

Control Link RSC Ordering Guide

Control Link RSC Components

Control Link RSC Main Module (P/N 818-2050)

The Control Link Refrigeration System Controller (RSC) is a unique controller for Reach-in coolers, Reach-in freezers, and self contained refrigeration display cases. The RSC can operate in 120, 208, or 240 VAC applications. Without an optional relay expansion board, the RSC has 3 inputs and 2 outputs. The inputs can be configured as follows:

- Input 1: Control temperature (analog)
- Input 2: Defrost termination temperature (analog) or start defrost (digital) or setpoint shift (digital)
- Input 3: Generic temperature input for E2 use (analog) or start defrost (digital) or setpoint shift (digital)

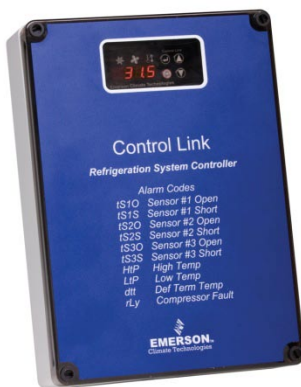
The two relay outputs on the RSC are rated for up to 3A @ 250V. For loads greater than 3A, use the outputs to energize external relays or contactors for controlling compressors, defrost heaters, alarm, lights, or fan.

- Output 1: Compressor
- Output 2: Defrost Heaters or Alarm or Lights or Fan



Control Link RSC Walk-In (P/N 818-2500)

The Control Link Walk-In Controller (WIC) is a unique controller for walk-in coolers and freezers. The WIC is mounted in a NEMA 4X enclosure. The WIC is UL 508A rated. The general purpose relay board provides 5 relay outputs. The enclosure is 10" tall x 7" wide x 2 1/2" deep.



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Remote Displays (Red P/N 818-2070 or Green P/N 818-2072)

The Control Link RSC has an optional remote display. The remote display is used to provide technicians and store personnel the ability to view the control temperature and operating condition of the RSC. All programming parameters can be set using the remote display. The remote display has all of the features and benefits of the main module display. The same information is displayed on both the RSC display and the remote display at the same time. The remote display requires an Ethernet cable (P/N 335-0030) to communicate with the RSC.



General Purpose Relay Board (P/N 618-1120)

The general purpose relay is an optional relay board for the RSC. The general purpose relay board is when additional relay outputs are required. Adding the general purpose relay board increases the number of relay outputs from two to five. When the general purpose relay board is used, the two onboard RSC relays are disabled. All of the relays on the general purpose relay board are Form C relays. Therefore, the relays may be wired normally open or normally closed. Typically, defrost and auxiliary outputs are wired normally open, and fans and refrigeration outputs are wired normally closed.



The general purpose relay boards are pre-assigned as the following outputs:

- Relay 3: Defrost 10A-N.C. or 12A N.O. @ 120-240 VAC
- Relay 4: Auxiliary 10A-N.C. or 12A N.O. @ 120-240 VAC
- Relay 5: Fans ½ hp N.O. or N.C. @ 120 VAC
- 1 hp N.O. or N.C. @ 240 VAC

Relay 6: Refrigeration

	Contactor		Solenoid		Pilot Duty
	Inrush	Steady-State	Inrush	Steady State	
24 VAC	2.50 A	0.30 A	4.0 A	2.0 A	50 VA
120 VAC	0.50 A	0.06 A	0.8 A	0.4 A	50 VA
240 VAC	0.25 A	0.03 A	0.4 A	0.2 A	50 VA

Relay 7: Refrigeration (same ratings as Relay 6)

- Notes: 1) The general purpose relay board requires a RSC with 4.10 software or higher.
 2) Relay output 6 and 7 operate together. The relays cannot be controlled separately.



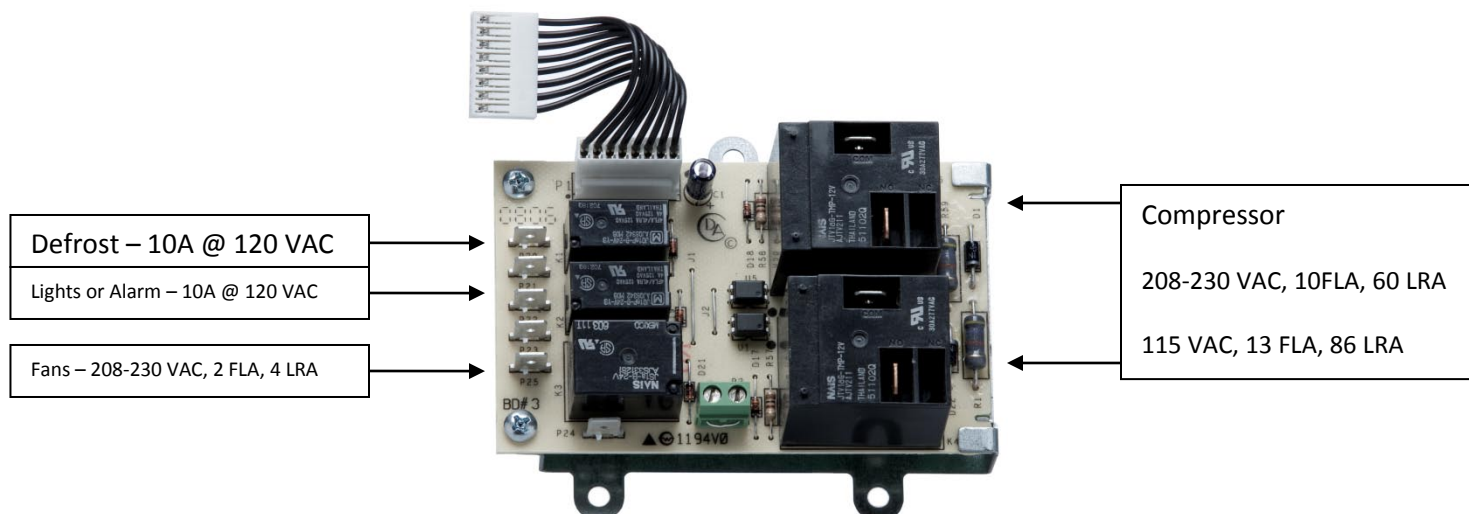
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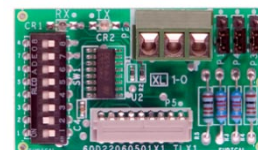
Expansion Board (P/N 618-2085)

The expansion board is an optional relay board for the RSC. The expansion board is used when additional relay outputs are required. Adding the board increases the number of relay outputs from two to five. When the expansion board is used, the two onboard RSC relays are disabled.



Communication Card (P/N 618-2080)

The optional communication card allows the Control Link RSC to communicate with an Facility Management System, such as Emerson’s E2 line of controllers. Remote communication provides the end user with remote monitoring, alarm management, maintenance, coil defrost, and troubleshooting.



Real-time Clock (P/N 618-2082)

The real-time clock module provides the Control Link RSC with the ability to maintain accurate time data. Unlike traditional defrost time clocks, the card will allow the RSC to maintain accurate defrost schedules after prolonged power outages. The RSC cannot use both a Communication Card and Real-time Clock at the same time because the RSC has one expansion card slot. However, when using the Communication Card, the time is provided by the Facility Management System.



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Ethernet Cable (P/N 335-0030)

The Ethernet cable is used to connect the Control Link RSC to a remote display. The Ethernet cable is a standard 25' straight-thru network cable with RJ45 connectors on each end. The added length of the cable allows the display to be mounted anywhere on a standard case.



Temperature Sensors

The Control Link RSC uses standard CPC temperate sensors. The temperature sensors are 10k thermistors. The green sensor is used for measuring the discharge air / control temperature. The sensor is terminated on input 1 of the RSC. The orange sensor is designed for measuring the evaporator coil temperature for defrost termination. The sensor is terminated on input 2 of the RSC.



PC Programming Interface

To aid in OEM programming, the Control Link RSC can be programmed using Control Link PC software. The software allows OEMs to repetitively program Control Links without any programming errors. The software allows for default templates to be created fast and easy programming. Contact your salesman for additional information on Control Link PC software availability.



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Control Link RSC Ordering Guide

Control Link RSC Kits

Medium Temperature Control Link RSC Kit (P/N 818-2052)

Includes:

- 1 - Control Link RSC Main Module (P/N 818-2050)
- 1 – General Purpose Temperature Sensor (Green)
- 1 – Defrost Termination Sensor (Orange)

Control Link RSC Kit (P/N 818-2053)

Includes:

- 1 - Control Link RSC Main Module (P/N 818-2050)
- 1 – General Purpose Temperature Sensor (Green)

Low Temperature Control Link RSC Kit (P/N 818-2055)

Includes:

- 1 - Control Link RSC Main Module (P/N 818-2050)
- 1 – Expansion Board (P/N 618-2085)
- 1 – General Purpose Temperature Sensor (Green)
- 1 – Defrost Termination Sensor (Orange)

Medium Temperature RSC Kit with Communication Card (P/N 818-2087)

Includes:

- 1 - Control Link RSC Main Module (P/N 818-2050)
- 1 – Communication Card (P/N 618-2080)
- 1 – Red Remote Display (P/N 818-2070)
- 1 – Ethernet Cable (P/N 335-0030)
- 1 – General Purpose Temperature Sensor (Green)
- 1 – Defrost Termination Sensor (Orange)

Control Link Walk-In Kit (P/N 818-2510)

Includes:

- 1 - Control Link RSC Main Module (P/N 818-2050)
- 1 – General Purpose Relay Board (P/N 618-1120)
- 1 – Enclosure (NEMA 4X)
- 1 – General Purpose Temperature Sensor (Green)
- 1 – Defrost Termination Sensor (Orange)



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