

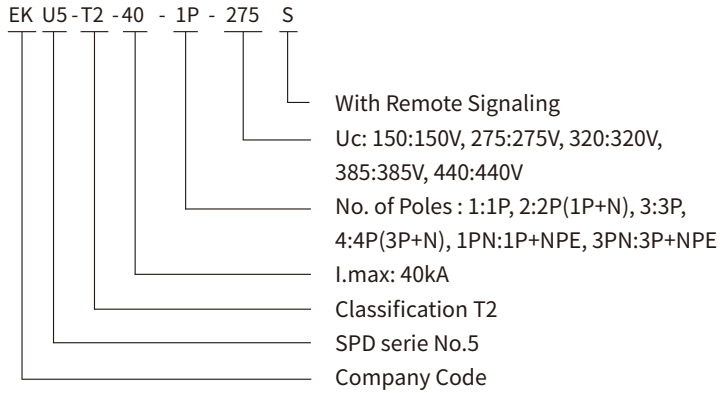
EKU5-T2-40 SPD TYPE T2

ET3K®

Usage manual

Standard_ IEC/EN61643-11

Product Selection Guide



EKU5-T2-40
2P(1P+N)



EKU5-T2-40
1P+NPE



EKU5-T2-40
3P

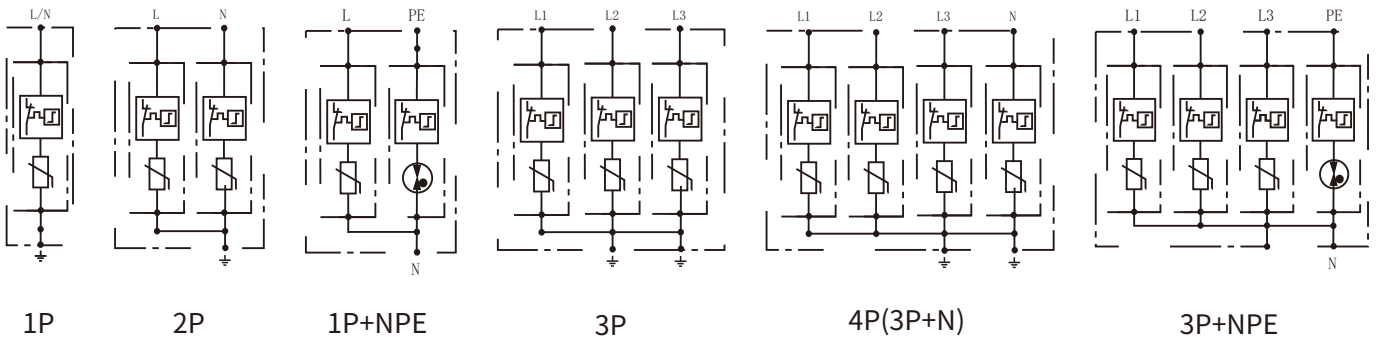


EKU5-T2-40
4P(3P+N)



EKU5-T2-40
3P+NPE

Basic Circuit Diagram



SPD Type Reference List

No. of Poles	Max. Continuous Operating AC Voltage				
	150V	275V	320V	385V	440V
1P	EKU5-T2-40-1P150	EKU5-T2-40-1P275	EKU5-T2-40-1P320	EKU5-T2-40-1P385	EKU5-T2-40-1P440
2P(1P+N)	EKU5-T2-40-2P150	EKU5-T2-40-2P275	EKU5-T2-40-2P320	EKU5-T2-40-2P385	EKU5-T2-40-2P440
3P	EKU5-T2-40-3P150	EKU5-T2-40-3P275	EKU5-T2-40-3P320	EKU5-T2-40-3P385	EKU5-T2-40-3P440
4P(3P+N)	EKU5-T2-40-4P150	EKU5-T2-40-4P275	EKU5-T2-40-4P320	EKU5-T2-40-4P385	EKU5-T2-40-4P440
1P+NPE	EKU5-T2-40-1PN150	EKU5-T2-40-1PN275	EKU5-T2-40-1PN320	EKU5-T2-40-1PN385	EKU5-T2-40-1PN440
3P+NPE	EKU5-T2-40-3PN150	EKU5-T2-40-3PN275	EKU5-T2-40-3PN320	EKU5-T2-40-3PN385	EKU5-T2-40-3PN440

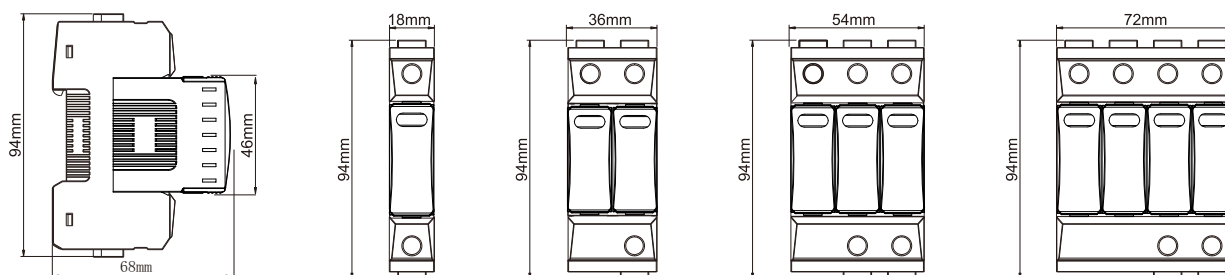
With Remote Signaling

1P	EKU5-T2-40-1P150S	EKU5-T2-40-1P275S	EKU5-T2-40-1P320S	EKU5-T2-40-1P385S	EKU5-T2-40-1P440S
2P(1P+N)	EKU5-T2-40-2P150S	EKU5-T2-40-2P275S	EKU5-T2-40-2P320S	EKU5-T2-40-2P385S	EKU5-T2-40-2P440S
3P	EKU5-T2-40-3P150S	EKU5-T2-40-3P275S	EKU5-T2-40-3P320S	EKU5-T2-40-3P385S	EKU5-T2-40-3P440S
4P(3P+N)	EKU5-T2-40-4P150S	EKU5-T2-40-4P275S	EKU5-T2-40-4P320S	EKU5-T2-40-4P385S	EKU5-T2-40-4P440S
1P+NPE	EKU5-T2-40-1PN150S	EKU5-T2-40-1PN275S	EKU5-T2-40-1PN320S	EKU5-T2-40-1PN385S	EKU5-T2-40-1PN440S
3P+NPE	EKU5-T2-40-3PN150S	EKU5-T2-40-3PN275S	EKU5-T2-40-3PN320S	EKU5-T2-40-3PN385S	EKU5-T2-40-3PN440S

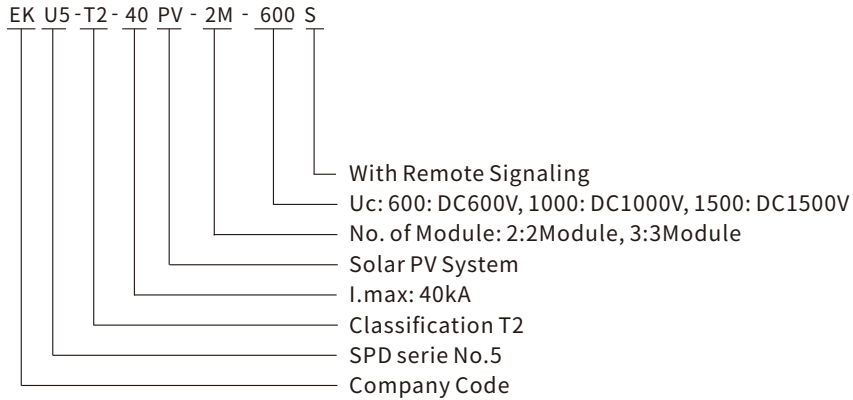
Technical Data

SPD classification according to IEC/EN61643-11		T2	T2	T2	T2	T2
Max. continuous operating a.c.voltage	Uc	150V	275V	320V	385V	440V
Max. continuous operating a.c.voltage	Uc(N-PE)	255V	255V	255V	255V	255V
Normal discharge current (8/20μs)	In	20kA	20kA	20kA	20kA	20kA
Maximum discharge current (8/20μs)	I _{max}	40kA	40kA	40kA	40kA	40kA
Voltage protection level	Up	≤0.8kV	≤1.3kV	≤1.5kV	≤1.8kV	≤2.0kV
Voltage protection level5 kA	Up	≤0.6kV	≤1.0kV	≤1.2kV	≤1.4kV	≤1.6kV
Voltage protection level	Up(N-PE)	≤1.5kV	≤1.5kV	≤1.5kV	≤1.5kV	≤1.5kV
Max. backup fuse		125A gL				
Response time	tA	≤25ns				
Response time	tA(N-PE)	≤100ns				
Operating temperature range	Tu	-40°C~80°C				
Operating State/Fault Indication		Green/Red				
Cross-section area (Min.)		4mm ²				
Cross-section area (Max.)		35mm ²				
For mounting on		35mm Din rail				
Enclosure material		Thermal Plastic UL 94-V0				
Degree of Protection		IP20				
No. of Poles		1P,2P(1P+N),3P,4P(3P+N),1P+NPE,3P+NPE				

Overall and Installation Dimension(mm)



Product Selection Guide



EKU5-T2-40PV
2P(600VDC)



EKU5-T2-40PV
2P(1000VDC)

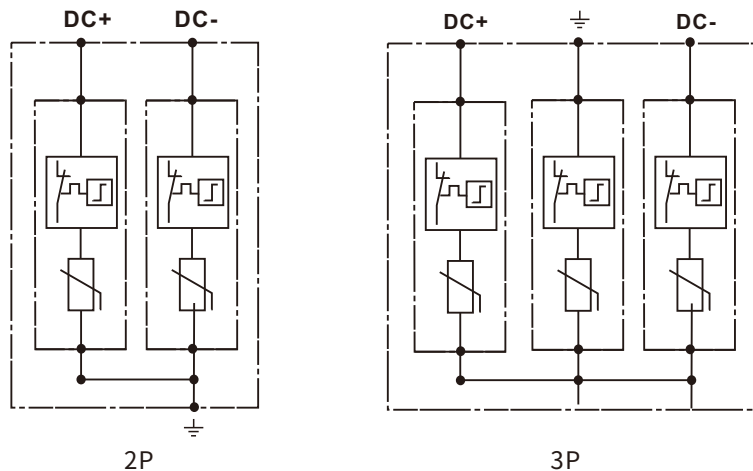


EKU5-T2-40PV
3P(1000VDC)



EKU5-T2-40PV
3P(1500VDC)

Basic circuit diagram



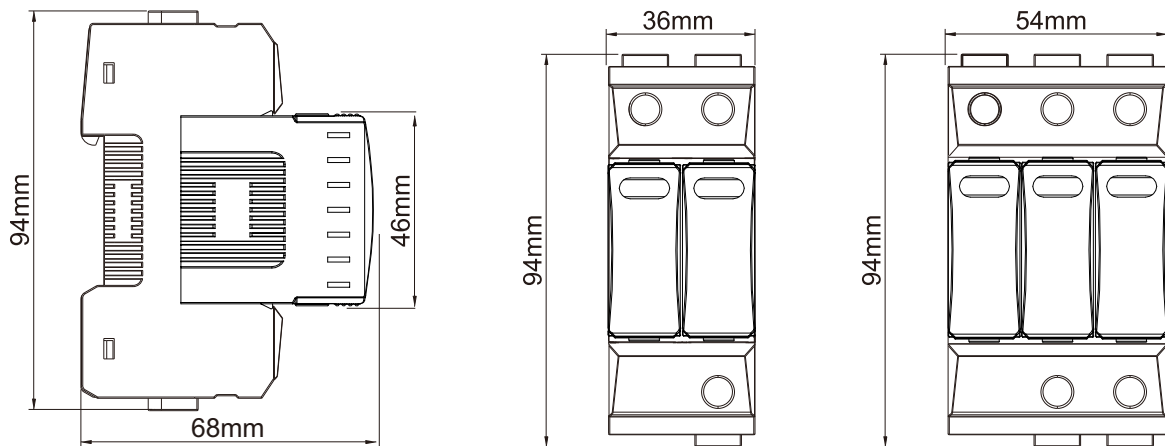
SPD Type Reference List

No. of Poles	Max. Continuous Operating DC Voltage		
	600VDC	1000VDC	1500VDC
2Module	EKU5-T2-40PV-2M600	EKU5-T2-40PV-2M1000	-
3Module	-	EKU5-T2-40PV-3M1000	EKU5-T2-40PV-3M1500
With Remote Signaling			
2Module	EKU5-T2-40PV-2M600S	EKU5-T2-40PV-2M1000S	-
3Module	-	EKU5-T2-40PV-3M1000S	EKU5-T2-40PV-3M1500S

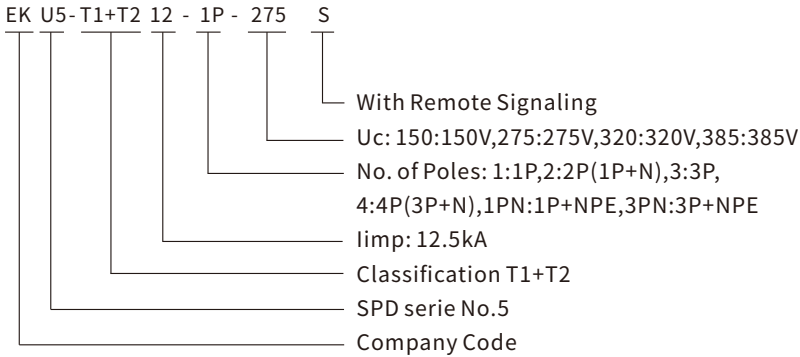
Technical Data

SPD classification according to IEC/EN61643-31			T2	T2	T2
Max. continuous operating a.c.voltage	Ucpv		600VDC	1000VDC	1500VDC
Normal discharge current (8/20μs)	In		20kA	20kA	20kA
Maximum discharge current (8/20μs)	Imax		40kA	40kA	40kA
Voltage protection level DC+/DV-to PE	Up	2Mods	≤2.6kV	≤4.0kV	-
		3Mods	-	≤4.0kV	≤5.2kV
Response time	tA		≤25ns	≤25ns	≤25ns
Operating temperature range	Tu		-40°C~80°C		
Operating State/Fault Indication			Green/Red		
Cross-section area (Min.)			4mm ²		
Cross-section area (Max.)			35mm ²		
For mounting on			35mm Din rail		
Enclosure material			Thermal Plastic UL94-V0		
Degree of Protection			IP20		
No. of Moudles			2P(2Mods),3P(3Mods)		

Overall and Installation Dimension(mm)



Product Selection Guide



EKU5-T1+T2-12
2P(1P+N)



EKU5-T1+T2-12
1P+NPE



EKU5-T1+T2-12
3P

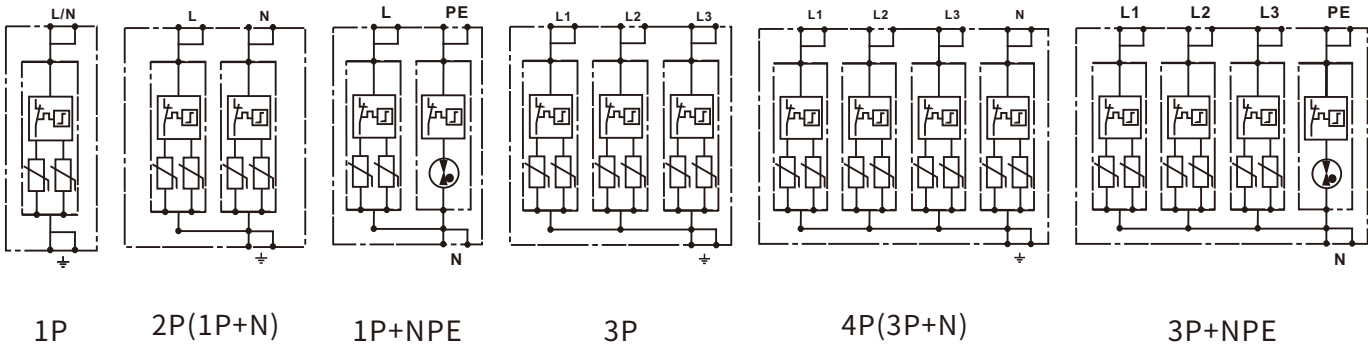


EKU5-T1+T2-12
4P(3P+N)



EKU5-T1+T2-12
3P+NPE

Basic circuit diagram



SPD Type Reference List

No. of Poles	Max. Continuous Operating AC Voltage			
	150V	275V	320V	385V
1P	EKU5-T1+T2-12-1P150	EKU5-T1+T2-12-1P275	EKU5-T1+T2-12-1P320	EKU5-T1+T2-12-1P385
2P(1P+N)	EKU5-T1+T2-12-2P150	EKU5-T1+T2-12-2P275	EKU5-T1+T2-12-2P320	EKU5-T1+T2-12-2P385
3P	EKU5-T1+T2-12-3P150	EKU5-T1+T2-12-3P275	EKU5-T1+T2-12-3P320	EKU5-T1+T2-12-3P385
4P(3P+N)	EKU5-T1+T2-12-4P150	EKU5-T1+T2-12-4P275	EKU5-T1+T2-12-4P320	EKU5-T1+T2-12-4P385
1P+NPE	EKU5-T1+T2-12-1PN150	EKU5-T1+T2-12-1PN275	EKU5-T1+T2-12-1PN320	EKU5-T1+T2-12-1PN385
3P+NPE	EKU5-T1+T2-12-3PN150	EKU5-T1+T2-12-3PN275	EKU5-T1+T2-12-3PN320	EKU5-T1+T2-12-3PN385

With Remote Signaling

1P	EKU5-T1+T2-12-1P150S	EKU5-T1+T2-12-1P275S	EKU5-T1+T2-12-1P320S	EKU5-T1+T2-12-1P385S
2P(1P+N)	EKU5-T1+T2-12-2P150S	EKU5-T1+T2-12-2P275S	EKU5-T1+T2-12-2P320S	EKU5-T1+T2-12-2P385S
3P	EKU5-T1+T2-12-3P150S	EKU5-T1+T2-12-3P275S	EKU5-T1+T2-12-3P320S	EKU5-T1+T2-12-3P385S
4P(3P+N)	EKU5-T1+T2-12-4P150S	EKU5-T1+T2-12-4P275S	EKU5-T1+T2-12-4P320S	EKU5-T1+T2-12-4P385S
1P+NPE	EKU5-T1+T2-12-1PN150S	EKU5-T1+T2-12-1PN275S	EKU5-T1+T2-12-1PN320S	EKU5-T1+T2-12-1PN385S
3P+NPE	EKU5-T1+T2-12-3PN150S	EKU5-T1+T2-12-3PN275S	EKU5-T1+T2-12-3PN320S	EKU5-T1+T2-12-3PN385S

Technical Data

SPD classification according to IEC/EN61643-11		T1+T2	T1+T2	T1+T2	T1+T2
Max. continuous operating a.c.voltage	Uc	150V	275V	320V	385V
Max. continuous operating a.c.voltage	Uc(N-PE)	255V	255V	255V	255V
Lightning impulse current (10/350μs)	Iimp	12.5kA	12.5kA	12.5kA	12.5kA
Norminal discharge current (8/20μs)	In	30kA	30kA	30kA	30kA
Maximum discharge current (8/20μs)	I _{max}	60kA	60kA	60kA	60kA
Voltage protection level	Up	≤1.2kV	≤1.5kV	≤1.6kV	≤1.8kV
Voltage protection level 5kA	Up	≤0.6kV	≤1.0kV	≤1.2kV	≤1.3kV
Voltage protection level	Up(N-PE)	≤1.5kV	≤1.5kV	≤1.5kV	≤1.5kV
Max. backup fuse		160A gL			
Response time	tA	≤25ns			
Response time	tA(N-PE)	≤100ns			
Operating temperature range	Tu	-40°C~80°C			
Operating State/Fault Indication		Green/Red			
Cross-section area (Min.)		4mm ²			
Cross-section area (Max.)		35mm ²			
For mounting on		35mm Din rail			
Enclosure material		Thermal Plastic UL94-V0			
Degree of Protection		IP20			
No. of Poles		1P, 2P(1P+N), 3P, 4P(3P+N), 1P+NPE, 3P+NPE			

Overall and Installation Dimension(mm)

