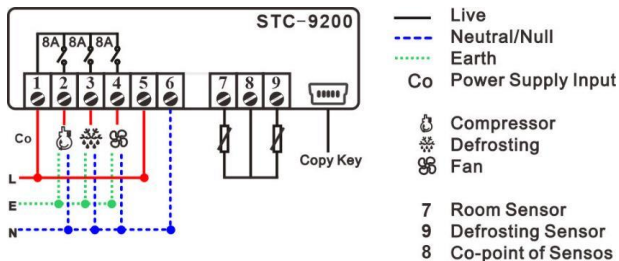# STC-9200 Thermostat

Quick Start Guide

(Version 22.11.03GEN)

[Video on YouTube](#)

STC-9200 digital temperature controller controls three loads: the refrigeration device, the defrosting unit, and the Evaporator Fan; Typically suited to an oversized freezer room.

1. Wiring Diagram

2. Set the target temperature

The room temperature was supposed to keep at the range

from "F1" to "F1 + F2" ("SEt" to "SEt + HY").

You can set them in the user interface and the Admin

Interface; below is the 2nd method.

Step 1: enter the Admin Interface by hold the [SET] key

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

see the code "F1" ("SEt").

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

press the ▲ key or the ▼ key to change the F1

value;

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

to the menu list, you will see the code "F1" ("SEt")

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.

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 $F\ I0 = I$

($tdF = HtG$)

If you found the "$F\ I$" (SEt) value cannot be modified to the value you need, please adjust the $F3$ and $F4$ (US and LS), which are the limitation for $F\ I$ (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" $F8$ (dtE), which is a significant value to prevent over defrost.

Time Condition 1: the real-time passes the preset

interval time F6 (ɪdF), 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 F10

= 1 (EdF = HEG), it will count the compressor's last stops

moment plus F5 (AC), which is a protective value to avoid

the compressor frequently startup and stops.

The operates method is just like page 1 shows;

6) F6 (ɪdF): Defrosting Cycle / Interval Time

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

8) F8 (dEE): Defrosting Stop Temperature

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

10) *F10* (*LdF*): Defrosting Mode:

- *0* (*EL*): Electric-Heating.

- *1* (*HLG*): Hot Gas from the compressor.

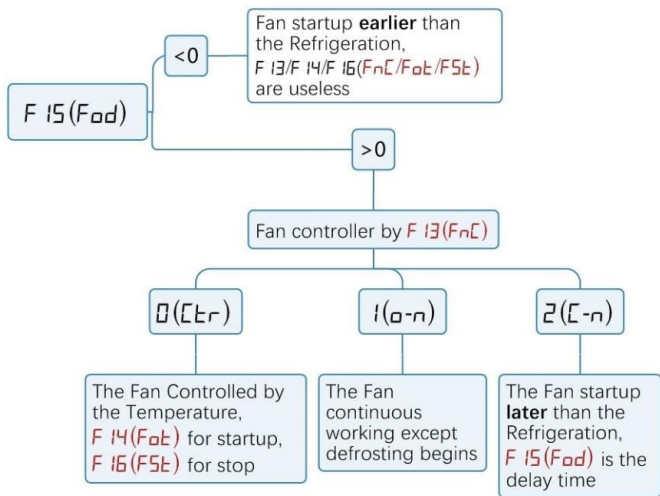**11) *F11* (*dCL*): Count mode of defrost cycle:**

- *0* (*rL*): Cumulative time from the controller power on.

- *1* (*CoH*): Cumulative time of the compressor working.

12) *F12* (*dFd*): Display mode when defrosting:

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

B. *1* (*iL*): Shows the evaporator sensor temp. (continue showing 10 minutes once defrosting over)

4. Set the Evaporation Fan?

Check the *F15* (*Fod*) value before others

Fan startup **earlier** than the Refrigeration, F 13/F 14/F 16 (FnC/FoE/FSE) are useless

< 0

F 15 (Fod)

> 0

Fan controller by F 13 (FnC)

0 (CEr)

The Fan Controlled by the Temperature, F 14 (FoE) for startup, F 16 (FSE) for stop

1 (o-n)

The Fan continuous working except defrosting begins

2 (C-n)

The Fan startup **later** than the Refrigeration, F 15 (Fod) is the delay time

13) F 15 (Fod): Time delay seconds for the Fan

 A. < 0: in this case, F 15 (Fod) is the period for the Fan starts earlier than the compressor starts, Fan stops if defrosting begins.

 B. ≥ 0: Fan was controller by F 13 (FnC).

14) F 13: Fan output modes when F 15 (Fod) ≥ 0

 A. 0 (CEr): Fan Starts by F 14 (FoE), Stop by F 16 (FSE).

 B. 1 (o-n): continuous working except defrosting.

 C. 2 (C-n): in this case, F 15 (Fod) is the time for the Fan to start later than the compressor; the

Fan stops if defrosting begins.

15) F 14 (Fₒₜ): Defrost sensor Temp for Fan Starts

16) F 16 (F5ₜ): Defrost sensor Temp for Fan Stops

5. <mark>Set the Alarm</mark>

The alarm function is based on the room sensor

temperature, and the Alarm also works if the evaporator

sensor is broken.

17) F 17 (ALU): Upper Temperature of the Room sensor to

Trigger Alarm

18) F 18 (ALL): Lower Temperature of the Room sensor to

Trigger Alarm

19) F 19 (ALd): Time delay of the Room sensor to Trigger

Alarm

20) F20 (ot): Temperature Calibration = Real

Temperature - Measured Temperature.

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-9200 Defrost Fan Controller](#)
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