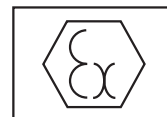


- ATEX-APPROVED
- BASEEFA-CERTIFIED
- CENELEC-APPROVED
- GLASS REINFORCED POLYESTER WITH STRONG, FIRE RETARDENT PROPERTIES
- REDUCED MAINTENANCE COSTS
- CORROSION AND CHEMICAL RESISTANCE
- WATER- AND DUST PROTECTED TO CLASS IP66 & IP67
- COMPLIES WITH INTERNATIONAL INSTALLATION AND SAFETY REGULATIONS



The Philips LBC 3437/00 and LBC 3438/00 Horn Loudspeakers are specifically designed and approved for installations where explosive gas-air mixtures are likely to be present. They are suitable for use in all gas groups including hydrogen. The LBC 3437/00 has a power rating of 15 W, while the LBC 3438/00 offers 25 W.

Glass reinforced polyester

The flamepaths, flare and body of both loudspeakers are constructed from a UV stable glass reinforced polyester (GRP). This strong, fire- and corrosion resistant material offers greater reliability and reduced maintenance costs. GRP is also chemical resistant and thermally stable, making it ideal for even the harshest environments.

The horns are weather proof, and incorporate stainless steel mounting brackets and captive cover screws, and a stainless steel sinter, to increase their resistance to corrosion. They are supplied with an EExdIIc gland as standard.

Power setting

The horn loudspeakers include a built-in transformer with taps on the primary winding for different power settings.

Mounting

The horn loudspeakers are supplied with a sturdy mounting bracket allowing the sound beam to be accurately directed. The bracket has a ratchet facility to ensure it stays correctly positioned.

Quality assurance

All Philips loudspeakers are designed to withstand operating at their rated power for 100 hours in



LBC 3437/00, LBC 3438/00

HORN LOUDSPEAKERS

accordance with IEC 268-5 Power Handling Capacity (PHC) standards. Philips 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 operating life, and much less chance of failure or performance deterioration.

Safety aspects

The enclosure is made from high-impact self-extinguishing GRP (acc. to class UL 94V1). In common with all Philips products, care is taken to meet high safety standards. This horn loudspeaker complies with the relevant safety and installation regulations of EN 60065.

SPECIFICATIONS

LBC 3437/00, LBC 3438/00

HORN LOUDSPEAKERS

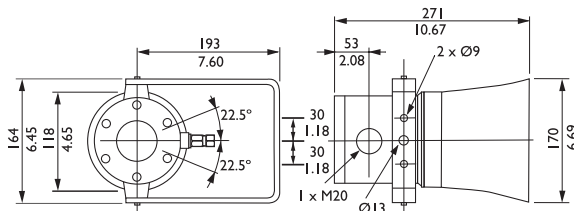
TECHNICAL PERFORMANCE DATA ACC. TO IEC 268-5

	LBC 3437/00	LBC 3438/00
Maximum power	22.5 W	37.5 W
Rated power (PHC)	15 W (15 - 7.5 - 5 - 4 - 2 - 0.8 W)	25 W (25 - 12.5 - 6 - 4 - 2 - 1 W)
Sound pressure level at rated power/1 W		
(at 1 kHz, 1 m)	112 dB/100 dB (SPL)	114 dB/100 dB (SPL)
Effective frequency range (-10 dB)	420 Hz to 3.5 kHz	420 Hz to 3.5 kHz
Opening angle (at 1 kHz/4 kHz, -6 dB)	160°/60°	160°/60°
Rated voltage	100 V	100 V
Rated impedance	667 Ω	400 Ω
Ambient temperature range	-20 to +55 °C	-20 to +50 °C
Safety	acc. to EN 60065	acc. to EN 60065
Water- and dust protected	acc. to IEC 60529 IP66 & IP67	acc. to IEC 60529 IP66 & IP67
Certification		
BASEEFA	Cert. No. BAS00ATEX2097X EEExd II CT5, Zones I and 2	Cert. No. BAS00ATEX2097X EEExd II CT4, Zones I and 2
CENELEC	EN 50014, I8, I9	EN 50014, I8, I9
Connection	screw terminal block	screw terminal block
Cable diameter	7.5 mm (min) - 11.9 mm (max) 0.3 in (min) - 0.5 in (max)	7.5 mm (min) - 11.9 mm (max) 0.3 in (min) - 0.5 in (max)
Dimensions		
aperture dia.	170 mm (6.7 in)	170 mm (6.7 in)
overall length	271 mm (10.7 in)	271 mm (10.7 in)
Colour	Natural black	Natural black
Weight	5 kg (11 lbs)	5 kg (11 lbs)

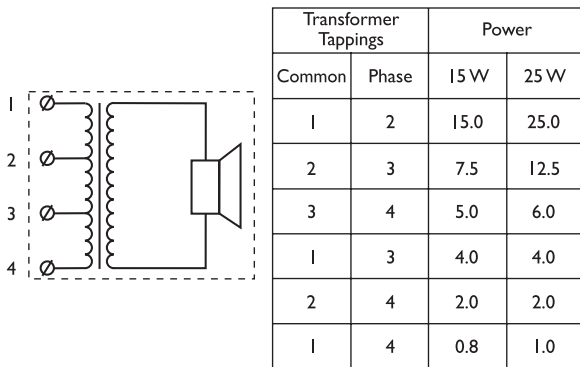
*BASEEFA = British Approved Service for Electrical Equipment in Flammable Atmospheres

**CENELEC = European Committee for Electrotechnical Standardization

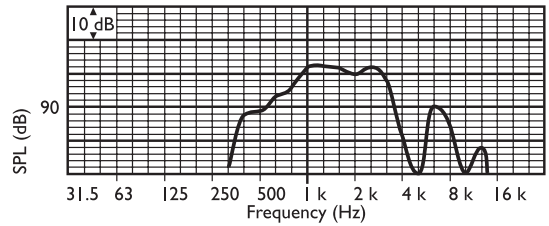
LBC 3437/00 and LBC 3438/00



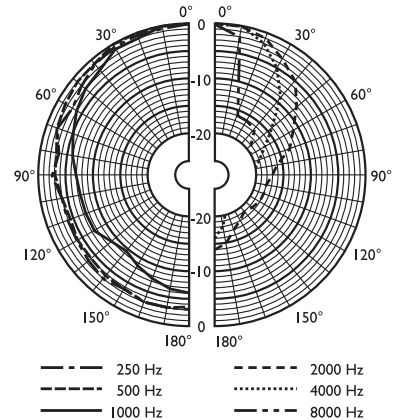
Dimensions (in mm and inches)



Circuit diagram



Frequency response



Polar diagram (measured with pink noise)



PHILIPS

Let's make things better.