

## Installation Instructions: Daisy-Chain Power Module

The Daisy Chain Power Module (see *Table 1* for part numbers) is a device that works along with a CC-100 Case Controller to command the lights, fans, defrost, and anti-sweat heaters for a single refrigerated case. The Daisy Chain Power Module differs from all other power modules in that it may be chained together with other Daisy Chain Power Modules to allow a single CC-100 to control multiple cases.

The Daisy Chain Power Module is designed to work with a CC-100P (*P/N 810-3160*) with a Dual Pulse Valve Control kit installed (*P/N 510-3131*). The CC-100P may control two valves in tandem, and is typically used to control a single dual-evaporator case, such as a walk-in freezer. However, when a CC-100P is used in conjunction with two Daisy Chain Power Modules, a CC-100P can control valves, lights, fans, defrost, and anti-sweat heaters in two separate refrigerated cases.

Up to three Daisy Chain Power Modules may be connected to a single CC-100 or CS-100, although currently CPC does not offer a case control product that can control more than two valves.

P/N	Power Module Description
816-3502	Daisy-Chain Power Module, w/enclosure, lights & fans only, with circuit breakers & 100VA power transformer (for dual-valve control).
816-3514	Daisy-Chain Power Module, w/enclosure, lights, fans, defrost, and anti-sweat. 100VA power transformer (for dual-valve control).

**Table 1 - Daisy Chain Power Module Part Numbers**

### Case Installation

A Daisy Chain Power Module is typically installed in the raceway or on top of a refrigerated case. The power module's 100VA transformer should be connected to either a 120VAC single phase power source (whichever is necessary for the model ordered). Complete wiring of the case controller power module, including lights, fans, defrost, and anti-sweat heaters, is diagrammed in *Figure 1*. Follow all local, NEC, and UL wiring practices.

Ratings for the relays on the power modules are given in *Table 1*.

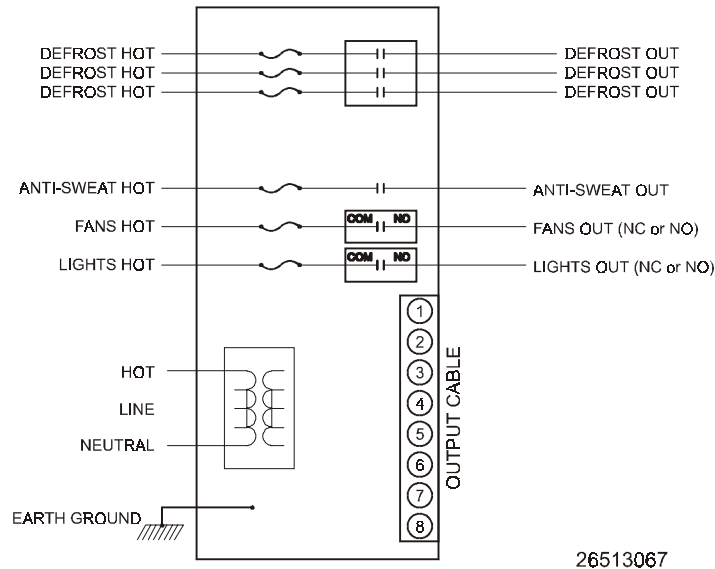


Figure 1 - Power Module Wiring

Power Module Output Ratings				
Output	Volts	Normally Open	Normally Closed	Maximum Fuse
Lights	120 V	20 A	10 A	20 A
	240 V	6 A	3 A	
Fans	120 V	¾ hp	¼ hp	15 A
	240 V	1½ hp	½ hp	
Anti-Sweat	120 V	12 A		15 A
	240 V	12 A		
Defrost	120 V	30 A (1 or 2 pole) 25 A (3 pole)		30 A
	240 V	30 A (1 or 2 pole) 25 A (3 pole)		

### Connection to CC-100/CS-100

In a Daisy Chain Power Module installation, one power module must be connected to the CC-100/CS-100 using the Output Cable Harness (P/N 335-3258). The other power modules are “chained” in series from the first power module using the Power Module Interconnection Cable (P/N 335-3270).

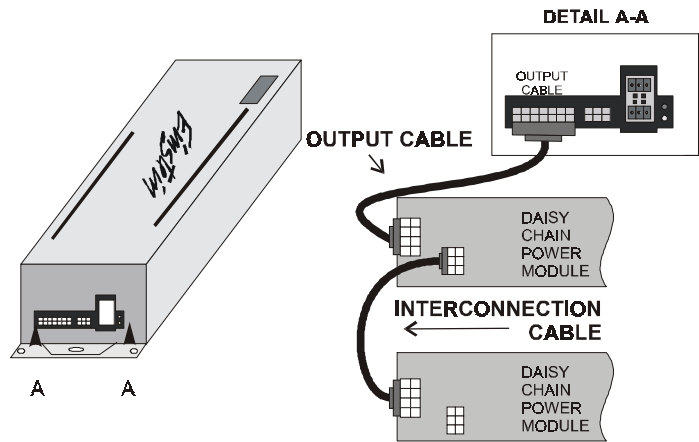
To connect a Daisy Chain Power Module to a CC-100 or CS-100, locate the 8-pin connector mounted inside the power module enclosure. Connect the Output Cable Harness from the 8-pin connector to the Output Cable receptacle on the CC-100/CS-100.

The 6-pin receptacle inside the Daisy Chain Power Module enclosure is used to chain together the power modules. Connect the six-pin connector end of the Interconnection Cable to the 6-pin receptacle. Connect the 8-pin end of the cable to the 8-pin receptacle of the power module you are adding. Refer to *Figure 2*.

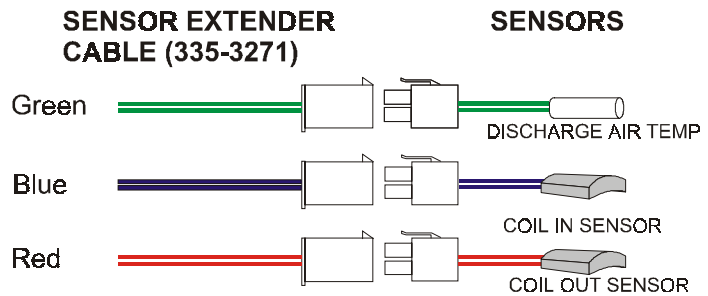
### Using the Sensor Extender Cable

Because a case with a Daisy Chain Power Module might be a significant distance away from the CC-100/CS-100 that controls it, the cables for the case-mounted sensors might not reach the CC-100/CS-100. To accommodate this, a Daisy Chain Power Module kit comes with a Sensor Cable Extender (P/N 335-3271).

The Sensor Cable Extender is CMRA color-coded, using the same color wires as the case temperature (GREEN/WHITE), coil in temperature (BLUE/WHITE), and coil out temperature (RED/WHITE). Snap the sensor cable connectors into the corresponding connectors on the Sensor Extender Cable, as shown in *Figure 3*. Snap the connectors on the other end of the Sensor Extender Cable into the appropriate input slots on the CC-100 or CS-100 (Refer to the Einstein RX User's Guide, P/N 026-1601, for information on CC-100 input connection).



*Figure 2 - Daisy Chaining Power Modules*



*Figure 3 - Sensor Extender Cable*