# LBC 3483/00 Horn Loudspeaker

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- ► High efficiency driver
- ▶ Excellent speech reproduction
- ► Provision for inside mounting of the optional line/ loudspeaker supervision board
- ▶ Water-and dust protected to IP 65
- ► EN 54-24 certified

Bosch high-efficiency horn loudspeakers provide excellent speech reproduction and sound distribution for a wide scope of outdoor applications. They are ideal for sports grounds, parks, exhibitions, factories and swimming pools.

The LBC 3483/00 is a circular, 35 W horn loudspeaker, measuring 490 mm (19.6 in) in diameter. They are made from aluminum. The edges of the horns are covered with a PVC profile for protection against impact damage. They are light grey (RAL 7035), and are water and dust protected.

# Voice alarm loudspeaker

The LBC 3483/00 is designed for use in voice alarm systems and is compliant with emergency standards. The horn loudspeaker has built-in protection to ensure that, in the event of a fire, damage to the loudspeaker does not result in failure of the circuit to which it is connected. In this way, system integrity is maintained; ensuring loudspeakers in other areas can still be used to inform people of the situation. The Horn loudspeaker has a ceramic terminal block, thermal fuse and heat resistant, high-temperature wiring. They have provision for inside mounting the optional line/loudspeaker supervision boards.

## **Functions**

The rear cover on the horn is made from self-extinguishing ABS (acc. to class UL 94 VO). The connection cable is fed out through a cable gland (PG 13.5) in rear cover. For loop through connection, the rear cover is fitted with a second hole (covered as standard supplied).

These integrated horns are also available as separate horn and driver, allowing installing any combination of horn and driver. See order information for the type numbers.

## **Certifications and approvals**

All Bosch loudspeakers are designed to withstand operating at their rated power for 100 hours in accordance with IEC 268-5 Power Handling Capacity (PHC) standards. Bosch has also developed the Simulated Acoustical Feedback Exposure (SAFE) test to demonstrate that they can withstand two times their rated power for short durations. This ensures extra reliability under extreme conditions, leading to higher customer satisfaction, longer operation life, and much less chance of failure or performance deterioration.

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Safety	acc. to EN 60065
Water and dust protection	acc. to IEC 60529, IP 65
Emergency	acc. to EN 54-24 / BS 5839-8 / EN 60849
Wind-force	acc. to NEN 6702: 2007 + A1: 2008, Bft11

Region	Certification
Europe	CE
	CPD
Poland	CNBOP
	CNBOP

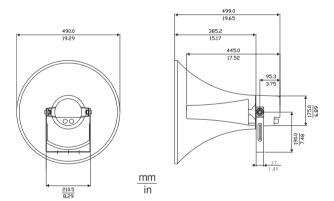
# Installation/configuration notes

## **Simple Power Setting**

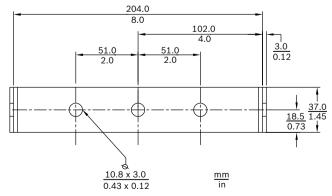
The horn has a three-way terminal block with screw connection (including earth). Three primary taps are provided on the matching transformer to allow selection of nominal full-power, half-power or quarter-power radiation (in 3 dB steps).

## Mounting

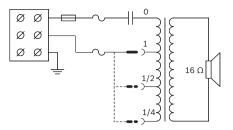
The horn loudspeakers are supplied complete with sturdy adjustable steel mounting brackets, allowing the sound beam to be accurately directed.



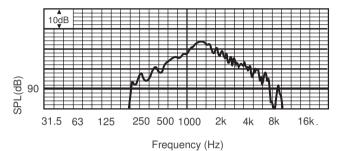
Dimensions in mm (in)



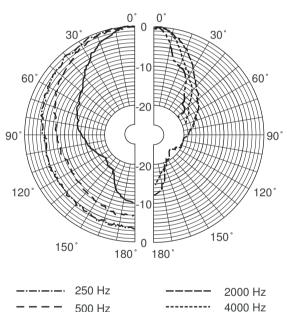
Bracket dimensions



# Circuit diagram



Frequency response



Polar diagram (measured in pink noise)

1000 Hz

Octave band sensitivity *			
	Octave SPL 1W/1m	Total octave SPL 1W/1m	Total octave SPL Pmax/1m
125 Hz	74.0	-	-
250 Hz	91.7	-	-
500 Hz	102.5	-	-
1000 Hz	111.3	-	-
2000 Hz	106.5		

8000 Hz

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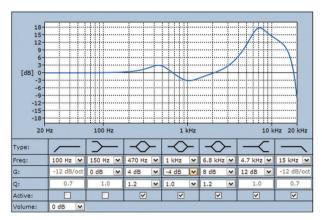
4000 Hz	99.9	-	-
8000 Hz	92.6	-	-
A-weighted	-	103.5	117.1
Lin-weighted	-	103.4	115.6

## Octave band opening angles

	Horizontal	Vertical	
125 Hz	-	-	
250 Hz	179	179	
500 Hz	93	93	
1000 Hz	55	55	
2000 Hz	37	37	
4000 Hz	26	26	
8000 Hz	15	15	

Acoustical performance specified per octave

 (all measurements are done with a pink noise signal; the valuals are in dBSPL)



Specified active equalization, required for EN54-24

## **Parts included**

Quantity	Component
1	LBC 3483/00 Horn Loudspeaker
1	PG 13.5 cable gland (fitted)

## **Technical specifications**

## Electrical\*

Maximum power	52.5 W
Rated power	35 / 17.5 / 8.75 W
Sound pressure level at 35 W / 1 W (1 kHz, 1 m)	127 dB / 112 dB (SPL)
Effective frequency range (-10 dB)	380 Hz to 5 kHz

Opening angle at 1 kHz/4 kHz (-6 dB)	50° / 25°
Rated voltage	100 V
Rated impedance	286 ohm
Connector	Screw terminal block

\* Technical performance data acc. to IEC 60268-5

#### Mechanical

Dimensions (L x Dmax)	499 x 490 mm (20 x 19.6 in)
Weight	4.5 kg (9.9 lb)
Color	Light grey (RAL 7035)
Cable diameter	6 mm to 12 mm (0.24 in to 0.47 in)

## **Environmental**

Operating temperature	-25 °C to +55 °C (-13 °F to +131 °F)
Storage temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Relative humidity	<95%

Other parameters are available in CNBOP test report nr 4787/BA/10.



1438

Bosch Security Systems BV Kapittelweg 10, 4827 HG Breda, The Netherlands 10 1438-CPD-0191

EN 54-24:2008

Loudspeaker for voice alarm systems for fire detection and fire alarm systems for buildings

Horn Loudspeaker 35 W LBC3483/00 Type B

# **Ordering information**

## LBC 3483/00 Horn Loudspeaker

Horn loudspeaker 35 W, circular 20", aluminum/ABS material, U-bracket mounting, water and dust protected IP65, EN54-24 certified, light gray RAL 7035. Order number LBC3483/00

## Accessories

## LBC 3472/00 Driver Unit

Horn driver 25 W, for use with LBC3478/00 (14") or LBC3479/00 (20") horns, light gray RAL 7035. Order number LBC 3472/00

## LBC 3473/00 Driver Unit

Horn driver 35 W, for use with LBC3478/00 (14") or LBC3479/00 (20") horns, light gray RAL 7035. Order number LBC 3473/00

## LBC 3474/00 Driver Unit

Horn driver 50 W, for use with LBC3478/00 (14") or LBC3479/00 (20") horns, light gray RAL 7035. Order number LBC3474/00

## LBC 3478/00 Horn, 14" without Driver

Horn 14" without driver, aluminum material, for use with horn drivers LBC3472/00 (25 W), LBC3473/00 (35 W), and LBC3474/00 (50 W), light gray RAL 7035. Order number LBC 3478/00

## LBC 3479/00 Horn, 20" without Driver

Horn 20" without driver, aluminum material, for use with horn drivers LBC3472/00 (25 W), LBC3473/00 (35 W), and LBC3474/00 (50 W), light gray RAL 7035. Order number LBC 3479/00

## Represented by:

## Americas:

Bosch Security Systems, Inc. 12000 Portland Avenue South Burnsville MN 55337, USA Phone: +1-800-392-3497 Fax: +1-800-955-6831 audiosupport@us.bosch.com www.boschsecurity.com

### Europe, Middle East, Africa:

Bosch Security Systems B.V. P.O. Box 80002 5617 BA Eindhoven, The Netherlands Phone: + 31 40 2577 284 Fax: +31 40 2577 330 emea.securitysystems@bosch.com www.boschsecurity.com

#### Asia-Pacific:

Robert Bosch (SEA) Pte Ltd, Security Systems 11 Bishan Street 21 Singapore 573943 Phone: +65 6571 2808 Fax: +65 6571 2699 apr.securitysystems@bosch.com www.boschsecurity.asia

#### China:

Bosch (Shanghai) Security Systems Ltd. 201 Building, No. 333 Fuquan Road North IBP Changning District, Shanghai 200335 China Phone +86 21 22181111 Fax: +86 21 22182398 www.boschsecurity.com.cn

#### America Latina:

Robert Bosch Ltda Security Systems Division Via Anhanguera, Km 98 CFP 13065-900 Campinas, Sao Paulo, Brazil Phone: +55 19 2103 2860 Fax: +55 19 2103 2862 latam.boschsecurity@bosch.com www.boschsecurity.com