

Features

Option for hot standby when CPU fails

The redundant CPU provides redundancy and automatic backup in the case of main CPU or power supply failure in the master controller. A CPU switcher card in the primary bay allows communications to be transferred to the secondary bay in the case of CPU failure.

Dedicated redundant power supply

The redundant CPU is powered by a dedicated system power supply (SPS).

Two-bay assembly

for each of the primary and backup master controllers.

Available with standard 2x40 operator interface and InfoAlarm interface

Introduction

A Redundant CPU Controller Card is used to switch system operation to back-up CPU and Power Converter boards in the event of CPU or Power Converter failure. This is achieved through the use of two CPU bays, a primary and a secondary. The primary bay contains the primary CPU and the additional controller cards necessary to switch to the secondary CPU if a trouble occurs. The primary system power supply (SPS) is located in the primary CPU bay.

The secondary CPU bay houses the secondary CPU that is mounted in a 4" CPU Motherboard and a secondary SPS. Figure 2 shows a typical layout of the components within an FACU with a Redundant Master Controller.

The 4100-9121 includes the standard 2x40 operator interface, while the 4100-9122 and 4100-9222 versions of the redundant master controller includes an InfoAlarm interface. The InfoAlarm Interface is a front panel assembly that features a large screen display instead of the standard 2x40 display.



Figure 1: 4100ES Two-Bay Cabinet

Listings Information

- UL 864, Fire Detection and Control (UOJZ), Smoke Control Service (UUKL), Releasing Device Service (SYZV)
- UL 1076, Proprietary Alarm Units - Burglar (APOU)
- UL 2017, Process Management Equipment (QVAX), Emergency Alarm System Control Units (FSZI)
- UL 1730, Smoke Detector Monitor (UULH)
- UL 2572, Mass Notification Systems (PGWM)
- CAN/ULC-S527 Control Units for Fire Alarm Systems (UOJZ7), Releasing Device Service (SYZV7)
- ULC/ORD-C1076 Proprietary Burglar Alarm Units and Systems (APOU7)
- ULC/ORD-C100 Smoke Control System Equipment (UUKL7)

Product Selection

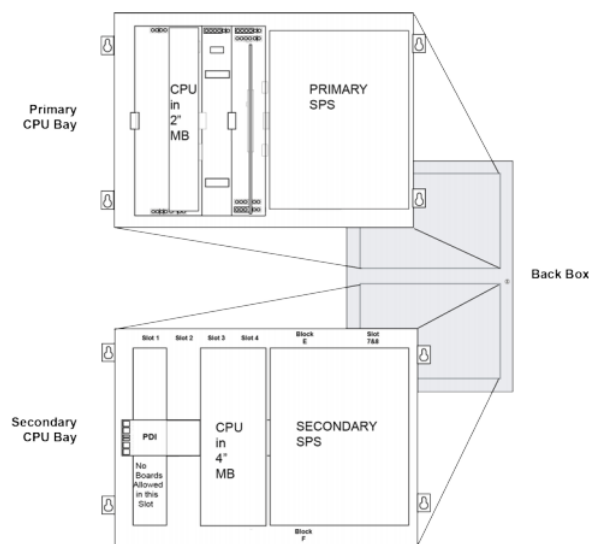
Table 1: 4100ES Master Controller with InfoAlarm Command Center

Model	Model Type	UL	ULC	Voltage	InfoAlarm Command Center Type	Master Controller Features
4100-9122	English	Yes	—	120 VAC, 60 Hz	Redundant CPU (Master Controller); raised keys with fixed labels	One Command Center with redundant CPU cards and SPS power supplies in a two bay assembly. Active SPS battery charger in Bay 1 only. External RUI connections require 4100-1291 RUI expansion modules. Do not use circuit connections on primary and secondary SPS power supplies. Not compatible with ES Net network panels.
4100-9222	International	Yes	—	220/240 VAC, 50/60 Hz	Redundant CPU (Master Controller); flat keys with inserts for custom key labels	

Table 2: 4100ES Master Controller

Model	Model Type and Listing	Description	Supv.	Alarm
4100-9121 (not ULC listed)	Redundant Master Controller with a two bay assembly, one for each of the primary and backup master controllers. Both bays have an LCD and operator interface, CPU card assembly, and 9 A system power supply (SPS) 120 VAC, 60 Hz input. Active SPS battery charger in Bay 1 only. External RUI connections require 4100-1291 RUI expansion modules. Do not use circuit connections (IDNet, NACs, etc.) on primary and secondary SPS power supplies. Not compatible with ES Net network panels		718 mA	937 mA

Reference Diagram


Figure 2: Primary and Secondary Bay reference diagram

Additional Reference

Subject	Datasheet
4100ES Basic Panels with SPS Power Supplies	S4100-0031
InfoAlarm Command Center for the 4100ES Fire Alarm Control Panel	S4100-0045
4100ES Addressable Fire Detection and Control Basic Panel Modules and Accessories	S4100-1031
InfoAlarm Command Center with ES-PS Power Supplies	S4100-1045