

## GENELEC® 1025B CONTROL ROOM MONITOR

- main monitor for large control rooms
- for flush mounting

### DESCRIPTION

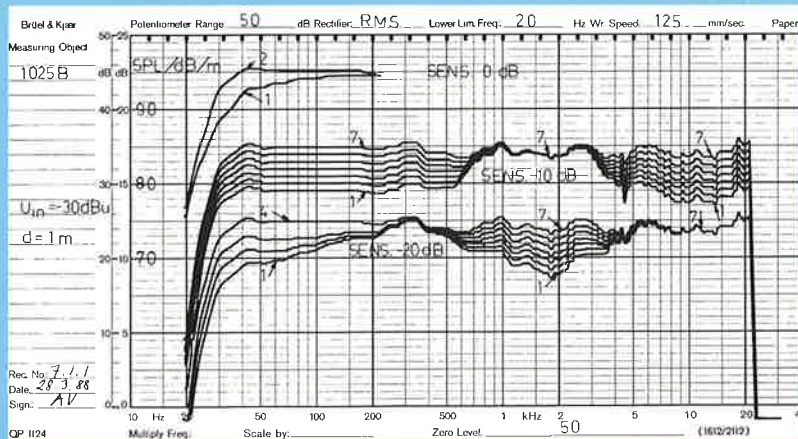
The GENELEC® 1025B has been designed for neutral reproduction at very high sound pressure levels in large control rooms. The integrated system consists of a 450 litre speaker enclosure and a 19" rack mounted three channel power amplifier / active crossover unit. The system is designed for flush mounting in the control room wall, but it can also be used as a free-standing speaker with the built-in radiation space control (bass tilt) in 4  $\pi$  position (maximum).

The active crossover network consists of three parallel band pass filters with equal delay networks. An active symmetric input stage with a 2-pos sensitivity control switch precedes the filter group.

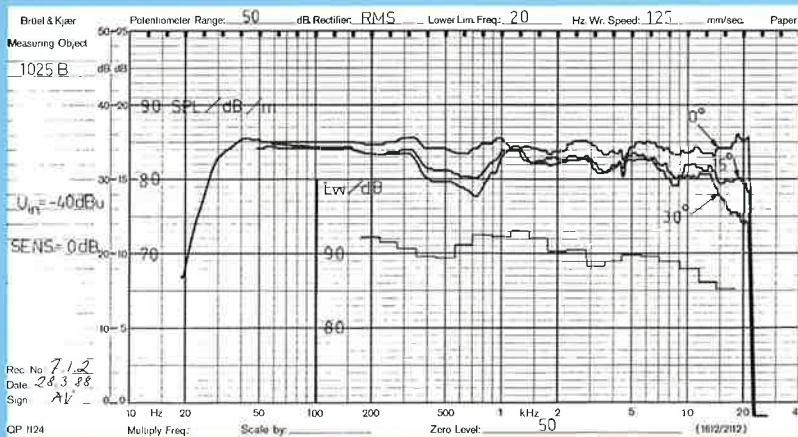
The low frequency system utilizes two long-throw 385 mm woofers in a dual chamber configuration, both drivers having their own power amplifiers. Together with the active filter stage the system response has 6th order Butterworth characteristic extending to 28 Hz (-3 dB). The critical midrange frequencies are reproduced with a 80 mm soft dome unit. The frequency range is 500 Hz to 3,5 kHz. Treble frequencies are reproduced with a 38 mm dome driver, the frequency response of which extends up to 25 kHz.

The front panel real-time level indicators of all three channels form a reliable headroom monitor, and the separate clipping indicators give an accurate indication of amplifier channel clipping.

The control logic of the amplifier system senses the temperature of the modules, the DC-voltage at output, as well as the overloading of the elements thus eliminating the risk for system failure. During the muting operation the starting sequence eliminates undesired switch-on transients entering the speaker.



Effect of control settings measured in free field conditions.



Directional characteristics and total radiated acoustic power response (measured in reverberation chamber at 1/3 octave bands).

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## SYSTEM SPECIFICATIONS

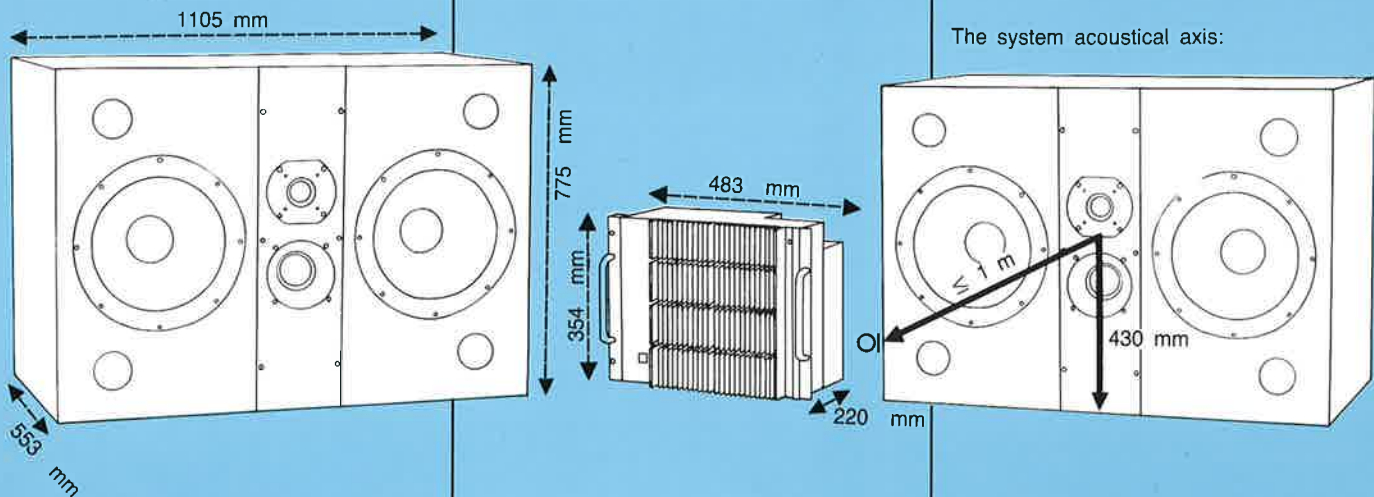
## AMPLIFIER SECTION

## CROSSOVER SECTION

Lower cut-off frequency, -3 dB	28 Hz
Upper cut-off frequency, -3 dB	20 kHz
Passband response tolerance, free field	± 3 dB
Maximum continuous sine wave acoustic output @ 1 m on axis in half space	≥ 121 dB
Maximum peak acoustic output per pair behind a console, 2 m from the engineer	≥ 128 dB
0 dBu will produce 107 dB SPL in free field @ 1 m on axis with the controls at 'CAL' position	
Self generated noise level in free field @ 1 m on axis	≤ 20 dB (A)
Harmonic distortion at 105 dB SPL @ 1 m on axis	
f ≤ 200 Hz	≤ 3 %
f > 200 Hz	≤ 2 %
Horizontal treble radiation loss at 30 deg off axis	
f = 10 kHz	≤ 3 dB
f = 15 kHz	≤ 4 dB
Drivers:	Bass 2 x 385 mm cone
	Mid 80 mm dome
	Treble 38 mm dome
Dimensions:	
Weight:	speaker 98 kg
	amplifier 28 kg

Input connector	XLR female
Bass amplifier output power,	
continuous	2x225 W
transients	2x260 W
Middle amplifier output power,	
continuous	100 W
transients	300 W
Treble amplifier output power,	
continuous	20 W
transients	180 W
Slew rate	60 V / μs
Amplifier system distortion at nominal output	
THD	≤ 0,05 %
SMTE-IM	≤ 0,1 %
CCIF-IM	≤ 0,1 %
DIM100	≤ 0,1 %
Mains voltage, specifications applicable	
operation	220 VAC
Other mains voltage specifications available on request.	198...242 VAC
Power consumption,	
idle	100 VA
full output	1500 VA

Input impedance	10 kΩ balanced
Input level for maximum output, continuously variable	
	+13...+23 dBu
Input attenuator, 2 positions	
	-10 / 0 dB
Subsonic attenuation	12 dB @ 15 Hz
Ultrasonic attenuation	5 dB @ 30 kHz
Crossover frequency,	
bass / midrange	500 Hz
midrange / treble	3,5 kHz
Tone control operation range, 1 dB steps	
bass	0...-6 dB
middle	0...-6 dB
treble	0...-6 dB
Bass roll-off filter, 2 positions	
	-4 or 0 dB @ 30 Hz
Bass tilt control, 4 steps,	
2 dB / step	-4...+2 dB @ 60 Hz



The system acoustical axis:

# GENELEC

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