



Certificate of  
constancy of performance  
**0560-CPR-10219002**  
**Issue: 11**

**Issued** 13 December 2019

**Replaces** 0560-CPR-10219002 / 10

**First issued** 31 March 2011

**Page** 1 of 10

In compliance with Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the construction product:

Product description:	<b>Public Address and Voice Alarm System</b>
Trademark:	<b>Bosch</b>
Type designation:	<b>Praesideo</b>
Conditions and essential characteristics:	See Annex 1
Variants:	See Annex 1

placed on the market under the name or trademark of:

Name of the manufacturer:	<b>Bosch Security Systems B.V.</b>
Address:	<b>Torenallee 49</b>
City:	<b>5617 BA EINDHOVEN</b>
Country:	<b>Netherlands</b>

and produced in the manufacturing plant(s):

Manufacturing plant:	<b>Bosch Security Systems B.V.</b>
Address:	<b>Torenallee 49</b>
City:	<b>5617 BA EINDHOVEN</b>
Country:	<b>Netherlands</b>

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standard(s):

**EN 54-16**  
**EN 54-4**  
**EN 54-4/A1**  
**EN 54-4/A2**

under system 1 for the performances set out in this certificate are applied and that the factory production control conducted by the manufacturer is assessed to ensure the **constancy of performance of the construction product**.

This certificate was first issued on 2011-03-31 and will remain valid as long as neither the harmonised standard, the construction product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body.

Ronald Karel  
Managing director

## 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. 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: TS, TS-IT, VX25 series
  - Schroff: 20130073 Praesideo
  - E.LAN: Diamond series
  - Knürr (Emerson): Miracel series
- 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 fires)	7.1, 7.8, 12	Pass
Operational reliability	4, 5, 6, 7, 8, 11, 12, 13, 14	Pass
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 or Ethernet switch PRA-ES8P2S.

The Hirschmann Switch may also be used to connect, within the cabinet, other EN 54-16 compliant products as listed in annex 3.

There are six Praesideo systems possible:

- \* Praesideo 3.5 system based on network controller PRS-NCOB and PRS-SW software version 3.51 - 3.53
- \* Praesideo 3.6 system based on network controller PRS-NCOB and PRS-SW software version 3.60 - 3.64

- \* Praesideo 4.0 system based on network controller PRS-NCO3 and PRS-SW software version 4.00 - 4.01
- \* Praesideo 4.1 system based on network controller PRS-NCO3 and PRS-SW software version 4.10 - 4.11
- \* Praesideo 4.3 system based on network controller PRS-NCO3 and PRS-SW software version 4.30 - 4.37
- \* Praesideo 4.4 system based on network controller PRS-NCO3 and PRS-SW software version 4.40

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.

<b>Essential characteristics of EN 54-4:</b>	<b>Clauses:</b>	<b>Performance</b>
Performance of power supply	4, 5, 6	Pass
Operational reliability	4, 5, 6, 7, 8	Pass
Durability of operational reliability temperature resistance	9.5	Pass
Durability of operational reliability impact and 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

**The product as described in this Certificate of Constancy of Performance includes the following type designations:**

- Product description: Public Address and Voice Alarm System
- Trademark: Bosch
- Type designation: Praesideo
  
- Product description: SW
- Trademark: Bosch
- Family name: Praesideo
- Type designation: Praesideo 3.5
- Hardware version: N/A
- Software version: 3.51 - 3.53
  
- Product description: SW
- Trademark: Bosch
- Family name: Praesideo
- Type designation: Praesideo 3.6
- Hardware version: N/A
- Software version: 3.60 - 3.64
  
- Product description: SW
- Trademark: Bosch
- Family name: Praesideo
- Type designation: Praesideo 4.0
- Hardware version: N/A
- Software version: 4.00 - 4.01
  
- Product description: SW
- Trademark: Bosch
- Family name: Praesideo
- Type designation: Praesideo 4.1
- Hardware version: N/A
- Software version: 4.10 - 4.11
  
- Product description: SW
- Trademark: Bosch
- Family name: Praesideo
- Type designation: Praesideo 4.3
- Hardware version: N/A
- Software version: 4.30 - 4.37

- Product description: SW
  - Trademark: Bosch
  - Family name: Praesideo
  - Type designation: Praesideo 4.4
  - Hardware version: N/A
  - Software version: 4.40
- 
- Product description: Installation Software
  - Trademark: Bosch
  - Family name: Praesideo
  - Type designation: PRS-SW
  - Hardware version: N/A
  - Software version: 3.5 - 4.4
- 
- Product description: Network Controller
  - Trademark: Bosch
  - Family name: Praesideo
  - Type designation: PRS-NCO3
  - Hardware version: 30/00 - 30/25
  - Software version: 4.0 - 4.4
- 
- Product description: Network Controller
  - Trademark: Bosch
  - Family name: Praesideo
  - Type designation: PRS-NCO-B
  - Hardware version: 21/05 - 21/08
  - Software version: 3.5 - 3.6
- 
- Product description: Analog Audio Expander
  - Trademark: Bosch
  - Family name: Praesideo
  - Type designation: PRS-4AEX4
  - Hardware version: 20/00 - 20/05
  - Software version: 3.61 - 4.4
- 
- Product description: Analog Audio Expander
  - Trademark: Bosch
  - Family name: Praesideo
  - Type designation: LBB4402/00
  - Hardware version: 16/15
  - Software version: 3.5 - 4.4
- 
- Product description: CobraNet Interface
  - Trademark: Bosch
  - Family name: Praesideo
  - Type designation: LBB4404/00
  - Hardware version: 03/10 - 03/20
  - Software version: 3.5 - 4.4
- 
- Product description: OMNEO Interface
  - Trademark: Bosch
  - Family name: Praesideo
  - Type designation: PRS-4OMI4
  - Hardware version: 01/00
  - Software version: 4.3 - 4.4
- 
- Product description: IP-Audio Interface
  - Trademark: Bosch
  - Family name: Praesideo
  - Type designation: PRS-1AIP1

- Hardware version: 02/00 - 02/50
- Software version: 3.5 - 4.4
  
- Product description: Call Station
- Trademark: Bosch
- Family name: Praesideo
- Type designation: LBB4430/00
- Hardware version: 06/15
- Software version: 3.5 - 4.4
  
- Product description: Remote Call Station
- Trademark: Bosch
- Family name: Praesideo
- Type designation: PRS-CSR
- Hardware version: 01/15 - 01/30
- Software version: 3.5 - 4.4
  
- Product description: Call Station Interface
- Trademark: Bosch
- Family name: Praesideo
- Type designation: PRS-CSI
- Hardware version: 01/15 - 01/35
- Software version: 3.5 - 4.4
  
- Product description: Call Station Keypad
- Trademark: Bosch
- Family name: Praesideo
- Type designation: LBB4432/00
- Hardware version: 01/18 - 01/19
- Software version: 3.5 - 4.4
  
- Product description: Call Station Numeric Keypad
- Trademark: Bosch
- Family name: Praesideo
- Type designation: PRS-CSNKP
- Hardware version: 01/18
- Software version: 3.5 - 4.4
  
- Product description: Call Station Module
- Trademark: Bosch
- Family name: Praesideo
- Type designation: PRS-CSM
- Hardware version: 11/00
- Software version: 3.5 - 4.4
  
- Product description: Remote Call Station Module
- Trademark: Bosch
- Family name: Praesideo
- Type designation: PRS-CSRSM
- Hardware version: 11/00
- Software version: 3.5 - 4.4
  
- Product description: Call Station Keypad Module
- Trademark: Bosch
- Family name: Praesideo
- Type designation: PRS-CSKPM
- Hardware version: 11/00
- Software version: 3.5 - 4.4
  
- Product description: Handheld emergency microphone
- Trademark: Bosch

- Family name: Praesideo
- Type designation: LBB9081/00
- Hardware version: N/A
- Software version: 3.5 - 4.4
  
- Product description: Gooseneck emergency microphone
- Trademark: Bosch
- Family name: Praesideo
- Type designation: LBB9082/00
- Hardware version: N/A
- Software version: 3.5 - 4.4
  
- Product description: Call Stacker
- Trademark: Bosch
- Family name: Praesideo
- Type designation: PRS-CRF
- Hardware version: 01/10, 06/10 - 06/15
- Software version: 3.5 - 4.4
  
- Product description: Power Amplifier 1x500W
- Trademark: Bosch
- Family name: Praesideo
- Type designation: PRS-1P500
- Hardware version: 06/05 - 06/25
- Software version: 3.5 - 4.4
  
- Product description: Power Amplifier 1x500W
- Trademark: Bosch
- Family name: Praesideo
- Type designation: PRS-1P500-EU
- Hardware version: 06/10 - 06/25
- Software version: 3.5 - 4.4
  
- Product description: Power Amplifier 2x250W
- Trademark: Bosch
- Family name: Praesideo
- Type designation: PRS-2P250
- Hardware version: 06/05 - 06/25
- Software version: 3.5 - 4.4
  
- Product description: Power Amplifier 2x250W
- Trademark: Bosch
- Family name: Praesideo
- Type designation: PRS-2P250-EU
- Hardware version: 06/10 - 06/25
- Software version: 3.5 - 4.4
  
- Product description: Power Amplifier 4x125W
- Trademark: Bosch
- Family name: Praesideo
- Type designation: PRS-4P125
- Hardware version: 06/05 - 06/15
- Software version: 3.5 - 4.4
  
- Product description: Power Amplifier 4x125W
- Trademark: Bosch
- Family name: Praesideo
- Type designation: PRS-4P125-EU
- Hardware version: 06/10 - 06/15
- Software version: 3.5 - 4.4

- Product description: Power Amplifier 8x60W  
- Trademark: Bosch  
- Family name: Praesideo  
- Type designation: LBB4428/00  
- Hardware version: 04/05, 05/05, 06/00 - 06/10  
- Software version: 3.5 - 4.4

- Product description: Power Amplifier 8x60W  
- Trademark: Bosch  
- Family name: Praesideo  
- Type designation: LBB4428/00-EU  
- Hardware version: 05/05, 06/00 - 06/10  
- Software version: 3.5 - 4.4

- Product description: Multi-Channel Interface  
- Trademark: Bosch  
- Family name: Praesideo  
- Type designation: PRS-16MCI  
- Hardware version: 04/10 - 04/15  
- Software version: 3.5 - 4.4

- Product description: Basic Amplifier 1x500W  
- Trademark: Bosch  
- Family name: Praesideo  
- Type designation: PRS-1B500  
- Hardware version: 06/05 - 06/20  
- Software version: 3.5 - 4.4

- Product description: Basic Amplifier 1x500W  
- Trademark: Bosch  
- Family name: Praesideo  
- Type designation: PRS-1B500-EU  
- Hardware version: 06/05 - 06/20  
- Software version: 3.5 - 4.4

- Product description: Basic Amplifier 2x250W  
- Trademark: Bosch  
- Family name: Praesideo  
- Type designation: PRS-2B250  
- Hardware version: 06/05 - 06/20  
- Software version: 3.5 - 4.4

- Product description: Basic Amplifier 2x250W  
- Trademark: Bosch  
- Family name: Praesideo  
- Type designation: PRS-2B250-EU  
- Hardware version: 06/05 - 06/20  
- Software version: 3.5 - 4.4

- Product description: Basic Amplifier 4x125W  
- Trademark: Bosch  
- Family name: Praesideo  
- Type designation: PRS-4B125  
- Hardware version: 06/05, 07/00 - 07/10  
- Software version: 3.5 - 4.4

- Product description: Basic Amplifier 4x125W  
- Trademark: Bosch  
- Family name: Praesideo  
- Type designation: PRS-4B125-EU  
- Hardware version: 06/05, 07/00 - 07/10  
- Software version: 3.5 - 4.4

- Product description: Basic Amplifier 8x60W
- Trademark: Bosch
- Family name: Praesideo
- Type designation: PRS-8B060
- Hardware version: 06/05, 07/00 - 07/10
- Software version: 3.5 - 4.4
  
- Product description: Basic Amplifier 8x60W
- Trademark: Bosch
- Family name: Praesideo
- Type designation: PRS-8B060-EU
- Hardware version: 06/05, 07/00 - 07/10
- Software version: 3.5 - 4.4
  
- Product description: Supervision Control Board
- Trademark: Bosch
- Family name: Praesideo
- Type designation: LBB4440/00
- Hardware version: 01/05
- Software version: 3.5 - 4.4
  
- Product description: Supervision control board
- Trademark: Bosch
- Family name: Praesideo
- Type designation: LBB4440/04
- Hardware version: 01/05
- Software version: 3.5 - 4.4
  
- Product description: Loudspeaker Supervision Board
- Trademark: Bosch
- Family name: Praesideo
- Type designation: LBB4441/00
- Hardware version: 01/05
- Software version: 3.5 - 4.4
  
- Product description: End-Of-Line Supervision Set
- Trademark: Bosch
- Family name: Praesideo
- Type designation: LBB4442/00
- Hardware version: 01/10
- Software version: 3.5 - 4.4
  
- Product description: End-Of-Line Supervision Board
- Trademark: Bosch
- Family name: Praesideo
- Type designation: LBB4443/00
- Hardware version: 01/05
- Software version: 3.5 - 4.4
  
- Product description: Loudspeaker DC Blocking Board
- Trademark: Bosch
- Family name: Praesideo
- Type designation: PM1-LISD
- Hardware version: 01/00
- Software version: 4.1 - 4.4
  
- Product description: Loudspeaker Line Isolator Master
- Trademark: Bosch
- Family name: Praesideo
- Type designation: PM1-LISM6



- Hardware version: 01/00 - 01/10
- Software version: 4.1 - 4.4
  
- Product description: Loudspeaker Line Isolator Module
- Trademark: Bosch
- Family name: Praesideo
- Type designation: PM1-LISS
- Hardware version: 01/00
- Software version: 4.1 - 4.4
  
- Product description: Network Splitter
- Trademark: Bosch
- Family name: Praesideo
- Type designation: PRS-NSP
- Hardware version: 03/15 - 03/20
- Software version: 3.5 - 4.4
  
- Product description: Redundant Controller Switch Master
- Trademark: Bosch
- Family name: Praesideo
- Type designation: PSP-D00039
- Hardware version: 03/15 - 03/20
- Software version: 3.5 - 4.4
  
- Product description: Redundant Controller Switch Slave
- Trademark: Bosch
- Family name: Praesideo
- Type designation: PSP-D00040
- Hardware version: 03/15 - 03/20
- Software version: 3.5 - 4.4
  
- Product description: Redundant Controller Switch
- Trademark: Bosch
- Family name: Praesideo
- Type designation: PSP-D00060
- Hardware version: 03/20
- Software version: 3.5 - 4.4
  
- Product description: Fiber Interface
- Trademark: Bosch
- Family name: Praesideo
- Type designation: PRS-FIN
- Hardware version: 03/15 - 03/20
- Software version: 3.5 - 4.4
  
- Product description: Non-Addressable Fiber Interface
- Trademark: Bosch
- Family name: Praesideo
- Type designation: PRS-FINNA
- Hardware version: 03/15 - 03/20
- Software version: 3.5 - 4.4
  
- Product description: Single Mode Fiber Interface
- Trademark: Bosch
- Family name: Praesideo
- Type designation: PRS-FINS
- Hardware version: 03/15 - 03/20
- Software version: 3.5 - 4.4
  
- Product description: Battery Charger 48V
- Trademark: Bosch

- Family name: Praesideo
- Type designation: PRS-48CH12
- Hardware version: N/A
- Software version: 3.5 - 4.4
  
- Product description: Battery Charger 48V With Battery
- Trademark: PSD
- Family name: Praesideo
- Type designation: PRS-48CH02-DE
- Hardware version: N/A
- Software version: 3.5 - 4.4
  
- Product description: Battery Charger 48V With Battery
- Trademark: PSD
- Family name: Praesideo
- Type designation: PRS-48CH05-DE
- Hardware version: N/A
- Software version: 3.5 - 4.4
  
- Product description: Battery Charger 48V With Battery
- Trademark: PSD
- Family name: Praesideo
- Type designation: PRS-48CH06-DE
- Hardware version: N/A
- Software version: 3.5 - 4.4
  
- Product description: Battery Charger 48V With Battery
- Trademark: PSD
- Family name: Praesideo
- Type designation: PRS-48CH07-DE
- Hardware version: N/A
- Software version: 3.5 - 4.4
  
- Product description: PSE With Battery
- Trademark: Merawex
- Family name: Praesideo
- Type designation: ZDSO400E-AK3
- Hardware version: N/A
- Software version: N/A
  
- Product description: Ethernet switch, 8xPoE, 2xSFP
- Trademark: Advantech
- Type designation: PRA-ES8P2S
- Hardware version: Rev. 04
- Software version: 1.01.04
  
- Product description: Fiber transceiver, multimode
- Trademark: Advantech
- Type designation: PRA-SFPSX
- Hardware version: Rev. A0
- Software version: N/A
  
- Product description: Fiber transceiver, single mode
- Trademark: Advantech
- Type designation: PRA-SFPLX
- Hardware version: Rev. A0
- Software version: N/A