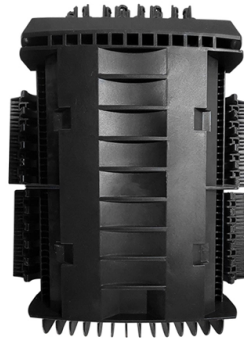


Connect the external and internal lines of the audio distribution cabinet to the surge protection unit



Overview

To ensure effective protection, the surge protection must be installed as close as possible to the feed point for the electrical system.

Key Takeaways

Connect the external (incoming) and internal (outgoing) lines directly to the SPD terminals, keeping all connections as short as possible and ensuring proper grounding.

Step-by-Step Guidance

1. Position the SPD: Install the surge protection device as close as possible to the audio distribution cabinet where the lines enter. This ensures that surges are diverted before reaching sensitive equipment . 2. Connect External Lines:

- The incoming audio or power lines from outside the cabinet should be connected directly to the input terminals of the SPD.

- Use short cables (≤ 0.5 m) with the largest practical cross-section to minimize residual voltage and voltage drop during a surge . 3. Connect Internal Lines:

- The outgoing lines from the SPD to the internal audio distribution circuits should be connected to the output terminals of the SPD.

- Maintain the same short, low-inductance wiring principle to ensure effective protection . 4. Grounding:

- Connect the SPD's earth terminal to the cabinet's equipotential bonding rail or PE conductor.
- For Type I SPDs, both earth terminals must be connected: one to the building's main equipotential bonding and the other to the PE conductor of the installation .
- Keep grounding wires as short as possible to reduce inductive voltage spikes . 5. Wiring Configuration:
 - You can use a V-connection or single branch wiring, connecting incoming and outgoing lines directly to the SPD terminals .
 - Ensure that the total length of SPD connections (L1 + L2 + L3) does not exceed 50 cm to maintain the voltage protection level . 6. Compliance and Safety:
 - Only qualified electricians should perform the installation, following national and international standards .
 - Verify that the SPD type (Type I, II, or III) matches the protection requirements of the cabinet and connected devices . By following these steps, the SPD will effectively protect the audio distribution cabinet from surges, minimizing the risk of equipment damage or fire. Proper placement, short connections, and secure grounding are critical for optimal performance .

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Installation information and requirements

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