

Features

Designed specifically for protection of fire alarm circuits including:

- DC power (200 mA maximum)
- Monitor circuits
- Audio riser circuits
- Firefighter telephone riser circuits
- Refer to page 2 for application details
- Listed as an Isolated Loop Circuit Protector to UL 497B, *Protectors for Data Communications and Fire Alarm Circuits*
- Listed as a Surge Suppressor to ULC-S527, *Control Units for Fire Alarm Systems*
- For higher current ILCP applications (up to 5A), refer to Model 2081-9028 on data sheet S2081-0008

Multiple stages of protection include:

- Line-to-Line protection
- Line-to-Earth protection
- Rugged epoxy encapsulated package

Description

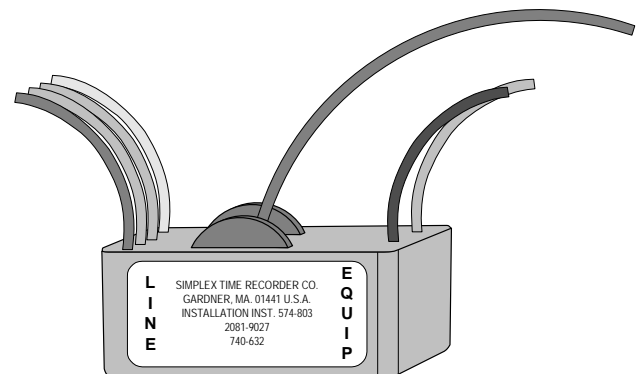
Electrical transients caused by lightning or by disturbances on high voltage power lines are conditions that require low voltage wiring circuits to be adequately protected. This protection is most effective when placed at the location where such circuits leave or enter the building.

Transient Protection. The 2081-9027 Isolated Loop Circuit Protector (ILCP) is designed to protect Simplex® Fire Alarm circuits from those electrical transients induced on wire runs that are routed external to the building. Because of its small package size, it can be easily mounted at the location that achieves maximum protection.

Note 1: Overvoltage Protector Applications. Model 2081-9027 is for use as an Isolated Loop Circuit Protector which is different from operation as an Overvoltage Protector. For Overvoltage Protector applications, refer to Overvoltage Protector model 2081-9044 which is listed to UL 864, rated for up to 200 mA, and documented on data sheet S2081-0016.

Note 2: Operation with other Circuit Types.

Performance of the 2081-9028 ILCP has been quantified for use with other circuit types for specific applications where its low resistance is desired. Contact your local Simplex product supplier for application guidance.



2081-9027 Isolated Loop Circuit Protector

Operating Specifications

Line-to-Line Voltage Rating	Continuous: 38 VDC, 28 VAC RMS Clamping: 47 V typical
Line-to-Earth Voltage Rating	Continuous: 45 VDC, 35 VAC RMS Clamping: 56 V typical
Shield-to-Earth Voltage Rating	Continuous: 48 VDC, 33 VAC RMS Clamping: 75 V typical
Line-to-Line Capacitance	0.006 μ F typical
Continuous Current Rating	200 mA maximum
Series Resistance	3 Ω /line
Response Time	Line-to-Line <1 Nanosecond (10^{-9})
	Line-to-Earth <25 Nanosecond (10^{-9})
Maximum Current	Line-to-Line 2000 A (10 x 50 μ sec pulse)
	Line-to-Earth 2000 A (8 x 20 μ sec pulse)
	Shield-to-Earth 5000 A (10 x 50 μ sec)

Mechanical Specifications

Dimensions	2 $\frac{7}{16}$ " W x 1 $\frac{3}{8}$ " D x 1 $\frac{1}{16}$ " H (62 mm x 35 mm x 27 mm)
Package	Beige epoxy encapsulated
Electrical box requirement	4" (102 mm) square box, 2 $\frac{1}{8}$ " (54 mm) minimum depth
Temperature Rating	32° F to 120° F (0° C to 49° C)
Humidity Rating	10-95% RH, at 30° C
Signal Leads	Color coded, 18 AWG (0.82 mm ²), 10" long (245 mm)
Ground Lead	Green, 14 AWG, 10" long (254 mm)
Installation Instructions	574-803

* This product 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 7300-0026:171 for allowable values and/or conditions concerning material presented in this document. This product was not FM or MEA (NYC) approved as of document revision date. 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 Fire Protection Products.

