User Manual

DRAWELL
Artist of Science

Please read operating manual before installation and operation.

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Catalogue

SW-CJ-3F Laminar flow cabinet

1、Product features

1. Adopting arbitrary positioning sliding door system

2. The shell is made of cold plate electrostatic spray, and the work surface is SUS304 brushed stainless steel, which is corrosion-resistant and easy to clean.

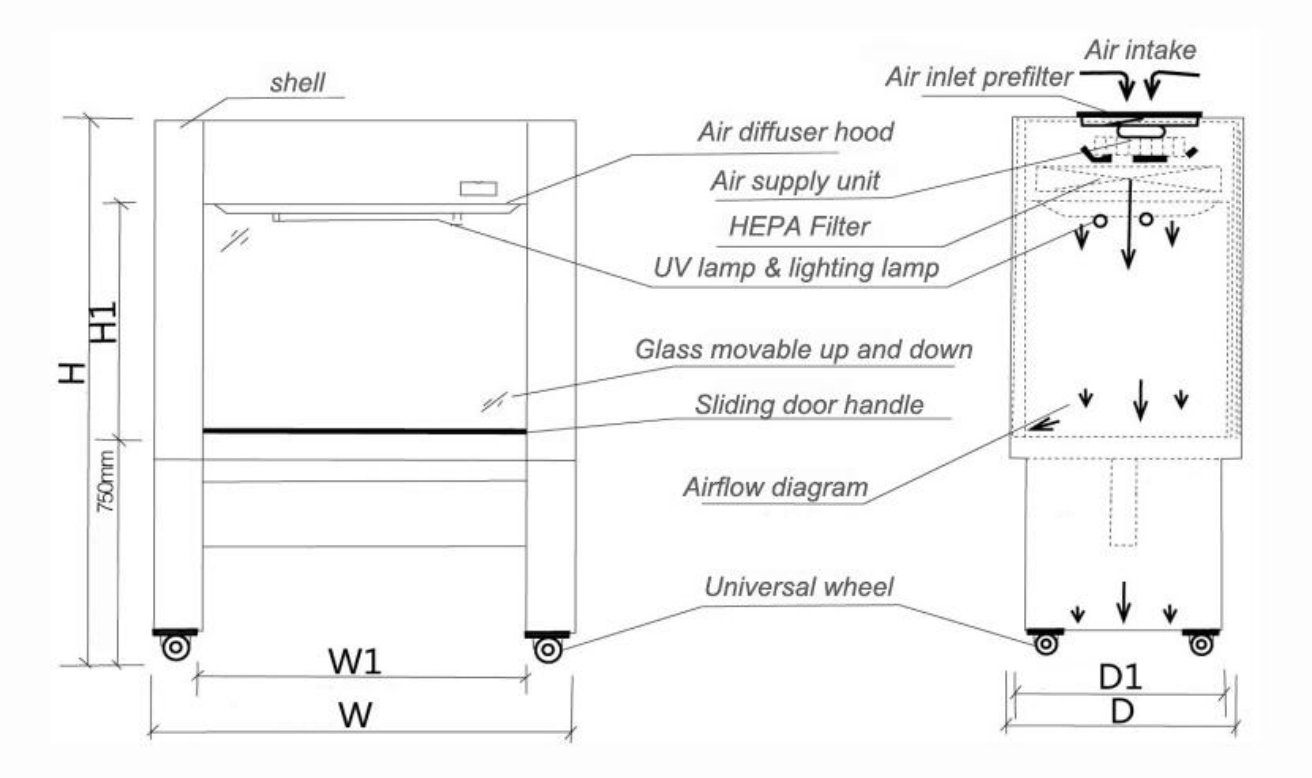
3. Safety interlocking of lighting and sterilization system

4. Digital display LCD control interface, three speeds adjustable for fast, medium and slow, UV lamp timing, more user-friendly design

5. The vertical quasi-closed table top and the formation of a downward flow air curtain in the operation room can effectively prevent the input of external air and the operation area is clean

6. Equipped with HEPA high-efficiency air filter, with primary filter for preliminary filtration, which can effectively extend the service life of the high-efficiency filter

7. Meet the safety requirements of various medical equipment



SW-CJ-3F Schematic

2、Technical parameter

Model / parameter	SW-CJ-3F
Cleanliness level	Class 100@≥0.5μM (US Federal 209E)
Number of colonies	≤0.5 个/dish·h（Φ90mm dish）

average wind speed		0.3-0.5m/s
noise		≤58dB（A）
Vibration half peak		≤5μM（x、y、z direction）
Illuminance		≥300Lx
power supply		AC single phase220V/50Hz
Maximum power		700W
weight		200Kg
Working area	W1×D1×H1	1800×650×580
Overall dimension	W×D×H	1960×720×1600
Applicable number		Three person-Double side
High efficiency filter specification and quantity		1785×555×50×①
Specification and quantity of fluorescent lamp/ultraviolet lamp		20W×①/36W×①

3、Structure

The purification workbench is composed of several major components such as a cabinet, a fan, a high-efficiency filter, and an operation switch. The box body is made of cold-rolled plate, and the surface is sprayed with plastic. The purification unit adopts a fan system with adjustable air volume. By adjusting the working state of the fan, the average wind speed in the clean working area can be kept within the rated range, and the service life of the high-efficiency filter can be effectively extended.

4、Working principle

The air passes through the primary filter, is pressed into the static pressure box by the centrifugal fan, and then blown out from the air outlet after being filtered by the high efficiency filter to form a clean air flow. The clean air flow flows through the area to be purified at a uniform cross-sectional wind speed, and the area is The dust is taken away, thus forming a highly clean working environment.

5、Install and use

The location of the workbench should be in a clean room (preferably in a primary clean room with a level of 100,000 or 300,000). Plug in the power supply and turn it on according to the function shown on the controller. The working area and shell of the clean bench should be carefully cleaned before starting up to remove dust on the surface. Normal operation and use can be carried out ten minutes after starting up.

6.Maintain

1. According to the actual use, the primary filter is removed and cleaned regularly. The cleaning cycle is generally 3-6 months. (If it is not cleaned for a long time, dust accumulation will affect the insufficient air intake and reduce the cleaning effect.)

2. When the ideal cross-sectional wind speed cannot be reached after the normal exchange or cleaning of the primary filter air filter, the working voltage of the fan should be adjusted to achieve the ideal uniform wind speed.

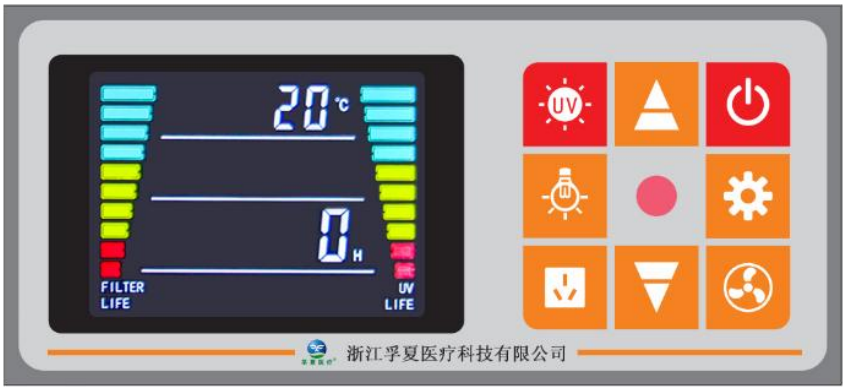
3. Generally, when the working voltage of the fan is adjusted to the highest point after the eighteenth is used, when the ideal wind speed is still not reached, it means that the high-efficiency filter has too much dust (the filter hole on the filter material has been basically blocked, and it should be updated in time) , Generally, the service life of high-efficiency air filters is 18 months.

4. When replacing the high-efficiency air filter, pay attention to whether the model, specification and size are correct (configured by the original manufacturer), follow the arrow wind direction device, and pay attention to the surrounding seal of the filter, absolutely no leakage occurs.

7.General faults, causes, and troubleshooting methods

Failure phenomenon	Reason	Discharge method
The main power switch can not be closed, automatically trip	1. The fan is stuck and the motor is blocked, or there is a short circuit in the circuit	1. Adjust the position of the fan shaft, or replace the impeller and bearing, and check whether the circuit is in good condition.
Low wind speed	1. Too much dust in the primary filter.	2. Check the insulation resistance of the circuit and components to the shell point by point according to the wiring diagram, and repair the insulation failure.
The fan does not turn	2. The high efficiency filter fails.	1. Clean the primary filter.
Fluorescent light does not light up	1. The contactor does not work.	2. Replace the high-efficiency filter.

8.Instructions for use of clean bench controller



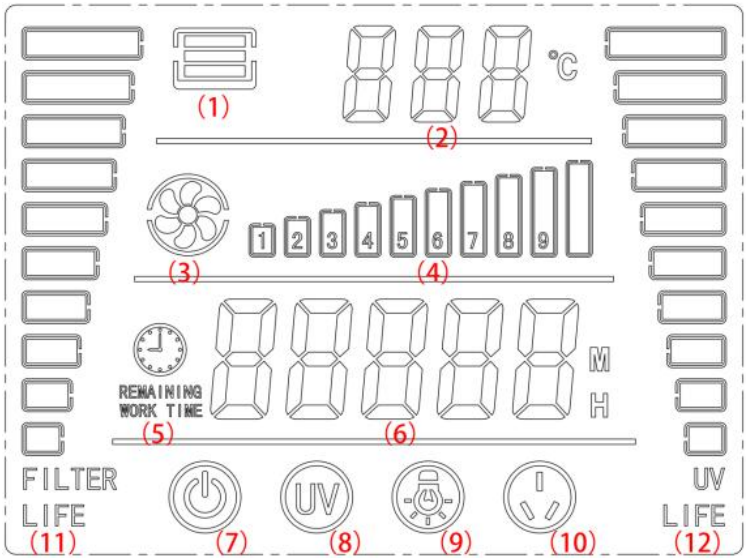
I. Overview

Laminar flow cabinet controller, its appearance is beautiful, suitable for clean bench control

II. Main technical specifications and requirements

1. Power supply voltage: 220VAC±10% (or 110VAC±10%, please note the order);
2. Power frequency: 50/60Hz; Ambient temperature: -10 ~ 60℃; Relative humidity: < 90%RH (non-condensation)

III.Panel indication



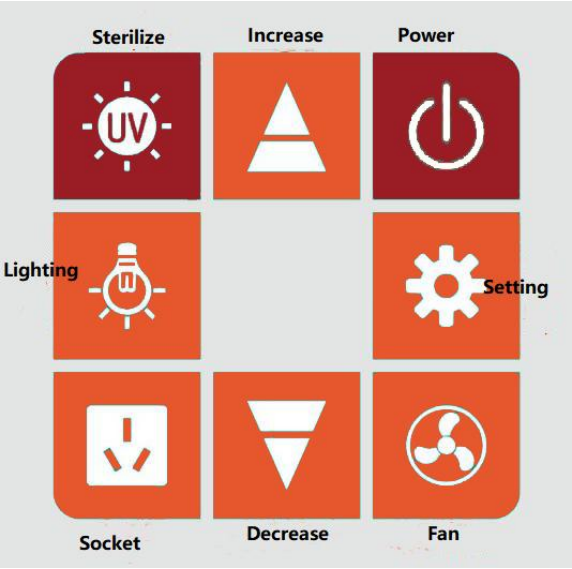
IV.Icon meaning

No	Item	Description
1	【 Door Status 】 icon	When the door opening function is enabled, if the door state is open, the three bars in the middle of this

		icon will be extinguished; When the door is closed, all the ICONS are lit. (The standard configuration is closed, and the gating function needs to be added.)
2	Ambient temperature measurement	When entering a password, PA is displayed. When in the parameter setting state, the English abbreviation of the corresponding parameter is displayed here; When the ambient temperature function is enabled, the measurement value of the current ambient temperature is displayed.
3	【 Fan 】 icon	When the fan is on, the fan icon rotates according to the
4	The gear position of 【 Fan 】	Gear set for the fan (standard 3 gears, can be added to 10 gears)
5	【 Time Remaining 】 icon	This icon lights up when not in the parameter setting state
6	Running time	When in sterilization state, display sterilization time countdown; When input password state, display the input password; When the parameter setting state, display the input parameter; When the sterilization time is completed, "End" is displayed; In other states, the cumulative operating hours of the fan are displayed.
7	【 Power 】 icon	When the power supply is off, this icon is on and all other ICONS are off. When the power supply is on, this icon is off and other ICONS are on.
8	【 Sterilize 】 icon	The icon blinks when the system is in the sterilized state
9	【 Lighting 】 Icon	When the lighting is on, the icon brightens
10	【 Socket 】 icon	When the socket is turned on, the icon is illuminated

11	【Filter life ratio】	When the filter life time is not set to 0, the icon is bright and shows the remaining life ratio of the filter.
12	【Sterilized lamp life ratio】	When the set life time of sterilization lamp is not 0, the icon is bright, and shows the remaining life ratio of sterilization lamp.

V.Key definition：



1. 【Power】key: Power on key, click to turn on or off the power.
2. 【 Lighting 】key: lighting switch.
3. 【 Socket 】key: socket opening key.
4. 【 Sterilization 】key: The key of sterilization lamp (long press when on, click when off).
5. [Fan] key: fan opening key, when the fan is closed, all gear bars are out, the outer frame is out, the fan icon is out, the fan has no output; When the fan is started, the current gear is displayed and the fan has output. The fan icon rotates at different speeds according to the size of the gear.
6. 【▲】 (increase), 【▼】 (decrease) key:

When not in parameter setting and password input state:

When the fan is off, click this key to enter the gear setting state (the gear has been set before the factory). If you accidentally press it, stop for 3 seconds and then return to the normal state.

When the fan is on, click this key to increase or decrease the gear directly and save automatically.

Note: In this state, long press this key does not continuously increase or decrease function.

When in parameter setting or password state:

Click this key to increase or decrease the parameter value or password value.

Note: In this state, long press this key has continuous increase or decrease function.

7. 【Setting】key: Click 【Setting】key to enter the password input interface, modify the input password through 【Increase】and 【Decrease】 keys, and then click 【Setting】key to judge

whether the password is correct. If it is incorrect, exit the password input interface, and enter the corresponding internal parameter interface if it is correct. In the internal parameter interface, you can adjust the parameter size by 【Increase】and 【Decrease】. Click 【Setting】to cycle setting, and hold down 【Setting】 for 3 seconds to exit the parameter setting. The newly set parameter is saved and takes effect.

8. Key interlock description

1. Sterilization and lighting interlock;

9.Wiring diagram

Power board wiring：

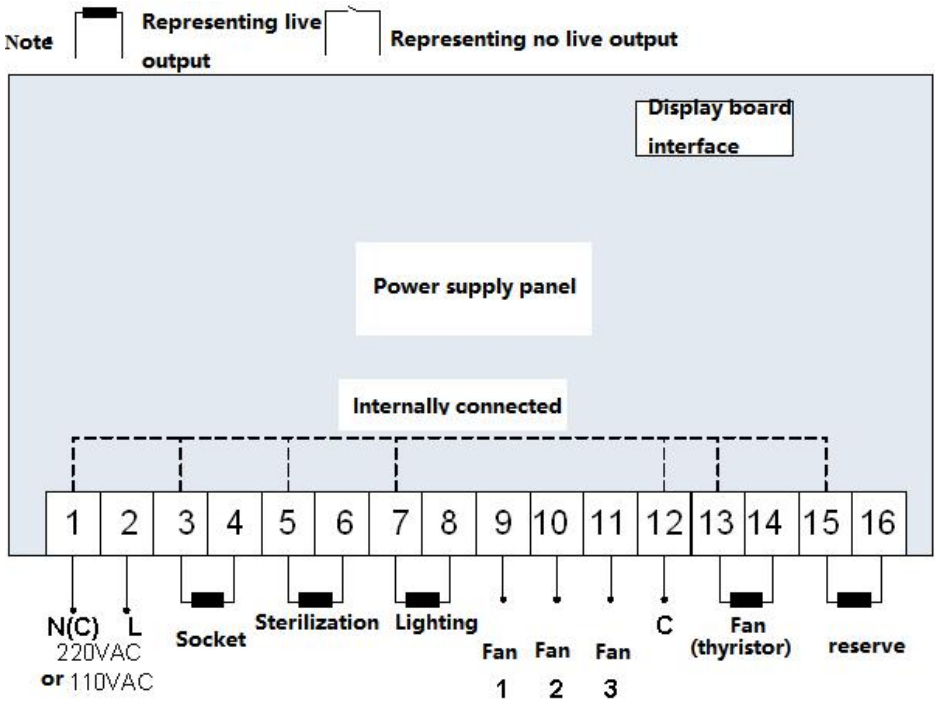
(1) 1 and 2 ends of the 220VAC or 110VAC power cable.

(2) 3, 4 end socket, 5, 6 end sterilization, 7, 8 end lighting.

(3) When the fan is the relay output, the 12 end is the fan 1, 2, 3 is the common end, 9 end is connected to the fan 1, 10 end is connected to the fan

2,11 End fan 3. When the fan is the thyristor output, 13, 14 end connected to the fan.

(4) The signal cable is connected to the interface of the display board and the interface of the power board



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