

# HUSSMANN®

## CoreLink™

### Defrost Sync Setup Using Digital Input Override



**IMPORTANT**

Keep with controller for  
future reference!

## Operation Manual

Application Version 151217

## Introduction

When cases in a lineup is required to have defrost synchronization, multiple methods can be applied in CoreLink to achieve synchronization of defrost of the cases next to each other.

Following are the available options in CoreLink

- Using Defrost Sync feature in CoreLink
- System Manager coordinating through network commands
- An External component like Mechanical timer to provide signal to CoreLink

This document covers the connectivity, configuration and wiring detail to enable external devices like mechanical time clock providing signal to multiple cases in line up to synchronize defrost among the cases.

## Hardware Setup

CoreLink configuration is defaulted to defrost initiate on Digital Input Pin 21.

Pin 22 is configured for defrost terminate.

To put cases into defrost in sync using a single source, a 24V signal to pin 21 will enable the case to eb in defrost.

The ground connection of the input signal must be connected to pin 31 if using 24 VDC power is used .

If using AC power is used, only connect the 24Vac signal to pin 21 of the CoreLink's.

## Software Configurations

No software configurations are required as these defrost initiate and terminate are defaulted on the CoreLink controller.

## Application Configurations

CoreLink controller is completely factory configured as per the Hussmann case model. This includes on how the case is built according to the customer specifications but also includes the recommended factory settings for refrigeration, valves, defrost etc.

Factory Defrost in the controller is configured to be on an interval defrost.

If the external source initiates a defrost, controller will wait till the next interval and if there is no initiation from external signal, then case goes into defrost on its own.

When initiated from an external source, controller terminates the defrost depending on termination configuration per case model.

Defrost Termination can also be overridden.

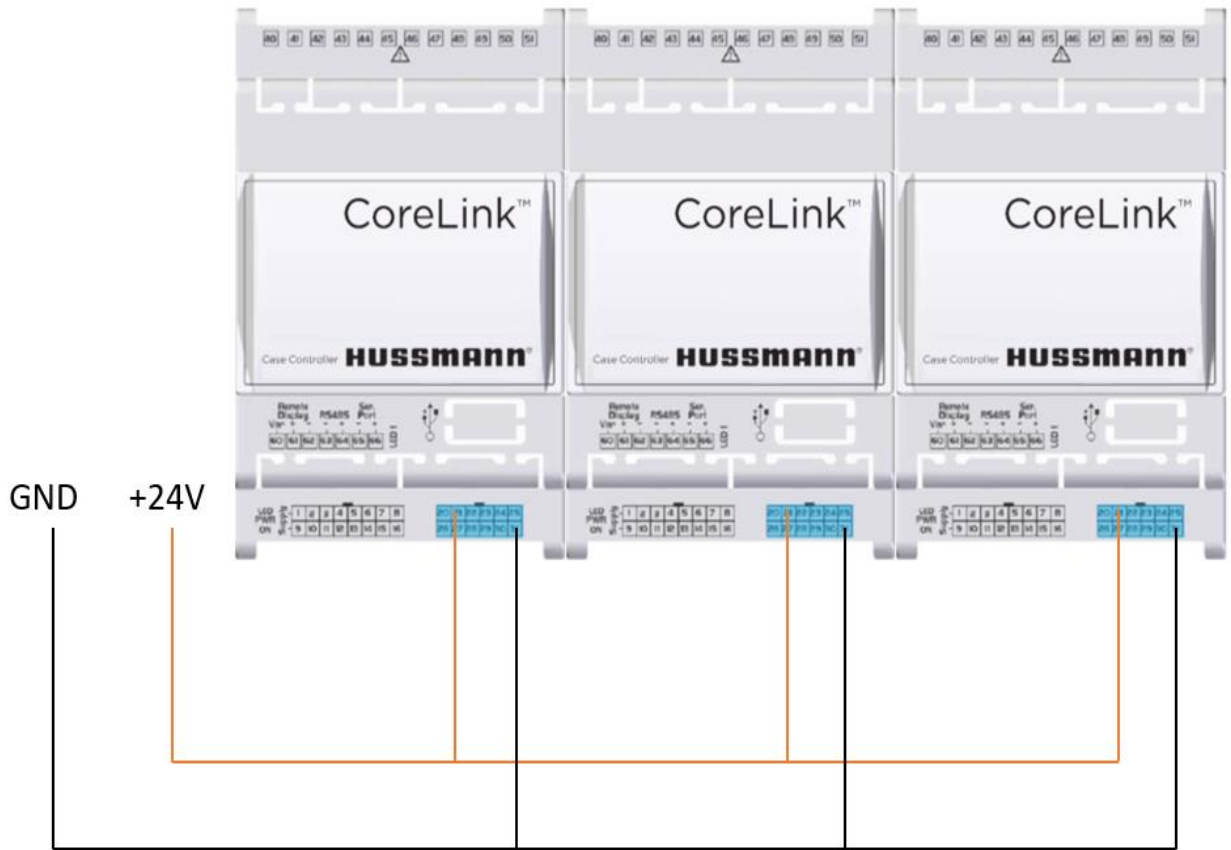
Best practice is to initiate the defrost using external source and cases terminate the defrost on its own.

## Configuration of External Timer

External Timer initiating defrost should be configured per the case model specification. If it is not configured same as case model spec or if it is different from CoreLink interval configuration, there is a potential to run double defrosts on the cases.

Ex: For a Hussmann D6NX case, defrost spec is to have defrost every 6 hours. CoreLink is already configured to defrost every 6 hours. If the External timer is programmed to more than 6 hours, say 8 hours, CoreLink initiates a defrost at 6 hour timelapse and external timer could initiate at 8 hours. CoreLink interval resets after every defrost execution on interval mode.

To avoid any defrost lapses, it is recommended to have external source to be at exact same time or little less than the case specified defrost interval.



Defrost Initiate sync using External signal – Wiring diagram

Dual Temp	26	20	Enabled
Optional [Open]	27	21	Defrost Initialize
Optional [Open]	28	22	Defrost Terminate
Optional [Open]	29	23	Motion
Optional [Open]	30	24	Clean
Digital Common	31	25	Door

Digital Input PIN configurations on CoreLink