



Telstar® *CLF Series*

Horizontal Laminar Flow Bench

High quality

Reliable performance

Advanced safety features

User-friendly control panel

Ergonomic design

Easy to clean



Product protection

Telstar® *CLF Series*

Telstar CLF Series is a high quality horizontal laminar flow workbench range for handling non-hazardous materials that require a clean working environment.

- *High quality*
- *Reliable performance*
- *Ergonomic design*
- *Easy to clean*
- *User-friendly control panel*
- *Advanced safety features*

International safety standards

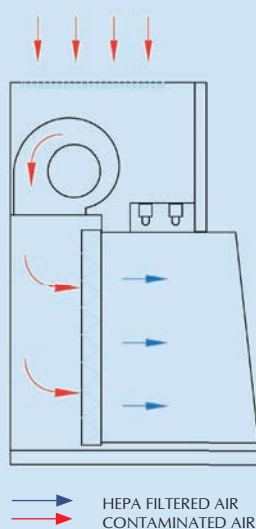
CLF Series is designed and manufactured in order to achieve a working area that meets the ISO 14644-1 (Class 5) , GMP Annex 1 (Class A)*, PIC's and equivalent standards.

Applications

Its applications are in the field of pharmaceutical industry, biotechnology, pharmacies, hospitals, university laboratories, tissue culture and electronic laboratories.

Available sizes

CLF Series is standard available in sizes 4, 5 and 6 ft width (120, 150 and 180 cm).



Basic principle

HEPA filtered horizontal laminar airflow (crossflow) creates an ISO 14644-1 (Class 5) / GMP Annex 1 (Class A)* work area and prevents ambient air entering the work area, ensures product protection.

* Former Class 100 according Federal Standard 209E

Features & benefits

General features

- Microprocessor flow control
- Control panel with alarms and parameters
- HEPA filter H14 (efficiency of 99,995 % MPPS)
- Pre-filter G3 (efficiency of 80 - 90 % Am)
- Epoxy coated steel in- and exterior (1,5 - 2 mm)
- Laminate worktop
- Sloped safety glass side windows

Advanced safety features

- HEPA filter surface covers complete work area. No dead corners and a laminar flow in the entire working area
- Smooth interior for efficient and easy cleaning
- Small barrier at the back of the worktop protects the HEPA filter against spilled liquids
- Automatic compensation of air velocity caused by HEPA-filter clogging
- Two redundant microprocessors (fail-safe synchronization)
- UV light safety control: FL light will be switched off when UV light is switched on

Options & Accessories

The available options and accessories make this cabinet adaptable to many applications. Together with the flexibility and expertise of our engineering department, this cabinet is suitable to customise to customer specific requirements.

Control panel with alarms and parameters



- Green light indicates safe work mode
- Red light indicates alarm (visual and audible) for:
 - Airflow (high/low)
- Switch for work mode (on/off) **
- Switch for stand-by mode (on/off)
- Switch for UV light (on/off) **
- Switch for FL light (on/off)
- Switch for power socket (on/off) **
- Switch for gas valve (on/off)
- English, Spanish, French, German and Dutch language
- Real-time clock
- Total running hours for fan, FL, UV
- Pin code to prevent unauthorised usage
- RS 232 and RS 485 connection
- Volt free contact for forwarding alarms to building management systems
- Volt free contact(s) which can be used to switch on/off an external system
- Prepared for control of disinfection options

** Also controllable by programmable clock (on/off) or timer (off)

Technical Specifications

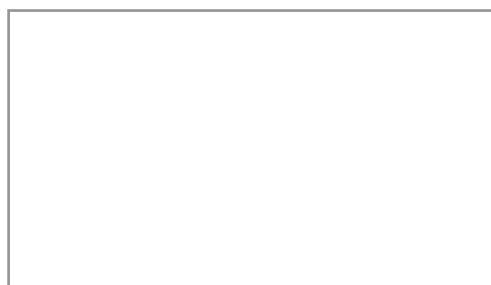
TYPE	CLF 475	CLF 575	CLF 675
Part numbers (epoxy coated)	P0012475	P0012575	P0012675
Part numbers (stainless steel)	P0012475R	P0012575R	P0012675R
DIMENSIONS			
Exterior dimensions WxDxH (mm)	1290 x 890 x 1350	1595 x 890 x 1350	1900 x 890 x 1350
Interior dimensions WxDxH (mm)	1190 x 580 x 730	1495 x 580 x 730	1805 x 580 x 730
Height with support frame (mm) ^[1]	2082	2082	2082
Weight (kg)	225	270	325
PERFORMANCES			
Horizontal velocity (m/s)	0,45	0,45	0,45
Sound level (dBA)	< 58	< 58	< 54
Power consumption (W) ^[2]	373 / 708	460 / 805	465 / 1000
Light intensity (lux)	> 900	> 900	> 900
ELECTRICS			
Electrical connection (V)/(Hz)	230 / 50	230 / 50	230 / 50
FILTERS			
Pre-filter (EN 779)	G3	G3	G3
Horizontal HEPA-Filter (EN 1822)	H14	H14	H14
STANDARDS (build according to)			
ISO Class 5	Yes	Yes	Yes
GMP Class A	Yes	Yes	Yes
2006/42/EC	Yes	Yes	Yes
2004/108/EC	Yes	Yes	Yes
2006/95/EC	Yes	Yes	Yes
EN 61010-01	Yes	Yes	Yes

[1] Support frame with working height 810 mm

[2] Stand-by mode and light off / work mode and light on

Options & Accessories

- Support frame
- Taps (natural gas, vacuum, O₂, N₂, etc)
- Electrical socket(s)
- UV light
- Stainless Steel worktop
- Stainless Steel bar with (6 or 8) hooks
- FAT / SAT / IQ / OQ



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