ZoneBarrier

Protects network and communications applications against induced surges and transients

Atlantic Scientific
MTL Surge Technologies
A part of COOPER Crouse-Hinds

- **Modular, expandable protection for one to an unlimited number of ports**
- **Wall, DIN rail or 19" rack mountable**
- **Wide range of connector types available**
- **Three stage protection**
- **Category 6 universal model available**
- **10 year product warranty**

The ZoneBarrier Series is a uniquely modular communication line interface protection system for IT networks and industrial communication systems. By providing an effective barrier between uncontrolled transient environments and your valuable electronic systems, the ZoneBarrier Series protects against costly system down time and equipment failure.

The sophisticated hybrid circuitry employed by the ZoneBarrier Series protects equipment without impeding normal operation. ZoneBarrier protection components comprise a combination of high energy Metal Oxide Varistors (MOVs) or Gas Discharge Tubes (GDTs) with ultra fast diodes and Silicon Avalanche Diodes (SADs). This combination of high quality surge protection components gives the ZoneBarrier Series its characteristic low let-through voltage and high surge current capacity which provides excellent protection.

Designed for multi-port or single-port applications the ZoneBarrier Series offers a flexible surge protection solution that is capable of growing with your requirements. A ZoneBarrier module can be used as a stand-alone device, providing protection for a single workstation, or as a building block in a surge protection solution as simple or as complex as your requirements, now and in the future.

The small foot print of ZoneBarrier modules allows a single module to be conveniently located near to the equipment it is protecting. Where multiple modules are required, ZoneBarrier units can be mounted on standard DIN rail. A DIN rail kit is also available for 19" rack applications which can hold up to 32 modules, providing protection of an impressive 64 100Base-T lines while occupying less than 5.2 inches (or a 3U space).

All widely used network systems can be protected by the ZoneBarrier Series. ZoneBarrier modules are available for 100Base-T, 1,000Base-T, 10Base-2, RS232, RS422, RS423 and others with a range of connector types to suit all common network applications.

Additional protection circuitry should be provided for other parts of the network or other systems which may be interconnected e.g. incoming AC power, telephone wiring, fire and security systems etc. ZoneBarrier modules are available to meet these requirements, contact your local supplier for details.

Network & Comms Protection

Specification

All figures typical at 77°F (25°C) unless otherwise stated

Maximum load current
0.5 Amps
Ambient temperature limits
−40°F to +185°F (working)
−40°C to +85°C (working)
Humidity
95% RH (non-condensing)
Casing
Molded plastic
Weight
2.8 oz (0.08Kg)
Dimensions
See figure 1
EMC compliance
BS EN 60950: 1992
BS EN 61000-6-2: 1999
IEC 61000-4-5 and CCITT K17

Model	Type	Maximum surge current (kA)	Wires	Working voltage (V)	Let-through voltage (V)	Bandwidth (MHz)	Connectors
24509	RS232	3	4 + Shield	15	27	0.5	Terminal Strip
24510	RS232	3	5	15	27	0.5	Terminal Strip
24511	RS232	3	8	18	27	0.5	RJ45
24513	RS422	10	4 + Shield	8	15	0.5	Terminal Strip
24516	RS423	3	4 + Shield	6	12	3	Terminal Strip
24517	RS423	3	6	6	12	0.5	MMJ
24518	RS485	10	2	5	10	50	Terminal Strip
24523	AS400	10	2	8	15	70	TwinAx
24528	RS422	10	4 + Shield	8	15	50	Terminal Strip
24534	10Base-2	10	Coax	8	30	150	BNC
24537	ArcNet	10	Coax	8	30	70	BNC
24540	100Base-T*	1	8	5	10	155	RJ45
24550	100Base-T*	1	2 x 4	5	10	155	2 x RJ45
24551	100Base-T*	1	8	5	10	155	RJ45/110
24563	1000Base-T+	1	8	5	10	250	RJ45

*Suitable for Cat.5 application, 100Base-T, 100VG, 10Base-T
+Suitable for Cat. 6 application

Installation

All ZoneBarrier modules are installed in-line and are identified with "Protected" and "Unprotected" for fail-safe installation.

DIN rail mounting (figure 2)

ZoneBarrier modules can be mounted on any standard T-section DIN rail or on the optional 19" DIN rail assembly. To attach the ZoneBarrier module to the DIN rail, simply locate the DIN rail foot of the module over on edge of the DIN rail and then securely push the ZoneBarrier onto the DIN rail. Note the DIN rail must be properly grounded.

Stand-alone installation (figure 3)

To install a ZoneBarrier module as a stand-alone protector, attach an ground lead to the supplied ring terminal and secure this with the self tapping screw provided to the base of the unit. Using screws (or bolts) mount the module on any flat surface.

To order specify -

Model number as per specification table above

Mounting options

21605	5" DIN rail for up to 4 ZoneBarriers
21649	17.5" DIN rail for up to 16 ZoneBarriers
24500	19" DIN rail (with mounting brackets) for up to 32 ZoneBarriers

Note: In accordance with our policy of continuous improvement, we reserve the right to change the product's specification without notice.

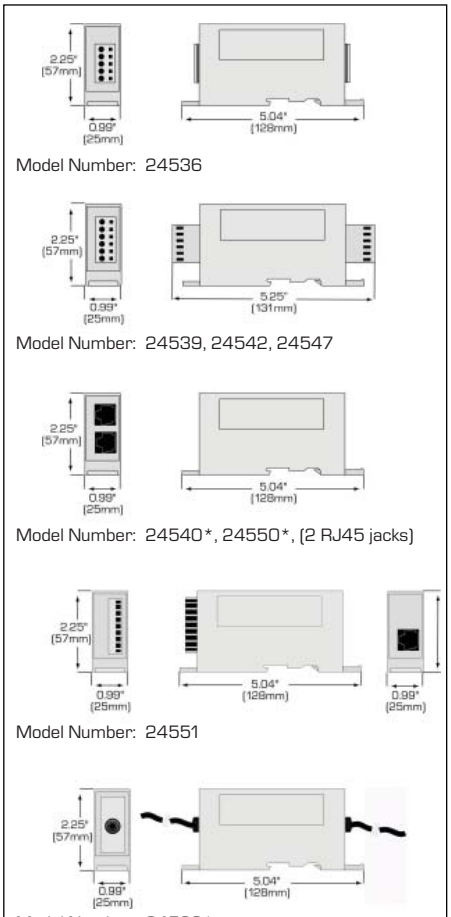

Figure 1 Dimensions

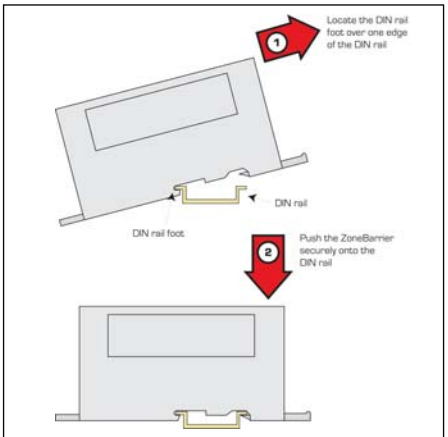

Figure 2 DIN rail installation

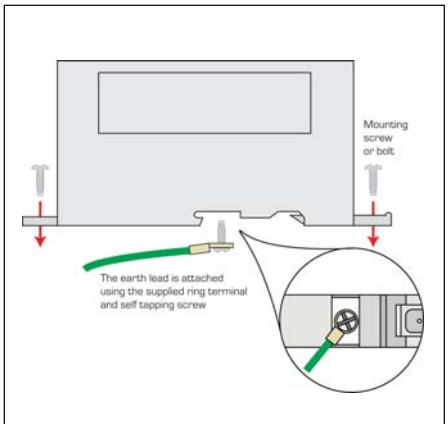

Figure 3 Stand alone installation

Approvals

Country	Standard/Authority	Approved for	Product
United States & Canada	UL 497B Listed UL Certified Cat.5	Networks	24525, 24540, 24563

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