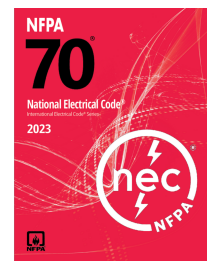




NEC 2023 Article 409 Industrial Control Panels

The latest release of NEC/NFPA 70 edition 2023 (NEC 2023) has placed a greater emphasis on increasing personnel safety by mandating the use of Surge Protective Devices (SPDs).

From 2014 to 2023, the number articles now requiring SPDs has increased significantly for applications ranging from Modular Data Centers, Fire Pumps, Elevators, Critical Power Systems, Dwellings (Dormitories, Homes, Hospitals, Hotels), etc. This article will focus on Industrial Control Panels and how they are defined by NFPA 70 Article 409.



Scope

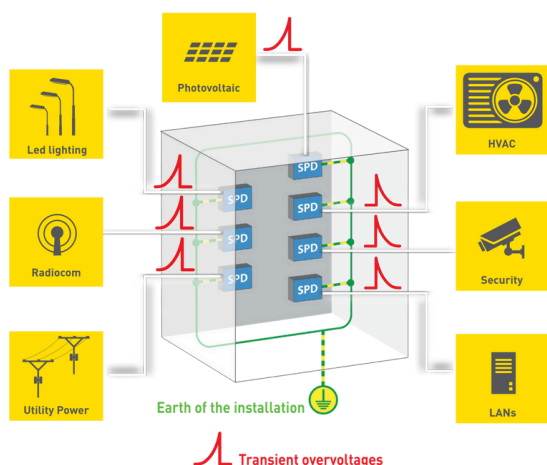
This article covers industrial control panels intended for general use and operating at 1000 volts or less.

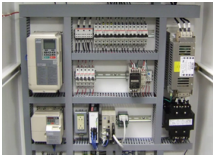





Informational Note: See ANSI/UL 508A, Standard for Industrial Control Panels, a safety standard for industrial control panels.

Article 409.70	Surge Protection
Requirement	<i>"Safety circuits for personnel protection that are subject to damage from surge events shall have surge protection installed within or immediately adjacent to the control panel."</i>

SOLUTION

The Box Concept



Location	Equipment	System	Citel Part Number	
	PLC Cabinet	120-240Vac Power Input	<u>DS72US-240T/NN</u>	
	Power Supply	24Vdc Power Output	<u>DS220S-24DC</u>	
	Analog Sensors	4-20mA	<u>DLAS-24D3</u>	
	Discrete I/O	RS-485	<u>DLAS-12D3</u>	
	Network Switch	Ethernet Cat 6A	<u>MJ8-C6A</u>	
	Radio Transmitter	SCADA Wireless	<u>P8AX09-6G-N/FF</u>	