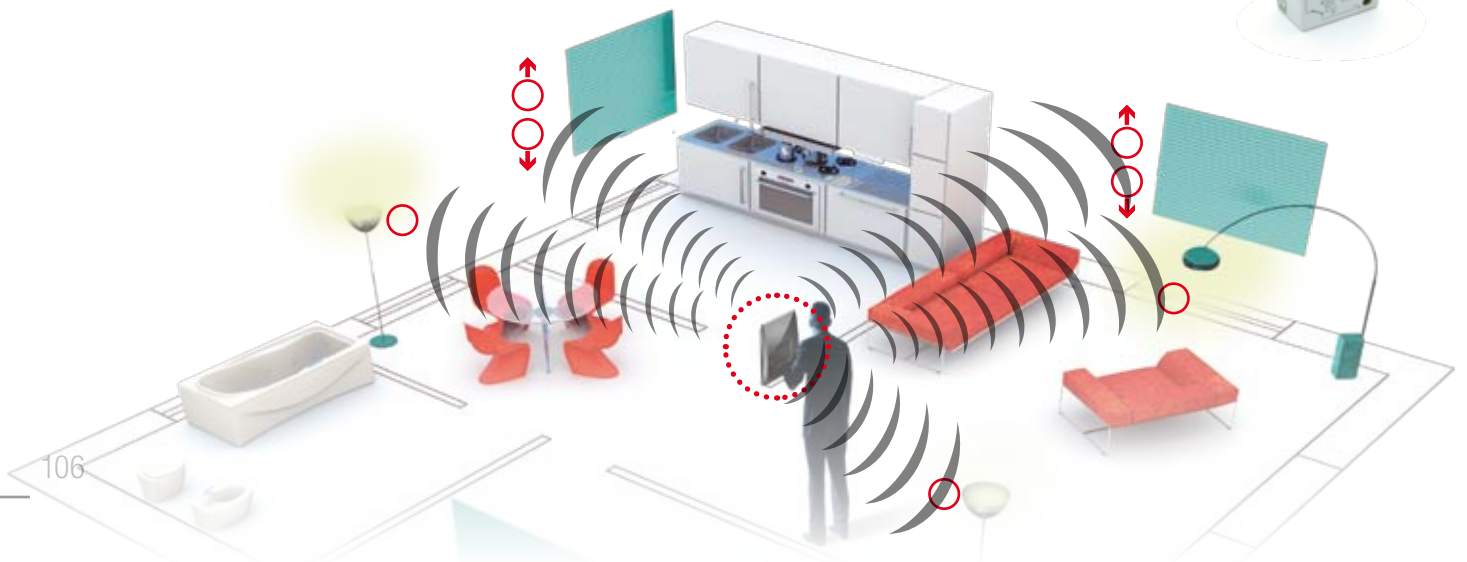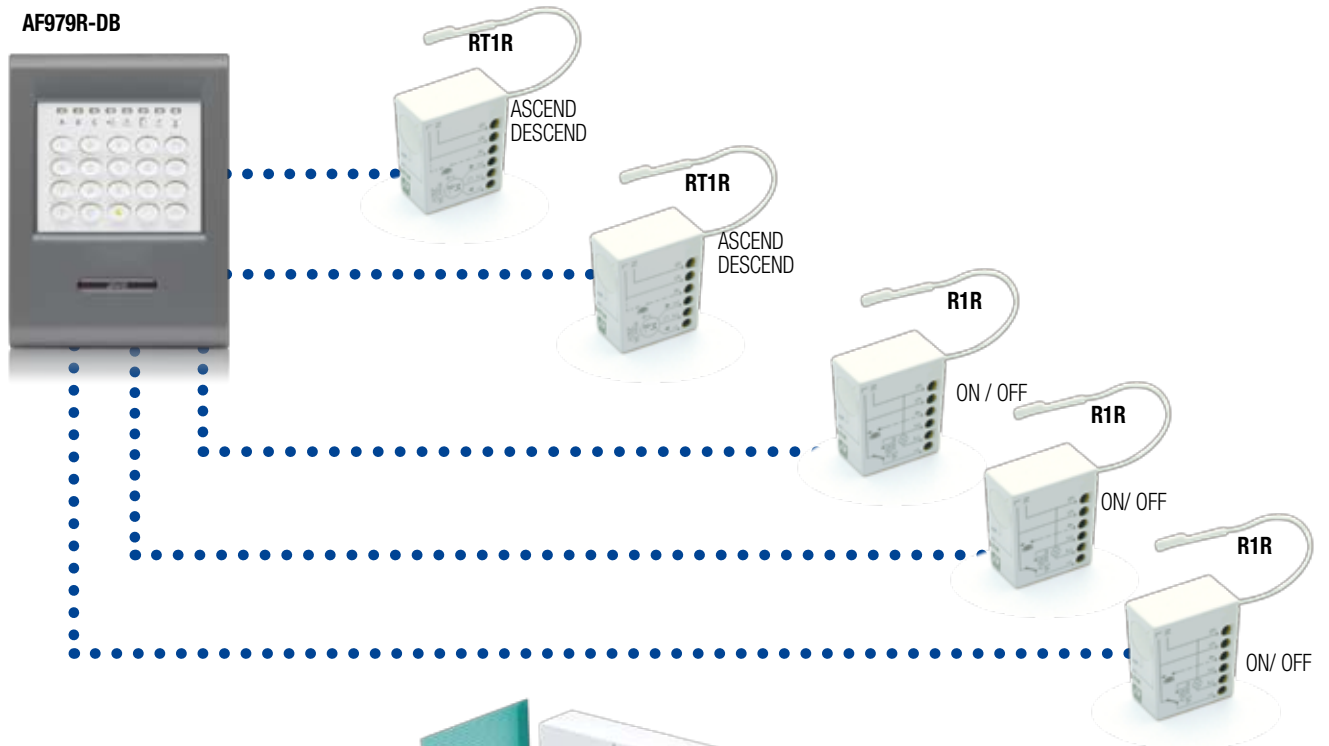
Radio systems

After installing the radio anti-intrusion control panel, the receivers can be controlled remotely as well. It is possible to call the control panel from a remote telephone to activate the receivers. This offers the possibility to control the different electric loads installed in the house by remote control..

RT1R

R1R
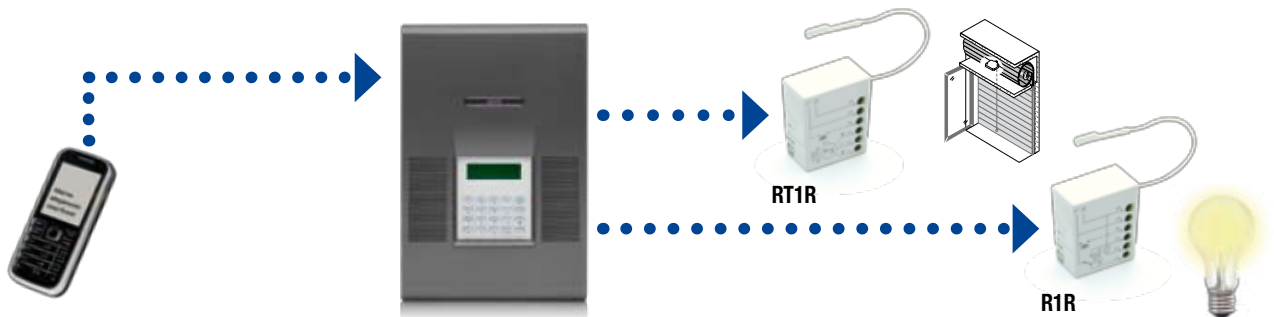
Should it be necessary to control a certain number of motors and/or light sources, it is possible to use the AF979R-DB keyboard, which in addition to controlling the burglar alarm system, also allows the control of various receivers, identifying them with a numeric code assigned in the programming phase.

AF979R-DB

RT1R
ASCEND
DESCEND

RT1R
ASCEND
DESCEND

R1R
ON / OFF

R1R
ON/ OFF

R1R
ON/ OFF

Code	Description	Mod.	Info
T9R	Nine push-button remote control for radio system. It allows to control radio burglar alarm control panels and radio receivers. Dimensions: 41x41x10 mm		
TRS1	Desktop support for T9R remote control.		
TRS2	Desktop and wall support for T9R remote control. Can also be installed on a wall by magnetic coupling TRS2M		
TRS2M	Magnetic coupling for installation of item TRS2 to the wall.		

T9R

T9R+TRS1

T9R+TRS2

TRS2M

INSTALLATION EXAMPLE

The remote control T9R allows the control of 9 radio receivers. In addition, by a simple programming process it can be used to control a radio burglar alarm control panel by push-buttons 1, 2 and 3 and control 6 radio receivers using the other push-buttons, as shown in the picture.

The burglar alarm control panel and the electric loads can then be controlled just with one single remote control.

ON

OFF

A+B

Command for actuators
R1R - RT1R (max 6)
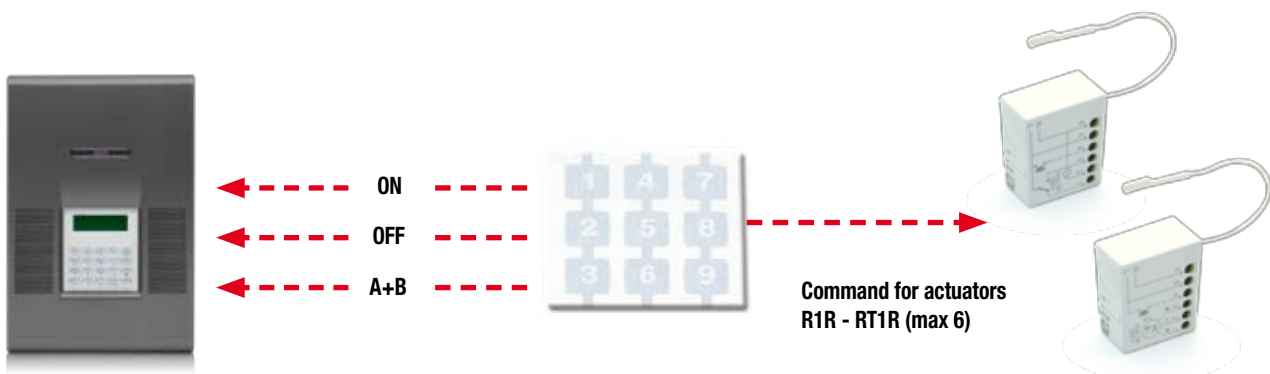
Sound diffusion

The 44..DS02 device is a stereo volume control and an impedance matching device for loudspeakers made by means of an audio transformer. It allows the simultaneous control of the volume of a pair of 8 ohm (R and L channels) loudspeakers as the standard loudspeakers of an Hi-Fi system or additional loudspeakers for the rooms of a house (i.e. AVE 44..AP01 loudspeakers). Adjusting a pair of loudspeakers does not affect the volume of other pairs of loudspeakers installed in the same system. The system can be prepared to receive several loudspeakers and the corresponding volume control. Through this device a single-channel multi-room system can be installed with no need for a sound system control panel. It is also particularly suitable for sound diffusion and regulation in different rooms to create a pleasant atmosphere at a reasonable price. The input impedance value of the control can be set to 40 Ohm or 80 Ohm by the jumper and using the corresponding output terminals. It is also possible to change the maximum number of controls which can be connected to each channel and therefore the power required by each single control.

Technical data
• Enclosure: 3 S44 mod.
• 6-position audio/stereo volume control: Off, volume control 1 – 2 – 3 – 4 – 5.
• Selectable input impedance 80 or 40 Ohms, output impedance for loudspeaker from 8 Ohms.
• Power of connectable amplifiers: from 30W to 80W on 4 Ohms or from 30W to 40W on 8 Ohms.
• Maximum number of connectable amplifiers (see table below):
- In case of amplifiers with 4 Ohms minimum impedance and prearranged for 80 Ohms (of each single control) 20 volume controls for a total number of 40 loudspeakers can be connected. If prearranged for 40 Ohms, 10 controls can be connected (for a total number of 20 loudspeakers).
- In case of amplifiers with 8 Ohms minimum impedance and prearranged for 80 Ohms (of each single control) 10 volume controls, for a total number of 20 loudspeakers, can be connected. If prearranged for 40 Ohms, 5 controls can be connected (for a total number of 10 loudspeakers).
• Audio-type transformers with broad frequency response and controlled impedance even at low frequency.

TERMINAL BLOCK AND JUMPER

Jumper for presetting the impedance value of control (40 Ohms or 80 Ohms)

ORDER OF INSTALLATION

BL02P flush-mounting box
44A33 Standard frame S44
441AP01 Loudspeaker
44P933.. Cover plate with removable frame
Inner-frame supplied with loudspeaker
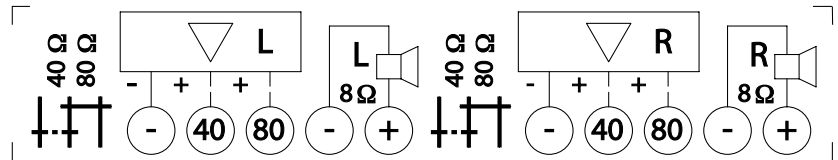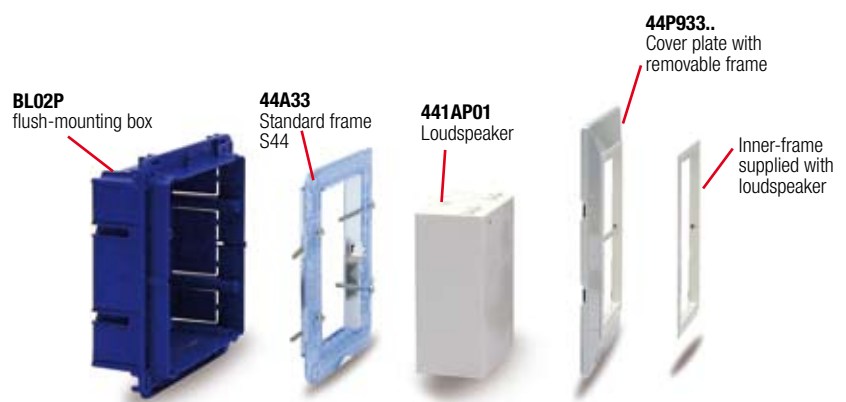
Use the 6 module (3+3) plate (Zama / Personal or Vera) with one of the frames supplied with the loudspeaker after removing the original frame with central crossbar.

AMPLIFIER			CONTROL	
Output impedance	Power [W]	MAX no. of loudspeakers per channel	Position J1	Power (W) per loudspeaker
8 Ohm	30 35 40	5	40 Ohm	6 7 8
	30 35 40	10	80 Ohm	3 3,5 4
4 Ohm	30 40 60 80	10	40 Ohm	3 4 6 8
	30 40 60 80	20	80 Ohm	1,5 2 3 4

Note: As already mentioned, the 44..DS02 device is also an impedance matching device which prevents that total impedance connected to the amplifier output line is lower than the minimum allowed value. The direct connection of the amplifier to the output lines without a volume control of one pair of loudspeakers has to be avoided to prevent overloading of the amplifier and excessive volume of the amplifiers which were connected directly. For a fair distribution of sound in all the rooms and in order to avoid overloading of the amplifier each pair of loudspeakers must be equipped with its own sound control (even a pair of standard loudspeakers of an Hi-Fi system).

441AP01

442AP01

441DS01

442DS01

443DS01

441DS02

442DS02

443DS02

Code	Description	Mod.	Info
441AP01	Loudspeaker. Designed to be installed in 44A33 frame and BL02P flush-mounting box. To complete with System 44 plates. • Impedance: 8 Ohms • Power: 5 W rms • Protection against overloading and limit signalled by LED • Supplied with two RAL 9010 white inner frames for use with 6 mod. (3+3) plates. One inner frames for Zama/Personal 44 (44P933.. – 44P033..) plates and one for Vera 44 plates (44PV33.. – 44PA33.. – 44PL33..). The inner frames must be mounted onto the corresponding plate after removing the original inner frames with central crossbar. • Domus Touch series.	6 (3+3) - S44	
442AP01	Loudspeaker. Life Touch as above. • Supplied with polished dark grey inner frames for use with 6 mod. (3+3) plates. One inner frames for Zama/Personal 44 (44P933.. – 44P033..) plates and one for Vera 44 plates (44PV33.. – 44PA33.. – 44PL33..). The inner frames must be mounted onto the corresponding plate after removing the original inner frames with central crossbar.	6 (3+3) - S44	
44CR33CR/AP	Chrome-coloured spare inner frames for use with Zama and Personal 44 (44P033.. – 44P933..) plates 6 (3+3) with loudspeakers 441AP01 and 442AP01.		
44CRV33CR/AP	Chrome-coloured spare inner frames for use with Vera 44 (44PV33.. – 44PA33..) plates 6 (3+3) with loudspeakers 441AP01 and 442AP01.		
441DS01	Mono volume control for loudspeakers. Allows volume control of a single loudspeaker (channel R or channel L) without affecting the volume of other loudspeakers installed in the same system. 6 position control OFF – 1 – 2 – 3 – 4 – 5 Domus Touch series.	2 - S44	
442DS01	Life Touch series as above.		
443DS01	Allumia series as above.		
441DS02	Stereo volume control for loudspeakers. Allows simultaneous volume control of a pair of loudspeakers (channel R or channel L) without affecting the volume of other pairs of loudspeakers installed in the same system. 6 position control OFF – 1 – 2 – 3 – 4 – 5. Supplied mounted on frame. Domus Touch series.	3 - S44	
442DS02	Life Touch series as above.		
443DS02	Allumia series as above.		
ABTTINT01	Interface for connection of AVE bus to Tutondo sound diffusion systems with TS02-ENG. • AVEbus input • RS232 output for Tutondo systems • Possibility to select the sound source for each zone from Touch Screen and adjust volumes and tones. Housed in an elegant desktop enclosure		
441TT	Adapter for Tutondo control modules. Domus Touch series.	2 - S44	
442TT	Life Touch series as above.		

INSTALLATION EXAMPLE

Amplifier

441DS02

441DS02

441AP01

441AP01
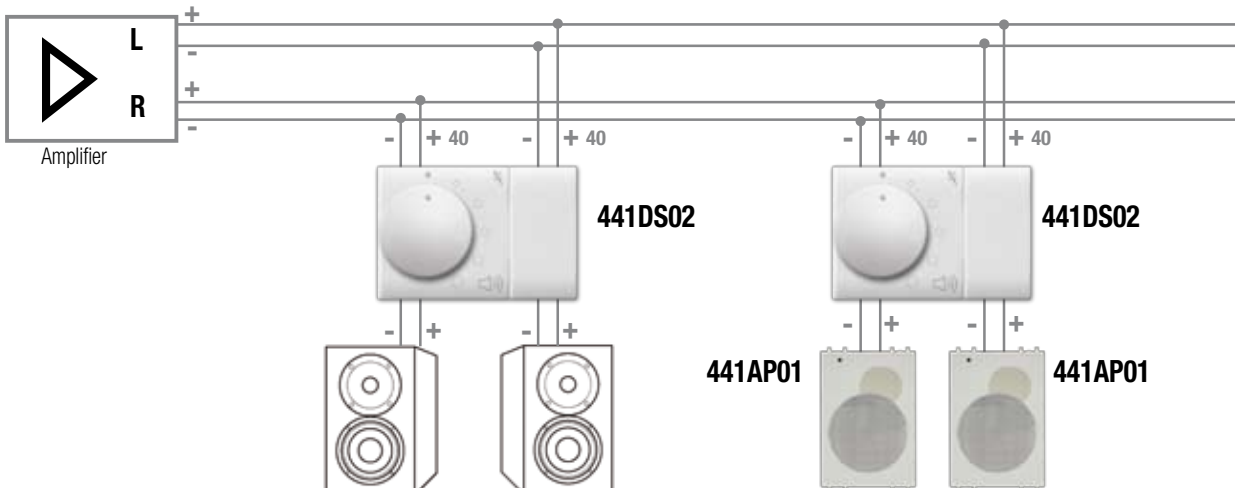
Anti-Intrusion Burglar Alarm Systems

AF998EXP-ENG

AF998EXP-ENG is a fully programmable and expandable control unit. It is equipped with 8 basic inputs expandable to 16 by connecting the AFEX81 expansion board to the control unit. Two AFEX81-RE remote expansion modules can also be connected by bus to the control unit in order to increase to 32 the total number of inputs which can be managed by the system. To further increase the number of inputs, the AF907RR radio receiver can be connected on the bus to have 64 radio inputs in addition to the 32 wire inputs for a total number of 96. Similarly, the 8 built-in outputs can be increased to 32 by connecting three AFEX8U remote expansion modules by bus. The inputs can be grouped into 8 individually programmable groups (or areas). The control unit can manage up to 8 AF983 keypads and 64 programmable access codes. The keypads and codes can be associated with one or more groups of inputs so that the system can be managed with pro-

grammable levels of access to the various zones.
The control unit is supplied with a standard factory programming allowing it to be used with most systems.
The system programming can be changed for customization purposes by the keyboard or a special programme installed on PC, connected to the RS232 serial port on the control unit by the AFPC01 cable.
The AF899B board (modem/digital telephone dialler) enables the alarms to be transmitted through the switched telephone line in digital format. Finally, by installing the AF899SV4 voice synthesizer board, alarms may also be transmitted in voice format. By integrating the HAYES module to the AF988B board, remote management of the system is possible. The touch screen can also be connected to the control unit to display the room map in order to control all the areas of the system and, if an alarm occurs, the area

where the alarm has started is promptly signalled by flashing. In addition, by means of a virtual keyboard displayed on the screen, the touch screen allows to connect, disconnect and partially connect the alarm system and ask for a report of all the detected alarms.

Thanks to its flexibility, modularity and to the range of peripheral units, the AF998EXP-ENG control unit is the ideal solution for advanced residential systems, average industrial systems and for all situations with particular access requirements.

POSSIBILITA' D'INSTALLAZIONE

AF968R-DB
AF913R-DB
AF969R-DB
AF963
AF963
AF53900
AF907RR
AF45343
AF339
AF442044
AF339-T
AF998EXP-ENG
TS03B
AF983
RS485 line
AF45380
AFEX8I-RE
AF963
AF962

AF998EXP-ENG

AF983

AF45380

AFEX8I

AFEX8I-RE

AFEX8U

AFGSM02

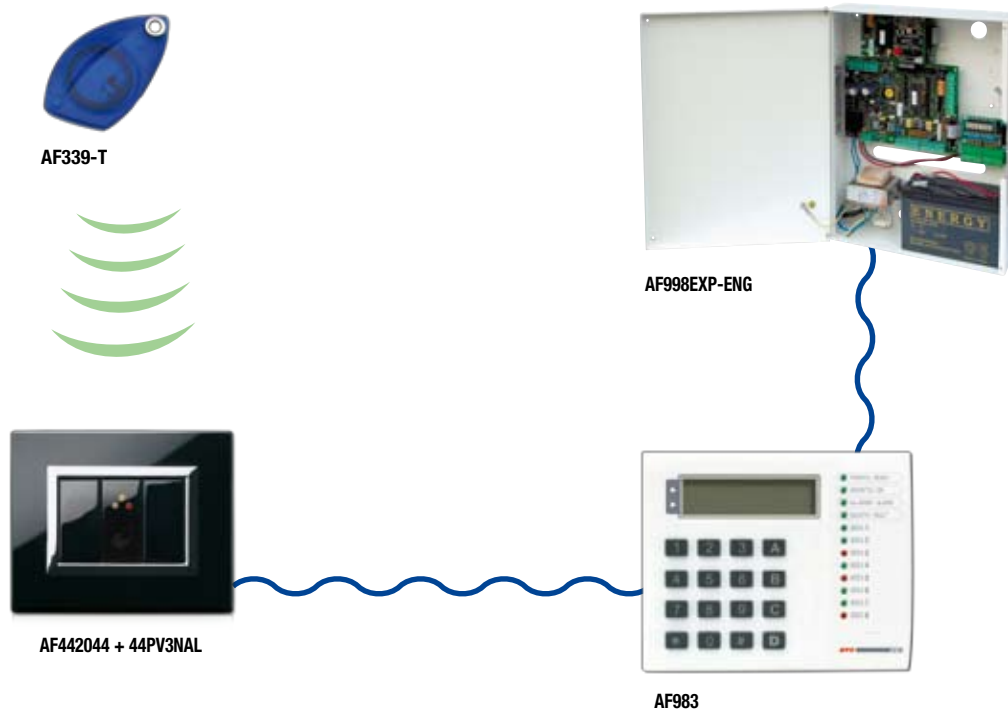| Code	Description	Mod.	Info
AF998EXP-ENG	Wired programmable and expandable burglar alarm control unit with 8 inputs - 8 base programmable inputs - Possibility of expanding to 16 inputs by connecting the AFEX81 board to the control unit. - Possibility of expanding to 32 inputs with no. 2 remote modules code AFEX81-RE with 8 inputs each - Possibility of expanding to 96 inputs with 64 radio inputs using the AF907RR receiver. - 8 base programmable outputs. - Possibility of expanding to 32 outputs with no. 3 remote modules code AFEX8U with 8 outputs each. - Possibility of managing up to 8 independent areas. - Up to 8 keyboards (AF983 – AF45380) or touch screen devices and 8 decoders. **Note:** At least 1 AF983 keyboard must be present even if touch screen devices are used. - Storage of last 100 events. - It can be connected to PC by the RS232 serial port for programming purposes. - Remote controlled by the special AF899B board (and HAYES modem). - To complete with the AF912 battery and at least one AF983 keyboard		
AF983	LCD keyboard for AF998EXP-ENG – AF948 and AF948-C control unit. For system management operations. Housed in an AVE module (102x125) for flush-mounted or wall-mounted installations.		
AF45380	Keyboard for AF948, AF948-C, AF998EXP-ENG control units. Allows to connect, disconnect and partially connect the system. Flush-mounting or wall-mounted installations (with 45SA03 or 45SY3 box) No. 3 leds for area identification	3 S45	
AFEX8I	Expansion module with 8 inputs. Connected to the control unit by a special cable, it allows expansion to 16 inputs.		
AFPC01	Cable for connecting the AF998EXP-ENG control unit to a PC for local programming operations by the AF998SW programme.		
AF998SW	AF998EXP-ENG Software for control unit programming and remote assistance.		
AFEX8I-RE	Remote expansion module with 8 inputs. Connected to the control unit from a remote station through 3-wire connection, it allows the input expansion. A maximum of 2 remote modules can be connected to the system.		
AFEX8U	Remote expansion module with 8 outputs. Connected to the control unit from a remote station through 3-wire connection, it allows the output expansion. A maximum of 3 modules can be connected to the system.		
AF907RR	Radio receiver. It allows connection of radio range detectors.		
AF899B	Bidirectional digital telephone dialler PSTN to be connected to the control unit by special cable. Note: installed in a AF998EXP-ENG control unit the dialler can only be used with EPROMs 3.1 or following versions.		
AF899SV4	Voice synthesizer board for AF899B. It enables alarm transmission in voice mode.		
AFGSM02	GSM module for AF899B telephone dialler. Connected to the AF899B board, enables transmitting the alarms of the AF998EXP-ENG control unit on GSM line. A bidirectional module, it can be called from a remote telephone for control unit connection and disconnection and programmable outputs control. Supplied with special monopole antenna to be installed outside the metal enclosure of the AF998EXP-ENG control unit.		
AF128	Wired programmable and expandable burglar alarm control unit with 8 inputs - Base features as for AF998EXP-ENG - Possibility of expanding to 16 inputs by the AFEX8I board housed in the control unit. - Possibility of expanding to 128 inputs with no. 14 modules code AFEX8I-RE-RE with 8 inputs each - Possibility of expanding to 128 outputs with no. 15 modules code AFEX8U - Can be connected to Ave touch screen devices. - Multi-system management (up to 8 single systems) - **Available on demand (for further information contact AVE after-sales service)**		
TSINT01	Interface for touch screen device. Allows connection of AVE touch screens to the AF998EXP-ENG control unit.		

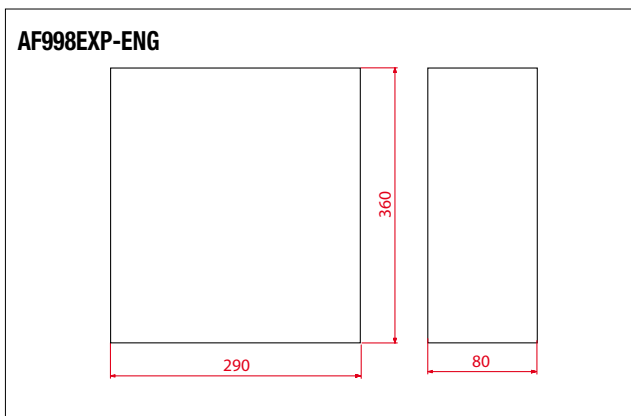# Anti-Intrusion Burglar Alarm Systems

Transponder activator

AVE series can be integrated with the Burglar Alarm System.

It is possible to activate, de-activate and partially activate the system through the transponder key AF339-T and the corresponding readers embedded in 1 System44 module (AF442044, AF441044 and AF443044) or in 1 System45 module (AF45344) to be completed with plates from AVE selection

POSSIBILITY OF INSTALLATION

AF339-T

AF998EXP-ENG

AF442044 + 44PV3NAL

AF983

OVERALL DIMENSIONS

AF998EXP-ENG

360

290

80

Expandable systems

AF339

AF339-T

AF45343   **AF45344**

AF441043   **AF441044**

AF442043   **AF442044**

AF443043   **AF443044**

AF983

Code	Description	Mod.	Info
AF339-T	Transponder key. Operates with AF45344, AF441044, AF442044, , AF443044, AF442TC44 readers.		
AF339	Electronic proximity key. Comunicates with readers AF45343, AF441043,AF442043, AF443043.		
AF45343	Decoder for AF339 electronic key. No. 3 leds for identification of system areas – Noir series	1 - S45	
AF441043	Decoder for AF339 electronic key. No. 3 leds for identification of system areas – Domus Touch series	1 - S44	
AF442043	Decoder for AF339 electronic key. No. 3 leds for indications of system area – Life Touch series	1 - S44	
AF443043	Decoder for AF339 electronic key. No. 3 leds for indications of system area – Allumia Touch series	1 - S44	
AF45344	Transponder key reader. Enables control of AF998EXP-ENG control unit No. 3 LEDS for indications of system's areas. Noir series	1 - S45	
AF441044	Transponder key reader. Enables control of AF998EXP-ENG control unit. No. 3 LEDS for identification of system areas. S44 Domus Touch series	1 - S44	
AF442044	Transponder key reader. Enables control of AF998EXP-ENG control unit. No. 3 LEDS for identification of system areas. S44 Life Touch series	1 - S44	
AF443044	Transponder key reader. Enables control of AF998EXP-ENG control unit. No. 3 LEDS for identification of system areas. S44 Allumia Touch series	1 - S44	
AF983	LCD keyboard for AF998EXP-ENG control unit housed in AVE module (102x125) for flush-mounting or wall-mounting installations.		

MEMBER OF:

ANIE CEI AEI

Za dodatne informacije posetite sajtove

www.ave.it
www.avetouch.it

posetite sajt sistema kućne automatike
www.domoticaplus.it

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