

New Product Announcement

U4 Surge Protective Devices

November 2024



Noark Electric NA announces the release of Type 4 Surge Protective devices (SPD) with modular plug-in design, nominal discharge current of 20kA and maximum continuous operating voltage from 170V to 660V. The U4 series SPD comes in variety of configurations including 1P, 1P+N, 2P, 2P+N, 3P, 3P+N to safely clamp and attenuate transient voltage surge in electrical systems.

The devices are UL1449 recognized components for installation on load side of service entry equipment in commercial and residential applications or OEM distribution equipment in industrial applications.

Features

- Type 4 SPD (component tested for Type 2 application)
- Modular plug-in design
- Nominal discharge current of 20kA with 8/20μs waveform
- Maximum continuous operating voltage, MCOV 175V ~ 660V
- Available in 1P, 1P+N, 2P, 2P+N, 3P, 3P+N & 4P configuration.
- Thermal protection feature
- Optional signal contact for remote indication



Standards

- UL 1449
- CSA C22.2 No. 269.5-17
- IEC/EN 61643-11
- GB/T18802.11

Certification

- UL 1449 Recognized component, File No. E537154
- CSA C22.2 No. 269.5-17 File no. E537154

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Electrical data

Product Model	U4
Standards	UL1449, CSA C22.2 No.269.5-17
Rated frequency	50/60Hz
Application type	4CA
Poles	1P / 1P+N / 2P / 2P+N / 3P / 3P+N / 4P
Voltage system	120/208V, 120/240V, 277/480V, 347/600V, 400/690V
Maximum continuous operating voltage, MCOV	L-N: 175 / 320 / 440 / 550 / 660V; N-PE: 255V
Nominal discharge current, In	L-N: 20kA (8/20us); N-PE: 20kA (8/20us)
Measured limiting voltage MLV	L-N: 1.02/1.54/1.97/2.36/2.49kV; N-PE:1.37kV
Protection mode	L-L / L-N / L-G / N-G

Mechanical data

Status indication	green = OK, red = Fault
Pluggable cartridges	Yes
Housing material	Thermoplastic UL94
Flame retardant rating	V0
Mounting method	DIN rail
Wire range	Solid wire: #10-4 AWG (2.5~25mm ²)
	Stranded wire: #14-8 AWG (2.5~16mm ²)
Wiring torque	1.8lb-in(2.0Nm)
Operating temperature	-40~+80°C

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No. of Poles	MCOV	With Signal Contact		Without Signal Contact	
		Catalog Number	Description	Catalog Number	Description
1P	175	U41P40175S	U4 SPD 1P 40kA 175V AC w/signal contact	U41P40175	U4 SPD 1P 40kA 175V AC UL
	320	U41P40320S	U4 SPD 1P 40kA 320V AC w/signal contact	U41P40320	U4 SPD 1P 40kA 320V AC UL
	440	U41P40440S	U4 SPD 1P 40kA 440V AC w/signal contact	U41P40440	U4 SPD 1P 40kA 440V AC UL
	550	U41P40550S	U4 SPD 1P 40kA 550V AC w/signal contactL	U41P40550	U4 SPD 1P 40kA 550V AC UL
	660	U41P40660S	U4 SPD 1P 40kA 660V AC w/signal contact	U41P40660	U4 SPD 1P 40kA 660V AC UL
1P+N	175	U41N40175S	U4 SPD 1P+N 40kA 175V AC w/signal contact	U41N40175	U4 SPD 1P+N 40kA 175V AC UL
	320	U41N40320S	U4 SPD 1P+N 40kA 320V AC w/signal contact	U41N40320	U4 SPD 1P+N 40kA 320V AC UL
	440	U41N40440S	U4 SPD 1P+N 40kA 440V AC w/signal contact	U41N40440	U4 SPD 1P+N 40kA 440V AC UL
	550	U41N40550S	U4 SPD 1P+N 40kA 550V AC w/signal contact	U41N40550	U4 SPD 1P+N 40kA 550V AC UL
	660	U41N40660S	U4 SPD 1P+N 40kA 660V AC w/signal contact	U41N40660	U4 SPD 1P+N 40kA 660V AC UL
2P	175	U42P40175S	U4 SPD 2P 40kA 175V AC w/signal contact	U42P40175	U4 SPD 2P 40kA 175V AC UL
	320	U42P40320S	U4 SPD 2P 40kA 320V AC w/signal contact	U42P40320	U4 SPD 2P 40kA 320V AC UL
	440	U42P40440S	U4 SPD 2P 40kA 440V AC w/signal contactL	U42P40440	U4 SPD 2P 40kA 440V AC UL
	550	U42P40550S	U4 SPD 2P 40kA 550V AC w/signal contact	U42P40550	U4 SPD 2P 40kA 550V AC UL
	660	U42P40660S	U4 SPD 2P 40kA 660V AC w/signal contact	U42P40660	U4 SPD 2P 40kA 660V AC UL
2P+N	175	U42N40175S	U4 SPD 2N40kA 175V AC w/signal contact	U42N40175	U4 SPD 2N40kA 175V AC UL
	320	U42N40320S	U4 SPD 2N40kA 320V AC w/signal contact	U42N40320	U4 SPD 2N40kA 320V AC UL
	440	U42N40440S	U4 SPD 2N40kA 440V AC w/signal contact	U42N40440	U4 SPD 2N40kA 440V AC UL
	550	U42N40550S	U4 SPD 2N40kA 550V AC w/signal contact	U42N40550	U4 SPD 2N40kA 550V AC UL
	660	U42N40660S	U4 SPD 2N40kA 660V AC w/signal contact	U42N40660	U4 SPD 2N40kA 660V AC UL

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		Catalog Number	Description	Catalog Number	Description
3P	175	U43P40175S	U4 SPD 3P 40kA 175V AC w/signal contact	U43P40175	U4 SPD 3P 40kA 175V AC UL
	320	U43P40320S	U4 SPD 3P 40kA 320V AC w/signal contact	U43P40320	U4 SPD 3P 40kA 320V AC UL
	440	U43P40440S	U4 SPD 3P 40kA 440V AC w/signal contact	U43P40440	U4 SPD 3P 40kA 440V AC UL
	550	U43P40550S	U4 SPD 3P 40kA 550V AC w/signal contact	U43P40550	U4 SPD 3P 40kA 550V AC UL
	660	U43P40660S	U4 SPD 3P 40kA 660V AC w/signal contact	U43P40660	U4 SPD 3P 40kA 660V AC UL
3P+N	175	U43N40175S	U4 SPD 3P+N 40kA 175V AC w/signal contact	U43N40175	U4 SPD 3P+N 40kA 175V AC UL
	320	U43N40320S	U4 SPD 3P+N 40kA 320V AC w/signal contact	U43N40320	U4 SPD 3P+N 40kA 320V AC UL
	440	U43N40440S	U4 SPD 3P+N 40kA 440V AC w/signal contact	U43N40440	U4 SPD 3P+N 40kA 440V AC UL
	550	U43N40550S	U4 SPD 3P+N 40kA 550V AC w/signal contact	U43N40550	U4 SPD 3P+N 40kA 550V AC UL
	660	U43N40660S	U4 SPD 3P+N 40kA 660V AC w/signal contact	U43N40660	U4 SPD 3P+N 40kA 660V AC UL
4P	175	U44P40175S	U4 SPD 4P 40kA 175V AC w/signal contact	U44P40175	U4 SPD 4P 40kA 175V AC UL
	320	U44P40320S	U4 SPD 4P 40kA 320V AC w/signal contact	U44P40320	U4 SPD 4P 40kA 320V AC UL
	440	U44P40440S	U4 SPD 4P 40kA 440V AC w/signal contact	U44P40440	U4 SPD 4P 40kA 440V AC UL
	550	U44P40550S	U4 SPD 4P 40kA 550V AC w/signal contact	U44P40550	U4 SPD 4P 40kA 550V AC UL
	660	U44P40660S	U4 SPD 4P 40kA 660V AC w/signal contact	U44P40660	U4 SPD 4P 40kA 660V AC UL

No. of Poles	MCOV	Modules	
		Catalog Number	Description
1P	175	U41P40175M	U4 SPD 1P 40kA 175V AC Module UL
	320	U41P40320M	U4 SPD 1P 40kA 320V AC Module UL
	440	U41P40440M	U4 SPD 1P 40kA 440V AC Module UL
	550	U41P40550M	U4 SPD 1P 40kA 550V AC Module UL
	660	U41P40660M	U4 SPD 1P 40kA 660V AC Module UL