Project		Catalog #		Type	
Prepared by		Notes		Date	

Cooper Lighting Solutions

Germicidal UV (GUV) Magnetic Access Sensor

Contact Closure Magnetic Sensors used for GUV Control System

Typical Applications

Office • Education • Healthcare • Restaurant

Interactive Menu

Product Certification

Germicidal UV System

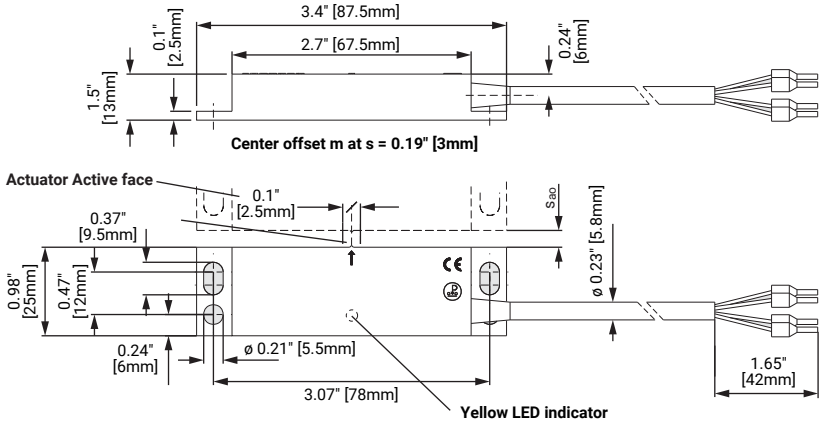
Product Features

GERMICIDAL UV

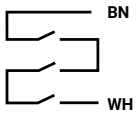
Top Product Features

- **Primary Safeguard –** GUV Magnetic Access Sensor, composed of an actuator and read head, ensures that all doors and windows within the space to be disinfected are closed. For the GUV Control System to be activated, all contact closures need to be in the closed position.
- **Redundancy –** Built-in redundancy; if one switch fails in the device then the device will remain open preventing activation of a faulty device.
- **Tamper-proof –** Magnetic read heads that sense a coded magnetic actuator. The read heads only respond to specifically coded actuator types to prevent tampering. The GUV Magnetic Access Sensor does not prevent the door from opening.
- **Designed for the toughest environment –** Designed for areas where dirt and cleaning are major factors. Actuators and read heads can be fitted behind stainless steel making them ideal for pharmaceutical and food industry applications.

Dimensional Details



Circuit diagram not actuated



Order Information

Catalog Number

Catalog Number	Description
GUV-MAG-SENSOR-1	GUV Magnetic Access Sensor

Notes
1. Each door and window within the cleaning space need a GUV Magnetic Access Sensor.
2. The GUV Magnetic Access Sensor needs to be terminated within the GUV Control Panel. Please refer to the GUV Control Panel datasheet for more information.
3. Commissioning services are required to configure and test the GUV Control System. Please refer to the GUV Control Panel datasheet to learn more about the associated commissioning services.

Required Accessories

Catalog Number

Catalog Number	Description
GUV-PB-1	GUV Clearance Pushbutton
GUV-USER-1	GUV User Safety Station
GUV-16-120-277	Medium - GUV Control Panel with 16 Pushbutton Inputs
GUV-24-120-277	Large - GUV Control Panel with 24 Pushbutton Inputs

Product Specifications

Key Features

- The GUV Magnetic Access Sensor is composed of a magnetic read head and an actuator. Once the two devices are close to each other; the door, window or other opening is considered closed.
- The actuator is to be installed on the stationary section and the read head is to be installed on the moving section.
- Actuators and read heads can be fitted behind stainless steel making them ideal for pharmaceutical and food industry applications.
- Read head and actuator include 2 safety screws (M4 x 14) each.
- The assured switch-on distance between read head and actuator is 0.24" (6 mm). The assured switch-off distance is 0.67" (17 mm).
- Comes with both read head and actuator.

Applications

- Office
- Education
- Healthcare
- Retail
- Not suitable for warehouse or industrial applications such as roll up doors or other doors which do not have a tight tolerance. Heavy use and abuse to the door can cause the sensor to become misaligned resulting in the system not operating. Please refer to the "assured switch on" and "assured switch off" tolerances above for guidance.

Mechanical - Read Head

Size: 1.4" x 1.0" x 0.5" (36mm X 26mm x 13mm)
Environment:
- **Operating temperature:** -4°F to 140°F (-20°C to 60°C)
- For indoor use only

Degree of protection according to EN 60529: IP67
Installation Position: Mount in any position. Ensure alignment of arrows
Connection Type: Molded cable with crimped ferrules / plug connector M8
Mechanical Life: 100 x 10^6 operating cycles
Vibration Resistance: 10 to 55 Hz, amplitude 1 mm
Shock Resistance: 30 g / 11 ms
Center offset from actuator: ± 2.5 mm at a distance of s = 3 mm
Switch on distance: 0.24" (6 mm)
Switch off distance: 0.67" (17 mm)
Mounting: 2 Safety screws included; size M4 x 14
Color: Red
Housing: Reinforced PPS

Mechanical - Actuator

Size: 1.4" x 1.0" x 0.5" (36mm X 26mm X 13 mm)
- The dimensions of the actuators are the same as those of the read heads.
- The actuator has a 3 meter connection cable.
- The actuator needs to be home wired to the Safety Control Panel.

Mounting: 2 Safety screws included; size M4 x 14
Installation Position: Mount in any position. Ensure alignment of arrows

Electrical

Power Voltage: 24V
Wiring type: 12-14 AWG (copper wire)
Method of Operation: Magnetic, read contact
Distance: 1000' maximum

Standards/Ratings

- UL8802 Safety Certified GUV System – Designed to meet UL8802 standards for safer disinfection than systems without an equivalent control system in place
- EMC Compliance: According to EN 60947-5-3

Warranty

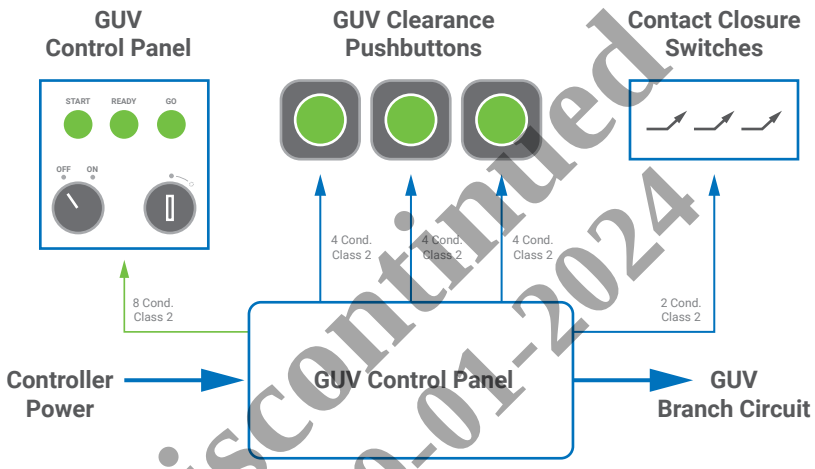
One year standard limited warranty

Overview of the complete GUV Control System

The UL8802 Safety Certified GUV Control System is composed of one GUV Control Panel, one GUV User Station, GUV Clearance Pushbuttons and GUV Magnetic Access Sensors.

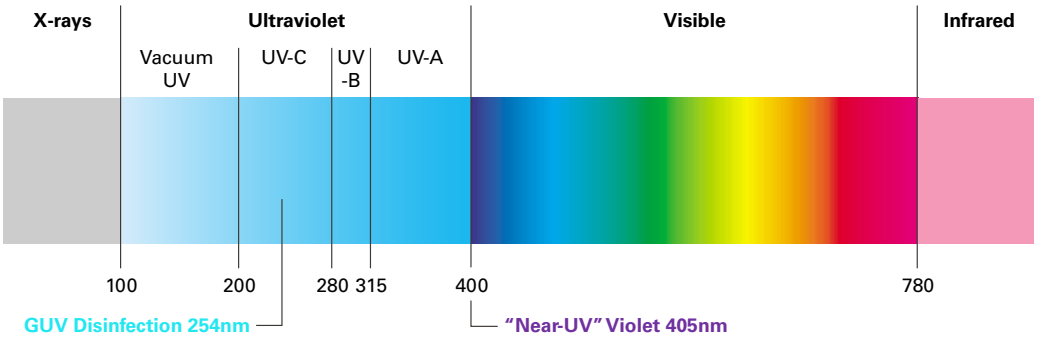
- **The GUV Control System –** Meets UL safeguard requirements as per UL8802. The safeguards ensure that the GUV Control system can be turned on and remains on if all safeguards are met. In the event someone enters the space, the system will automatically turn off and will not restart until the safeguards are met again and the user turns the system back on.
- **GUV Control Panel –** A control panel that manages the GUV Control System based on inputs received from the GUV Clearance Pushbuttons, GUV Magnetic Access Sensors installed at each door/windows and the GUV User Station installed outside the cleaning area. The GUV Control Panel includes a timer that allows the certified installer to configure the maximum activation time for the space disinfection.
- **GUV User Station with LED Indicators –** Contains the Off/On selector switch and a system activate keyed switch. The selector switch provides power to the GUV Clearance Pushbuttons while the keyed switch turns the GUV fixtures On. The LED indicators notifies the operator that:
  START: Power has been supplied
  READY: All safeguards are met
  GO: The system is actively running
- **GUV Magnetic Access Sensors –** The GUV Magnetic Access Sensors are to be installed at the entrances and windows of the enclosed spaces. These sensors act as the primary safeguard within the GUV Control System. All doors/windows need to be closed for the GUV operator to activate the GUV Control System. Opening a door or window will stop the GUV session.
- **GUV Clearance Pushbuttons –** Clearance Pushbuttons are used to verify that no one is within the space prior to the GUV session. The GUV Clearance Pushbutton acts as the secondary safeguard. All GUV Clearance Pushbuttons installed within the space need to be pressed for the GUV operator to activate the GUV Control System. Inactivating a GUV Clearance Pushbutton during the GUV session will turn off the GUV Control System.

System Topology



GUV Education

- GUV (germicidal ultraviolet) is a proven and effective disinfection technology.
- GUV refers to short-wavelength ultraviolet "light" outside of the visible spectrum that is proven to kill bacteria and inactivate viruses...FAST! These short wavelengths in the photobiological UV spectral band known as "UV-C" are centered at 254nm, which is the optimal source wavelength for eliminating pathogens.
- GUV is an excellent surface and air disinfectant due to its quick germicidal efficacy.
- Germicidal effectiveness is determined by the exposure dose irradiance (how much) and time (how long).
- GUV can pose a safety and health hazard to the eyes and skin if the product is improperly used or installed.
- Follow recommended practices for utilization and control of GUV fixtures.



For more information on Fail-Safe GUV Disinfecting Solutions, please visit www.cooperlighting.com/GUV

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