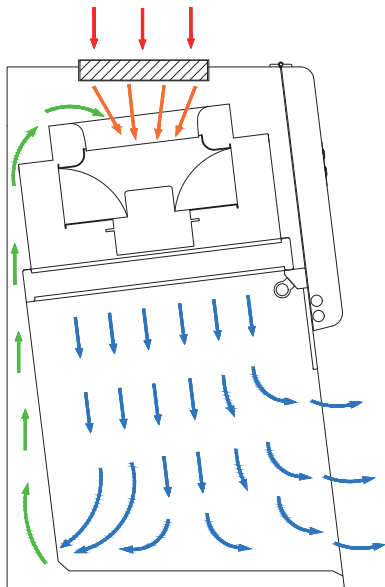**metisafe**
CLEANROOM & BIOSAFETY

VERTICAL TYPE
LAMINAR AIRFLOW CABINET
C Series

ISO 14644 CE

O Ergonomic Design
O Spacious and Comfort Work Area
O Reliable Product/Material Protection
O Class 100 / ISO 5 Cleanliness Class

"Laminar Airflow (LAF) cabinet ensures particle-freeenvironment for product & material/sample protection against airbornedust or microorganisms"

AIRFLOW DIAGRAM

→ HEPA Filtered Air (Fresh Air)

→ Air Passing through the Prefilter

→ Ambient Air

→ HEPA Filtered Recirculated Air

Metisafe Vertical LAF cabinets works under air filtration, re-circulation and indoor exhausting principle. Room air pass through pre-filters that blocks coarse particles at device top and reaches to work cabinet area with air velocity of 0.40 m/s (±5%) by passing through HEPA filter. Built in laminator in fan filter module supplies the airflow at homogenous and lam-inated way. Designs of working cabinet and air diffusion as-sures trimmed airflow and sweeping dead zones. Air moves in two way in workingcabinet, one part exhausted to room at front by reventing room air move into the working zone. The rest of the internal air isrecirculated from the back holes of the cabinet by increasing HEPA filter life.

Main Body and Design Features

O Main body from antibacterial electrostatic paint coated on steel

O <7° angle back sloped front panel for work comfort and increased working chamber vision

O Easy reachable electronic control & electrical part protection inside at front panel isolated from working chamber

O UV resistant glass front window and side windows

With the increasing needs of cleanroom workstationsalmost all laboratories have an application field for LAF cabinets, such as electronic, optic, pharma and food industries

O Homogenous and cruise control airflow

O Advanced filter compensation system keeping steady air velocity under increased filter resistance

O Negative plenum Fan/Filter Unit suitable for non-stop operation

O Homogenous illumination

O Timer controlled effective disinfection by UV Lamp

O D.O.P. test ports

ELECTRONIC CONTROL UNIT

- Power, Fan, UV and FL lamp On/Off buttons
- Digital screen with real-time air velocity data
- Standby and Normal work modes
- Advanced filter compensation system keeping fixed airflow rate under increased filter resistance
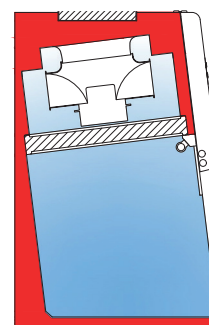- Audial alarm activation with unproper air velocity rates

Laf cabinet control panel

Easy access, isolated control unit from the contaminated are

Monoblock stainless steel work plate Spacious working cabinet

Plenum cast design creates negative pressure around contaminated work area and ensures zero leakage
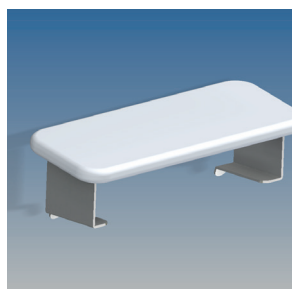
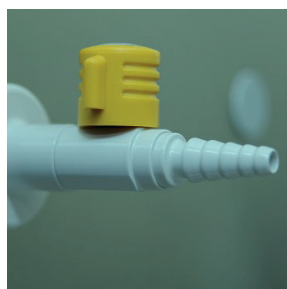| CAT #	OPTIONALS
MOP.HTS	Humidity/Temperature Sensor
MOP.CFL.EU4	Active Carbon Impregnated Pre-filter
MOP.PMS	Particle Measure System
MOP.BWT	Precision Balance with Vibration Damping Weighing Table
MOP.MDS	Manual Decontamination System

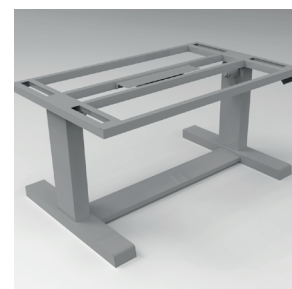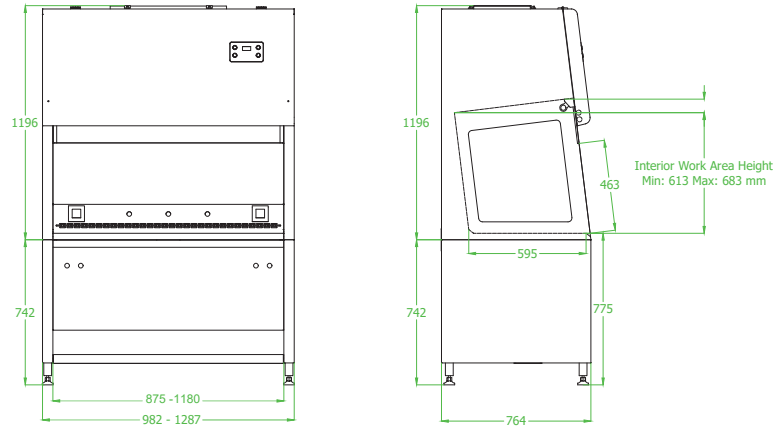| CAT #	ACCESSORIES
MAC.HAS	Height Adjustable Support Stand
MAC.WSS	Wheeled Support Stand
MAC.UVC	Portable Germicidal UV Lamp
MAC.MIS	Microbiological Air Sampling Apparatus
MAC.ASA	Arm Support Apparatus
MAC.UPS	Uninrerruptible Power Supply (UPS)
MAC.ADH	Acrobat Document Holder
MAC.AMH	Acrobat Monitor Holder
MAC.INC	Incinerator
MAC.DID	Disinfection Dispenser
MAC.ECM	Document/Equipment Cleaning Module
MAC.VLF	Service Valves
MAC.FOS	Foot Stand

Incinerator

Arm Support Apparatus

Service Valves

Height Adjustable Support Stand

METİSAFE C SERIES VERTİCAL TYPE LAF CABINET TECHNICAL DRAWING

Front view dimensions: 1196, 742, 875 -1180, 982 - 1287

Side view dimensions: 1196, 463, Interior Work Area Height Min: 613 Max: 683 mm, 595, 742, 775, 764

METİSAFE C SERIES VERTICAL TYPE LAF CABINET TECHNICAL SPECIFICATIONS			
Model		**LFV-C90**	**LFV-C120**
DIMENSIONS and WEIGHT			
Internal Dimensions (WxLxH) mm		875 x 595 x 613	1180 x 595 x 613
External Dimensions (WxLxH) mm		982 x 764 x 1196	1287 x 764 x 1196
Support Stand (WxLxH) mm		982 x 764 x 742	1287 x 764 x 742
Working Table Height (mm)		775 mm	
Cabinet Weight (Kg)		150	190
Support Stand Weight (Kg)		30	34
Packaged Total Weight (With Support Stand) (Kg)		210	255
Pack/Palette Dimensions (With Support Stand) (WxLxH) mm		1050 x 1150 x 1600	1410 x 1450 x 1600
HEPA FILTER and AIRFLOW DYNAMICS			
Airflow Velocity	Down Flow	0.45 m/s ± %20	
Filters (EN 1822)	Pre-Filter	EU4	
	Main Filter	H14 HEPA, 0,3 μm paticle %99.995 < filtration efficiency	
Airflow Rate m³/h		615	770
ENERGY			
Energy Consumption 230 VAC- 50Hz	Fan Filter Unit	227 W	239 W
	Illumination	18 W	36 W
	UV Lamp	18 W	30 W
	Electrical Socket Power/Current	2x1150 W / 2x5 A	
Total Power / Current		2563 W / 11,1 A	2605 W / 11,3 A
Power Consumption Under Normal Operating Conditions (Illumination and Fan Motor)		245 W / 1 A	275 W / 1,1 A
ERGONOMICS and COMFORT			
Front Window Aperture (Fixed)		463 mm	
Noise Level		≤ 60 dB	
Illumination		≥750 Lux	
WORKING AREA			
Working Table	Standard	304 Stainless Steel	
	Optional	316 Stainless Steel	
Front Window Thickness		≥ 6 mm	

QUALITY and CERTIFICATIONS

CE, ISO9001-2015 Quality Management Certificate, ISO14644 Cleanroom Class Compatibility, EN61010 Electric and Electronic Safety Compatibility, Accredited Testing Institution Validation Guarantee in case the installation is opareted by Metisafe® Certified Technical Personnel

Dimension and Weight

HEPA

Energy Productivity

Ergonomics and Comfort

Working Area