# Desigo® Fire Safety Modular system

## Device Loop Card
## Model XDLC

## Architect & Engineer Specifications

☐ **Supports up to 252 addressable points**

☐ **Operates and maintains all devices residing on up to four (4) `Class A', eight (8) `Class B' addressable circuits**

☐ **Compatible with Siemens intelligent, addressable 'X' and 'H'-series devices:**
  - **Multi-criteria / Carbon Monoxide (CO) Detector with ASA*technology*™**
  - **Multi-criteria Detector with ASA*technology*™**
  - **Multi-criteria Detector**
  - **Thermal (Heat) Detector**
  - **Input / Output Interface Module**

☐ **Polarity insensitive (in non-isolation mode) via *SureWire*™ technology:**
  - **Modern technology supports comprehensive system and interface communication**

☐ **Quantity 16 diagnostic light-emitting diodes (LEDs) for easy circuit diagnosis**

☐ **Microchip controls on-board isolators**

☐ **Device Programmer / Tester (Model DPU) programs and verifies device's address:**
  - **programming capabilities include testing a duct detector, as well as other Siemens addressable devices**

☐ **Supports `Class B' | `Class A' | `Class X' wiring**

☐ **Supports T-Tapping**

☐ **Degrade mode**

☐ **UL864 | CAN / ULC Listed**

## Product Overview

The Siemens – Fire Safety `Class X' Device Loop Card (Model XDLC) is the interface used for connecting Siemens addressable, intelligent `X' as well as `H'-series devices.

Each Model XDLC plugs into one (1) slot of the Model CC-2 or Model CC-5 card cage. Programming for Model XDLC is accomplished via the Desigo Fire Safety Modular system custom-configuration tool, *Zeus-D*. Model XDLC takes one (1) address on the network, communicating up to a total 252 detectors and devices. Model XDLC has 16 LEDs for diagnostic purposes, and provides ground-fault detection and zone-isolation circuitry.

## Specifications

The `Class X' Device Loop Card (Model XDLC) initializes, operates and maintains all devices residing on up to four (4) `Class A', eight (8) `Class B' addressable circuits. Model XDLC communicates all relevant device and event data (`Alarm', `Trouble' and `Supervisory' commands) to a Desigo Fire Safety Modular (Desigo Modular) fire-alarm control panel (FACP), and supervises the device loop circuit.

Model XDLC is polarity insensitive via *SureWire* technology, which greatly reduces commissioning time normally spent tracing down crossed-field wiring. Model XDLC communicates detector data, such as sensitivity of intelligent fire detectors and logic-function information, to the Desigo Modular Operating Unit (Model FCM2041-U2), which is located within a given Desigo Modular system.

Each device loop card supports four (4) `Class A', eight (8) `Class B' circuits for up to a total of 252 addressable devices – as well as relay and audible bases, remote lamps and duct-detector housings in any combination.

The microprocessor in a Model XDLC controls the on-board isolation, in case there is a fault (short) in any of the circuits, thus allowing the other circuit to continue operating. For continuous protection, the on-board microprocessor continues to operate even in the event of a CPU failure.
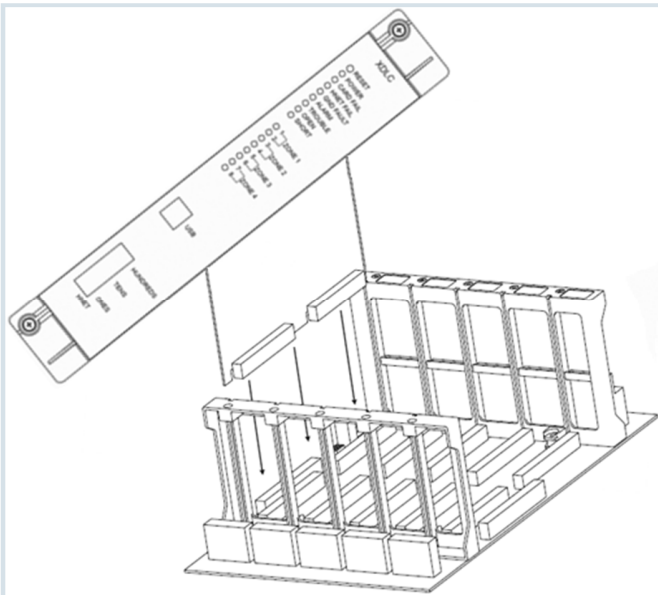
**NOTE**: Refer to installation manual: **P/N – A6V101040156** to ensure Model XDLC compatibility with the Siemens FACPs intended for use in the given application.



**Model XDLC**
**Side View**

**Model XDLC**
**Front View**

**Model XDLC**
Diagram of an `Class X' Device Loop Card
mounted to a Siemens Card Cage

## Temperature and Humidity Range

`Class X' Device Loop Cards are UL Listed **|** ULC Listed for indoor dry locations within a temperature range of 120$^+$/-3°F (49$^+$/-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).

## Technical Data

| | |
|---|---|
| **24V CURRENT DRAW:** [Back Plane] | 0 |
| **24V CURRENT DRAW:** [Screw Terminal] | 100mA **+** 1.4mA per device |
| **6.2V CURRENT DRAW:** [Back Plane] | 1mA, max. |
| **24V CURRENT DRAW:** [Standby] | 100mA **+** 1.4mA per device |
| **DEVICE LOOP:** [@ 30 VDC Max.] | 500mA, max. (power limited) |

## Details for Ordering

| MODEL OR TYPE | PART NUMBER | PRODUCT |
|---|---|---|
| XDLC | S54430-B8-A1 | `Class X' Device Loop Card |

NOTICE – The information contained in this data-sheet document is intended only as a summary, and is subject to change without notice.

The product(s) described here has/have a specific instruction sheet(s) that cover various technical, limitation and liability information.

Copies of install-type, instruction sheets – as well as the *General Product Warning and Limitations* document, which also contains important data, are provided with the product, and are available from the Manufacturer.

Data contained in the aforesaid type of documentation should be consulted with a fire-safety professional before specifying or using the product.

Any further questions or assistance concerning particular problems that might arise, relative to the proper functioning of the equipment, please contact the Manufacturer.

**SIEMENS**

## Desigo® Fire Safety