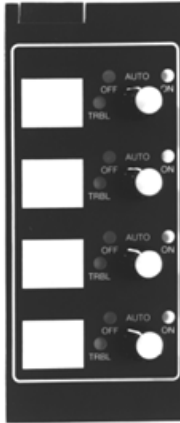

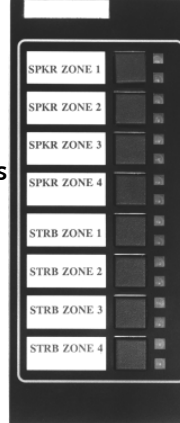


MXL / MXLV

Fan Control Module: (Model VFM-1)
LED Annunciator Module: (Model VLM-1)
Operator Switch Module: (Model VSM-1)

ARCHITECT AND ENGINEER SPECIFICATIONS

 <p>VFM-1</p> <ul style="list-style-type: none"> • Four (4) programmable fan-control switches • Rotary H.O.A. switches • Manual ON / OFF / AUTO positions • Positive feedback (supervised) • LED indication of fan status (On / Off and Trouble) • Protected label provided • Activation-stagger timer • Modular • UL 864 9th Edition Listed, ULC Listed; FM, CSFM, NYMEA and City of Chicago Approved 	 <p>VLM-1</p> <ul style="list-style-type: none"> • Eight (8) programmable switches • Protected space provided for labeling • Multi-color LEDs for clear indication of system status • Programmable LED annunciation • Discreet switches • Modular • UL 864 9th Edition Listed, ULC Listed; FM, CSFM, NYMEA and City of Chicago Approved 	 <p>VSM-1</p> <ul style="list-style-type: none"> • Eight (8) programmable switches • Protected space provided for labeling • Multi-color LEDs for clear indication of system status • Programmable LED annunciation • Discreet switches • Modular • UL 864 9th Edition Listed, ULC Listed; FM, CSFM, NYMEA and City of Chicago Approved
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Product Overview

Model VFM-1

The Fan-Control Module (Model VFM-1) from Siemens Industry – Fire Safety is a MXLV command-console option module that provides manual control of building HVAC system fans, motors, and dampers. Each Model VFM-1 module provides four (4) rotary (3) three-position switches for manual system control.

These H.O.A. (Hand, Off, Auto) switches provide a visual indication of the switch state, (OFF, ON, or AUTO position) and its associated control outputs by both light-emitting diode (LED) status indication and visual switch-position indication. Each switch has three (3) associated LEDs to indicate Fan / Damper / Motor status: OFF (Red LED), ON (Green LED), TROUBLE (Yellow LED).

When in the AUTO position the Red and Green LEDs indicate fan status (ON or OFF) based on the system logic that can be programmed to automatically control the fan outputs. When manually switched to the OFF position, the Red LED will flash, indicating the output circuit used to turn off the Fan / Damper / Motor has activated.

The Red LED will light Solid Red to indicate positive feedback of the Fan / Damper / Motor actually turning off (via a monitored input). When manually switched to the ON position, the Green LED will flash indicating that the output circuit used to turn on the Fan / Damper / Motor has activated.

The Green LED will light Solid Green, actually turning on via a monitored input, to indicate positive feedback of the Fan / Damper / Motor.

Switch Position	LED Indication	Description
AUTO	OFF: Solid Red	Based on system-logic driving fans
	ON: Solid Green	
ON	Flashing Green	Command sent out to turn on fans
	Solid Green	Fan's ON - Positive feedback rec.'vd
OFF	Flashing Red	Command sent out to turn off fans
	Solid Red	Fan's OFF - Positive feedback rec.'vd

During system reset, when switches are turned manually to the ON or OFF position, the associated outputs do not change state. The outputs remain either ON or OFF, based upon the position of each switch. Outputs will only change state when manually controlled via the ON / OFF switch, or based on system logic when switch is in the AUTO position.

Each Model VFM-1 is mounted on a hinged panel as a part of the MXLV command-console enclosure. A (4) four-conductor cable is supplied for interconnection of the modules. A 12" cable (Model MRRC-1) is available for connection between rows.

Product Overview – (continued)

Model VFM-1

Each Model VFM-1 switch is fully programmable. Many outputs, circuits or relays may be grouped and controlled by a single switch. When more than one (1) fan is controlled by a single Model VFM-1 switch, an optional, programmable stagger time can be set to prevent all fans from turning on simultaneously, (0 - 255 seconds). Switch programming and zone usage groupings are assigned using the system custom programming software.

Any combination of the Model VFM, VLM or VSM modules may be used. A maximum of 31 modules may be used via audio control module, Model ACM-1.

Model VLM-1

The LED Annunciator Module (Model VLM-1) from Siemens Industry – Fire Safety is a MXLV option module that provides LED annunciation of system activity. Each Model VLM-1 contains eight (8) groups of two (2) LEDs – each of which can be assigned to desired outputs using the custom-programming software of the system. Eight (8) LEDs are dual-color capable of illuminating either **Red** or **Green**, Flashing or Steady. The remaining LEDs are **Amber**, Flashing or Steady.

A space is provided for labeling of LED functions. The label slides behind a clear protective membrane.

The dimensions of Model VLM-1 are identical to Model VSM-1, mounting on the same hinged panel as a part of the MXLV Command Console enclosure. A four (4) conductor cable is supplied for connection between the modules. A 12" cable (Model MRRC-1) is available for connection between rows. A maximum of 31 modules may be used via audio control module, Model ACM-1.

Model VSM-1

The Operator Switch Module (Model VSM-1) from Siemens Industry – Fire Safety is a MXLV Command Console option module that provides manual control of the Emergency Voice Evacuation System. Each Model VSM-1 module provides eight (8) momentary push-button switches and 16 LEDs to indicate module status. Each switch is assigned two (2) LEDs and a label, indicating programmed usage. The label slides behind a clear, protective membrane.

One of the LEDs assigned to each switch is a dual-color LED used to indicate what type of signal is active. This LED may also be lighted Steady or Flashing to further indicate system status.

For example:

- ❑ Zones active to the *Evacuation* audio channel will have the LED lighted **Red** and Steady
- ❑ Zones active to the *Alert* audio channel will have the LED lighted **Red** and Flashing
- ❑ Zones selected for paging will have the LED lighted **Green** and Flashing until the microphone key is pressed; when the zone transfer confirmation message is received by the MXLV Command Console, the LED will change to **Solid Green**, indicating that it is clear to page
- ❑ Telephone zones with a call-in in progress will have their LED flashing **Red** until selected at the Command Console at which time the LED will convert to **Solid Red**, etc.

These aforementioned illuminating LED scenarios allow the operator clear and easy access to the overall system condition at all times. The second LED is **Amber**, and is used to indicate a fault condition.

Each Model VSM-1 switch is fully programmable and may be used to control speaker circuits, as well as a wide range of general-system functions, such as: All Call, All Evac, Warden's Page, Local Speaker, Select, etc. Any number of circuits may be grouped and controlled by a single switch. Switch usage and zone groupings are assigned using the system custom programming software.

Each Model VSM-1 is mounted on a hinged panel as a part of the MXLV Command Console enclosure. A four (4) conductor cable is supplied for interconnection of the modules. A 12" cable (Model MRRC-1) is available for connection between rows. Model VSM-1 connects to Model TBM-2 module mounted in the enclosure.

Temperature and Humidity Range

Products are $\text{UL 864 9}^{\text{th}}$ Edition 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).

Installation and Operation Manual [IOM]

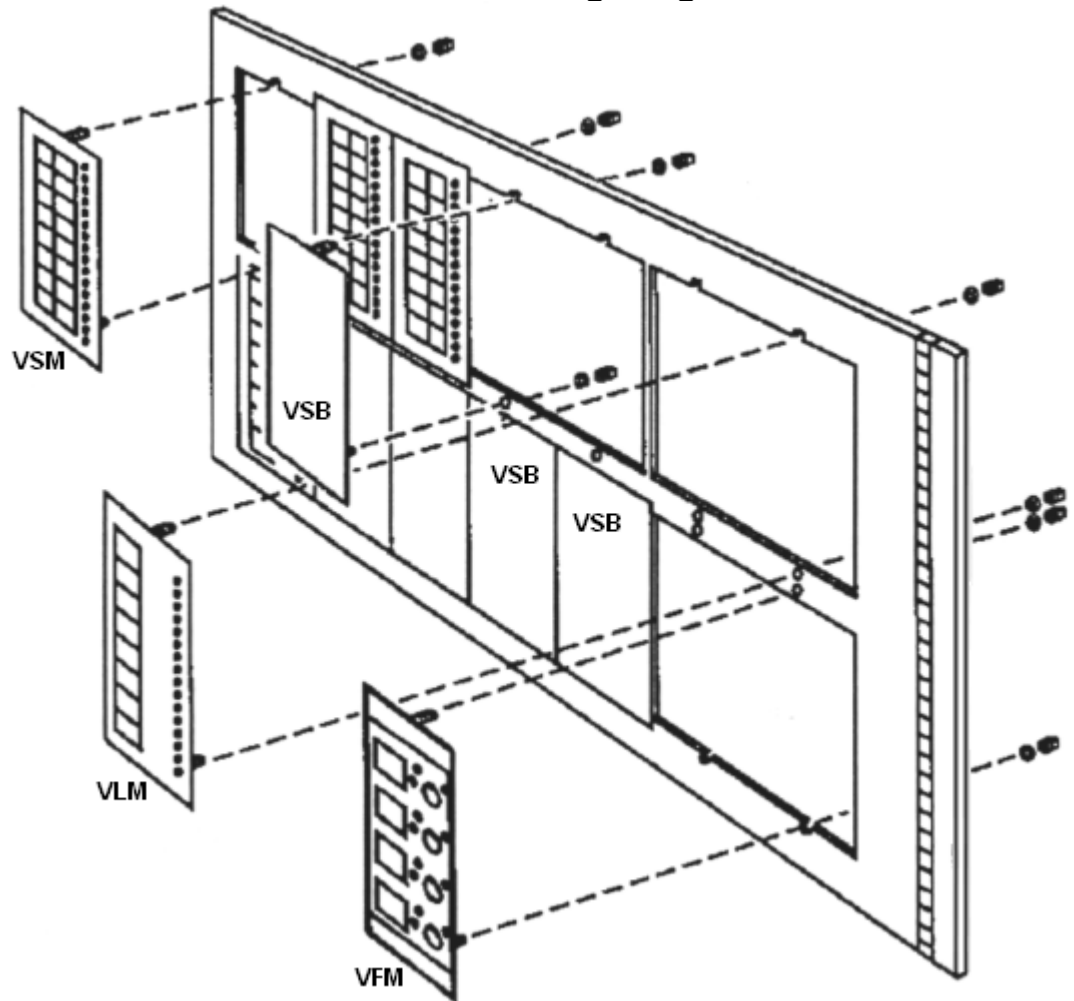
Model Number	Part Number	Description
VFM-1	315-092064	MXLV Modules
VLM-1		
VS-1		
VSM-1		

Note: For further details, refer to MXLV IOM manual: 315-092036.

Related Documentation

Product	Data Sheet Number
MXLV	5035
Enclosures	5056
Rack-Mount Equipment	5057
VSA-1	5081

Mounting Diagram



Details for Ordering

Model Number	Part Number	Description
MHD-3	500-092072	Hinged Frame, 14-Module Openings
MHD-4	500-092074	Hinged Frame, Openings for Eight (8) Modules and Model TSP-40 Strip Printer
MHD-5	500-092377	Hinged Frame, Five (5) Module Openings {for Model MSE-2}
MRRC-1	500-692106	12" Cable, Four (4) Conductor
VFM-1	500-893967	Fan-Control Module, Four (4) Three (3)-Position Switches: {ON, OFF, AUTO}
VLM-1	500-092086	LED Annunciator Module {Eight [8] LED Sets
VSF-1	500-692075	Module Blank with Overlay
VSF-P	500-648552	Plastic Blank with Overlay, Six (6) pieces
VSM-1	500-892065	Switch Module, Eight (8) switches

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Notice: This marketing data sheet is not intended to be used for system design or installation purposes. For the most up-to-date information, refer to each product's installation instructions.

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