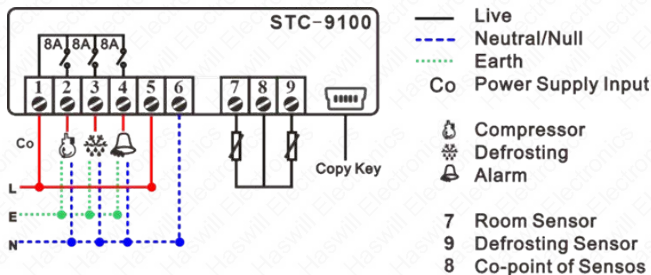# STC-9100 Thermostat

Quick Start Guide

(Version 21.08.02GEN)

STC-9100 defrosting temperature controller controls

three loads: the refrigeration device, the defrosting unit,

and the External Alarm.

1. Wiring Diagram

2. Set the temperature

Please learn that the room temperature was supposed to
keep at the range from "$F\,I$" to "$F\,I\,+\,F2$" ("$5EE$" to

"**5EE** + **HY**").

You can set them in both the user interface and the

Admin Interface. Below is the 2nd method.

Step 1: Enter the Admin Interface: hold the [SET] key and

the [▼] key at the same time for 10s; you will

see the code "**F I**" ("**5EE**").

Step 2: Press the [SET] key to check current value, and

press the ▲ key or the ▼ key to change the

F I value;

Step 3: Press the [SET] key to save the new data, and

back to the menu list, you will see the code "**F I**"

("**5EE**") again.

Step 4: Switch to the "$F2$" ("HY") code by press the ▲

      key.

Repeat the above 2-4 steps to update all the code you

want to.

At last: Just leave the unit alone; it will auto quit from

      setting mode back to normal status in 10s.

https://www.thermo-hygro.com

1) $F1$ (SEt): SP (Temperature Set-Point)

2) $F2$ (HY): Temperature Hysteresis / Return

    Difference

3) $F3$ (US): Upper limit for SP

4) $F4$ (LS): Lower limit for SP

5)   **F5** (**AC**): Delay Time for the Compressor

and Delay time for defrosting if it was Hot Gas

mode **F10** = **1** (**tdF** = **HtG**)

If you found the "**F1**" (**SEt**) value cannot be modified

to the value you need, please adjust the **F3** and **F4**

(the **US** and the **LS**), which are the limitation for **F1**

(**SEt**).

3.   Configure the Defrosting

This unit controls the defrosting by Time and

Temperature.

Temperature Condition: the evaporation sensor

temperature is lower than the preset "defrosting Stop

temperature" **F8** (**d t e**), which is a significant value to

prevent over defrost.

Time Condition 1: the real-time passes the preset interval time FG (i d f), a regular parameter for almost all defrosting thermostats.

Time Condition 2: If the "defrosting method" you take is the hot gas from the compressor reverse rotary when $F\ ID = I$ (t d f = HEG), it will count the compressor's last stops moment plus $F5$ (a c), which is a protective value to avoid the compressor frequently startup and stops.

The operates method is just like page 1 shows;

6) FG ($\boldsymbol{\iota} d F$): Defrosting Cycle / Interval Time

7) **F7** (**AdF**): Defrosting Lasting/Running Time

8) **F8** (**dtE**): Defrosting Stop Temperature

9) **F9** (**Fdt**): Defrosting Water Dripping Time

10) **F 10** (**tdF**): **Defrosting Mode:**

- **0** (**EL**): Electric-Heating.
- **1** (**HtG**): Hot Gas from the compressor.

11) **F 11** (**dCt**): **Count mode of defrost cycle:**

- **0** (**rt**): Cumulative time from the controller power on.
- **1** (**CoH**): Cumulative time of the compressor working.

12) **F 12** (**dFd**): **Display mode when defrosting:**

A. **0** (**rt**): Shows the room sensor temperature display.

B. **1** (**it**): Shows the evaporator sensor

temp. (continue showing 10 minutes once defrosting over)

4.   Set the External Alarm?

Unlike other defrost thermostats, which only reference the room sensor, **this unit STC-9100 also monitors the evaporator sensor temperature.**

Check the Alarm output options in $F\ I3$ (**dⁿo**):

Code	Description	
n-C/0	The alarm output's function was banned.	
A-C/1	The alarm follows the buzzer status	press any key to stops
A-A/2		It cannot be canceled before fixed all errors.

And then check below items

Sensor Position	EN Code	F code	Meaning
Evaporator	ELL	F 14	Lower Limit
	Eod	F 15	Time delay
	ELU	F 16	Upper Limit
Room	ALU	F 17	Upper Limit
	ALL	F 18	Lower Limit
	ALd	F 19	Time delay

This is not a step-by-step user manual;
It just shows the key points.
The new user should read the Full-Content Version User
Manual

Haswill Electronics
STC-9100 Temperature Control & Monitor System
https://www.thermo-hygro.com