Voltage Surge Protectors

A Complete System in Circuit Protection

EPS®

Voltage Surge Protectors

Techincal Data

Product Classification	BY7-C Series	BY7-B Series
Nominal Voltage	220/380V	220/380V
Maximum Continuous Operating Voltage	385/420V	385V
Frequency	50/60Hz	50/60Hz
Nominal discharge current of the upper part (8/20μS) In (kA)	20	30/40
Maximum discharge current of the upper part (8/20μS) Imax (kA)	40	60/80
Up protection level (kV)	<2.0	<2.0
Response time t(ns)	<25	<25
Terminal capacity : Rigid Conductor	35mm²	35mm²
: Flexible Conductor	25mm²	25mm²
Installation	Snap on Mounting acc. to DIN EN 50022	
Operating Temperature Range	-40°C to + 80°C	
Degree of Protection	IP20 installed in Enclosure	

Voltage Surge Protectors

A - Overvoltages of atmospheric origin Lightning propagation modes

1 - Direct attack

This occurs at the point of impact and may result in powerful currents flowing through fairly conductive elements

2 - Indirect attack

These occur most frequently, where a single direct attack at a point can generate overvoltages at a distance which are then propagated via the electrical supply right inside the building and can damage the installation and electrical equipment

a) Overvoltages on overhead power lines

When lightning strikes a high or low-voltage overhead power line and creates an overvoltage of several thousand volts and a current of several thousand amps

b) Overvoltages due to elec tromagnetic coupling

When lightning strikes in the vicinity of an electrical supply creates an overvoltage caused by electromagnetic radiation which is propagated to the building electrical installation directly or via the electrical supply

c) Overvoltages from the earth system

When lightning strikes the ground and generates an increase in the earth system potential, which is fed back to the installation

B - Overvoltages of non-atmospheric origin

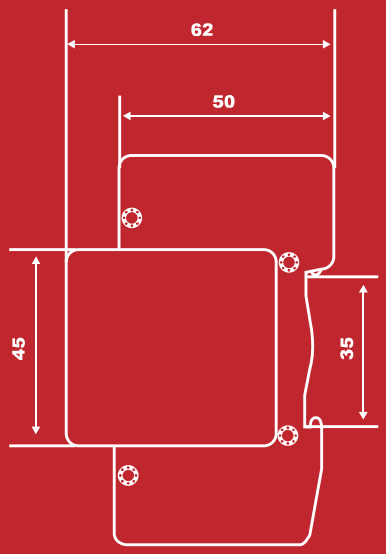
These are overvoltages resulting from operations on equipment such as : motors (lifts), sodium lamps, etc

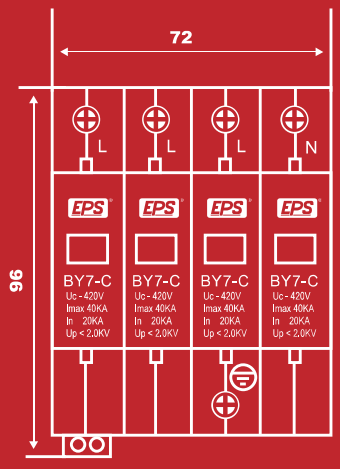
C - Effects of overvoltages

There are two types of overvoltage :

- overvoltages between the supply and the metal structure or earth system : these result in the creation of an electrical arc between the supply and the earth. This results in destruction of the consumer unit
- overvoltages between phase and neutral : these damage the actual electrical appliances

Layout / Dimension





BY7-C / BY7-B Series

UTAMA SWITCHGEAR SDN BHD (416650-H)

EPS®

Dealer :

UTAMA
SWITCHGEAR SDN BHD
(416650-H)

Main office
No.3, Jalan USJ 19/4A,
UEP Subang Jaya, 47630 P. Jaya
Selangor Darul Ehsan, Malaysia.
Tel : 603-8024 1215 / 1216
Fax : 603-8024 1796
e-mail : utamasb@ussbeps.com
Website: www.ussbeps.com