## HUSSMAnn°

# CoreLink™

#### **Emergency Shutdown Configurations**



### IMPORTANT Keep in store for future reference!

INSTRUCTION-CORELINK EMERGENCY

## Application Manual

P/N 3113283\_B June 2022

Spanish 3113284\_B

#### **CoreLink Emergency Shutdown**

Objectives:

To handle some safety and other functional priorities in systems like CO2 systems and other special configurations, rack controller would like to shut down the refrigeration in the cases/ refrigeration units.

When CoreLink is controlling the cases/refrigeration units, Emergency shutdown can be initiated through either a hardwired signal or through communications.

This document describes the configuration, setup and connectivity for both the methods.

#### **Digital Signal - Hardware Setup**

Requirements: CoreLink does not have the ability to accept dry contact at the digital input. CoreLink requires a source voltage when triggering the digital input. The source can be 24vac or 24vdc, though it is recommended to use 24vac for reduced polarity risk and simple installation. CoreLink

#### Wiring Diagram:



#### **CoreLink Delivered Configuration**

# Digital Input Configuration Digital Input Polarity DIC01 (Pin 20): Enable (Default)

#### **Emergency Shutdown Operation:**

Following two shutdown methods are enabled in CoreLink.

**Enable/Disabled DI** – All digital outputs are disabled. Refrigeration, Defrost, Lights, Evap Fan, Cond Fan, etc. Case controller continues to data log and monitor analog input temperatures & pressure. System Enable is always active on PIN 20 Digital Input.

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P/N 3113283_B
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U.S. & Canada 1-800-922-1919 • Mexico 1-800-890-2900 • WWW.HUSSMANN.COM **Refrigeration Shutoff DI** (Optional) – Refrigeration, Evap Fan, Cond Fan, EEV 0% disabled ONLY. This can be configured on one of the available pins in the Digital Inputs menu. All other controller operations continue to operate.

#### **Primary Controller**

This is for a direct hardwired configuration through a Primary controller like E2 rack controller. Install a single 24vac transformer. Use this transformer to provide 24vac signal to all Corelink case controllers. It is recommended that the polarity at the Digital output(DO) board be configured as the following:

Relay Open = Controller Enabled	(Primary Controller opens relay for normal case operation)
Relay Closed = Controller Disabled	(Primary Controller closes relay for emergency shutdown)

Note: When configured in this manner, no polarity adjustments at Corelink case controller are required. Landing the wires at the appropriate terminal is only required. If configured reverse, the polarity opposite at the E2, the polarity would have to be adjusted at each individual case controller in the digital input menu which increases the amount of work to complete the install.

#### **Network Configuration - Software Setup**

Description: Users can use the RS485 communication network and BAS system to send network disable commands to each controller. Depending on the BAS user interface, a user could point to each individual controller and utilize the same Enable Network or Refrigeration Disable Network commands through software. This can provide additional system safety through multiply layers of protection if physical digital input setup was to fail.

Application Programs could be used to activate each controller one at a time to reduce the load on the refrigeration rack system after emergency shutdown. Please consult BAS system operation manuals to benefit from these options or contact your BAS system administrator for application.

Parameter Name	Address	Unit	Scale	Data Type	Data Description and Valid Range
System Enable via Network	16#6A06	NULL	0	BOOL	TRUE, system enable; FALSE, system disable
Refrig Disable Network	16#6B00	NULL	0	BOOL	Refrig Disable network command if set to 1