



Stay Protected with PanelGuard™ Commercial and Industrial-Grade Surge Protection

In a safety emergency, every detail matters. Keep essential systems, including backup illumination, power ventilation, fire detection and communication systems, operating when it counts the most with a PanelGuard Surge Protective Device from Intermatic.

The NEC codes below highlight the critical areas in which an industrial-strength SPD is required to help mitigate disaster.

NEC Article 670.6

“Industrial machinery with safety interlock circuits shall have surge protection installed”

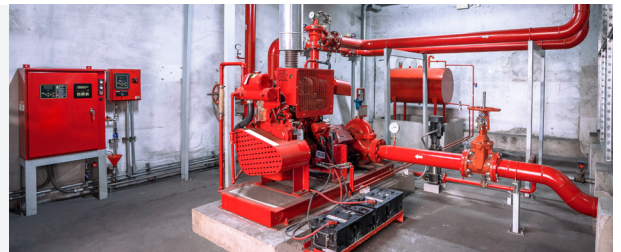
Failure of safety interlocks on industrial machinery can create a safety risk to operators who may not be aware that the safety mechanisms have failed.



NEC Article 695.15

“A listed surge protective device shall be installed in or on the fire pump controller.”

This NEC provision requires a SPD to be installed internally or externally on the fire pump controller. The SPD is essential to provide fire pump controller protection. A study “Data Assessment for Electrical Surge Protective Devices” commissioned by the Fire Protection Research Foundation showed that 12% of fire pumps had damage due to voltage surges.



NEC Article 620.51(E)

“Where any of the disconnecting means in 620.51 has been designated as supplying an emergency system load, surge protection shall be provided”.

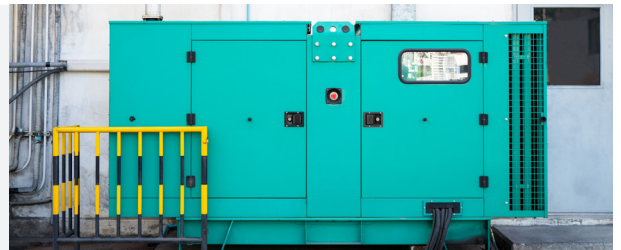
This requirement addresses emergency system loads such as escalators 620.51(C)(3), platform lifts and stairway chairlifts 620.51(C)(4), moving walkways 620.51(C)(3), elevators without generator field control 620.51(C)(1) and associated equipment.



NEC Article 700.8

“A listed SPD shall be installed in or on all emergency system switchboards and panelboards.”

Emergency power systems are defined by the NEC as systems legally required to automatically supply power to designated loads upon loss of normal power such as emergency lighting, exit signs, fire alarm systems or panels and automatic doors. This requirement ensures emergency electrical distribution systems continue to provide power to vital safety loads in the event of damaging surges.



NEC Article 708.20

“Surge protection devices shall be provided at all facility voltage distribution levels for Critical Operation Power Systems.”

These systems include power systems, HVAC systems, fire alarms, remote operated doors, smoke alarms and detectors security, communications for designated critical operations areas. SPD's ensure these systems will operate in an emergency type situation.



PanelGuard™ Product Selection Chart

Voltage Type: Split Phase - 120/240 V

Part Number	SPD Type	LED, Remote Contact & Audible Alarm	UL1283 Filtering	Max Surge Current Per Phase	Modes
L5F21S1DG1	2	No	EMI/RFI FILTER	50kA	4
L5F21S1DG2		Yes			
L10F11S1DG1	1	No	VRC (NO FILTER)	100kA	4
L10F11S1DG2		Yes			
H10S21S1DG1	2	No	EMI/RFI FILTER	100kA	7
H10S21S1DG2		Yes			
H20S21S1DG1	2	No	EMI/RFI FILTER	200kA	7
H20S21S1DG2		Yes			

Voltage Type: 3 Phase WYE 347/600 V

Part Number	SPD Type	LED, Remote Contact & Audible Alarm	UL1283 Filtering	Max Surge Current Per Phase	Modes
L5F13Y3DG1	1	No	VRC (NO FILTER)	50kA	4
L5F13Y3DG2		Yes			
L10F13Y3DG1	1	No	VRC (NO FILTER)	100kA	4
L10F13Y3DG2		Yes			
H10S13Y3DG1	1	No	VRC (NO FILTER)	100kA	7
H10S13Y3DG2		Yes			
H20S13Y3DG1	1	No	VRC (NO FILTER)	200kA	7
H20S13Y3DG2		Yes			

Voltage Type: 3 Phase WYE - 120/208 V

Part Number	SPD Type	LED, Remote Contact & Audible Alarm	UL1283 Filtering	Max Surge Current Per Phase	Modes
L5F13Y1DG1	1	No	VRC (NO FILTER)	50kA	4
L5F13Y1DG2		Yes			
L5F23Y1DG1	2	No	EMI/RFI FILTER	100kA	4
L5F23Y1DG2		Yes			
L10F13Y1DG1	1	No	VRC (NO FILTER)	100kA	4
L10F13Y1DG2		Yes			
L10F23Y1DG1	2	No	EMI/RFI FILTER	100kA	7
L10F23Y1DG2		Yes			
H10S13Y1DG1	1	No	VRC (NO FILTER)	100kA	7
H10S13Y1DG2		Yes			
H10S23Y1DG1	2	No	EMI/RFI FILTER	200kA	7
H10S23Y1DG2		Yes			
H20S13Y1DG1	1	No	VRC (NO FILTER)	200kA	7
H20S13Y1DG2		Yes			
H20S23Y1DG1	2	No	EMI/RFI FILTER	200kA	7
H20S23Y1DG2		Yes			

Voltage Type: 3 Phase High Leg Delta - 120/240 V

Part Number	SPD Type	LED, Remote Contact & Audible Alarm	UL1283 Filtering	Max Surge Current Per Phase	Modes
L5F13D1DG1	1	No	VRC (NO FILTER)	50kA	4
L5F13D1DG2		Yes			
L10F23D1DG1	2	No	EMI/RFI FILTER	100kA	4
L10F23D1DG2		Yes			
H10S13D1DG1	1	No	VRC (NO FILTER)	100kA	7
H10S13D1DG2		Yes			
H10S23D1DG1	2	No	EMI/RFI FILTER	200kA	7
H10S23D1DG2		Yes			
H20S13D1DG1	1	No	VRC (NO FILTER)	200kA	7
H20S13D1DG2		Yes			
H20S23D1DG1	2	No	EMI/RFI FILTER	200kA	7
H20S23D1DG2		Yes			

Voltage Type: 3 Phase Delta - 440/480 V

Part Number	SPD Type	LED, Remote Contact & Audible Alarm	UL1283 Filtering	Max Surge Current Per Phase	Modes
L10F13N4DG1	1	No	VRC (NO FILTER)	100kA	4
L10F13Y3DG2		Yes			
L10F23N4DG1	2	No	VRC (NO FILTER)	100kA	4
L10F23N4DG2		Yes			

Voltage Type: 3 Phase WYE - 277/480 V

Part Number	SPD Type	LED, Remote Contact & Audible Alarm	UL1283 Filtering	Max Surge Current Per Phase	Modes
L5F13Y2DG1	1	No	VRC (NO FILTER)	50kA	4
L5F13Y2DG2		Yes			
L5F23Y2DG1	2	No	EMI/RFI FILTER	100kA	4
L5F23Y2DG2		Yes			
L10F13Y2DG1	1	No	VRC (NO FILTER)	100kA	4
L10F13Y2DG2		Yes			
L10F23Y2DG1	2	No	EMI/RFI FILTER	100kA	7
L10F23Y2DG2		Yes			
H10S13Y2DG1	1	No	VRC (NO FILTER)	100kA	7
H10S13Y2DG2		Yes			
H10S23Y2DG1	2	No	EMI/RFI FILTER	200kA	7
H10S23Y2DG2		Yes			
H20S13Y2DG1	1	No	VRC (NO FILTER)	200kA	7
H20S13Y2DG2		Yes			
H20S23Y2DG1	2	No	EMI/RFI FILTER	200kA	7
H20S23Y2DG2		Yes			

Product Series Key



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