FT-1986
FAN TRAY ASSEMBLY WITH DIGITALTEMPERATURE CONTROLLER

Specifications & Technical Data

- **Catalog No. : FT-1986**

- **Installation Size: 1.75" H x 19" W x 18.56" D (excluding mounting brackets)**
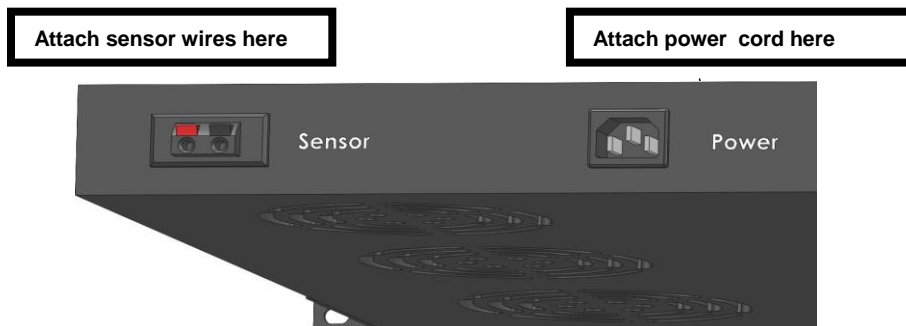
- **Total Air Flow (with no back pressure): 540 CFM**

Temperature controller specifications:

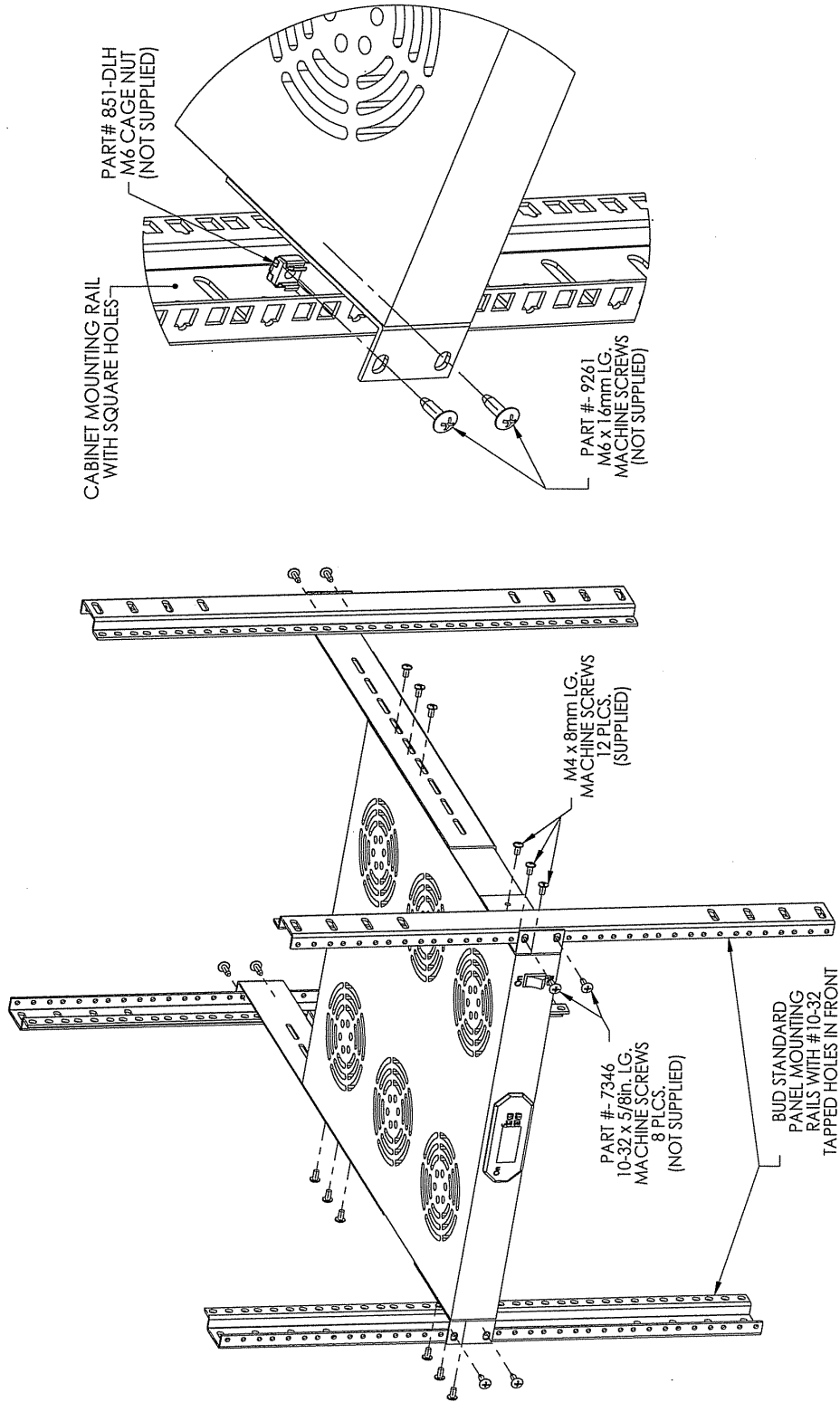| Input power	110V AC ±10% 60HZ
Maximum current	20A (Default) under 110V AV
Sensor	NTC, 25°C / 100KΩ; the sensor cable is 200cm long
Protection class	IP65 to the front panel
Unit storage conditions	-10°C – 60°C, RH<90%, without condensation
Measureable range	0°C – 300°C
Controllable range	0°C – 300°C
Resolution	1°C
Accuracy	±1°C
Power consumption	≤ 3W

NOTICE: For shipping purpose, the Temperature Sensor Cable or Power Cord may be placed inside of the Fan Tray. To gain access, detach top cover of tray by removing two screws that are in the top corners of rear panel.

Controller Connection

1. Connect the two bare ends of the included sensor wire into the two spring loaded lock tabs labeled "Sensor" on the rear panel of the controller, one wire per tab, orientation is not important.
2. Locate the sensor inside the cabinet near the area where the temperature needs to be controlled. Secure the sensor in place by securing the attached wire using a tape or wire ties. DO NOT USE TAPE OR WIRES OVER THE SENSOR.

3. Plug the female end of the power cord into the labeled power receptacle on the rear panel, and the plug's other end into an electrical outlet.

4. Unit is now ready for setting-up the Digital Temperature controller's Parameters.

ASSEMBLY METHOD FOR
FT-1986 FANTRAY WITH DIGITAL TEMPERATURE CONTROLLER

PART# 851-DLH
M6 CAGE NUT
(NOT SUPPLIED)

CABINET MOUNTING RAIL
WITH SQUARE HOLES

PART #- 9261
M6 x 16mm LG.
MACHINE SCREWS
(NOT SUPPLIED)

M4 x 8mm LG.
MACHINE SCREWS
12 PLCS.
(SUPPLIED)

PART #- 7346
10-32 x 5/8in. LG.
MACHINE SCREWS
8 PLCS.
(NOT SUPPLIED)

BUD STANDARD
PANEL MOUNTING
RAILS WITH # 10-32
TAPPED HOLES IN FRONT

Form 1986-INST
Revised: 4/11/2021

Initial thermostat settings:

1. Unpack mounting brackets and attach the included sensor probe to the back of the fan tray
2. Attach the power cord
3. Turn unit on using the power switch at the front of the unit
4. If the unit does not start immediately, press **"Rst"** button briefly (to switch the unit off from the digital controller, press and hold **"Rst"** for 3 seconds)
5. To set the target temperature, briefly press the **"Set"** button. **"Set"** indicator light will display. Press the ▲ and ▼ arrows (within 10 seconds) to change the target temperature. *Recommended value = 24°C*.

> **Attention:**
> - **If at any time (regardless of whether the unit is running or not) you wish to change the target temperature of the unit, simply follow step #5 above.**

Programming thermostat parameters:

Parameter	Description	Recommended value
d	Differential (Hysteresis)	1°C
LS	Low temperature threshold	16°C
HS	High temperature threshold	50°C
CA	Calibration value	CA = Actual temp. – Displayed temp.
Pt	Delay in cooling mode	0

1. Follow all the steps above through #5.
2. Press and hold the **"Set"** button for 3 seconds until "HC" is displayed on the screen; within 10 seconds, press the **"Set"** button again. If the display shows the letter "H", press ▼ to display the letter "C".
3. After verifying the letter "C" is displayed, press **"Set"** once more. "HC" will then be displayed.
4. When display shows "HC", use ▲ (within 10 seconds) to start setting the default parameters for your application**.**
5. To set each parameter, press ▲. When the parameter letter is displayed, press the **"Set"** button and then use the ▲ or ▼ arrows to set the value.
6. Press **"Set"** one more time after desired value has been reached.
7. Press ▲ again to move to the next parameter. Repeat steps 5 & 6 until all parameters are set. Refer to the recommended values listed in the chart above.
8. Once the display is back to "HC", press the **"Rst"** button to resume normal operation (parameters are saved automatically).

> **Attention:**
> - **If programming is done while the letter "H" is displayed (rather than "C"), the unit will not function properly, it will work as if the fans are heating the unit rather than cooling it.**
> - **Audible alarm will sound when displayed temperature values are above HS or below LS. The alarm will stop once the temperature is back in the allowed range. Switching the unit off will turn off the alarm.**
> - **Whenever the unit signals the fans to kick in, the "Work" indicator light will be lit.**

Front panel interface:

- When the screen is lit, hold the **"Rst"** key for 3 seconds to turn off the controller
- When the screen is dark, press the **"Rst"** key to turn on the screen
- Indicators / Characters in Display:

Indicator	On	Off
Work O	Fans working	Fans off ("C")
Set O	Settings available	Settings locked

Avoid installing unit in the following environments:

- Relative humidity > 90%.
- Temperature less than -10°C or greater than 60°C.
- Near flammables and explosives.
- Strong vibrations.
- Near water spray or under active misting systems.
- High-dust environments.
- Near corrosives, smoke, gas fumes, or fumes containing salts such as sulfur or ammonia.
- Near transmission antennae or in switch board rooms (to avoid exposure to electromagnetic interference or strong magnetic fields).

Factory Reset:

While "Work" indicator light is on, press the ▲ and ▼ keys at the same time; do not release until the screen displays "YS" which indicates the Factory Reset has been completed. This should take approximately 8 seconds.