Cerberus® PRO

System Periphery Boards
Models FCI2016-U1 I FCI2017-U1

SIEMENS

Architect & Engineer Specifications

- ☐ **Used with Cerberus PRO panels**
  - ▪ **Model FCI2016-U1 is used with Model FC922 panel**
  - ▪ **Model FCI2017-U1 is used with Model FC924 panel**
- ☐ **Maximum 252 point device addresses per integrated loop card**
  - ▪ **Up to 252 addresses are used with Model FCI2016-U1**
  - ▪ **Up to 504 addresses are used with Model FCI2017-U1**
  - ▪ **Model FCI2017-U1 has two (2) integrated loop cards (Loop A / Loop B) with EMC surge protection for eight (8) Style 4, or four (4) Style 6 / 7 loops**
  - ▪ **Model FCI2016-U1 has one (1) integrated loop card (Loop A / Loop B) with EMC surge protection for four (4) Style 4, or two (2) Style 6 / 7 loops**
- ☐ **NAC connection for one (1) Class A or two (2) 'Class B' functions**
  - ▪ **3 Amps max. for NAC for synchronization and alarms**
- ☐ **Two (2) plugs for optional extensions**
  - ▪ **Leased line / city-tie module**
  - ▪ **Notification Appliance Circuit (NAC) Expansion Module or Releasing Module**
- ☐ **Additional peripheral-data bus connection for LED or digital alarm communication transmitter (DACT) modules**
- ☐ **Field-wiring configuration via removable terminal blocks**
- ☐ **Degrade-mode functions**
- ☐ **Four (4) configurable relay outputs**
- ☐ **Battery charger included**
- ☐ **Auxiliary output**
  - ▪ **(24VDC, nominal; 1.5 Amps)**
- ☐ **UL 864 10th Edition Listed, ULC Listed**
- ☐ **FM, CSFM and NYC Fire Dept. Approved**

Product Overview

The periphery boards (Models FCI2016-U1 and FCI2017-U1) are the main components for operation of the Cerberus PRO panels (Models FC922 and FC924). Both models are FM (#3010); CSFM (#7165-0067:0259) and FDNY (#6104) Approved.

Each module operates and monitors input-device identity; as well as controls the signaling-line circuits that communicate with smoke detectors and other field devices (i.e., — C-NET). All functions are supported by the power supplies of either Model FP2011-U1 or Model FP2012-U1.

Model FP2011-U1 provides regulated 24VDC, nominal, 6 amps (max), while Model FP2012-U1 offers regulated 24VDC, nominal, 11.5 Amps (max) to the Models FC922 and FC924 Cerberus PRO systems.

Specifications

Each periphery board is equipped with two (2) programmable 'Class B' (Style Y) or 'one (1) Class A' (Style Z) NAC, providing 24VDC, nominal @ up to 3A per circuit of audible / visual notification appliances.

Either periphery board has an integrated C-NET loop circuit with built-in EMI surge protection, thus allowing automatic devices to be installed and configured for 'Class B' or 'Class A' circuit operation.

Model FCI2016-U1 supports (1) one-to-four (4) 'Class B' circuits — or supports (1) one-to-two (2) 'Class A' circuits that can supervise and control up to 252 devices. Model FCI2017-U1 supports (1) one-to-eight (8) 'Class B' circuits — or supports (1) one-to-four (4) 'Class A' circuits that can supervise and control up to 504 devices.

The following devices work with the C-NET loop:

- ▪ Model 'H'-series devices
- ▪ Model 'S'-series devices
- ▪ Model 'C'-series devices
- ▪ Monitor module

Model FCI2016-U1   Model FCI2017-U1

Specifications (cont.)

Each periphery board has a built-in, microprocessor-controlled battery charger that supervises the status of the battery, and provides four (4) modes of operation: *trickle, bulk, over-charge* and *float*. The charger also contains an automatic power-transfer circuit that switches the FACP to standby batteries during reduction and / or loss of primary AC power sources (automatically switching back to AC power when normal, regulated power is restored). The battery connects directly to Model FCI2016-U1/ FCI2017-U1 module.

The periphery boards mount directly on the enclosure backboxes of the Model FC922 and Model FC922 Cerberus PRO panels. Models FCI2016-U1/ FCI2017-U1 provide two (2) parallel auxiliary powered, short-circuit-protected connections (regulated 24VDC, 1.5A max) that supply power to external devices or modules. The system periphery boards also include a Bell Follower terminal connection, allowing the NACs to follow external-coded signals.

The periphery boards support connection to the following optional modules:

- City Tie / Leased Line
- Notification Appliance Circuit (NAC) Expansion Module
- Releasing Module
- Digital Alarm Communicator Transmitter (DACT)
- Light-emitting diode (LED) module

Models FCI2016-U1 and FCI2017-U1 contain four (4) 'Form C' relays and defaults to the following system events:

- *System Alarm*
- *Supervisory*
- *Trouble*
- *[User Programmable]*

Built-in system firmware is also resident in flash electrically erasable programmable read-only memory (EEPROM), and can be upgraded by software upload — eliminating the need for upgrade chips.

Temperature and Humidity Range

Products are UL 864 10th Edition listed for indoor dry locations within a temperature range of 120+/ 3°F (2°C) to 32+/ 3°F (0+/ 2°C) and a relative humidity of 93+/ 2% at a temperature of 90+/ 3°F (32+/ 2°C).

Physical Properties

DIMENSIONS: {W –*x*– H –*x*– D}	11" -x- 11.25" -x- 0.125" (28 cm. -x- 29 cm. -x- 0.32 cm.)
WEIGHT:	0.44 Lbs. (20g)

Technical Data

Supply Inputs	**Operating Voltage:**	Regulated 24VDC, Nominal
	Operating Current:	6A (with FP2011-U1) 11.5A (with FP2012-U1)
NACs	**Operating Voltage:**	Regulated 24VDC, Nominal
	Max. Operating Current (Cumulative)	6A (for Model FP2011-U1) 11.5A (for Model FP2012-U1)
Auxiliary Power	**Operating Voltage:**	Regulated 24VDC, 1.5A (max)
Relay Contact Rating	**'Form C'**	30VDC @ 5A (max) 120VAC @ 5A (max)
DETECTOR LOOPS		
Output Voltage:		33VDC, max.
No. of Integrated Loop Cards:		- One (1) for Model FCI2016-U1 - Two (2) for Model FCI2017-U1
Protocol:		C-NET
Cable Types:		All types (recommended: twisted) [for detailed specifications, see IOM: A6V10337045]
Monitored For:		- Ground fault - Short-circuit - Open loop
PER INTEGRATED LOOP CARDS		
Output Current:		1A, max.
Addressable Devices:		- 252 max. (with FCI2016-U1) - 504 max. (with FCI2017-U1)
Connectable Loops:		- Four (4) 'Class A' loops - Eight (8) 'Class B' loops for FCI2017-U1 [mixed variants are possible]
Connection Terminals: (Inputs, Outputs, C-Net)	**Design:**	Removable terminal blocks
	Admissible Cross-Section Cable:	12 — 22 AWG [American Wire Gauge]

Details for Ordering		
Model or Type	**Part Number**	**Product**
FCI2016-U1	S54400-A55-A1	Periphery Board for the Model FC922 Cerberus PRO panel
FCI2017-U1	S54400-A56-A1	Periphery Board for the Model FC924 Cerberus PRO panel

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