



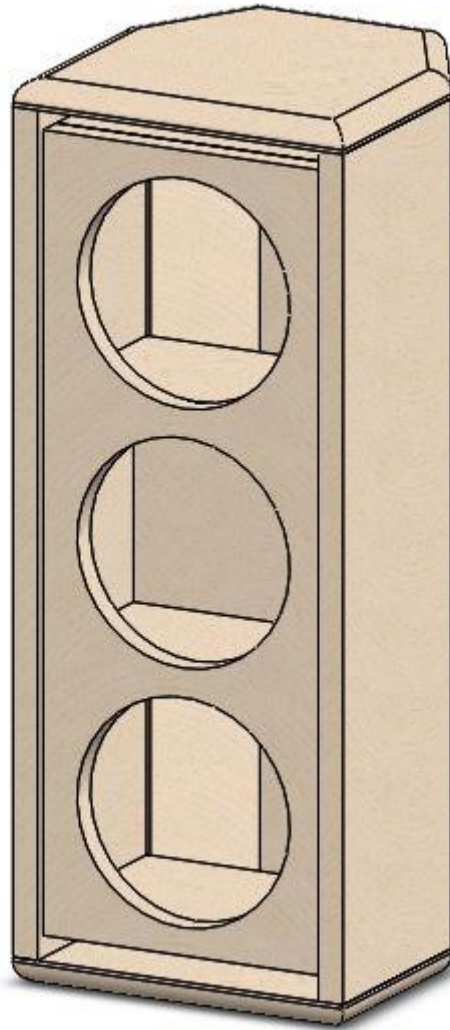
CX3.4

Multi purpose – three way column Speaker

Low Frequencies : 2x4 " Woofers – 4NDS34 – 8 ohm

Mid/High Frequencies : 1x4" Coaxial Transucer – 4CXN36 8 ohm

FBCXN36 (4CXN36 dedicated passive filter).

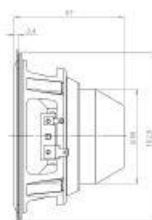
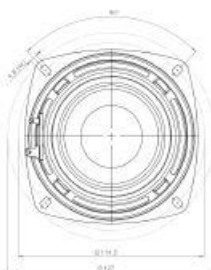


Side TRANSDUCERS (2x4NDS34)

4NDS34

8Ω

LF Drivers - 4.0 Inches



- 200 W continuous program power capacity
- 34 mm (1.34 in) copper voice coil
- 80 - 2000 Hz response
- 89 dB sensitivity
- Neodymium magnet allows a very light yet powerful motor assembly

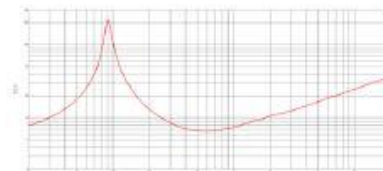
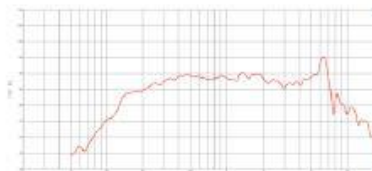


Unique to B&C, a complete lineup of high sensitivity and power handling 4" frame transducers. These high technology products are made with our famously critical quality control, allowing new compact loudspeaker designs with appropriately scaled performance. The 4NDS34 features a 1.3" copper coil, 200W continuous power handling, and frequency response from 80 - 2000Hz.

OEM Quantities only...

4NDS34

LF Drivers- 4.0 Inches



SPECIFICATIONS

Nominal Diameter	100 mm (3.94 in)
Nominal Impedance	8 Ω
Minimum Impedance	6.2 Ω
Nominal Power Handling ¹	100 W
Continuous Power Handling ²	200 W
Sensitivity ³	89.0 dB
Frequency Range	80 - 2000 Hz
Voice Coil Diameter	34 mm (1.34 in)
Winding Material	Copper
Former Material	Glass Fibre
Winding Depth	11.0 mm (0.43 in)
Magnetic Gap Depth	7.0 mm (0.28 in)
Flux Density	1.25 T

DESIGN

Surround Shape	Roll
Cone Shape	Exponential
Magnet Material	Neodymium Inside Slug
Spider	Single
Pole Design	T-Pole
Woofer Cone Treatment	TWP Waterproof Both Sides
Recommended Enclosure	3.0 dm ³ (0.11 ft ³)
Recommended Tuning	90 Hz

PARAMETERS⁴

Resonance Frequency	79 Hz
Re	5.5 Ω
Qes	0.25
Qms	8.5
Qts	0.24
Vas	2.6 dm ³ (0.09 ft ³)
Sd	57.0 cm ² (8.84 in ²)
η _e	0.5 %
Xmax	3.8 mm
Xvar	5.0 mm
Mms	7.2 g
Bl	8.8 Txm
Le	0.21 mH
EBP	316 Hz

MOUNTING AND SHIPPING INFO

Overall Diameter	127 mm (5.0 in)
Bolt Circle Diameter	114 mm (4.51 in)
Baffle Cutout Diameter	103.0 mm (4.06 in)
Depth	67 mm (2.64 in)
Flange and Gasket Thickness	3 mm (0.12 in)
Air Volume Occupied by Driver	0.25 dm ³ (0.01 ft ³)
Net Weight	0.57 kg (1.26 lb)
Shipping Units	24
Shipping Weight	14.0 kg (30.86 lb)
Shipping Box	425x335x250 mm (16.73x13.19x9.84 in)

SERVICE KIT

Recone kit	RCK04NDS348
------------	-------------

1. 2 hours test made with continuous pink noise signal within the range F_s-10F_s. Power calculated on rated minimum impedance. Loudspeaker in free air.
 2. Power on Continuous Program is defined as 3 dB greater than the Nominal rating.
 3. Applied RMS Voltage is set to 2.83 V for 8 ohms Nominal Impedance.
 4. Thiele-Small parameters are measured after a high level 20 Hz sine wave preconditioning test.

Central Mid/High TRANSDUCER (1x4CXN36)

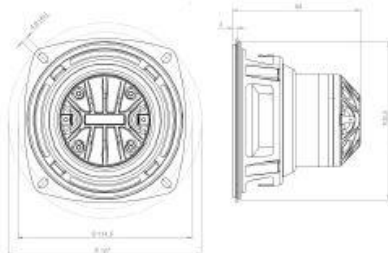
4CXN36

Coaxials - 4.0 Inches

8Ω

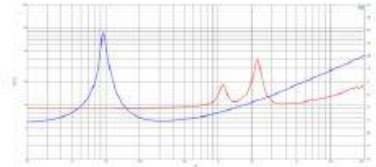
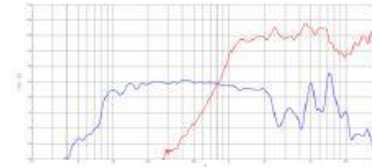
4CXN36

Coaxials - 4.0 Inches



- 200 W continuous program power capacity
- 70° nominal coverage
- 95 - 18000 Hz response
- 86 dB sensitivity
- 21.5 mm (0.85") HF unit exit diameter
- Neodymium magnet allows a very light yet powerful motor assembly
- Aluminium demodulating ring allows a very low distortion figure

Unique to B&C, a complete lineup of high sensitivity and power handling 4" frame transducers. These high technology products are made with our famously critical quality control, allowing new compact loudspeaker designs with appropriately scaled performance. Combined with a 1.4" dome compression driver, our 4CXN36 coaxial is the most compact and cost effective full range transducer we have ever built, offering 95 - 18000Hz frequency response and a 70° conical coverage pattern.



SPECIFICATIONS

Nominal Diameter	100 mm (4.0 In)
Nominal Impedance	8 Ω
Minimum Impedance LF	6.4 Ω
Minimum Impedance HF	11.0 Ω
Frequency Range	95 - 18000 Hz
Dispersion Angle ²	70 °
Woofer Cone Treatment	WP Waterproof Front Side
Magnet Material	Neodymium Ring

SPECIFICATIONS LF UNIT

Sensitivity ²	86.0 dB
Nominal Power Handling ³	100 W
Continuous Power Handling ⁴	200 W
Voice Coil Diameter	33 mm (1.3 In)
Winding Material	Copper
Flux Density	0.8 T
Former Material	Glass Fibre
Winding Depth	11.0 mm (0.43 In)
Magnetic Gap Depth	6.0 mm (0.24 In)

SPECIFICATIONS HF UNIT

Sensitivity ²	99.0 dB
Nominal Power Handling ⁵	25 W
Continuous Power Handling ⁷	50 W
Voice Coil Diameter	36 mm (1.4 In)
Winding Material	Aluminium
Flux Density	1.5 T
Diaphragm Material	HT Polymer
Recommended Crossover ⁶	2.0 kHz
Inductance	0.14 mH

PARAMETERS

Resonance Frequency	94 Hz
R _e	5.4 Ω
Q _{es}	0.8
Q _{ms}	15.75
Q _{ts}	0.76
V _{as}	1.9 dm ³ (0.07 ft ³)
S _d	56.0 cm ² (8.68 in ²)
η _o	0.19 %
x _{max}	4.0 mm
x _{var}	4.0 mm
m _{ms}	6.8 g
BI	5.25 T·xm
L _e	0.75 mH
ESP	117 Hz

MOUNTING AND SHIPPING INFO

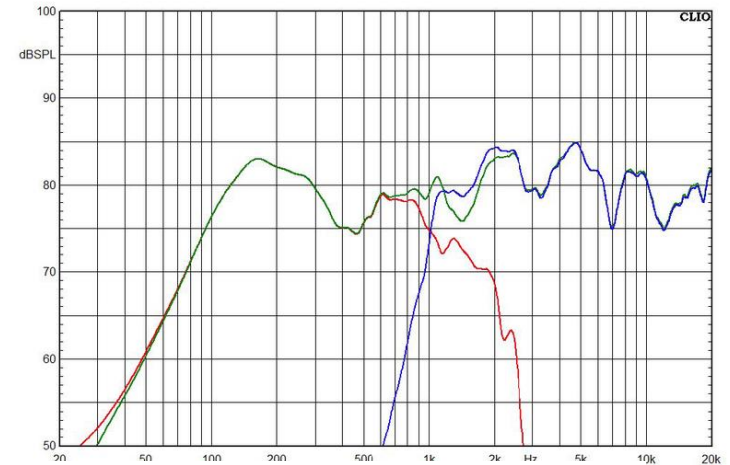
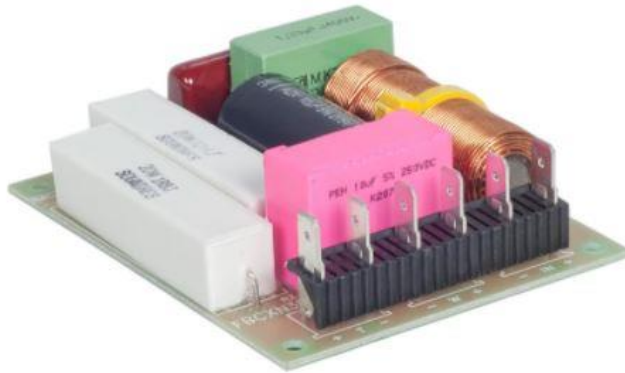
Overall Diameter	127 mm (5.0 In)
Bolt Circle Diameter	114 mm (4.51 In)
Baffle Cutout Diameter	103 mm (4.06 In)
Depth	84 mm (3.31 In)
Flange and Gasket Thickness	3 mm (0.12 In)
Net Weight	0.54 kg (1.19 lb)
Shipping Units	1
Shipping Weight	0.75 kg (1.65 lb)
Shipping Box	210x210x125 mm (8.27x8.27x4.92 In)

SERVICE KIT

LF recone kit	RCK004CXN368
MF replacement diaphragm	MMDE11016

1. Included by -6 dB down points.
2. Applied RMS Voltage is set to 2.83V.
3. 2 hours test made with continuous pink noise signal within the range Fs-10Fs. Power calculated on rated minimum Impedance. Loudspeaker in free air.
4. Power on Continuous Program is defined as 3 dB greater than the Nominal rating.
5. Applied RMS Voltage is set to 2.83V.
6. 2 hour test made with continuous pink noise signal within the range from the recommended crossover frequency to 20 kHz. Power calculated on rated minimum Impedance. Loudspeaker in free air.
7. Power on Continuous Program is defined as 3 dB greater than the Nominal rating.
8. 12 dB/oct. or higher slope high-pass filter.

FBCXN36 (4CXN36 dedicated filter)



Specifications

Nominal Impedance
8 Ω

Crossover Frequency
1.0 kHz

Filter Type
Two Way

Low-pass Slope
12.0 dB/oct

High-pass Slope
6.0 dB/oct

Overall Dimensions
100x76 mm (3.94x2.99 in)

Mounting and Shipping Info

Net Weight
0.22 kg (0.49 lb)

Shipping Units
1

Shipping Weight
0.25 kg (0.54 lb)

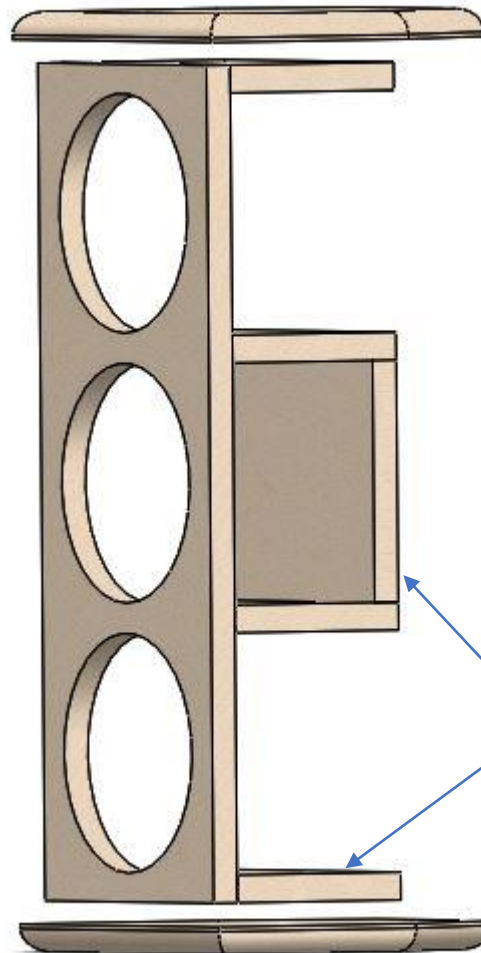
Shipping Box
120x125x35 mm (4.72x4.92x1.38 in)

Other Details
Four 4 mm diameter holes on the PCB at 90 mm x 66 mm for mounting

ENCLOSURE DESIGN

Internal view and notes

- 2 X 4NDS34 connected in series in bass reflex configuration.
- 4CXN36 Mid-High Component in central closed box.
- All dimensions are expressed in millimeters.
- M4 screws suggested



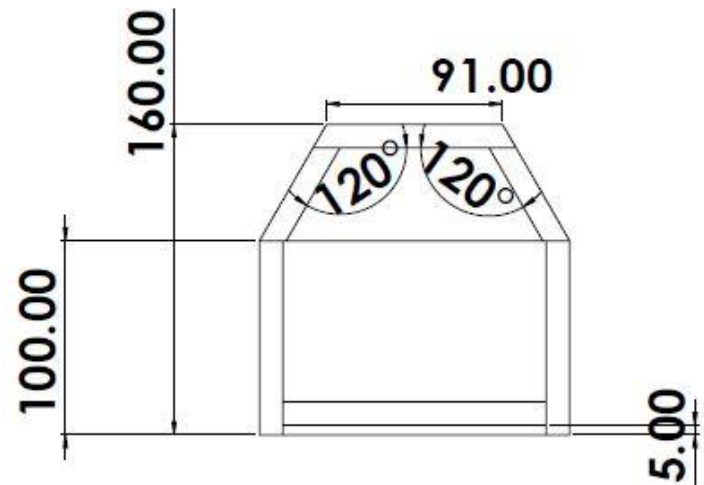
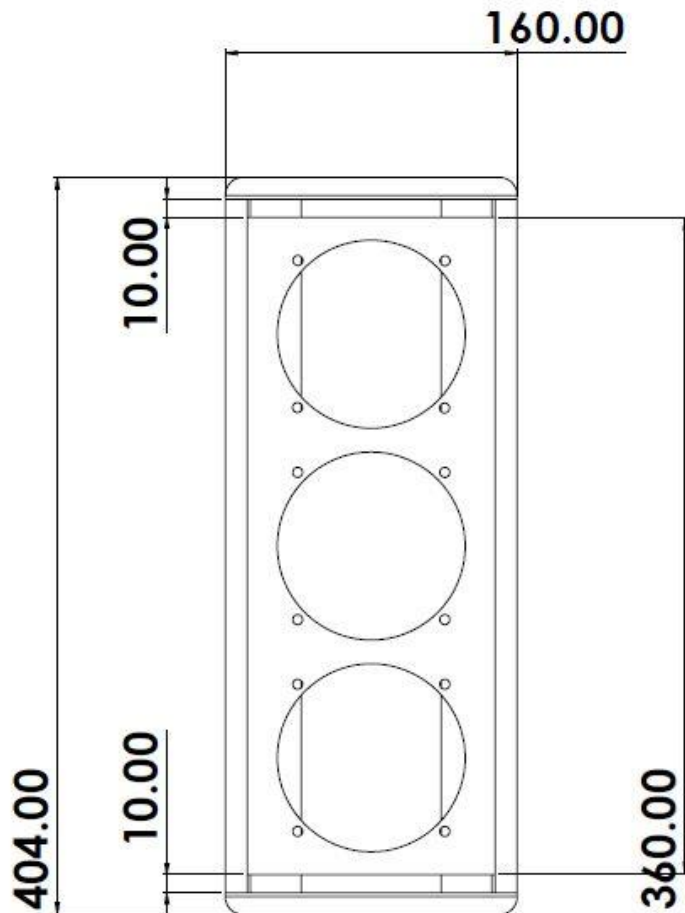
- 12mm Wood thickness (birch plywood suggested)

- A good dampening material should be placed inside the cabinet keeping the ports zone free.

-Passive filter can be placed in the internal side of panel 6 or on the rear face of panel 7 (in this case a rear acces panel is needed).

ENCLOSURE DESIGN

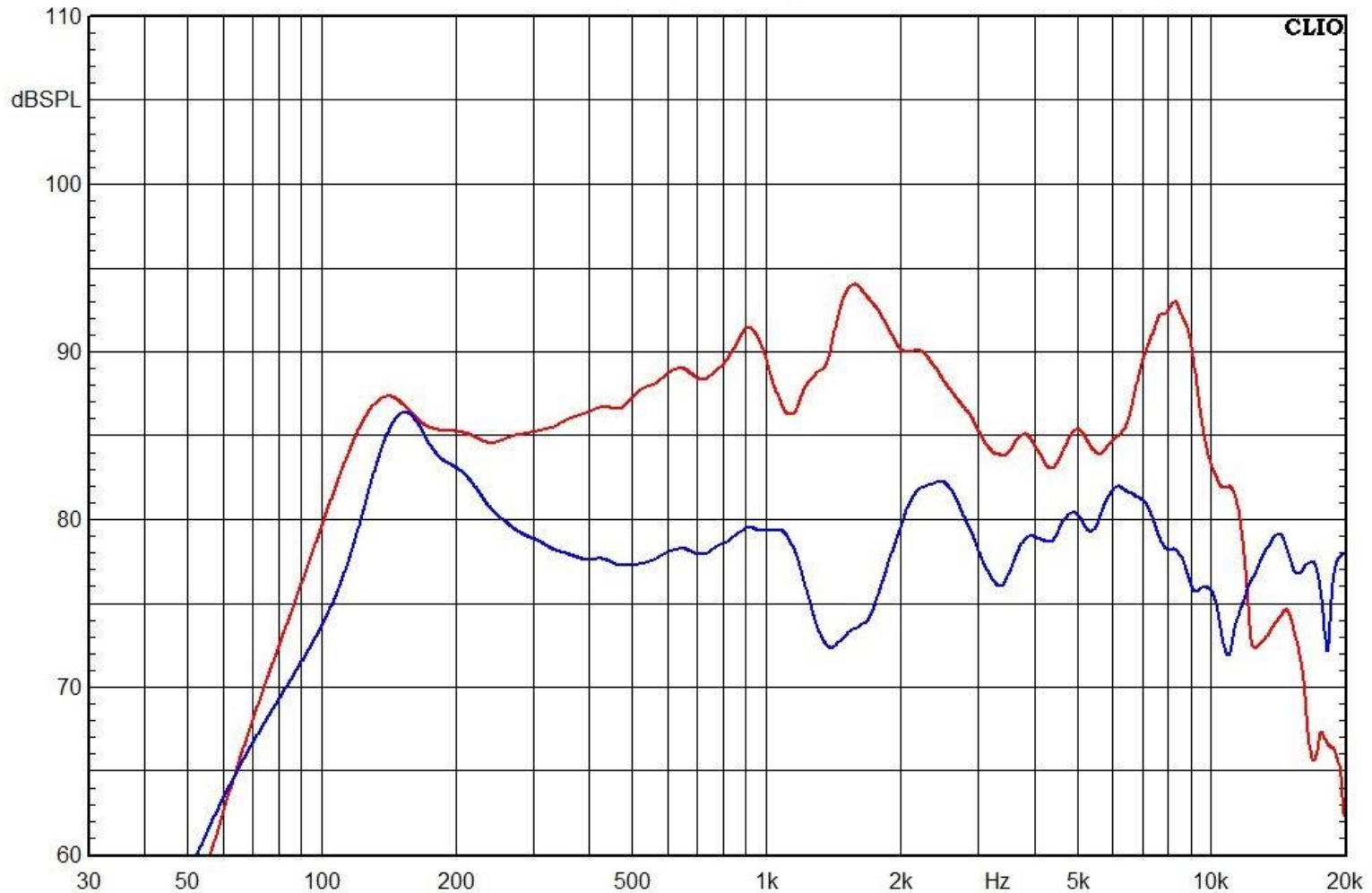
Overall dimensions



Upper View without Top Panel

MEASUREMENTS

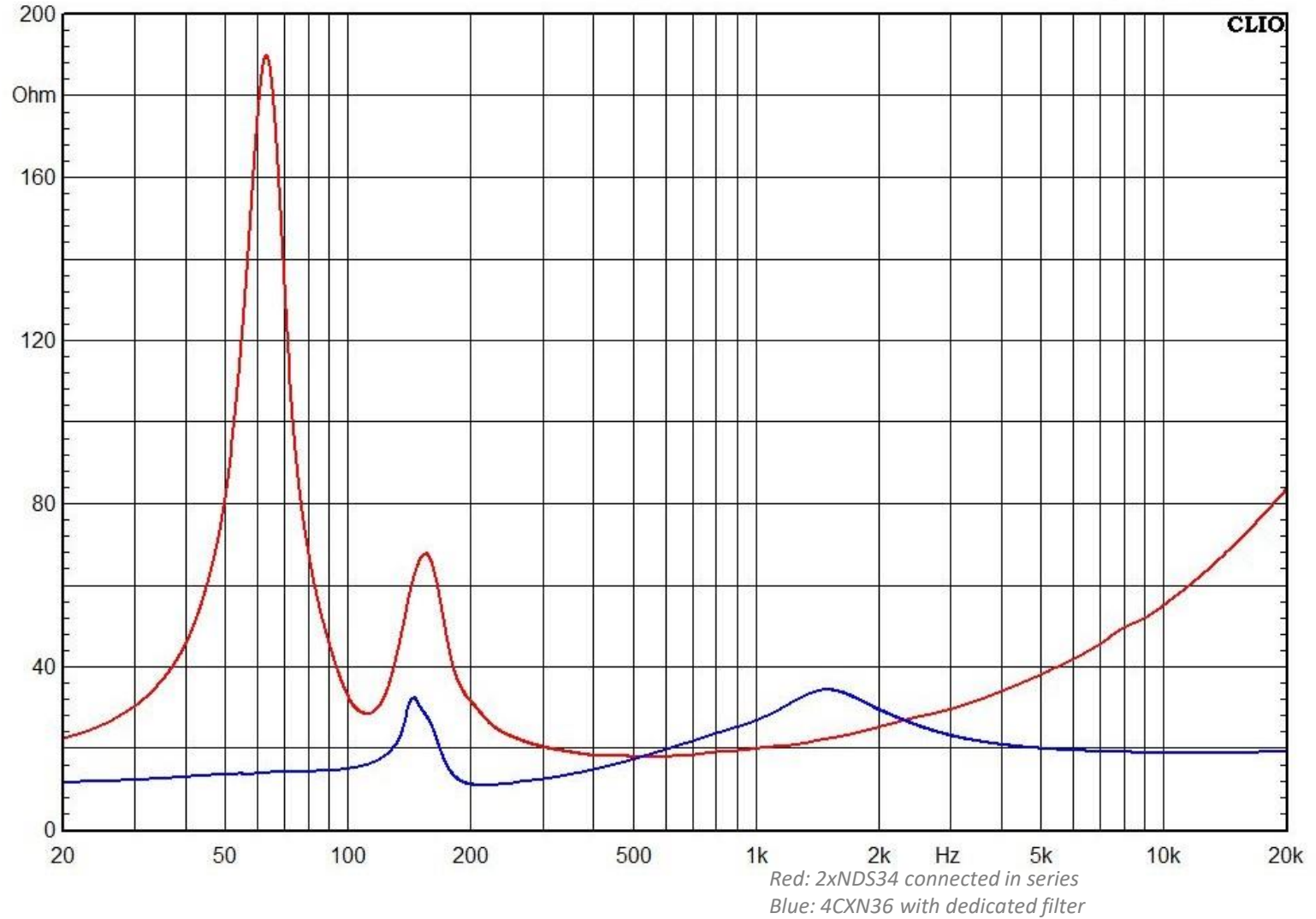
Frequency response @2.83V@1mt



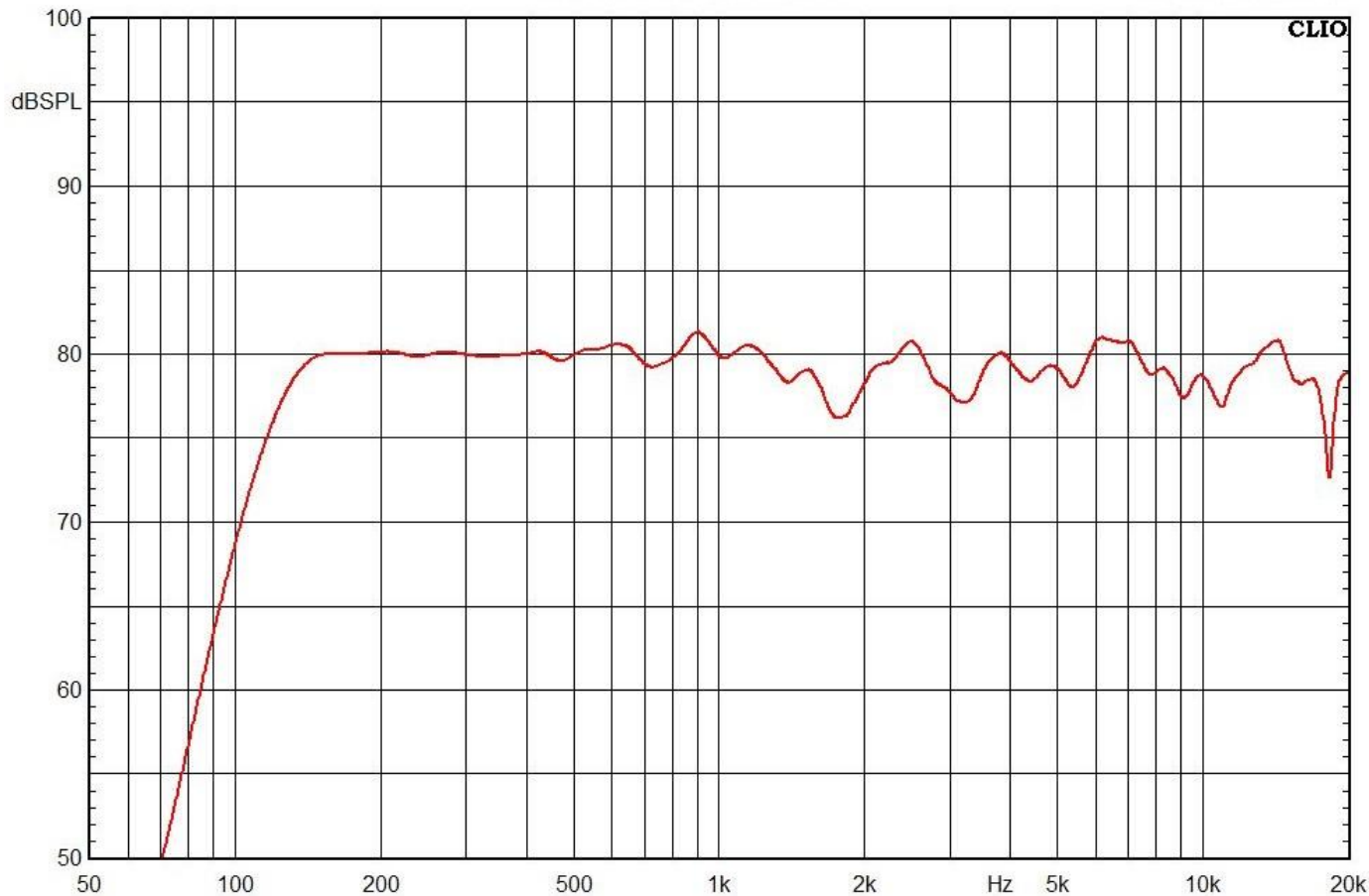
Red: 2xNDS34 connected in series
Blue: 4CXN36 with dedicated filter

MEASUREMENTS

Components Impedance @-20dBu input



Active dsp settings (2 channels)



Processed Frequency response

LF:

In: -4.5dB

HPF: 75Hz – BTW 24dB/Oct

Peaking #1: +2dB – Q:1,5 – Frq:250Hz

LPF: 800Hz – BTW 12dB/Oct

MF+HF:

In: 0dB

HPF: 1KHz – BTW 12dB/Oct

Peaking #1: +6dB – Q:2 – Frq:1.5KHz

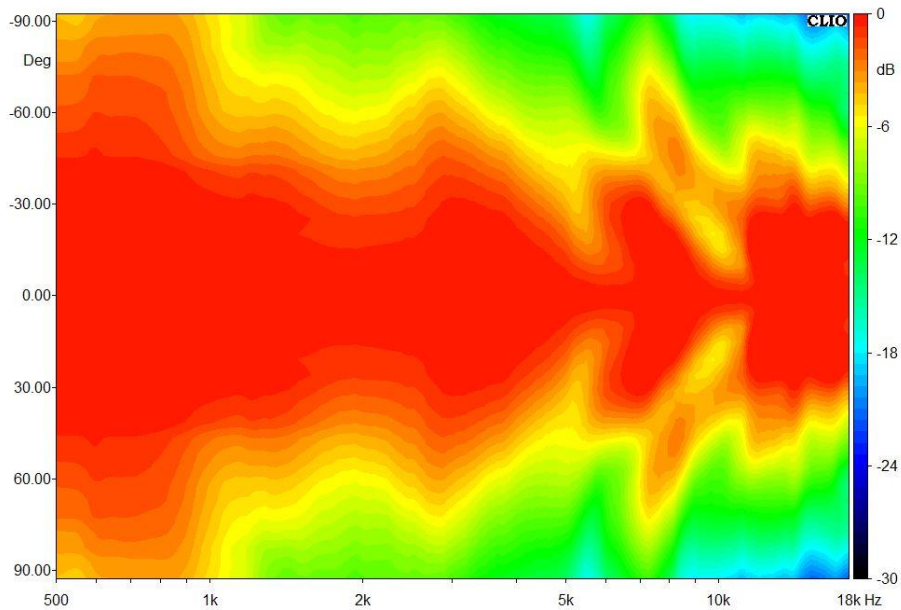
Peaking #2: +4dB – Q:4 – Frq:3.6KHz

Peaking #3: +4dB – Q:4 – Frq:11KHz

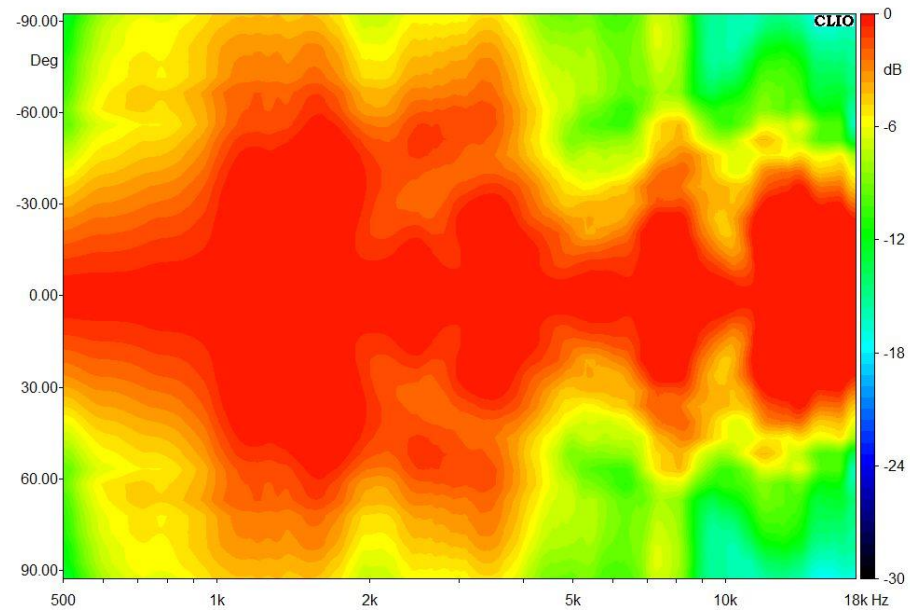
HSH: +4dB – Q:1 - from 8KHz

Polar map

Directivity Index with Active dsp settings.



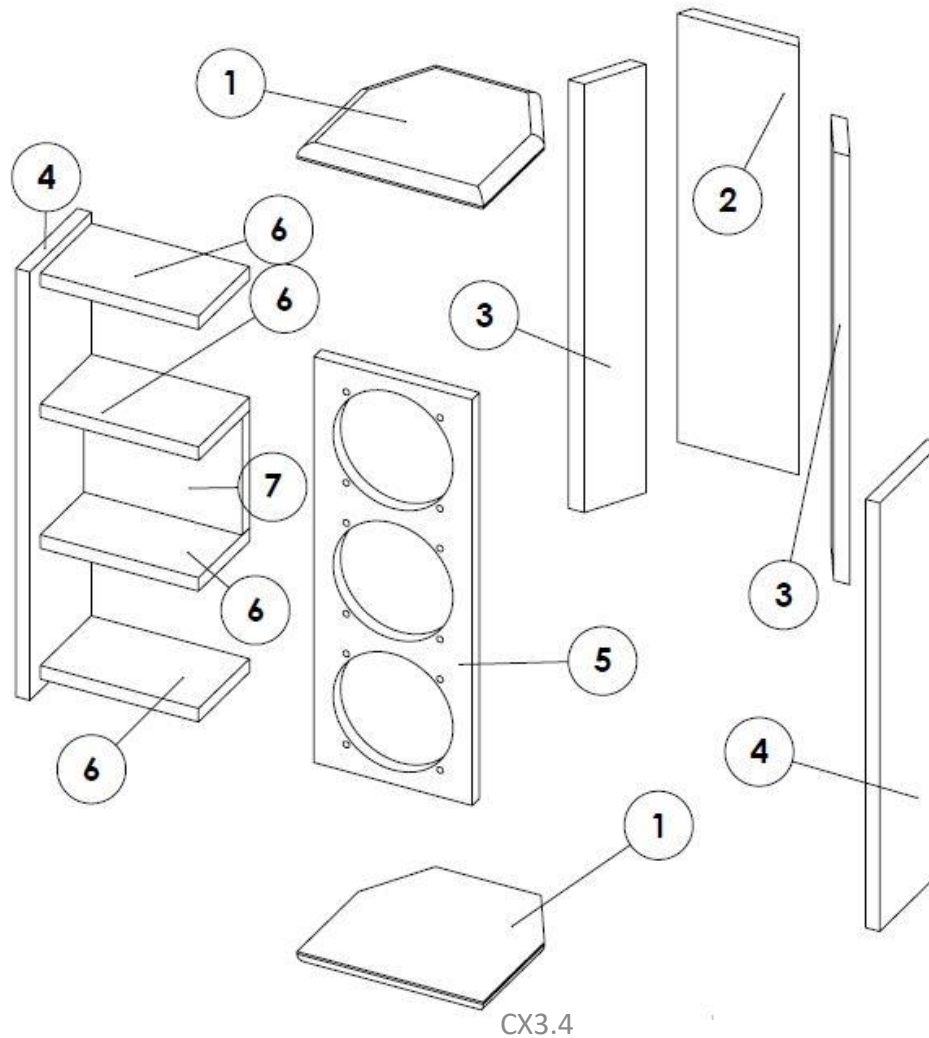
Horizontal plane



Vertical plane

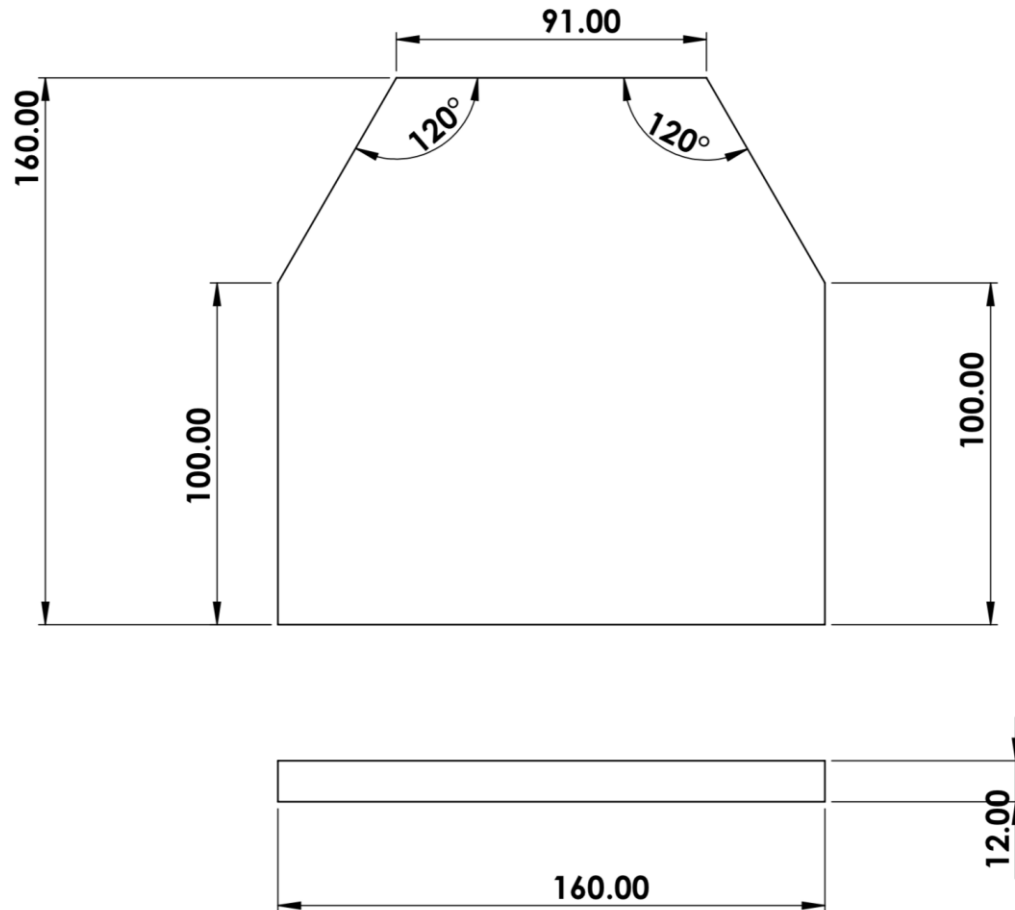
ENCLOSURE DESIGN

Exploded view and parts



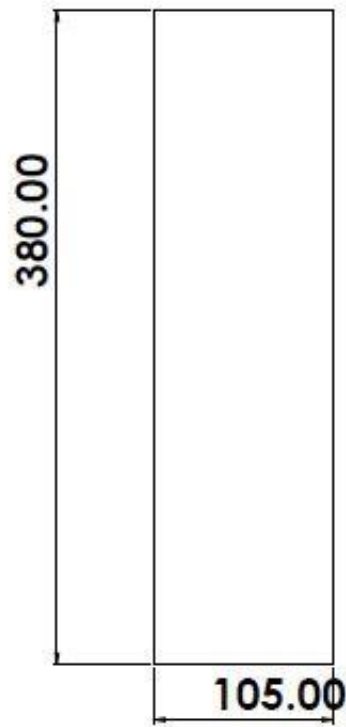
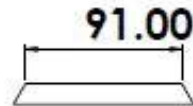
ENCLOSURE DESIGN

Part 1 : top/bottom panels (nr:2)



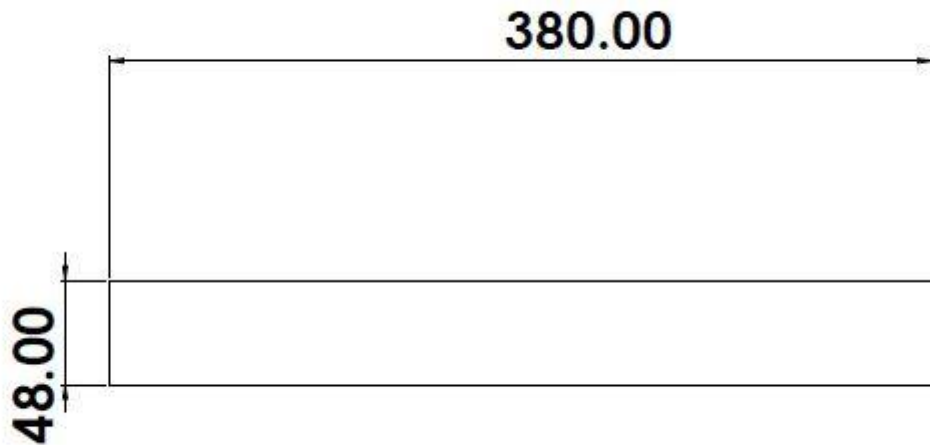
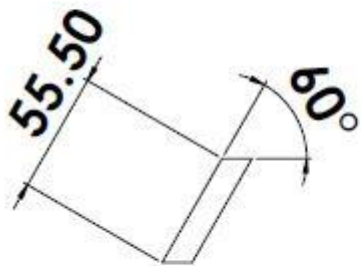
ENCLOSURE DESIGN

Part 2 (back panel)



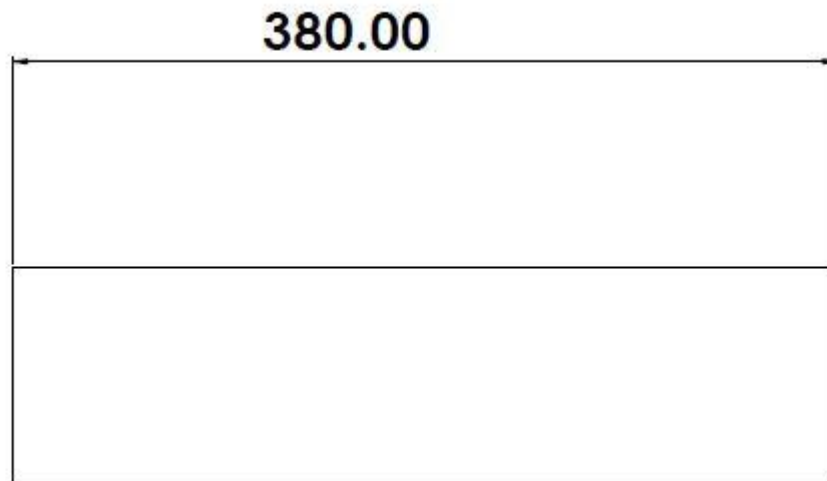
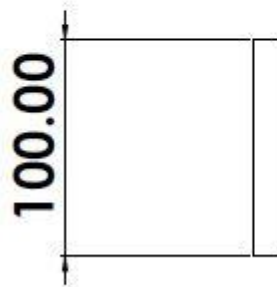
ENCLOSURE DESIGN

Part 3 : back/side panels (nr:2)



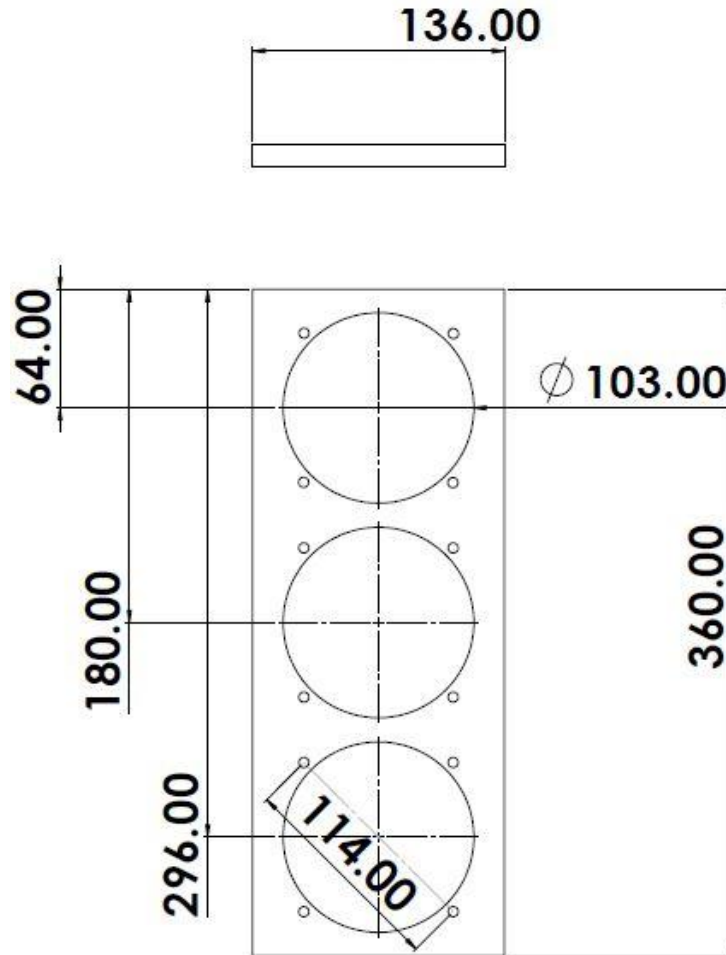
ENCLOSURE DESIGN

Part 4 : baffle/side panels (nr:2)



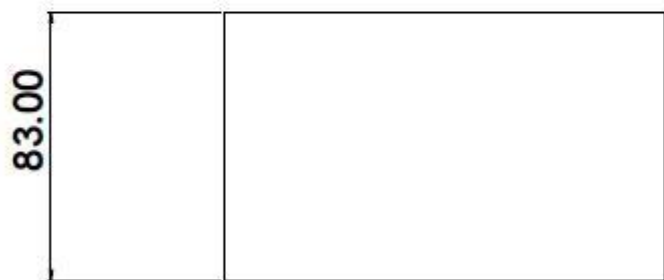
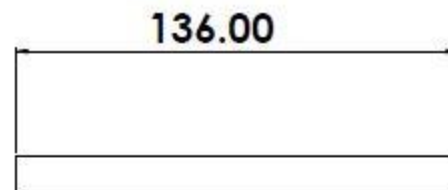
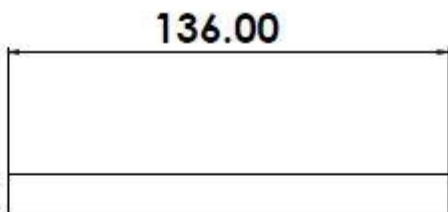
ENCLOSURE DESIGN

Part 5 : baffle panel

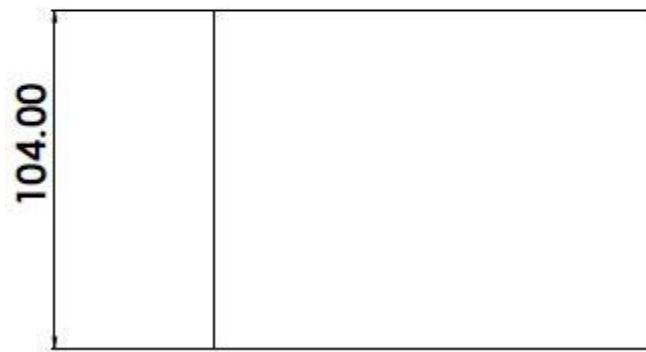


ENCLOSURE DESIGN

Part 6/7 : internal panels



Part 6:
Horizontal internal panels(nr:4)



Part 7:
Internal box rear panel