



日燭科技有限公司  
JD Auspice Co., Ltd

CLASS I+II SPD  
Power Supply System

# TvssPro<sup>®</sup>

Professional  
Surge protection  
Protector enclosure  
**箱型突波保護器**





## Class I+II (B+C) One Phase AC Protector enclosure Type SPD Type JDA TvssPro-60-1

Surge arrester for low-voltage power supply system protection against surges at the boundaries from lightning protection zone 0B-1 and higher.

- Class I+II arrester in according with IEC 61643-1:2005.
- One phase protection, application in variant power supply system is available.
- High energy MOV (Metal Oxide Varistor) and GDT (Gas Discharge Tube) inside.
- Maximum energy capability.
- Low voltage protection level.
- Built-in circuit breaker provides over-current protection.
- Steel enclosure, not exhaust when exposed to lightning strikes.
- Degradation failure indicates and lightning Strikes count.



System voltage (50/60Hz)		110V-120V		120/240V	220-240V		277V	
Phase Configuration		Single-phase		Split-phase	Single-phase		Single-phase	
Model No.		E60-1/3M-175	E60-1/2M-175	E60-1/6M-175	E60-1/3M-320	E60-1/3M-320	E60-1/3M-350	E60-1/2M-350
Mode protected		L-N, L-G, N-G	L-N, N-G	L-N, L-G L-L, N-G	L-N, L-G, N-G	L-N, N-G	L-N, L-G, N-G	L-N, N-G
Max. Discharge Current Imax (8/20)		60KA						
Nominal Discharge Current In (8/20)		30KA						
Let through voltage @ 20KA	L- N	800V	800V	800V	1350V	1350V	1500V	1500V
	L- G	800V	N/A	800V	1350V	N/A	1500V	N/A
	N- G	800V	800V	800V	1350V	1350V	1500V	1500V
	L - L	N/A	N/A	1400V	N/A	N/A	N/A	N/A
Clamping voltage @ In	L- N	800V	800V	800V	1400V	1400V	1500V	1500V
	L- G	800V	N/A	800V	1400V	N/A	1500V	N/A
	N- G	800V	800V	800V	1400V	1400V	1500V	1500V
	L - L	N/A	N/A	1400V	N/A	N/A	N/A	N/A
Sensitivity of surge counter		≤3kA(8/20μs)						
Enclosure material		Steel , IP50 , optional PC enclosure						
Connecting cable section area		16mm <sup>2</sup> - 35mm <sup>2</sup>						
Working environments		Temperature -40°C ~+70°C , Humidity relative 5~95% (25°C) , Altitudes≤3km						

Note: Subject to change without any notice.

## Class I+II (B+C) One Phase AC Protector enclosure Type SPD Type JDA TvssPro-80-1

Surge arrester for low-voltage power supply system protection against surges at the boundaries from lightning protection zone 0B-1 and higher.

- Class I+II arrester in according with IEC 61643-1:2005.
- One phase protection, application in variant power supply system is available.
- High energy MOV (Metal Oxide Varistor) and GDT (Gas Discharge Tube) inside.
- Maximum energy capability.
- Low voltage protection level.
- Built-in circuit breaker provide over-current protection.
- Steel enclosure, not exhaust when exposed to lightning strikes.
- Degradation failure indicates and lightning Strikes count.



System voltage (50/60Hz)		110V-120V		120/240V	220-240V		277V	
Phase Configuration		Single-phase		Split-phase	Single-phase		Single-phase	
Model No.		E80-1/3M-175	E80-1/2M-175	E80-1/6M-175	E80-1/3M-320	E80-1/2M-320	E80-1/3M-350	E80-1/2M-350
Mode protected		L-N, L-G, N-G	L-N, N-G	L-N, L-G, L-L, N-G	L-N, L-G, N-G	L-N, N-G	L-N, L-G, N-G	L-N, N-G
Max. Discharge Current I <sub>max</sub> (8/20)		80KA						
Nominal Discharge Current I <sub>n</sub> (8/20)		40KA						
Let through voltage @ 20KA	L- N	800V	800V	800V	1350V	1350V	1500V	1500V
	L- G	800V	N/A	800V	1350V	N/A	1500V	N/A
	N- G	800V	800V	800V	1350V	1350V	1500V	1500V
	L - L	N/A	N/A	1400V	N/A	N/A	N/A	N/A
Clamping voltage @ I <sub>n</sub>	L- N	800V	800V	800V	1400V	1400V	1500V	1500V
	L- G	800V	N/A	800V	1400V	N/A	1500V	N/A
	N- G	800V	800V	800V	1400V	1400V	1500V	1500V
	L - L	N/A	N/A	1400V	N/A	N/A	N/A	N/A
Sensitivity of surge counter		≤3kA(8/20μs)						
Enclosure material		Steel, IP50, optional PC enclosure						
Connecting cable section area		16mm <sup>2</sup> - 35mm <sup>2</sup>						
Working environments		Temperature -40°C ~ +70°C, Humidity relative 5~95% (25°C), Altitude≤3km						

Note: Subject to change without any notice.



## Class I+II (B+C) One Phase AC Protector enclosure Type SPD Type JDA TvssPro-100-1

Surge arrester for low-voltage power supply system protection against surges at the boundaries from lightning protection zone 0B-1 and higher.

- Class I+II arrester in according with IEC 61643-1:2005.
- One phase protection, application in variant power supply system is available.
- High energy MOV (Metal Oxide Varistor) and GDT (Gas Discharge Tube) inside.
- Maximum energy capability.
- Low voltage protection level.
- Built-in circuit breaker provide over-current protection.
- Steel enclosure, not exhaust when exposed to lightning strikes.
- Degradation failure indicates and lightning Strikes count.



System voltage (50/60Hz)		110V-120V		120/240V	220-240V		277V	
Phase Configuration		Single-phase		Split-phase	Single-phase		Single-phase	
Model No.		E100-1/3M-175	E100-1/2M-175	E100-1/6M-175	E100-1/3M-320	E100-1/2M-320	E100-1/3M-350	E100-1/2M-350
Mode protected		L-N, L-G, N-G	L-N, N-G	L-N, L-G L-L, N-G	L-N, L-G, N-G	L-N, N-G	L-N, L-G, N-G	L-N, N-G
Max. Discharge Current Imax (8/20)		100KA						
Nominal Discharge Current In (8/20)		50KA						
Let through voltage @ 20KA	L- N	800V	100KA	800V	1350V	1350V	1500V	1500V
	L- G	800V	50KA	800V	1350V	N/A	1500V	N/A
	N- G	800V	800V	800V	1350V	1350V	1500V	1500V
	L- L	N/A	N/A	1400V	N/A	N/A	N/A	N/A
Clamping voltage @ In	L- N	800V	800V	800V	1400V	1400V	1500V	1500V
	L- G	800V	N/A	800V	1400V	N/A	1500V	N/A
	N- G	800V	800V	800V	1400V	1400V	1500V	1500V
	L- L	N/A	N/A	1400V	N/A	N/A	N/A	N/A
Sensitivity of surge counter		≤3kA(8/20μs)						
Enclosure material		Steel , IP50 , optional PC enclosure						
Connecting cable section area		16mm <sup>2</sup> - 35mm <sup>2</sup>						
Working environments		Temperature -40℃ ~ +70℃ , Humidity relative 5~95% (25℃) , Altitude≤3km						

Note: Subject to change without any notice.



# Class I+II (B+C) One Phase AC Protector enclosure Type SPD Type JDA TvssPro-120-1

Surge arrester for low-voltage power supply system protection against surges at the boundaries from lightning protection zone 0B-1 and higher.

- Class I+II arrester in according with IEC 61643-1:2005.
- One phase protection, application in variant power supply system is available.
- High energy MOV (Metal Oxide Varistor) and GDT (Gas Discharge Tube) inside.
- Maximum energy capability.
- Low voltage protection level.
- Built-in circuit breaker provide over-current protection.
- Steel enclosure, not exhaust when exposed to lightning strikes.
- Degradation failure indicates and lightning Strikes count.



System voltage (50/60Hz)	110V-120V		120/240V	220-240V		277V		
Phase Configuration	Single-phase		Split-phase	Single-phase		Single-phase		
Model No.	E120-1/3M-175	E120-1/2M-175	E120-1/6M-175	E120-1/3M-320	E120-1/2M-320	E120-1/3M-350	E120-1/2M-350	
Mode protected	L-N, L-G, N-G	L-N, N-G	L-N, L-G L-L, N-G	L-N, L-G, N-G	L-N, N-G	L-N, L-G, N-G	L-N, N-G	
Max. Discharge Current I <sub>max</sub> (8/20)	120KA							
Nominal Discharge Current I <sub>n</sub> (8/20)	60KA							
Let through voltage @ 20KA	L - N	800V	800V	800V	1350V	1350V	1500V	1500V
	L - G	800V	800V	800V	1350V	N/A	1500V	N/A
	N - G	800V	800V	800V	1350V	1350V	1500V	1500V
	L - L	N/A	N/A	1400V	N/A	N/A	N/A	N/A
Clamping voltage @ I <sub>n</sub>	L - N	800V	800V	800V	1400V	1400V	1500V	1500V
	L - G	800V	800V	800V	1400V	N/A	1500V	N/A
	N - G	800V	800V	800V	1400V	1400V	1500V	1500V
	L - L	N/A	N/A	1400V	N/A	N/A	N/A	N/A
Sensitivity of surge counter	≤3kA(8/20μs)							
Enclosure material	Steel, IP50, optional PC enclosure							
Connecting cable section area	16mm <sup>2</sup> - 35mm <sup>2</sup>							
Working environments	Temperature -40°C ~ +70°C, Humidity relative 5~95% (25°C), Altitude ≤ 3km							

Note: Subject to change without any notice.

## Class I+II (B+C) One Phase AC Protector enclosure Type SPD Type JDA TvssPro-150-1

Surge arrester for low-voltage power supply system protection against surges at the boundaries from lightning protection zone 0B-1 and higher.

- Class I+II arrester in according with IEC 61643-1:2005.
- One phase protection, application in variant power supply system is available.
- High energy MOV (Metal Oxide Varistor) and GDT (Gas Discharge Tube) inside.
- Maximum energy capability.
- Low voltage protection level.
- Built-in circuit breaker provide over-current protection.
- Steel enclosure, not exhaust when exposed to lightning strikes.
- Degradation failure indicates and lightning Strikes count.



System voltage (50/60Hz)		110V-120V		120/240V	220-240V		277V	
Phase Configuration		Single-phase		Split-phase	Single-phase		Single-phase	
Model No.		E150-1/3M-175	E150-1/2M-175	E150-1/6M-175	E150-1/3M-320	E150-1/2M-320	E150-1/3M-350	E150-1/2M-350
Mode protected		L-N, L-G, N-G	L-N, N-G	L-N, L-G, L-L, N-G	L-N, L-G, N-G	L-N, N-G	L-N, L-G, N-G	L-N, N-G
Max. Discharge Current I <sub>max</sub> (8/20)		150KA						
Nominal Discharge Current I <sub>n</sub> (8/20)		70KA						
Let through voltage @ 20KA	L - N	800V	800V	800V	1350V	1350V	1500V	1500V
	L - G	800V	N/A	800V	1350V	N/A	1500V	N/A
	N - G	800V	800V	800V	1350V	1350V	1500V	1500V
	L - L	N/A	N/A	1400V	N/A	N/A	N/A	N/A
Clamping voltage @ I <sub>n</sub>	L - N	800V	800V	800V	1400V	1400V	1500V	1500V
	L - G	800V	N/A	800V	1400V	N/A	1500V	N/A
	N - G	800V	800V	800V	1400V	1400V	1500V	1500V
	L - L	N/A	N/A	1400V	N/A	N/A	N/A	N/A
Sensitivity of surge counter		≤3kA(8/20μs)						
Enclosure material		Steel, IP50, optional PC enclosure						
Connecting cable section area		16mm <sup>2</sup> - 35mm <sup>2</sup>						
Working environments		Temperature -40°C ~ +70°C, Humidity relative 5~95% (25°C), Altitudes ≤ 3km						

Note: Subject to change without any notice.

## Class I+II (B+C) One Phase AC Protector enclosure Type SPD Type JDA TvssPro-200-1

Surge arrester for low-voltage power supply system protection against surges at the boundaries from lightning protection zone 0B-1 and higher.

- Class I+II arrester in according with IEC 61643-1:2005.
- One phase protection, application in variant power supply system is available.
- High energy MOV (Metal Oxide Varistor) and GDT (Gas Discharge Tube) inside.
- Maximum energy capability.
- Low voltage protection level.
- Built-in circuit breaker provide over-current protection.
- Steel enclosure, not exhaust when exposed to lightning strikes.
- Degradation failure indicates and lightning Strikes count.



System voltage (50/60Hz)		110V-120V		120/240V	220-240V		277V	
Phase Configuration		Single-phase		Split-phase	Single-phase		Single-phase	
Model No.		E200-1/3M-175	E200-1/2M-175	E200-1/6M-175	E200-1/3M-320	E200-1/2M-320	E200-1/3M-350	E200-1/2M-350
Mode protected		L-N, L-G, N-G	L-N, N-G	L-N, L-G, L-L, N-G	L-N, L-G, N-G	L-N, N-G	L-N, L-G, N-G	L-N, N-G
Max. Discharge Current I <sub>max</sub> (8/20)		200KA						
Nominal Discharge Current I <sub>n</sub> (8/20)		100KA						
Let through voltage @ 20KA	L - N	800V	800V	800V	1350V	1350V	1500V	1500V
	L - G	800V	N/A	800V	1350V	N/A	1500V	N/A
	N - G	800V	800V	800V	1350V	1350V	1500V	1500V
	L - L	N/A	N/A	1400V	N/A	N/A	N/A	N/A
Clamping voltage @ I <sub>n</sub>	L - N	800V	800V	800V	1400V	1400V	1500V	1500V
	L - G	800V	N/A	800V	1400V	N/A	1500V	N/A
	N - G	800V	800V	800V	1400V	1400V	1500V	1500V
	L - L	N/A	N/A	1400V	N/A	N/A	N/A	N/A
Sensitivity of surge counter		≤3kA(8/20μs)						
Enclosure material		Steel, IP50, optional PC enclosure						
Connecting cable section area		16mm <sup>2</sup> - 35mm <sup>2</sup>						
Working environments		Temperature -40°C ~ +70°C, Humidity relative 5~95% (25°C), Altitude ≤3km						

Note: Subject to change without any notice.



## Class I+II (B+C) One Phase AC Protector enclosure Type SPD Type JDA TvssPro-60-3

Surge arrester for low-voltage power supply system protection against surges at the boundaries from lightning protection zone 0B-1 and higher.

- Class I+II arrester in according with IEC 61643-1:2005.
- Three phase protection, application in variant power supply system is available.
- High energy MOV (Metal Oxide Varistor) and GDT (Gas Discharge Tube) inside.
- Maximum energy capability.
- Low voltage protection level.
- Built-in circuit breaker provide over-current protection.
- Steel enclosure, not exhaust when exposed to lightning strikes.
- Degradation failure indicates and lightning Strikes count.



System voltage (50/60Hz)	208V/120V		400V/230V			480V/277V		240V	480V	
Phase Configuration	Three-phase WYE		Three-phase WYE	Three-phase TT/TN	Three-phase IT	Three-phase WYE		3-phase DELTA	3-phase DELTA	
Model No.	E60-3/10M-175	E60-3/4M-175	E60-3/10M-320	E60-3/4M-320	E60-3/3M-385	E60-3/10M-350	E60-3/4M-350	E60-3/3M-320	E60-3/3M-640	
Mode Protected	L-N, L-G, L-L, N-G	L-N, N-G	L-N, L-G, L-L, N-G	L-N, N-G	L-G	L-N, L-G, L-L, N-G	L-N, N-G	L-L, L-G	L-L	
Max. Discharge Current Imax	60KA									
Nominal Discharge Current In	30KA									
Let through voltage @ 20KA	L - N	750V	750V	1250V	1250V	N/A	1300V	1300V	N/A	N/A
	L - G	750V	N/A	1250V	N/A	1700V	1300V	N/A	1250V	N/A
	N - G	750V	750V	1250V	1250V	N/A	1300V	1300V	N/A	N/A
	L - L	1500V	N/A	2500V	N/A	N/A	2600V	N/A	1250V	2400V
Clamping voltage @ In	L - N	800V	800V	1400V	1400V	N/A	1500V	1500V	N/A	N/A
	L - G	800V	N/A	1400V	N/A	1700V	1500V	N/A	1400V	N/A
	N - G	800V	800V	1400V	1400V	N/A	1500V	1500V	N/A	N/A
	L - L	1600V	N/A	2800V	N/A	N/A	3000V	N/A	1400V	2500V
Sensitivity of Surge counter	≤3kA(8/20μs)									
Enclosure material	Steel, IP50, optional PC enclosure									
Connecting cable section area	16mm <sup>2</sup> - 35mm <sup>2</sup>									
Working environments	Temperature -40°C ~ +70°C, Humidity relative 5~95% (25°C), Altitude ≤ 3km									

Note: Subject to change without any notice.





## Class I+II (B+C) One Phase AC Protector enclosure Type SPD Type JDA TvssPro-80-3

Surge arrester for low-voltage power supply system protection against surges at the boundaries from lightning protection zone 0B-1 and higher.

- Class I+II arrester in according with IEC 61643-1:2005.
- Three phase protection, application in variant power supply system is available.
- High energy MOV (Metal Oxide Varistor) and GDT (Gas Discharge Tube) inside.
- Maximum energy capability.
- Low voltage protection level.
- Built-in circuit breaker provide over-current protection.
- Steel enclosure, not exhaust when exposed to lightning strikes.
- Degradation failure indicates and lightning Strikes count.



System voltage (50/60Hz)	208V/120V		400V/230V			480V/277V		240V	480V	
Phase Configuration	Three-phase WYE		Three-phase WYE	Three-phase TT/TN	Three-phase IT	Three-phase WYE		3-phase DELTA	3-phase DELTA	
Model No.	E80-3/10M-175	E80-3/4M-175	E80-3/10M-320	E80-3/4M-320	E80-3/3M-385	E80-3/10M-350	E80-3/4M-350	E80-3/3M-320	E80-3/3M-640	
Mode Protected	L-N, L-G, L-L, N-G	L-N, N-G	L-N, L-G, L-L, N-G	L-N, N-G	L-G	L-N, L-G, L-L, N-G	L-N, N-G	L-L, L-G	L-L	
Max. Discharge Current I <sub>max</sub>	80KA									
Nominal Discharge Current I <sub>n</sub>	40KA									
Let through voltage @ 20KA	L - N	750V	750V	1250V	1250V	N/A	1300V	1300V	N/A	N/A
	L - G	750V	N/A	1250V	N/A	1700V	1300V	N/A	1250V	N/A
	N - G	750V	750V	1250V	1250V	N/A	1300V	1300V	N/A	N/A
	L - L	1500V	N/A	2500V	N/A	N/A	2600V	N/A	1250V	2400V
Clamping voltage @ I <sub>n</sub>	L - N	800V	800V	1400V	1400V	N/A	1500V	1500V	N/A	N/A
	L - G	800V	N/A	1400V	N/A	1700V	1500V	N/A	1400V	N/A
	N - G	800V	800V	1400V	1400V	N/A	1500V	1500V	N/A	N/A
	L - L	1600V	N/A	2800V	N/A	N/A	3000V	N/A	1400V	2500V
Sensitivity of Surge counter	≤3kA(8/20μs)									
Enclosure Material	Steel : IP50 , optional PC enclosure									
Connecting cable section area	16mm <sup>2</sup> - 35mm <sup>2</sup>									
Working environments	Temperature -40°C ~ +70°C , Humidity relative 5~95% (25°C) , Altitude≤3km									

Note: Subject to change without any notice.



## Class I+II (B+C) One Phase AC Protector enclosure Type SPD Type JDA TvssPro-100-3

Surge arrester for low-voltage power supply system protection against surges at the boundaries from lightning protection zone 0B-1 and higher.

- Class I+II arrester in according with IEC 61643-1:2005.
- Three phase protection, application in variant power supply system is available.
- High energy MOV (Metal Oxide Varistor) and GDT (Gas Discharge Tube) inside.
- Maximum energy capability.
- Low voltage protection level.
- Built-in circuit breaker provide over-current protection.
- Steel enclosure, not exhaust when exposed to lightning strikes.
- Degradation failure indicates and lightning Strikes count.



System voltage (50/60Hz)	208V/120V		400V/230V			480V/277V		240V	480V	
Phase Configuration	Three-phase WYE		Three-phase WYE	Three-phase TT/TN	Three-phase IT	Three-phase WYE		3-phase DELTA	3-phase DELTA	
Model No.	E100-3/10M-175	E100-3/4M-175	E100-3/10M-320	E100-3/4M-320	E100-3/3M-385	E100-3/10M-350	E100-3/4M-350	E100-3/3M-320	E100-3/3M-640	
Mode Protected	L-N, L-G, L-L, N-G	L-N, N-G	L-N, L-G, L-L, N-G	L-N, N-G	L-G	L-N, L-G, L-L, N-G	L-N, N-G	L-L, L-G	L-L	
Max. Discharge Current Imax	100KA									
Nominal Discharge Current In	50KA									
Let through voltage @ 20KA	L - N	750V	750V	1250V	1250V	N/A	1300V	1300V	N/A	N/A
	L - G	750V	N/A	1250V	N/A	1700V	1300V	N/A	1250V	N/A
	N - G	750V	750V	1250V	1250V	N/A	1300V	1300V	N/A	N/A
	L - L	1500V	N/A	2500V	N/A	N/A	2600V	N/A	1250V	2400V
Clamping voltage @ In	L - N	800V	800V	1400V	1400V	N/A	1500V	1500V	N/A	N/A
	L - G	800V	N/A	1400V	N/A	1700V	1500V	N/A	1400V	N/A
	N - G	800V	800V	1400V	1400V	N/A	1500V	1500V	N/A	N/A
	L - L	1600V	N/A	2800V	N/A	N/A	3000V	N/A	1400V	2500V
Sensitivity of Surge counter	≤3kA(8/20μs)									
Enclosure material	Steel , IP50 , optional PC enclosure									
Connecting cable section area	16mm <sup>2</sup> - 35mm <sup>2</sup>									
Working environments	Temperature -40°C ~ +70°C , Humidity relative 5~95% (25°C) , Altitudes≤3km									

Note: Subject to change without any notice.



## Class I+II (B+C) One Phase AC Protector enclosure Type SPD Type JDA TvssPro-120-3

Surge arrester for low-voltage power supply system protection against surges at the boundaries from lightning protection zone 0B-1 and higher.

- Class I+II arrester in according with IEC 61643-1:2005.
- Three phase protection, application in variant power supply system is available.
- High energy MOV (Metal Oxide Varistor) and GDT (Gas Discharge Tube) inside.
- Maximum energy capability.
- Low voltage protection level.
- Built-in circuit breaker provide over-current protection.
- Steel enclosure, not exhaust when exposed to lightning strikes.
- Degradation failure indicates and lightning Strikes count.



System voltage (50/60Hz)	208V/120V		400V/230V			480V/277V		240V	480V	
Phase Configuration	Three-phase WYE		Three-phase WYE	Three-phase TT/TN	Three-phase IT	Three-phase WYE		3-phase DELTA	3-phase DELTA	
Model No.	E120-3/10M-175	E120-3/4M-175	E120-3/10M-320	E120-3/4M-320	E120-3/3M-385	E120-3/10M-350	E120-3/4M-350	E120-3/3M-320	E120-3/3M-640	
Mode Protected	L-N, L-G L-L, N-G	L-N,N-G	L-N, L-G L-L, N-G	L-N,N-G	L-G	L-N, L-G L-L, N-G	L-N,N-G	L-L,L-G	L-L	
Max. Discharge Current Imax	120KA									
Nominal Discharge Current In	60KA									
Let through voltage @ 20KA	L - N	750V	750V	1250V	1250V	N/A	1300V	1300V	N/A	N/A
	L - G	750V	N/A	1250V	N/A	1700V	1300V	N/A	1250V	N/A
	N - G	750V	750V	1250V	1250V	N/A	1300V	1300V	N/A	N/A
	L - L	1500V	N/A	2500V	N/A	N/A	2600V	N/A	1250V	2400V
Clamping voltage @ In	L - N	800V	800V	1400V	1400V	N/A	1500V	1500V	N/A	N/A
	L - G	800V	N/A	1400V	N/A	1700V	1500V	N/A	1400V	N/A
	N - G	800V	800V	1400V	1400V	N/A	1500V	1500V	N/A	N/A
	L - L	1600V	N/A	2800V	N/A	N/A	3000V	N/A	1400V	2500V
Sensitivity of Surge counter	≤3kA(8/20μs)									
Enclosure material	Steel, IP50, optional PC enclosure									
Connecting cable section area	16mm <sup>2</sup> - 35mm <sup>2</sup>									
Working environments	Temperature -40°C ~ +70°C, Humidity relative 5~95% (25°C), Altitude ≤3km									

Note: Subject to change without any notice.



## Class I+II (B+C) One Phase AC Protector enclosure Type SPD Type JDA TvssPro-150-3

Surge arrester for low-voltage power supply system protection against surges at the boundaries from lightning protection zone 0B-1 and higher.

- Class I+II arrester in according with IEC 61643-1:2005.
- Three phase protection, application in variant power supply system is available.
- High energy MOV (Metal Oxide Varistor) and GDT (Gas Discharge Tube) inside.
- Maximum energy capability.
- Low voltage protection level.
- Built-in circuit breaker provide over-current protection.
- Steel enclosure, not exhaust when exposed to lightning strikes.
- Degradation failure indicates and lightning Strikes count.



System voltage (50/60Hz)	208V/120V		400V/230V			480V/277V		240V	480V	
Phase Configuration	Three-phase WYE		Three-phase WYE	Three-phase TT/TN	Three-phase IT	Three-phase WYE		3-phase DELTA	3-phase DELTA	
Model No.	E150-3/ 10M-175	E150-3/ 4M-175	E150-3/ 10M-320	E150-3/ 4M-320	E150-3/ 3M-385	E150-3/ 10M-350	E150-3/ 4M-350	E150-3/ 3M-320	E150-3/ 3M-640	
Mode Protected	L-N, L-G, L-L, N-G	L-N, N-G	L-N, L-G, L-L, N-G	L-N, N-G	L-G	L-N, L-G, L-L, N-G	L-N, N-G	L-L, L-G	L-L	
Max. Discharge Current Imax	150KA									
Nominal Discharge Current In	70KA									
Let through voltage @ 20KA	L - N	750V	750V	1250V	1250V	N/A	1300V	1300V	N/A	N/A
	L - G	750V	N/A	1250V	N/A	1700V	1300V	N/A	1250V	N/A
	N - G	750V	750V	1250V	1250V	N/A	1300V	1300V	N/A	N/A
	L - L	1500V	N/A	2500V	N/A	N/A	2600V	N/A	1250V	2400V
Clamping voltage @In	L - N	800V	800V	1400V	1400V	N/A	1500V	1500V	N/A	N/A
	L - G	800V	N/A	1400V	N/A	1700V	1500V	N/A	1400V	N/A
	N - G	800V	800V	1400V	1400V	N/A	1500V	1500V	N/A	N/A
	L - L	1600V	N/A	2800V	N/A	N/A	3000V	N/A	1400V	2500V
Sensitivity of Surge counter	≤3kA(8/20μs)									
Enclosure material	Steel, IP50, optional PC enclosure									
Connecting cable section area	16mm <sup>2</sup> - 35mm <sup>2</sup>									
Working environments	Temperature -40°C ~ +70°C, Humidity relative 5~95% (25°C), Altitude ≤3km									

Note: Subject to change without any notice.



## Class I+II (B+C) One Phase AC Protector enclosure Type SPD Type JDA TvssPro-200-3

Surge arrester for low-voltage power supply system protection against surges at the boundaries from lightning protection zone 0B-1 and higher.

- Class I+II arrester in according with IEC 61643-1:2005.
- Three phase protection, application in variant power supply system is available.
- High energy MOV (Metal Oxide Varistor) and GDT (Gas Discharge Tube) inside.
- Maximum energy capability.
- Low voltage protection level.
- Built-in circuit breaker provide over-current protection.
- Steel enclosure, not exhaust when exposed to lightning strikes.
- Degradation failure indicates and lightning Strikes count.



System voltage(50/60Hz)	208V/120V		400V/230V			480V/277V		240V	480V	
Phase Configuration	Three-phase WYE		Three-phase WYE	Three-phase TT/TN	Three-Phase IT	Three-phase WYE		3-phase DELTA	3-phase DELTA	
Model No.	E200-3/10M-175	E200-3/4M-175	E200-3/10M-320	E200-3/4M-320	E200-3/3M-385	E200-3/10M-350	E200-3/4-M-350	E200-3/3M-320	E200-3/3M-640	
Mode Protected	L-N, L-G L-L, N-G	L-N, N-G	L-N, L-G L-L, N-G	L-N, N-G	L-G	L-N, L-G L-L, N-G	L-N, N-G	L-L, L-G	L-L	
Max. Discharge Current Imax	200KA									
Nominal Discharge Current In	100KA									
Let through voltage @ 20KA	L - N	750V	750V	1250V	1250V	N/A	1300V	1300V	N/A	N/A
	L - G	750V	N/A	1250V	N/A	1700V	1300V	N/A	1250V	N/A
	N - G	750V	750V	1250V	1250V	N/A	1300V	1300V	N/A	N/A
	L - L	1500V	N/A	2500V	N/A	N/A	2600V	N/A	1250V	2400V
Clamping voltage @ In	L - N	800V	800V	1400V	1400V	N/A	1500V	1500V	N/A	N/A
	L - G	800V	N/A	1400V	N/A	1700V	1500V	N/A	1400V	N/A
	N - G	800V	800V	1400V	1400V	N/A	1500V	1500V	N/A	N/A
	L - L	1600V	N/A	2800V	N/A	N/A	3000V	N/A	1400V	2500V
Sensitivity of Surge counter	≤3kA(8/20μs)									
Enclosure material	Steel, IP50, optional PC enclosure									
Connecting cable section area	16mm <sup>2</sup> - 35mm <sup>2</sup>									
Working environments	Temperature -40°C ~ +70°C, Humidity relative 5~95% (25°C), Altitude ≤3km									

Note: Subject to change without any notice.



## Class I+II (B+C) Three Phase AC Protector enclosure Type SPD Type JDA TvssPro-160-3/4M-320-S-C

Surge arrester for low-voltage power supply system protection against surges at the boundaries from lightning protection zone 0B-1 and higher.

- Class I+II arrester in according with IEC 61643-1:2005.
- Three phase protection, application in variant power supply system is available.
- Maximum energy capability.
- Low voltage protection level.
- Built-in circuit breaker provides over-current protection.
- Steel enclosure, not exhaust when exposed to lightning strikes.
- Degradation failure indicates and lightning Strikes count.



System voltage (50/60Hz)		380V/220Vac
Phase Configuration		Three-phase WYE
Model No.		E160-3/4M-320-S-C
Mode Protected		L-N , L-G , L-L , N-G
Max. Discharge Current (Imax) per phase 8/20		160KA
Nominal Discharge Current (In) per phase 8/20		80KA
Let through voltage @ 20KA	L - N	1250V
	L - G	1250V
	N - G	1250V
	L - L	2500V
Clamping voltage @ In	L - N	1400V
	L - G	1400V
	N - G	1400V
	L - L	2800V
Sensitivity of Surge counter		≤3kA(8/20μs)
Enclosure material		Steel , IP66
Connecting cable section area		16mm <sup>2</sup> - 35mm <sup>2</sup>
Working environments		Temperature -40°C ~+70°C , Humidity relative 5~95% (25°C) , Altitude≤3km

Note: Subject to change without any notice.



## Class I+II (B+C) Three Phase AC Protector enclosure Type SPD Type JDA TvssPro-400-3/4M-320-S-C

Surge arrester for low-voltage power supply system protection against surges at the boundaries from lightning protection zone 0B-1 and higher.

- Class I+II arrester in according with IEC 61643-1:2005.
- Three phase protection, application in variant power supply system is available.
- Maximum energy capability.
- Low voltage protection level.
- Built-in circuit breaker provides over-current protection.
- Steel enclosure, not exhaust when exposed to lightning strikes.
- Degradation failure indicates and lightning Strikes count.



System voltage (50/60Hz)		380V/220Vac
Phase Configuration		Three-phase WYE
Model No.		E400-3/4M-320-S-C
Mode Protected		L-N , L-G , L-L , N-G
Max. Discharge Current (Imax) per phase 8/20		400KA
Nominal Discharge Current (In) per phase 8/20		200KA
Let through voltage @ 20KA	L - N	1250V
	L - G	1250V
	N - G	1250V
	L - L	2500V
Clamping voltage @ In	L - N	1400V
	L - G	1400V
	N - G	1400V
	L - L	2800V
Sensitivity of Surge counter		≤3kA(8/20μs)
Enclosure material		Steel , IP66
Connecting cable section area		16mm <sup>2</sup> - 35mm <sup>2</sup>
Working environments		Temperature -40°C ~+70°C , Humidity relative 5~95% (25°C) , Altitude≤3km

Note: Subject to change without any notice.



## Class I+II (B+C) Three Phase AC Protector enclosure Type SPD Type JDA TvssPro-480-3/4M-320-S-C

Surge arrester for low-voltage power supply system protection against surges at the boundaries from lightning protection zone 0B-1 and higher.

- Class I+II arrester in according with IEC 61643-1:2005.
- Three phase protection, application in variant power supply system is available.
- Maximum energy capability.
- Low voltage protection level.
- Built-in circuit breaker provides over-current protection.
- Steel enclosure, not exhaust when exposed to lightning strikes.
- Degradation failure indicates and lightning Strikes count.



System voltage (50/60Hz)		380V/220Vac
Phase Configuration		Three-phase WYE
Model No.		E480-3/4M-320-S-C
Mode Protected		L-N , L-G , L-L , N-G
Max. Discharge Current (Imax) per phase 8/20		480KA
Nominal Discharge Current (In) per phase 8/20		240KA
Let through voltage @ 20KA	L - N	1250V
	L - G	1250V
	N - G	1250V
	L - L	2500V
Clamping voltage @ In	L - N	1400V
	L - G	1400V
	N - G	1400V
	L - L	2800V
Sensitivity of Surge counter		≤3kA(8/20μs)
Enclosure material		Steel , IP66
Connecting cable section area		16mm <sup>2</sup> - 35mm <sup>2</sup>
Working environments		Temperature -40°C ~+70°C , Humidity relative 5~95% (25°C) , Altitude≤3km

Note: Subject to change without any notice.



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