

Multi-application Peripherals

24 Point I/O Annunciator Modules for use with the 4010 Fire Alarm Control Unit

UL, ULC, CSFM Listed; FM Approved; MEA (NYC) Acceptance*

Features

Programmable input/output module for use with the 4010 Simplex addressable fire alarm control unit (FACU):

 4605 Series Models provide 24 input/output (I/O) points per module with each point selectable as either an input or an output

Four input switch types are supported:

- Unsupervised switch connection
- · Supervised for open to switch circuit
- · Supervised for open or short to switch circuit
- · Monitored three position H.O.A. (hand-off-auto)

Monitored switches may be:

- Normally open (N.O.) or normally closed (N.C.)
- Momentary or maintained

Outputs:

- Rated 24 V at 75 mA each for operation of relays, incandescent lamps, or current limited LEDs
- · Selectable for continuous on, or slow or fast flash

Modules communicate with the 4010 FACU using N2 serial communications:

- · Up to six total annunciators are supported
- Compatible annunciators include the 24 I/O module, the 4606-9101 LCD annunciator, and the 24 LED door mounted annunciator
- Communications are provided with extended diagnostics for quick setup and easy maintenance

4605 Series 24 Point I/O Package availability:

- Modular package with cabinet, with or without retainer and door, for up to six modules
- $\boldsymbol{\cdot}$ Plate mounting for up to six modules (for use with cabinet by others)
- Module only (for expansion, or for use with mounting plate and enclosure by others)

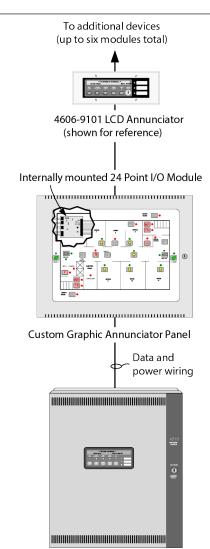


Figure 1: Typical application for 24 Point I/O Module (shown with LCD Annunciator for reference only)

General description

The 4605 Series of I/O modules provide a flexible remote interface for graphic annunciators, HVAC monitoring and control, output bypass control, utility door monitoring, and emergency call switches. Each I/O point can be selected as an input or output as determined by local requirements.

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Selectable outputs and inputs

Outputs can be selected to be continuously on, or pulsed at a slow or fast rate. Inputs can be selected to be unsupervised, supervised for open circuit wiring, supervised for open or short circuit wiring, or to monitor three position switches such as those used for H.O.A. switch control.

^{*} The 4605 series 24 Point I/O module has been approved by the California State Fire Marshal (CSFM) pursuant to Section 13144.1 of the California Health and Safety Code. See CSFM Listing 7120-0026:225 for allowable values and/or conditions concerning material presented in this document. It is subject to re-examination, revision, and possible cancellation. Accepted for use – City of New York Department of Buildings – MEA35-93E. Additional listings may be applicable; contact your local Simplex product supplier for the latest status. Listings and approvals under Simplex Time Recorder Co. are the property of Tyco Safety Products Westminster.



Packaging description

Mounting options

Options include a module only package, module (or multiple modules) mounted on a plate suitable for installation in separately purchased cabinets, up to six modules mounted in a Simplex cabinet, or as door mounted 24 LED annunciators for use on the 4010 cabinet.

Annunciation flexibility

Up to six, N2 communications modules may be connected to the 4010 N2 external annunciator communications bus. These modules may be either the 4606-9101 LCD annunciator or the 24 Point I/O module.

Product selection, 4605 Series graphic I/O modules and accessories

Table 1: System type (select one)*

Model	Description	Dimensions
4605-8401	Cabinet mounted modules; six maximum; for use with Simplex cabinet; cabinet ordered separately	see below
4605-8402	Plate mounted modules; six maximum, for sahinet by others	13 1/2 in. H x 21 3/8 in. W
	Plate mounted modules; six maximum; for cabinet by others	(323 mm x 543 mm)
1605 0004	Madula anh	5 3/4 in. x 6 1/2 in.
4605-8904	Module only	(146 mm x 165 mm)
*See Installation re	eference	

Note: If the 24-Point I/O equipment is used for a custom graphic annunciator panel, one output must be configured always-on and wired to a power-on indicator on the front panel to meet UL requirements.

Table 2: Graphic type (order quantity as required)

Model	Description	Dimensions
4605-7401	24 Point I/O Module: includes mounting hardware	5 3/4 in. x 6 1/2 in.
		(146 mm x 165 mm)

Table 3: Cabinet selection (select if cabinet mounted, reference 4605-8401)

Model	Description	Dimensions
4605-2401	Beige 2-Unit Cabinet; mounts up to six modules; with glass door and	
4003-2401	retainer	20 3/4 in. H x 25 3/4 in. W x 4 1/4 in. D
4605-2404	Beige 2-Unit Cabinet; mounts up to six modules; without door and	(527 mm x 654 mm x 108 mm)
4003-2404	retainer (back box only)	
4605-2201	Red finish option	

Table 4: Accessories (select as required)

Model	Description	
2975-9801	Beige	Semi-flush trim kit
2975-9802	Red	Semi-liush trim kit

Specifications

Table 5: General specifications

Specification		Rating		
Input voltage and switch voltage rating		18 VDC to 32 VDC, system supplied		
Communications		N2 external annunciator communications line from 4010 FACU		
Wiring connections		Terminal blocks for wire size 18 AWG to 14 AWG (0.82 mm² to 20.8 mm²)		
Module operating current*		60 mA @ 24 VDC		
Output rating*		75 mA @ 32 VDC maximum, per output (1.8 A total maximum)		
	Unsupervised	7.3 mA when closed, no current draw when open		
	Supervised for open	Supervisory state	N.O. = 3.7 mA	N.C. = 7.3 mA
		Switch activated	N.O. = 7.3 mA	N.C. = 3.7 mA
Switch current draw @ 24	Supervised for open and	Supervisory state	N.O. = 3.2 mA	N.C. = 5.6 mA
VDC, per switch*	short	Switch activated	N.O. = 5.6 mA	N.C. = 3.2 mA
		Hand position = 7.3 mA		
	H.O.A	Off position = 5.9 mA		
		Auto position = 3.7 mA		
24 LED annunciator door		Supervisory = 60 mA		
		Alarm = 83 mA with all LEDs on		
Temperature range		32°F to 120°F (0°C to 49°C)		
Humidity range		10% to 90% RH, non-condensing, at 90°F (32°C)		

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Table 5: General s	specifications
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Specification	Rating
Additional reference	Refer to Installation Instructions 574-348 and Field Wiring Diagram 842-063
* For total current, add outputs and supervisory current to module current.	

Installation reference

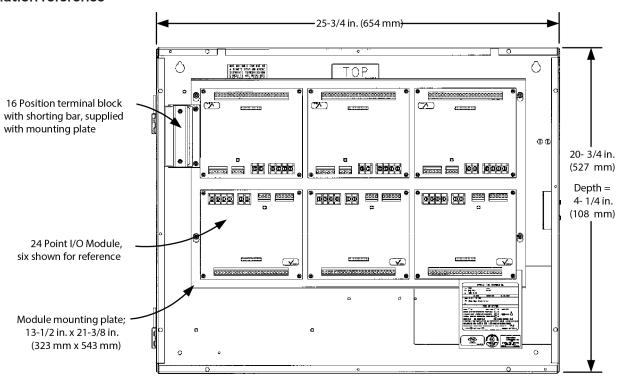


Figure 2: Two-unit mounting cabinet reference drawing

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