HUSSMANN®

CoreLink
™

Defrost Sync Setup

Operation Manual

Application Version 151217

P/N 0557046_A
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IMPORTANT

Keep with controller for future reference!

MANUAL- CORELINK CASE CONTROLLER

Spanish
French

Introduction

Corelink has the ability to synchronize defrost with other Corelink case controllers. This coordination can be beneficial in low temp case setups that operate below freezing.

A single Corelink case controller can manage up to 8 adjacent controllers in the system. This communication occurs over TCP/IP protocol. Each controller must be configured with a specific IP address identifier compatible with the preferred network.

This system has the benefit of being completely isolated as a small system group, up to 9 controllers, and with the option to expand to a large store network operation.

Hardware Requirements
- Corelink Case Controller
- Ethernet Cable
- 16 Port Network Switch
- USB to Ethernet 2.0 Adaptor

Note: USB to Ethernet adaptor must be Hussmann approved USB 2.0 unit. Generic adaptors could have compatibility issues.

Optional
- Wireless Network Switch Router
- Wireless Miniature Router

Software Requirements
- Application Version 2.2.0 +
- Web UI 1.4.0 +

System Setup

Defrost Sync Settings can be accessed within the Corelink Web UI under *Config>Defrost*.

To access Corelink Web UI, enter controller IP in open browser address bar. Click enter to launch the Corelink sign-in page. Enter username/password credentials to enter site.

Check application version information in the system tab. Make sure the current application and Web UI are compatible before you continue.
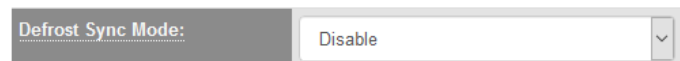
Assigning Controllers
Access the defrost menu for defrost sync settings.

ONLY one Corelink controller can be set to MASTER, all other controllers set to SLAVE.

Defrost Sync Mode
To enable this mode, look for **Defrost Sync Mode** in the defrost menu.

Defrost Sync Mode: Disable

DEFAULT = Disabled

Here users can set the controller as either DISABLE/MASTER/SLAVE.

During setup, the user will have to access each controller one at a time to set the defrost sync mode setting.

Number of Slaves

Users can determine the number of slave controllers to be configured. To adjust this setting, defrost sync mode should be set to MASTER.

IP Address

From the MASTER defrost menu, enter the slave controllers IP address. IP order changes the delays on controllers. Expect up to two minutes of delay between the first and last controller switching between modes. An ascending or descending order is strongly recommended for better organization. After entering the IP addresses click apply.

Note: This is a good time to double check the entered lines. All controllers should share a common network address apart from the last 3 digits.

Typical settings used for isolated group not part of a larger network. See below…

Corelink IP Settings (Default)

IP	192.168.0.250
Netmask	255.255.255.0
Network	192.168.0.0
Gateway	192.168.0.1
DNS192.	192.168.0.1

Note: Typically in isolated groups, the MASTER will use the above normal IP settings.

SLAVE IP Settings

Isolated group example:

IP	192.168.0.250
Netmask	255.255.255.0
Network	192.168.0.0
Gateway	192.168.0.1
DNS192.	192.168.0.1

SLAVE 1 = 192.168.0.243
SLAVE 2 = 192.168.0.244
SLAVE 3 = 192.168.0.245
SLAVE 4 = 192.168.0.246
SLAVE 5 = 192.168.0.247
SLAVE 6 = 192.168.0.248
SLAVE 7 = 192.168.0.249
MASTER = 192.168.0.250

Change Controller Network Settings

Please refer to Corelink manual.

Align group example to image in some way

Description of Operation

The MASTER controller will establish connection with the SLAVE controllers.

The defrost settings between all controllers should be similar as configured from Hussmann factory. The only difference typically should be enabling this mode.

Should a user decide to use different settings, make sure all changes are applied equally across all controllers within the defrost sync group.

Refrigeration

During normal running the MASTER controller will communicate with the configured SLAVE controllers.

Defrost Sequence

Delay
Defrost
Drip
Wait

Change defrost sequence timing in the Web UI under *Config>Defrost>Defrost Sequence*

When the MASTER controller defrost count reaches 0:00 TIME, the controller will begin the defrost sync operation. Defrost count can be viewed from the status page of the Web UI.

The MASTER will enter defrost delay. The compressors will turn off and valves will move to 0%. A command is sent to the SLAVE controllers to enter defrost delay. The MASTER checks the status of all SLAVES until defrost delay is accomplished.

Each controller will independently manage itself for most of the defrost cycle.

Defrost Delay – Pump down, time before defrost outputs turn on.

Defrost – The main defrost period when defrost outputs are ON depending on controller configuration.

Drip – Time period that defrost output is OFF and coil is allowed to drip moisture.

Wait – Controller is in a wait status for the duration of its timer. During this state, the controller is waiting for the MASTER to send END WAIT command.

When the MASTER enters the wait period, it begins to check the status of the other SLAVE controllers in the system.

When all other controllers reach a wait status, the MASTER will send out END WAIT command. During this time period the MASTER will end its own WAIT and the SLAVE controllers.

Refrigeration will now resume.

Note: SLAVE controllers will ignore their specific defrost start times for 1 hour when configured as slaves. This allows the MASTER to coordinate defrost.

In case of ERROR the SLAVE controllers will failsafe defrost on their own after one hour if a defrost command is not received from MASTER.

MASTER

—— Up to 8 SLAVES ——

All Corelink case controllers require a USB to Ethernet RJ45 adaptors. Ethernet cable is then ran from each Corelink to a dedicated network switch.

Network Switch

Note: Installs can be different. Installs could be small isolated groups up to 8 controllers. Others can include large store network connections either hardwired or wireless. Network switch could have wireless built into the device or a small wireless node maybe used outside the switch. All are acceptable applications based on store requirements. If in doubt, please contact your Hussmann representative.

Optional Hardwired
To other Corelink network switch…
(Full Store Network)

Wireless

Optional Wireless
To Corelink Gateway
(Full Store Network)