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C e r t i f i c a t e

of

Constancy of Performance

Certificate No.: 0560-CPR-10219002
Issue: 08

In compliance with the procedure specified in RD_090, Telefication declares as designated Notified Body
for the European Construction Products Regulation, that the stated products, evaluated according Annex 1
of this certificate, are in conformity with Regulation (EU) No 305/2011,
based on the applicable Technical Standards and
Specifications as listed under Annex 2 of this Certificate.

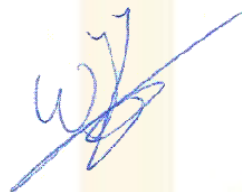|	
Product description:	**Digital Public Address and Emergency Sound System**
Trademark:	**See annex 3**
Family name:	**Praesideo**
Type designation:	**See annex 3**
Serial No:	**See annex 3**
Software release No:	**See annex 3**

Manufacturer:	**Bosch Security Systems B.V.**
Address:	**Torenallee 49**
City:	**5617 BA Eindhoven**
Country:	**Netherlands**

This certificate is granted to:

Name:	**Bosch Security Systems B.V.**
Address:	**Torenallee 49**
City:	**5617 BA Eindhoven**
Country:	**Netherlands**

This certificate is valid as long as the requirements laid down in the technical specification(s) listed in Annex II do
not change, and the product and the manufacturing conditions in the factory and the factory production control are
not modified significantly.

This certificate has THREE Annexes.
Zevenaar, 05 March 2015

CE

W.J.M. Jong
Manager Product Certification

PRODUCTS
RvA C 224

- Each product to which this Certificate of Constancy of Performance relates (see Annex 3 of this certificate), has been placed under the scope of the Construction Products Directive by EU Commission decision 96/577/EC and therefore falls under the Construction Products Regulation 305/2011 after July 1st 2013.

- There is a presumption of conformity with respect to the requirements as listed in Annex I of the Construction Products Directive and Construction Products Regulation 305/2011, when all applicable harmonised standards listed in the Official Journal of the EU are being applied.

- This certificate is part of the Assessment and Verification of Constancy of Performance system 1, as described in annex V of the Construction Products Regulation and made applicable by EU Commission decision 96/577/EC.

- The validity of this Certificate of Constancy of Performance is limited to products, which are equal to the one(s) assessed for this Certificate of Constancy of Performance (see Annex 3 of this certificate).

- When the manufacturer (or holder of this Certificate of Constancy of Performance) is placing the products on the European market, he is obliged to label the products with the prescribed CE logo and the Notified Body number of Telefication: 0560. The CE logo stands for conformity to all applicable directives. This Certificate of Constancy of Performance is limited to the Construction Products Regulation.

Remarks and observations

The following conditions are applicable:

The tested configuration of the Praesideo system is representative for comparable combinations of components as identified in annex 3 of this certificate. Each component may be installed multiple times into a Praesideo system. The installer is responsible for the correct selection of components and EN 54-16 compliance of the completely installed system. EN 54-16 compliance of the Praesideo system is only achieved if the installer fulfills all installer specific requirements as stated in the EN 54-16 compliance checklist in the installation and user instructions.

Certification of the Praesideo Digital Public Address and Emergency Sound System includes the cabinets (i.e. the enclosed 19" racks) in which the system components are mounted. It is allowed to use one or more cabinets, depending on the size of the Praesideo system. Within the same cabinet family different heights are allowed up to a maximum height that depends on the brand and type of an approved cabinet. The following cabinets have been approved for use with Praesideo:

• Rittal TS8 series, with lockable glass door, side panels, temperature controlled top fans and having a fixed frame with a maximum height of 42 HU or a lockable swing frame with a maximum height of 40 HU.
Only batteries as mentioned in the user manuals of the battery chargers are allowed to be used and must be placed on the ground plane of the cabinet, free from the walls.

• 20130073PRAESIDEO Schroff cabinet

• The power supply system ZDSO400E-AK3 can consist of: main power supply ZDSO-400-E, additional power supply ZDSOR-400-E, additional power supply ZDSOT-400-E, distribution panel PD-2U-x, battery circuit resistance measurer RMB-1.

Essential Characteristics of EN 54-16:	Clauses:	Performance:
Performance under fire condition	4, 5, 7, 10, 12, 16.5, 16.6, 16.7	Pass
Response delay (response time to fire)	7.1, 7.8, 12	Pass
	7.4	N/A
Operation reliability	4, 5, 6, 7, 8, 11, 12, 13, 14	Pass
	9	N/A
Durability of operational reliability Temperature resistance	16.4, 16.8	Pass
Durability of operational reliability Impact and vibration resistance	16.11, 16.12, 16.13	Pass
Durability of operational reliability Electrical stability	16.14, 16.15	Pass
Durability of operational reliability Humidity resistance	16.9, 16.10	Pass

Implemented optional functions with requirements (per clause of EN 54-16):

7.3	Audible warning
7.6.2	Manual silencing of the voice alarm condition
7.7.2	Manual reset of the voice alarm condition
7.8	Output to fire alarm devices
7.9	Voice alarm condition output
8.3	Indication of faults related to the transmission path to the CIE
8.4	Indication of fault related to voice alarm zones
10	Voice alarm manual control
11	Interface to external control device(s)
12	Emergency microphone(s)
13.14	Redundant power amplifiers

The battery mid-point monitor, model SD08 from Alpha Technologies Ltd., may be used with the PRS-48CH12 battery charger and mounted in the cabinet, but is excluded from certification.

The Cobranet Interface is only EN 54-16 compliant in combination with the Hirschmann Switch RSR20-0800M2M2T1UCCHPHH07.1.01.
The Hirschmann Switch may also be used to connect, within the cabinet, other EN54-16 compliant products as listed in annex 3.

There are five Praesideo systems possible:
* Praesideo 3.5 system based on network controller PRS-NCO-B and PRS-SW software version 3.5x (where x can be 0, 1, 2 or 3)
* Praesideo 3.6 system based on network controller PRS-NCO-B and PRS-SW software version 3.6y (where y can be 0 or 1)
* Praesideo 4.0 system based on network controller PRS-NCO3 and PRS-SW software version 4.0y (where y can be 0 or 1)
* Praesideo 4.1 system based on network controller PRS-NCO3 and PRS-SW software version 4.1
* Praesideo 4.3 system based on network controller PRS-NCO3 and PRS-SW software version 4.3

For proper operation with the Line Isolator System, consisting of the PM1-LISM6 master unit and slave devices PM1-LISS and PM1-LISD, the multi-channel interface PRS-16MCI must have hardware version HW 04/15 or newer.

Essential Characteristics of EN 54-4:	Clauses:	Performance:
Performance under fire condition	4, 5, 6	Pass
Operation reliability	4, 5, 6, 7, 8	Pass
Durability of operational reliability Temperature resistance	9.5	Pass
Durability of operational reliability vibration resistance	9.7, 9.8, 9.15	Pass
Durability of operational reliability Electrical stability	9.9 to 9.13	Pass
Durability of operational reliability Humidity resistance	9.6, 9.14	Pass

Documentation lodged for this Certificate of Constancy of Performance

Test Reports:

 - Telefication B.V.: 20114721801 Rev.1.00, 03 September 2012
 - CNPP: 100070, 23 July 2010
 - CNPP: 110019, 17 March 2011
 - Telefication B.V.: 20124320800 Ver.1.00, 29 January 2013
 - VdS GmbH: BMA 11111, 12 January 2012
 - Telefication B.V.: 20104096800 Rev.1.10, 03 September 2012
 - Telefication B.V.: 20134632800 Ver. 1.00, 06 March 2014
 - Telefication B.V.: 20134648800 Ver. 1.00, 28 March 2014
 - Telefication B.V.: 20144581800 Ver. 2.00, 12 February 2015

Product Documentation:

 - Assembly drawings
 - Bill of materials
 - Block diagram
 - Electric diagrams
 - Photos
 - User manual
 - Manufacturer's declarations

Technical Standards and Specifications

The product shows no non-compliances with:

 - EN 50130-4:   December, 1995
 - EN 50130-4/A1:   April, 1998
 - EN 50130-4/A2:   January, 2003
 - EN 54-16:   March, 2008
 - EN 54-4:   1997
 - EN 54-4:   A1, 2002
 - EN 54-4:   A2, 2006

Technical features and characteristics

The product includes the following features and characteristics:

 Voice Alarm Equipment
 - 100V loudspeaker outputs

The product as described in this certificate includes the following type designations:

- Product description: Digital Public Address and Emergency Sound System
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: Praesideo 3.5
- Software version: 3.5x (where x can be 0,1,2 or 3)

- Product description: Digital Public Address and Emergency Sound System
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: Praesideo 3.6
- Software version: 3.6y (where y can be 0 or 1)

- Product description: Digital Public Address and Emergency Sound System
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: Praesideo 4.0
- Software version: 4.0y (where y can be 0 or 1)

- Product description: Digital Public Address and Emergency Sound System
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: Praesideo 4.1
- Software version: 4.1

- Product description: Digital Public Address and Emergency Sound System
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: Praesideo 4.3
- Software version: 4.3

- Product description: 48 VDC Battery Charger
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-48CH12
- Hardware version: N/A
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: 48 VDC Battery Charger
- Trademark: PSD
- Family name: Praesideo
- Type Designation: PRS-48CHxx-DE (where xx can be 02, 05, 06 or 07)
- Hardware version: N/A
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Audio Expander
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: LBB4402/00
- Hardware version: 16/15
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Audio Expander Analogue
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-4AEX4
- Hardware version: 20/00
- Software version: 3.61 & 4.1 & 4.3

- Product description: Basic Amplifier 1 x 500 W
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-1B500
- Hardware version: 06/05 & 06/10 & 06/15
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Basic Amplifier 1 x 500 W
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-1B500-EU
- Hardware version: 06/05 & 06/10 & 06/15
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Basic Amplifier 2 x 250 W
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-2B250
- Hardware version: 06/05 & 06/10 & 06/15
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Basic Amplifier 2 x 250 W
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-2B250-EU
- Hardware version: 06/05 & 06/10 & 06/15
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Basic Amplifier 4 x 125 W
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-4B125
- Hardware version: 06/05 & 07/00 & 07/05
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Basic Amplifier 4 x 125 W
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-4B125-EU
- Hardware version: 06/05 & 07/00 & 07/05
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Basic Amplifier 8 x 60 W
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-8B060
- Hardware version: 06/05 & 07/05
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Basic Amplifier 8 x 60 W
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-8B060-EU
- Hardware version: 06/05 & 07/05
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Basic Call Station
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: LBB4430/00
- Hardware version: 06/15
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Call Stacker
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-CRF
- Hardware version: 01/10 & 06/10
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Call Station Interface
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-CSI
- Hardware version: 01/15 & 01/20 & 01/30
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Call Station Keypad
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: LBB4432/00
- Hardware version: 01/18 & 01/19
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Call Station Keypad Module
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-CSKPM
- Hardware version: 11/00
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Calll Station Module
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-CSM
- Hardware version: 11/00
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Cobranet Interface
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: LBB4404/00
- Hardware version: 03/10 & 03/15 & 03/20
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: EOL Supervision Board
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: LBB4443/00
- Hardware version: 01/05
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Fiber Interface
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-FIN
- Hardware version: 03/15
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Fiber Interface Non-Addressable
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-FINNA
- Hardware version: 03/15
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Fiber Interface Single-Mode
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-FINS
- Hardware version: 03/15
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: IP Audio Interface
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-1AIP1
- Hardware version: 2.0
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Line Supervision Set
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: LBB4442/00
- Hardware version: 01/10
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Loudspeaker DC blocking board
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PM1-LISD
- Hardware version: 01/00
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Loudspeaker Line Isolator System Master
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PM1-LISM6
- Hardware version: 01/00 & 01/05
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Loudspeaker Line Isolator with housing
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PM1-LISS
- Hardware version: 01/00
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: LSP Supervision Board
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: LBB4441/00
- Hardware version: 01/05
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Multichannel Interface
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-16MCI
- Hardware version: 04/10 & 04/15
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Network Controller
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-NCO3
- Hardware version: 30/00 & 30/10 & 30/15
- Software version: 4.0y & 4.1 & 4.3

- Product description: Network Controller
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-NCO-B
- Hardware version: 21/05 & 21/08
- Software version: 3.5x & 3.6y

- Product description: Network Splitter
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-NSP
- Hardware version: 03/15 & 03/20
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Numeric Keypad
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-CSNKP
- Hardware version: 01/18
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: OMNEO Interface
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-4OMI4
- Hardware version: 01/00
- Software version: 4.3

- Product description: Power Amplifier 1 x 500 W
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-1P500
- Hardware version: 06/05 & 06/10 & 06/15 & 06/20
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Power Amplifier 1 x 500 W
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-1P500-EU
- Hardware version: 06/10 & 06/15 & 06/20
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Power Amplifier 2 x 250 W
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-2P250
- Hardware version: 06/05 & 06/10 &06/15 & 06/20
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Power Amplifier 2 x 250 W
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-2P250-EU
- Hardware version: 06/10 & 06/15 & 06/20
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Power Amplifier 4 x 125 W
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-4P125
- Hardware version: 06/05 & 06/10 & 06/15
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Power Amplifier 4 x 125 W
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-4P125-EU
- Hardware version: 06/10 & 06/15
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Power Amplifier 8 x 60 W
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: LBB4428/00
- Hardware version: 04/05 & 05/05 & 06/00
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Power Amplifier 8 x 60 W
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: LBB4428/00-EU
- Hardware version: 05/05 & 06/00
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Power supply system with battery backup for Voice Alarm System
                            Praesideo
- Trademark: Merawex
- Family name: Praesideo
- Type Designation: ZDSO400E-AK3
- Hardware version: N/A
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Praesideo Software
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-SW
- Hardware version: N/A
- Software version: 3.5x (where x can be 0,1,2 or 3)

- Product description: Praesideo Software
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-SW
- Hardware version: N/A
- Software version: 3.6y (where y can be 0 or 1)

- Product description: Praesideo Software
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-SW
- Hardware version: N/A
- Software version: 4.0y (where y can be 0 or 1)

- Product description: Praesideo Software
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-SW
- Hardware version: N/A
- Software version: 4.1

- Product description: Praesideo Software
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-SW
- Hardware version: N/A
- Software version: 4.3

- Product description: Remote Call Station
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-CSR
- Hardware version: 01/15 & 01/20 & 01/30
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Remote Call Station Module
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PRS-CSRM
- Hardware version: 11/00
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: SPEC RCS Master
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PSP-D00039
- Hardware version: 03/15
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: SPEC RCS Slave
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: PSP-D00040
- Hardware version: 03/15
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3

- Product description: Supervision Control Board
- Trademark: BOSCH
- Family name: Praesideo
- Type Designation: LBB4440/00
- Hardware version: 01/05
- Software version: 3.5x & 3.6y & 4.0y & 4.1 & 4.3