

5 EQUIPMENT DESCRIPTION

5.1 SCOPE OF SUPPLY

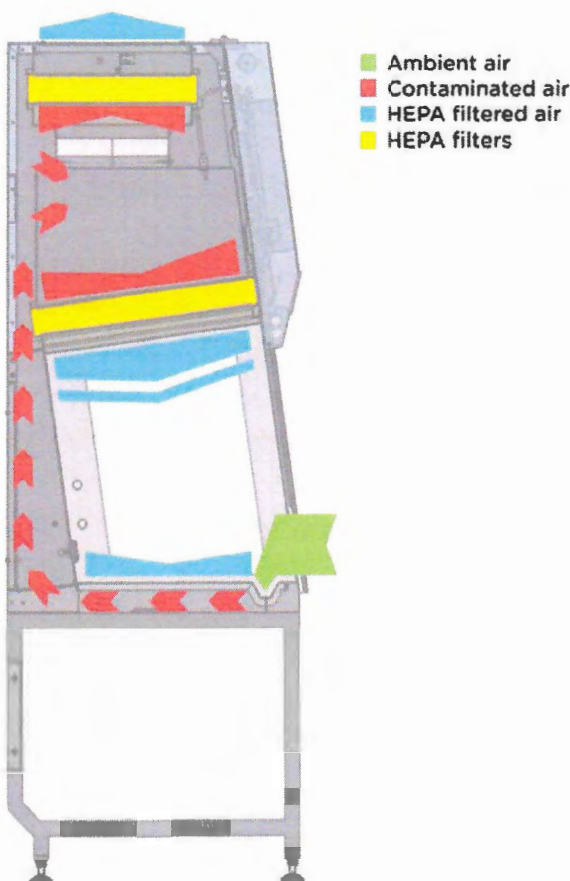
Based on this document, one identical devices will be supplied, each with its own unique serial number and with its own user documentation.

5.2 PURPOSE AND FUNCTION OF THE EQUIPMENT

Microbiological safety enclosure - Class II, is applied in laboratories, manipulating chemical and biological substances and in areas and it provides maximum protection of the operator, the surrounding and the working product.

5.3 FUNCTIONAL DESCRIPTION OF SAFETY CABINET

The cabinet takes a part of the air from the surrounding and returns it to the surrounding after being cleaned through an absolute exhaust filter (can be connected to the exhaust duct – OPTION), the rest of the air is circulating inside the cabinet.

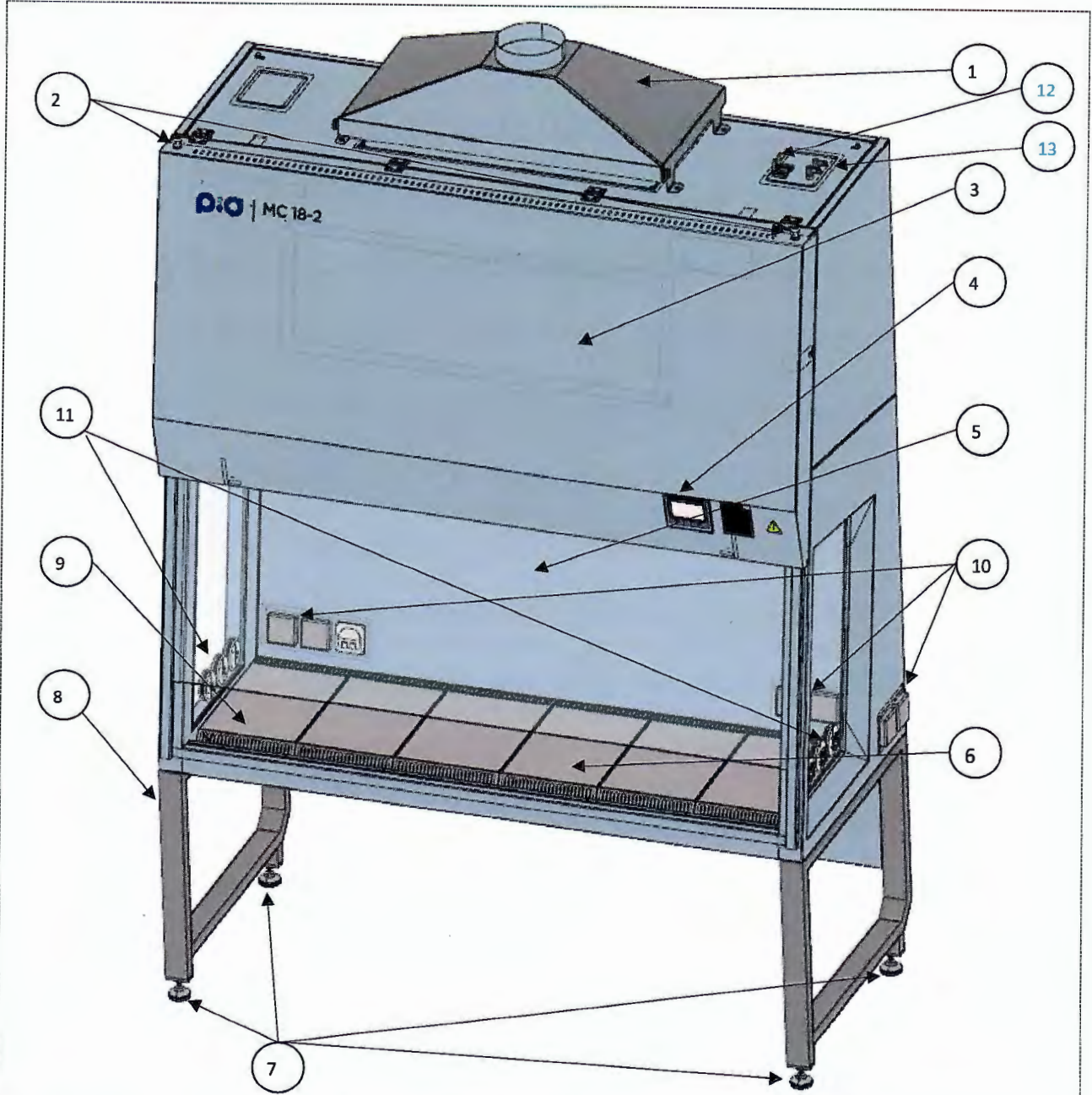


The air is entering the safety cabinet from the lower front side through front aperture and further through cuttings in the working-desk segments. Under the working-desk segments, the entering and the recirculated air are mixing together. Then the air travels through the return flow channel to the upper casing and enters the overpressure hood. A ventilator is pressing a part of the air (ca. 30%) through a H14 (EN 1822) quality exhaust filter to the surrounding (or is connected to exhaust duct - OPTION), the rest of the air (ca. 70%) is being pressed inside the working area through a H14 (EN 1822) quality filter above the working area and through a distribution net. The rates of exhaust respectively entering and recirculating air are ensured by the proportions of the surfaces of the exhaust filter and the filter above the working area.

The distribution net provides a laminar air arrangement above the working area and directs the air vertically to the working surface of the cabinet. The laminar air flow is carrying away the particles, which are generated by the manipulation of the material.

In the front area of the cabinet between the operator and the location of dusting is an air curtain, separating the working area of the cabinet from the surrounding.

Device consist of the following major components:



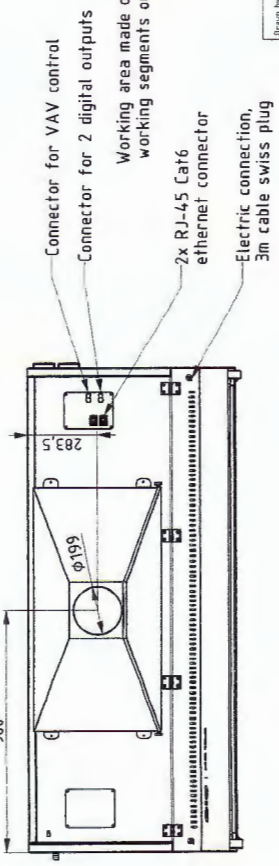
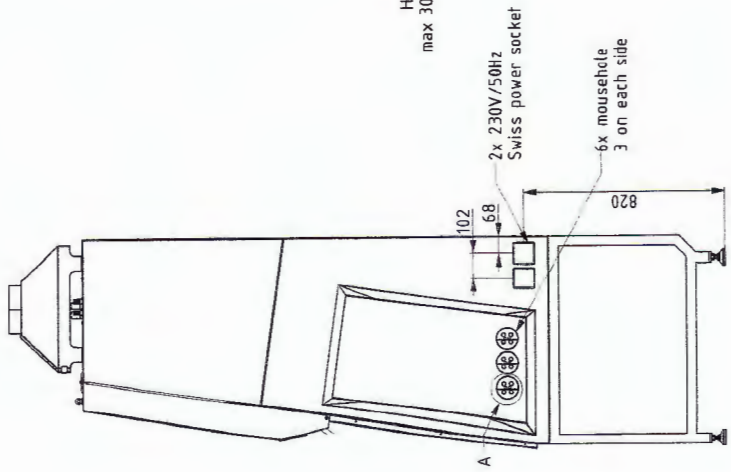
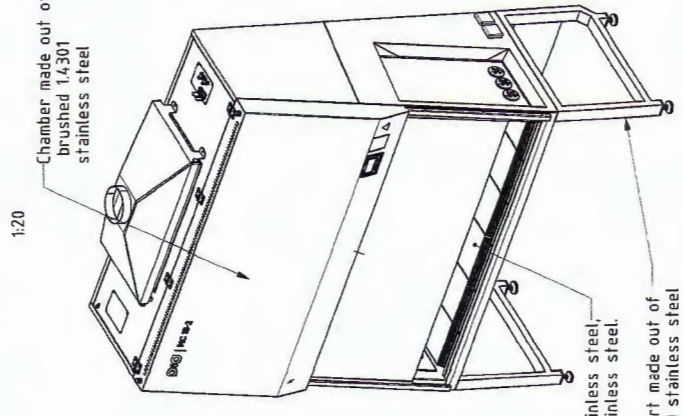
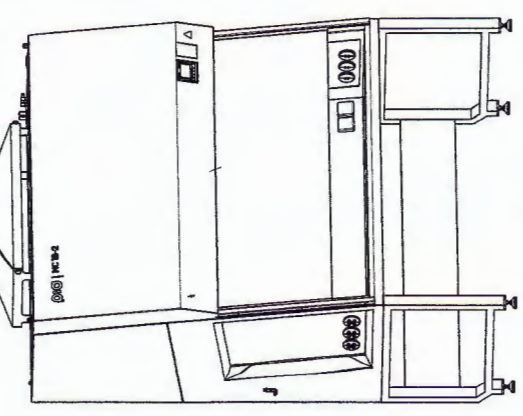
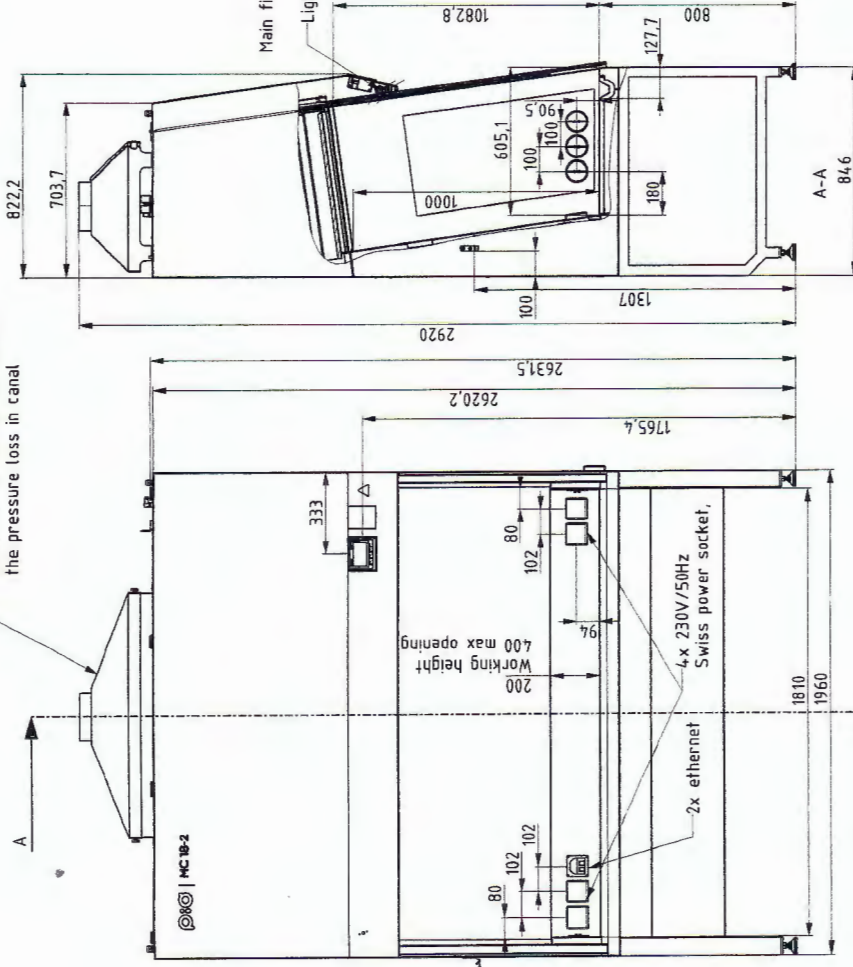
1 Exhaust, protective cover	7 Levelling feet for anchoring
2 Electrical connection: Power plug Type 23 (Switzerland standard), 3m cable (L or R)	8 Support structure
3 Technical area	9 Standard work segments
4 Operating panel	10 Power sockets (2x + 2x + 2x outside)
5 Protective front glass	11 Electrical cable passages (2x)
6 Working area without connections	12 Ethernet connection (2x)
	13 Connectors (2x) – for output signals and VAV

5.4 MATERIAL

Material used:

- All exterior surfaces are made mild steel sheet metal, stainless steel AISI 304/EN 1.4301, surfaces brushed – $Ra < 1,6\mu m$
- All surfaces in working area made of stainless steel AISI 316/EN 1.4404, surfaces brushed – $Ra < 0,8\mu m$
- Working area segments are made of brushed stainless steel AISI 316L/EN 1.4404; $Ra \leq 0,8\mu m$. Sheet metal thickness: 1,5mm
- Support structure made of mild steel tubing and sheet metal, stainless steel AISI 304/EN 1.4301, surfaces brushed – $Ra < 1,6\mu m$

Suction hood with spacer
Client needs to provide
800 m³/h air suction and cover
the pressure loss in canal



Katia Santos
Digitally signed by Katia Santos
DN: cn=K.S.,
email=k.santos@scggroup.com,
c=CH, ou=Engineering, cn=Katia Santos
Date: 2022.10.17 14:00:56+0200

Drawn by Heidi Heide Surface Protection	Drawn by Timo Zuber 10.19.2022	Surface finishing Natural	Mass (kg) 600 kg
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pio
Clean visions
Surface Protection
No 22
Königsplatz 20
7000 Winterthur
T +41 52 788 88 88
F +41 52 788 88 88
www.pio.ch
Third party except with prior written consent at file's page 6/6

AssemblyDrawing MC 18-2 S
Drawing number
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Scale: 1:15
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