

Desigo® Fire Safety Compact Systems

MXL Device Interface Module
Model FCL2004-U1

MXL-IQ Migration Hardware Kit
Model FHA-MIQKIT-04 | FHA-MIQKIT-05

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Architect & Engineer Specifications

MXL Device Interface Module (FCL2004)

- Supports Two (2) intelligent device circuits
 - up to 60 intelligent devices per circuit
- One(1) Reset switch for the main processor and seven (7) diagnostic LEDs
- Capability to report 'Power' | 'Alarm' | 'Trouble' system conditions
- Option to convert existing MXL CSGM configuration to Desigo
- On-board microprocessor
- Ground-fault detection
- Programmable Input / Output module
- Supports relay bases, audible bases, remote lamps
- UL864 9th Edition Listed, ULC-S527 3rd Edition Listed; USCG Approval (pending)

MXL-IQ Migration Hardware Kit

- Migration of panel hardware into a Desigo Fire Safety control panel:
 - Fire-only panel for up to 252 addressable points, Model FC2025
 - Fire-only panel for up to 504 addressable points, Model FC2050
- Replacement of internal-system electronics of each Siemens legacy MXL-IQ control panel
- Each new migration hardware includes the following equipment:
 - one (1) outer door
 - one (1) inner door
 - one (1) back plate
- Re-use of existing panel's back box
- No need to replace existing conduit and wire
- Orderable with either **black** or **red** outer door
- Migration hardware functions with optional Desigo Fire Safety system modules:
 - Digital Alarm Communication Transmitter (DACT), FCA2015-U1
 - Releasing module, XCI2001-U1
 - NAC expansion module, FCI2011-U1
 - Leased Line City-Tie Module, FCI2020-U1
- Suitable for use with the following MXL-IQ enclosures: MSE-3/3R & MSE-3L/3LR
- UL864 9th Edition Listed, ULC-S527 3rd Edition Listed

Introduction

Siemens provides migration options for MXL-IQ or MXL systems to Desigo Fire Safety Compact Systems (FC2025 / FC2050). The MXL Device Interface Module allows MXL intelligent addressable devices onto existing MXL-IQ or MXL systems to connect to Desigo Fire Safety Compact panels. The MXL-IQ Migration Hardware Kit allows efficient conversion of an MXL-IQ to a Desigo Fire Safety Compact system keeping the existing back box, wiring and conduit in place.

Product Overview

MXL Device Interface Module

The Model FCL2004-U1 loop driver is a module that allows MXL intelligent addressable smoke detectors, manual stations, monitors, and control devices to interface to the Desigo Fire Safety 252-Point and 504-Point Addressable Control Panels (Models FC2025 and FC2050).

The application program loaded into the on-board microprocessor controls the FCL2004 operation. A fully operational Desigo fire-alarm control panel (FACP) can support a maximum of 240 MXL intelligent field devices using up to two (2) FCL2004 modules inside the enclosure.

Model FCL2004-U1 contains one reset switch for the main processor and seven (7) diagnostic LEDs. Ground fault detection of the intelligent loops is also provided.

All field devices connected to the FCL2004 module are addressed and tested using the Device Programming Unit (DPU) or the FPI-21 Programmer/Tester. The select system setting on the DPU and FPI-32 must be set to the MXL Device Interface Module.



Model FCL2004-U1

MXL Device Interface Module



Operation

Model FCL2004-U1 initializes, operates, and maintains all devices residing on the loop. It communicates all relevant device and event information, such as alarms and troubles, to the Desigo Fire Safety addressable control panel. The sensitivity of any intelligent input smoke detector and the logic functions of any intelligent output device can be checked and adjusted from the Desigo FACP. All information about the devices on the loop can be displayed on the Operator Interface (PMI).

Note: Refer to the Desigo Fire Safety 252-Point and 504-Point FACP Manual, for information about each device on the loop.

When the FCL2004 module is used with the Desigo 2HU (two-height-unit) enclosure or the marine approved enclosure, the FCL-MXLPLATE mounting bracket is required. The mounting bracket will support up to two FCL2004 MXL device interface modules and includes necessary mounting hardware.

The placement of the FCL2004 modules on the adapter plate determines its address. The first FCL2004 module is always address 91 and the second (where applicable) module is always address 92.



Model FCL-MXLPLATE
Mounting Bracket

The FCL2004 module supports two separate circuits of MXL intelligent field devices. Each circuit can monitor and control up to 60 intelligent devices as well as device accessories (relay bases, audible bases, and remote lamps) in any combination.

The on-board microprocessor provides the module with the ability to function and initiate alarm conditions even if the Operator Interface (PMI) fails.

LED Indicator Table

COLOR	CONDITION	STATUS (NORMAL)
GREEN	Indicates the power for the MXL is applied to the card	ON
YELLOW	Indicates one of the following conditions (if illuminated): <ul style="list-style-type: none"> ▪ hardware failure on the card or unsuccessful firmware upload ▪ card is being updated through the PMI ▪ card has detected an alarm ▪ a trouble is present on the card, not related to its field wiring or slave ALD driver ▪ card has detected a wiring trouble (fault) or a ground fault on device loop 1 or 2 field wiring. 	OFF
RED	Indicates the card has detected an alarm	OFF

Specifications

Model FCL2004-U1 supports two device loops of up to 60 intelligent field devices. Each loop draws a maximum of 90mA from the MXL Line Card.

Each Model FCL2004-U1 circuit can be wired in either a 'Class B' (Style 4) or 'Class A' (Style 6) configuration. When using the (Style 4) method, T-Tap wiring is permitted with no loss of supervision.

Further, remote conventional initiating-device zone modules (Model CZM-1B6), intelligent monitoring devices (Model TRI), and intelligent control points (Model ICP-B6) are also supported by Model FCL2004-U1 circuits. (See MXL Compatible Devices Table on Page 3, for more information.)

MXL COMPATIBLE DEVICES

Devices	Base	Maximum Quantity on the Loop
CZM-1B6	—	30
FP-11*	DB-3S/DB-X3RS with DB-ADPT or DB-11/DB-X11RS/ADBX-11	60
FPT-11	DB-3S/DB-X3RS with DB-ADPT or DB-11/DB-X11RS/ADBX-11	60
ICP	—	12
ICP-B6	—	12
ILI-1*/-1H*	DB-3S, DB-X3RS	60
ILI-1A*/-1AH*	DB-3S, DB-X3RS	60
ILI-1B(d)*/-1BH(d)*	AD-3I, AD-3XRI	60
ILP-1*/ILPT-1*	DB-3S, DB-X3RS	60
ILP-1(d)*	AD-3ILP	60
ILP-2	DB-3S, DB-X3RS	60
ILP-2(d)	AD-3ILP	60
ILT-1	DB-3S	60
MSI-1/-2		30
MSI-10/-20	—	30
MSI-10B/-20B	—	30
MSI-30B(C)	—	30
MSI-B6F	—	30
MSI-MB6	—	30
TRI-B6/-B6D/-B6R	—	60
TRI-B6M	—	60
TRI-S/-D/-R	—	60

(d) duct application

* supports drift compensation (IEC)

MXL-IQ Migration Hardware Kit

Product Overview

The MXL-IQ Migration Hardware Kit (Model FHA-MIQKIT) is specifically designed for the seamless transition of an existing Siemens Legacy MXL-IQ Control Panel into a fully operational Desigo 252 or 504 addressable point (Models FC2025 / FC2050) fire-alarm control panels (FACPs).

The Model FHA-MIQKIT-series mechanical migration kit includes the following pieces of equipment:

- one (1) outer door (either Black or Red)
- one (1) inner door
- one (1) back plate

NOTE: The three (3) items that comprise one (1) Model FHA-MIQKIT-series hardware-migration kit cannot be ordered individually.



Product Overview (cont.)

The MXL-IQ mechanical migration kit allows the existing backbox with all field wiring and conduit work to remain in place, thus saving a considerable effort when migrating to a new Desigo Fire Safety system.

The migration hardware Kit is suitable for use with the following MXL-IQ enclosures:

- MSE-3M/3MR
- MSE-3L/3LR

Additionally, the migration hardware kit will function with the following optional Desigo Fire Safety modules:

- Model FCA2015-U1: DACT module
- Model XCI2001-U1: Releasing module
- Model FCI2011-U1: NAC expansion
- Model FCI2020-U1: Leased Line/City-tie

Physical Properties

OUTER DOOR DIMENSIONS: {W-x-H-x-D}	21.50" x 27.71"
INNER DOOR DIMENSIONS: {W-x-H-x-D}	20.84" x 11.91"
BACK PLATE DIMENSIONS: {W-x-H-x-D}	18.52" x 24.06"
THICKNESS	0.060"

Product Compatibilities

MODEL OR TYPE	DATA SHEET	PANEL
FCM201x series	6801	252 / 504-point Operating Units
FCI201x series	6802	Desigo Fire Safety Periphery Boards
FCA2015-U1	6804	Digital Alarm Communication Transmitter
FP2011-U1	6806	Desigo Fire Safety 170W power supply
FP2012-U1	6806	Desigo Fire Safety 300W power supply
Enclosures, equipment	6807	Desigo Fire Safety control panel hardware
FCI2011-U1	6808	NAC Expansion Module
XCI2001-U1	6809	Releasing Module
FC2025	6815	Desigo Fire Safety 252-point addressable (fire)
FC2050		Desigo Fire Safety 504-point addressable (fire)

Details for Ordering

MODEL OR TYPE	PART NUMBER	PRODUCT
FHAMIQKIT-01	S54400-A66-A1	One (1) FCL2004 Module with PMI Cable
FHAMIQKIT-02	S54400-A67-A1	One (1) FCL2004 Module with Expansion Cable
FHAMIQKIT-03	S54400-K1-A1	One (1) PMI cable & One (1) Expansion Cable
FHAMIQKIT-04	S54400-C24-A1	MXL-IQ Mechanical Migration Kit-Black
FHAMIQKIT-05	S54400-C25-A1	MXL-IQ Mechanical Migration Kit-Red
FCL-MXLPLATE	S54400-B153-A1	Mounting Bracket for FCL2004 (2HU/USCG)
FCL2004-U1	S54400-A68-A1	MXL Device Interface Module

Desigo Fire Safety FACPs' kits:

MODEL OR TYPE	PART NUMBER	PRODUCT
FC2025-US	S54400-C4-A1	Desigo Fire Safety 252-point addressable panel kit
FC2050-US	S54400-C5-A1	Desigo Fire Safety 504-point addressable panel kit

NOTE: Refer to Installation Operation Manual, IOM: 6V101004423, for more information.

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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.

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