

Commercial and Industrial Surge Protective Devices Infographic



SURGE **PROTECTIVE** DEVICES

Protecting Your Business from Downtime and Data Loss

Surges can occur in **any facility** and according to the National Electrical Manufacturers Association, **80%** of all surges **originate inside facilities**.

THE NATIONAL ELECTRICAL CODE REQUIRES SURGE PROTECTION IN:

EXIT

EMERGENCY
SYSTEMS



ELEVATORS &
ESCALATORS



WIND ELECTRIC
SYSTEMS



INDUSTRIAL
MACHINERY



FIRE PUMP
CONTROLLERS

TYPE OF SURGE PROTECTION

Use **Type 1, 2, and 3 SPDs** for the best level of protection.

Type 1

Permanently connected Surge Protective Device. Protects against external and internal surges. May be installed **inside or outside** the facility.



Type 2

Permanently connected Surge Protective Device installed in, or next to, main panel. Protects against **internal and external** surges.



Extra Protection

Type 3

Point of use Surge Protective Device. Provides **limited protection** to devices plugged directly to SPD.



SURGE PROTECTIVE DEVICES PROTECT AGAINST:



EQUIPMENT DAMAGE



EQUIPMENT DOWNTIME



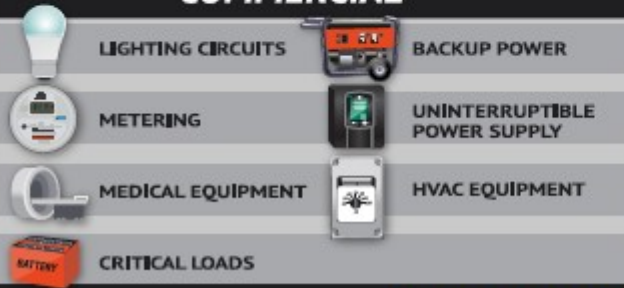
LOST REVENUE



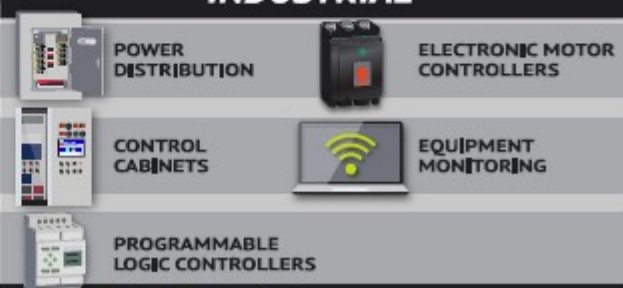
PRODUCTIVITY LOSS

The following can be damaged by surge and should have a level of surge protection to prevent **damage, downtime, and lost revenue**.

COMMERCIAL



INDUSTRIAL



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Surges can occur in any facility and according to the National Electrical Manufacturers Association, 80% of all surges originate inside facilities.

The National Electrical Code Requires Surge Protection In:

- Emergency systems

- Elevators & Escalators
- Wind Electric Systems
- Industrial Machinery
- Fire Pump Controllers

Type of Surge Protection

Use Type 1, 2, and 3 SPDs for the best level of protection

- Type 1:
Permanently connected Surge Protective Device. Protects against external and internal surges. May be installed inside or outside the facility.
- Type 2:
Permanently connected Surge Protective Device installed in, or next to, main panel. Protects against internal and external surges
- Extra Protection
Type 3
Point-of-use Surge Protective Device. Provides limited protection to devices directly plugged into SPD.

Surge Protective Devices Protect Against:

- Equipment Damage
- Equipment Downtime
- Lost Revenue
- Productivity Loss

The following can be damaged by surges and should have a level of Surge Protection to prevent damage, downtime, and lost revenue.

Commercial:

- Lighting Circuits
- Metering
- Medical Equipment
- Critical Loads
- Backup Power
- Uninterruptable Power Supply
- HVAC Equipment

Industrial:

- Power Distribution
- Control Cabinets
- Programmable Logic Controllers
- Electronic Motor Controllers
- Equipment Monitoring

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