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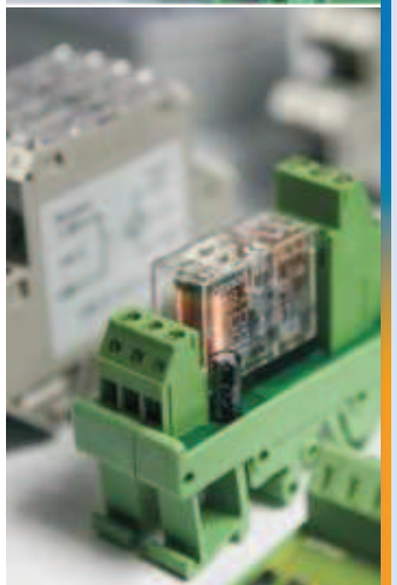


Isolator

Relay module and optocoupler

Switching power supply

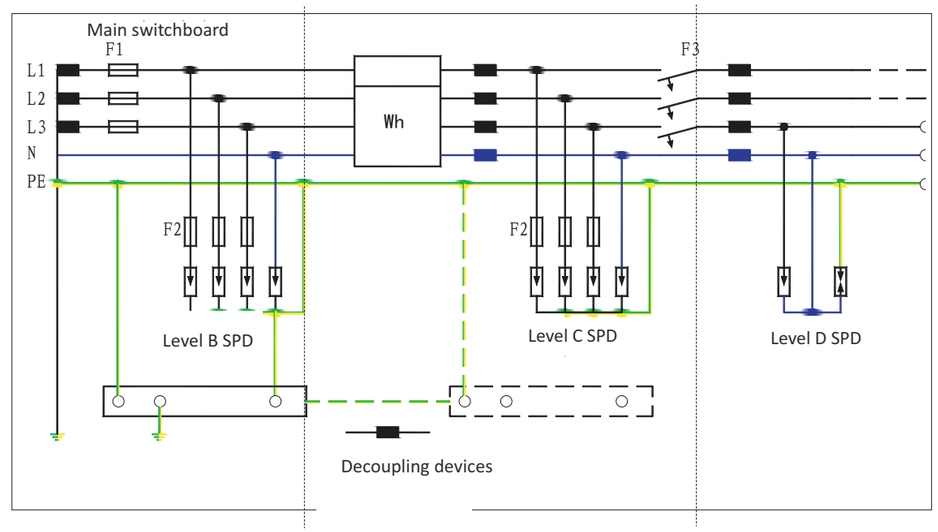
Surge protective device

Type

U	B0	1	- B	/ 4	-385	- 60
Company code	SPD	Design no.	Lighting protection grade B C D	1P 2P 3P 4P 1+1P 2+1P 3+1P	Max. continuous operating voltage 275V 320V 385V 420V	Imax 60KA 40KA 25KA 10KA

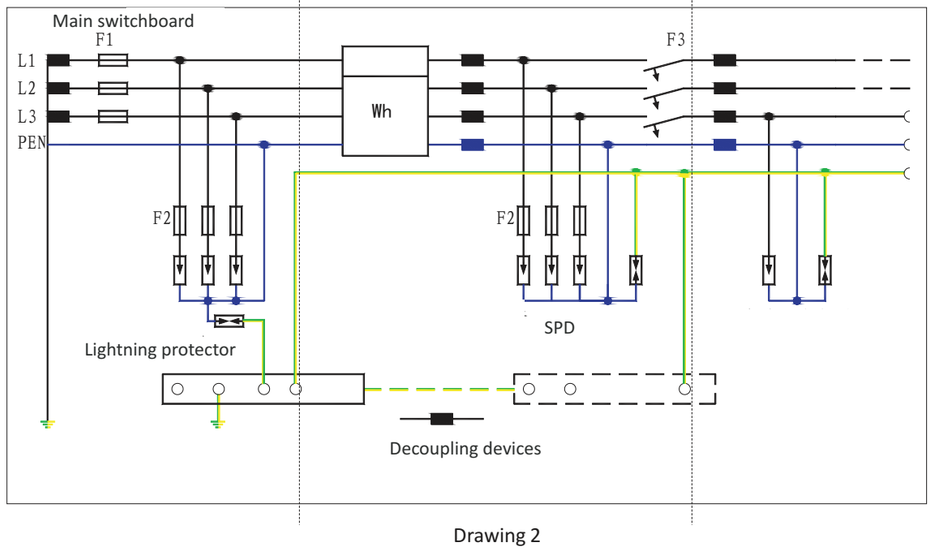
U	B0	4	-150	/ 4	-385
Company code	SPD	Design no. 2.Gas-filled surge arrester 4.Varistor	Imax 150KA 100KA 80KA 60KA	1P 2P 3P 4P 1+1P 2+1P 3+1P	Max. continuous operating voltage 275V 320V 385V 420V

TN-S



Drawing 1

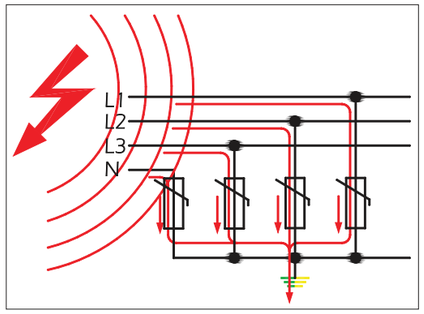
TT



Drawing 2

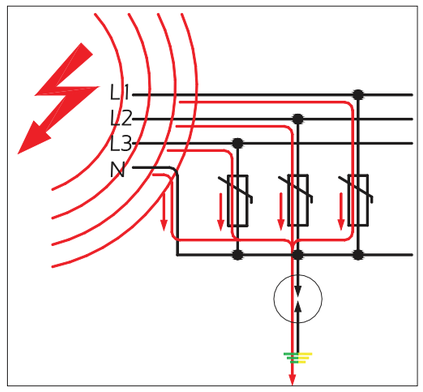
UB01-D series SPD (for 220/380 VAC, 50/60Hz) can be used to provide a lightning or overvoltage protection to electronic devices in the end of power supply system, such as information networks, intelligent devices and civil buildings.

Features:
1. Low residual voltage and leakage current;
2. Response time⩽25nS;
3. Thermal disconnect and fuse devices;
4. Mechanical status indication: green(OK), red(Overloaded);
5. With or without floating remote indication contacts;
6. Can be mounted on TH 35 rails;
7. Plug-in.



Drawing 1

4P electrical schematic



Drawing 2

3+1P electrical schematic

SPD for power supply system
UB01-D/□-275-10

Ordering data	Type	Order no.
□ SPD combinations: 1, 2, 3, 4, 1+1, 3+1 see drawing 1 under 4P drawing 2 for 3+1P	UB01-D/1-275-10X	380420
	UB01-D/1-275-10	380421
	UB01-D/1+1-275-10X	380422
	UB01-D/1+1-275-10	380423
	UB01-D/2-275-10X	380424
	UB01-D/2-275-10	380425
	UB01-D/2+1-275-10X	380426
X :With remote indication contact	UB01-D/2+1-275-10	380427
	UB01-D/3-275-10X	380428
	UB01-D/3-275-10	380429
	UB01-D/4-275-10X	380430
	UB01-D/4-275-10	380431
	UB01-D/3+1-275-10X	380432
	UB01-D/3+1-275-10	380433

Dimension	
Width/Thickness(per piece)/Height	90/18/66mm

Technical data		
Max. continuos operating voltage Uc AC/DC		275V/350V
Breakdown voltage U1mA		430V
Nominal discharge current In 8/20μS		5KA
Max discharge current Imax 8/20μS		10KA
Voltage protection level Up		1.0KV
Pre-installed circuit breaker		16A
Pre-installed fuse		16A
Response time		⩽25ns
Leakage current		⩽0.3mA
Temperature range	℃	-40～+85

Remote indication contact			
Max. operating voltage Umax	AC/DC		250V/125V
Max. operating current Imax	AC		1A
Max. operating current Imax	DC		0.2A

Connection data	
Phase	6mm²
Ground	10mm²
Remote indication contact	0.5-1.5mm²

Mounting		
TH35 rails	TH35-7.5	102001
	TH35-15	102005

General data	
Housing material	PA
Protection degree	IP20
Test standards	GB/T18802.1-2011 IEC 61643-1:1998

Wiring diagram	
4P wiring diagram	Drawing 3
3+1P wiring diagram	Drawing 4
Application	See drawing 1/2 on page B6

SPD for power supply system
UB01-D/□-320-10

Type	Order no.
UB01-D/1-320-10X	380434
UB01-D/1-320-10	380435
UB01-D/1+1-320-10X	380436
UB01-D/1+1-320-10	380437
UB01-D/2-320-10X	380438
UB01-D/2-320-10	380439
UB01-D/2+1-320-10X	380440
UB01-D/2+1-320-10	380441
UB01-D/3-320-10X	380442
UB01-D/3-320-10	380443
UB01-D/4-320-10X	380444
UB01-D/4-320-10	380445
UB01-D/3+1-320-10X	380446
UB01-D/3+1-320-10	380447

90/18/66mm

320V/415V	
510V	
5KA	
10KA	
1.2KV	
16A	
16A	
⩽25ns	
⩽0.3mA	
-40～+85	

250V/125V	
1A	
0.2A	

6mm²	
10mm²	
0.5-1.5mm²	

TH35-7.5		102001
TH35-15		102005

PA	
IP20	
GB/T18802.1-2011 IEC 61643-1:1998	

Drawing 3	
Drawing 4	
See drawing 1/2 on page B6	

SPD for power supply system
UB01-D/□-385-10

Type	Order no.
UB01-D/1-385-10X	380448
UB01-D/1-385-10	380449
UB01-D/1+1-385-10X	380450
UB01-D/1+1-385-10	380451
UB01-D/2-385-10X	380452
UB01-D/2-385-10	380453
UB01-D/2+1-385-10X	380454
UB01-D/2+1-385-10	380455
UB01-D/3-385-10X	380456
UB01-D/3-385-10	380457
UB01-D/4-385-10X	380458
UB01-D/4-385-10	380459
UB01-D/3+1-385-10X	380460
UB01-D/3+1-385-10	380461

90/18/66mm

385V/505V	
620V	
5KA	
10KA	
1.35KV	
16A	
16A	
⩽25ns	
⩽0.3mA	
-40～+85	

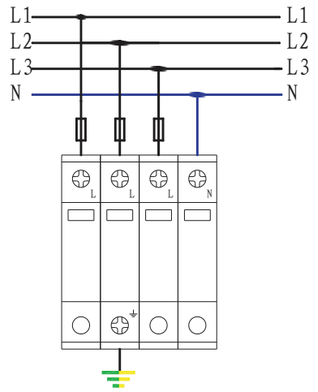
250V/125V	
1A	
0.2A	

6mm²	
10mm²	
0.5-1.5mm²	

TH35-7.5		102001
TH35-15		102005

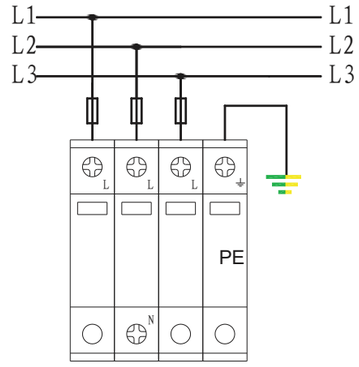
PA	
IP20	
GB/T18802.1-2011 IEC 61643-1:1998	

Drawing 3	
Drawing 4	
See drawing 1/2 on page B6	



Drawing 3

4P wiring diagram

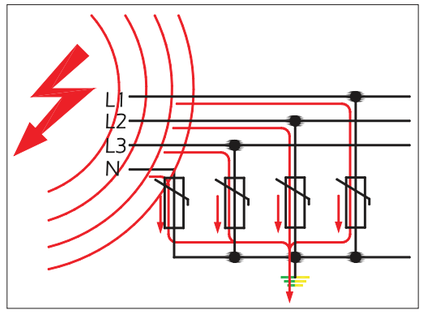


Drawing 4

3+1P wiring diagram

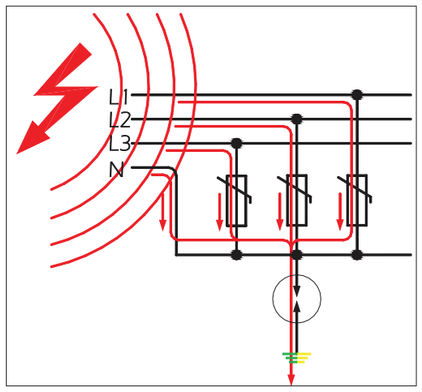
UB01-D series SPD (for 220/380 VAC, 50/60Hz) can be used to provide a lightning or overvoltage protection to electronic devices in the end of power supply system, such as information networks, intelligent devices and civil buildings.

Features:
1. Low residual voltage and leakage current;
2. Response time⩽25nS;
3. Thermal disconnect and fuse devices;
4. Mechanical status indication: green(OK), red(Overloaded);
5. With or without floating remote indication contacts;
6. Can be mounted on TH 35 rails;
7. Plug-in.



Drawing 1

4P electrical schematic



Drawing 2

3+1P electrical schematic

SPD for power supply system
UB01-D/□-275-25

Ordering data	Type	Order no.
□ SPD combinations: 1, 2, 3, 4, 1+1, 3+1 see drawing 1 under 4P drawing 2 for 3+1P	UB01-D/1-275-25X	380462
	UB01-D/1-275-25	380463
	UB01-D/1+1-275-25X	380464
	UB01-D/1+1-275-25	380465
	UB01-D/2-275-25X	380466
	UB01-D/2-275-25	380467
	UB01-D/2+1-275-25X	380468
	UB01-D/2+1-275-25	380469
	UB01-D/3-275-25X	380470
	UB01-D/3-275-25	380471
	UB01-D/4-275-25X	380472
	UB01-D/4-275-25	380473
	UB01-D/3+1-275-25X	380474
X :With remote indication contact	UB01-D/3+1-275-25	380475

Dimension	
Width/Thickness(per piece)/Height	90/18/66mm

Technical data	
Max. continuos operating voltage Uc AC/DC	275V/350V
Breakdown voltage U1mA	430V
Nominal discharge current In 8/20μS	10KA
Max discharge current Imax 8/20μS	25KA
Voltage protection level Up	1.2KV
Pre-installed circuit breaker	16A
Pre-installed fuse	16A
Response time	⩽25ns
Leakage current	⩽0.3mA
Temperature range ℃	-40～+85

Remote indication contact	
Max. operating voltage Umax AC/DC	250V/125V
Max. operating current Imax AC	1A
Max. operating current Imax DC	0.2A

Connection data	
Phase	6mm²
Ground	10mm²
Remote indication contact	0.5-1.5mm²

Mounting		
TH35 rails 	TH35-7.5	102001
	TH35-15	102005

General data	
Housing material	PA
Protection degree	IP20
Test standards	GB/T18802.1-2011 IEC 61643-1:1998

Wiring diagram	
4P wiring diagram	Drawing 3
3+1P wiring diagram	Drawing 4
Application	See drawing 1/2 on page B6

SPD for power supply system
UB01-D/□-320-25

Type	Order no.
UB01-D/1-320-25X	380476
UB01-D/1-320-25	380477
UB01-D/1+1-320-25X	380478
UB01-D/1+1-320-25	380479
UB01-D/2-320-25X	380480
UB01-D/2-320-25	380481
UB01-D/2+1-320-25X	380482
UB01-D/2+1-320-25	380483
UB01-D/3-320-25X	380484
UB01-D/3-320-25	380485
UB01-D/4-320-25X	380486
UB01-D/4-320-25	380487
UB01-D/3+1-320-25X	380488
UB01-D/3+1-320-25	380489

90/18/66mm

320V/415V
510V
10KA
25KA
1.35KV
16A
16A
⩽25ns
⩽0.3mA
-40～+85

250V/125V
1A
0.2A

6mm²
10mm²
0.5-1.5mm²

TH35-7.5	102001
TH35-15	102005

PA
IP20
GB/T18802.1-2011 IEC 61643-1:1998

Drawing 3
Drawing 4
See drawing 1/2 on page B6

SPD for power supply system
UB01-D/□-385-25

Type	Order no.
UB01-D/1-385-25X	380490
UB01-D/1-385-25	380491
UB01-D/1+1-385-25X	380492
UB01-D/1+1-385-25	380493
UB01-D/2-385-25X	380494
UB01-D/2-385-25	380495
UB01-D/2+1-385-25X	380496
UB01-D/2+1-385-25	380497
UB01-D/3-385-25X	380498
UB01-D/3-385-25	380499
UB01-D/4-385-25X	380500
UB01-D/4-385-25	380501
UB01-D/3+1-385-25X	380502
UB01-D/3+1-385-25	380503

90/18/66mm

385V/505V
620V
10KA
25KA
1.5KV
16A
16A
⩽25ns
⩽0.3mA
-40～+85

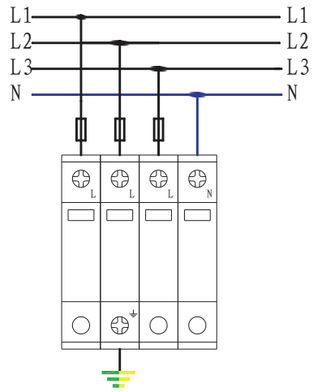
250V/125V
1A
0.2A

6mm²
10mm²
0.5-1.5mm²

TH35-7.5	102001
TH35-15	102005

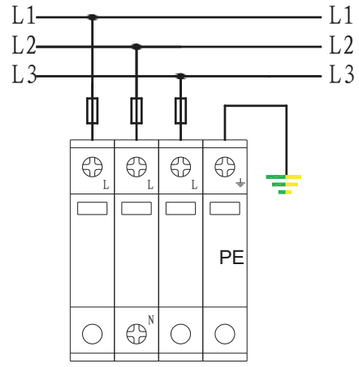
PA
IP20
GB/T18802.1-2011 IEC 61643-1:1998

Drawing 3
Drawing 4
See drawing 1/2 on page B6



Drawing 3

4P wiring diagram

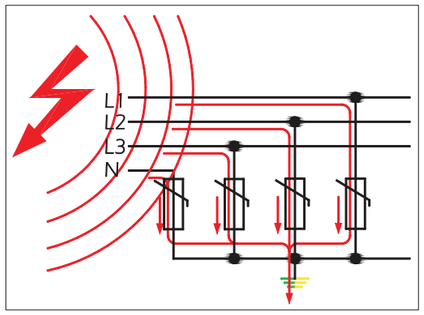


Drawing 4

3+1P wiring diagram

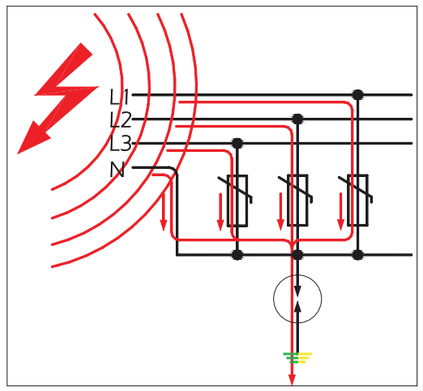
UB01-C series SPD (for 220/380 VAC, 50/60Hz) can be used to provide a type-2(level C) lightning or overvoltage protection to low-voltage distribution system, such as floor distribution cabinets, unit distribution cabinets.

Features:
1. Low residual voltage and leakage current;
2. Response time⩽25nS;
3. Thermal disconnect and fuse devices;
4. Mechanical status indication: green(OK), red(Overloaded);
5. With or without floating remote indication contacts;
6. Can be mounted on TH 35 rails;
7. Plug-in.



Drawing 1

4P electrical schematic



Drawing 2

3+1P electrical schematic

SPD for power supply system
UB01-C/□-275-40

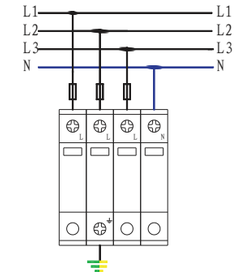
Ordering data	Type	Order no.
□ SPD combinations: 1, 2, 3, 4, 1+1, 3+1 see drawing 1 under 4P drawing 2 for 3+1P X :With remote indication contact	UB01-C/1-275-40X	380504
	UB01-C/1-275-40	380505
	UB01-C/1+1-275-40X	380506
	UB01-C/1+1-275-40	380507
	UB01-C/2-275-40X	380508
	UB01-C/2-275-40	380509
	UB01-C/2+1-275-40X	380510
	UB01-C/2+1-275-40	380511
	UB01-C/3-275-40X	380512
	UB01-C/3-275-40	380513
	UB01-C/4-275-40X	380514
	UB01-C/4-275-40	380515
	UB01-C/3+1-275-40X	380516
	UB01-C/3+1-275-40	380517
Dimension		
Width/Thickness(per piece)/Height		90/18/66mm
Technical data		
Max. continuos operating voltage Uc AC/DC		275V/350V
Breakdown voltage U1mA		430V
Nominal discharge current In 8/20μS		20KA
Max discharge current Imax 8/20μS		40KA
Voltage protection level Up		1.5KV
Pre-installed circuit breaker		32A
Pre-installed fuse		32A
Response time		⩽25ns
Leakage current		⩽0.3mA
Temperature range	℃	-40～+85
Remote indication contact		
Max. operating voltage Umax	AC/DC	250V/125V
Max. operating current Imax	AC	1A
Max. operating current Imax	DC	0.2A
Connection data		
Phase		10mm²
Ground		16mm²
Remote indication contact		0.5-1.5mm²
Mounting		
TH35 rails 		TH35-7.5 102001
		TH35-15 102005
General data		
Housing material		PA
Protection degree		IP20
Test standards		GB/T18802.1-2011 IEC 61643-1:1998
Wiring diagram		
4P wiring diagram		Drawing 3
3+1P wiring diagram		Drawing 4
Application		See drawing 1/2 on page B6

SPD for power supply system
UB01-C/□-320-40

SPD for power supply system
UB01-C/□-385-40

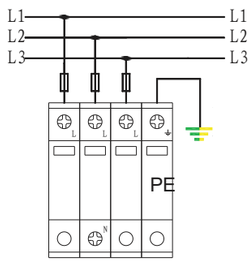
SPD for power supply system
UB01-C/□-420-40

Type	Order no.	Type	Order no.	Type	Order no.
UB01-C/1-320-40X	380518	UB01-C/1-385-40X	380532	UB01-C/1-420-40X	380546
UB01-C/1-320-40	380519	UB01-C/1-385-40	380533	UB01-C/1-420-40	380547
UB01-C/1+1-320-40X	380520	UB01-C/1+1-385-40X	380534	UB01-C/1+1-420-40X	380548
UB01-C/1+1-320-40	380521	UB01-C/1+1-385-40	380535	UB01-C/1+1-420-40	380549
UB01-C/2-320-40X	380522	UB01-C/2-385-40X	380536	UB01-C/2-420-40X	380550
UB01-C/2-320-40	380523	UB01-C/2-385-40	380537	UB01-C/2-420-40	380551
UB01-C/2+1-320-40X	380524	UB01-C/2+1-385-40X	380538	UB01-C/2+1-420-40X	380552
UB01-C/2+1-320-40	380525	UB01-C/2+1-385-40	380539	UB01-C/2+1-420-40	380553
UB01-C/3-320-40X	380526	UB01-C/3-385-40X	380540	UB01-C/3-420-40X	380554
UB01-C/3-320-40	380527	UB01-C/3-385-40	380541	UB01-C/3-420-40	380555
UB01-C/4-320-40X	380528	UB01-C/4-385-40X	380542	UB01-C/4-420-40X	380556
UB01-C/4-320-40	380529	UB01-C/4-385-40	380543	UB01-C/4-420-40	380557
UB01-C/3+1-320-40X	380530	UB01-C/3+1-385-40X	380544	UB01-C/3+1-420-40X	380558
UB01-C/3+1-320-40	380531	UB01-C/3+1-385-40	380545	UB01-C/3+1-420-40	380559
90/18/66mm		90/18/66mm		90/18/66mm	
320V/415V		385V/505V		420V/560V	
510V		620V		680V	
20KA		20KA		20KA	
40KA		40KA		40KA	
1.5KV		1.8KV		2.0KV	
32A		32A		32A	
32A		32A		32A	
⩽25ns		⩽25ns		⩽25ns	
⩽0.3mA		⩽0.3mA		⩽0.3mA	
-40～+85		-40～+85		-40～+85	
250V/125V		250V/125V		250V/125V	
1A		1A		1A	
0.2A		0.2A		0.2A	
10mm²		10mm²		10mm²	
16mm²		16mm²		16mm²	
0.5-1.5mm²		0.5-1.5mm²		0.5-1.5mm²	
TH35-7.5	102001	TH35-7.5	102001	TH35-7.5	102001
TH35-15	102005	TH35-15	102005	TH35-15	102005
PA		PA		PA	
IP20		IP20		IP20	
GB/T18802.1-2011 IEC 61643-1:1998		GB/T18802.1-2011 IEC 61643-1:1998		GB/T18802.1-2011 IEC 61643-1:1998	
Drawing 3		Drawing 3		Drawing 3	
Drawing 4		Drawing 4		Drawing 4	
See drawing 1/2 on page B6		See drawing 1/2 on page B6		See drawing 1/2 on page B6	



Drawing 3

4P wiring diagram

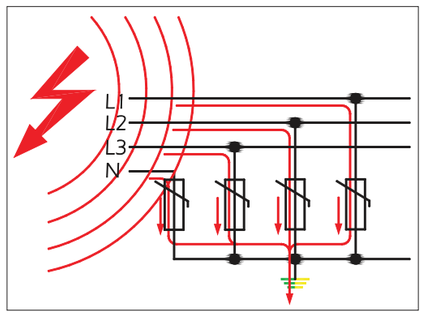


Drawing 4

3+1P wiring diagram

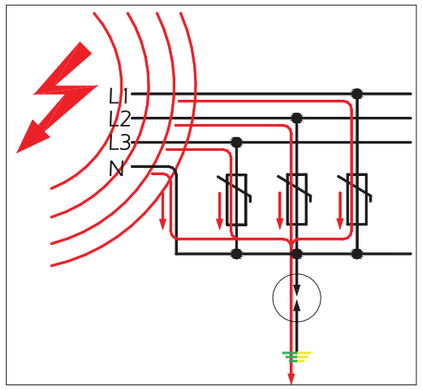
UB01-C series SPD (for 220/380 VAC, 50/60Hz) can be used to provide a type-2(level C) lightning or overvoltage protection to low-voltage distribution system, such as floor distribution cabinets, unit distribution cabinets.

Features:
1. Low residual voltage and leakage current;
2. Response time⩽25nS;
3. Thermal disconnect and fuse devices;
4. Mechanical status indication: green(OK), red(Overloaded);
5. With or without floating remote indication contacts;
6. Can be mounted on TH 35 rails;
7. Plug-in.



Drawing 1

4P electrical schematic



Drawing 2

3+1P electrical schematic

SPD for power supply system
UB01-C/□-550-40

Ordering data	Type	Order no.
□ SPD combinations: 1, 2, 3, 4, 1+1, 3+1 see drawing 1 under 4P drawing 2 for 3+1P	UB01-C/1-550-40X	380560
	UB01-C/1-550-40	380561
	UB01-C/1+1-550-40X	380562
	UB01-C/1+1-550-40	380563
	UB01-C/2-550-40X	380564
	UB01-C/2-550-40	380565
	UB01-C/2+1-550-40X	380566
X :With remote indication contact	UB01-C/2+1-550-40	380567
	UB01-C/3-550-40X	380568
	UB01-C/3-550-40	380569
	UB01-C/4-550-40X	380570
	UB01-C/4-550-40	380571
	UB01-C/3+1-550-40X	380572
	UB01-C/3+1-550-40	380573

Dimension	
Width/Thickness(per piece)/Height	90/18/66mm

Technical data	
Max. continuos operating voltage Uc AC/DC	550V/745V
Breakdown voltage U1mA	910V
Nominal discharge current In 8/20μS	20KA
Max discharge current Imax 8/20μS	40KA
Voltage protection level Up	2.6KV
Pre-installed circuit breaker	32A
Pre-installed fuse	32A
Response time	⩽25ns
Leakage current	⩽0.3mA
Temperature range ℃	-40～+85

Remote indication contact		
Max. operating voltage Umax	AC/DC	250V/125V
Max. operating current Imax	AC	1A
Max. operating current Imax	DC	0.2A

Connection data	
Phase	10mm²
Ground	16mm²
Remote indication contact	0.5-1.5mm²

Mounting		
TH35 rails	TH35-7.5	102001
	TH35-15	102005

General data	
Housing material	PA
Protection degree	IP20
Test standards	GB/T18802.1-2011 IEC 61643-1:1998

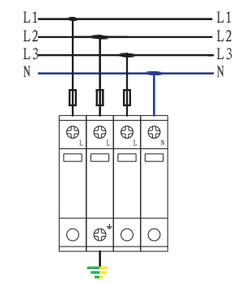
Wiring diagram	
4P wiring diagram	Drawing 3
3+1P wiring diagram	Drawing 4
Application	See drawing 1/2 on page B6

SPD for power supply system
UB01-C/□-600-40

SPD for power supply system
UB01-C/□-680-40

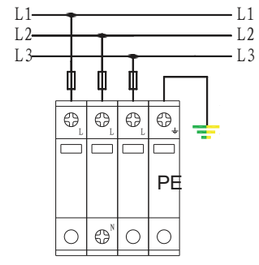
SPD for power supply system
UB01-C/□-750-40

Type	Order no.	Type	Order no.	Type	Order no.
UB01-C/1-600-40X	380574	UB01-C/1-680-40X	380588	UB01-C/1-750-40X	380602
UB01-C/1-600-40	380575	UB01-C/1-680-40	380589	UB01-C/1-750-40	380603
UB01-C/1+1-600-40X	380576	UB01-C/1+1-680-40X	380590	UB01-C/1+1-750-40X	380604
UB01-C/1+1-600-40	380577	UB01-C/1+1-680-40	380591	UB01-C/1+1-750-40	380605
UB01-C/2-600-40X	380578	UB01-C/2-680-40X	380592	UB01-C/2-750-40X	380606
UB01-C/2-600-40	380579	UB01-C/2-680-40	380593	UB01-C/2-750-40	380607
UB01-C/2+1-600-40X	380580	UB01-C/2+1-680-40X	380594	UB01-C/2+1-750-40X	380608
UB01-C/2+1-600-40	380581	UB01-C/2+1-680-40	380595	UB01-C/2+1-750-40	380609
UB01-C/3-600-40X	380582	UB01-C/3-680-40X	380596	UB01-C/3-750-40X	380610
UB01-C/3-600-40	380583	UB01-C/3-680-40	380597	UB01-C/3-750-40	380611
UB01-C/4-600-40X	380584	UB01-C/4-680-40X	380598	UB01-C/4-750-40X	380612
UB01-C/4-600-40	380585	UB01-C/4-680-40	380599	UB01-C/4-750-40	380613
UB01-C/3+1-600-40X	380586	UB01-C/3+1-680-40X	380600	UB01-C/3+1-750-40X	380614
UB01-C/3+1-600-40	380587	UB01-C/3+1-680-40	380601	UB01-C/3+1-750-40	380615
90/18/66mm		90/18/66mm		90/18/66mm	
575V/760V		680V/895V		750V/980V	
950V		1100V		1235V	
20KA		20KA		20KA	
40KA		40KA		40KA	
2.8KV		3.2KV		3.5KV	
32A		32A		32A	
32A		32A		32A	
⩽25ns		⩽25ns		⩽25ns	
⩽0.3mA		⩽0.3mA		⩽0.3mA	
-40～+85		-40～+85		-40～+85	
250V/125V		250V/125V		250V/125V	
1A		1A		1A	
0.2A		0.2A		0.2A	
10mm²		10mm²		10mm²	
16mm²		16mm²		16mm²	
0.5-1.5mm²		0.5-1.5mm²		0.5-1.5mm²	
TH35-7.5	102001	TH35-7.5	102001	TH35-7.5	102001
TH35-15	102005	TH35-15	102005	TH35-15	102005
PA		PA		PA	
IP20		IP20		IP20	
GB/T18802.1-2011 IEC 61643-1:1998		GB/T18802.1-2011 IEC 61643-1:1998		GB/T18811.1-2011 IEC 61643-1:1998	
Drawing 3		Drawing 3		Drawing 3	
Drawing 4		Drawing 4		Drawing 4	
See drawing 1/2 on page B6		See drawing 1/2 on page B6		See drawing 1/2 on page B6	



Drawing 3

4P wiring diagram

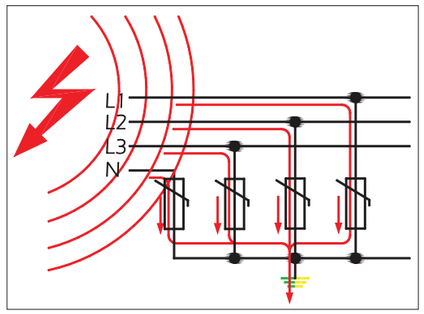


Drawing 4

3+1P wiring diagram

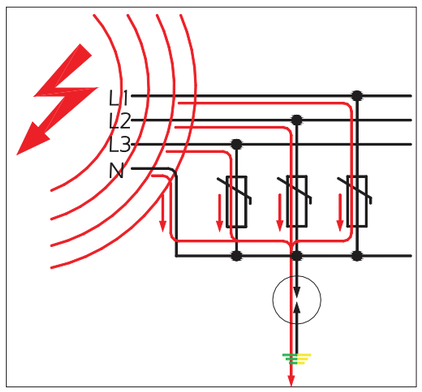
UB01-B series SPD (for 380/420 VAC, 50/60Hz) can be used to provide a type-1 lightning or overvoltage protection to low-voltage distribution system, such as low-voltage main distribution cabinets, outdoor distribution control cabinets and power supplies with high lightning risk.

Features:
1. Low residual voltage and leakage current;
2. Response time⩽25nS;
3. Thermal disconnect and fuse devices;
4. Mechanical status indication: green(OK), red(Overloaded);
5. With or without floating remote indication contacts;
6. Can be mounted on TH 35 rails;



Drawing 1

4P electrical schematic



Drawing 2

3+1P electrical schematic

SPD for power supply system
UB01-B/□-275-60

Ordering data	Type	Order no.
□ SPD combinations: 1, 2, 3, 4, 1+1, 3+1 see drawing 1 under 4P drawing 2 for 3+1P	UB01-B/1-275-60X	380616
	UB01-B/1-275-60	380617
	UB01-B/1+1-275-60X	380618
	UB01-B/1+1-275-60	380619
	UB01-B/2-275-60X	380620
	UB01-B/2-275-60	380621
X :With remote indication contact	UB01-B/2+1-275-60X	380622
	UB01-B/2+1-275-60	380623
	UB01-B/3-275-60X	380624
	UB01-B/3-275-60	380625
	UB01-B/4-275-60X	380626
	UB01-B/4-275-60	380627
	UB01-B/3+1-275-60X	380628
	UB01-B/3+1-275-60	380629

Dimension	
Width/Thickness(per piece)/Height	90/18/66mm

Technical data		
Max. continuos operating voltage Uc AC/DC		275V/350V
Breakdown voltage U1mA		430V
Nominal discharge current In 8/20μS		30KA
Max discharge current Imax 8/20μS		60KA
Voltage protection level Up		1.5KV
Pre-installed circuit breaker		63A
Pre-installed fuse		63A
Response time		⩽25ns
Leakage current		⩽0.3mA
Temperature range	℃	-40～+85

Remote indication contact		
Max. operating voltage Umax	AC/DC	250V/125V
Max. operating current Imax	AC	1A
Max. operating current Imax	DC	0.2A

Connection data	
Phase	16mm²
Ground	25mm²
Remote indication contact	0.5-1.5mm²

Mounting		
TH35 rails	TH35-7.5	102001
	TH35-15	102005

General data	
Housing material	PA
Protection degree	IP20
Test standards	GB/T18802.1-2011 IEC 61643-1:1998

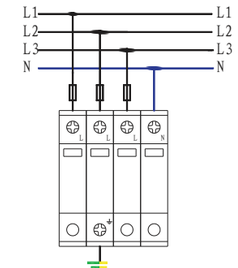
Wiring diagram	
4P wiring diagram	Drawing 3
3+1P wiring diagram	Drawing 4
Application	See drawing 1/2 on page B6

SPD for power supply system
UB01-B/□-320-60

SPD for power supply system
UB01-B/□-385-60

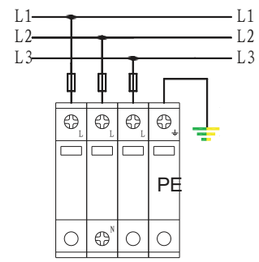
SPD for power supply system
UB01-B/□-420-60

Type	Order no.	Type	Order no.	Type	Order no.
UB01-B/1-320-60X	380630	UB01-B/1-385-60X	380644	UB01-B/1-420-60X	380658
UB01-B/1-320-60	380631	UB01-B/1-385-60	380645	UB01-B/1-420-60	380659
UB01-B/1+1-320-60X	380632	UB01-B/1+1-385-60X	380646	UB01-B/1+1-420-60X	380660
UB01-B/1+1-320-60	380633	UB01-B/1+1-385-60	380647	UB01-B/1+1-420-60	380661
UB01-B/2-320-60X	380634	UB01-B/2-385-60X	380648	UB01-B/2-420-60X	380662
UB01-B/2-320-60	380635	UB01-B/2-385-60	380649	UB01-B/2-420-60	380663
UB01-B/2+1-320-60X	380636	UB01-B/2+1-385-60X	380650	UB01-B/2+1-420-60X	380664
UB01-B/2+1-320-60	380637	UB01-B/2+1-385-60	380651	UB01-B/2+1-420-60	380665
UB01-B/3-320-60X	380638	UB01-B/3-385-60X	380652	UB01-B/3-420-60X	380666
UB01-B/3-320-60	380639	UB01-B/3-385-60	380653	UB01-B/3-420-60	380667
UB01-B/4-320-60X	380640	UB01-B/4-385-60X	380654	UB01-B/4-420-60X	380668
UB01-B/4-320-60	380641	UB01-B/4-385-60	380655	UB01-B/4-420-60	380669
UB01-B/3+1-320-60X	380642	UB01-B/3+1-385-60X	380656	UB01-B/3+1-420-60X	380670
UB01-B/3+1-320-60	380643	UB01-B/3+1-385-60	380657	UB01-B/3+1-420-60	380671
90/18/66mm		90/18/66mm		90/18/66mm	
320V/415V		385V/505V		420V/560V	
510V		620V		680V	
30KA		30KA		30KA	
60KA		60KA		60KA	
1.8KV		2.0KV		2.2KV	
63A		63A		63A	
63A		63A		63A	
⩽25ns		⩽25ns		⩽25ns	
⩽0.3mA		⩽0.3mA		⩽0.3mA	
-40～+85		-40～+85		-40～+85	
250V/125V		250V/125V		250V/125V	
1A		1A		1A	
0.2A		0.2A		0.2A	
16mm²		16mm²		16mm²	
25mm²		25mm²		25mm²	
0.5-1.5mm²		0.5-1.5mm²		0.5-1.5mm²	
TH35-7.5	102001	TH35-7.5	102001	TH35-7.5	102001
TH35-15	102005	TH35-15	102005	TH35-15	102005
PA		PA		PA	
IP20		IP20		IP20	
GB/T18802.1-2011 IEC 61643-1:1998		GB/T18802.1-2011 IEC 61643-1:1998		GB/T18802.1-2011 IEC 61643-1:1998	
Drawing 3		Drawing 3		Drawing 3	
Drawing 4		Drawing 4		Drawing 4	
See drawing 1/2 on page B6		See drawing 1/2 on page B6		See drawing 1/2 on page B6	



Drawing 3

4P wiring diagram

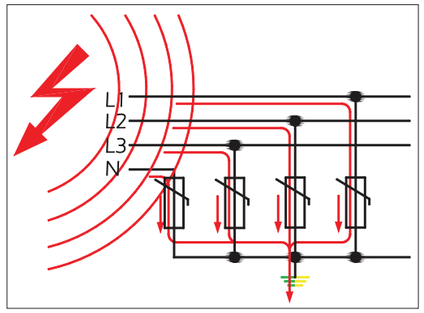


Drawing 4

3+1P wiring diagram

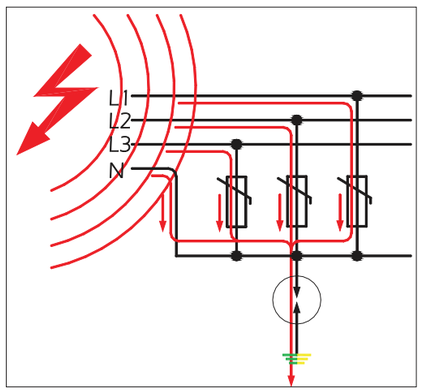
UB04-60 series SPD (for 380/420 VAC, 50/60Hz) can be used to provide a type-1 lightning or overvoltage protection to low-voltage distribution system, such as low-voltage main distribution cabinets, outdoor distribution control cabinets and power supplies with high lightning risk.

Features:
1. Low residual voltage and leakage current;
2. Response time⩽25nS;
3. Thermal disconnect and fuse devices;
4. Mechanical status indication: green(OK), red(Overloaded);
5. With or without floating remote indication contacts;
6. Can be mounted on TH 35 rails;



Drawing 1

4P electrical schematic



Drawing 2

3+1P electrical schematic

SPD for power supply system
UB04-60/□-275

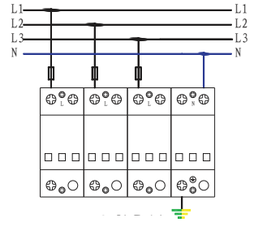
Ordering data	Type	Order no.
□ SPD combinations: 1, 2, 3, 4, 1+1, 3+1 see drawing 1 under 4P drawing 2 for 3+1P	UB04-60/1-275X	380714
	UB04-60/1-275	380715
	UB04-60/2-275X	380716
	UB04-60/2-275	380717
	UB04-60/3-275X	380718
	UB04-60/3-275	380719
	UB04-60/4-275X	380720
X :With remote indication contact	UB04-60/4-275	380721
	UB04-60/3+1-275X	380722
	UB04-60/3+1-275	380723
Dimension		
Width/Thickness(per piece)/Height	90/36/66mm	
Technical data		
Max. continuos operating voltage Uc AC/DC	275V/350V	
Breakdown voltage U1mA	430V	
Nominal discharge current In 8/20μS	30KA	
Max discharge current Imax 8/20μS	60KA	
Voltage protection level Up	1.5KV	
Pre-installed circuit breaker	63A	
Pre-installed fuse	63A	
Response time	⩽25ns	
Leakage current	⩽0.3mA	
Temperature range ℃	-40～+85	
Remote indication contact		
Max. operating voltage Umax AC/DC	250V/125V	
Max. operating current Imax AC	1A	
Max. operating current Imax DC	0.2A	
Connection data		
Phase	16mm²	
Ground	25mm²	
Remote indication contact	0.5-1.5mm²	
Mounting		
TH35 rails 	TH35-7.5	102001
	TH35-15	102005
General data		
Housing material	PA	
Protection degree	IP20	
Test standards	GB/T18802.1-2011 IEC 61643-1:1998	
Accessories		
Wiring diagram		
4P wiring diagram	Drawing 3,4	
3+1P wiring diagram	Drawing 5,6	
Application	See drawing 1/2 on page B6	

SPD for power supply system
UB04-60/□-320

SPD for power supply system
UB04-60/□-385

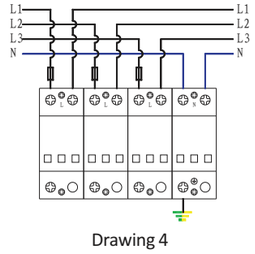
SPD for power supply system
UB04-60/□-420

Type	Order no.	Type	Order no.	Type	Order no.
UB04-60/1-320X	380724	UB04-60/1-385X	380734	UB04-60/1-420X	380744
UB04-60/1-320	380725	UB04-60/1-385	380735	UB04-60/1-420	380745
UB04-60/2-320X	380726	UB04-60/2-385X	380736	UB04-60/2-420X	380746
UB04-60/2-320	380727	UB04-60/2-385	380737	UB04-60/2-420	380747
UB04-60/3-320X	380728	UB04-60/3-385X	380738	UB04-60/3-420X	380748
UB04-60/3-320	380729	UB04-60/3-385	380739	UB04-60/3-420	380749
UB04-60/4-320X	380730	UB04-60/4-385X	380740	UB04-60/4-420X	380750
UB04-60/4-320	380731	UB04-60/4-385	380741	UB04-60/4-420	380751
UB04-60/3+1-320X	380732	UB04-60/3+1-385X	380742	UB04-60/3+1-420X	380752
UB04-60/3+1-320	380733	UB04-60/3+1-385	380743	UB04-60/3+1-420	380753
90/36/66mm		90/36/66mm		90/36/66mm	
320V/415V		385V/505V		420V/560V	
510V		620V		680V	
30KA		30KA		30KA	
60KA		60KA		60KA	
1.8KV		2.0KV		2.2KV	
63A		63A		63A	
63A		63A		63A	
⩽25ns		⩽25ns		⩽25ns	
⩽0.3mA		⩽0.3mA		⩽0.3mA	
-40～+85		-40～+85		-40～+85	
250V/125V		250V/125V		250V/125V	
1A		1A		1A	
0.2A		0.2A		0.2A	
16mm²		16mm²		16mm²	
25mm²		25mm²		25mm²	
0.5-1.5mm²		0.5-1.5mm²		0.5-1.5mm²	
TH35-7.5	102001	TH35-7.5	102001	TH35-7.5	102001
TH35-15	102005	TH35-15	102005	TH35-15	102005
PA		PA		PA	
IP20		IP20		IP20	
GB/T18802.1-2011 IEC 61643-1:1998		GB/T18802.1-2011 IEC 61643-1:1998		GB/T18802.1-2011 IEC 61643-1:1998	
Drawing 3,4		Drawing 3,4		Drawing 3,4	
Drawing 5,6		Drawing 5,6		Drawing 5,6	
See drawing 1/2 on page B6		See drawing 1/2 on page B6		See drawing 1/2 on page B6	



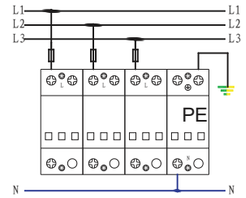
Drawing 3

4P wiring diagram



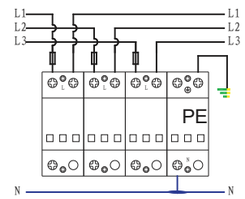
Drawing 4

4P wiring diagram



Drawing 5

3+1P wiring diagram

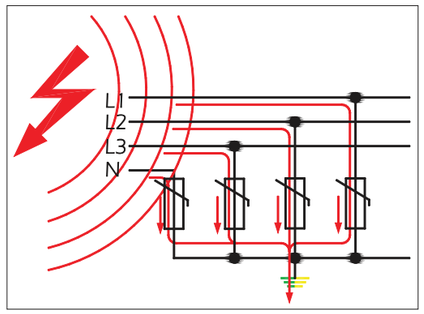


Drawing 6

3+1P wiring diagram

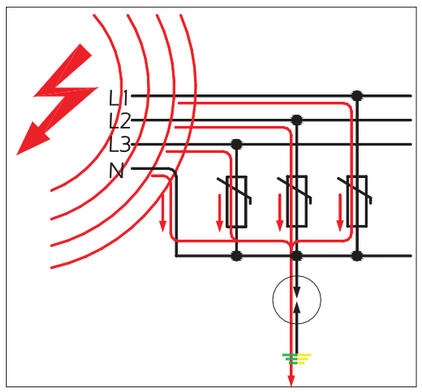
UB04-80 series SPD (for 380/420 VAC, 50/60Hz) can be used to provide a type-1 lightning or overvoltage protection to low-voltage distribution system, such as low-voltage main distribution cabinets, outdoor distribution control cabinets and power supplies with high lightning risk.

Features:
1. Low residual voltage and leakage current;
2. Response time⩽25nS;
3. Thermal disconnect and fuse devices;
4. Mechanical status indication: green(OK), red(Overloaded);
5. With or without floating remote indication contacts;
6. Can be mounted on TH 35 rails;



Drawing 1

4P electrical schematic



Drawing 2

3+1P electrical schematic

SPD for power supply system
UB04-80/□-275

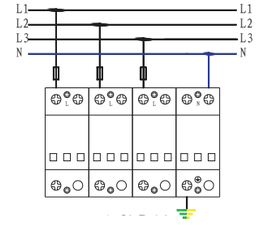
Ordering data	Type	Order no.
□ SPD combinations: 1, 2, 3, 4, 1+1, 3+1 see drawing 1 under 4P drawing 2 for 3+1P	UB04-80/1-275X	380754
	UB04-80/1-275	380755
	UB04-80/2-275X	380756
	UB04-80/2-275	380757
	UB04-80/3-275X	380758
	UB04-80/3-275	380759
	UB04-80/4-275X	380760
X :With remote indication contact	UB04-80/4-275	380761
	UB04-80/3+1-275X	380762
	UB04-80/3+1-275	380763
Dimension		
Width/Thickness(per piece)/Height	90/36/66mm	
Technical data		
Max. continuos operating voltage Uc AC/DC	275V/350V	
Breakdown voltage U1mA	430V	
Nominal discharge current In 8/20μS	40KA	
Max discharge current Imax 8/20μS	80KA	
Voltage protection level Up	1.6KV	
Pre-installed circuit breaker	63A	
Pre-installed fuse	63A	
Response time	⩽25ns	
Leakage current	⩽0.3mA	
Temperature range ℃	-40～+85	
Remote indication contact		
Max. operating voltage Umax AC/DC	250V/125V	
Max. operating current Imax AC	1A	
Max. operating current Imax DC	0.2A	
Connection data		
Phase	16mm²	
Ground	25mm²	
Remote indication contact	0.5-1.5mm²	
Mounting		
TH35 rails	TH35-7.5	102001
	TH35-15	102005
General data		
Housing material	PA	
Protection degree	IP20	
Test standards	GB/T18802.1-2011 IEC 61643-1:1998	
Accessories		
Wiring diagram		
4P wiring diagram	Drawing 3,4	
3+1P wiring diagram	Drawing 5,6	
Application	See drawing 1/2 on page B6	

SPD for power supply system
UB04-80/□-320

SPD for power supply system
UB04-80/□-385

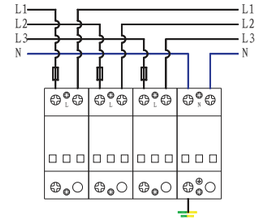
SPD for power supply system
UB04-80/□-420

Type	Order no.	Type	Order no.	Type	Order no.
UB04-80/1-320X	380764	UB04-80/1-385X	380774	UB04-80/1-420X	380784
UB04-80/1-320	380765	UB04-80/1-385	380775	UB04-80/1-420	380785
UB04-80/2-320X	380766	UB04-80/2-385X	380776	UB04-80/2-420X	380786
UB04-80/2-320	380767	UB04-80/2-385	380777	UB04-80/2-420	380787
UB04-80/3-320X	380768	UB04-80/3-385X	380778	UB04-80/3-420X	380788
UB04-80/3-320	380769	UB04-80/3-385	380779	UB04-80/3-420	380789
UB04-80/4-320X	380770	UB04-80/4-385X	380780	UB04-80/4-420X	380790
UB04-80/4-320	380771	UB04-80/4-385	380781	UB04-80/4-420	380791
UB04-80/3+1-320X	380772	UB04-80/3+1-385X	380782	UB04-80/3+1-420X	380792
UB04-80/3+1-320	380773	UB04-80/3+1-385	380783	UB04-80/3+1-420	380793
90/36/66mm		90/36/66mm		90/36/66mm	
320V/415V		385V/505V		420V/560V	
510V		620V		680V	
40KA		40KA		40KA	
80KA		80KA		80KA	
2.0KV		2.2KV		2.5KV	
63A		63A		63A	
63A		63A		63A	
⩽25ns		⩽25ns		⩽25ns	
⩽0.3mA		⩽0.3mA		⩽0.3mA	
-40～+85		-40～+85		-40～+85	
250V/125V		250V/125V		250V/125V	
1A		1A		1A	
0.2A		0.2A		0.2A	
16mm²		16mm²		16mm²	
25mm²		25mm²		25mm²	
0.5-1.5mm²		0.5-1.5mm²		0.5-1.5mm²	
TH35-7.5	102001	TH35-7.5	102001	TH35-7.5	102001
TH35-15	102005	TH35-15	102005	TH35-15	102005
PA		PA		PA	
IP20		IP20		IP20	
GB/T18802.1-2011 IEC 61643-1:1998		GB/T18802.1-2011 IEC 61643-1:1998		GB/T18802.1-2011 IEC 61643-1:1998	
Drawing 3,4		Drawing 3,4		Drawing 3,4	
Drawing 5,6		Drawing 5,6		Drawing 5,6	
See drawing 1/2 on page B6		See drawing 1/2 on page B6		See drawing 1/2 on page B6	



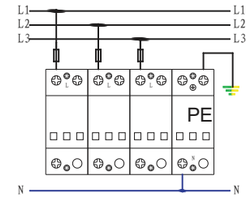
Drawing 3

4P wiring diagram



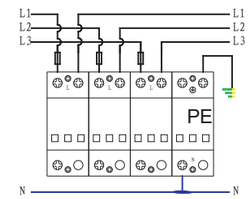
Drawing 4

4P wiring diagram



Drawing 5

3+1P wiring diagram

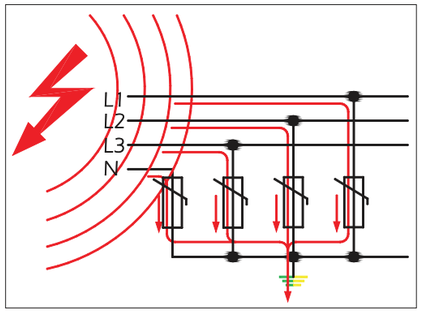


Drawing 6

3+1P wiring diagram

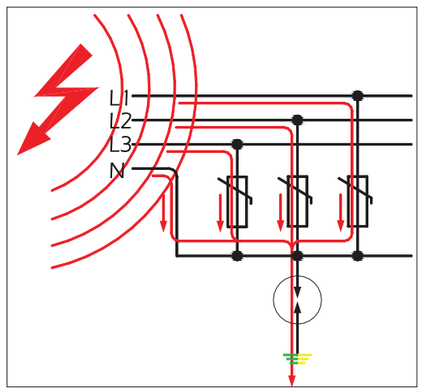
UB04-100 series SPD (for 380/420 VAC, 50/60Hz) can be used to provide a type-1 lightning or overvoltage protection to low-voltage distribution system, such as low-voltage main distribution cabinets, outdoor distribution control cabinets and power supplies with high lightning risk.

Features:
1. Low residual voltage and leakage current;
2. Response time⩽25nS;
3. Thermal disconnect and fuse devices;
4. Mechanical status indication: green(OK), red(Overloaded);
5. With or without floating remote indication contacts;
6. Can be mounted on TH 35 rails;



Drawing 1

4P electrical schematic



Drawing 2

3+1P electrical schematic

SPD for power supply system
UB04-100/□-275

Ordering data	Type	Order no.
□ SPD combinations: 1, 2, 3, 4, 1+1, 3+1 see drawing 1 under 4P drawing 2 for 3+1P	UB04-100/1-275X	380794
	UB04-100/1-275	380795
	UB04-100/2-275X	380796
	UB04-100/2-275	380797
	UB04-100/3-275X	380798
	UB04-100/3-275	380799
	UB04-100/4-275X	380800
X :With remote indication contact	UB04-100/4-275	380801
	UB04-100/3+1-275X	380802
	UB04-100/3+1-275	380803

Dimension		
Width/Thickness(per piece)/Height		90/36/66mm
Technical data		
Max. continuos operating voltage Uc	AC/DC	275V/350V
Breakdown voltage U1mA		430V
Nominal discharge current In 8/20μS		50KA
Max discharge current Imax 8/20μS		100KA
Voltage protection level Up		1.8KV
Pre-installed circuit breaker		63A
Pre-installed fuse		63A
Response time		⩽25ns
Leakage current		⩽0.3mA
Temperature range	℃	-40～+85
Remote indication contact		
Max. operating voltage Umax	AC/DC	250V/125V
Max. operating current Imax	AC	1A
Max. operating current Imax	DC	0.2A
Connection data		
Phase		16mm²
Ground		25mm²
Remote indication contact		0.5-1.5mm²
Mounting		
TH35 rails	TH35-7.5	102001
	TH35-15	102005
General data		
Housing material		PA
Protection degree		IP20
Test standards		GB/T18802.1-2011 IEC 61643-1:1998
Accessories		
Wiring diagram		
4P wiring diagram		Drawing 3,4
3+1P wiring diagram		Drawing 5,6
Application		See drawing 1/2 on page B6

SPD for power supply system
UB04-100/□-320

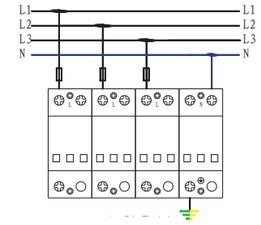
Type	Order no.
UB04-100/1-320X	380804
UB04-100/1-320	380805
UB04-100/2-320X	380806
UB04-100/2-320	380807
UB04-100/3-320X	380808
UB04-100/3-320	380809
UB04-100/4-320X	380810
UB04-100/4-320	380811
UB04-100/3+1-320X	380812
UB04-100/3+1-320	380813
90/36/66mm	
320V/415V	
510V	
50KA	
100KA	
2.2KV	
63A	
63A	
⩽25ns	
⩽0.3mA	
-40～+85	
250V/125V	
1A	
0.2A	
16mm²	
25mm²	
0.5-1.5mm²	
TH35-7.5 102001	
TH35-15 102005	
PA	
IP20	
GB/T18802.1-2011 IEC 61643-1:1998	
Drawing 3,4	
Drawing 5,6	
See drawing 1/2 on page B6	

SPD for power supply system
UB04-100/□-385

Type	Order no.
UB04-100/1-385X	380814
UB04-100/1-385	380815
UB04-100/2-385X	380816
UB04-100/2-385	380817
UB04-100/3-385X	380818
UB04-100/3-385	380819
UB04-100/4-385X	380820
UB04-100/4-385	380821
UB04-100/3+1-385X	380822
UB04-100/3+1-385	380823
90/36/66mm	
385V/505V	
620V	
50KA	
100KA	
2.5KV	
63A	
63A	
⩽25ns	
⩽0.3mA	
-40～+85	
250V/125V	
1A	
0.2A	
16mm²	
25mm²	
0.5-1.5mm²	
TH35-7.5 102001	
TH35-15 102005	
PA	
IP20	
GB/T18802.1-2011 IEC 61643-1:1998	
Drawing 3,4	
Drawing 5,6	
See drawing 1/2 on page B6	

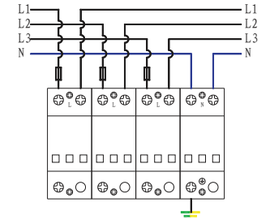
SPD for power supply system
UB04-100/□-420

Type	Order no.
UB04-100/1-420X	380824
UB04-100/1-420	380825
UB04-100/2-420X	380826
UB04-100/2-420	380827
UB04-100/3-420X	380828
UB04-100/3-420	380829
UB04-100/4-420X	380830
UB04-100/4-420	380831
UB04-100/3+1-420X	380832
UB04-100/3+1-420	380833
90/36/66mm	
420V/560V	
680V	
50KA	
100KA	
2.8KV	
63A	
63A	
⩽25ns	
⩽0.3mA	
-40～+85	
250V/125V	
1A	
0.2A	
16mm²	
25mm²	
0.5-1.5mm²	
TH35-7.5 102001	
TH35-15 102005	
PA	
IP20	
GB/T18802.1-2011 IEC 61643-1:1998	
Drawing 3,4	
Drawing 5,6	
See drawing 1/2 on page B6	



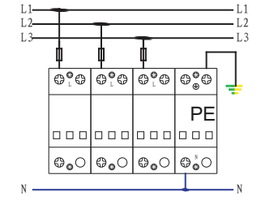
Drawing 3

4P wiring diagram



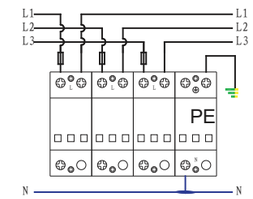
Drawing 4

4P wiring diagram



Drawing 5

3+1P wiring diagram

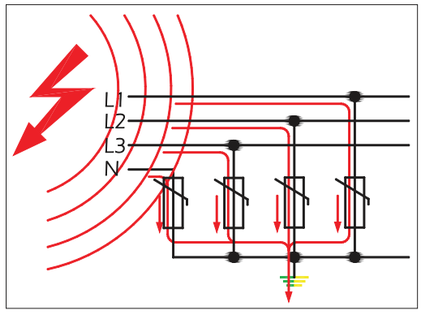


Drawing 6

3+1P wiring diagram

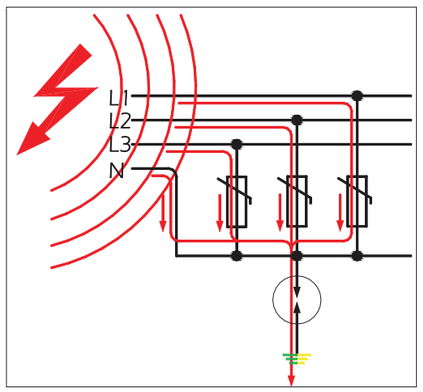
UB04-120 series SPD (for 380/420 VAC, 50/60Hz) can be used to provide a type-1 lightning or overvoltage protection to low-voltage distribution system, such as low-voltage main distribution cabinets, outdoor distribution control cabinets and power supplies with high lightning risk.

Features:
1. Low residual voltage and leakage current;
2. Response time⩽25nS;
3. Thermal disconnect and fuse devices;
4. Mechanical status indication: green(OK), red(Overloaded);
5. With or without floating remote indication contacts;
6. Can be mounted on TH 35 rails;



Drawing 1

4P electrical schematic



Drawing 2

3+1P electrical schematic

SPD for power supply system
UB04-120/□-275

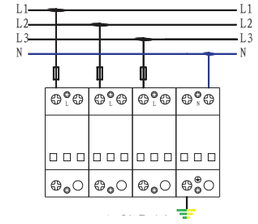
Ordering data	Type	Order no.
□ SPD combinations: 1, 2, 3, 4, 1+1, 3+1 see drawing 1 under 4P drawing 2 for 3+1P	UB04-120/1-275X	380834
	UB04-120/1-275	380835
	UB04-120/2-275X	380836
	UB04-120/2-275	380837
	UB04-120/3-275X	380838
	UB04-120/3-275	380839
	UB04-120/4-275X	380840
	UB04-120/4-275	380841
	UB04-120/3+1-275X	380842
	UB04-120/3+1-275	380843
X :With remote indication contact		
Dimension		
Width/Thickness(per piece)/Height	90/36/66mm	
Technical data		
Max. continuos operating voltage Uc AC/DC	275V/350V	
Breakdown voltage U1mA	430V	
Nominal discharge current In 8/20μS	60KA	
Max discharge current Imax 8/20μS	120KA	
Voltage protection level Up	2.0KV	
Pre-installed circuit breaker	63A	
Pre-installed fuse	63A	
Response time	⩽25ns	
Leakage current	⩽0.3mA	
Temperature range ℃	-40～+85	
Remote indication contact		
Max. operating voltage Umax AC/DC	250V/125V	
Max. operating current Imax AC	1A	
Max. operating current Imax DC	0.2A	
Connection data		
Phase	16mm²	
Ground	25mm²	
Remote indication contact	0.5-1.5mm²	
Mounting		
TH35 rails	TH35-7.5	102001
	TH35-15	102005
General data		
Housing material	PA	
Protection degree	IP20	
Test standards	GB/T18802.1-2011 IEC 61643-1:1998	
Accessories		
Wiring diagram		
4P wiring diagram	Drawing 3,4	
3+1P wiring diagram	Drawing 5,6	
Application	See drawing 1/2 on page B6	

SPD for power supply system
UB04-120/□-320

SPD for power supply system
UB04-120/□-385

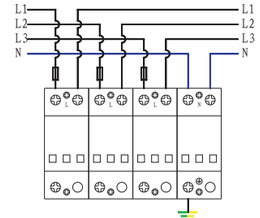
SPD for power supply system
UB04-120/□-420

Type	Order no.	Type	Order no.	Type	Order no.
UB04-120/1-320X	380844	UB04-120/1-385X	380854	UB04-120/1-420X	380864
UB04-120/1-320	380845	UB04-120/1-385	380855	UB04-120/1-420	380865
UB04-120/2-320X	380846	UB04-120/2-385X	380856	UB04-120/2-420X	380866
UB04-120/2-320	380847	UB04-120/2-385	380857	UB04-120/2-420	380867
UB04-120/3-320X	380848	UB04-120/3-385X	380858	UB04-120/3-420X	380868
UB04-120/3-320	380849	UB04-120/3-385	380859	UB04-120/3-420	380869
UB04-120/4-320X	380850	UB04-120/4-385X	380860	UB04-120/4-420X	380870
UB04-120/4-320	380851	UB04-120/4-385	380861	UB04-120/4-420	380871
UB04-120/3+1-320X	380852	UB04-120/3+1-385X	380862	UB04-120/3+1-420X	380872
UB04-120/3+1-320	380853	UB04-120/3+1-385	380863	UB04-120/3+1-420	380873
90/36/66mm		90/36/66mm		90/36/66mm	
320V/415V		385V/505V		420V/560V	
510V		620V		680V	
60KA		60KA		60KA	
120KA		120KA		120KA	
2.5KV		2.8KV		3.0KV	
63A		63A		63A	
63A		63A		63A	
⩽25ns		⩽25ns		⩽25ns	
⩽0.3mA		⩽0.3mA		⩽0.3mA	
-40～+85		-40～+85		-40～+85	
250V/125V		250V/125V		250V/125V	
1A		1A		1A	
0.2A		0.2A		0.2A	
16mm²		16mm²		16mm²	
25mm²		25mm²		25mm²	
0.5-1.5mm²		0.5-1.5mm²		0.5-1.5mm²	
TH35-7.5	102001	TH35-7.5	102001	TH35-7.5	102001
TH35-15	102005	TH35-15	102005	TH35-15	102005
PA		PA		PA	
IP20		IP20		IP20	
GB/T18802.1-2011 IEC 61643-1:1998		GB/T18802.1-2011 IEC 61643-1:1998		GB/T18802.1-2011 IEC 61643-1:1998	
Drawing 3,4		Drawing 3,4		Drawing 3,4	
Drawing 5,6		Drawing 5,6		Drawing 5,6	
See drawing 1/2 on page B6		See drawing 1/2 on page B6		See drawing 1/2 on page B6	



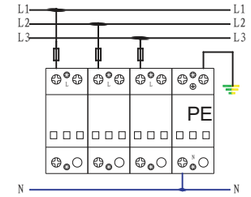
Drawing 3

4P wiring diagram



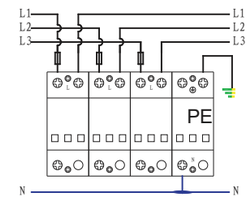
Drawing 4

4P wiring diagram



Drawing 5

3+1P wiring diagram

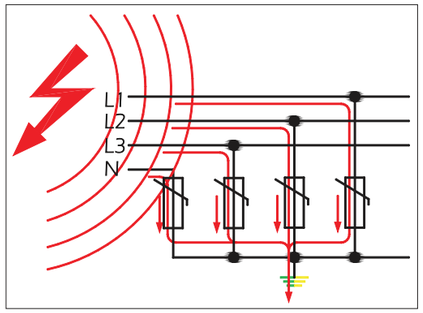


Drawing 6

3+1P wiring diagram

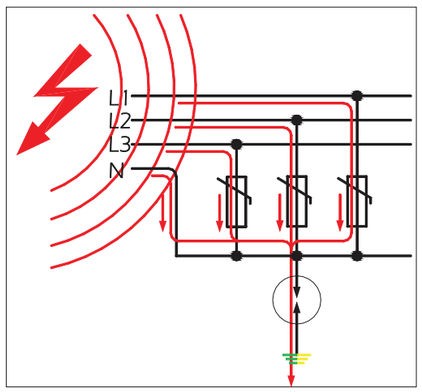
UB04-150 series SPD (for 380/420 VAC, 50/60Hz) can be used to provide a type-1 lightning or overvoltage protection to low-voltage distribution system, such as low-voltage main distribution cabinets, outdoor distribution control cabinets and power supplies with high lightning risk.

Features:
1. Low residual voltage and leakage current;
2. Response time⩽25nS;
3. Thermal disconnect and fuse devices;
4. Mechanical status indication: green(OK), red(Overloaded);
5. With or without floating remote indication contacts;
6. Can be mounted on TH 35 rails;



Drawing 1

4P electrical schematic



Drawing 2

3+1P electrical schematic

SPD for power supply system
UB04-150/□-275

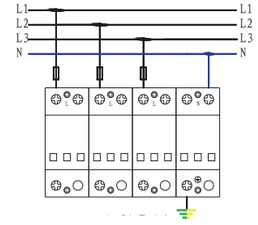
Ordering data	Type	Order no.
□ SPD combinations: 1, 2, 3, 4, 1+1, 3+1 see drawing 1 under 4P drawing 2 for 3+1P	UB04-150/1-275X	380874
	UB04-150/1-275	380875
	UB04-150/2-275X	380876
	UB04-150/2-275	380877
	UB04-150/3-275X	380878
	UB04-150/3-275	380879
	UB04-150/4-275X	380880
X :With remote indication contact	UB04-150/4-275	380881
	UB04-150/3+1-275X	380882
	UB04-150/3+1-275	380883
Dimension		
Width/Thickness(per piece)/Height	90/36/66mm	
Technical data		
Max. continuos operating voltage Uc AC/DC	275V/350V	
Breakdown voltage U1mA	430V	
Nominal discharge current In 8/20μS	60KA	
Max discharge current Imax 8/20μS	150KA	
Voltage protection level Up	2.0KV	
Pre-installed circuit breaker	63A	
Pre-installed fuse	63A	
Response time	⩽25ns	
Leakage current	⩽0.3mA	
Temperature range ℃	-40～+85	
Remote indication contact		
Max. operating voltage Umax AC/DC	250V/125V	
Max. operating current Imax AC	1A	
Max. operating current Imax DC	0.2A	
Connection data		
Phase	16mm²	
Ground	25mm²	
Remote indication contact	0.5-1.5mm²	
Mounting		
TH35 rails	TH35-7.5	102001
	TH35-15	102005
General data		
Housing material	PA	
Protection degree	IP20	
Test standards	GB/T18802.1-2011 IEC 61643-1:1998	
Accessories		
Wiring diagram		
4P wiring diagram	Drawing 3,4	
3+1P wiring diagram	Drawing 5,6	
Application	See drawing 1/2 on page B6	

SPD for power supply system
UB04-150/□-320

SPD for power supply system
UB04-150/□-385

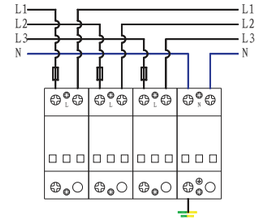
SPD for power supply system
UB04-150/□-420

Type	Order no.	Type	Order no.	Type	Order no.
UB04-150/1-320X	380884	UB04-150/1-385X	380894	UB04-150/1-420X	380904
UB04-150/1-320	380885	UB04-150/1-385	380895	UB04-150/1-420	380905
UB04-150/2-320X	380886	UB04-150/2-385X	380896	UB04-150/2-420X	380906
UB04-150/2-320	380887	UB04-150/2-385	380897	UB04-150/2-420	380907
UB04-150/3-320X	380888	UB04-150/3-385X	380898	UB04-150/3-420X	380908
UB04-150/3-320	380889	UB04-150/3-385	380899	UB04-150/3-420	380909
UB04-150/4-320X	380890	UB04-150/4-385X	380900	UB04-150/4-420X	380910
UB04-150/4-320	380891	UB04-150/4-385	380901	UB04-150/4-420	380911
UB04-150/3+1-320X	380892	UB04-150/3+1-385X	380902	UB04-150/3+1-420X	380912
UB04-150/3+1-320	380893	UB04-150/3+1-385	380903	UB04-150/3+1-420	380913
90/36/66mm		90/36/66mm		90/36/66mm	
320V/415V		385V/505V		420V/560V	
510V		620V		680V	
60KA		60KA		60KA	
150KA		150KA		150KA	
2.5KV		2.8KV		3.0KV	
63A		63A		63A	
63A		63A		63A	
⩽25ns		⩽25ns		⩽25ns	
⩽0.3mA		⩽0.3mA		⩽0.3mA	
-40～+85		-40～+85		-40～+85	
250V/125V		250V/125V		250V/125V	
1A		1A		1A	
0.2A		0.2A		0.2A	
16mm²		16mm²		16mm²	
25mm²		25mm²		25mm²	
0.5-1.5mm²		0.5-1.5mm²		0.5-1.5mm²	
TH35-7.5	102001	TH35-7.5	102001	TH35-7.5	102001
TH35-15	102005	TH35-15	102005	TH35-15	102005
PA		PA		PA	
IP20		IP20		IP20	
GB/T18802.1-2011 IEC 61643-1:1998		GB/T18802.1-2011 IEC 61643-1:1998		GB/T18802.1-2011 IEC 61643-1:1998	
Drawing 3,4		Drawing 3,4		Drawing 3,4	
Drawing 5,6		Drawing 5,6		Drawing 5,6	
See drawing 1/2 on page B6		See drawing 1/2 on page B6		See drawing 1/2 on page B6	



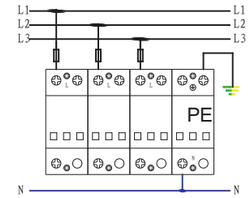
Drawing 3

4P wiring diagram



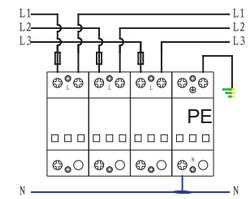
Drawing 4

4P wiring diagram



Drawing 5

3+1P wiring diagram

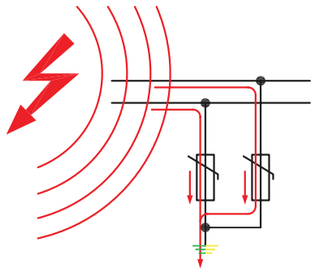


Drawing 6

3+1P wiring diagram

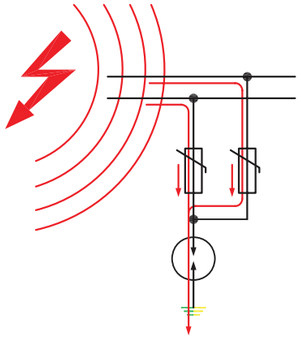
UB01-D series SPD is designed for DC power supply system.
It can be used to provide lightning (overvoltage) protection for solar and wind energy.

Features:
1. Low residual voltage and leakage current;
2. Response time⩽25nS;
3. Thermal disconnect and fuse devices;
4. Mechanical status indication: green(OK), red(Overloaded);
5. With or without floating remote indication contacts;
6. Can be mounted on TH 35 rails;



Drawing 1

2P electrical schematic



Drawing 2

2+1P electrical schematic

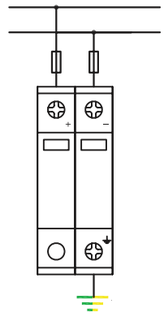
SPD for DC application
UB01-C/□-60VDC-40

SPD for DC application
UB01-C/□-110VDC-40

SPD for DC application
UB01-C/□-120VDC-40

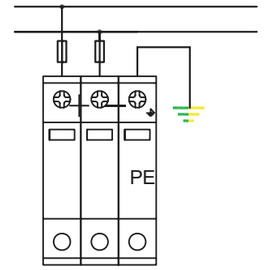
Ordering data	Type	Order no.
□ SPD combinations: 1, 2, 3, 4, 1+1, 3+1 see drawing 1 under 4P drawing 2 for 3+1P X :With remote indication contact	UB01-C/1-60VDC-40X	380672
	UB01-C/1-60VDC-40	380673
	UB01-C/1+1-60VDC-40X	380674
	UB01-C/1+1-60VDC-40	380675
	UB01-C/2-60VDC-40X	380676
	UB01-C/2-60VDC-40	380677
Dimension		
Width/Thickness(per piece)/Height	90/18/66mm	
Technical data		
Max. continuos operating voltage Uc DC/AC	100V/75V	
Breakdown voltage U1mA	120V	
Nominal discharge current In 8/20μS	15KA	
Max discharge current Imax 8/20μS	40KA	
Voltage protection level Up	250V	
Pre-installed circuit breaker	32A	
Pre-installed fuse	32A	
Response time	⩽25ns	
Leakage current	⩽0.3mA	
Temperature range	-40～+85	
Remote indication contact		
Max. operating voltage Umax AC/DC	250V/125V	
Max. operating current Imax	1A	
Max. operating current Imax	0.2A	
Connection data		
Phase	16mm²	
Ground	25mm²	
Remote indication contact	0.5-1.5mm²	
Mounting		
TH35 rails	TH35-7.5	102001
	TH35-15	102005
General data		
Housing material	PA	
Protection degree	IP20	
Test standards	GB/T18802.1-2011 IEC 61643-1:1998	
Accessories		
Wiring diagram		
2P wiring diagram	Drawing 3	
2+1P wiring diagram	Drawing 4	

Type	Order no.	Type	Order no.
UB01-C/1-110VDC-40X	380678	UB01-C/1-120VDC-40X	380684
UB01-C/1-110VDC-40	380679	UB01-C/1-120VDC-40	380685
UB01-C/1+1-110VDC-40X	380680	UB01-C/1+1-120VDC-40X	380686
UB01-C/1+1-110VDC-40	380681	UB01-C/1+1-120VDC-40	380687
UB01-C/2-110VDC-40X	380682	UB01-C/2-120VDC-40X	380688
UB01-C/2-110VDC-40	380683	UB01-C/2-120VDC-40X	380689
90/18/66mm		90/18/66mm	
180V/140V		200V/150V	
220V		240V	
20KA		20KA	
40KA		40KA	
600V		800V	
32A		32A	
32A		32A	
⩽25ns		⩽25ns	
⩽0.3mA		⩽0.3mA	
-40～+85		-40～+85	
250V/125V		250V/125V	
1A		1A	
0.2A		0.2A	
16mm²		16mm²	
25mm²		25mm²	
0.5-1.5mm²		0.5-1.5mm²	
TH35-7.5	102001	TH35-7.5	102001
TH35-15	102005	TH35-15	102005
PA		PA	
IP20		IP20	
GB/T18802.1-2011 IEC 61643-1:1998		GB/T18802.1-2011 IEC 61643-1:1998	
Drawing 3		Drawing 3	
Drawing 4		Drawing 4	



Drawing 3

2P wiring diagram

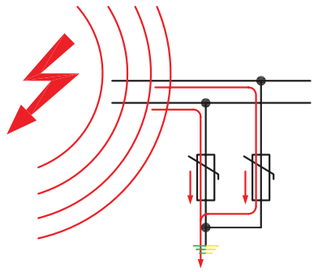


Drawing 4

2+1P wiring diagram

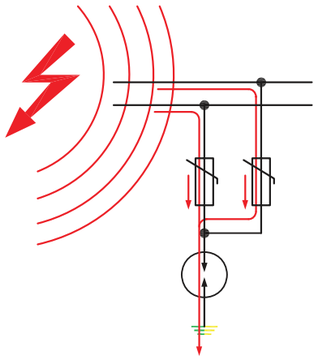
UB01-C series SPD is designed for DC power supply system.
It can be used to provide lightning (overvoltage) protection for solar and wind energy.

Features:
1. Low residual voltage and leakage current;
2. Response time⩽25nS;
3. Thermal disconnect and fuse devices;
4. Mechanical status indication: green(OK), red(Overloaded);
5. With or without floating remote indication contacts;
6. Can be mounted on TH 35 rails;



Drawing 1

2P electrical schematic



Drawing 2

2+1P electrical schematic

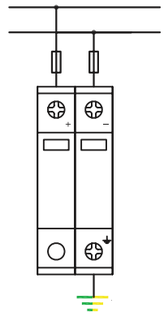
SPD for DC application
UB01-C/□-560VDC-40

Ordering data	Type	Order no.
□ SPD combinations: 1, 2, 3, 4, 1+1, 3+1 see drawing 1 under 4P drawing 2 for 3+1P X :With remote indication contact	UB01-C/1-560VDC-40X	380690
	UB01-C/1-560VDC-40	380691
	UB01-C/1+1-560VDC-40X	380692
	UB01-C/1+1-560VDC-40	380693
	UB01-C/2-560VDC-40X	380694
	UB01-C/2-560VDC-40	380695
	UB01-C/2+1-560VDC-40X	380696
	UB01-C/2+1-560VDC-40	380697
Dimension		
Width/Thickness(per piece)/Height	90/18/66mm	
Technical data		
Max. continuos operating voltage Uc DC/AC	560V/420V	
Breakdown voltage U1mA	680V	
Nominal discharge current In 8/20μS	20KA	
Max discharge current Imax 8/20μS	40KA	
Voltage protection level Up	2.2KV	
Pre-installed circuit breaker	32A	
Pre-installed fuse	32A	
Response time	⩽25ns	
Leakage current	⩽0.3mA	
Temperature range ℃	-40～+85	
Remote indication contact		
Max. operating voltage Umax AC/DC	250V/125V	
Max. operating current Imax AC	1A	
Max. operating current Imax DC	0.2A	
Connection data		
Phase	16mm²	
Ground	25mm²	
Remote indication contact	0.5-1.5mm²	
Mounting		
TH35 rails 	TH35-7.5	102001
	TH35-15	102005
General data		
Housing material	PA	
Protection degree	IP20	
Test standards	GB/T18802.1-2011 IEC 61643-1:1998	
Wiring diagram		
2P wiring diagram	Drawing 3	
2+1P wiring diagram	Drawing 4	

SPD for DC application
UB01-C/□-910VDC-40

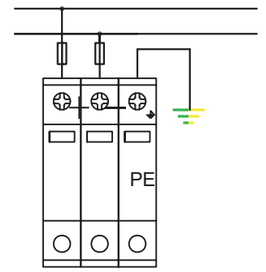
SPD for DC application
UB01-C/□-1000VDC-40

Type	Order no.	Type	Order no.
UB01-C/1-910VDC-40X	380698	UB01-C/1-1000VDC-40X	380706
UB01-C/1-910VDC-40	380699	UB01-C/1-1000VDC-40	380707
UB01-C/1+1-910VDC-40X	380700	UB01-C/1+1-1000VDC-40X	380708
UB01-C/1+1-910VDC-40	380701	UB01-C/1+1-1000VDC-40	380709
UB01-C/2-910VDC-40X	380702	UB01-C/2-1000VDC-40X	380710
UB01-C/2-910VDC-40	380703	UB01-C/2-1000VDC-40	380711
UB01-C/2+1-910VDC-40X	380704	UB01-C/2+1-1000VDC-40X	380712
UB01-C/2+1-910VDC-40	380705	UB01-C/2+1-1000VDC-40	380713
90/18/66mm		90/18/66mm	
895V/680V		980V750V	
1100V		1235V	
20KA		20KA	
40KA		40KA	
3.3KV		3.5KV	
32A		32A	
32A		32A	
⩽25ns		⩽25ns	
⩽0.3mA		⩽0.3mA	
-40～+85		-40～+85	
250V/125V		250V/125V	
1A		1A	
0.2A		0.2A	
16mm²		16mm²	
25mm²		25mm²	
0.5-1.5mm²		0.5-1.5mm²	
TH35-7.5	102001	TH35-7.5	102001
TH35-15	102005	TH35-15	102005
PA		PA	
IP20		IP20	
GB/T18802.1-2011 IEC 61643-1:1998		GB/T18802.1-2011 IEC 61643-1:1998	
Drawing 3		Drawing 3	
Drawing 4		Drawing 4	



Drawing 3

2P wiring diagram



Drawing 4

2+1P wiring diagram

Application

Can be used to provide protection for monitoring systems and equipments, such as "Power, PTZ, Camera", bank, residential area, factory, school, and transportation.

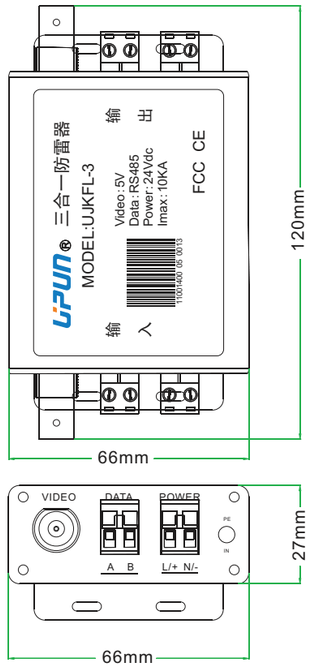
Features

1. Comprehensive protection for power supply of camera, PTZ control signal and video signal, low interference;
2. Large flow, low residual depression;
3. Multi-level protection;
4. Low insertion loss, superior transmission performance, free of leakage current.

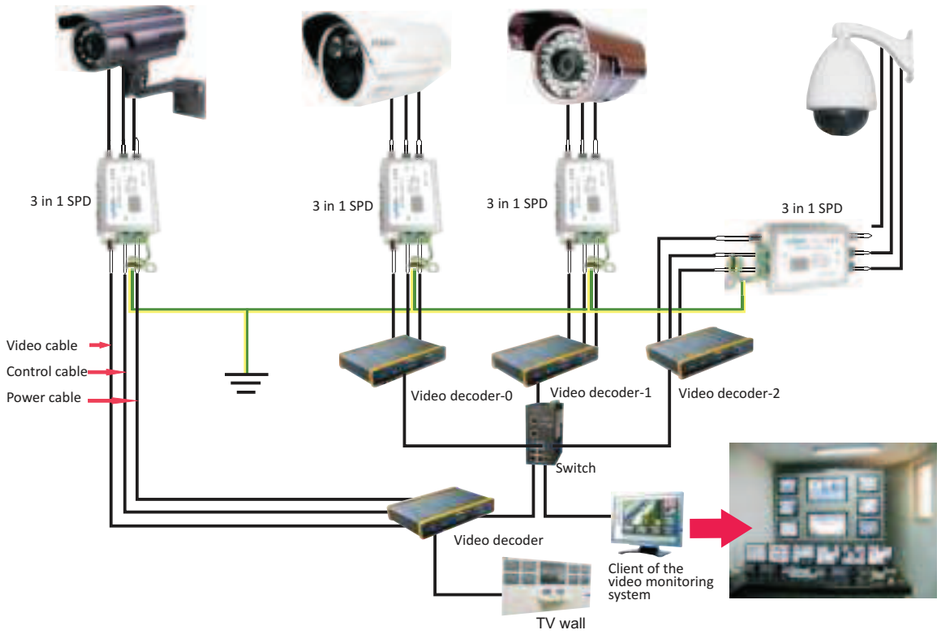
Mounting

1.Prepare for connection
2.Keep it away from rain, it may cause a short circuit.
3.Connect it in the correct direction, the end of output should be connected with the device to be protected.
4.Cut off power source before installing
5.Check the circuit after the installation is completed
6.No special maintenance is required. Just check regularly the product is well-connected and the status indication is working correctly.

Dimension drawing



Installation drawing



	3 in 1 CCTV camera SPD UJKFL-3-220Vac	3 in 1 CCTV camera SPD UJKFL-3-24Vdc	3 in 1 CCTV camera SPD UJKFL-3-12Vdc
			
Ordering data	**Type / Order no.**	**Type / Order no.**	**Type / Order no.**
SPD for monitoring system	UJKFL-3-220Vac 385051	UJKFL-3-24Vdc 385052	UJKFL-3-12Vdc 385053
Dimension			
Length/Width/Thickness	120*66*27mm（conntector included）	120*66*27mm（conntector included）	120*66*27mm（conntector included）
Technical data			
Power supply			
Operating voltage	220Vac	24Vdc	12Vdc
Max. continuos operating voltage Uc	275Vac	45Vdc	26Vdc
Rated operating voltage	3A	3A	3A
Nominal discharge current In 8/20μs	5KA	5KA	5KA
Max. discharge current Imax 8/20μs	10KA	10KA	10KA
Voltage protection level Up	900V		100V
Temperature range℃	-40～+85℃	-40～+85℃	-40～+85℃
Video and control			
Operating voltage	⩽12V	⩽12V	⩽12V
Nominal discharge current In 8/20μs	3KA	3KA	3KA
Max. discharge current Imax 8/20μs	5KA	5KA	5KA
Limiting voltage （10/700μs) Core-Housing/Ground	⩽40V	⩽40V	⩽40V
Transmission rate	⩽100Mbps	⩽100Mbps	⩽100Mbps
Impedance	75Ω	75Ω	75Ω
Insertion loss	⩽0.5dB	⩽0.5dB	⩽0.5dB
Interface form-I/O	BNC-K/J,2Pcrimp terminal	BNC-K/J,2Pcrimp terminal	BNC-K/J,2P crimp terminal
Others			
Housing	Aluminium alloy	Aluminium alloy	Aluminium alloy
Conductor connection			
Power supply	16-26AWG (Approx. 0.15～1.3mm²)	16-26AWG (Approx. 0.15～1.3mm²)	16-26AWG (Approx. 0.15～1.3mm²)
Control signal	16-26AWG (Approx. 0.15～1.3mm²)	16-26AWG (Approx. 0.15～1.3mm²)	16-26AWG (Approx. 0.15～1.3mm²)
Video signal	BNC	BNC	BNC
Grounding	Ground terminal block or earth wire of 2.5mm²	Ground terminal block or earth wire of 2.5mm²	Ground terminal block or earth wire of 2.5mm²
Mounting	Box or cabinet	Box or cabinet	Box or cabinet

Application

Can be used to provide protection for monitoring systems and equipments, such as "Power, PTZ, Camera", bank, residential area, factory, school, and transportation.

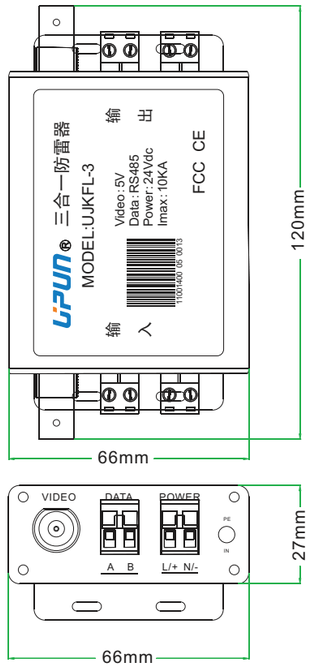
Features

1. Comprehensive protection for power supply of camera, PTZ control signal and video signal, low interference;
2. Large flow, low residual depression;
3. Multi-level protection;
4. Low insertion loss, superior transmission performance, free of leakage current.

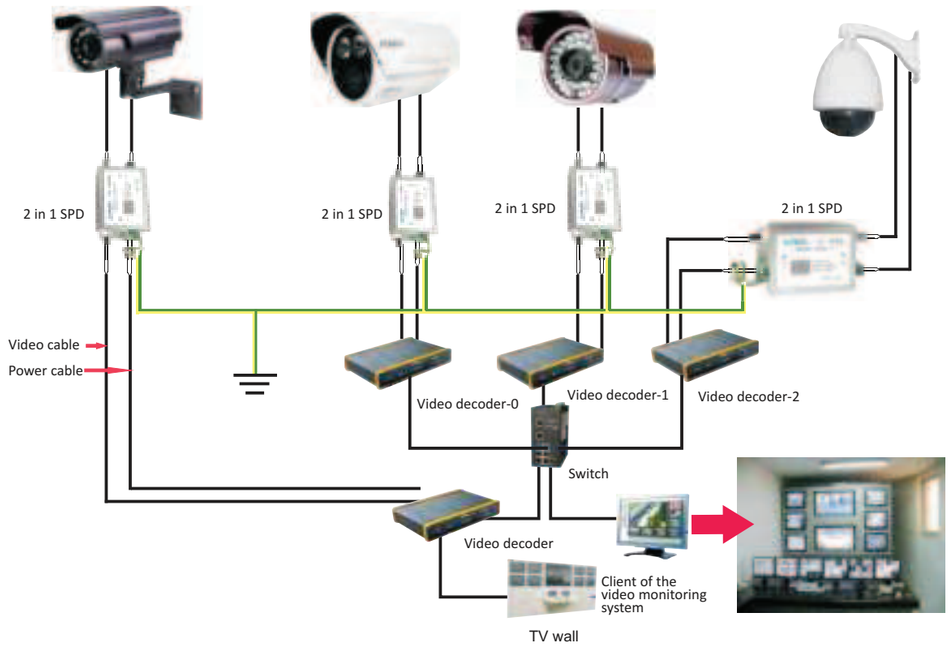
Mounting

1.Prepare for connection
2.Keep it away from rain, it may cause a short circuit.
3.Connect it in the correct direction, the end of output should be connected with the device to be protected.
4.Cut off power source before installing
5.Check the circuit after the installation is completed
6.No special maintenance is required. Just check regularly the product is well-connected and the status indication is working correctly.

Dimension drawing



Installation drawing



	2 in 1 CCTV camera SPD UJKFL-2-220Vac	2 in 1 CCTV camera SPD UJKFL-2-24Vdc	2 in 1 CCTV camera SPD UJKFL-2-12Vdc
			
Ordering data	**Type / Order no.**	**Type / Order no.**	**Type / Order no.**
SPD for monitoring system	UJKFL-2-220Vac 385054	UJKFL-2-24Vdc 385055	UJKFL-2-12Vdc 385056
Dimension			
Length/Width/Thickness	120*66*27mm（conntector included）	120*66*27mm（conntector included）	120*66*27mm（conntector included）
Technical data			
Power supply			
Operating voltage	220Vac	24Vdc	12Vdc
Max. continuos operating voltage Uc	275Vac	45Vdc	26Vdc
Rated operating voltage	3A	3A	3A
Nominal discharge current In 8/20μs	5KA	5KA	5KA
Max. discharge current Imax 8/20μs	10KA	10KA	10KA
Voltage protection level Up	900V		100V
Temperature range℃	-40～+85℃	-40～+85℃	-40～+85℃
Video			
Operating voltage	⩽12V	⩽12V	⩽12V
Nominal discharge current In 8/20μs	3KA	3KA	3KA
Max. discharge current Imax 8/20μs	5KA	5KA	5KA
Limiting voltage （10/700μs) Core-Housing/Ground	⩽40V	⩽40V	⩽40V
Transmission rate	⩽100Mbps	⩽100Mbps	⩽100Mbps
Impedance	75Ω	75Ω	75Ω
Insertion loss	⩽0.5dB	⩽0.5dB	⩽0.5dB
Interface form-I/O	BNC-K/J,2Pcrimp terminal	BNC-K/J,2Pcrimp terminal	BNC-K/J,2P crimp terminal
Others			
Housing	Aluminium alloy	Aluminium alloy	Aluminium alloy
Conductor connection			
Power supply	16-26AWG (Approx. 0.15～1.3mm²)	16-26AWG (Approx. 0.15～1.3mm²)	16-26AWG (Approx. 0.15～1.3mm²)
Video signal	BNC	BNC	BNC
Grounding	Ground terminal block or earth wire of 2.5mm²	Ground terminal block or earth wire of 2.5mm²	Ground terminal block or earth wire of 2.5mm²
Mounting	Box or cabinet	Box or cabinet	Box or cabinet

Power supply lightning protection cabinet

3-phase power supply lightning protection cabinet

UPK3-□/□-40

Ordering data	Type	Order no.
	UPK3-□/□-40	551001
Dimension		
Width/Thickness/Height	500×220×700mm	
Technical data		
Operating voltage Uo DC/AC	380V	
Max. continuous operating voltage Uc	385V	
Nominal discharge current In	20KA	
Max. discharge current Imax	40KA	
Voltage protection level Up	< 1.8KV	
Response time Ta	⩽25ns	
Input/output	□/□	
3-phase/single phase	3-phase	

UPK3-□/□-60

Type	Order no.
UPK3-□/□-60	551002
500×220×700mm	
380V	
385V	
30KA	
60KA	
< 2.0KV	
⩽25ns	
□/□	
3-phase	

UPK3-□/□-80

Type	Order no.
UPK3-□/□-80	551003
500×220×700mm	
380V	
385V	
40KA	
80KA	
< 2.2KV	
⩽25ns	
□/□	
3-phase	

UPK3-□/□-100

Type	Order no.
UPK3-□/□-100	551004
500×220×700mm	
380V	
385V	
50KA	
100KA	
< 2.5KV	
⩽25ns	
□/□	
3-phase	

UPK3-□/□-120

Type	Order no.
UPK3-□/□-120	551005
600×220×800mm	
380V	
385V	
60KA	
120KA	
< 2.8KV	
⩽25ns	
□/□	
3-phase	

Single-phase power supply lightning protection cabinet

UPK2-1/□-40

Ordering data	Type	Order no.
	UPK2-1/□-40	551006
Dimension		
Width/Thickness/Height	500×220×700mm	
Technical data		
Operating voltage Uo	220V	
Max. continuous operating voltage Uc	235V	
Nominal discharge current In	20KA	
Max. discharge current Imax	40KA	
Voltage protection level Up	< 1.8KV	
Response time Ta	⩽25ns	
Input/output	1/□	
3-phase/Single phase	Single phase	

UPK2-1/□-60

Type	Order no.
UPK2-1/□-60	551007
500×220×700mm	
220V	
235V	
30KA	
60KA	
< 2.0KV	
⩽25ns	
1/□	
Single phase	

UPK2-1/□-80

Type	Order no.
UPK2-1/□-80	551008
500×220×700mm	
220V	
235V	
40KA	
80KA	
< 2.2KV	
⩽25ns	
1/□	
Single phase	

UPK2-1/□-100

Type	Order no.
UPK2-1/□-100	551009
500×220×700mm	
220V	
235V	
50KA	
100KA	
< 2.5KV	
⩽25ns	
1/□	
Single phase	

U PK 3 - □ / □ - 000 N A V

- Voltmeter
- Ammeter
- Smart power lightning protection box
- Max. discharge current
- "□" output channel(customized)
- "□" input channel(customized)
- "2" 2-phase AC
- "3" 3-phase AC
- PK/PA/KK Product code
- Company code

Power supply lightning protection cabinet

Application

- The auto city-power switcher is used for switching between the two power supplies of emergency AC power supply system, to guarantee continuous and reliable operation of powered devices. It is mainly used for AC power distribution systems of communication stations, telecommunication rooms and other power.

Features

1. Flexible switching methods,auto/manual switching
2. Switches of well recognized brands home and abroad, e.g Schneider or ABB miniature circuit breakers
3. Possible to pre-install 32A~60A single phase or three phase generator input sockets
4. Optional voltage and current display and power supply operating indication
5. Optional power meter function (use an electric meter or others)
6. Optional generator start timing
7. Level B power supply lightning protector with different specifications and protection modes available on request
8. Level B power supply lightning protector incorporated in cabinet provides excellent protection for short line distance
9. Large peak current, low residual voltage and short response time of power supply lightning protector
10. Optional auxiliary functions of lightning counter, remote signaling and mains power failure alarm etc.
11. Superior electrical insulation

Auto city-power switcher

UKK3-□/□-40

Ordering data	Type	Order no.
	UKK3-□/□-40	561001

Dimension	
Width/Thickness/Height	500×220×700mm

Technical data	
Operating voltage Uo	380V/380V
Max. continuous operating voltage Uc	385V
Nominal discharge current In	20KA
Max. discharge current Imax	40KA
Voltage protection level Up	＜1.8KV
Response time Ta	⩽25ns
Input/output	□/□
3-phase/Single phase	3-phase

UKK3-□/□-40

Type	Order no.
UKK3-□/□-60	561002

500×220×700mm

380V/380V
385V
30KA
60KA
＜2.0KV
⩽25ns
□/□
3-phase

UKK3-□/□-80

Type	Order no.
UKK3-□/□-80	561003

600×220×800mm

380V/380V
385V
40KA
80KA
＜2.2KV
⩽25ns
□/□
3-phase

UKK3-□/□-100

Type	Order no.
UKK3-□/□-100	561004

600×220×800mm

380V/
385V
50KA
100KA
＜2.5KV
⩽25ns
□/□
3-phase

- Application
- Level B and C power supply protection
  They are designed for power distribution systems of mobile communication stations, telecommunication stations, computer rooms, power rooms, chemical industries, plants and minings, airports, railways, civil buildings, low voltage AC power distribution, solar PV and wind power generation etc.,
- Can be also used to provide overvoltage and over current protection with the short response time.

Features

1. Excellent performance with core components of well known brands
2. Capacity to withstand continuous and multi lightning strikes with strict current sharing technology
3. High carrying current, low residual voltage and short response time
4. Lightning counter
5. Remote surveillance with remote signaling function
6. SPD window status indication
7. Ensured separation of fault module with power supply system through built-in auto protection devices of the SPD module
8. “3+1” protection as standard, with other optional protection modes as required
9. Use Schneider high performance as back-up protection for the lightning protection cabinet, also possible to choose other foreign brands as customer requirements
10. Kevin wiring for lightning protection cabinet installation to reduce residual voltage of the line and improve the protection.

Standard


Ordering data	Type	Order no.	Type	Order no.
	UPA385/40	571007	UPA385/60	571008
Dimension				
Width/Thickness/Height	320×130×430mm		320×130×430mm	
Technical data				
Operating voltage Uo	380V/220V		380V/220V	
Max. continuous operating voltage Uc	385V		385V	
Nominal discharge current In	20KA		30KA	
Max. discharge current Imax	40KA		60KA	
Voltage protection level Up	< 1.8KV		< 2.0KV	
Protection mode	L-N,N-PE.L-N-PE		L-N,N-PE.L-N-PE	
Response time Ta	⩽25ns		⩽25ns	
Lightning counter	With		With	
SPD staus indication	With		With	
Floating remote indication	With		With	

Smart


Ordering data	Type	Order no.	Type	Order no.
	UPA385/40N	571001	UPA385/60N	571002
Dimension				
Width/Thickness/Height	300×120×400mm		300×120×400mm	
Technical data				
Operating voltage Uo	380V/220V		380V/220V	
Max. continuous operating voltage Uc	385V		385V	
Nominal discharge current In	20KA		30KA	
Max. discharge current Imax	40KA		60KA	
Voltage protection level Up	< 1.8KV		< 2.0KV	
Protection mode	L-N,N-PE.L-N-PE		L-N,N-PE.L-N-PE	
Response time Ta	⩽25ns		⩽25ns	
Lightning counter	With		With	
SPD staus indication	With		With	
Floating remote indication	With		With	

UPA385/80

UPA385/100

UPA385/120

UPA385/150

Type	Order no.	Type	Order no.	Type	Order no.	Type	Order no.
UPA385/80	571009	UPA385/100	571010	UPA385/120	571011	UPA385/150	571012
320×130×430mm		320×130×430mm		320×130×430mm		320×130×430mm	
380V/220V		380V		380V		380V	
385V		385V		385V		385V	
40KA		50KA		60KA		80KA	
80KA		100KA		120KA		150KA	
< 2.2KV		< 2.5KV		< 2.8KV		< 3.0KV	
L-N,N-PE.L-N-PE		L-N,N-PE.L-N-PE		L-N,N-PE.L-N-PE		L-N,N-PE.L-N-PE	
⩽25ns		⩽25ns		⩽25ns		⩽25ns	
With		With		With		With	
With		With		With		With	
With		With		With		With	

UPA385/80N

UPA385/100N

UPA385/120N

UPA385/150N

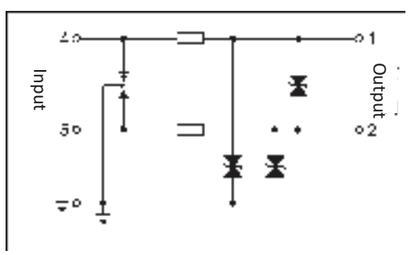
Type	Order no.	Type	Order no.	Type	Order no.	Type	Order no.
UPA385/80N	571003	UPA385/100N	571004	UPA385/120N	571005	UPA385/150N	571006
300×120×400mm		300×120×400mm		300×120×400mm		300×120×400mm	
380V/220V		380V		380V		380V	
385V		385V		385V		385V	
40KA		50KA		60KA		80KA	
80KA		100KA		120KA		150KA	
< 2.2KV		< 2.5KV		< 2.8KV		< 3.0KV	
L-N,N-PE.L-N-PE		L-N,N-PE.L-N-PE		L-N,N-PE.L-N-PE		L-N,N-PE.L-N-PE	
⩽25ns		⩽25ns		⩽25ns		⩽25ns	
With		With		With		With	
With		With		With		With	
With		With		With		With	

UTT Series product can be used to provide lightning protection for analog signal of 2-wire and 3-wire system.

Features:
1.A narrow width of 7.6mm, space-saving;
2.Low impedance;
3.Thermocouple and thermal resistance signal input.

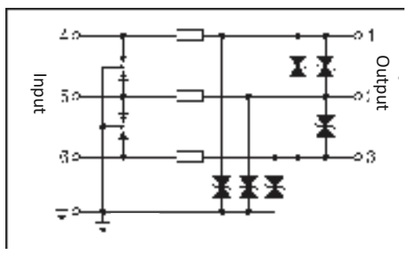
Type

U	TT	–	2	L	–	5
Company code	Surge protection for MCR technology		Wire system 2:2-wire 3:3-wire	Protection type: L:thermocouple/ thermal resistance K:switch BS: transducer RS: communication JD: floating,2-wire /2:common reference potential JD/S1: 2-wire,floating		Rated operating voltage 5Vdc 12Vdc 24Vdc 110Vac



Drawing 1

2-wire



Drawing 2

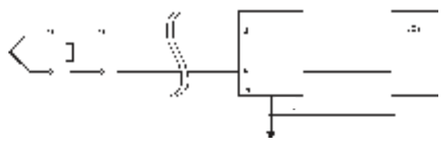
3-wire

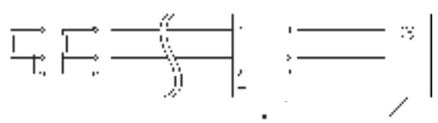
For analog signal
UTT-L

Ordering data	Type	Order no.
2-wire(see drawing 1)	UTT-2L-5VDC	385001
3-wire(see drawing 2)	UTT-3L-5VDC	385002
Dimension		
Width/Thickness/Height	99.0/7.6/92.4	
Technical data		
Rated operating voltage DC	5V	
Max. operating voltage DC	6V	
Rated current IN	250mA	
Nominal discharge current In 8/20μS	5KA	
Max. discharge current Imax 8/20μS	10KA	
Output voltage limitation 1000V/μS	15V	
Output voltage residual 8/20μS	30V	
Cut-off frequency -0.5/dB	10MHz	
Response time	10ns	
Resistance per path	4.7Ω	
Temperature range	-20℃～+60℃	
Connection data		
Cross section(AWG)	AWG20～12	
Cross section	0.5mm～2.5mm	
Mounting		
TH35 rails	TH35-7.5	102001
	TH35-15	102005
General data		
Housing material	PA	
Protection degree	IP20	
Test standards	GB/T18802.21-2004 IEC 61643-21:2000	
Accessories		
End bracket: for fixing SPD		

Application

UTT-2L-5VDC

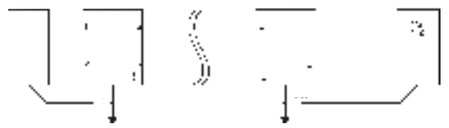




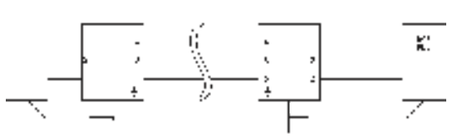
For analog signal
UTT-K

Type	Order no.
UTT-2K-12VDC	385003
UTT-3K-12VDC	385004
99.0/7.6/92.4	
12V	
15V	
250mA	
5KA	
10KA	
25V	
40V	
10MHz	
10ns	
4.7Ω	
-20℃～+60℃	
AWG20～12	
0.5mm～2.5mm	
TH35-7.5	102001
TH35-15	102005
PA	
IP20	
GB/T18802.21-2004 IEC 61643-21:2000	

UTT-2K-12VDC UTT-2K-12VDC



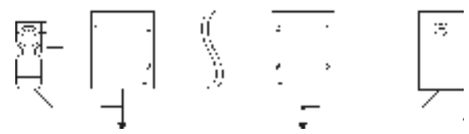
UTT-3K-12VDC UTT-3K-12VDC



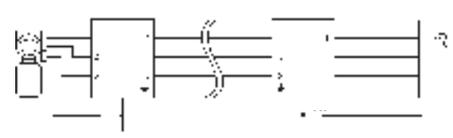
For analog signal
UTT-BS

Type	Order no.
UTT-2BS-24VDC	385005
UTT-3BS-24VDC	385006
99.0/7.6/92.4	
24V	
32V	
250mA	
5KA	
10KA	
45V	
60V	
10MHz	
10ns	
4.7Ω	
-20℃～+60℃	
AWG20～12	
0.5mm～2.5mm	
TH35-7.5	102001
TH35-15	102005
PA	
IP20	
GB/T18802.21-2004 IEC 61643-21:2000	

UTT-2BS-24VDC UTT-2BS-24VDC

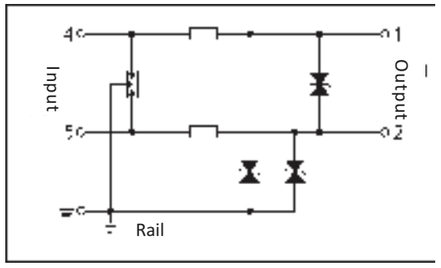


UTT-3BS-24VDC UTT-3BS-24VDC



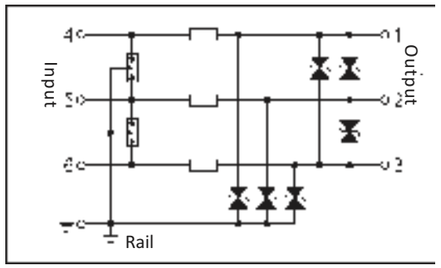
UTT Series product can be used to provide lightning protection for digital signal of 2-wire and 3-wire system.

Features:
1.A narrow width of 7.6mm, space-saving;
2.Low impedance;
3.RS485 and RS232 signal input.



Drawing 1

2-wire



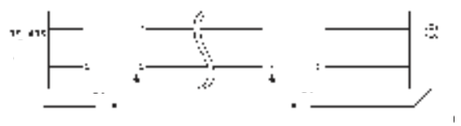
Drawing 2

3-wire

For digital signal
UTT-RS485

Ordering data	Type	Order no.
2-wire(see drawing 1)	UTT-RS485-5VDC	385007
3-wire(see drawing 2)		
Dimension		
Width/Thickness/Height	99.0/7.6/92.4	
Technical data		
Rated operating voltage DC	5V	
Max. operating voltage DC	6V	
Rated current IN	250mA	
Nominal discharge current In 8/20μS	5KA	
Max. discharge current Imax 8/20μS	10KA	
Output voltage limitation 1000V/μS	15V	
Output voltage residual 8/20μS	30V	
Cut-off frequency -0.5/dB	10MHz	
Response time	10ns	
Resistance per path	4.7Ω	
Temperature range	-20℃～+60℃	
Connection data		
Cross section(AWG)	AWG20～12	
Cross section	0.5mm～2.5mm	
Mounting		
TH35 rails	TH35-7.5	102001
	TH35-15	102005
General data		
Housing material	PA	
Protection degree	IP20	
Test standards	GB/T18802.21-2004 IEC 61643-21:2000	
Accessories		
End bracket: for fixing SPD		
Application		

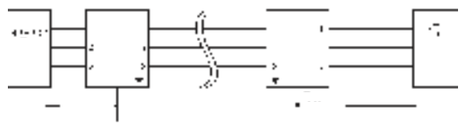
UTT-RS485-5VDC UTT-RS485-5VDC



For digital signal
UTT-RS232

Type	Order no.
UTT-RS232-12VDC	385008
99.0/7.6/92.4	
12V	
15V	
250mA	
5KA	
10KA	
25V	
40V	
10MHz	
10ns	
4.7Ω	
-20℃～+60℃	
AWG20～12	
0.5mm～2.5mm	
TH35-7.5	102001
TH35-7.5	102001
TH35-15	
PA	
IP20	
GB/T18802.21-2004 IEC 61643-21:2000	

UTT-RS232-12VDC UTT-RS232-12VDC

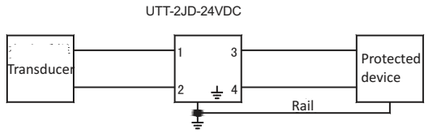


Type

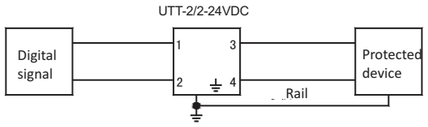
U	TT	–	2	L	–	5
Company code	Surge protection for MCR technology		Wire system 2:2-wire 3:3-wire	Protection type: L:thermocouple/ thermal resistance K:switch BS: transducer RS: communication JD: floating,2-wire /2:common reference potential JD/S1: 2-wire,floating		Rated operating voltage 5Vdc 12Vdc 24Vdc 110Vac

Application

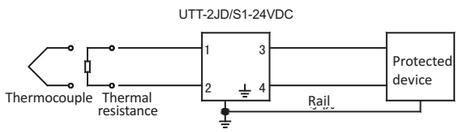
1. The product(type:UTT-2JD-24VDC)can be used to protect analog signal, such as 0-20mA, 0-10V

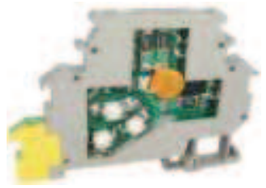
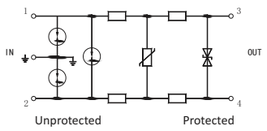


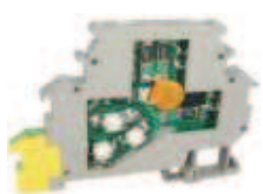
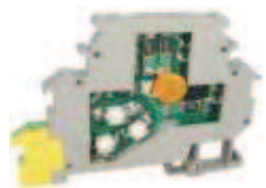
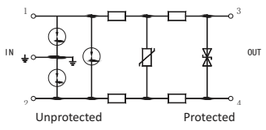
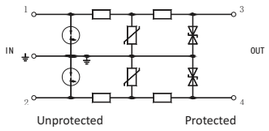
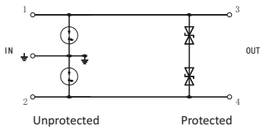
2. The product(type:UTT-2/2-24VDC)can be used to protect 2-wire with common reference potential, such as binary signal



3. The product(type:UTT-2JD/S1-24DC)can be used to protect floating double wire, such as temperature measurement



	For analog signal UTT-2JD-24VDC
	
Electrical diagrams	
	
Ordering data	**Type / Order no.**
	UTT-2JD-24VDC 385009
Dimension	
Width/Thickness/Height	79.6/54.6/6.2mm
Technical data	
Max. continuous operating voltage DC/AC	30V/21V
Impulse discharge current 10/350μS	500A/path
Rated current IN	300mA
Nominal discharge current In 8/20μS Core-Core/ Core-Ground	5KA/5KA
Max. discharge current Imax 8/20μS Core-Ground	10KA
Output voltage limitation 1000V/μS Core-Core/ Core-Ground	⩽44V/⩽650V
Output voltage residual 8/20μS Core-Core/ Core-Ground	⩽53V/⩽650V
Response time	⩽1ns/⩽100ns
Resistance per path	3.7Ω±5%
Temperature range	-20℃～+60℃
Connection data	
Cross section	0.2-2.5mm²
Mounting	
TH35 rails 	TH35-7.5 102001
	TH35-15 102005
General data	
Protection degree	IP20
Test standards	GB/T18802.21-2004 IEC 61643-21:2000
Accessories	
End bracket: for fixing SPD	
	UTT-G 385013
Marker strip	
Horizontally/Vertically Blank	UZB 6-10 014002
Can be printed 1- 600, or the technical data according to your requirements. Horizontally 1 2 3 4 5 6 7	UZB 6-10(Horizontally) 014007
Vertically 1 2 3 4 5 6 7	UZB 6-10(Vertically) 014008

	For analog signal UTT-2JD-110VAC	For digital signal UTT-2/2-24VDC	For analog signal UTT-2JD/S1-24VDC
			
Electrical diagrams			
			
Ordering data	**Type / Order no.**	**Type / Order no.**	**Type / Order no.**
	UTT-2JD-110VAC 385010	UTT-2/2-24VDC 385011	UTT-2JD/S1-24VDC 385012
Dimension			
	79.6/54.6/6.2mm	79.6/54.6/6.2mm	79.6/54.6/6.2mm
Technical data			
	170V/120V	30V/21V	30V/21V
	500A/path	500A/path	500A/path
	300mA	300mA	10A
	5KA/5KA	-/5KA	300A/5KA
	10KA	10KA	10KA
	⩽250V/⩽650V	-/⩽42V	⩽50V/⩽1500V
	⩽60V/-	-/⩽70	⩽80V/⩽50
	⩽1ns/⩽100ns	-/1ns	⩽1ns/100ns
	9.4Ω±5%	9.4Ω±5%	5mΩ±5%
	-20℃～+60℃	-20℃～+60℃	-20℃～+60℃
Connection data			
	0.2-2.5mm²	0.2-2.5mm²	0.2-2.5mm²
Mounting			
	TH35-7.5 102001	TH35-7.5 102001	TH35-7.5 102001
	TH35-15 102005	TH35-15 102005	TH35-15 102005
General data			
	IP20	IP20	IP20
	GB/T18802.21-2004 IEC 61643-21:2000	GB/T18802.21-2004 IEC 61643-21:2000	GB/T18802.21-2004 IEC 61643-21:2000
Accessories			
	UTT-G 385013	UTT-G 385013	UTT-G 385013
Marker strip			
	UZB 6-10 014002	UZB 6-10 014002	UZB 6-10 014002
	UZB 6-10(Horizontally) 014007	UZB 6-10(Horizontally) 014007	UZB 6-10(Horizontally) 014007
	UZB 6-10(Vertically) 014008	UZB 6-10(Vertically) 014008	UZB 6-10(Vertically) 014008

Transient-voltage-suppression diode

A transient-voltage-suppression diode may be either unidirectional or bidirectional. Compared to the voltage regulator tube, the suppressor diode has a shorter response time(pS).

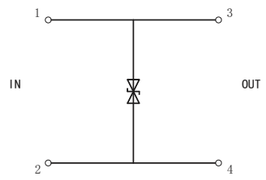
Type

U	DK	– U	D	A	24V
Company code	Housing type	Over-voltage protection	Protection type: D: Suppression diode R:Varistor Q:Gas-filled surge arrester	Degree of discharge current A-Large B-Medium C-Small	Rated operating voltage: 24V 48V 110V 220V

Overvoltage protection

With suppressor diode
UDK-UDA24V

Electrical diagrams



Ordering data

Type	Order no.
UDK-UDA 24Vdc	293013
UDK-UDA 24Vac	293001

Dimension

Width/Thickness/Height 65.5/6.2/57mm

Technical data

	UDK-UDA 24Vdc	UDK-UDA 24Vac
Rated operating voltage	24Vdc	24Vac
Rated current IN	20A	20A
Max. continuos operating voltage Uc DC	33Vdc	43Vdc
Max. continuos operating voltage Uc AC	22Vac	29Vac
Nominal discharge current In(10/1000us)	95.7A	73.5A
Residual voltage at In	45.4V	64.5V
Response time ta	⩽1ns	⩽1ns

General data

Housing material	PA
Protection degree	IP20
Test standards	GB/T18802.21-2004 IEC 61643-21:2000
IEC test classification	C3

Connection data

Cross section(AWG)	AWG20～12
Cross section	0.5mm～4mm

Accessories

Dustproof cover	UDK-F	312002

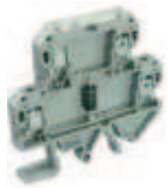
End cover

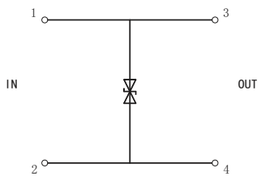
	UDK-G	312001

Insertion bridge

2-pos.	UEB 2-6	013019
3-pos. 	UEB 3-6	013027
10-pos.	UEB10-6	013013
Screwdriver 	YB 0.6×3.5	304002

With suppressor diode
UDK-UDA48V





Type	Order no.
UDK-UDA 48Vdc	293014
UDK-UDA 48Vac	293002

65.5/6.2/57mm

UDK-UDA 48Vdc	UDK-UDA 48Vac
48Vdc	48Vac
20A	20A
70Vdc	85Vdc
48Vac	58Vac
45.1A	37.2A
87.1V	126V
⩽1ns	⩽1ns

PA

IP20

GB/T18802.21-2004 IEC 61643-21:2000

C3

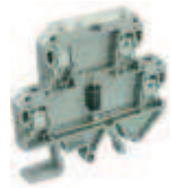
AWG20～12

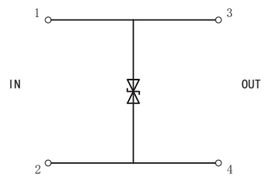
0.5mm～4mm

UDK-F	312002	
UDK-G	312001	

UEB 2-6	013019	
UEB 3-6	013027	
UEB10-6	013013	
YB 0.6×3.5	304002	

With suppressor diode
UDK-UDA110V





Type	Order no.
UDK-UDA 110Vdc	293015
UDK-UDA 110Vac	293003

65.5/6.2/57mm

UDK-UDA 110Vdc	UDK-UDA 110Vac
110Vdc	110Vac
20A	20A
160Vdc	220Vdc
109Vac	150Vac
19.7A	13.7A
209V	308V
⩽1ns	⩽1ns

PA

IP20

GB/T18802.21-2004 IEC 61643-21:2000

C3

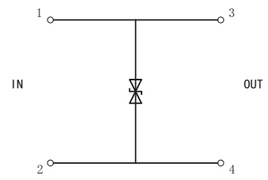
AWG20～12

0.5mm～4mm

UDK-F	312002	
UDK-G	312001	

UEB 2-6	013019	
UEB 3-6	013027	
UEB10-6	013013	
YB 0.6×3.5	304002	

With suppressor diode
UDK-UDA220V



Type	Order no.
UDK-UDA 220Vdc	293004

65.5/6.2/57mm

UDK-UDA 220Vdc

220Vdc

250Vdc

176Vac

12A

425V

⩽1ns

PA

IP20

GB/T18802.21-2004 IEC 61643-21:2000

C3

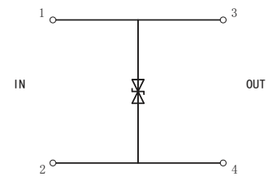
AWG20～12

0.5mm～4mm

UDK-F	312002	
UDK-G	312001	

UEB 2-6	013019	
UEB 3-6	013027	
UEB10-6	013013	
YB 0.6×3.5	304002	

With suppressor diode
UDK-UDB24V



Type	Order no.
UDK-UDB 24Vdc	293016
UDK-UDB 24Vac	293005

65.5/6.2/57mm

UDK-UDB 24Vdc	UDK-UDB 24Vac
24dc	24dc
20A	20A
33Vdc	47Vdc
20Vac	28Vac
32.8A	23.1A
45.7V	64.8
⩽1ns	⩽1ns

PA

IP20

GB/T18802.21-2004 IEC 61643-21:2000

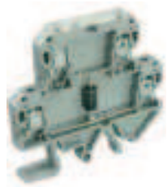
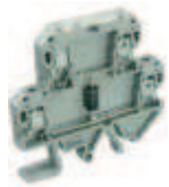
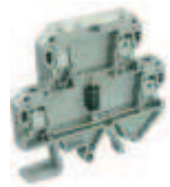
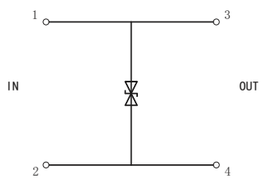
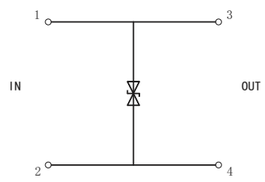
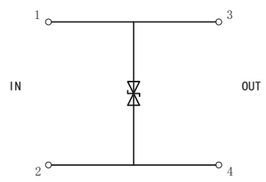
C3

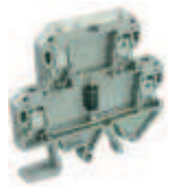
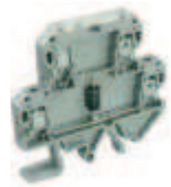
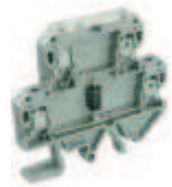
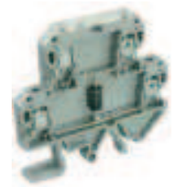
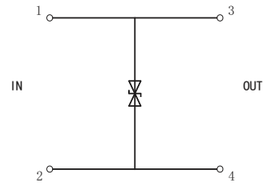
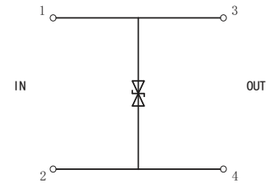
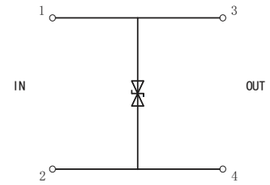
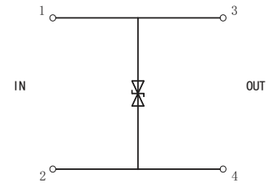
AWG20～12

0.5mm～4mm

UDK-F	312002	
UDK-G	312001	

UEB 2-6	013019	
UEB 3-6	013027	
UEB10-6	013013	
YB 0.6×3.5	304002	

Overvoltage protection	With suppressor diode UDK-UDB48V	With suppressor diode UDK-UDB110V	With suppressor diode UDK-UDB220V
			
Electrical diagrams			
Ordering data	Type / Order no.	Type / Order no.	Type / Order no.
	UDK-UDB 48Vdc 293017	UDK-UDB 110Vdc 293018	UDK-UDB 220Vdc 293008
	UDK-UDB 48Vac 293006	UDK-UDB 110Vac 293007	
Dimension			
Width/Thickness/Height	65.5/6.2/57mm	65.5/6.2/57mm	65.5/6.2/57mm
Technical data	UDK-UDB 48Vdc / UDK-UDB 48Vac	UDK-UDB 110Vdc / UDK-UDB 110Vac	UDK-UDB 220Vdc
Rated operating voltage	48Vdc / 48Vac	110Vdc / 110Vac	220Vdc
Rated current IN	20A / 20A	20A / 20A	20A
Max. continuos operating voltage Uc DC	58Vdc / 77.8Vdc	128Vdc / 185Vdc	256Vdc
Max. continuos operating voltage Uc AC	40Vac / 53Vac	88Vac / 128Vac	175Vac
Nominal discharge current In(10/1000us)	16.3A / 12A	7.3A / 4.6A	3.7A
Residual voltage at In	85V / 125V	207V / 328V	414V
Response time ta	⩽1ns / ⩽1ns	⩽1ns / ⩽1ns	⩽1ns
General data			
Housing material	PA	PA	PA
Protection degree	IP20	IP20	IP20
Test standards	GB/T18802.21-2004 IEC 61643-21:2000	GB/T18802.21-2004 IEC 61643-21:2000	GB/T18802.21-2004 IEC 61643-21:2000
IEC test classification	C3	C3	C3
Connection data			
Cross section(AWG)	AWG20～12	AWG20～12	AWG20～12
Cross section	0.5mm～4mm	0.5mm～4mm	0.5mm～4mm
Accessories			
Dustproof cover 	UDK-F 312002	UDK-F 312002	UDK-F 312002
End cover			
	UDK-G 312001	UDK-G 312001	UDK-G 312001
Insertion bridge			
2-pos.	UEB 2-6 013019	UEB 2-6 013019	UEB 2-6 013019
3-pos. 	UEB 3-6 013027	UEB 3-6 013027	UEB 3-6 013027
10-pos.	UEB10-6 013013	UEB10-6 013013	UEB10-6 013013
Screwdriver 	YB 0.6×3.5 304002	YB 0.6×3.5 304002	YB 0.6×3.5 304002

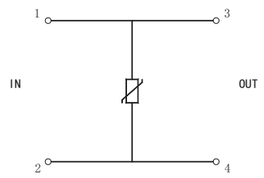
	With suppressor diode UDK-UDC24V	With suppressor diode UDK-UDC48V	With suppressor diode UDK-UDC110V	With suppressor diode UDK-UDC220V
				
				
	Type / Order no.	Type / Order no.	Type / Order no.	Type / Order no.
	UDK-UDC 24Vdc 293019	UDK-UDC 48Vdc 293020	UDK-UDC 110Vdc 293021	UDK-UDC 220Vdc 293012
	UDK-UDC 24Vac 293009	UDK-UDC 48Vac 293010	UDK-UDC 110Vac 293011	
	65.5/6.2/57mm	65.5/6.2/57mm	65.5/6.2/57mm	65.5/6.2/57mm
	UDK-UDC 24Vdc / UDK-UDC 24Vac	UDK-UDC 48Vdc / UDK-UDC 48Vac	UDK-UDC 110Vdc / UDK-UDC 110Vac	UDK-UDC 220Vdc
	24Vdc / 24Vac	48Vdc / 48Vac	110Vdc / 110Vac	220Vdc
	20A / 20A	20A / 20A	20A / 20A	20A
	28Vdc / 40Vdc	53Vdc / 77Vdc	128Vdc / 185Vdc	256Vdc
	20Vac / 28Vac	37Vac / 53Vac	90Vac / 128Vac	181Vac
	13.3A / 10.3A	6.6A / 4.8A	2.8A / 1.9A	1.3A
	45.7V / 70.1V	85V / 125V	207V / 328V	85V
	⩽1ns / ⩽1ns	⩽1ns / ⩽1ns	⩽1ns / ⩽1ns	⩽1ns
	PA	PA	PA	PA
	IP20	IP20	IP20	IP20
	GB/T18802.21-2004 IEC 61643-21:2000	GB/T18802.21-2004 IEC 61643-21:2000	GB/T18802.21-2004 IEC 61643-21:2000	GB/T18802.21-2004 IEC 61643-21:2000
	C3	C3	C3	C3
	AWG20～12	AWG20～12	AWG20～12	AWG20～12
	0.5mm～4mm	0.5mm～4mm	0.5mm～4mm	0.5mm～4mm
	UDK-F 312002	UDK-F 312002	UDK-F 312002	UDK-F 312002
	UDK-G 312001	UDK-G 312001	UDK-G 312001	UDK-G 312001
	UEB 2-6 013019	UEB 2-6 013019	UEB 2-6 013019	UEB 2-6 013019
	UEB 3-6 013027	UEB 3-6 013027	UEB 3-6 013027	UEB 3-6 013027
	UEB10-6 013013	UEB10-6 013013	UEB10-6 013013	UEB10-6 013013
	YB 0.6×3.5 304002	YB 0.6×3.5 304002	YB 0.6×3.5 304002	YB 0.6×3.5 304002

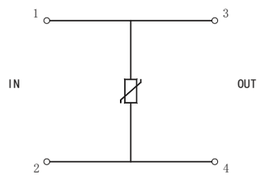
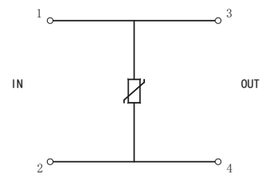
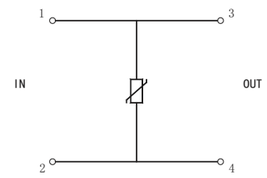
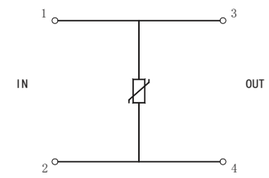
Varistor

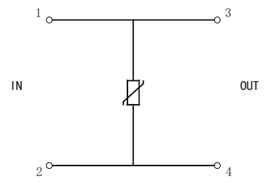
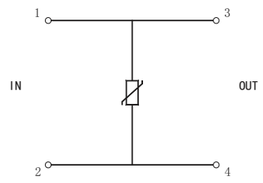
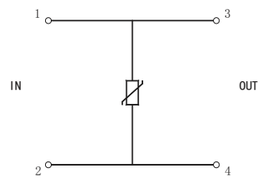
Varistor is typically used in parallel with the component or device to be protected. The varistor allows the pass of the maximum AC operating voltage. Any voltage higher than the indicated voltage will be converted safely. The varistor can be applied to medium or higher voltage surge circuits.

Type

U	DK	– U	D	A	24V
Company code	Housing type	Over-voltage protection	Protection type: D: Suppression diode R:Varistor Q:Gas-filled surge arrester	Degree of discharge current A-Large B-Medium C-Small	Rated operating voltage: 24V 48V 110V 220V

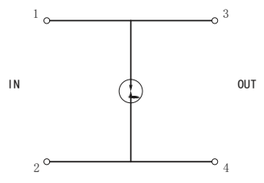
	With varistor UDK-URA24V
	
Electrical diagrams	
Ordering data	Type / Order no.
	UDK-URA 24Vdc 294009
	UDK-URA 24Vac 294005
Dimension	
Width/Thickness/Height	65.5/6.2/57mm
Technical data	UDK-URA 24Vdc / UDK-URA 24Vac
Rated operating voltage	24Vdc / 24Vac
Rated current IN	20A / 20A
Max. continuos operating voltage Uc DC	38V / 56V
Max. continuos operating voltage Uc AC	30V / 40V
Breakdown voltage V1mA	47V / 60V
Nominal discharge current In (8/20)us	0.5KA / 0.5KA
Referance capacitance	1500pf / 1250pf
General data	
Housing material	PA
Protection degree	IP20
Test standards	GB/T18802.21-2004 IEC 61643-21:2000
IEC test classification	C3
Connection data	
Cross section(AWG)	AWG20～12
Cross section	0.5mm～4mm
Accessories	
Dustproof cover 	UDK-F 312002
End cover	
	UDK-G 312001
Insertion bridge	
2-pos.	UEB 2-6 013019
3-pos. 	UEB 3-6 013027
10-pos.	UEB10-6 013013
Screwdriver 	YB 0.6×3.5 304002

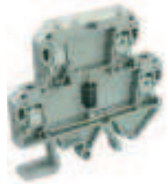
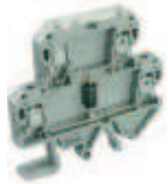
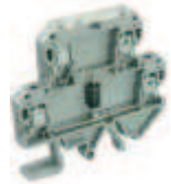
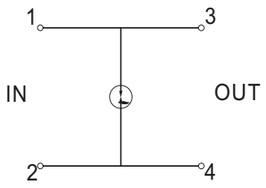
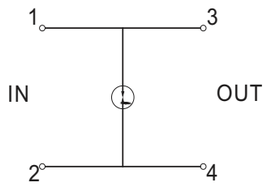
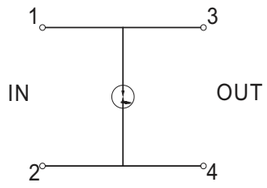
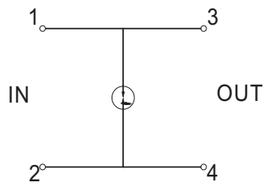
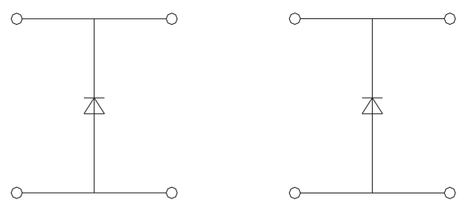
	With varistor UDK-URA48V	With varistor UDK-URA110V	With varistor UDK-URA220V	With varistor UDK-URB24V
				
Electrical diagrams				
Ordering data	Type / Order no.	Type / Order no.	Type / Order no.	Type / Order no.
	UDK-URA 48Vdc 294010	UDK-URA 110Vdc 294011	UDK-URA 220Vdc 294012	UDK-URB 24Vdc 294013
	UDK-URA 48Vac 294006	UDK-URA 110Vac 294007	UDK-URA 220Vac 294008	UDK-URB 24Vac 294001
Dimension				
Width/Thickness/Height	65.5/6.2/57mm	65.5/6.2/57mm	65.5/6.2/57mm	65.5/6.2/57mm
Technical data	UDK-URA 48Vdc / UDK-URA 48Vac	UDK-URA 110Vdc / UDK-URA 110Vac	UDK-URA 220Vdc / UDK-URA 220Vac	UDK-URB 24Vdc / UDK-URB 24Vac
Rated operating voltage	48Vdc / 48Vac	110Vdc / 110Vac	220Vdc / 220Vac	24Vdc / 24Vac
Rated current IN	20A / 20A	20A / 20A	20A / 20A	20A / 20A
Max. continuos operating voltage Uc DC	85V / 125V	150V / 180V	300V / 350V	38V / 56V
Max. continuos operating voltage Uc AC	60V / 95V	115V / 140V	230V / 275V	30V / 40V
Breakdown voltage V1mA	100V / 150V	180V / 220V	360V / 430V	47V / 68V
Nominal discharge current In (8/20)us	2.5KA / 2.5KA	2.5KA / 2.5KA	2.5KA / 2.5KA	1KA / 1KA
Referance capacitance	920pf / 760pf	310pf / 270pf	610pf / 160pf	3800pf / 270pf
General data				
Housing material	PA	PA	PA	PA
Protection degree	IP20	IP20	IP20	IP20
Test standards	GB/T18802.21-2004 IEC 61643-21:2000	GB/T18802.21-2004 IEC 61643-21:2000	GB/T18802.21-2004 IEC 61643-21:2000	GB/T18802.21-2004 IEC 61643-21:2000
IEC test classification	C1、C2	C3	C3	C3
Connection data				
Cross section(AWG)	AWG20～12	AWG20～12	AWG20～12	AWG20～12
Cross section	0.5mm～4mm	0.5mm～4mm	0.5mm～4mm	0.5mm～4mm
Accessories				
Dustproof cover	UDK-F 312002	UDK-F 312002	UDK-F 312002	UDK-F 312002
End cover				
	UDK-G 312001	UDK-G 312001	UDK-G 312001	UDK-G 312001
Insertion bridge				
2-pos.	UEB 2-6 013019	UEB 2-6 013019	UEB 2-6 013019	UEB 2-6 013019
3-pos.	UEB 3-6 013027	UEB 3-6 013027	UEB 3-6 013027	UEB 3-6 013027
10-pos.	UEB10-6 013013	UEB10-6 013013	UEB10-6 013013	UEB10-6 013013
Screwdriver	YB 0.6×3.5 304002	YB 0.6×3.5 304002	YB 0.6×3.5 304002	YB 0.6×3.5 304002

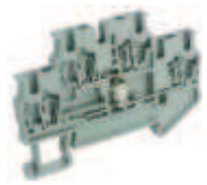
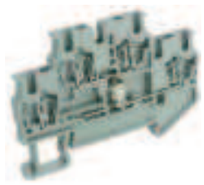
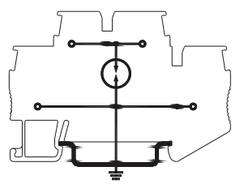
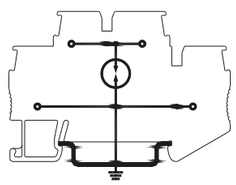
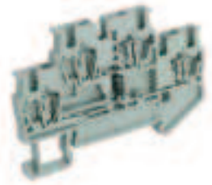
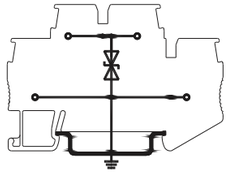
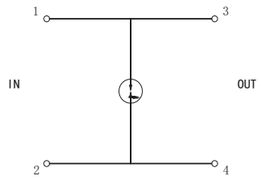
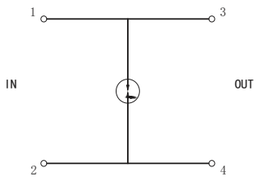
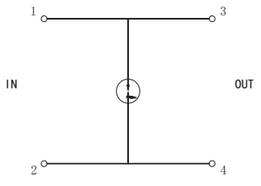
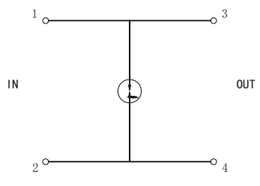
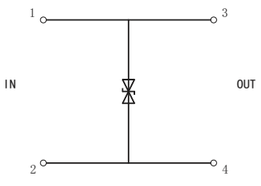
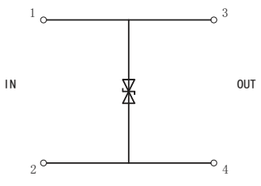
	With varistor UDK-URB48V	With varistor UDK-URB110V	With varistor UDK-URB220V
			
Electrical diagrams			
			
Ordering data	Type / Order no.	Type / Order no.	Type / Order no.
	UDK-URB 48Vdc 294014	UDK-URB 110Vdc 294015	UDK-URB 220Vdc 294016
	UDK-URB 48Vac 294002	UDK-URB 110Vac 294003	UDK-URB 220Vac 294004
Dimension			
Width/Thickness/Height	65.5/6.2/57mm	65.5/6.2/57mm	65.5/6.2/57mm
Technical data	UDK-URB 48Vdc / UDK-URB 48Vac	UDK-URB 110Vdc / UDK-URB 110Vac	UDK-URB 220Vdc / UDK-URB 220Vac
Rated operating voltage	48Vdc / 48Vac	110Vdc / 110Vac	220Vdc / 220Vac
Rated current IN	20A / 20A	20A / 20A	20A / 20A
Max. continuos operating voltage Uc DC	85V / 125V	150V / 180V	300V / 350V
Max. continuos operating voltage Uc AC	60V / 95V	115V / 140V	230V / 275V
Breakdown voltage V1mA	100V / 150V	180V / 220V	360V / 430V
Nominal discharge current In (8/20)us	4.5KA / 4.5KA	4.5KA / 4.5KA	4.5KA / 4.5KA
Referance capacitance	1900pf / 940pf	800pf / 640pf	430pf / 370pf
General data			
Housing material	PA	PA	PA
Protection degree	IP20	IP20	IP20
Test standards	GB/T18802.21-2004 IEC 61643-21:2000	GB/T18802.21-2004 IEC 61643-21:2000	GB/T18802.21-2004 IEC 61643-21:2000
IEC test classification	C1、C2	C3	C3
Connection data			
Cross section(AWG)	AWG20～12	AWG20～12	AWG20～12
Cross section	0.5mm～4mm	0.5mm～4mm	0.5mm～4mm
Accessories			
Dustproof cover	UDK-F 312002	UDK-F 312002	UDK-F 312002
End cover	UDK-G 312001	UDK-G 312001	UDK-G 312001
Insertion bridge			
2-pos.	UEB 2-6 013019	UEB 2-6 013019	UEB 2-6 013019
3-pos.	UEB 3-6 013027	UEB 3-6 013027	UEB 3-6 013027
10-pos.	UEB10-6 013013	UEB10-6 013013	UEB10-6 013013
Screwdriver	YB 0.6×3.5 304002	YB 0.6×3.5 304002	YB 0.6×3.5 304002

Type

U	DK	–	U	D	A	24V
Company code	Housing type		Over-voltage protection	Protection type: D: Suppression diode R:Varistor Q:Gas-filled surge arrester	Degree of discharge current A-Large B-Medium C-Small	Rated operating voltage: 24V 48V 110V 220V

	With gas-filled surge arrester UDK-UQA110V
	
Electrical diagrams	
	
Ordering data	Type / Order no.
	UDK-UQA 110Vdc 295013
	UDK-UQA 110Vac 295009
Dimension	
Width/Thickness/Height	65.5/6.2/57mm
Technical data	UDK-UQA 110Vdc / UDK-UQA 110Vac
Rated operating voltage	110Vdc / 110Vac
Rated current IN	20A / 20A
Max. continuos operating voltage Uc DC	127V / 195V
Max. continuos operating voltage Uc AC	90V / 138V
Nominal discharge current In (8/20)us	5KA / 5KA
Output voltage limitation at 1KV/us	⩽700V / ⩽700V
Response time ta	⩽100ns / ⩽100ns
General data	
Housing material	PA
Protection degree	IP20
Test standards	GB/T18802.21-2004 IEC 61643-21:2000
IEC test classification	C1、C2
Connection data	
Cross section(AWG)	AWG20～12
Cross section	0.5mm～4mm
Accessories	
Dustproof cover	UDK-F 312002
End cover	UDK-G 312001
Insertion bridge	
2-pos.	UEB 2-6 013019
3-pos.	UEB 3-6 013027
10-pos.	UEB10-6 013013
Screwdriver	YB 0.6×3.5 304002

	With gas-filled surge arrester UDK-UQA220V	With gas-filled surge arrester UDK-UQB110V	With gas-filled surge arrester UDK-UQB220V	With diode UDK-D24Vdc	With diode UDK-D48Vdc	With diode UDK-D110Vdc	With diode UDK-D220Vdc
							
Electrical diagrams							
Ordering data	Type / Order no.	Type / Order no.	Type / Order no.	Type / Order no.	Type / Order no.	Type / Order no.	Type / Order no.
	UDK-UQA 220Vdc 295014	UDK-UQB 110Vdc 295011	UDK-UQB 220Vdc 295012	UDK-D 24Vdc 297005	UDK-D 48Vdc 297006	UDK-D 110Vdc 297007	UDK-D 220Vdc 297008
	UDK-UQA 220Vac 295010	UDK-UQB 110Vac 295006	UDK-UQB 220Vac 295007				
Dimension							
Width/Thickness/Height	65.5/6.2/57mm	65.5/6.2/57mm	65.5/6.2/57mm	65.5/6.2/57mm	65.5/6.2/57mm	65.5/6.2/57mm	65.5/6.2/57mm
Technical data	UDK-UQA 220Vdc / UDK-UQA 220Vac	UDK-UQB 110Vdc / UDK-UQB 110Vac	UDK-UQB 220Vdc / UDK-UQB 220Vac				
Rated operating voltage	220Vdc / 220Vac	110Vdc / 110Vac	220Vdc / 220Vac	24Vdc	48Vdc	110Vdc	220Vdc
Rated impulse voltage				4KV	4KV	4KV	4KV
Rated current IN	20A / 20A	20A / 20A	20A / 20A	2A	2A	2A	2A
Max. continuos operating voltage Uc DC	255V / 399V	127V / 195V	255V / 399V				
Max. continuos operating voltage Uc AC	180V / 282V	90V / 137V	180V / 282V				
Nominal discharge current In (8/20)us	5KA / 5KA	10KA / 10KA	10KA / 10KA				
Output voltage limitation at 1KV/us	⩽900V / ⩽1200V	⩽800V / ⩽800V	⩽900V / ⩽1200V				
Response time ta	⩽100ns / ⩽100ns	⩽100ns / ⩽100ns	⩽100ns / ⩽100ns				
Temperature range				-25℃～+40℃	-25℃～+40℃	-25℃～+40℃	-25℃～+40℃
Clearance and creepage distance				⩾3mm	⩾3mm	⩾3mm	⩾3mm
Cross section(AWG)	AWG20～12	AWG20～12	AWG20～12	AWG20～12	AWG20～12	AWG20～12	AWG20～12
Cross section	0.5mm～4mm	0.5mm～4mm	0.5mm～4mm	0.5mm～4mm	0.5mm～4mm	0.5mm～4mm	0.5mm～4mm
General data							
Housing material	PA	PA	PA				
Protection degree	IP20	IP20	IP20				
Pollution degree				2	2	2	2
Test standards	GB/T18802.21-2004 IEC 61643-21:2000	GB/T18802.21-2004 IEC 61643-21:2000	GB/T18802.21-2004 IEC 61643-21:2000				
IEC test classification	C1、C2	C1、C2	C1、C2				
Surge voltage category				III	III	III	III
Accessories							
Dustproof cover 	UDK-F 312002	UDK-F 312002	UDK-F 312002	UDK-F 312002	UDK-F 312002	UDK-F 312002	UDK-F 312002
End cover 							
	UDK-G 312001	UDK-G 312001	UDK-G 312001	UDK-G 312001	UDK-G 312001	UDK-G 312001	UDK-G 312001
Insertion bridge							
2-pos.	UEB 2-6 013019	UEB 2-6 013019	UEB 2-6 013019	UEB 2-6 013019	UEB 2-6 013019	UEB 2-6 013019	UEB 2-6 013019
3-pos. 	UEB 3-6 013027	UEB 3-6 013027	UEB 3-6 013027	UEB 3-6 013027	UEB 3-6 013027	UEB 3-6 013027	UEB 3-6 013027
10-pos.	UEB10-6 013013	UEB10-6 013013	UEB10-6 013013	UEB10-6 013013	UEB10-6 013013	UEB10-6 013013	UEB10-6 013013
Screwdriver 	YB 0.6×3.5 304002	YB 0.6×3.5 304002	YB 0.6×3.5 304002				

	With gas-filled surge arrester UJ5-UQA110V	With gas-filled surge arrester UJ5-UQA220V	With gas-filled surge arrester UJ5-JD-UQA110V	With gas-filled surge arrester UJ5-JD-UQA220V	With suppressor diode UJ5-UDB24V	With suppressor diode UJ5-JD-UDB24V
						
Electrical diagrams						
Ordering data	Type / Order no.	Type / Order no.	Type / Order no.	Type / Order no.	Type / Order no.	Type / Order no.
	UJ5-UQA 110Vdc 421102	UJ5-UQA 220Vdc 421104	UJ5-JD-UQA 110Vdc 421106	UJ5-JD-UQA 220Vdc 421108	UJ5-UDB 24Vdc 421110	UJ5-JD-UDB 24Vdc 421112
	UJ5-UQA 110Vac 421103	UJ5-UQA 220Vac 421105	UJ5-JD-UQA 110Vac 421107	UJ5--JD-UQA 220Vac 421109	UJ5-UDB 24Vac 421111	UJ5-JD-UDB 24Vac 421113
Dimension						
Width/Thickness/Height	83.5/6.2/45.8mm	83.5/6.2/45.8mm	83.5/6.2/45.8mm	83.5/6.2/45.8mm	83.5/6.2/45.8mm	83.5/6.2/45.8mm

Technical data	UJ5-UQA 110Vdc	UJ5-UQA 110Vac	UJ5-UQA 220Vdc	UJ5-UQA 220Vac	UJ5-JD-UQA 110Vdc	UJ5-JD-UQA 110Vac	UJ5-UQA 220Vdc	UJ5-UQA 220Vac	UJ5-UDB 24Vdc	UJ5-UDB 24Vac	UJ5-JD-UDB 24Vdc	UJ5-JD-UDB 24Vac
Rated operating voltage	110Vdc	110Vac	220Vdc	220Vac	110Vdc	110Vac	220Vdc	220Vac	24Vdc	24Vdc	24Vdc	24Vdc
Rated current IN	20A	20A	20A	20A	20A	20A	20A	20A	32A	32A	32A	32A
Max. continuos operating voltage Uc DC	127V	195V	255V	399V	127V	195V	255V	399V	28Vdc	40Vdc	28Vdc	40Vdc
Max. continuos operating voltage Uc AC	90V	138V	180V	282V	90V	138V	180V	282V	20Vac	28Vac	20Vac	28Vac
Nominal discharge current In(10/1000us)	5KA	5KA	5KA	5KA	5KA	5KA	5KA	5KA	33A	23.2A	33A	23.2A
Residual voltage at In	⩽700V	⩽700V	⩽900V	⩽1200V	⩽700V	⩽700V	⩽900V	⩽1200V	45.7V	64.8	45.7V	64.8
Response time ta	⩽100ns	⩽100ns	⩽100ns	⩽100ns	⩽100ns	⩽100ns	⩽100ns	⩽100ns	⩽1ns	⩽1ns	⩽1ns	⩽1ns
General data												
Housing material	PA		PA		PA		PA		PA		PA	
Protection degree	IP20		IP20		IP20		IP20		IP20		IP20	
Test standards	GB/T18802.21-2004 IEC 61643-21:2000		GB/T18802.21-2004 IEC 61643-21:2000		GB/T18802.21-2004 IEC 61643-21:2000		GB/T18802.21-2004 IEC 61643-21:2000		GB/T18802.21-2004 IEC 61643-21:2000		GB/T18802.21-2004 IEC 61643-21:2000	
IEC test classification	C1、C2		C1、C2		C1、C2		C1、C2		C3		C3	
Connection data												
Cross section(AWG)	AWG20～12		AWG20～12		AWG20～12		AWG20～12		AWG20～12		AWG20～12	
Cross section	0.5mm～4mm		0.5mm～4mm		0.5mm～4mm		0.5mm～4mm		0.5mm～4mm		0.5mm～4mm	
End cover												
	UJ5-4/2-2G 422036		UJ5-4/2-2G 422036		UJ5-4/2-2G 422036		UJ5-4/2-2G 422036		UJ5-4/2-2G 422036		UJ5-4/2-2G 422036	
	UJ5-1.5～4/2-2FG 422020		UJ5-1.5～4/2-2FG 422020		UJ5-1.5～4/2-2FG 422020		UJ5-1.5～4/2-2FG 422020		UJ5-1.5～4/2-2FG 422020		UJ5-1.5～4/2-2FG 422020	
Insertion bridge												
2-pos.	UFBS 2-6 423011		UFBS 2-6 423011		UFBS 2-6 423011		UFBS 2-6 423011		UFBS 2-6 423011		UFBS 2-6 423011	
3-pos.	UFBS 3-6 423012		UFBS 3-6 423012		UFBS 3-6 423012		UFBS 3-6 423012		UFBS 3-6 423012		UFBS 3-6 423012	
4-pos.	UFBS 4-6 423013		UFBS 4-6 423013		UFBS 4-6 423013		UFBS 4-6 423013		UFBS 4-6 423013		UFBS 4-6 423013	
5-pos.	UFBS 5-6 423014		UFBS 5-6 423014		UFBS 5-6 423014		UFBS 5-6 423014		UFBS 5-6 423014		UFBS 5-6 423014	
10-pos.	UFBS 10-6 423015		UFBS 10-6 423015		UFBS 10-6 423015		UFBS 10-6 423015		UFBS 10-6 423015		UFBS 10-6 423015	
Screwdriver	YB 0.6×3.5 304002		YB 0.6×3.5 304002		YB 0.6×3.5 304002		YB 0.6×3.5 304002		YB 0.6×3.5 304002		YB 0.6×3.5 304002	