Surge Protection

NOTIFIER® by Honeywell

General

Surge protection is required to reduce the risk of potential high voltage spikes on power and communication lines from permanently damaging the equipment connected to it.

Lightning is a predominant cause of high voltage surges; however power line disturbances and load switching can also cause such surges.

Whilst Notifier equipment contains some surge protection, it cannot absorb as much energy as a stand alone surge protector.

Because a fire panel interfaces to a large volume of various devices which are located over a wide area, the loops and zone cables are particular exposed to voltage surges.

Every connection from a panel makes the system vulnerable to an energy spike through each connection.

Mains Supply Protection

A 240 VAC surge protector and filter protects the panel from an energy spike down the supply line. The unit supplied by Notifier provides protection for a load of up to 10A.

24V Power Protection

To protect the panel from an energy spike from the ring field modules, the communication wiring and power wiring must have surge protection on it.

A two channel 24 VDC surge suppressor rated at 2A is used to protect the power line.

RS485 Communications Protection

A two channel communications surge suppressor for RS485 is used to protect the communications line to devices such as the AZM-8 and LCD-80.

Addressable Loop Protection

Protection for the addressable loop wiring is done by using a 33V 0-33MHz surge protector. This will provide protection for ELCM/LEM loops, both A and B channels.

Conventional Circuit Protection

Protection for the conventional loop wiring is done by using a 36V surge protector. This will provide protection for 4 x AZF circuits on all Notifier Systems.

Specifications

SFD1-10 Mains Power Surge Suppressor

Nominal Voltage:	230 V / 50 Hz
Maximum Continuous Voltage:	275 V / 50 Hz
Maximum Discharge Current (8/20µs):	13kA
Maximum Load Current:	10A
Voltage Protection Level @ 3kA (8/20µs):	<700V
Earth Leakage Current:	<500µA

PLP-42-S Loop Protection

Operating Voltage:	30VDC
Clamping Voltage:	33VDC
Operating Current:	7A
Peak Surge Current:	400A

SL2DIN - 485 RS485 Protection (Two channel)

Maximum Working Voltage:	36VDC
Maximum Working Current:	2A
Peak Surge Handling Per Mode (8/20µs):	20kA
Clamping Voltage:	36VDC
Let Through Voltage for 5kV 10/700µs pulse:	41V

SL2DIN - 36/2A 24V Power (Two channel)

Maximum Working Voltage:	36VDC
Maximum Working Current:	2A
Peak Surge Handling Per Mode (8/20µs):	20kA
Clamping Voltage:	36VDC
Let Through Voltage for 5kV 10/700µs pulse:	41V

SL4DIN - 36 Conventional Circuit Wiring (Two channel)

Maximum Working Voltage:	36VDC
Maximum Working Current:	2A
Peak Surge Handling Per Mode (8/20µs):	20kA
Clamping Voltage:	36VDC
Let Through Voltage for 5kV 10/700µs pulse:	41V