

## OMX-IO Control Interface

### Description

- Integrates GRAFIK 5000™, GRAFIK 6000®, GRAFIK 7000™, LCP128®, and Softswitch128® systems with equipment that has a contact-closure I/O, including:
  - Motion and occupant sensors.
  - Timeclocks and push buttons.
  - Motorized projection screens, skylights, window shades, and movable walls.
  - AV equipment.
  - Security systems.
- Use the GRAFIK Systems™ processor panel to set up the OMX-IO interface for different modes, functions, and momentary/maintained inputs and outputs.

### Inputs/Outputs

- Provides five inputs and five outputs.
- Provides both normally open (NO) and normally closed (NC) contacts.
- Using the inputs, contact closures in other equipment can operate controls to:
  - Select scenes.
  - Run sequences (loop through scenes).
  - Lock lighting controls to prevent changes.
  - Activate panic mode (lights go full on).
  - Adjust control logic to reflect status of movable walls.
  - Turn lights on or off based on room occupancy.
- Using the outputs, scene changes in lighting controls can:
  - Trigger outputs to control other equipment.
  - Provide status feedback to other equipment.



Job Name:	Model Numbers:
Job Number:	

## Specifications

### Power

- IEC PELV/NEC® Class 2
- Operating voltage: 12 V<sub>DC</sub> 200 mA  
24 V<sub>DC</sub> 100 mA
- Provides 2-way interface between lighting controls and dry contact closure devices.
- Provides 5 inputs and 5 outputs. Outputs can control other manufacturers' equipment.

### Status LEDs

Five Status LEDs light when associated output is active (on).

### System Communications and Capacity

IEC PELV/NEC® Class 2 wiring connects OMX-IO interface to processor panel.

### Environment

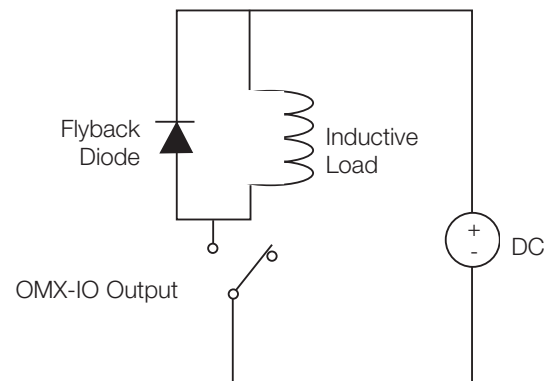
32 to 104 °F (0 to 40 °C). Relative humidity less than 90% non-condensing.

### Five Input Terminals

- Accept maintained inputs and momentary inputs with 40 msec minimum pulse times.
- Off-state leakage current must be less than 100 µA.
- Open circuit voltage: 24 V<sub>DC</sub> maximum.
- Inputs must be dry contact closure, solid state, open collector, or active-low (NPN)/active high (PNP) output.
  - Open collector NPN or active-low on-state voltage must be less than 2 V<sub>DC</sub> and sink 3.0 mA.
  - Open collector PNP or active-high on-state voltage must be greater than 12 V<sub>DC</sub> and source 3.0 mA.

### Five Output Terminals

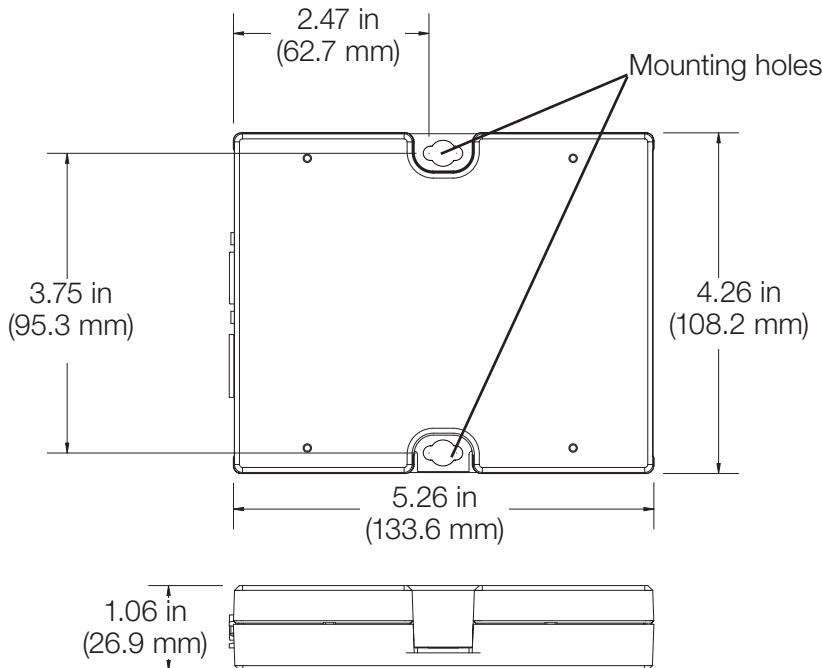
- Provide maintained or momentary (1-second) outputs.
- The OMX-IO is not rated to control unclamped, inductive loads. Inductive loads include, but are not limited to, relays, solenoids, and motors. To control these types of equipment, a flyback diode must be used (DC voltages only). See diagram below.



Supply Voltage	Resistive Load
0-24 V <sub>DC</sub>	1.0 A
0-24 V <sub>AC</sub>	0.5 A

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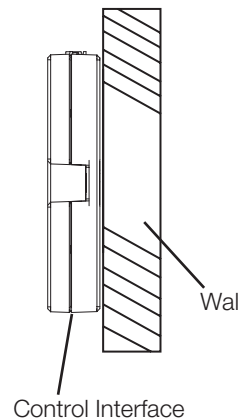
## Dimensions



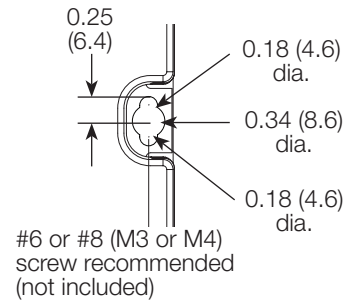
## Mounting

1. Mount the control interface directly on a wall, as shown in the Mounting Diagram, using screws (not included). When mounting, provide sufficient space for connecting cables. The unit can also be placed in the LUT-19AV-1U AV rack using the screws provided with the unit. The LUT-19AV-1U will hold up to four units. If conduit is desired for wiring, the LUT-5x10-ENC can be used to mount one unit.
2. Strip  $\frac{3}{8}$  in (10 mm) of insulation from wires. Each data link terminal will accept up to two 18 AWG (1.0 mm<sup>2</sup>) wires.
3. Connect wiring as shown in the Wiring Diagram (next page). LED 1 lights continuously (Power) and LED 7 blinks rapidly (Data Link RX) when the Class 2 (PELV) Data Link is installed correctly.

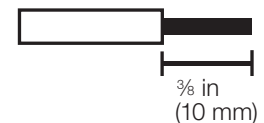
### Mounting Diagram



### Mounting Hole Detail Dimensions: in (mm)



### Wire Strip Length



LUT-5x10-ENC

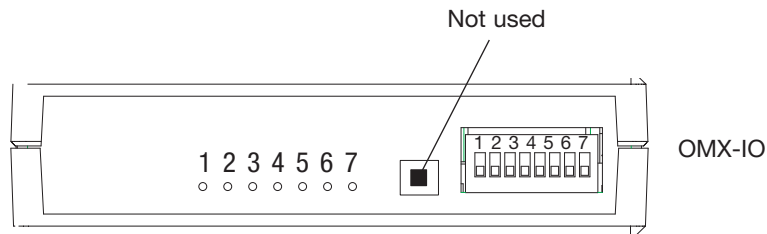


LUT-19AV-1U

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## IEC PELV/NEC® Class 2 Wiring

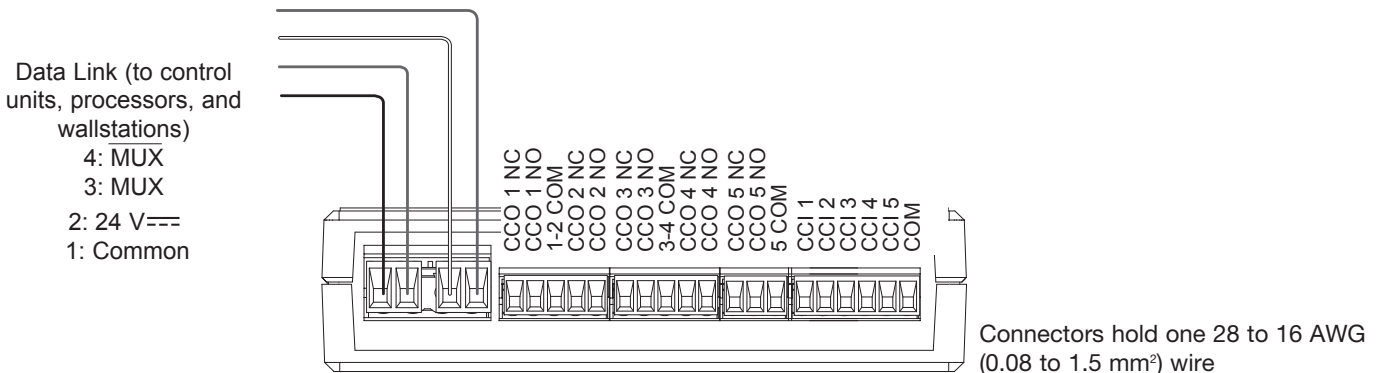
- Daisy-chain the OMX-IO Interface to the IEC PELV/NEC® Class 2 wallstation link that connects to the processor panel.
- Make daisy-chain connections to the IEC PELV/NEC® Class 2 MUX Link terminals on front of OMX-IO interface.
- Do not use T-taps. Run all wires in and out of the terminal block.
- Each terminal accepts up to two 18 AWG (1.0 mm<sup>2</sup>) wires.
- Consult Processor Panel Specification Submittal for more details.



LED 1: Relay 1 status  
 LED 2: Relay 2 status  
 LED 3: Relay 3 status  
 LED 4: Relay 4 status  
 LED 5: Relay 5 status  
 LED 6: Unused  
 LED 7: Link status

DIP switches

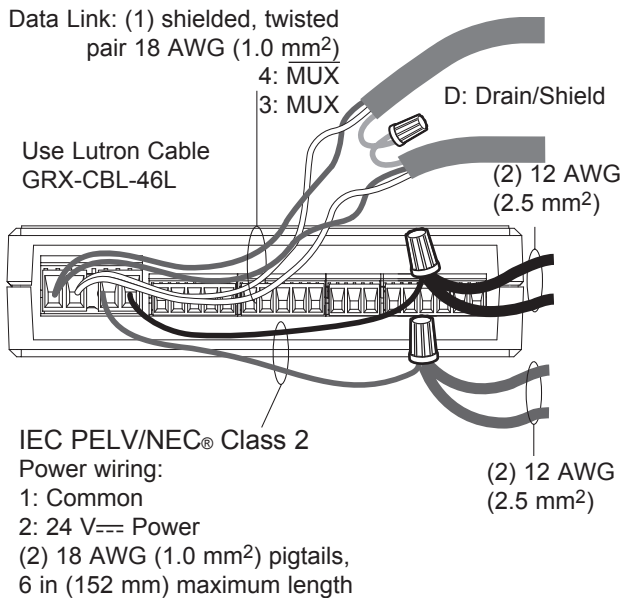
To up to 31 additional control interfaces, control units, or wallstations



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## IEC PELV/NEC® Class 2 Terminal Connections

- Install in accordance with all applicable regulations.
- Do **not** connect line voltage/mains power to device.
- This control can use IEC PELV/NEC® Class 2 wiring methods. Check with your local electrical inspector for compliance with national and local codes and wiring practices.
- Make daisy-chain connections to the IEC PELV/NEC® Class 2 data link terminals on the end of the control interface.
- Do not use T-taps. Run all wires in and out of the terminal block.
- Each terminal accepts up to two 18 AWG (1.0 mm<sup>2</sup>) wires.



**Note:** Do not connect Drain/Shield to Ground (Earth) or Wallstation/Control Interfaces. Connect the bare drain wires and cut off the outside shield.

**Note:** 12 AWG (2.5 mm<sup>2</sup>) conductors for Common (terminal 1) and 24 V== Power (terminal 2) will not fit in terminals; use 18 AWG (1.0 mm<sup>2</sup>) pigtails (< 6 in/152 mm).

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