Desigo® Fire Safety

Remote Peripheral Module (with RS-485 Interface)

Model FCA2018-U1 (with Model FCA2016-U1)

Architect & Engineer Specifications

Model FCA2018-U1:

☐ **Provides connection to the external-event printer (Model PAL-1)**
- **Provides an interface to remote printers: - Two (2) serial ports and one (1) parallel**

☐ **Mounts remotely from the Desigo Fire Safety System**

☐ **Provided in its own enclosure**

☐ **Supervised intelligent module**

☐ **Supports 'Class B' (Style 4) or 'Class A' (Style 6) wiring**

☐ **Fast installation with IN / OUT screw terminals using #12 to #18 AWG wire**

☐ **Built-in transient protection**

☐ **Downloadable module firmware**
- **Built-in flash electrically erasable programmable read-only memory (EEPROM)**

☐ **Plain-decimal addressing**

☐ **UL 864 10th Edition Listed, ULC Listed**

☐ **FM, CSFM & NYC Fire Dept. Approved**

Model FCA2016-U1:

☐ **Dual, standardized RS-485 interface that is used on 252 / 504-point control panels**

☐ **RS-485 module provides communication to Model FCA2018-U1 for managing and supervising Model PAL-1**

☐ **Supports 'Class B' (Style 4) and `Class A' (Style 6) wiring configurations**

☐ **Up to eight (8) devices on the RS-485 Universal Fire Protocol (UFP) network**

☐ **Electrical isolation between the RS-485 interface and the Desigo Fire Safety System**

☐ **Ground-fault monitoring**

☐ **UL 864 10th Edition Listed, ULC Listed**

☐ **FM, CSFM & NYC Fire Dept. Approved**

Product Overview

The Remote Peripheral Module (Model FCA2018-U1) provides a means of connecting a Desigo 50-point or a Desigo Compact (252/524-point) Fire Safety system to a parallel printer for creating a hard copy of system-status and configuration reports. This supervised, intelligent module contains built-in transient protection and plain-decimal addressing.

Specifications

Model FCA2018-U1 is remotely connected to the Model FCA2016-U1(RS-485) communication bus from Desigo 50-point (Model FC2005) or Desigo 252/524-point (Models FC2025/ FC2050) addressable system enclosures. Model FCA2018-U1 uses 'Class B' (Style 4) or 'Class A' (Style 6) wiring, and provides two (2) RS-232 (serial) ports and a single parallel port that allow connection to the parallel printer (Model PAL-1).

When Model PAL-1 is used with a Model FCA2018-U1 remote peripheral module, Model FCA2018-U1 supervises the PAL-1 printer for **ON, OFF Line | POWER ON | PAPER OUT | PAPER JAM,** and wiring-fault conditions, as required by UL for NFPA72 proprietary systems. Event / report printing, is generated at the operating unit (Model FCM20-series) on the main Desigo system.

Note:

> For PAL-1 connectivity with Remote Peripheral Modules on Desigo Fire Safety 252-point (Model FC2025) and 504-point (Model FC2050) addressable systems, a Model FCA2016-U1(RS–485) interface must be ordered, used.

> For connection of a Model PAL-1 parallel printer with a Desigo 50-point (Model FC2005) panel, Model FCA2016-U1 is not required as all Desigo 50-point panels have a built-in RS-485 interface.

Model FCA2018-U1 has necessary mounting flanges to allow the module to be mounted unobtrusively under a table or behind a desk. Model FCA2018-U1 runs on required 24VDC, nominal, power and this source for power can be provided from the auxiliary power connection on the Desigo system enclosure.
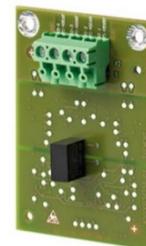
Power from other UL Listed 24VDC power sources is also acceptable. Model FCA2018-U1 has screw terminals capable of supporting a 12 to 18 American Wire Gauge (AWG) configuration.

Model FCA2018-U1
Remote Peripheral Module

The 252-point addressable system (Model FC2025) and the 504-point addressable system (Model FC2050) require having a RS-485 interface (Model FCA2016-U1) to provide communication to the Remote Peripheral Module (Model FCA2018-U1).

Models FCA2018-U1 and FCA2016-U1 are FM (#3010); CSFM (#7165-0067:0259) and FDNY (#6104) Approved.

Model FCA2016-U1
RS-485 Interface

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) Temperature and Humidity Range and a relative humidity of 93+/ 2% at a temperature of 90+/ 3°F (32+/ 2°C).

Technical Data

RS-485 Interface	**Voltage**	3.3VDC
	Operating Voltage	▪ Receiving 5VDC (peak) ▪ Transmitting 5VDC (peak)
	Communication Mode	Half-duplex
	Number of Participants	Eight (8), max.
	Wire Length	3940ft max.(unshielded / twisted-pair wiring) for both Class A & Class B
Connections	**RS-485 Interface**	Removable Terminal Block
	▪ **Design**	4-pole screw terminal
	▪ **Admissible Cross-Section**	12 to 18 American Wire Gauge (AWG)
	System Interface	Plug-in-type connection
Model FCA2018-U1	**Power Requirement**	24VDC @ 150mA

Physical Properties

Model FCA2018-U1	**Dimensions (W -x- H -x- D)**	9.5" –x– 6.75" –x– 2.5" (24.1 cm. -x- 17.1 cm. -x- 6.4 cm.)
	Weight	1.75 Lbs. (794g)
Model FCA2016-U1	**Dimensions (W -x- H -x- D)**	1.97" –x– 0.6" –x– 2.76" (5 cm. -x- 1.5 cm. -x- 7 cm.)
	Weight	0.044 Lbs. (20g)

Details for Ordering

Model or Type	Part Number	Description
FCA2018-U1	S54400-A65-A1	Remote Peripheral Module
FCA2016-U1	S54400-A39-A1	RS-485 Interface
PAL-1	500-692407	Parallel Printer

Related Documentation

Product	Datasheet #
PAL-1 Printer	5048
Remote Display Terminals	6812
50-point Desigo Fire Safety System	6813
252-point Desigo Fire Safety System	6815
504-point Desigo Fire Safety System	

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