

NOARK®

Catalog U4 Surge Protective Devices



Company Overview

About us

NOARK Electric is a global manufacturer of low-voltage electrical components for industrial applications. We specialize in motor controls and circuit protection for original equipment manufacturers. Our mission is to provide customers with the highest quality products at an exceptional value and back them with world-class service and support. Every NOARK product is tested and certified to the highest industry standards and covered by our exclusive five-year limited warranty.

Research and Development

The entire portfolio of high-quality NOARK products is designed for manufacturing and assembly (DFMA). Each component is developed in-house by our engineering team to meet the strictest standards and performance requirements. This dedication to excellence has led to the development of patented technology found in many of our products.

World-class Manufacturing

After being thoroughly tested, approved and certified – each NOARK product is sent into production at our state-of-the-art manufacturing facilities. This allows us to maintain strict quality control standards throughout the manufacturing process. In addition, NOARK Electric adheres to a policy of environmental protection and sustainability.

North American Distribution

NOARK's primary distribution center is located in Pomona, CA, with the aim of ensuring prompt and reliable deliveries of the entire product range to our customers all over North America. Our supply chain team works closely with our factories and logistics partners to ensure the availability of our products on the North American market and provide logistics services on the level which our customers expect.

NOARK Electric is a wholly subsidiary of the largest electrical manufacturing group in Asia with over 30 thousand employees and sales revenue of \$10 billion USD. We have corporate facilities in Los Angeles, Shanghai and Prague to service the requirements of individual markets and countries.

140+ Countries
300+ Overseas Distributors
20 Overseas Subsidiaries
22 Logistics Centers
3 R & D Centers
10,000,000+ Sq.Ft. Manufacturing Space
30,000+ Employees Worldwide



U4 Surge protective devices

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U4 Surge protective devices

Product Overview/Selection and Ordering Guide

Description

U4 surge protective devices are suitable for AC 50/60Hz, rated voltage is not more than 600V low-voltage power supply system, used to suppress the transient overvoltage is lower than the equipment impulse overvoltage, discharge the surge energy, so as to protect the system circuit and equipment.

Features

- Indication window of fault status, makes the product more safer to use;
- Pluggable module installation, makes maintenance and replacement more convenient;
- Signal contact is optional, makes remote indication more flexible.

Standard

- UL1449、CSA C22.2 NO.269.5–17;
- IEC/EN 61643-11、GB/T18802.11

Certificate

- UL、CSA、CE、CQC、ROHS

Product Selection Guide

U	4	1P	40	320	S
Product	Application type	Pole	Maximum discharge current	Maximum continuous operating voltage	Function
U: SPD	4: Type 4CA	1P: 1P 1N: 1P+N 2P: 2P 2N: 2P+N 3P: 3P 3N: 3P+N 4P: 4P	40: 40kA 70: 70kA	175: 175V 255: 255V (only N-pole module) 320: 320V 385: 385V (IEC standard only) 440: 440V 550: 550V 660: 660V	Default: None S: Signal contact M: Module

U4 Surge protective devices

Technical Parameters

UL electrical parameters	
Product Model	U4
Standards	UL1449、CSA C22.2 NO.269.5-17
Rated operating frequency	50/60Hz
Application type	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
Thermal protection	Yes

IEC electrical parameters	
Product Model	U4
Standards	IEC/EN 61643-11, GB/T 18802.11
Rated operating frequency	50/60Hz
Application type	T2
Poles	1P/1P+N/2P/2P+N/3P/3P+N/4P
Voltage system	120/208V, 120/240V, 230/400V, 277/480V, 347/600V, 400/690V
Maximum continuous operating voltage Uc	L-N: 175/320/385/440/550/660V; N-PE: 255V
Nominal discharge current In	L-N: 20kA(8/20us); N-PE: 40kA(8/20us)
Maximum discharge current I _{max}	L-N: 40kA; N-PE: 70kA
Voltage protection level Up	L-N: 1.2/1.6/1.8/2.0/2.5/2.9kV; N-PE: 1.5kV
Protection mode	L-L/L-N/L-G/N-G
Thermal protection	Yes

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Technical Parameters

Mechanical characteristics	
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)
Signal contact	Optional accessory for telecontacts
Operating temperature	-40~+80°C
Protection class	IP20

Signal contact	
Contact type	Dry contact
Operating voltage/current	250V/1.5A; 125V/3A
Terminal torque	28-16AWG (0.5~1.5mm ²)

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Ordering Code and Description

Ordering code	SKU	Description	Net weight of product kg/pc	Boxes/ Qty	Cartons/ Qty	Outer box size mm	Gross weight kg/ctn	Net weight kg/ctn
1002726	U41P40175	U4 SPD 1P 40kA 175V AC UL	0.10	1.00	96.00	415*240*285	11.90	9.36
1002727	U41P40320	U4 SPD 1P 40kA 320V AC UL	0.10	1.00	96.00	415*240*285	12.20	9.66
1002728	U41P40440	U4 SPD 1P 40kA 440V AC UL	0.11	1.00	96.00	415*240*285	13.00	10.46
1002729	U41P40550	U4 SPD 1P 40kA 550V AC UL	0.12	1.00	96.00	415*240*285	13.80	11.26
1002730	U41P40660	U4 SPD 1P 40kA 660V AC UL	0.11	1.00	96.00	415*240*285	13.58	11.04
1002731	U41N40175	U4 SPD 1P+N 40kA 175V AC UL	0.17	1.00	81.00	415*240*285	16.04	13.45
1002732	U41N40320	U4 SPD 1P+N 40kA 320V AC UL	0.18	1.00	81.00	415*240*285	16.78	14.19
1002733	U41N40440	U4 SPD 1P+N 40kA 440V AC UL	0.18	1.00	81.00	415*240*285	17.46	14.86
1002734	U41N40550	U4 SPD 1P+N 40kA 550V AC UL	0.19	1.00	81.00	415*240*285	18.13	15.54
1002735	U41N40660	U4 SPD 1P+N 40kA 660V AC UL	0.19	1.00	81.00	415*240*285	17.95	15.36
1002736	U42P40175	U4 SPD 2P 40kA 175V AC UL	0.17	1.00	81.00	415*240*285	16.42	13.83
1002737	U42P40320	U4 SPD 2P 40kA 320V AC UL	0.19	1.00	81.00	415*240*285	17.90	15.30
1002738	U42P40440	U4 SPD 2P 40kA 440V AC UL	0.21	1.00	81.00	415*240*285	19.24	16.65
1002739	U42P40550	U4 SPD 2P 40kA 550V AC UL	0.22	1.00	81.00	415*240*285	20.59	18.00
1002740	U42P40660	U4 SPD 2P 40kA 660V AC UL	0.22	1.00	81.00	415*240*285	20.23	17.63
1002741	U42N40175	U4 SPD 2P+N 40kA 175V AC UL	0.25	1.00	54.00	380*300*285	15.49	13.23
1002742	U42N40320	U4 SPD 2P+N 40kA 320V AC UL	0.26	1.00	54.00	380*300*285	16.48	14.22
1002743	U42N40440	U4 SPD 2P+N 40kA 440V AC UL	0.28	1.00	54.00	380*300*285	17.38	15.12

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Ordering Code and Description

Ordering code	SKU	Description	Net weight of product kg/pc	Boxes/Qty	Cartons/Qty	Outer box size mm	Gross weight kg/ctn	Net weight kg/ctn
1002744	U42N40550	U4 SPD 2P+N 40kA 550V AC UL	0.30	1.00	54.00	380*300*285	18.28	16.01
1002745	U42N40660	U4 SPD 2P+N 40kA 660V AC UL	0.29	1.00	54.00	380*300*285	18.03	15.77
1002746	U43P40175	U4 SPD 3P 40kA 175V AC UL	0.25	1.00	54.00	380*300*285	15.74	13.48
1002747	U43P40320	U4 SPD 3P 40kA 320V AC UL	0.28	1.00	54.00	380*300*285	17.22	14.96
1002748	U43P40440	U4 SPD 3P 40kA 440V AC UL	0.30	1.00	54.00	380*300*285	18.57	16.31
1002749	U43P40550	U4 SPD 3P 40kA 550V AC UL	0.33	1.00	54.00	380*300*285	19.91	17.65
1002750	U43P40660	U4 SPD 3P 40kA 660V AC UL	0.32	1.00	54.00	380*300*285	19.55	17.28
1002751	U43N40175	U4 SPD 3P+N 40kA 175V AC UL	0.32	1.00	45.00	405*300*285	17.84	14.57
1002752	U43N40320	U4 SPD 3P+N 40kA 320V AC UL	0.35	1.00	45.00	405*300*285	19.15	15.81
1002753	U43N40440	U4 SPD 3P+N 40kA 440V AC UL	0.38	1.00	45.00	405*300*285	20.35	16.93
1002754	U43N40550	U4 SPD 3P+N 40kA 550V AC UL	0.40	1.00	45.00	405*300*285	21.55	18.05
1002755	U43N40660	U4 SPD 3P+N 40kA 660V AC UL	0.39	1.00	45.00	405*300*285	21.22	17.75
1002756	U44P40175	U4 SPD 4P 40kA 175V AC UL	0.33	1.00	45.00	405*300*285	18.06	14.78
1002757	U44P40320	U4 SPD 4P 40kA 320V AC UL	0.36	1.00	45.00	405*300*285	19.81	16.42
1002758	U44P40440	U4 SPD 4P 40kA 440V AC UL	0.40	1.00	45.00	405*300*285	21.41	17.92
1002759	U44P40550	U4 SPD 4P 40kA 550V AC UL	0.43	1.00	45.00	405*300*285	23.00	19.42
1002760	U44P40660	U4 SPD 4P 40kA 660V AC UL	0.42	1.00	45.00	405*300*285	22.57	19.01
1002761	U41P40175S	U4 SPD 1P 40kA 175V AC with signal contact UL	0.10	1.00	96.00	415*240*285	12.30	9.76

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Ordering Code and Description

Ordering code	SKU	Description	Net weight of product kg/pc	Boxes/ Qty	Cartons/ Qty	Outer box size mm	Gross weight kg/ctn	Net weight kg/ctn
1002762	U41P40320S	U4 SPD 1P 40kA 320V AC with signal contact UL	0.10	1.00	96.00	415*240*285	12.60	10.06
1002763	U41P40440S	U4 SPD 1P 40kA 440V AC with signal contact UL	0.11	1.00	96.00	415*240*285	13.40	10.86
1002764	U41P40550S	U4 SPD 1P 40kA 550V AC with signal contact UL	0.12	1.00	96.00	415*240*285	14.20	11.66
1002765	U41P40660S	U4 SPD 1P 40kA 660V AC with signal contact UL	0.12	1.00	96.00	415*240*285	13.98	11.44
1002766	U41N40175S	U4 SPD 1P+N 40kA 175V AC with signal contact UL	0.17	1.00	81.00	415*240*285	16.49	13.90
1002767	U41N40320S	U4 SPD 1P+N 40kA 320V AC with signal contact UL	0.18	1.00	81.00	415*240*285	17.23	14.64
1002768	U41N40440S	U4 SPD 1P+N 40kA 440V AC with signal contact UL	0.19	1.00	81.00	415*240*285	17.90	15.31
1002769	U41N40550S	U4 SPD 1P+N 40kA 550V AC with signal contact UL	0.20	1.00	81.00	415*240*285	18.58	15.99
1002770	U41N40660S	U4 SPD 1P+N 40kA 660V AC with signal contact UL	0.20	1.00	81.00	415*240*285	18.40	15.80
1002771	U42P40175S	U4 SPD 2P 40kA 175V AC with signal contact UL	0.18	1.00	81.00	415*240*285	16.87	14.27
1002772	U42P40320S	U4 SPD 2P 40kA 320V AC with signal contact UL	0.19	1.00	81.00	415*240*285	18.34	15.75
1002773	U42P40440S	U4 SPD 2P 40kA 440V AC with signal contact UL	0.21	1.00	81.00	415*240*285	19.69	17.10
1002774	U42P40550S	U4 SPD 2P 40kA 550V AC with signal contact UL	0.23	1.00	81.00	415*240*285	21.04	18.44
1002775	U42P40660S	U4 SPD 2P 40kA 660V AC with signal contact UL	0.22	1.00	81.00	415*240*285	20.67	18.08
1002776	U42N40175S	U4 SPD 2P+N 40kA 175V AC with signal contact UL	0.25	1.00	54.00	380*300*285	15.85	13.59
1002777	U42N40320S	U4 SPD 2P+N 40kA 320V AC with signal contact UL	0.27	1.00	54.00	380*300*285	16.84	14.58
1002778	U42N40440S	U4 SPD 2P+N 40kA 440V AC with signal contact UL	0.29	1.00	54.00	380*300*285	17.74	15.47
1002779	U42N40550S	U4 SPD 2P+N 40kA 550V AC with signal contact UL	0.30	1.00	54.00	380*300*285	18.63	16.37

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Ordering Code and Description

Ordering code	SKU	Description	Net weight of product kg/pc	Boxes/ Qty	Cartons/ Qty	Outer box size mm	Gross weight kg/ctn	Net weight kg/ctn
1002780	U42N40660S	U4 SPD 2P+N 40kA 660V AC with signal contact UL	0.30	1.00	54.00	380*300*285	18.39	16.13
1002781	U43P40175S	U4 SPD 3P 40kA 175V AC with signal contact UL	0.26	1.00	54.00	380*300*285	16.10	13.84
1002782	U43P40320S	U4 SPD 3P 40kA 320V AC with signal contact UL	0.28	1.00	54.00	380*300*285	17.58	15.31
1002783	U43P40440S	U4 SPD 3P 40kA 440V AC with signal contact UL	0.31	1.00	54.00	380*300*285	18.93	16.66
1002784	U43P40550S	U4 SPD 3P 40kA 550V AC with signal contact UL	0.33	1.00	54.00	380*300*285	20.27	18.01
1002785	U43P40660S	U4 SPD 3P 40kA 660V AC with signal contact UL	0.33	1.00	54.00	380*300*285	19.91	17.64
1002786	U43N40175S	U4 SPD 3P+N 40kA 175V AC with signal contact UL	0.33	1.00	45.00	405*300*285	18.21	14.92
1002787	U43N40320S	U4 SPD 3P+N 40kA 320V AC with signal contact UL	0.36	1.00	45.00	405*300*285	19.52	16.15
1002788	U43N40440S	U4 SPD 3P+N 40kA 440V AC with signal contact UL	0.38	1.00	45.00	405*300*285	20.72	17.28
1002789	U43N40550S	U4 SPD 3P+N 40kA 550V AC with signal contact UL	0.41	1.00	45.00	405*300*285	21.92	18.40
1002790	U43N40660S	U4 SPD 3P+N 40kA 660V AC with signal contact UL	0.40	1.00	45.00	405*300*285	21.59	18.09
1002791	U44P40175S	U4 SPD 4P 40kA 175V AC with signal contact UL	0.34	1.00	45.00	405*300*285	18.43	15.13
1002792	U44P40320S	U4 SPD 4P 40kA 320V AC with signal contact UL	0.37	1.00	45.00	405*300*285	20.18	16.77
1002793	U44P40440S	U4 SPD 4P 40kA 440V AC with signal contact UL	0.41	1.00	45.00	405*300*285	21.78	18.27
1002794	U44P40550S	U4 SPD 4P 40kA 550V AC with signal contact UL	0.44	1.00	45.00	405*300*285	23.37	19.77
1002795	U44P40660S	U4 SPD 4P 40kA 660V AC with signal contact UL	0.43	1.00	45.00	405*300*285	22.94	19.36
1002796	U41P40385	U4 SPD 1P 40kA 385V AC IEC	0.11	1.00	96.00	415*240*285	12.70	10.16
1002797	U41N40385	U4 SPD 1P+N 40kA 385V AC IEC	0.18	1.00	81.00	415*240*285	17.20	14.61

U4 Surge protective devices

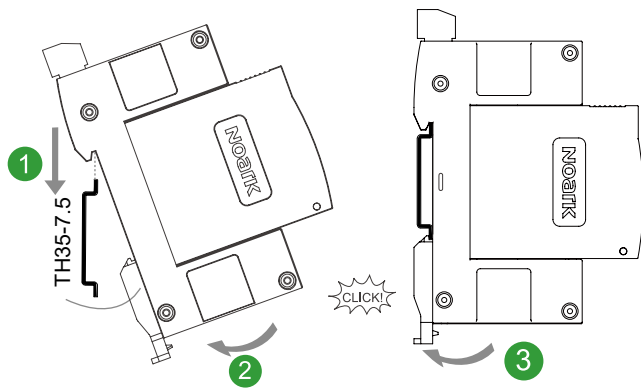
Ordering Code and Description

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1002798	U42P40385	U4 SPD 2P 40kA 385V AC IEC	0.20	1.00	81.00	415*240*285	18.74	16.15
1002799	U42N40385	U4 SPD 2N40kA 385V AC IEC	0.27	1.00	54.00	415*240*285	17.04	14.78
1002800	U43P40385	U4 SPD 3P 40kA 385V AC IEC	0.29	1.00	54.00	415*240*285	18.07	15.80
1002801	U43N40385	U4 SPD 3P+N 40kA 385V AC IEC	0.37	1.00	45.00	405*300*285	19.90	16.51
1002802	U44P40385	U4 SPD 4P 40kA 385V AC IEC	0.39	1.00	45.00	405*300*285	20.81	17.36
1002803	U41P40385S	U4 SPD 1P 40kA 385V AC with signal contact IEC	0.11	1.00	96.00	415*240*285	13.10	10.56
1002804	U41N40385S	U4 SPD 1P+N 40kA 385V AC with signal contact IEC	0.19	1.00	81.00	415*240*285	17.65	15.06
1002805	U42P40385S	U4 SPD 2P 40kA 385V AC with signal contact IEC	0.20	1.00	81.00	415*240*285	19.18	16.59
1002806	U42N40385S	U4 SPD 2N40kA 385V AC with signal contact IEC	0.28	1.00	54.00	415*240*285	17.40	15.14
1002807	U43P40385S	U4 SPD 3P 40kA 385V AC with signal contact IEC	0.30	1.00	54.00	415*240*285	18.42	16.16
1002808	U43N40385S	U4 SPD 3P+N 40kA 385V AC with remote signaling Accessories IEC	0.37	1.00	45.00	405*300*285	20.27	16.85
1002809	U44P40385S	U4 SPD 4P 40kA 385V AC with signal contact IEC	0.39	1.00	45.00	405*300*285	21.18	17.71
1002810	U41P40175M	U4 SPD 1P 40kA 175V AC module UL	0.04	1.00	96.00	415*240*285	6.38	3.84
1002811	U41P40320M	U4 SPD 1P 40kA 320V AC module UL	0.05	1.00	96.00	415*240*285	7.26	4.72
1002812	U41P40440M	U4 SPD 1P 40kA 440V AC module UL	0.06	1.00	96.00	415*240*285	8.06	5.52
1002813	U41P40550M	U4 SPD 1P 40kA 550V AC module UL	0.07	1.00	96.00	415*240*285	8.85	6.31
1002814	U41P40660M	U4 SPD 1P 40kA 660V AC module UL	0.06	1.00	96.00	415*240*285	8.64	6.10
1002815	U41P40385M	U4 SPD 1P 40kA 385V AC module IEC	0.05	1.00	96.00	415*240*285	7.76	5.22
1002816	U41P70255M	U4 SPD 1P 70kA 255V AC module UL	0.04	1.00	96.00	415*240*285	5.94	3.40

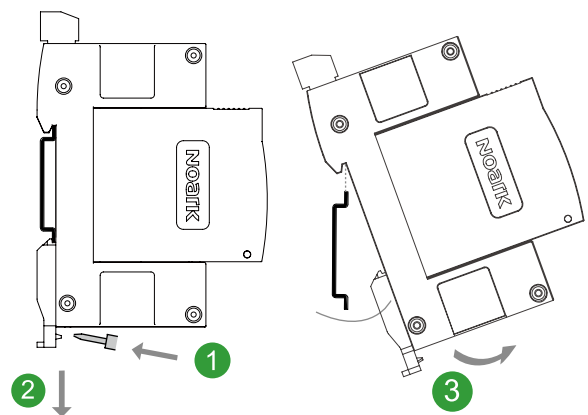
U4 Surge protective devices

Installations

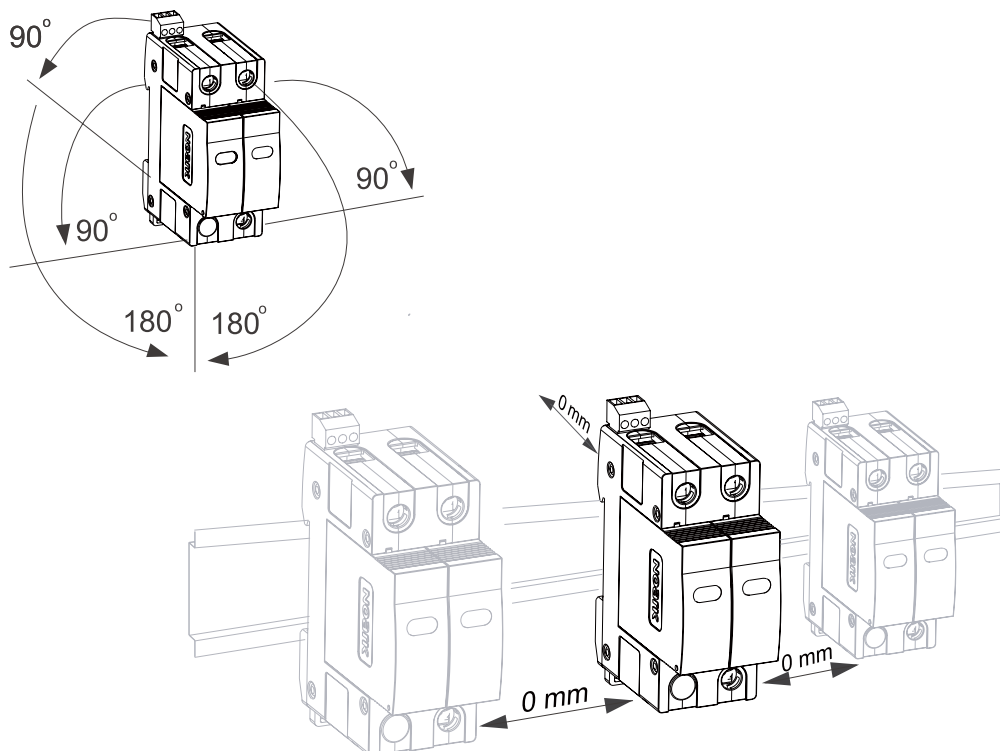
Installation:



Disassembly:



Can be mounted horizontally or vertically:

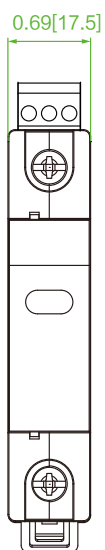


U4 Surge protective devices

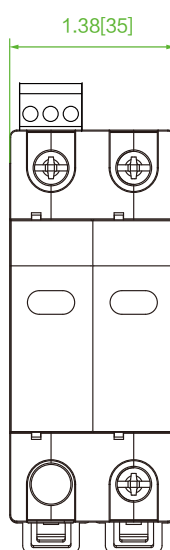
Dimensions

Unit : in [mm]

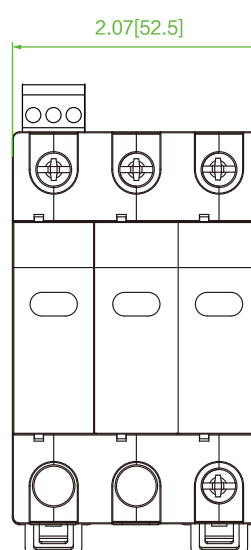
1P:



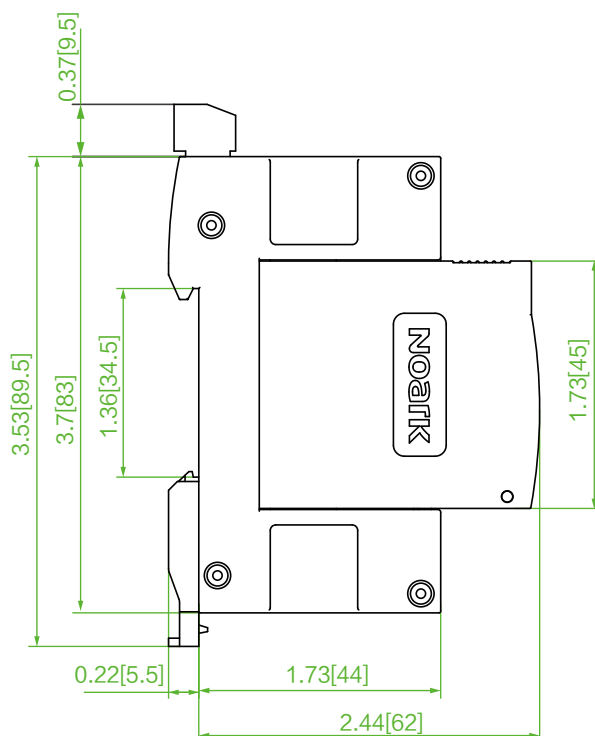
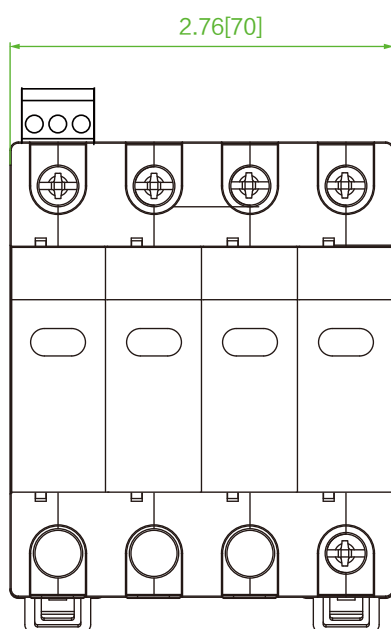
1P+N&2P:



2P+N&3P:

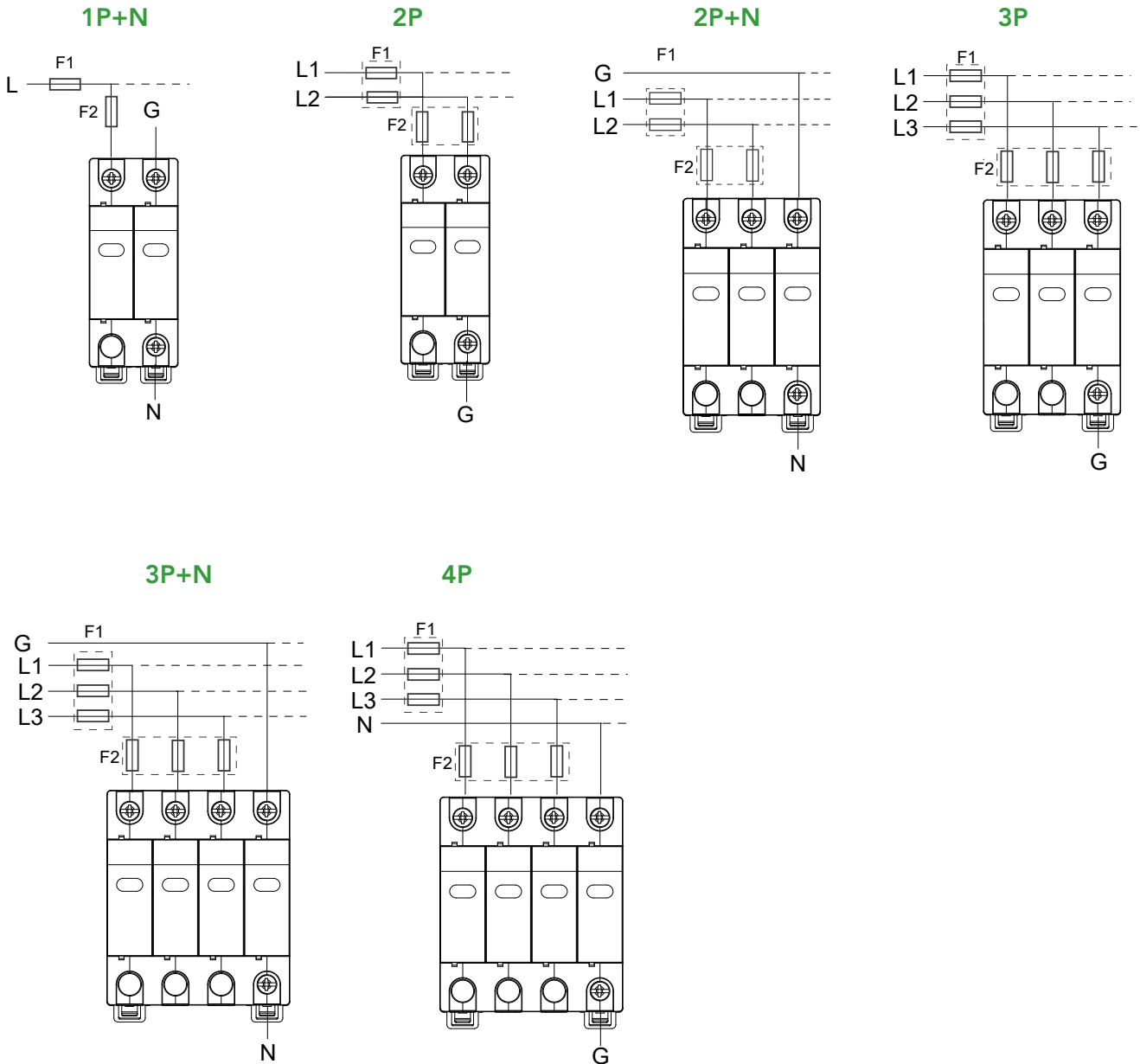


3P+N&4P:



U4 Surge protective devices

Electrical wiring



Note:

F1: Priority to protection

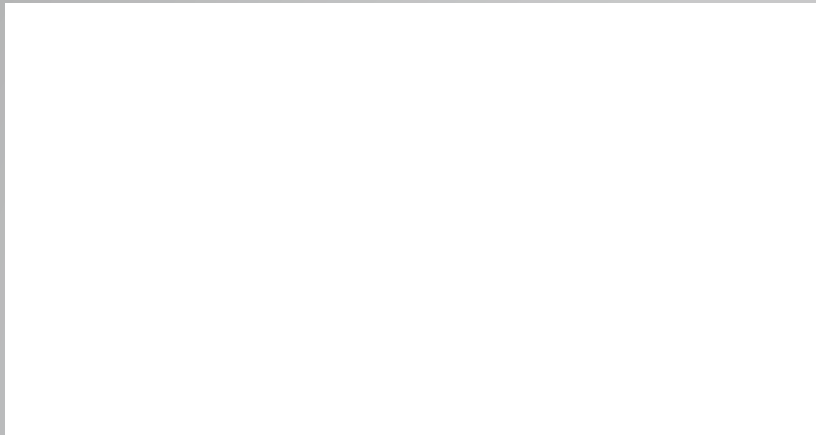
F2: Priority to service

If $F1 < 125A$ Class J : F2 is optional; If $F1 \geq 125A$ Class J : F2 is mandatory

NOARK®

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