

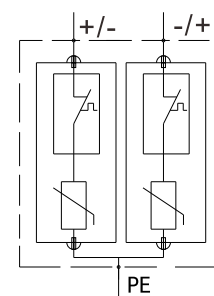
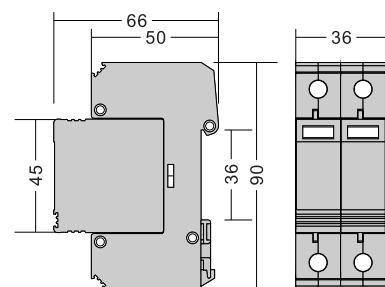
FV20C/2-***PVS

- ◆Category IEC / EN / VDE: Class II / Type 2 / C.
- ◆Location of use: Photovoltaic System DC side.
- ◆Protection modes: (+/-) - PE, (-/+) - PE
- ◆Protective elements: MOV, U type
- ◆High surge discharge rating: $I_{max}=40kA$.
- ◆Complies with: IEC/EN 61643-11:2011
IEC/EN 50539-11
UTE C 61-740-51



Model NO.	FV20C/2-48PVS	FV20C/2-96PVS	FV20C/2-150PVS	FV20C/2-500PVS	FV20C/2-600PVS	FV20C/2-800PVS	FV20C/2-1000PVS
Test Class According to IEC/EN50539-11&IEC/EN61643-11	Class II						
Nominal Voltage U_N	48Vdc	96Vdc	150Vdc	500Vdc	600Vdc	800Vdc	1000Vdc
Max. Cont. Operation Voltage $U_{c\,pv}$	56Vdc	125Vdc	180Vdc	560Vdc	670Vdc	825Vdc	1060Vdc
Maximum Discharge Current (8/20 μs) I_{max}	40kA						
Nominal Discharge Current (8/20 μs) I_n	20kA						
Voltage Protective Level U_p (CM/DM)	$\leq 0.6kV$	$\leq 0.8kV$	$\leq 1.0kV$	$\leq 1.8kV$	$\leq 2.2kV$	$\leq 2.7kV$	$\leq 3.2kV$
Response Time t_A	$\leq 25ns$						
Recommended Back-up Fuse	125A						
Isolation Resistance	$>10^2 M\Omega$						
I/O Connections	Multi-strand 4~25mm ² , Single-strand: 4~35mm ²						
Mounting	35mm, Symmetrical rail (EN50022/DIN46277-3)						
Operation Temperature Range	-40°C~+85°C						
Degree of Protection	IP20						
Housing Material	UL94V0						
Disconnection Indicator	Mechanical Indicator						
Remote Control Contact	Optional						

CM=Common mode(+/-PE or -/PE) DM=Differential mode(+/-)



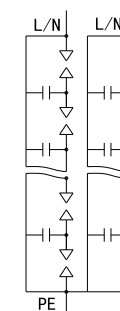
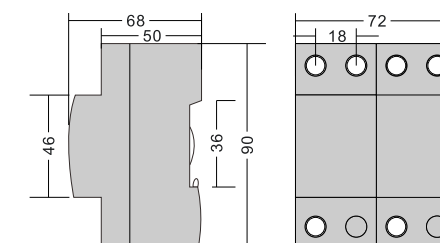
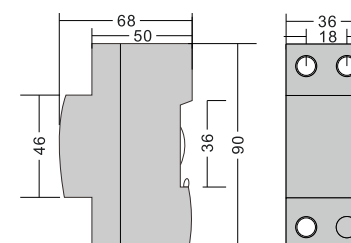
FV50B

- ◆Category IEC / EN / VDE: Class I / Type 1 / B..
- ◆Location of use: Main-distribution boards.
- ◆Connections: TN, TT, IT
- ◆Protective elements: Spark gap
- ◆High surge discharge rating: $I_{imp}=50kA$.
- ◆Complies with: IEC/EN61643-11:2011



Model NO.	FV50B/*-150	FV50B/*-255
Test Class According to IEC/EN61643-11	Class I	
Nominal Voltage 50(60)Hz U_N	120V	230V
Max Cont Operating Voltage U_c	150V	255V
Impulse Discharge Current (10/350 μs) I_{imp}	50kA	
Nominal Discharge Current (8/20 μs) I_n	50KA	
Voltage Protective Level U_p	$\leq 1.2kV$	$\leq 1.8kV$
Response Time t_A	$\leq 100ns$	
Recommended Back-up Fuse	500A	
Isolation Resistance	$>10^2 M\Omega$	
I/O Connections	Multi-strand 4~25mm ² , Single-strand: 4~35mm ²	
Mounting	35mm, Symmetrical rail (EN50022/DIN46277-3)	
Operation Temperature Range	-40°C~+85°C	
Degree of Protection	IP20	
Housing Material	UL94V0	
Disconnection Indicator	NO	
Remote Control Contact	NO	

Remark: "*" refers to number of poles, 1,2,3,4



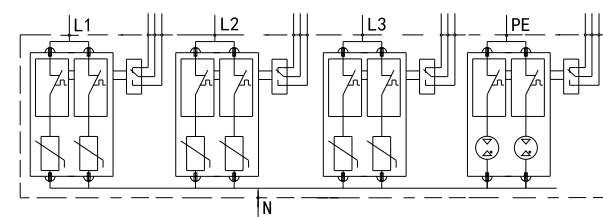
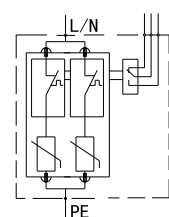
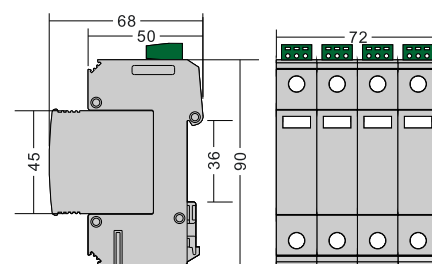
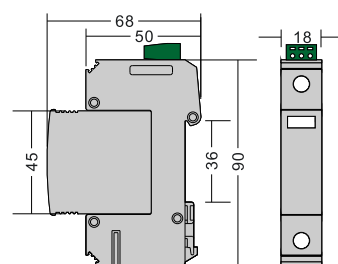
FVB12.5B+C

- ◆Category IEC / EN / VDE: Class I+II / Type 1+2 / B+C.
- ◆Location of use: Sub/Main-distribution boards.
- ◆Connections: TN, TT, IT
- ◆Protective elements: L-PE: MOV, N-PE: GDT
- ◆High surge discharge rating: $I_{max}=80kA$, $I_{imp}=12.5kA$, 18mm/pole.
- ◆Complies with: IEC/EN61643-11:2011



Model NO.	FVB12.5B+C/*-150S	FVB12.5B+C/*-275S	FVB12.5B+C/*-300S	FVB12.5B+C/NPE
Test Class According to IEC/EN61643-11	Class I+II			
Type of Network	TT, TN, IT			TT
Nominal Voltage 50(60)Hz U_N	120V	230V	230V	220V
Max Cont Operating Voltage U_c	150V	275V	300V	255V
Impulse Discharge Current(10/350 μs) I_{imp}	12.5kA			12.5kA
Maximum Discharge Current(8/20 μs) I_{max}	80KA			80KA
Nominal Discharge Curren (8/20 μs) I_n	40KA			40KA
Voltage Protective Level U_p	$\leq 0.9kV$	$\leq 1.5kV$	$\leq 1.7kV$	$\leq 1.5kV$
Response Time t_A	$\leq 25ns$			$\leq 100ns$
Recommended Back-up Fuse	250A			—
Isolation Resistance	$>10^7 M\Omega$			
I/O Connections	Multi-strand 4~25mm ² , Single-strand: 4~35mm ²			
Mounting	35mm, Symmetrical rail(EN50022/DIN46277-3)			
Operation Temperature Range	$-40^{\circ}C \sim +85^{\circ}C$			
Degree of Protection	IP20			
Housing Material	UL94V0			
Disconnection Indicator	Mechanical indicator			
Remote Control Contact	Optional			

Remark: "*" refers to number of poles, 1,2,3,4



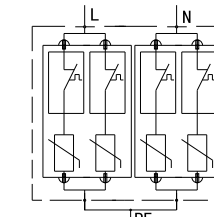
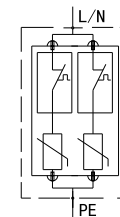
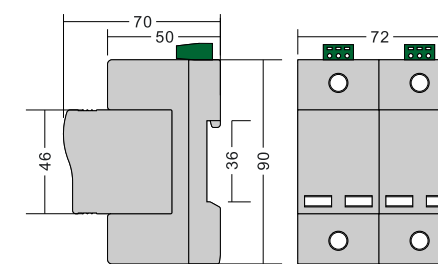
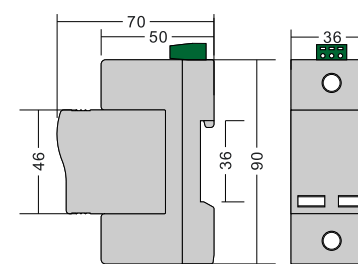
FV40B+C

- ◆Category IEC / EN / VDE: Class I+II / Type 1+2 / B+C..
- ◆Location of use: Sub/main-distribution boards.
- ◆Connections: TN, TT, IT
- ◆Protective elements: L-PE: MOV, N-PE: GDT
- ◆High surge discharge rating: $I_{max}=80kA$, $I_{imp}=12kA$.
- ◆Complies with: IEC/EN61643-11:2011



Model NO.	FV40B+C/*-150S	FV40B+C/*-275S	FV40B+C/*-320S	FV40B+C/NPE
Test Class According to IEC/EN61643-11	Class I+II			
Type of Network	TT, TN			TT
Nominal Voltage 50(60)Hz U_N	120V	230V	230V	220V
Max Cont Operating Voltage U_c	150V	275V	320V	255V
Impulse Discharge Current(10/350 μs) I_{imp}	12kA			12kA
Maximum Discharge Current(8/20 μs) I_{max}	80KA			80KA
Nominal Discharge Curren (8/20 μs) I_n	40KA			40KA
Voltage Protective Level U_p	$\leq 1.5kV$	$\leq 1.7kV$	$\leq 2.0kV$	$\leq 1.5kV$
Response Time t_A	$\leq 25ns$			$\leq 100ns$
Recommended Back-up Fuse	200A			—
Isolation Resistance	$>10^7 M\Omega$			
I/O Connections	Multi-strand 4~25mm ² , Single-strand: 4~35mm ²			
Mounting	35mm, Symmetrical rail(EN50022/DIN46277-3)			
Operation Temperature Range	$-40^{\circ}C \sim +85^{\circ}C$			
Degree of Protection	IP20			
Housing Material	UL94V0			
Disconnection Indicator	Mechanical indicator			
Remote Control Contact	Optional			

Remark: "*" refers to number of poles, 1,2,3,4



FV30B+C

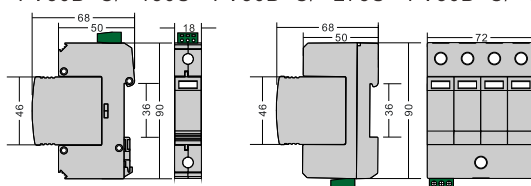
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- ◆Location of use: Sub/main distribution boards.
- ◆Connections: TN, TT, IT
- ◆Protective elements: L-PE: MOV, N-PE: GDT
- ◆High surge discharge rating: $I_{max}=60kA$, $I_{imp}=7kA$
- ◆Complies with: IEC/EN61643-11:2011



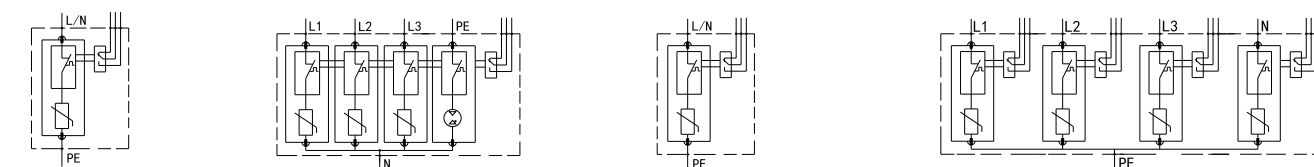
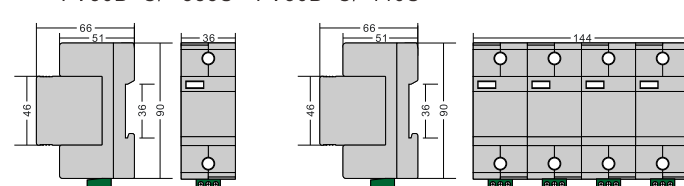
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Test Class According to IEC/EN61643-11	Class I+II					
Type of Network	TT, TN, IT					TT
Nominal Voltage 50(60)Hz U_N	120V	230V	230V	380V	400V	220V
Max cont Operating Voltage U_c	150V	275V	320V	385V	440V	255V
Impulse Discharge Current(10/350 μs) I_{imp}	7kA					7kA
Maximum Discharge Current(8/20 μs) I_{max}	60KA					60KA
Nominal Discharge Current (8/20 μs) I_n	30KA					30KA
Voltage Protective Level U_p	$\leq 1.2kV$	$\leq 1.5kV$	$\leq 1.8kV$	$\leq 2.0kV$	$\leq 2.2kV$	$\leq 1.5kV$
Response Time t_A	$\leq 25ns$					$\leq 100ns$
Recommended Back-up Fuse	160A					—
Isolation Resistance	$>10^2 M\Omega$					
I/O Connections	Multi-strand 4~25mm ² , Single-strand: 4~35mm ²					
Mounting	35mm, Symmetrical rail(EN50022/DIN46277-3)					
Operation Temperature Range	-40°C~+85°C					
Degree of Protection	IP20					
Housing Material	UL94V0					
Disconnection Indicator	Mechanical indicator					
Remote Control Contact	Optional					

Remark: "*" refers to number of poles, 1,2,3,4

FV30B+C/*-150S FV30B+C/*-275S FV30B+C/*-320S



FV30B+C/*-385S FV30B+C/*-440S



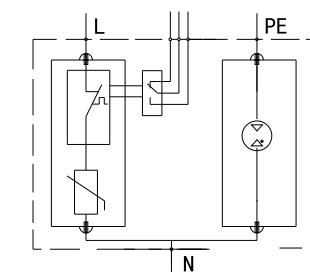
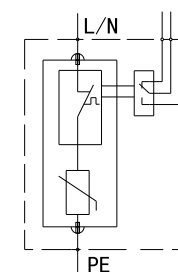
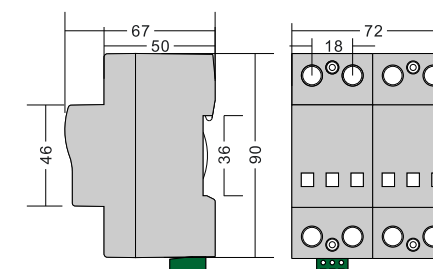
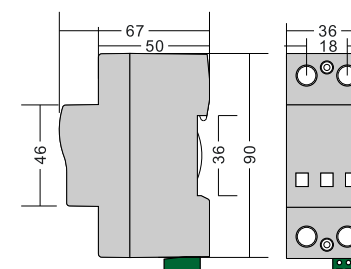
FV60C

- ◆Category IEC / EN / VDE: Class II / Type 2 / C.
- ◆Location of use: Sub-distribution boards.
- ◆Connections: TN, TT, IT
- ◆Protective elements: L-PE: MOV, N-PE: GDT
- ◆High surge discharge rating: $I_{max}=120kA$.
- ◆Complies with: IEC/EN61643-11:2011



Model NO.	FV60C/*-150S	FV60C/*-275S	FV60C/*-320S	FV60C/*-385S	FV60C/*-440S	FV60C/NPE
Test Class According to IEC/EN61643-11	Class II					
Type of Network	TT, TN					TT
Nominal Voltage 50(60)Hz U_N	120V	230V	230V	380V	400V	220V
Max Cont Operating Voltage U_c	150V	275V	320V	385V	440V	255V
Maximum Discharge Current(8/20 μs) I_{max}	120KA					120KA
Nominal Discharge Current (8/20 μs) I_n	60KA					60KA
Voltage Protective Level U_p	$\leq 1.8kV$	$\leq 2.2kV$	$\leq 2.5kV$	$\leq 2.8kV$	$\leq 3.0kV$	$\leq 1.5kV$
Response Time t_A	$\leq 25ns$					$\leq 100ns$
Recommended Back-up Fuse	315A					—
Isolation Resistance	$>10^2 M\Omega$					
I/O Connections	Multi-strand 4~25mm ² , Single-strand: 4~35mm ²					
Mounting	35mm, Symmetrical rail(EN50022/DIN46277-3)					
Operation Temperature Range	-40°C~+85°C					
Degree of Protection	IP20					
Housing Material	UL94V0					
Disconnection Indicator	Mechanical indicator					NO
Remote Control Contact	Optional					NO

Remark: "*" refers to number of poles, 1,2,3,4



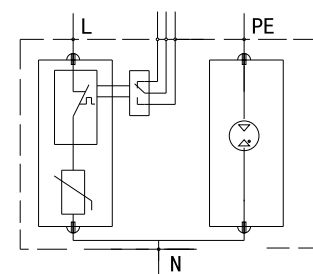
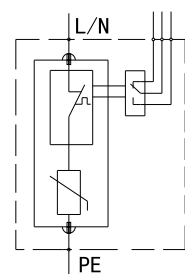
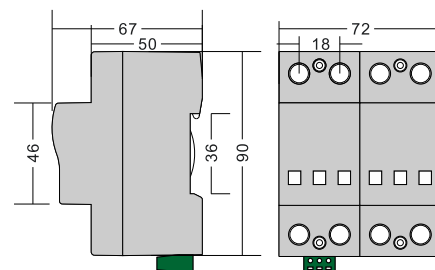
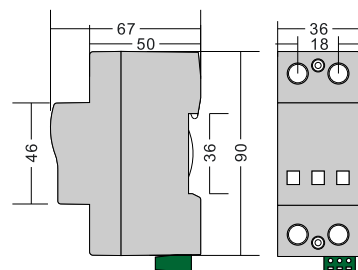
FV50C

- ◆Category IEC / EN / VDE: Class II / Type 2 / C.
- ◆Location of use: Sub-distribution boards.
- ◆Connections: TN, TT, IT
- ◆Protective elements: L-PE: MOV, N-PE: GDT
- ◆High surge discharge rating: $I_{max}=100kA$.
- ◆Complies with: IEC/EN61643-11:2011



Model NO.	FV50C/*-150S	FV50C/*-275S	FV50C/*-320S	FV50C/*-385S	FV50C/*-440S	FV50C/NPE
Test Class According to IEC/EN61643-11	Class II					
Type of Network	TT, TN					TT
Nominal Voltage 50(60)Hz U_N	120V	230V	230V	380V	400V	220V
Max Cont Operating Voltage U_c	150V	275V	320V	385V	440V	255V
Maximum Discharge Current(8/20 μs) I_{max}	100KA					100KA
Nominal Discharge Current (8/20 μs) I_n	50KA					50KA
Voltage Protective Level U_p	$\leq 1.6kV$	$\leq 1.8kV$	$\leq 2.2kV$	$\leq 2.6kV$	$\leq 2.8kV$	$\leq 1.5kV$
Response Time t_A	$\leq 25ns$					$\leq 100ns$
Recommended Back-up Fuse	250A					—
Isolation Resistance	$>10^7 M\Omega$					
I/O Connections	Multi-strand 4~25mm ² , Single-strand: 4~35mm ²					
Mounting	35mm, Symmetrical rail(EN50022/DIN46277-3)					
Operation Temperature Range	-40°C~+85°C					
Degree of Protection	IP20					
Housing Material	UL94V0					
Disconnection Indicator	Mechanical indicator					NO
Remote Control Contact	Optional					NO

Remark: "*" refers to number of poles, 1,2,3,4



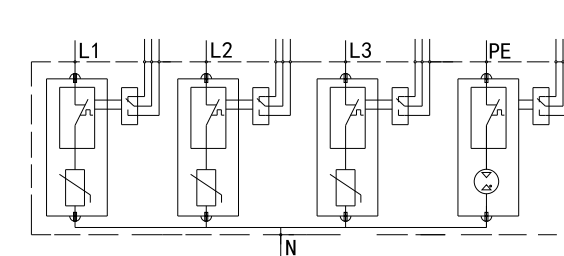
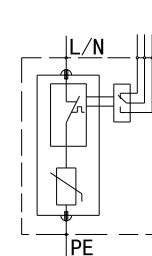
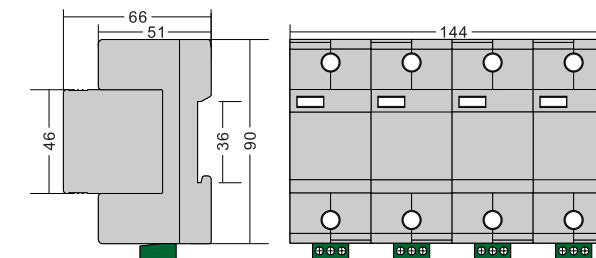
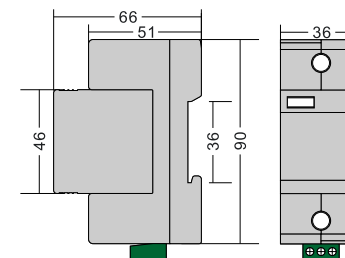
FV40C

- ◆Category IEC / EN / VDE: Class II / Type 2 / C.
- ◆Location of use: Sub-distribution boards.
- ◆Connections: TN, TT, IT
- ◆Protective elements: L-PE: MOV, N-PE: GDT
- ◆High surge discharge rating: $I_{max}=80kA$.
- ◆Complies with: IEC/EN61643-11:2011



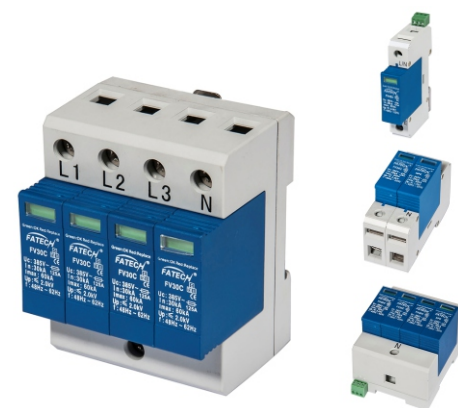
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Test Class According to IEC/EN61643-11	Class II					
Type of Network	TT, TN					TT
Nominal Voltage 50(60)Hz U_N	120V	230V	230V	380V	400V	220V
Max Cont Operating Voltage U_c	150V	275V	320V	385V	440V	255V
Maximum Discharge Current(8/20 μs) I_{max}	80KA					80KA
Nominal Discharge Current (8/20 μs) I_n	40KA					40KA
Voltage Protective Level U_p	$\leq 1.5kV$	$\leq 1.7kV$	$\leq 2.0kV$	$\leq 2.5kV$	$\leq 2.7kV$	$\leq 1.5kV$
Response Time t_A	$\leq 25ns$					$\leq 100ns$
Recommended Back-up Fuse	200A					—
Isolation Resistance	$>10^7 M\Omega$					
I/O Connections	Multi-strand 4~25mm ² , Single-strand: 4~35mm ²					
Mounting	35mm, Symmetrical rail(EN50022/DIN46277-3)					
Operation Temperature Range	-40°C~+85°C					
Degree of Protection	IP20					
Housing Material	UL94V0					
Disconnection Indicator	Mechanical indicator					NO
Remote Control Contact	Optional					NO

Remark: "*" refers to number of poles, 1,2,3,4



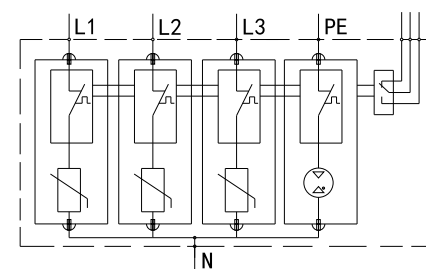
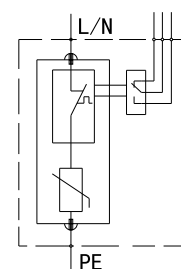
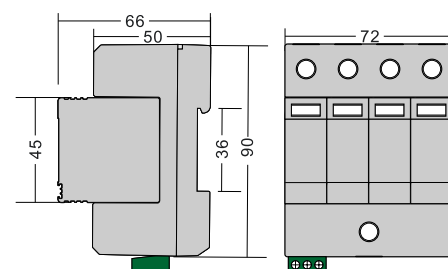
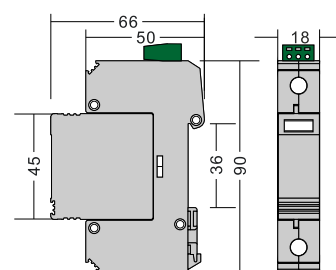
FV30C

- ◆Category IEC / EN / VDE: Class II / Type 2 / C.
- ◆Location of use: Sub-distribution boards.
- ◆Connections: TN, TT, IT
- ◆Protective elements: L-PE: MOV, N-PE: GDT
- ◆High surge discharge rating: $I_{max}=60kA$.
- ◆Complies with: IEC/EN61643-11:2011



Model NO.	FV30C/*-150S	FV30C/*-275S	FV30C/*-320S	FV30C/*-385S	FV30C/*-440S	FV30C/NPE
Test Class According to IEC/EN61643-11	Class II					
Type of Network	TT, TN, IT					TT
Nominal Voltage 50(60)Hz U_N	120V	230V	230V	380V	400V	220V
Max Cont Operating Voltage U_c	150V	275V	320V	385V	440V	255V
Maximum Discharge Current(8/20 μs) I_{max}	60KA					60KA
Nominal Discharge Current (8/20 μs) I_n	30KA					30KA
Voltage Protective Level U_p	$\leq 1.2kV$	$\leq 1.5kV$	$\leq 1.8kV$	$\leq 2.0kV$	$\leq 2.2kV$	$\leq 1.5kV$
Response Time t_A	$\leq 25ns$					$\leq 100ns$
Recommended Back-up Fuse	160A					—
Isolation Resistance	$>10^7M\Omega$					
I/O Connections	Multi-strand 4~25mm ² , Single-strand: 4~35mm ²					
Mounting	35mm, Symmetrical rail(EN50022/DIN46277-3)					
Operation Temperature Range	$-40^{\circ}C \sim +85^{\circ}C$					
Degree of Protection	IP20					
Housing Material	UL94V0					
Disconnection Indicator	Mechanical indicator					
Remote Control Contact	Optional					

Remark: "*" refers to number of poles, 1,2,3,4



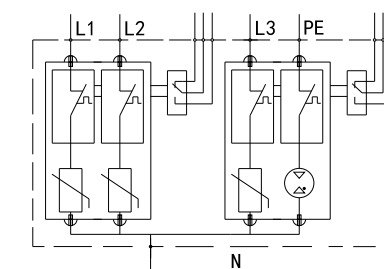
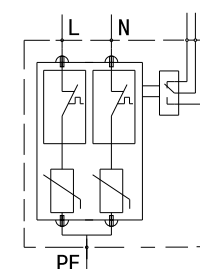
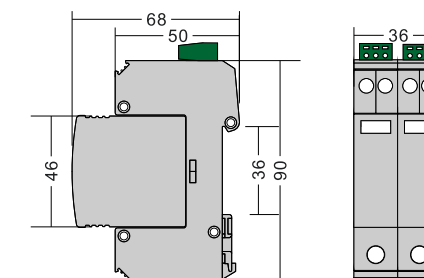
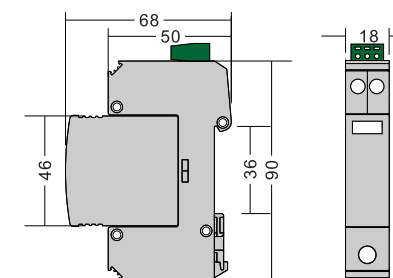
FVC20C

- ◆Category IEC / EN / VDE: Class II / Type 2 / C.
- ◆Location of use: Sub-distribution boards.
- ◆Connections: TN, TT, IT
- ◆Protective elements: L-PE: MOV, N-PE: GDT
- ◆High surge discharge rating: $I_{max}=40kA$, 9mm/pole.
- ◆Complies with: IEC/EN61643-11:2011



Model NO.	FVC20C/*-150S	FVC20C/*-275S	FVC20C/*-320S	FVC20C/*-385S	FVC20C/*-440S	FVC20C/NPE
Test Class According to IEC/EN61643-11	Class II					
Type of Network	TT, TN, IT					TT
Nominal Voltage 50(60)Hz U_N	120V	230V	230V	380V	400V	220V
Max Cont Operating Voltage U_c	150V	275V	320V	385V	440V	255V
Maximum Discharge Current(8/20 μs) I_{max}	40KA					40KA
Nominal Discharge Current (8/20 μs) I_n	20KA					20KA
Voltage Protective Level U_p	$\leq 1.0kV$	$\leq 1.3kV$	$\leq 1.5kV$	$\leq 1.8kV$	$\leq 2.0kV$	$\leq 1.5kV$
Response Time t_A	$\leq 25ns$					$\leq 100ns$
Recommended Back-up Fuse	125A					—
Isolation Resistance	$>10^7M\Omega$					
I/O Connections	Multi-strand 4~6mm ² , Single-strand: 4~6mm ²					
Mounting	35mm, Symmetrical rail(EN50022/DIN46277-3)					
Operation Temperature Range	$-40^{\circ}C \sim +85^{\circ}C$					
Degree of Protection	IP20					
Housing Material	UL94V0					
Disconnection Indicator	Mechanical indicator					
Remote Control Contact	Optional					

Remark: "*" refers to number of poles, 1,2,3,4



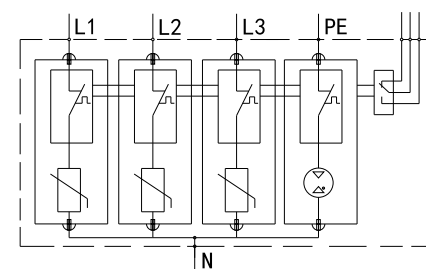
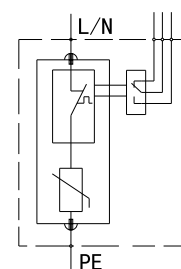
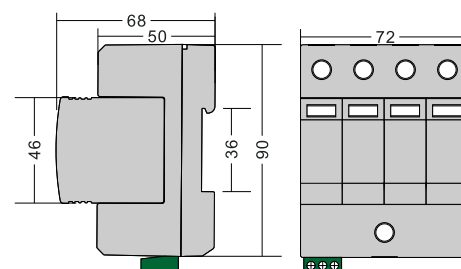
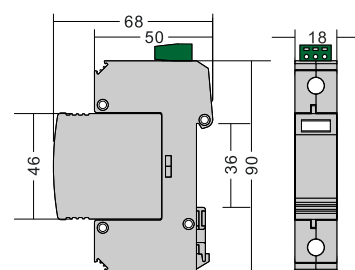
FV20C

- ◆Category IEC / EN / VDE: Class II / Type 2 / C.
- ◆Location of use: Sub-distribution boards.
- ◆Connections: TN, TT, IT
- ◆Protective elements: L-PE: MOV, N-PE: GDT
- ◆High surge discharge rating: $I_{max}=40kA$.
- ◆Complies with: IEC/EN61643-11:2011



Model NO.	FV20C/*-150S	FV20C/*-275S	FV20C/*-320S	FV20C/*-385S	FV20C/*-440S	FV20C/NPE
Test Class According to IEC/EN61643-11	Class II					
Type of Network	TT, TN, IT					TT
Nominal Voltage 50(60)Hz U_N	120V	230V	230V	380V	400V	220V
Max Cont Operating Voltage U_c	150V	275V	320V	385V	440V	255V
Maximum Discharge Current(8/20 μs) I_{max}	40KA					40KA
Nominal Discharge Current (8/20 μs) I_n	20KA					20KA
Voltage Protective Level U_p	$\leq 1.0kV$	$\leq 1.3kV$	$\leq 1.5kV$	$\leq 1.8kV$	$\leq 2.0kV$	$\leq 1.5kV$
Response Time t_A	$\leq 25ns$					$\leq 100ns$
Recommended Back-up Fuse	125A					—
Isolation Resistance	$>10^2M\Omega$					
I/O Connections	Multi-strand 4~25mm ² , Single-strand: 4~35mm ²					
Mounting	35mm, Symmetrical rail(EN50022/DIN46277-3)					
Operation Temperature Range	$-40^{\circ}C \sim +85^{\circ}C$					
Degree of Protection	IP20					
Housing Material	UL94V0					
Disconnection Indicator	Mechanical indicator					
Remote Control Contact	Optional					

Remark: "*" refers to number of poles, 1,2,3,4



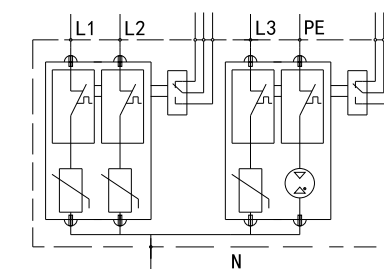
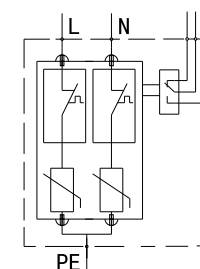
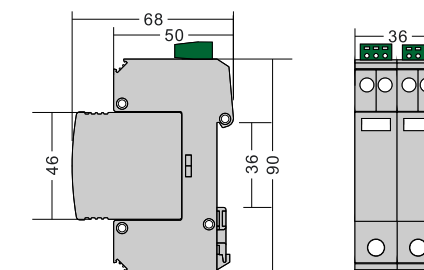
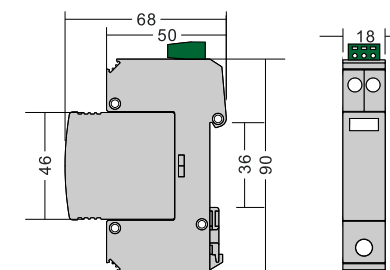
FVC10D

- ◆Category IEC / EN / VDE: Class II / Type 2 / C.
- ◆Location of use: Sub-distribution boards.
- ◆Connections: TN, TT, IT
- ◆Protective elements: L-PE: MOV, N-PE: GDT
- ◆High surge discharge rating: $I_{max}=20kA$, 9mm/pole.
- ◆Complies with: IEC/EN61643-11:2011



Model NO.	FVC10D/*-150S	FVC10D/*-275S	FVC10D/*-320S	FVC10D/*-385S	FVC10D/*-440S	FVC10D/NPE
Test Class According to IEC/EN61643-11	Class II					
Type of Network	TT, TN, IT					TT
Nominal Voltage 50(60)Hz U_N	120V	230V	230V	380V	400V	220V
Max Cont Operating Voltage U_c	150V	275V	320V	385V	440V	255V
Maximum Discharge Current(8/20 μs) I_{max}	20kA					20KA
Nominal Discharge Current (8/20 μs) I_n	10kA					10KA
Voltage Protective Level U_p	$\leq 1.0kV$	$\leq 1.2kV$	$\leq 1.5kV$	$\leq 1.8kV$	$\leq 2.0kV$	$\leq 1.5kV$
Response Time t_A	$\leq 25ns$					$\leq 100ns$
Recommended Back-up Fuse	63A					—
Isolation Resistance	$>10^2M\Omega$					
I/O Connections	Multi-strand 4~6mm ² , Single-strand: 4~6mm ²					
Mounting	35mm, Symmetrical rail(EN50022/DIN46277-3)					
Operation Temperature Range	$-40^{\circ}C \sim +85^{\circ}C$					
Degree of Protection	IP20					
Housing Material	UL94V0					
Disconnection Indicator	Mechanical indicator					
Remote Control Contact	Optional					

Remark: "*" refers to number of poles, 1,2,3,4



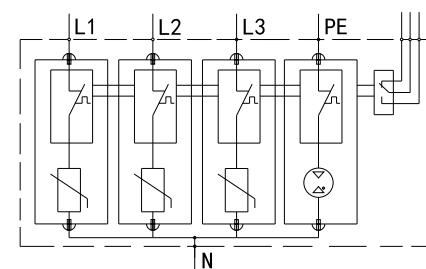
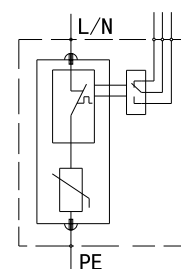
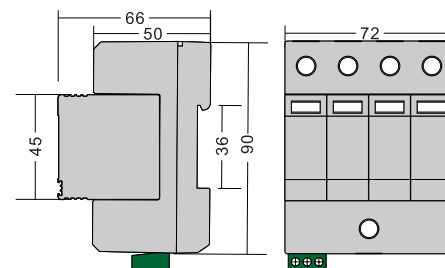
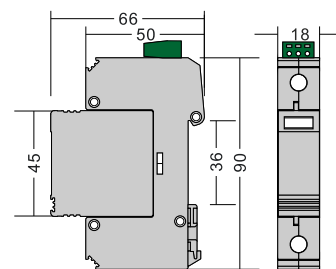
FV10D

- ◆Category IEC / EN / VDE: Class II / Type 2 / C.
- ◆Location of use: Sub-distribution boards.
- ◆Connections: TN, TT, IT
- ◆Protective elements: L-PE: MOV, N-PE: GDT
- ◆High surge discharge rating: $I_{max}=20kA$.
- ◆Complies with: IEC/EN61643-11:2011



Model NO.	FV10D/*-150S	FV10D/*-275S	FV10D/*-320S	FV10D/*-385S	FV10D/*-440S	FV10D/NPE
Test Class According to IEC/EN61643-11	Class II					
Type of Network	TT, TN, IT					TT
Nominal Voltage 50(60)Hz U_N	120V	230V	230V	380V	400V	220V
Max Cont Operating Voltage U_c	150V	275V	320V	385V	440V	255V
Maximum Discharge Current(8/20 μs) I_{max}	20KA					20KA
Nominal Discharge Current (8/20 μs) I_n	10KA					10KA
Voltage Protective Level U_p	$\leq 1.0kV$	$\leq 1.2kV$	$\leq 1.5kV$	$\leq 1.8kV$	$\leq 2.0kV$	$\leq 1.5kV$
Response Time t_A	$\leq 25ns$					$\leq 100ns$
Recommended Back-up Fuse	63A					—
Isolation Resistance	$>10^9M\Omega$					
I/O Connections	Multi-strand 4~25mm ² , Single-strand: 4~35mm ²					
Mounting	35mm, Symmetrical rail(EN50022/DIN46277-3)					
Operation Temperature Range	-40°C~+85°C					
Degree of Protection	IP20					
Housing Material	UL94V0					
Disconnection Indicator	Mechanical indicator					
Remote Control Contact	Optional					

Remark: "*" refers to number of poles, 1,2,3,4



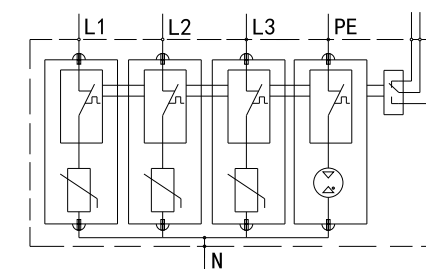
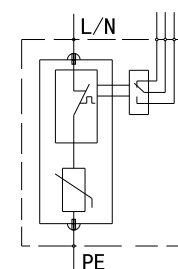
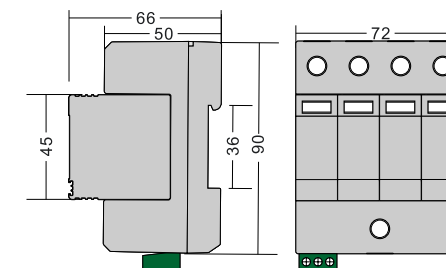
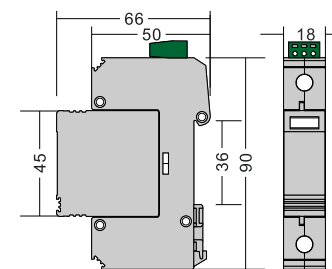
FV05D

- ◆Category IEC / EN / VDE: Class II / Type 2 / C.
- ◆Location of use: Sub-distribution boards.
- ◆Connections: TN, TT, IT
- ◆Protective elements: L-PE: MOV, N-PE: GDT
- ◆High surge discharge rating: $I_{max}=10kA$.
- ◆Complies with: IEC/EN61643-11:2011



Model NO.	FV05D/*-150S	FV05D/*-275S	FV05D/*-320S	FV05D/*-385S	FV05D/*-440S	FV05D/NPE
Test Class According to IEC/EN61643-11	Class II					
Type of Network	TT, TN, IT					TT
Nominal Voltage 50(60)Hz U_N	120V	230V	230V	380V	400V	220V
Max Cont Operating Voltage U_c	150V	275V	320V	385V	440V	255V
Maximum Discharge Current(8/20 μs) I_{max}	10KA					10KA
Nominal Discharge Current (8/20 μs) I_n	5KA					5KA
Voltage Protective Level U_p	$\leq 0.8kV$	$\leq 1.0kV$	$\leq 1.3kV$	$\leq 1.5kV$	$\leq 1.8kV$	$\leq 1.5kV$
Response Time t_A	$\leq 25ns$					$\leq 100ns$
Recommended Back-up Fuse	16A					—
Isolation Resistance	$>10^9M\Omega$					
I/O Connections	Multi-strand 4~25mm ² , Single-strand: 4~35mm ²					
Mounting	35mm, Symmetrical rail(EN50022/DIN46277-3)					
Operation Temperature Range	-40°C~+85°C					
Degree of Protection	IP20					
Housing Material	UL94V0					
Disconnection Indicator	Mechanical indicator					
Remote Control Contact	Optional					

Remark: "*" refers to number of poles, 1,2,3,4

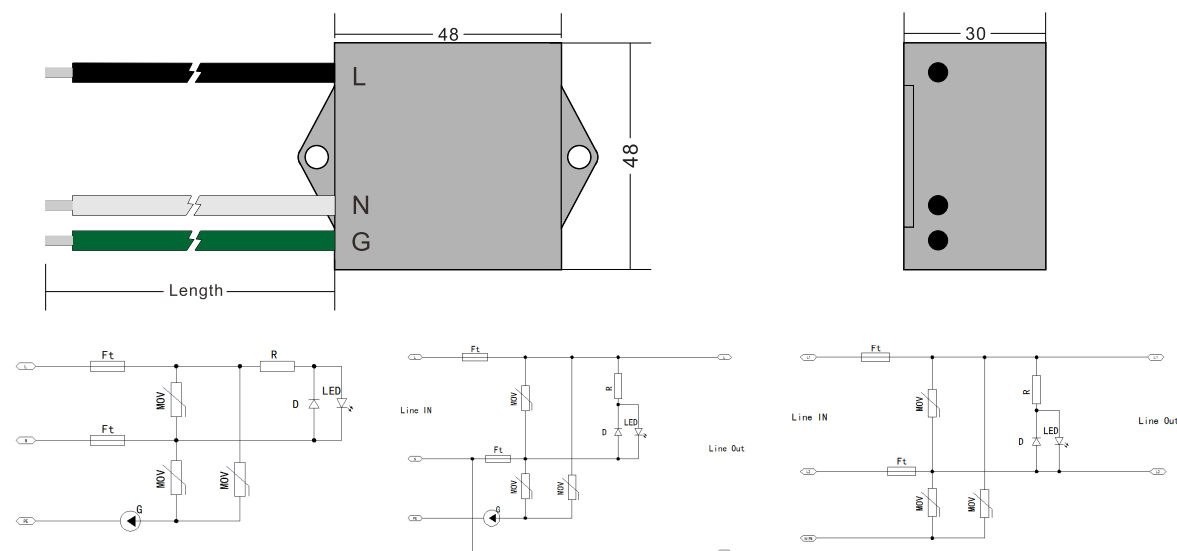


FLP10-***-P/S

- ◆LED street light surge protection
- ◆With thermal cut-off member inside
- ◆With working status indication
- ◆High energy I_{max} 20kA
- ◆Water proof IP66



Model NO.		FLP10-150-P/S	FLP10-275-P/S	FLP10-320-P/S	FLP10-385-P/S
Rated Voltage 50(60)Hz U _N		120V	230V	230V	380V
Max. Cont. Operating Voltage U _c		150V	275V	320V	385V
Max. Discharge Current (8/20μs) I _{max}		20kA			
Nominal Discharge Current (8/20μs) I _n		10kA			
Voltage Protective Level U _p	L-N	≤0.8kV	≤1.1kV	≤1.3kV	≤1.5kV
	L/N-PE	≤1.0kV	≤1.3kV	≤1.5kV	≤1.7kV
Response Time t _A	L-N	≤25ns			
	L/N-PE	≤100ns			
Recommended Back-up Fuse		63A			
Thermal Cut-off Member		Internal			
Protection Mode		L-N, L-PE, N-PE			
Failsafe Behavior		AC network cutoff and LED off			
Operating Temperature range		-40℃~+85℃			
Degree of Protection		IP66			
Housing Material		UL94V0			



FV03D/2-...L

- ◆Category IEC/EN/VDE: Clsaa III/Type3/D.
- ◆Location of use: Sub-distribution boards.
- ◆Protection modes: L-PE,N-PE
- ◆High surge discharge rating: I_{max}=6kA.
- ◆Complies with: IEC/EN61643-11:2011



Model NO.	FV03D/2-150L	FV03D/2-275L	FV03D/2-320L	FV03D/2-440L
Rated Voltage U _N	120V	230V	230V	400V
Max. Cont. Operating Voltage U _c	150V	275V	320V	440V
Nominal Discharge Current (8/20 μs) I _n	3kA			
Max Discharge Current(8/20 μs) I _{max}	6kA			
Voltage Protective Level U _p	≤0.5kV	≤0.8kV	≤1.0kV	≤1.2kV
Response Time t _A	≤25ns, ≤100ns			
Max Overcurrent Protection	16A gL/Gg			
Short-circuit Withstand Capability at Max Overcurrent Protection	6kA			
Conduction Recommended Max	2.5mm ²			
Mounting	Symmetrical rail (EN50022/DIN46277-3)			
Operation Temperature Range	-40°C~+85°C			
Degree of Protection	IP20			
Housing Material	UL94V0			
Disconnection Indicator	Internal			
Status Indicator	Green On:Normal ; Green Off:Fault			

