SIEMENS

6333

HOTEL SOLUTION™

Chipcard holder with doorbell speaker

HCH3.2/..

Chipcard holder to register room occupancy status

- **Registers access code on chipcard**
- **Transfers access code to room controller**
- **Membrane switches for signals from hotel room**
- **Built-in optical display of messages from hotel room**
- **Messages indicated by LEDs above imprinted symbols**
- **Illuminated card slot for guidance when entering hotel room**
- **Built-in speaker for 3-tone chimes (doorbell feature)**

Application

The HCH3.2 chipcard holder is used in conjunction with the HRC3.1 and HRC3.2 room controllers. Guest and hotel-staff access codes are read by the HCH3.2 chipcard holder and transmitted to the HRC3.1/HRC3.2 room controller for access control. The HRC3.1/ HRC3.2 room controller activates the pre-programmed occupancy-dependent room functions in the hotel room in accordance with the room occupancy status (guest(s) in room, hotel staff in room, or room empty).

Function

The HCH3.2 chipcard holder communicates with the HRC3.1/HRC3.2 room controller via a serial port, performing the following functions:

- Reads the access code on a chipcard
- After reading it, transmits the access code to HRC3.1/HRC3.2 room controller
- Activates the functions programmed in the HRC3.1/HRC3.2 room controller based on the access code concerned (guest code, hotel staff code, invalid code).
- Transmits the membrane switch signal for the selected message option
- Displays signals from the HRC3.1/HRC3.2 room controller with illuminated LEDs above the imprinted symbols
- Control of the illumination of the slot via the HRC3.1/HRC3.2 room controller
- Hotel-room doorbell feature via inbuilt loudspeaker (8 ohms, 2 W) for 3-tone chimes
- Volume adjustable by potentiometer (card holder must be dismounted for access)
- Kind of chime can be set (tone 1 / tone 2 / tone 3) with an application parameter in the room controller

Types

HCH3.2/BB	Chipcard holder for Bticino Living cover plate range
HCH3.2/BW	Chipcard holder for Bticino Light cover plate range
HCH3.2/VB	Chipcard holder for Vimar Idea cover plate range
HCH3.2/VW	Chipcard holder for Vimar Plana or Ikon cover plate range

Ordering

When ordering, please specify the quantity, product name and type code:

Example **30 Chipcard holders HCH3.2/BB**

The following items depend on the desired overall program and installation type and must be ordered separately from the corresponding frame supplier:

- Flush-mounted or cavity wall box for integration.
- Cover frame of the corresponding supplier with desired surface.

Compatibility

Device	Type	Data sheet
Room controller	**HRC3.1**	N6313
Room controller	**HRC3.2**	N6314
Chipcard holder on same room bus	**HCH3.2/..**	N6333
Chipcard reader on same room bus	**HCR3.2/..**	N6332
Chipcard encoder	**HCW3.2**	N6340
Room unit on same room bus	**HTC3.2/..**	N6320

Mechanical design

Construction

The chipcard holder consists of:

- Component assembly (carrier, printed circuit board, four LEDs, membrane switches, chipcard reader-unit, terminal block and DIP switch)
- Base frame
  - Bticino Living/Type L4703 for HCH3.2/BB
  - Bticino Light/Type N4703 for HCH3.2/BW
  - Vimar Idea/Type 16713 for HCH3.2/VB
  - Vimar Plana or Ikon/Type 20613 for HCH3.2/VW

The component assembly is permanently glued into the base frame and cannot, therefore, be replaced.

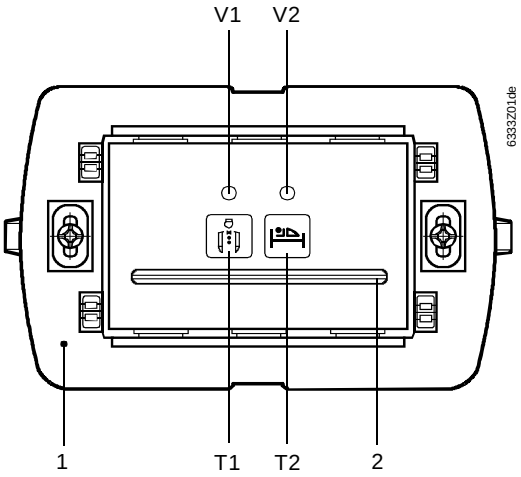
Display

Depending on the standard application configured in the HRC3.1/HRC3.2 room controller, the following room states can be displayed:

- Do not disturb
- SOS, Call for assistance, Room service

Operator controls, connections and display elements

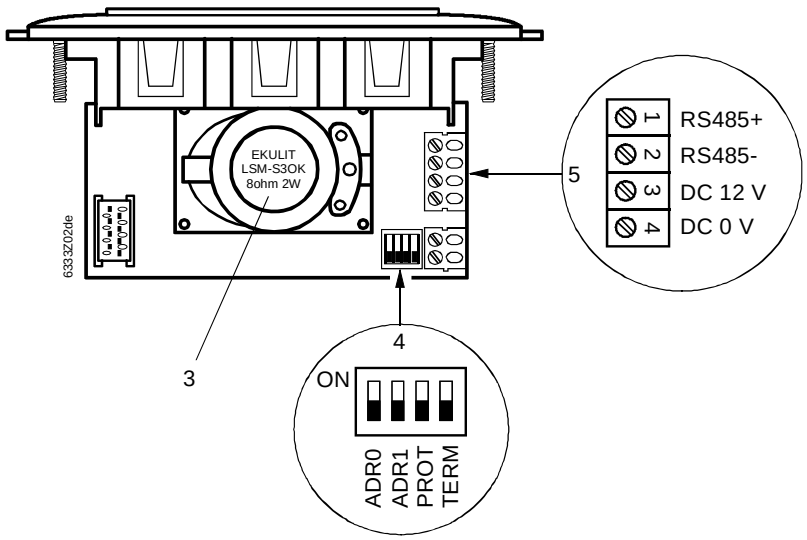
Front view



Key

1	Base frame with fixing screws • Bticino Living/Type L4703 for HCH3.2/BB • Bticino Light/Type N4703 for HCH3.2/BW • Vimar Idea/Type 16713 for HCH3.2/VB • Vimar Plana or Ikon/Type 20613 for HCH3.2/VW		
2	Card slot backlit with 3 green LEDs		
V1	Yellow LED		Room service call
V2	Yellow LED		Do not disturb
T1		Membrane switch	Activates room service call
T2		Membrane switch	Activates "Do not disturb"

Rear view



Key

3	Speaker	
4	DIP switches	• Bus address setting (ADR0, ADR1) • Protocol setting – PROT = 0, for HRC3.1/HRC3.2 room controller – PROT = 1, for HRC3.8 room controller • Control of RS485 bus termination resistance – TERM = 0, bus termination resistance disabled – TERM = 1, bus termination resistance enabled
5	Terminal block	• Connection to room controller

Important note

The bus termination resistance must be enabled on the last bus device only.

Engineering notes

Base frame

The room unit is designed for flush wall mounting in conjunction with base-frames and cover plates from various manufacturers:

- Bticino Living for HCH3.2/BB
- Bticino Light for HCH3.2/BW
- Vimar Idea for HCH3.2/VB
- Vimar Plana or Idea for HCH3.2/VW

Up to four chipcard holders may be connected to the same room bus.
The address is set with DIP switches on the back of the unit (see below).

Important note

The maximum permitted current associated with the supply voltage from the HRC3.1/HRC3.2 room controller must not be exceeded.
(For further information, see data sheet CM2N6313 and CM2N6314.)

Mounting instructions

- The HCH3.2/.. chipcard holder must be mounted in the entrance lobby of the hotel room at the same height as the light switch.
- Ensure that there is enough spare cable in the mounting box to allow operation of the address switches on the PCB.
- The device is intended for fixed installation in a dry, enclosed space.
- For installation in a 3-module mounting box, depth 50 mm.
- Must be mounted horizontally with the front plate vertical.
- Do not install AC 230 V devices in the same mounting box.
- Commissioning must be carried out by trained personnel only.
- Observe all local safety and installation regulations.

Commissioning

To operate several devices connected to the same room controller, set an address for each one. Only one device operates with the factory-set default.
The addresses of the room operator units are set by DIP switch on the back of these units.

Bus address	ADR0	ADR1
0x3C	OFF	OFF
0x3D	ON	OFF
0x3E	OFF	ON
0x3F	ON	ON

Note

In the standard application with only one reader, address 0x3C is used for the HCH3.2 chipcard holder. This address is preset by the manufacturer (both ADR switches to OFF).

3-tone chime

The volume for the 3-tone chimes can only be set by dismounting the unit, and must be set by qualified personnel only. The kind of chime (tone 1 / tone 2 / tone 3) is determined by a parameter in the room controller.

Operating notes

Alarm messages

Pattern	Description
All symbols OFF	No supply voltage to the HCH3.2 Possible causes: – Room controller off or faulty – Bus cable not correctly connected, or connection broken – Faulty HCH3.2
All symbols flashing (2 Hz)	No communication with the room controller Possible causes: – Wrong bus address set on HCH3.2 – Wrong bus address set in room controller – Bus cable not correctly connected, or connection broken – Room controller in "Stop" mode – Faulty RS485 interface

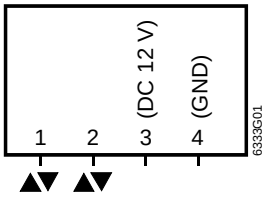
Technical data

Power supply (from HRC3..)	Operating voltage (SELV, PELV)	DC 9..0.15 V
	Current	45 mA max. (normal operation) 300 mA max. (door chimes active)
Chipcards	Type	Siemens SLE5542, SLE4442
	Format	86 mm x 54 mm x 0.76 mm
Membrane switches	Service life	100,000 switching operations
Bus interface	Type	RS485
	Transmission speed	4800 baud
	Bus voltage	SELV DC 12 V
Display	Luminous intensity of LEDs	1.8 mcd
Speaker for 3-tone chime	Power	Max. 2W
	Impedance	8 ohms
	Tone 1	660Hz
	Tone 2	550Hz
	Tone 3	440Hz
Ambient conditions	Normal operation	To IEC 721-3-3: Class 3K5
	Temperature	0...+50 °C
	Humidity	< 85 % rh
	Air pressure	Min. 700 hPa, equivalent to max. 3,000 m above sea level
	Transport	To IEC 721-3-2: Class 2K3
	Temperature	-25...+65 °C
	Humidity	< 95 % rh
	Air pressure	Min. 260 hPa, equivalent to max. 10,000 m above sea level
Industry standards		
Product safety	Automatic electrical controls for household and similar use	EN 60 730
Electromagnetic compatibility	Emitted interference in accordance with	EN 61000-6-3
	Interference immunity in accordance with	EN 61000-6-2
Housing protection standard	To EN 60 529	IP20
Protection class	To EN 60 730	III
CE conformity	Meets the requirements of:	
	EMC Directive	89/336/EEC
	Low-voltage directive	73/23/EEC
Environmental compatibility	Environmental product declaration CM2E6333en provides data on environmentally compatible product design and assessment (material composition, packaging, disposal)	ISO 14001 (environment) ISO 9001 (quality)
UL/CUL approval		UL/CUL 916
Installation	Suitable for flush mounting in rectangular flush-mounting box or rounded hollow wall box	3 modules
	HCH3.2/BB and HCH3.2/BW	Bticino 503E (angular),PS563N (round)
	HCH3.2/VB and HCH3.2/VW	Vimar V71613 (round), V71304 (angular)
Color	Front-plate label	RAL 9005 deep black

Dimensions	HCH3.2/BB – Bticino frame L4703	115 mm x 72 mm x 47 mm
	HCH3.2/BW – Bticino frame N4703	115 mm x 72 mm x 47 mm
	HCH3.2/VB – Vimar frame 16713	118 mm x 75 mm x 48 mm
	HCH3.2/VW – Vimar frame 20613	118 mm x 75 mm x 48 mm
	(without cover; and see dimension diagrams)	
Weight	Excluding packaging	0.085 kg
	With packaging	0.103 kg

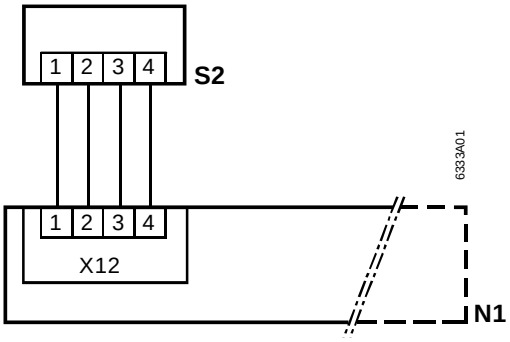
Connection diagrams

Connection terminals



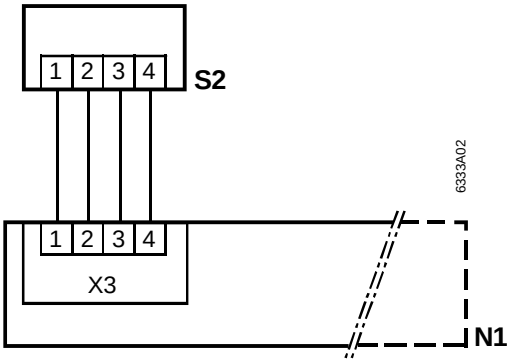
1 Serial port, RS485+
2 Serial port, RS-485 –
3 DC 12 V operating voltage
4 DC 0 V operating voltage

HCH3.2 connection diagram



S2 HCH3.2 chipcard holder
N1 HRC3.1 room controller

HCH3.2 connection diagram



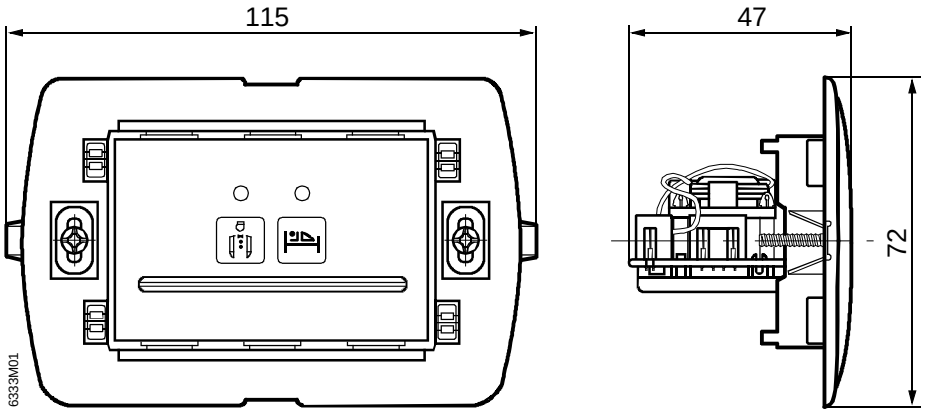
S2 HCH3.2 chipcard holder
N1 HRC3.2 room controller

Dimensions

HCH3.2/BB

Dimensions in mm

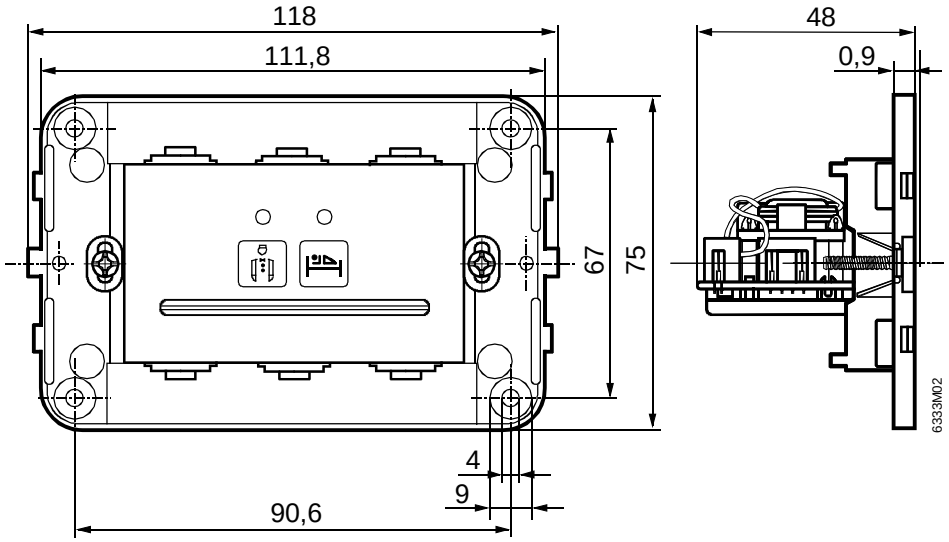
Diagram and dimensions of Bticino frame L4703.



HCH3.2/VB

Dimensions in mm

Diagram and dimensions of Vimar frame 16713.



Note

See the frame supplier documentation for dimensions of other frames and hole spacing (Bticino, Vimar).