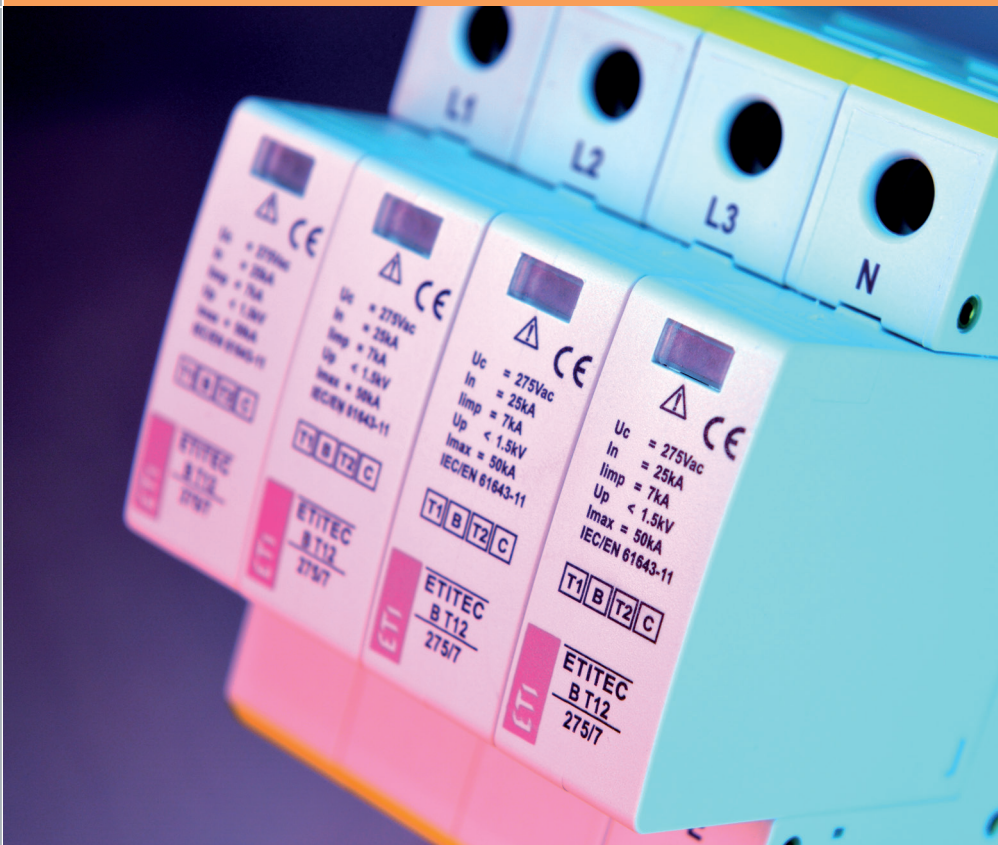


ETITEC

Surge arresters 2

Technical data 456

SURGE ARRESTERS



Surge arresters

Surge arrester ETITEC V T12

EN/IEC/VDE: T1,T2/I,II/B,C

<p>Description</p> <ul style="list-style-type: none"> ■ Type 1 + 2 AC power surge protector ■ I_n : 20 kA ■ I_{imp} : 12,5 kA ■ Pluggable module for each phase ■ Remote signaling (option) ■ EN 61643-11 and IEC 61643-11 compliant 	<p>Type designation: ETITEC V T12 xxx/12,5 p+c RC</p> <p>xxx - Uc voltage (max. AC operating voltage), must be above network voltage. 12.5 - 12,5kA(I_{imp} at 10/350us) p - number of poles with MOV c - 0 for MOV at NPE pole, 1 for GDT (TT systems) RC - remote contact (change over contact) for fault signalisation</p>
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New!

ETITEC V T $I_{imp}=12,5kA$							
Type	Code No.	I_{imp} (10/350) [kA]	I_n/I_{max} (8/20) [kA]	U_c [V AC]	Network	Weight [g]	Packaging [pcs]
ETITEC V T12 280/12,5 1+0	002442900	12,5	20/50	280	TNC	129	1/72
ETITEC V T12 440/12,5 1+0	002442901	12,5	20/50	440	IT	129	1/72
ETITEC V T12 280/12,5 2+0	002442902	12,5	20/50	280	TNC-S	260	1/36
ETITEC V T12 280/12,5 1+1	002442903	12,5	20/50	280	TT	235	1/36
ETITEC V T12 440/12,5 2+0	002442904	12,5	20/50	440	IT	260	1/36
ETITEC V T12 280/12,5 3+0	002442905	12,5	20/50	280	TNC	390	1/24
ETITEC V T12 440/12,5 3+0	002442906	12,5	20/50	440	IT	390	1/24
ETITEC V T12 280/12,5 4+0	002442907	12,5	20/50	280	TNC-S	490	1/18
ETITEC V T12 280/12,5 3+1	002442908	12,5	20/50	280	TT	492	1/18
ETITEC V T12 440/12,5 4+0	002442909	12,5	20/50	440	IT	490	1/18
ETITEC V T12 280/12,5 1+0 RC	002442910	12,5	20/50	280	TNC	129	1/72
ETITEC V T12 440/12,5 1+0 RC	002442911	12,5	20/50	440	IT	129	1/72
ETITEC V T12 280/12,5 2+0 RC	002442912	12,5	20/50	280	TNC-S	260	1/36
ETITEC V T12 280/12,5 1+1 RC	002442913	12,5	20/50	280	TT	235	1/36
ETITEC V T12 440/12,5 2+0 RC	002442914	12,5	20/50	440	IT	260	1/36
ETITEC V T12 280/12,5 3+0 RC	002442915	12,5	20/50	280	TNC	390	1/24
ETITEC V T12 440/12,5 3+0 RC	002442916	12,5	20/50	440	IT	390	1/24
ETITEC V T12 280/12,5 4+0 RC	002442917	12,5	20/50	280	TNC-S	490	1/18
ETITEC V T12 280/12,5 3+1 RC	002442918	12,5	20/50	280	TT	492	1/18
ETITEC V T12 440/12,5 4+0 RC	002442919	12,5	20/50	440	IT	490	1/18



ETITEC V T12 440/12,5 3+1

TT configurations: 1+1 and 3+1 housing size (height=82mm)...
Housing size (height=82mm) not compatible with all modular enclosures. It complies only to ACT, ECH series and SOLID GSX.

NOT COMPATIBLE WITH ECG, ECM and ECT series!

Surge arrester ETITEC V T2

EN/IEC/VDE: T2/II/C

Description

- Type 2 AC surge protector
- I_n : 20 kA
- I_{max} : 40 kA
- Pluggable module for each phase
- Remote signaling option
- IEC 61643-11 and EN 61643-11 compliance
- UL1449 ed.4

Type designation:

ETITEC V T2 xxx/20 p+c RC

xxx - Uc voltage (max. AC operating voltage), must be above network voltage.

20 - 20kA(In at 8/20us)

p - number of poles with MOV

c - 0 for MOV at NPE pole, 1 for GDT (TT systems)

RC - remote contact (Change over contact) for fault signalisation

New!

ETITEC V T2

Type	Code No.	I_n/I_{max} (8/20) [kA]	U_c [V AC]	Network	Weight [g]	Packaging [pcs]
ETITEC V T2 255/20 1+0	002442952	20/40	255	TNC	107	1/72
ETITEC V T2 255/20 2+0	002442953	20/40	255	TNC-S	263	1/36
ETITEC V T2 255/20 1+1	002442954	20/40	255	TT	216	1/36
ETITEC V T2 255/20 3+0	002442955	20/40	255	TNC	319	1/24
ETITEC V T2 255/20 4+0	002442956	20/40	255	TNC-S	420	1/18
ETITEC V T2 255/20 3+1	002442957	20/40	255	TT	431	1/18
ETITEC V T2 255/20 1+0 RC	002442958	20/40	255	TNC	107	1/72
ETITEC V T2 255/20 2+0 RC	002442959	20/40	255	TNC-S	263	1/36
ETITEC V T2 255/20 1+1 RC	002442960	20/40	255	TT	216	1/36
ETITEC V T2 255/20 3+0 RC	002442961	20/40	255	TNC	319	1/24
ETITEC V T2 255/20 4+0 RC	002442962	20/40	255	TNC-S	420	1/18
ETITEC V T2 255/20 3+1 RC	002442963	20/40	255	TT	431	1/18
ETITEC V T2 440/20 1+0 RC	002442964	20/40	440	TNC	107	1/72
ETITEC V T2 440/20 2+0 RC	002442965	20/40	440	TNC-S	263	1/36
ETITEC V T2 440/20 3+0 RC	002442966	20/40	440	TNC	319	1/24
ETITEC V T2 440/20 4+0 RC	002442967	20/40	440	TNC-S	420	1/18



ETITEC V T2 255/20 3+0

Type 2 multipole SPDs

Description

- Compact single-phase Type 2 / Compact 3-phase Type 2
- I_n : 20 kA
- I_{max} : 40 kA
- Common/Differential mode
- Pluggable module
- Remote signaling contact (option)
- EN 61643-11 and IEC 61643-11 compliant

Type designation:

ETITEC V 2T2 xxx/20 p+c RC

xxx - Uc voltage (max. AC operating voltage), must be above network voltage.

20 - 20kA(In at 8/20us)

p - number of poles with MOV

c - 0 for MOV at NPE pole, 1 for GDT (TT systems)

RC - remote contact (Change over contact) for fault signalisation



ETITEC V 2T2 255/20 2+0 RC



ETITEC V 2T2 255/20 4+0

New!

ETITEC V 2T2

Type	Code No.	I_n/I_{max} (8/20) [kA]	U_c [V AC]	Network	Weight [g]	Packaging [pcs]
ETITEC V 2T2 255/20 2+0	002442940	20/40	255	TNC-S	131	1/72
ETITEC V 2T2 440/20 2+0	002442941	20/40	440	TNC-S	131	1/72
ETITEC V 2T2 255/20 1+1	002442942	20/40	255	TT	140	1/72
ETITEC V 2T2 255/20 4+0	002442943	20/40	255	TNC-S	380	1/36
ETITEC V 2T2 440/20 4+0	002442944	20/40	440	TNC-S	380	1/36
ETITEC V 2T2 255/20 3+1	002442945	20/40	255	TT	240	1/36
ETITEC V 2T2 255/20 2+0 RC	002442946	20/40	255	TNC-S	131	1/72
ETITEC V 2T2 440/20 2+0 RC	002442947	20/40	440	TNC-S	131	1/72
ETITEC V 2T2 255/20 1+1 RC	002442948	20/40	255	TT	140	1/72
ETITEC V 2T2 255/20 4+0 RC	002442949	20/40	255	TNC-S	380	1/36
ETITEC V 2T2 440/20 4+0 RC	002442950	20/40	440	TNC-S	380	1/36
ETITEC V 2T2 255/20 3+1 RC	002442951	20/40	255	TT	240	1/36

Type 3 (weak type2) multipole SPDs

Description

- Compact single-phase SPD / Compact 3-phase SPD
- I_n : 5 kA
- I_{max} : 15 kA
- Common/Differential mode
- Pluggable module
- Remote signaling contact (option)
- IEC 61643-11 and EN 61643-11 compliant

Hard-wired AC Surge Protectors

Description - ETITEC L3 255/3/6

- Ultra Compact Type 3 surge protectors for 230 Vac networks
- Mounting on plate or terminal
- Disconnection signaling by buzzer or Led system
- 24 V AC or DC version available
- EN 61643-11, IEC 61643-11 and UL1449 4ed. compliant

Description - ETITEC L3 255/3/10

- Compact Type 2 and 3 surge protectors
- Wall mounting and hard wired connection
- UL1449 4ed. and IP 66
- Status indicators
- EN 61643-11, IEC 61643-11 and UL1449 4ed. compliant

Type designation:

ETITEC V 2T3 xxx/5 p+c RC

xxx - Uc voltage (max. AC operating voltage), must be above network voltage.

5 - 5kA(In at 8/20us)

p - number of poles with MOV

c - 0 for MOV at NPE pole, 1 for GDT (TT systems)

RC - remote contact (Change over contact) for fault signalisation

ETITEC L3 255/3/6

These very compact surge protectors can be integrated in the very small volumes of certain lights (linear LEDs).

The surge protection circuit is equipped with an end of life indicator buzzer in order to indicate the disconnection of the surge protector.

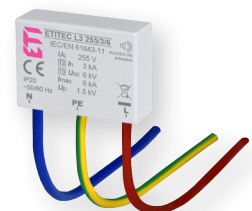
New!

ETITEC V 2T3

Type	Code No.	I_n/I_{max} (8/20) [kA]	U_{oc} [kV]	U_c [V AC]	Network	Weight [g]	Packaging [pcs]
ETITEC V 2T3 255/5 2+0	002442968	5/15	10	255	TNC-S	104	1/72
ETITEC V 2T3 440/5 2+0	002442969	5/15	10	440	TNC-S	104	1/72
ETITEC V 2T3 255/5 1+1	002442970	5/15	10	255	TT	111	1/72
ETITEC V 2T3 255/5 4+0	002442971	5/15	10	255	TNC-S	218	1/36
ETITEC V 2T3 440/5 4+0	002442972	5/15	10	440	TNC-S	218	1/36
ETITEC V 2T3 255/5 3+1	002442973	5/15	10	255	TT	218	1/36
ETITEC V 2T3 255/5 2+0 RC	002442974	5/15	10	255	TNC-S	104	1/72
ETITEC V 2T3 440/5 2+0 RC	002442975	5/15	10	440	TNC-S	104	1/72
ETITEC V 2T3 255/5 1+1 RC	002442976	5/15	10	255	TT	111	1/72
ETITEC V 2T3 255/5 4+0 RC	002442977	5/15	10	255	TNC-S	218	1/36
ETITEC V 2T3 440/5 4+0 RC	002442978	5/15	10	440	TNC-S	218	1/36
ETITEC V 2T3 255/5 3+1 RC	002442979	5/15	10	255	TT	218	1/36
ETITEC L3 255/3/6	002442987	3/6	6	255	TNC-S 1ph.	20	1/72



ETITEC V 2T3 255/5 3+1



ETITEC L3 255/3/6






LED lighting protection

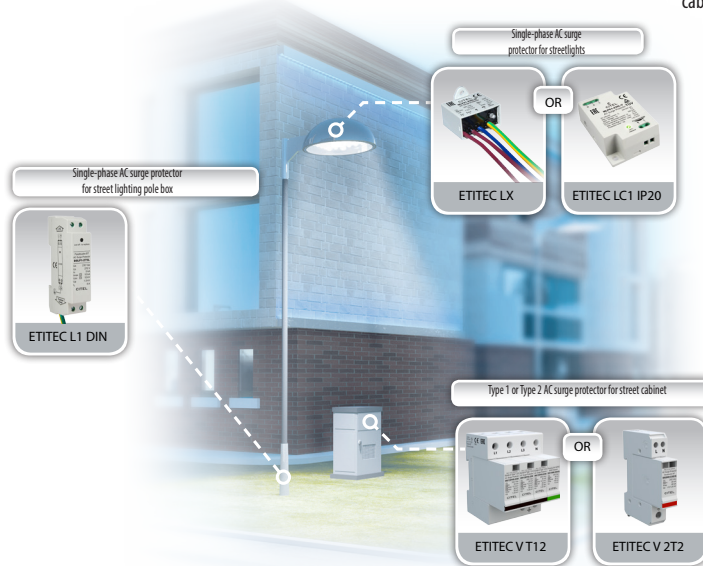
ETITEC LC1 IP20 range is a compact solution surge protectors to be installed in small spaces. These devices are available in 2 types of connectors (screw terminal or spring) and in two orientations wiring (input / output opposite or input / output on the same side) in order to adapt to the installation as much as possible. In cases of extreme aggression, lightning LC1 will be in a state of safe end of life: the indication of failure (disconnection) of the surge protector is performed by the extinction of an indicator and switching off the AC (extinction street luminaire) inform the user of the need for maintenance.

ETITEC LX range is an ultra compact surge protection solution for installation in extremely tight spaces. These surge protectors are available with an output by drivers and fixing bracket. In the end of life of security the LX indicates its failure (disconnection) by the extinction of an indicator and AC power supply switching off (extinction of the candelabra) inform the user of the need for maintenance. They are available in IP67.

ETITEC LP range is a complete range of AC surge protectors specifically designed for the protection of LED lighting systems at the lantern. Many versions have been proposed to meet the various existing configurations : surge protection devices are available in different isolation classes (Class 1, Class 2) and connection type (wire or screw terminal). Some versions are equipped with additional protection for data line option (RS485,DALI, 0-10V) to provide a complete solution for LED systems with control lines. In cases of extreme aggression, the surge protector will be in a state of retirement security: according to the different versions available, an indication of the failure of the surge protector is performed by the extinction of an indicator, a AC power supply failure and / or through a remote signalisation.

ETITEC L1 DIN device is installed inside the bottom of the lighting pole: its very compact dimension allows a easy integration with the connection box, on DIN rail . L1 is based on a powerful association of MOV and GDT components, secured by thermal disconnecter and connection light indicator.

Type	Description	Characteristics	Properties	Network
ETITEC L1 DIN	 DIN surge protector type 2 or 3	Compact. Montage DIN	Type 2+3, CM/DM, mounted in connection box on DIN rail.	
ETITEC LP1 IP20	 Hard-wired surge protector type 2 or 3	Remote signaling and data in option	Type 2 + 3, protection class I (GDT to earth), screw terminal.	Supply 230 V AC
ETITEC LP2 IP20	 Compact, hard-wired surge protector type 2 and type 3	Compact. Many configurations	Type 2 + 3, protection class II, screw terminal for double insulated fixtures.	
ETITEC LC1 IP20	 Ultra-compact hard-wired surge protector type 2+3	Ultra compact IP67 VG Technology	Type 2 + 3, protection class I (GDT to earth), connection cable, IP67.	
ETITEC LX1 IP67	 Ultra-compact hard-wired surge protector type 2+3	Ultra compact IP67 VG Technology	Type 2 + 3, protection class II for double insulated fixtures, connection cable, IP67.	



ETITEC LC1 IP20

- Type 2 (or 3) surge protectors for LED lighting
- Very compact
- Plate mounting
- Screw terminal or spring terminal connection
- Status indicator
- End of life AC Disconnection
- IEC 61643-11 and EN 61643-11 compliance

ETITEC LP1 and LP2

- Type 2 (or 3) surge protector
- Class I or Class II configurations
- Comprehensive range for all configurations
- Compact dimensions
- IP65 version
- Combined AC/Dataline version
- Wire connection
- Max. discharge current 10 kA
- IEC 61643-11 and EN 61643-11 compliant

ETITEC LX

- Ultra compact Type 2 + 3 surge protector for 230 Vac networks
- For Classe I and Classe II
- Wall mounting and hard wired connection
- Breakable mounting bracket
- Protection rating : IP67
- Disconnection signaling by indicator
- AC disconnection in case of end of life

ETITEC L1 DIN

- Type 2 (or 3) surge protectors for Led
- Very compact (low profile)
- DIN rail mounting
- Screw terminal connection
- Status indicator
- Disconnection AC end of life
- IEC 61643-11 and EN 61643-11 compliance

LED lighting protection

New!

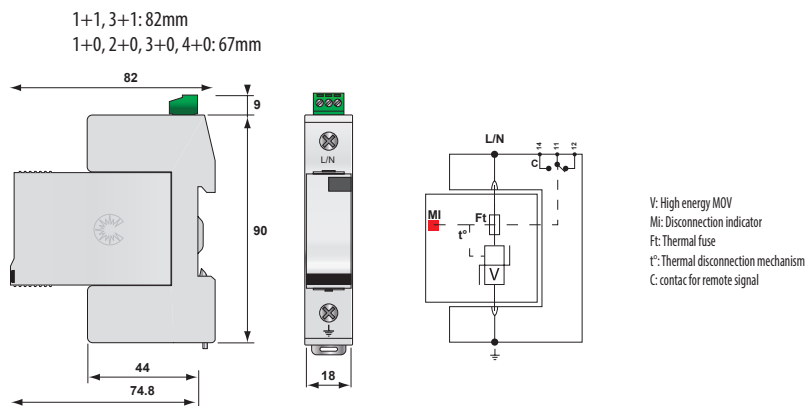
Type	Code No.	I_n/I_{max} (8/20) [kA]	Uoc [kV]	U_c [V AC]	IL [A]	Weight [g]	Packaging [pcs]
ETITEC LC1 IP20	002442980	5/10	10	320	5	35	1/36
ETITEC LP1 IP20	002442981	5/10	10	305	2,5	79	1/36
ETITEC LP2 IP20	002442982	5/10	10	305	2,5	79	1/36
ETITEC LX1 IP67	002442983	5/10	10	320	10	52	1/36
ETITEC LX2 IP67	002442984	5/10	10	320	10	52	1/36
ETITEC L1 DIN	002442985	5/10	10	320	10	107	1/72

Surge arrester ETITEC V T12

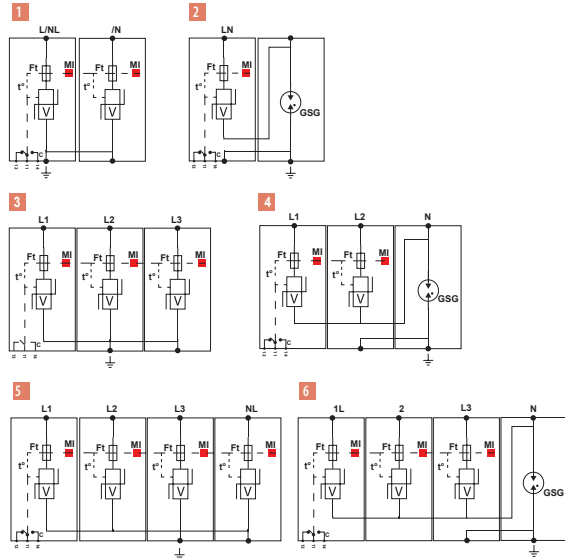
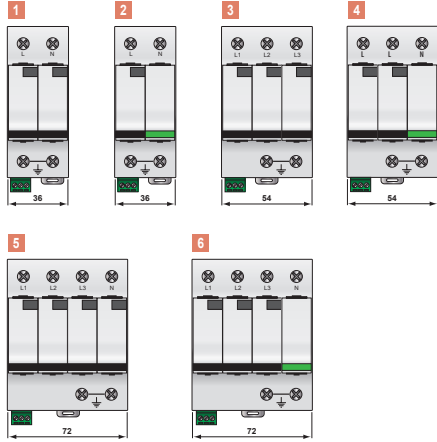
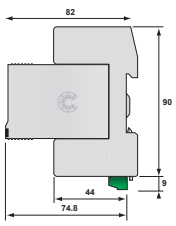
EN/IEC/VDE: T1,T2 /I,II/B,C

ETITEC V T $I_{imp}=12,5kA$			
Type		ETITEC V T12 280	ETITEC V T12 400
Description		1+2 AC surge protector - 1-pole	
Network		230/400	230/400 V
Max. AC operating voltage	U_c	280 VAC	440 VAC
Temporary Over Voltage (TOV) Characteristics - 5 sec.	UT	335 Vac withstand	580 Vac withstand
Temporary Over Voltage (TOV) Characteristics -120 mn	UT	440 Vac disconnection	770 Vac disconnection
Residual current - Leakage current at U_c	I_{pe}	< 1 mA	< 1 mA
Follow current	I_f	x	x
Nominal discharge current - 15 x 8/20 μs impulses	I_n	20 kA	20 kA
Max. discharge current -max. withstand @ 8/20 μs by pole	I_{max}	50 kA	50 kA
Impulse current by pole - max. withstand 10/350 μs	I_{imp}	12,5 kA	12,5 kA
Specific energy by pole	W/R	40 kJ/ohm	40 kJ/ohm
Protection level	U_p	1,3 kV	1,7 kV
Admissible short-circuit current	$I_{sc cr}$	25000 A	25000 A
Associated disconnectors			
Thermal disconnector		internal	
Fuses		Fuses Type gG - 125 A	
Installation ground fault breaker		Type "S" or delayed	
Mechanical characteristics			
Dimensions		see diagram	
Connection to Network		By screw terminals: 2,5-25 mm ² / by bus	
Disconnection indicator		1 mechanical indicator	
Remote signaling of disconnection		output on changeover contact	
Mounting		Symmetrical rail 35 mm (EN60715)	
Operating temperature		-40 ... +85°C	
Protection rating		IP20	
Housing material		Thermoplastic UL94-V0	
Standards compliance		IEC 61643-11 / EN 61643-11	

Dimensions



1+1, 3+1: 82mm
 1+0, 2+0, 3+0, 4+0: 67mm



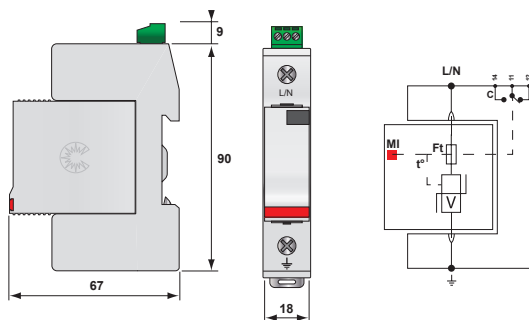
V: High energy MOV
 GSG: Specific gas tube
 MI: Disconnection indicator
 Ft: Thermal fuse
 t*: Thermal disconnection mechanism
 C: Contact for remote signal

Surge arrester ETITEC V T2

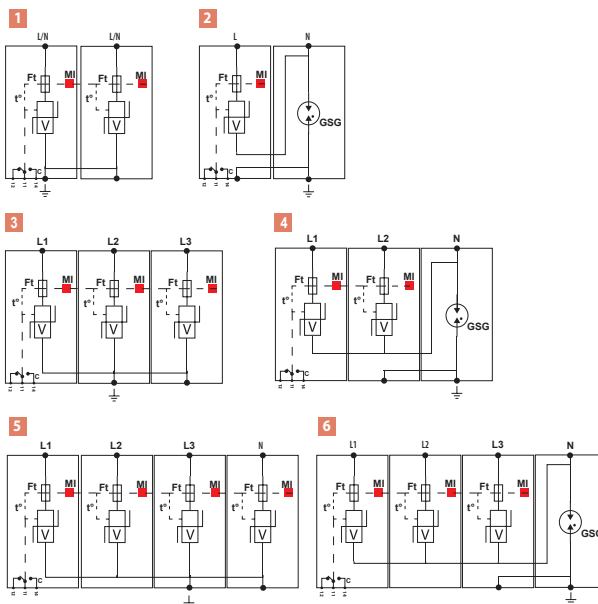
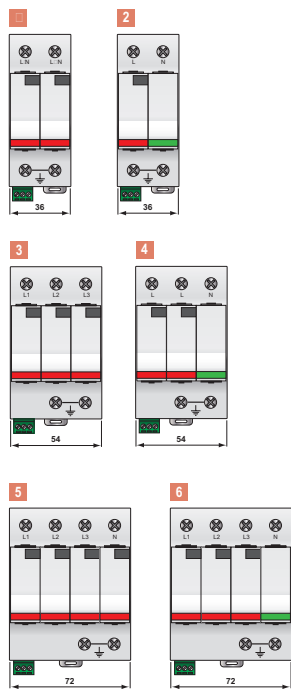
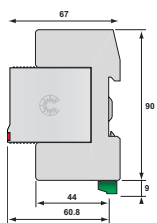
EN/IEC/VDE: T2/II/C

ETITEC V T2			
Type		ETITEC V T2 255	ETITEC V T2 440
Description		Type 2 AC surge protector - one-phase - pluggable	
Network		230/400 V	230/400 V
Max. AC operating voltage	Uc	255 VAC	440 VAC
Temporary Over Voltage (TOV) Characteristics - 5 sec.	UT	335 Vac withstand	580 Vac withstand
Temporary Over Voltage (TOV) Characteristics - 120 mn	UT	440 Vac disconnection	770 Vac disconnection
Residual current - Leakage current at Uc	Ipe	< 1 mA	< 1 mA
Follow current	If	x	x
Nominal discharge current - 15 x 8/20 μ s impulses	In	20 kA	20 kA
Max. discharge current -max. withstand @ 8/20 μ s by pole	I _{max}	40 kA	40 kA
Protection level	Up	1,25 kV	1,8 kV
Admissible short-circuit current	I _{scrr}	25000 A	25000 A
Associated disconnectors			
Thermal disconnector		internal	
Fuses		Fuses Type gG - 50 A	
Installation ground fault breaker		Type "S" or delayed	
Mechanical characteristics			
Dimensions		see diagram	
Connection to Network		By screw terminals: 2,5-25 mm ² / by bus	
Disconnection indicator		1 mechanical indicator	
Remote signaling of disconnection		output on changeover contact	
Mounting		Symmetrical rail 35 mm (EN60715)	
Operating temperature		-40 ... +85°C	
Protection rating		IP20	
Housing material		Thermoplastic UL94-V0	
Standards compliance		IEC 61643-11 / EN 61643-11	

Dimensions



V: High-energy varistor
 Ft: Thermal fuse
 C: Remote signaling contact
 t*: Thermal disconnection system
 Mi: Disconnection indicator



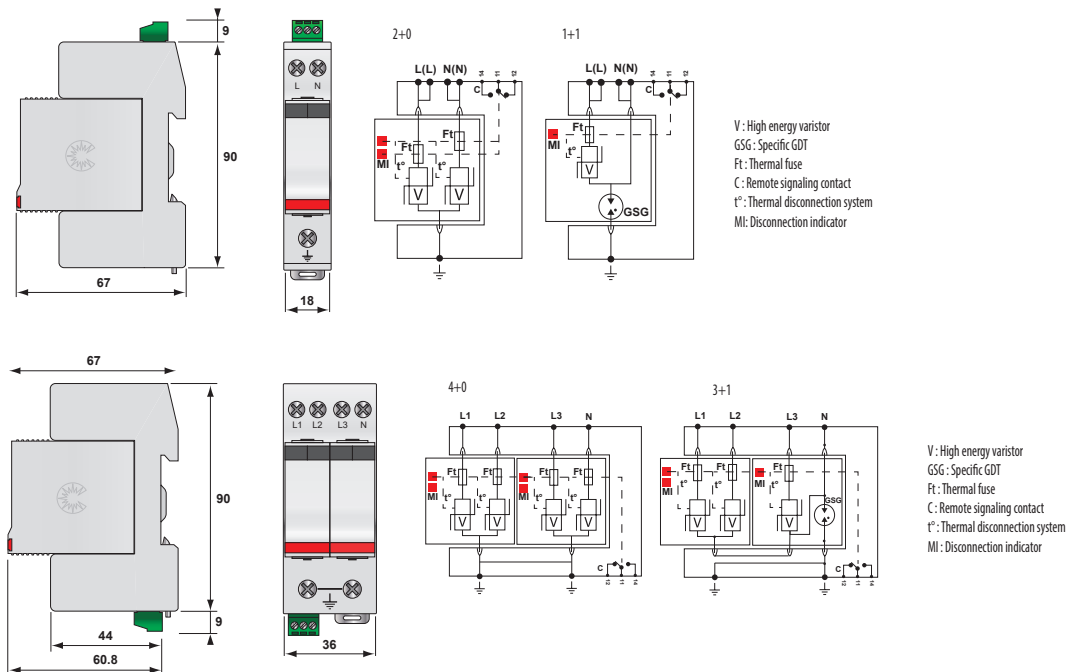
V: High-energy varistor
 GSG: Specific gas tube
 Ft: Thermal fuse
 C: Remote signaling contact
 t⁺: Thermal disconnection system
 MI: Disconnection indicator

Type 2 multipole SPDs

ETITEC V 2T2

Description	Compact 1-phase Type 2 Surge Protector - 230 V - Pluggable			Compact 3-phase+N Type 2 surge protector - 230/400 V - Pluggable			
	230 V 1-p	230 V 1-p	230 V 1-p	230/400 V 3-phase	230/400 V 3-phase	230/400 V 3-phase	
Network	L/PE & N/PE	L/PE & N/PE	L/N & N/PE	L/PE & N/PE	L/PE & N/PE	L/N & N/PE	
Connection mode	IT	TN	TT-TN	IT	TN	TT-TN	
Max. AC operating voltage	U_c	440 VAC	255 VAC	255 VAC	440 VAC	255 VAC	255 VAC
Temporary Over Voltage (TOV) Characteristics - 5 sec.	U_T	580 Vac withstand	335 Vac withstand	335 Vac withstand	580 Vac withstand	335 Vac withstand	335 Vac withstand
Temporary Over Voltage (TOV) Characteristics - 120 mn	U_T	770 Vac disconnection	440 Vac disconnection	440 Vac disconnection	770 Vac disconnection	440 Vac disconnection	440 Vac disconnection
Temporary Over Voltage N/PE (TOV HT)	U_T	-	-	1200 V/300A/200 ms withstand	-	-	1200 V/300A/200 ms withstand
Residual current - Leakage current at U_c	I_{pe}	< 1 mA	< 1 mA	x	< 1 mA	< 1 mA	x
Max. Load current (if connection serie)	I_L	20 A	20 A	20 A	-	-	-
Nominal discharge current - 15 x 8/20 μ s impulses	I_f	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA
Max. discharge current -max. withstand @ 8/20 μ s by pole	I_n	40 kA	40 kA	40 kA	40 kA	40 kA	40 kA
Protection level CM/DM* @ln (8/20 μ s) and @ 6kV (1.2/50 μ s)	I_{max}	1,8 kV	1,25 kV	1,5/1,25 kV	1,8 kV	1,25 kV	1,5/1,25 kV
Admissible short-circuit current	U_p	10000 A	10000 A	10000 A	10000 A	10000 A	10000 A
Associated disconnectors							
Thermal disconnector		internal					
Fuses		Fuses Type gG - 50 A					
Installation ground fault breaker		Type "S" or delayed					
Mechanical characteristics							
Dimensions		see diagram					
Connection to Network		by screw terminals: 1,5-10mm ² (L/N) or 2,5-25mm ² (PE)					
Disconnection indicator		2 mechanical indicators					
Remote signaling of disconnection		output on changeover contact					
Mounting		Symmetrical rail 35 mm (EN60715)					
Operating temperature		-40 ... +85°C					
Protection rating		IP20					
Housing material		Thermoplastic UL94-V0					
Standards compliance		IEC 61643-11 / EN 61643-11					

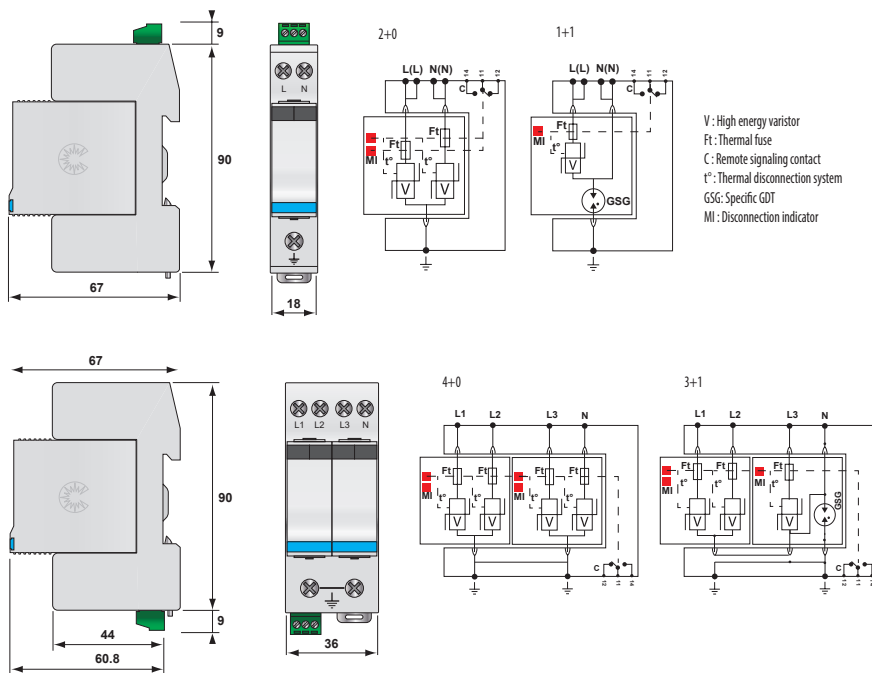
Dimensions



Type 3 (weak type2) multipole SPDs

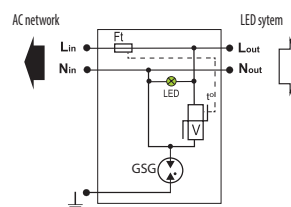
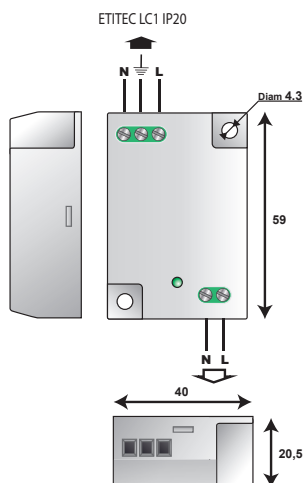
ETITEC V 2T3						
Description	Compact 1-phase Type 2 (or 3) surge protector - 230 V - Pluggable			Compact 3-phase+N Type 2 surge protector - 230/400 V - Pluggable		
Network	230 V single phase	230 V single phase	230 V single phase	230/400 V 3-phase	230/400 V 3-phase	230/400 V 3-phase
Connection mode	L/PE and N/PE	L/PE and N/PE	L/N and N/PE	L/N and N/PE	L/N and N/PE	L/N and N/PE
AC system	IT	TN	TT-TN	IT	TN	TT-TN
Max. AC operating voltage	U_c 440 VAC	255 VAC	255 VAC	440 VAC	255 VAC	255 VAC
Temporary Over Voltage (TOV) Characteristics - 5 sec.	U_t 580 Vac withstand	335 Vac withstand	335 Vac withstand	580 Vac withstand	335 Vac withstand	335 Vac withstand
Temporary Over Voltage (TOV) Characteristics - 120 mn	U_t 770 Vac disconnection	440 Vac disconnection	440 Vac disconnection	770 Vac disconnection	440 Vac disconnection	440 Vac disconnection
Temporary Over Voltage N/PE (TOV HT)	U_t -	-	1200 V/300A/200 ms withstand	-	-	1200 V/300A/200 ms withstand
Residual current - Leakage current at U_c	I_{pe} < 1 mA	< 1 mA	x	< 1 mA	< 1 mA	x
Max. Load current (if connection serie)	I_l 20 A	20 A	20 A	-	-	-
Nominal discharge current - 15 x 8/20 μ s impulses	I_f 5 kA	5 kA	5 kA	5 kA	5 kA	5 kA
Max. discharge current - max. withstand @ 8/20 μ s by pole	I_n 15 kA	15 kA	15 kA	15 kA	15 kA	15 kA
Withstand on overvoltages IEEE C62.41.1	I_{max} 10 kV	10 kV	10 kV	10 kV	10 kV	10 kV
Protection level CM/DM* @ln (8/20 μ s) and @6kV (1.2/50 μ s)	U_{oc} 1.3 kV	0.9 kV	1.5/0.9 kV	1.3 kV	0.9 kV	1.5/0.9 kV
Admissible short-circuit current	U_p 10000 A	10000 A	10000 A	10000 A	10000 A	10000 A
Associated disconnectors						
Thermal disconnector	internal					
Fuses	Fuses Type gG - 20 A					
Installation ground fault breaker	Type "S" or delayed					
Mechanical characteristics						
Dimensions	see diagram					
Connection to Network	by screw terminals: 1,5-10mm ² (L/N) or 2,5-25mm ² (PE)					
Disconnection indicator	4 mechanical indicators					
Remote signaling of disconnection	output on changeover contact					
Mounting	Symmetrical rail 35 mm (EN60715)					
Operating temperature	-40 ... +85°C					
Protection rating	IP20					
Housing material	Thermoplastic UL94-V0					
Standards compliance	IEC 61643-11 / EN 61643-11					

Dimensions



LED lighting protection

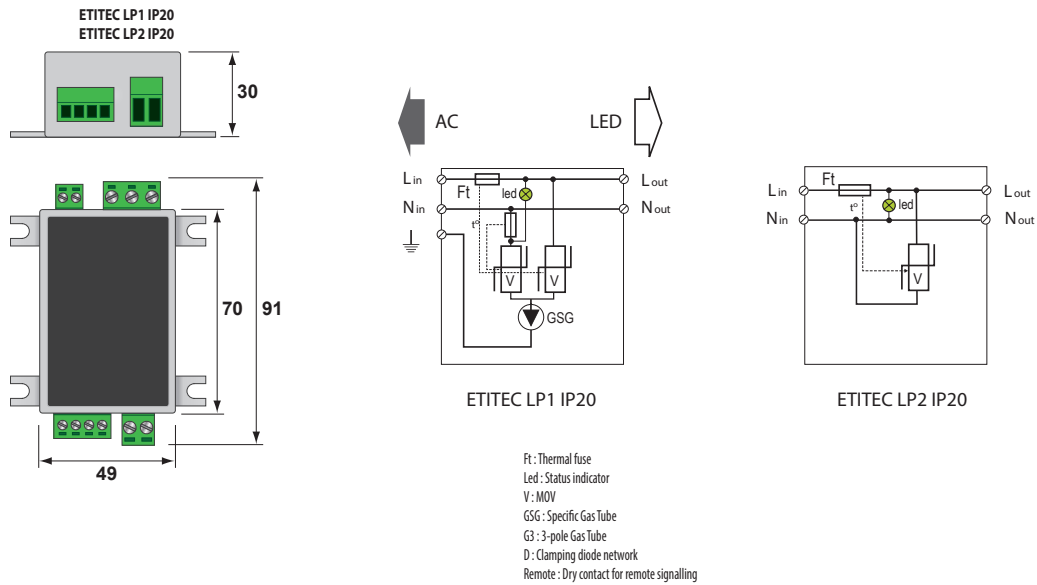
ETITEC LC1 IP20		
Description		Surge protectors for LED lighting system Class 1
Network		220-240 V single phase
AC system		TT/TN
Protection mode(s)		CM/DM
Max. AC operating voltage	Uc	320 VAC
Max. Load current	IL	5 A
Residual current - Leakage current at Uc	Ipe	x
Temporary Over Voltage (TOV) Characteristics - 5 sec.	UT	335 Vac withstand
Temporary Over Voltage (TOV) Characteristics - 120 mn	UT	440 Vac disconnection
Temporary Over Voltage N/PE (TOV HT)	UT	1200 V/300A/200 ms disconnection
Nominal discharge current - 15 x 8/20 μ s impulses	In	5 kA
Max. discharge current -max. withstand @ 8/20 μ s by pole	I _{max}	10 kA
Total lightning current - max. total withstand @ 8/20 μ s	I _{total}	20 kA
Withstand on Combination waveform - Class III test	Uoc	10 kV/5 kA
Withstand on overvoltages IEEE C62.41.1		10 kV/10 kA
Protection level CM/DM @In (8/20 μ s) and @ 6kV (1.2/50 μ s)	Up	1.5 kV/ 1.5 kV
Admissible short-circuit current	I _{sc}	10000 A
Admissible short-circuit current		25000 A
Associated disconnectors		
Thermal disconnector		internal
Installation ground fault breaker		Type "S" or delayed
Mechanical characteristics		
Dimensions		see diagram
Connection to Network		Screw (2.5 mm ² max) or Spring (1.5 mm ² max) contact terminal
Voltage/operating indicator		Green Led ON
Disconnection indicator		Disconnection
Failsafe behavior		Led green OFF and AC network cut-off
Remote signaling of disconnection		x
Mounting		on plate
Operating temperature		-40 ... +85°C
Protection rating		IP20
Housing material		Thermoplastic UL94-V0
Standards compliance		EN 61643-11 / IEC 61643-11



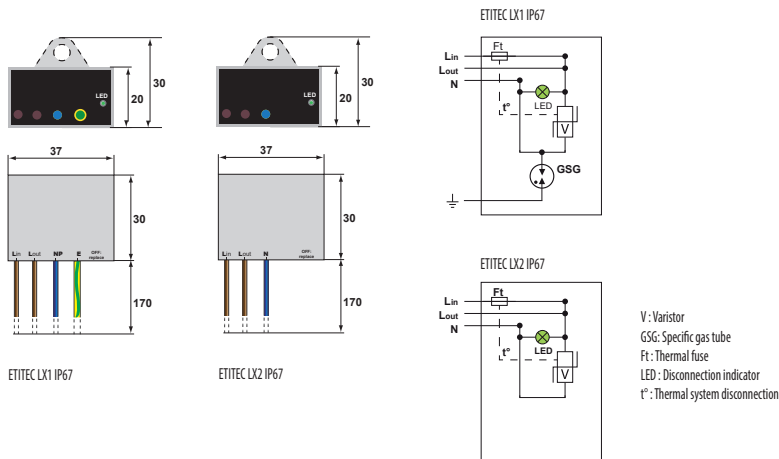
Ft: Thermal fuse
 Led: Status indicator
 V: MOV
 GSG: Specific Gas Tube
 T: Thermal system disconnection

ETITEC LP		
Type	ETITEC LP1 IP20	ETITEC LP2 IP20
Network	220-240 V single phase	
Protection mode(s)	CM/DM	
Max. AC operating voltage	305 VAC	
Max. Load current	2,5 A	
Residual current - Leakage current at Uc	x	
Nominal discharge current - 15 x 8/20 μs impulses	5 kA	
Max. discharge current -max. withstand @ 8/20 μs by pole	10 kA	
Total lightning current - max. total withstand @ 8/20 μs	20 kA	
Withstand on Combination waveform - Class III test	10 kV/5 kA	
Withstand on overvoltages IEEE C62.41.1	10 kV/10 kA	
Protection level CM/DM @In (8/20μs) and @ 6kV (1.2/50μs)	1.5 kV/ 1.5 kV	
Admissible short-circuit current	10000 A	
Mechanical characteristics		
Connection to Network	Screw or spring terminal - 1.5 mm ² max	
Voltage/operating indicator	Green Led ON	
Failsafe behavior	Led green OFF and AC network cut-off	
Disconnection indicator	Led green OFF and AC network cut-off or remote signal (option)	
Remote signaling of disconnection	Option	
Standards compliance	IEC 61643-11 / EN 61643-11 / UL1449 ed.4	
Description	Surge protector for LED lighting system Class 1	Surge protector for LED lighting system Class 2
AC voltage specifications		
Description	220-240 V single phase	220-240 V single phase
AC system	TT-TN	TT-TN
Protection mode(s)	CM/DM	DM
Max. AC operating voltage	305 Vac	305 Vac
Max. Load current	2,5 A	2,5 A
Residual current - Leakage current at Uc	x	x
Temporary Over Voltage (TOV) Characteristics - 5 sec.	335 Vac withstand	335 Vac withstand
Temporary Over Voltage (TOV) Characteristics - 120 mn	440 Vac disconnection	440 Vac disconnection
Nominal discharge current - 15 x 8/20 μs impulses	5 kA	5 kA
Max. discharge current -max. withstand @ 8/20 μs by pole	10 kA	10 kA
Total lightning current - max. total withstand @ 8/20 μs	20 kA	20 kA
Withstand on Combination waveform - Class III test	10 kV/5 kA	10 kV/5 kA
Withstand on overvoltages IEEE C62.41.1	10 kV/10 kA	10 kV/10 kA
Protection level CM/DM @In (8/20μs) and @ 6kV (1.2/50μs)	1.5 kV/ 1.5 kV	1.5 kV
Admissible short-circuit current	10000 A	10000 A
Connection to Network	screw 1.5mm ² max	screw 1.5mm ² max
Voltage/operating indicator	Green Led ON	Green Led ON
Failsafe behavior	Disconnection from AC line	Disconnection from AC line
Disconnection indicator	Green Led OFF and AC line cut-off	Green Led OFF and AC line cut-off
Remote signaling of disconnection	none	yes : output on contact NO
Associated disconnectors		
Thermal disconnector	internal	internal
Installation ground fault breaker	Type "S" or delayed	Type "S" or delayed
Mechanical characteristics		
Dimensions	see diagram	see diagram
Mounting	on plate	on plate
Operating temperature	-40/+85°C	-40/+85°C
Protection rating	IP65	IP20
Housing material	Thermoplastic UL94-V0	Thermoplastic UL94-V0
Standards compliance	IEC 61643-11 / EN 61643-11	

Technical data



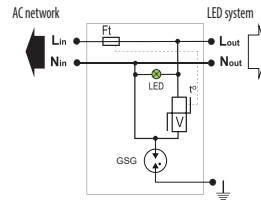
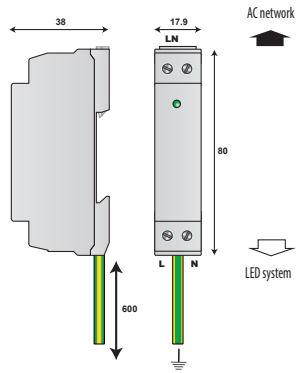
ETITEC LX		
Type	ETITEC LX1 IP67	ETITEC LX2 IP67
Description	Compact Type 2 +3 hard-wired surge protector	
Application (Classe)	I	II
Network	230-277 V single phase	230-277 V single phase
AC system	TT/TN	TT/TN
Protection mode(s)	CM/DM	DM
Max. AC operating voltage	320 VAC	320 VAC
Max. Load current	10A	10A
Temporary Over Voltage (TOV) Characteristics - 5 sec.	335 Vac withstand	335 Vac withstand
Temporary Over Voltage (TOV) Characteristics - 120 mn	440 Vac disconnection	440 Vac disconnection
Temporary Over Voltage N/PE (TOV HT)	1200 V/300A/200 ms disconnection	x
Nominal discharge current - 15 x 8/20 µs impulses	5 kA	5 kA
Max. discharge current - max. withstand @ 8/20 µs by pole	10 kA	10 kA
Total max. discharge current - max. total withstand @ 8/20 µs	20 kA	NA
Withstand on Combination waveform - Class III test	10 kV	10 kV
Withstand on overvoltages IEEE C62.41.1	10 kV/10 kA	10 kV/10 kA
Protection level CM/DM @In (8/20µs) and @ 6kV (1.2/50µs)	1.5 kV/1.5 kV	1.5 kV
Admissible short-circuit current	10000 A	10000 A
Associated disconnectors		
Thermal disconnector	internal	
Installation ground fault breaker	Type "S" or delayed	
Mechanical characteristics		
Dimensions	see diagram	
Connection to Network	by wires :1.5 mm ² (L/N) & 2.5 mm ² (PE)	by wires :1.5 mm ² (L/N)
Voltage/operating indicator	Green Led ON	
Disconnection indicator	Disconnection	
Failsafe behavior	Led green OFF and AC network cut-off	
Remote signaling of disconnection	x	
Mounting	wall or plate	
Operating temperature	-40/+85°C	
Protection rating	IP67	
Housing material	Thermoplastic UL94-V0	
Standards compliance	EN 61643-11 / IEC 61643-11	



ETITEC L1 DIN

ETITEC L1 DIN	
Description	Surge protectors for LED lighting system Class 1
Network	220-240 V single phase
AC system	TT/TN
Protection mode(s)	CM/DM
Max. AC operating voltage	320 VAC
Max. Load current	10A
Residual current - Leakage current at Uc	x
Temporary Over Voltage (TOV) Characteristics - 5 sec.	335 Vac withstand
Temporary Over Voltage (TOV) Characteristics - 120 mn	440 Vac disconnection
Temporary Over Voltage N/PE (TOV HT)	1200 V/300A/200 ms disconnection
Nominal discharge current - 15 x 8/20 μs impulses	5 kA
Max. discharge current - max. withstand @ 8/20 μs by pole	10 kA
Total lightning current - max. total withstand @ 8/20 μs	20 kA
Withstand on Combination waveform - Class III test	10 kV / 5 kA
Withstand on overvoltages IEEE C62.41.1	10 kV/10 kA
Protection level CM/DM @In (8/20μs) and @ 6kV (1.2/50μs)	1.5 kV/ 1.5 kV
Admissible short-circuit current	10000 A
Associated disconnectors	
Thermal disconnector	internal
Installation ground fault breaker	Type «S» or delayed
Mechanical characteristics	
Dimensions	see diagram
Connection to Network	Screw terminal 2.5 mm ² max., Earthing conductor 2 mm ² - length 60 cm
Voltage/operating indicator	Led green ON
Disconnection indicator	Disconnection and AC line cut-off
Failsafe behavior	Led green OFF and AC network cut-off
Remote signaling of disconnection	x
Mounting	Symmetrical rail 35mm (EN60715)
Operating temperature	-40 ... +85°C
Protection rating	IP20
Housing material	Thermoplastic UL94-V0
Standards compliance	EN 61643-11 / IEC 61643-11

Technical data



- V: Varistor
- Ft: Thermal fuse
- LED: Disconnection indicator
- MI: Mechanical disconnection indicator
- t°: Thermal system disconnection
- GSG: Specific Gas Tube

