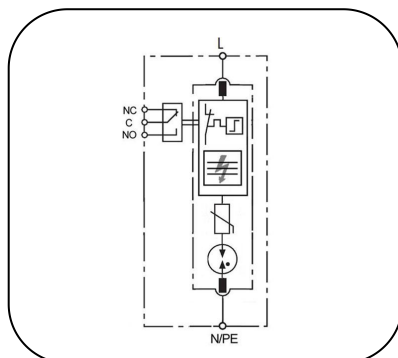


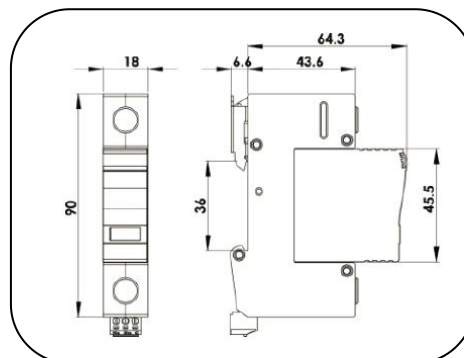
POWER SUPPLY SYSTEM

SURGE ARRESTERS – CLASS II

SP...VT(-S)



Basic circuit diagram



Dimension drawing

Type 2/Class II surge protective device is designed for low-voltage power supply system protection against surges at the boundaries from lightning protection zone 1-2 and higher.

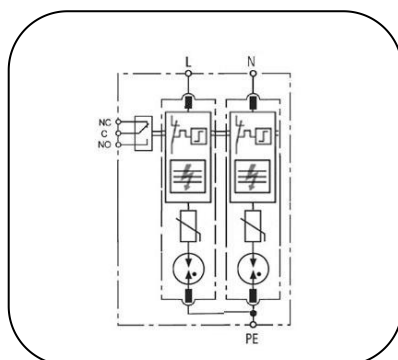
- KEMA certified T2 SPD per IEC/EN 61643-11 with VT technology to eliminate leakage current & follow current.
- High surge current discharge capacity up to 40kA 8/20μs.
- High reliability due to global patented thermally protected MOV with reliable arc-extinguish (TPAE) technology.
- Pluggable module for easy replacement
- High TOV (Temporary Over-Voltage) withstand and reliability, increased reliability for areas with unstable power network.
- Degradation indication and optional remote signal contact.
- Comply with IEC/EN 61643-11, UL1449 4th, CSA C22.2 etc standards.

Model		SP275VT(-S)	SP320VT(-S)
In accordance with		IEC61643-11:2011; EN61643-11:2012;UL1449 4th	
Category IEC/VDE/EN		II/CT2	
Max. continuous operating voltage (Vac/Vdc)	Uc	275/350V	320/420V
Nominal discharge current(8/20us)	In	20kA	
Max. discharge current(8/20us)	I _{max}	40kA	
Voltage protection level @In	Up	≤1.4kV	≤1.5kV
Temporary Overvoltage TOV -Withstand mode	U _{toV}	442V/120min	442V/120min
Residual current	I _{pe}	No	
Follow current	I _f	No	
Response time	t _A	≤25 ns	
Backup fuse(only required if not already provided in mains)		125A gL/gG	
Operating temperature range		- 40°C ~ + 85°C	
Cross-section of connection wire		Single-strand 35mm ² ; multi-strand 25mm ²	
Mounting		35mm DIN-rail in accordance with EN 50022/DIN46277-3	
Enclosure material		thermoplastic; extinguishing degree UL94 V-0	
Degree of protection		IP20	
Installation width		1 module, DIN 43880	
Failure indication/Status		Internal green – normal ; red - failure	
Remote alarm contact		Optional	
Approvals, Certifications		KEMA/CE	
Additional data for Remote Alarm Contacts			
Remote alarm contact type		Isolated Form C	
Switching capability	Un/In	AC: 250V/0.5A	DC: 250V/0.1A; 125V/0.2A; 75V/0.5A
Max. Size of connecting wire		Max. 1.5mm ² (or # 16AWG)	

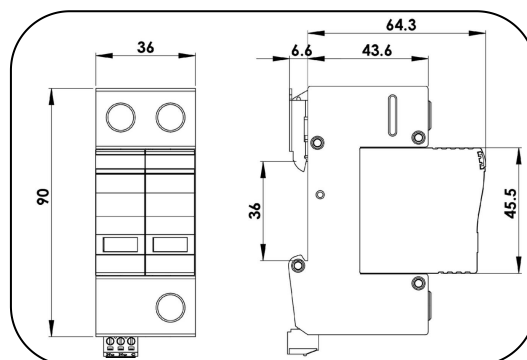
POWER SUPPLY SYSTEM

SURGE ARRESTERS – CLASS II

SP...VT/2P(-S)



Basic circuit diagram



Dimension drawing

Type 2/Class II surge protective device is designed for low-voltage power supply system protection against surges at the boundaries from lightning protection zone 1-2 and higher.

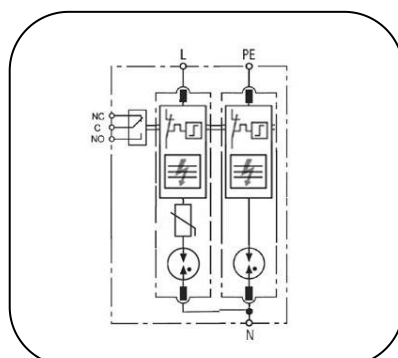
- KEMA certified T2 SPD per IEC/EN 61643-11 with VT technology to eliminate leakage current & follow current.
- Prewired 2 poles SPD application for single phase protection.
- High surge current discharge capacity up to 40kA 8/20 μ s.
- High reliability due to global patented thermally protected MOV with reliable arc-extinguish (TPAE) technology.
- Pluggable module for easy replacement
- High TOV (Temporary Over-Voltage) withstand and reliability, increased reliability for areas with unstable power network.
- Degradation indication and optional remote signal contact.
- Comply with IEC/EN 61643-11, UL1449 4th, CSA C22.2 etc standards.

Model		SP275VT/2P(-S)	SP320VT/2P(-S)
In accordance with		IEC61643-11:2011; EN61643-11:2012;UL1449 4th	
Category IEC/VDE/EN		II/C/T2	
Max. continuous operating voltage (Vac/Vdc)	Uc	275/350V	320/420V
Nominal discharge current(8/20us)	In	20kA	
Max. discharge current(8/20us)	I _{max}	40kA	
Voltage protection level @In	Up	≤ 1.4kV	≤ 1.5kV
Temporary Overvoltage TOV -Withstand mode	U _{toV}	442V/120min	442V/120min
Residual current	I _{pe}	No	
Follow current	I _f	No	
Response time	t _A	≤25 ns	
Backup fuse(only required if not already provided in mains)		125A gL/gG	
Operating temperature range		- 40°C ~ + 85°C	
Cross-section of connection wire		Single-strand 35mm ² ; multi-strand 25mm ²	
Mounting		35mm DIN-rail in accordance with EN 50022/DIN46277-3	
Enclosure material		thermoplastic; extinguishing degree UL94 V-0	
Degree of protection		IP20	
Installation width		2 module, DIN 43880	
Failure indication/Status		Internal green – normal ; red - failure	
Remote alarm contact		Optional	
Approvals, Certifications		KEMA/CE	
Additional data for Remote Alarm Contacts			
Remote alarm contact type		Isolated Form C	
Switching capability	Un/In	AC: 250V/0.5A	DC: 250V/0.1A; 125V/0.2A; 75V/0.5A
Max. Size of connecting wire		Max. 1.5mm ² (or # 16AWG)	

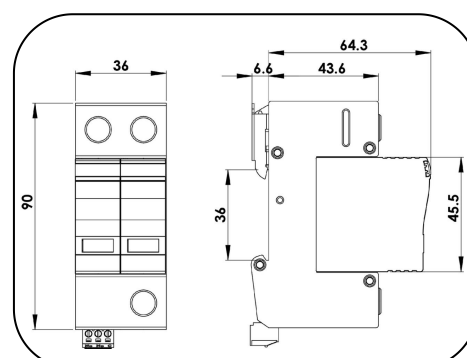
POWER SUPPLY SYSTEM

SURGE ARRESTERS – CLASS II

SP...VT/PN(-S)



Basic circuit diagram



Dimension drawing

Type 2/Class II surge protective device is designed for low-voltage power supply system protection against surges at the boundaries from lightning protection zone 1-2 and higher.

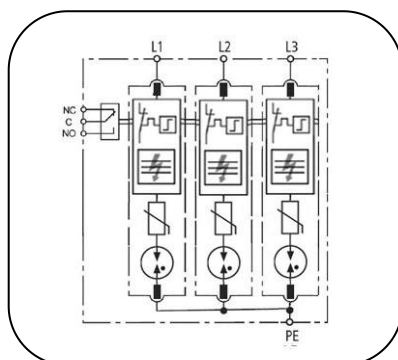
- KEMA certified T2 SPD per IEC/EN 61643-11 with VT technology to eliminate leakage current & follow current.
- Prewired “1+1” circuit application for single phase TT/TN system protection
- High surge current discharge capacity up to 40kA 8/20 μ s.
- High reliability due to global patented thermally protected MOV with reliable arc-extinguish (TPAE) technology.
- Pluggable module for easy replacement
- High TOV (Temporary Over-Voltage) withstand and robustness, increased reliability for areas with unstable power network.
- Degradation indication and optional remote signal contact.
- Comply with IEC/EN 61643-11, UL1449 4th, CSA C22.2 etc standards.

Model			SP275VT/PN(-S)	SP320VT/PN(-S)
In accordance with			IEC61643-11:2011; EN61643-11:2012;UL1449 4th	
Category IEC/VDE/EN			II/C/T2	
Max. continuous operating voltage	L-N (Vac/Vdc)	Uc	275/350V	320/420V
	N-PE(Vac)		255V	255V
Nominal discharge current(8/20us)		In	20kA	
Max. discharge current(8/20us)		I _{max}	40kA	
Voltage protection level	L-N @In	Up	≤ 1.4kV	≤1.5kV
	N-PE@1.2/50		≤ 1.5KV	≤1.5kV
Temporary Overvoltage TOV -Withstand mode	L-N	U _{tov}	442V/120min	442V/120min
	N-PE		1200V/200ms	1200V/200ms
Residual current		I _{pe}	No	
Follow current interrupt rating	N-PE	I _{fi}	100Arms @ 255Vac	
Response time		t _A	≤25 ns	
Backup fuse(only required if not already provided in mains)			125A gL/gG	
Operating temperature range			- 40°C ~ + 85°C	
Cross-section of connection wire			Single-strand 35mm²; multi-strand 25mm²	
Mounting			35mm DIN-rail in accordance with EN 50022/DIN46277-3	
Enclosure material			thermoplastic; extinguishing degree UL94 V-0	
Degree of protection			IP20	
Installation width			2 module, DIN 43880	
Failure indication/Status			Internal green – normal ; red - failure	
Remote alarm contact			Optional	
Approvals, Certifications			KEMA/CE	
Additional data for Remote Alarm Contacts				
Remote alarm contact type			Isolated Form C	
Switching capability		Un/In	AC: 250V/0.5A	DC: 250V/0.1A; 125V/0.2A; 75V/0.5A
Max. Size of connecting wire			Max. 1.5mm²(or # 16AWG)	

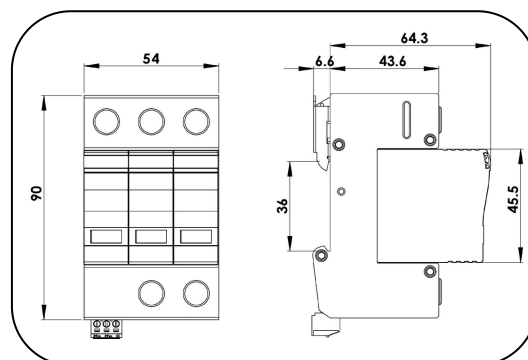
POWER SUPPLY SYSTEM

SURGE ARRESTERS – CLASS II

SP...VT/3P(-S)



Basic circuit diagram



Dimension drawing

Type 2/Class II surge protective device is designed for low-voltage power supply system protection against surges at the boundaries from lightning protection zone 1-2 and higher.

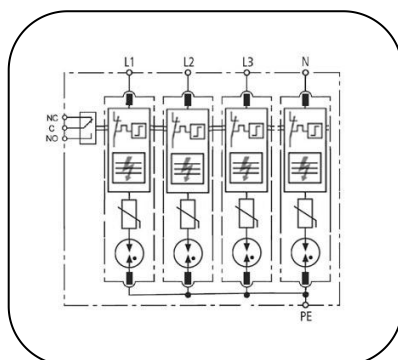
- KEMA certified T2 SPD per IEC/EN 61643-11 with VT technology to eliminate leakage current & follow current.
- Prewired 3 poles SPD application for three phases TN-C/IT system protection.
- High surge current discharge capacity up to 40kA 8/20 μ s.
- High reliability due to global patented thermally protected MOV with reliable arc-extinguish (TPAE) technology.
- Pluggable module for easy replacement
- High TOV (Temporary Over-Voltage) withstand and reliability, increased reliability for areas with unstable power network.
- Degradation indication and optional remote signal contact.
- Comply with IEC/EN 61643-11, UL1449 4th, CSA C22.2 etc standards.

Model		SP275VT/3P(-S)	SP320VT/3P(-S)
In accordance with		IEC61643-11:2011; EN61643-11:2012;UL1449 4th	
Category IEC/VDE/EN		II/C/T2	
Max. continuous operating voltage (Vac/Vdc)	Uc	275/350V	320/420V
Nominal discharge current(8/20us)	In	20kA	
Max. discharge current(8/20us)	Imax	40kA	
Voltage protection level @In	Up	≤1.4kV	≤1.5kV
Temporary Overvoltage TOV -Withstand mode	UtoV	442V/120min	442V/120min
Residual current	Ipe	No	
Follow current	If	No	
Response time	tA	≤25 ns	
Backup fuse(only required if not already provided in mains)		125A gL/gG	
Operating temperature range		- 40°C ~ + 85°C	
Cross-section of connection wire		Single-strand 35mm ² ; multi-strand 25mm ²	
Mounting		35mm DIN-rail in accordance with EN 50022/DIN46277-3	
Enclosure material		thermoplastic; extinguishing degree UL94 V-0	
Degree of protection		IP20	
Installation width		3 module, DIN 43880	
Failure indication/Status		Internal green – normal ; red - failure	
Remote alarm contact		Optional	
Approvals, Certifications		KEMA/CE	
Additional data for Remote Alarm Contacts			
Remote alarm contact type		Isolated Form C	
Switching capability	Un/In	AC: 250V/0.5A	DC: 250V/0.1A; 125V/0.2A; 75V/0.5A
Max. Size of connecting wire		Max. 1.5mm ² (or # 16AWG)	

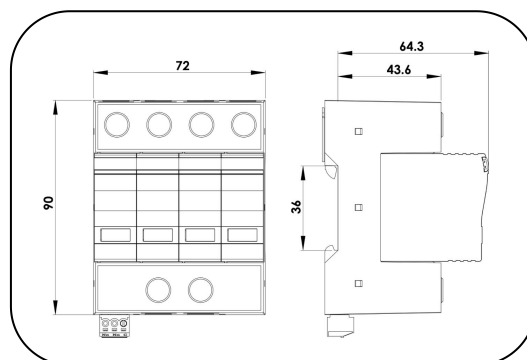
POWER SUPPLY SYSTEM

SURGE ARRESTERS – CLASS II

SP...VT/4P(-S)



Basic circuit diagram



Dimension drawing

Type 2/Class II surge protective device is designed for low-voltage power supply system protection against surges at the boundaries from lightning protection zone 1-2 and higher.

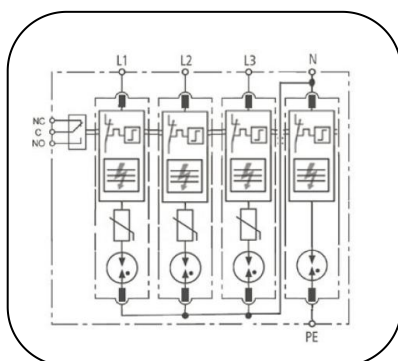
- KEMA certified T2 SPD per IEC/EN 61643-11 with VT technology to eliminate leakage current & follow current.
- Prewired 4+0 circuit application for three phases TN/TT system protection.
- High surge current discharge capacity up to 40kA 8/20 μ s.
- High reliability due to global patented thermally protected MOV with reliable arc-extinguish (TPAE) technology.
- Pluggable module for easy replacement
- High TOV (Temporary Over-Voltage) withstand and reliability, increased reliability for areas with unstable power network.
- Degradation indication and optional remote signal contact.
- Comply with IEC/EN 61643-11, UL1449 4th, CSA C22.2 etc standards.

Model		SP275VT/3P(-S)	SP320VT/3P(-S)
In accordance with		IEC61643-11:2011; EN61643-11:2012;UL1449 4th	
Category IEC/VDE/EN		II/C/T2	
Max. continuous operating voltage (Vac/Vdc)	Uc	275/350V	320/420V
Nominal discharge current(8/20us)	In	20kA	
Max. discharge current(8/20us)	Imax	40kA	
Voltage protection level @In	Up	≤1.4kV	≤1.5kV
Temporary Overvoltage TOV -Withstand mode	UtoV	442V/120min	442V/120min
Residual current	Ipe	No	
Follow current	If	No	
Response time	tA	≤25 ns	
Backup fuse(only required if not already provided in mains)		125A gL/gG	
Operating temperature range		- 40°C ~ + 85°C	
Cross-section of connection wire		Single-strand 35mm ² ; multi-strand 25mm ²	
Mounting		35mm DIN-rail in accordance with EN 50022/DIN46277-3	
Enclosure material		thermoplastic; extinguishing degree UL94 V-0	
Degree of protection		IP20	
Installation width		4 module, DIN 43880	
Failure indication/Status		Internal green – normal ; red - failure	
Remote alarm contact		Optional	
Approvals, Certifications		KEMA/CE	
Additional data for Remote Alarm Contacts			
Remote alarm contact type		Isolated Form C	
Switching capability	Un/In	AC: 250V/0.5A	DC: 250V/0.1A; 125V/0.2A; 75V/0.5A
Max. Size of connecting wire		Max. 1.5mm ² (or # 16AWG)	

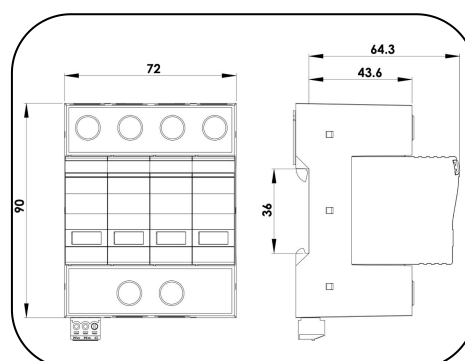
POWER SUPPLY SYSTEM

SURGE ARRESTERS – CLASS II

SP...VT/3PN(-S)



Basic circuit diagram



Dimension drawing

Type 2/Class II surge protective device is designed for low-voltage power supply system protection against surges at the boundaries from lightning protection zone 1-2 and higher.

- KEMA certified T2 SPD per IEC/EN 61643-11 with VT technology to eliminate leakage current & follow current.
- Prewired “3+1” circuit application for three phases TT/TN system protection
- High surge current discharge capacity up to 40kA 8/20μs.
- High reliability due to global patented thermally protected MOV with reliable arc-extinguish (TPAE) technology.
- Pluggable module for easy replacement
- High TOV (Temporary Over-Voltage) withstand and robustness, increased reliability for areas with unstable power network.
- Degradation indication and optional remote signal contact.
- Comply with IEC/EN 61643-11, UL1449 4th, CSA C22.2 etc standards.

Model			SP275VT/3PN(-S)	SP320VT/3PN(-S)
In accordance with			IEC61643-11:2011; EN61643-11:2012;UL1449 4th	
Category IEC/VDE/EN			II/C/T2	
Max. continuous operating voltage	L-N (Vac/Vdc)	Uc	275/350V	320/420V
	N-PE(Vac)		255V	255V
Nominal discharge current(8/20us)		In	20kA	
Max. discharge current(8/20us)		Imax	40kA	
Voltage protection level	L-N @In	Up	≤1.4kV	≤1.5kV
	N-PE@1.2/50		≤1.5kV	≤1.5kV
Temporary Overvoltage TOV -Withstand mode	L-N	UtoV	442V/120min	442V/120min
	N-PE		1200V/200ms	1200V/200ms
Residual current		Ipe	No	
Follow current interrupt rating	N-PE	Ifi	100Arms @ 255Vac	
Response time		tA	≤25 ns	
Backup fuse(only required if not already provided in mains)			125A gL/gG	
Operating temperature range			- 40°C ~ + 85°C	
Cross-section of connection wire			Single-strand 35mm²; multi-strand 25mm²	
Mounting			35mm DIN-rail in accordance with EN 50022/DIN46277-3	
Enclosure material			thermoplastic; extinguishing degree UL94 V-0	
Degree of protection			IP20	
Installation width			4 module, DIN 43880	
Failure indication/Status			Internal green – normal ; red - failure	
Remote alarm contact			Optional	
Approvals, Certifications			KEMA/CE	
Additional data for Remote Alarm Contacts				
Remote alarm contact type			Isolated Form C	
Switching capability		Un/In	AC: 250V/0.5A	DC: 250V/0.1A; 125V/0.2A; 75V/0.5A
Max. Size of connecting wire			Max. 1.5mm²(or # 16AWG)	