B&B ELECTRONICS

Model: 232HESP

RS-232 High Energy Surge Protector CE

Overview

The Model 232HESP is designed to help protect against lightning strikes, power surges, and other types of voltage disturbances. Five RS-232 signals on terminal blocks are supported with a clamping voltage of approximately 15 volts. The 232HESP offers three stages of protection starting with a gas discharge tube followed by a series resistor and finally a Transient Voltage Suppresser (TVS). In order for a surge protector to work properly it is important to have a good connection to earth ground. The 232HESP offers two terminal posts and two metal mounting brackets that provide a good ground connection for the user. The 232HESP has been tested to two specifications at 6 kilovolts, IEC 1000-4-5: 1995 "Surge Immunity Test" and IEEE C62.41-1991 "IEEE Recommended Practice on Surge Voltages in Low-Voltage AC Power Circuits". To ensure the best protection of your equipment some simple connection guidelines should be followed.

Connections

1. The 232HESP should be located as close as possible to the equipment being protected.
2. A good ground connection must be made between the 232HESP and earth ground. This can be done with the two terminal posts on the top of the unit or the two mounting brackets.
3. The earth ground connection should be kept as short as possible for best performance. As a recommendation a minimum of 10 gauge copper wire at no more than 3 feet should be used. If it is not possible to achieve the short distance a braided cable made specifically for grounding purposes should be used.
4. The chassis ground of the equipment should be connected to the buildings 3 prong plug ground.

Specifications

Clamping Voltage, stage one:	Min. 72 VDC, Max.108 VDC
Series Resistance, stage two:	2.7 Ohms
Clamping Voltage, stage three:	Min. 14.3V, Max 15.8 V
Clamping Time:	Less than 5 $x10^{-9}$ seconds
Connectors:	5 position terminal blocks
Dimensions:	Approximately 4.5L X 3.3W X 1.8H in (11.4 x 8.4 x 4.6 cm)
Weight:	Approximately 6.7 oz. (.19 kg)

DECLARATION OF CONFORMITY

Manufacturer's Name:	B&B Electronics Manufacturing Company
Manufacturer's Address:	P.O. Box 1040 707 Dayton Road Ottawa, IL 61350 USA
Model Number:	232HESP
Description:	RS-232 High Energy Surge Protector
Type:	Light industrial ITE equipment
Application of Council Directive:	89/336/EEC
Standards:	EN 50082-1 EN 61000 (-4-2, -4-3, -4-4, -4-6)

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PRODUCT INFORMATION