

### CLASS I+II SPD Power Supply System

### TvssPro®

Professional
Surge protection
Protector enclosure
箱型突波保護器



note: subject to change without any notice, JDA pay no responsibility



#### 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
- . 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
- · Degradation failure indicates and lightning Strikes count.



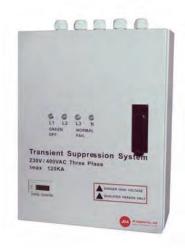
System v (50/60)	oltage Hz)	110V-120V		120/240V	220-	240V	27	7V			
Phase Configu	ration	Single	-phase	Split-phase	Single	-phase	Single	-phase			
Model No.		E60-1/3M-175	E60-1/2M-175	E60-1/6M-175	E60-1/3M-320	E60-1/3M-320	E60-1/3M-350	E60-1/2M-350			
Mode protecte	ed	L-N , L-G , N-G	L-N , N-G	L-N , L-G 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	t Imax (8/20)				60KA						
Nominal Discharge Cu	errent In (8/20)				30KA	a designation					
Let through	L- N	800V	800V	800V	1350V	1350V	1500V	1500V			
voltage	L- G	800V	N/A	800V	1350V	N/A	1500V	N/A			
@ 20KA	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	L- N	800V	800V	800V	1400V	1400V	1500V	1500V			
voltage	L- G	800V	N/A	800V	1400V	N/A	1500V	N/A			
@ In	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 surg	ge counter			≤	3kA(8/20µs)						
Enclosure mat	erial			Steel , IP50	, optional Po	enclosure					
Connecting cable se	ection area	16mm² - 35mm²									
Working enviro	onments	Temperature -40°C ~+70°C , Humidity relative 5~95% (25°C) , Altitude≤3km									



#### 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 vo (50/60		110V	-120V	120/240V	220-240V		277V					
Phase Configura	ation	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-3					
Mode protecte	d	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 Curre	nt Imax (8/20)				80KA							
Nominal Discharge Cu	urrent in (8/20)				40KA							
Let through	L- N	800V	800V	800V	1350V	1350V	1500V 1500V					
voltage	L- G	800V	N/A	800V	1350V	N/A	1500V	N/A				
@ 20KA	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	L- N	800V	800V	800V	1400V	1400V	1500V	1500V				
voltage	L- G	800V	N/A	800V	1400V	N/A	1500V	N/A				
@ In	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 su	rge counter	≤3kA(8/20μs)										
Enclosure mate	rial			Steel , IP50	optional PC	enclosure						
Connecting cable	section area	16mm² - 35mm²										
Working enviro	nments	Temperature –40°C ~+70°C , Humidity relative 5~95% (25°C) , Altitude≤3km										



#### 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
- Degradation failure indicates and lightning Strikes count.



System v (50/60	Maria de la companya della companya	110V	-120V	120/240V	220-240V		277V			
Phase Configur	ation	Single	-phase	Split-phase	Single	-phase	Single	-phase		
Model No.	-1	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 protecte	d	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 Curre	nt Imax (8/20)				100KA					
Nominal Discharge C	Current In (8/20)				50KA					
Let through	L- N	800V	100KA	800V	1350V	1350V	1500V	1500V		
voltage	L- G	800V	50KA	800V	1350V	N/A	1500V	N/A		
@ 20KA	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	L- N	800V	800V	800V	1400V	1400V	1500V	1500V		
voltage	L- G	800V	N/A	800V	1400V	N/A	1500V	N/A		
@ In	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 su	urge counter			<	3kA(8/20µs					
Enclosure mate	erial			Steel , IP50	, optional Po	enclosure				
Connecting cable	e section area			16	mm² - 35mn	n <sup>2</sup>				
Working enviro	nments	Tempera	ature −40°C	~+ <b>70</b> ℃ ,Hu	midity relat	ive 5~95% (2	5℃), Altitu	de≤3km		



#### 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
- · Degradation failure indicates and lightning Strikes count.



System vo (50/60)		110V	-120V	120/240V	220-240V		277V					
Phase Configura	ition	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	1	L-N , L-G , N-G	L-N , N-G	L-N , L-G L-L , N-G	L-N , N-G	L-N , L-G , N-G	L-N , N-G					
Max. Discharge Current	Imax (8/20)	120KA										
Nominal Discharge Cu	rrent In (8/20)				60KA							
Let through	L- N	800V	800V	800V	1350V	1350V	1500V	1500V				
voltage	L- G	800V	800V	800V	1350V	N/A	1500V	N/A				
@ 20KA	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	L- N	800V	800V	800V	1400V	1400V	1500V	1500V				
voltage	L- G	800V	800V	800V	1400V	N/A	1500V	N/A				
@ In	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 sur	ge counter				≤3kA(8/20µs	)						
Enclosure mate	rial			Steel , IP50	, optional P	C enclosure						
Connecting cable s	ection area	16mm² - 35mm²										
Working enviro	nments	Temperature -40°C ~+70°C , Humidity relative 5~95% (25°C) , Altitude≤3km										



# 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 vo (50/60)		110V	-120V	120/240V	220-	240V	27	<b>7</b> V				
Phase Configura	ation	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	d	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)				150KA							
Nominal Discharge Curr	rent In (8/20)				70KA							
Let through	L- N	800V	800V	800V	1350V	1350V	1500V	1500V				
voltage	L- G	800V	N/A	800V	1350V	N/A	1500V	N/A				
@ 20KA	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	L- N	800V	800V	800V	1400V	1400V	1500V	1500V				
voltage	L- G	800V	N/A	800V	1400V	N/A	1500V	N/A				
@ In	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 sur	ge counter	- "	≤3kA(8/20μs)									
Enclosure mate	rial			Steel , IP50	, optional Po	Cenclosure						
Connecting cable s	ection area			10	6mm² - 35mr	n <sup>2</sup>						
Working enviro	nments	Temperature -40°C ~+70°C , Humidity relative 5~95% (25°C) , Altitude≤3km										



### 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 v (50/60		110V	-120V	120/240V	220-240V		277V			
Phase Configur	ration	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 protecte	ed	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 Currer	nt Imax (8/20)				200KA					
Nominal Discharge C	urrent In (8/20)				100KA					
Let through	L- N	800V	800V	800V	1350V	1350V	1500V	1500V		
voltage	L- G	800V	N/A	800V	1350V	N/A	1500V	N/A		
@ 20KA	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	L- N	800V	800V	800V	1400V	1400V	1500V	1500V		
voltage	L- G	800V	N/A	800V	1400V	N/A	1500V	N/A		
@ In	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 su	ity of surge counter ≤3kA(8/20µs)									
Enclosure mate	erial			Steel , IP50	optional PC	enclosure				
Connecting cable	section area			16	mm² - 35mm	2				
Working enviro	onments	Tempe	rature −40°C	~+ <b>70</b> ℃ , Hu	midity relativ	re 5~95% (25°	C) , Altitude	e≤3km		



# 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 vo (50/60)		208V	/120V	4	100V/230	V	480V	/277V	240V	480V			
Phase Config	uration	Three-ph	nase WYE	Three-phase WYE	Three-phase	Three-phase	Three-pl	nase 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 Protec	ted	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	1-1			
Max. Discharge Cur	rent Imax		60KA										
Nominal Discharge C	urrent In					30KA							
Let through	L-N	750V	750V	1250V	1250V	N/A	1300V	1300V	N/A	N/A			
voltage	L-G	750V	N/A	1250V	N/A	1700V	1300V	N/A	1250V	N/A			
@ 20KA	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	L-N	800V	800V	1400V	1400V	N/A	1500V	1500V	N/A	N/A			
voltage	L-G	800V	N/A	1400V	N/A	1700V	1500V	N/A	1400V	N/A			
@ In	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 Surg	e counter	≤3kA(8/20μs)											
Enclosure ma	aterial	Steel , IP50 , optional PC						I PC enclosure					
Connecting cable sec	tion area				16	mm² - 35m	nm²	1					
Working enviro	nments	Temperature -40°C ~+70°C , Humidity relative 5~95% (25°C) , Altitude ≤ 3km								km			



#### 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
- Degradation failure indicates and lightning Strikes count.



System v (50/60)	oltage Hz)	208V	/120V	4	100V/230	V	480V	/277V	240V	480V		
Phase Configu	ration	Three-pl	nase WYE	Three-phase WYE	Three-phase	Three-phase WYE 3-phase 3-phas						
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 Protecte	ed	L-N , L-G, L-L , N-G	L-N , N-G	L-N , L-G, L-L , N-G	L-N , N-G	N-G L-G L-N, L-G, L-N, N-G L-L, L-G L						
Max. Discharge Curr	rent Imax	l,	80KA									
Nominal Discharge (	Current In					40KA						
Let through	L-N	750V	750V	1250V	1250V	N/A	1300V	1300V	N/A	N/A		
voltage	L-G	750V	N/A	1250V	N/A	1700V	1300V	N/A	1250V	N/A		
@ 20KA	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	L-N	800V	800V	1400V	1400V	N/A	1500V	1500V	N/A	N/A		
voltage	L-G	800V	N/A	1400V	N/A	1700V	1500V	N/A	1400V	N/A		
@ In	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 Surg	ge counter		≤3kA(8/20μs)									
Enclosure Mat	erial			S	teel : IP50	, optional P	C enclosu	re				
Connecting cable se	ction area				16	mm² - 35m	m²					
Working enviro	ing environments Temperature −40°C ~+70°C , Humidity relative 5~95% (25°C) , Altitude≤3km								m			



#### 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
- Degradation failure indicates and lightning Strikes count.



System vo (50/60)	1. 72	208V,	/120V	4	00V/230	V	480V	/277V	240V	480V				
Phase Configu	ration	Three-ph	nase WYE	Three-phas e WYE	Three-phas	Three- phase IT	Three-pl	nase 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 Protecte	d	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	LL				
Max. Discharge Cur	rent Imax		100KA											
Max. Discharge Current Imax  Nominal Discharge Current In						50KA								
Let through	L-N	750V	750V	1250V	1250V	N/A	1300V	1300V	N/A	N/A				
voltage	L-G	750V	N/A	1250V	N/A	1700V	1300V	N/A	1250V	N/A				
@ 20KA	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	L-N	800V	800V	1400V	1400V	N/A	1500V	1500V	N/A	N/A				
voltage	L-G	800V	N/A	1400V	N/A	1700V	1500V	N/A	1400V	N/A				
@ In	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 Surg	ge counter	ster ≤3kA(8/20μs)												
Enclosure mate	erial			Steel	, IP50 , op	tional PC	enclosure							
Connecting cable s	ection area				16mm	<sup>2</sup> - 35mm	2							
Working enviro	onments	Tem	perature –4	10°C ~+70°	Temperature –40°C ~+70°C , Humidity relative 5~95% (25°C) , Altitude≤3km									



#### 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
- Degradation failure indicates and lightning Strikes count.



System v (50/60		208V	/120V	4	00V/230	V	480V	/277V	240V	480V		
Phase Config	uration	Three-ph	nase WYE	Three-phas e WYE	Three-phas e TT/TN	Three-phase	Three-pl	nase 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 Protect	ted	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	t-t		
Max. Discharge Co	urrent Imax		120KA									
Nominal Discharg	e Current In					60KA						
Let through	L-N	750V	750V	1250V	1250V	N/A	1300V	1300V	N/A	N/A		
voltage	L-G	750V	N/A	1250V	N/A	1700V	1300V	N/A	1250V	N/A		
@ 20KA	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	L-N	800V	800V	1400V	1400V	N/A	1500V	1500V	N/A	N/A		
voltage	L-G	800V	N/A	1400V	N/A	1700V	1500V	N/A	1400V	N/A		
@ In	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 Su	rge counter		≤3kA(8/20μs)									
Enclosure ma	iterial			Ste	el , IP50 , d	ptional PC	enclosur	9				
Connecting cable	section area				16m	m² - 35mm	2					
Working enviro	onments	Ten	perature -	-40°C ~+7	0℃ ,Hum	idity relati	ve 5~95%	(25°C), A	ltitude≤3l	km		



# 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 v (50/60		208V,	/120V	4	100V/230\	/	480V	/277V	240V	480V		
Phase Config	uration	Three-ph	nase WYE	Three-phase WYE	Three-phase	Three-phase	Three-pl	nase 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	£150-3/ 4M-350	E150-3/ 3M-320	E150-3/ 3M-640		
Mode Protec	ted	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	ы		
Max. Discharge C	urrent Imax		150KA									
Nominal Discharge	Current In					70KA						
Let through	L-N	750V	750V	1250V	1250V	N/A	1300V	1300V	N/A	N/A		
voltage	L-G	750V	N/A	1250V	N/A	1700V	1300V	N/A	1250V	N/A		
@ 20KA	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	L-N	800V	800V	1400V	1400V	N/A	1500V	1500V	N/A	N/A		
voltage	L-G	800V	N/A	1400V	N/A	1700V	1500V	N/A	1400V	N/A		
@In	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 Surg	e counter				≤3	kA(8/20μs)						
Enclosure ma	aterial			St	eel , IP50 ,	optional PC	enclosure					
Connecting cable s	ection area	-			16m	nm² - 35mm	2					
Working enviro	onments	Te	emperatur	e –40°C ~+	70℃ , Hun	nidity relati	ve 5~95%	(25°C), A	ltitude≤3k	cm		



#### 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
- Degradation failure indicates and lightning Strikes count.



Syste voltage(5		208V	/120V	4	00V/230	V	480V	/277V	240V	480V	
Phase Configu	ration	Three-pl	nase WYE	Three-phas e WYE	Three-phas	Three- Phase IT	Three-pl	nase 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 Protect	ed	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-L, L-G L-L				
Max. Discharge C	Current Imax		200KA								
Nominal Discharge	Current In					100KA					
Let through	L-N	750V	750V	1250V	1250V	N/A	1300V	1300V	N/A	N/A	
voltage	L-G	750V	N/A	1250V	N/A	1700V	1300V	N/A	1250V	N/A	
@ 20KA	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	L-N	800V	800V	1400V	1400V	N/A	1500V	1500V	N/A	N/A	
voltage	L-G	800V	N/A	1400V	N/A	1700V	1500V	N/A	1400V	N/A	
@ In	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 Sur	ge counter	≤3kA(8/20μs)									
Enclosure mate	rial			Ste	el , IP50 ,	optional F	C enclosu	re			
Connecting cable	section area				16m	m² - 35m	m²				
Working enviro	nments	Tem	perature -	-40°C ~+7	0℃ ,Hum	nidity rela	tive 5~959	6 (25°C), A	Altitude≤	3km	



### 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	L - N	1250V
	L - G	1250V
	N - G	1250V
@ 20KA	L-L	2500V
Clamping	L - N	1400V
	L - G	1400V
	N - G	1400V
@ In	L-L	2800V
Sensitivity of Surge counter		≤3kA(8/20μs)
Enclosure material		Steel , IP66
Connecting cable section area		16mm² - 35mm²
Working environments		Temperature -40°C ~+70°C , Humidity relative 5~95% (25°C) , Altitude≤3km



### 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	L - N	1250V
	L-G	1250V
	N - G	1250V
@ 20KA	L-L	2500V
Clamping	L-N	1400V
	L - G	1400V
	N - G	1400V
@ In	L-L	2800V
Sensitivity of Surge counter		≤3kA(8/20μs)
Enclosure material		Steel , IP66
Connecting cable section area		16mm² - 35mm²
Working environments		Temperature −40°C ~+70°C , Humidity relative 5~95% (25°C) , Altitude≤3km



### 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	L - N	1250V
	L - G	1250V
	N - G	1250V
@ 20KA	L-L	2500V
Clamping voltage	L - N	1400V
	L - G	1400V
	N - G	1400V
@ In	L-L	2800V
Sensitivity of Surge counter		≤3kA(8/20µs)
Enclosure material		Steel , IP66
Connecting cable section area		16mm² - 35mm²
Working environments		Temperature –40 $^{\circ}$ C $\sim$ +70 $^{\circ}$ , Humidity relative 5~95% (25 $^{\circ}$ C) , Altitude≤3km









