ETITEC

Surge Arresters

Surge arresters ETITEC V **683**
Surge arresters ETITEC **701**
Surge arresters ETITEC M60 **721**

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Comparison table of protection parameters according to IEC/EN 61643-11

Technical specifications


Type			ETITEC ML T123 300/12,5		ETITEC V T12 280/12,5	ETITEC V T12 440/12,5
			1+0, 2+0, 3+0	1+1, 3+1	1+0, 2+0, 3+0, 4+0, 1+1, 3+1	
Class (IEC/EN/VDE)			T1, T2, T3 / I, II, III / B+C+D		T1, T2 / I, II / B+C	
Continuous operating voltage		Uc (AC)	300 V (L-N)	300 V (L-N) / 305 (N-PE)	280 V	440 V
Temporary overvoltage (TOV)	UT (AC)	5s	337 (L-N) withstand		335 V withstand	335 V withstand
		120 min	442 V Safe disconnect. (L-N) / 1200V 200 ms (N-PE) withstand		440 V Safe disconnect.	770 V Safe disconnect.
Max impulse current		limp (10/350)	12,5 kA	12,5 kA/50 kA	12,5 kA	
Nominal discharge current		In (8/20)	20 kA	20 kA (L-N)/50 kA(N-PE)	20 kA	
Max discharge current		Imax (8/20)	40 kA	40 kA (L-N)/100 kA(N-PE)	50 kA	
Voltage protection level		Up	1,5 kV	1,5 kV (L-N)/(N-PE)	1,3 kV	1,7 kV
Follow current		Ifi	N/A	100 ARMS (N-PE)	N/A	
Leakage current (IPE) at Uref		IPE at Uref	-		< 1 mA	
Permissible short-circuit current		ISCCR	50 kA		25 kA	
Dimensions (DIN)		-	1...4 DIN-modules		1...4 DIN-modules	
Fault indication		-	Yes (version with RC contact)			
Installation in panels/cabinets			ECM, ECT, ECG, ERP, ECH, ACT, WRP, EPC, GT, GSX, HXS		ECH, EPC, GT, SOLID GSX, HXS	
Catalogue pages		-	706		686	
Type according to IEC/EN 61643-11		-	Type T1, T2 , T3		Type T1, T2	

Technical specifications



Type			ETITEC C T2 275/20	T2 440/20	T2 255/20 G	ETITEC V T2 255/20	V T2 440/20	ETITEC V 2T2 255/20	2T2 440/20	2T2 255/20
			1+0, 2+0, 3+0, 4+0, 1+1, 3+1					2+0, 4+0		1+1; 3+1
Class (IEC/EN/VDE)			T2 / II / C					T2/ II /C		
Continuous operating voltage		Uc (AC)	275 V	440 V	255 V	255 V	440 V	255 V	440 V	255 V
Temporary overvoltage (TOV)	UT (AC)	5s	335 V/5s withstand		1200V	335 V withstand	580 V withstand	335 V витимує	580 V withstand	335 V withstand
		120 min	440 V Safe disc.	440 V Safe disc.	-	440 V Safe disc.	770V Safe disc.	440 V Safe disc..	770 V Safe disc	440 V Safe disc
Nominal discharge current		In (8/20)	20 kA			20 kA		20 kA		
Max discharge current		Imax (8/20)	40 kA			40 kA		40 kA		
Voltage protection level		Up	<1,5 kV	<2,0 kV	<1,5 kV	1,25 kV	1,8 kV	1,8 kV	1,25 kV	<1,5/1,25 kV
Follow current		Ifi	N/A		>100 A	N/A		-		-
Leakage current (IPE) at Uref		IPE at Uref	< 0,2 mA		-	< 1 mA		<1mA		-
Permissible short-circuit current		ISCCR	25 kA		-	25 kA		10 kA		
Dimensions (DIN)		-	1...4 DIN-modules					1...2 DIN-modules		
Fault indication		-	Yes (version with RC contact)							
Installation in panels/cabinets			ECM, ECT, ECG, ERP, ECH, ACT, WRP, EPC, GT, GSX, HXS							
Catalogue pages		-	710			688		690		
Type according to IEC/EN 61643-11		-	Type T2					Type T2		

Technical specifications

Type		ETITEC T WENT 320/25
		1+0, 2+0, 3+0, 4+0, 1+1, 3+1
Class		T1, T2 / I, II / B+C
Uc (AC)		320 V
UT (AC)	5s	334 V withstand
	120 min	440 V safe disconnection
Iimp (10/350)		25 kA
In (8/20)		25 kA
Imax (8/20)		100 kA
Up		<1,5 kV
Ifi		100 ARMS
IPE at Uref		< 0,3 mA
ISCCR		50 kA
DIN		2...8 DIN-modules
RC		Yes (version with RC contact)
Installation		ECM, ECT, ECG, ERP, ECH, ACT, WRP, EPC, GT, GSX, HXS
Page		701
Type (IEC/EN)		Type T1,T2

Technical specifications

Type		ETITEC CM T23 275/20		ETITEC V 2T3 255/5	ETITEC V 2T3 440/5	ETITEC V 2T3 255/5	ETITEC D T3	
		2+0, 4+0	1+1; 3+1	2+0, 4+0		1+1; 3+1	1+0	
Class		T2, T3 / II,III / C+D		T3/III/D			T3/III/D	
Uc (AC)		275 V (L-N)	275 V(L-N)/255 (N-PE)	255 V	440 V	255 V	275 V	440 V
UT (AC)	5s	335 V withstand		335 V withstand	580V withstand	335 V withstand	335 V withstand	
	120 min	440 V Safe disconnect.	440 V Safe disconnect.	440 V Safe disconnect.	770 V Safe disconnect.	440 V Safe disconnect.	440 V Safe disconnect.	440 V withstand
In (8/20)		20 kA	20 kA (L-N)/(N-PE)	5 kA			3 kA	
Imax (8/20)		40 kA	40 kA (L-N)/(N-PE)	15 kA			10 kA	
Up		1,5 kV	1,5 kV (L-N)/(N-PE)	0,9 kV	1,3 kV	1,5/0,9 kV	<1,4 kV	<1,6 kV
Ifi		-	100 ARMS (N-PE)	N/A			N/A	
IPE at Uref		-	-	< 1 mA		-	< 0,3 mA	
ISCCR		25 kA		10 kA			25 kA	
DIN		1...2 DIN-modules		1...2 DIN-modules			1 DIN-modules	
RC		Yes (version with RC contact)						
Installation		ECM, ECT, ECG, ERP, ECH, ACT, WRP, EPC, GT, GSX, HXS						
Crop.		714		683			717	
Type (IEC/EN)		Type T2, T3		Type T3				

ETITEC Surge arresters ETITEC V

Surge arrester ETITEC V T12

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

Description
- Type 1 + 2 AC power surge protector
- In : 20 kA
- Iimp : 12,5 kA
- Pluggable module for each phase
- Remote signaling (option)
- EN 61643-11 and IEC 61643-11 compliant

Type designation:
ETITEC V T12 xxx/12,5 p+c RC

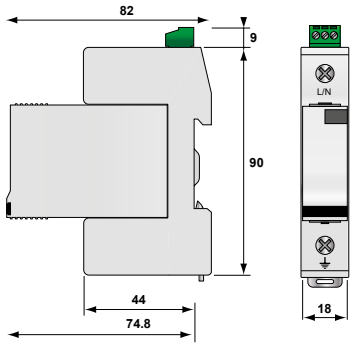
xxx - Uc voltage (max. AC operating voltage), must be above network voltage.
12.5 - 12,5kA(Iimp at 10/350µs)
p - number of poles with MOV
c - 0 for MOV at NPE pole, 1 for GDT (TT systems)
RC - remote contact (change over contact) for fault signalisation

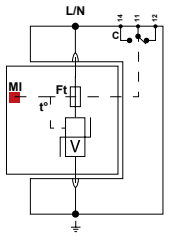
ETITEC V T12 I_{imp}=12,5kA

Type		ETITEC V T12 280	ETITEC V T12 400
Description		1+2 AC surge protector - 1-pole	
Rated. AC voltage	U_o	230/400	230/400 V
Max. AC operating voltage	U_c	280 VAC	440 VAC
Temporary Over Voltage (TOV) Characteristics - 5 sec.	U_T	335 Vac withstand	580 Vac withstand
Temporary Over Voltage (TOV) Characteristics -120 min	U_T	440 Vac disconnection	770 Vac disconnection
Residual current - Leakage current at Uc	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 10/350µs	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_{sccr}	25000 A	25000 A
Current Source generator		1mA	
Un min (MOV)		387 V AC	
Un max (MOV)		473 V AC	
Associated disconnectors			
Thermal disconnector		internal	
Fuses		Fuses Type gG - 125 A	
Installation ground fault breaker		Type "S" or delayed	
Mechnical characteristics			
Dimensions		see diagram	
Connection to Network		By screw terminals: 2,5-25 mm² / 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		Thermoplast 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
Mi: Disconnection indicator
Ft: Thermal fuse
t°: Thermal disconnection mechanism
C: contact for remote signal

ETITEC V T12

Type	Code No.	I_{imp} (10/350) [kA]	I_n/I_{max} (8/20) [kA]	Uc [V AC]	Network	g	
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

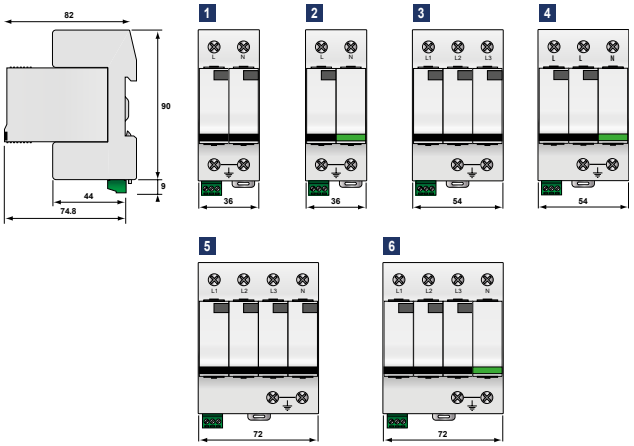
ETITEC V T12 440/12,5 3+1

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 ECH series and SOLID GSX.

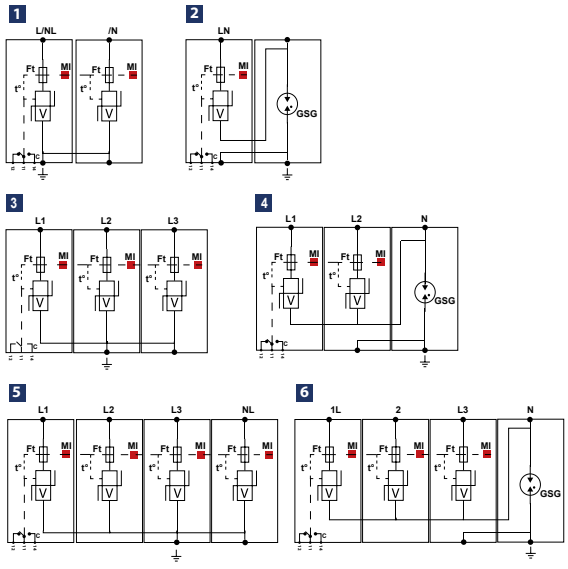
NOT COMPATIBLE WITH ECG, ECM, ACT and ECT series!

Dimensions

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



Internal Configuration



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

Description
- Type 2 AC surge protector
- In : 20 kA
- Imax : 40 kA
- Pluggable module for each phase
- Remote signaling option
- IEC 61643-11 and EN 61643-11 compliance
- UL1449 ed.4

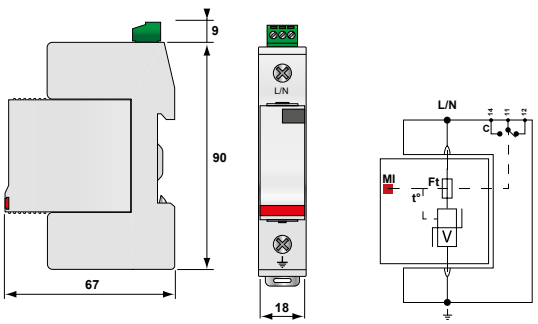
Type designation:
ETITEC V T2 xxx/20 p+c RC

xxx - Uc voltage (max. AC operating voltage), must be above network voltage.
20 - 20kA(In at 8/20µs)
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 T2

Type		ETITEC V T2 255	ETITEC V T2 440
Description		Type 2 AC surge protector - one-phase - pluggable	
Network	U_o	230/400 V	230/400 V
Max. AC operating voltage	U_c	255 VAC	440 VAC
Temporary Over Voltage (TOV) Characteristics - 5 sec.	U_T	335 Vac withstand	580 Vac withstand
Temporary Over Voltage (TOV) Characteristics - 120 min	U_T	440 Vac disconnection	770 Vac disconnection
Residual current - Leakage current at Uc	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}	40 kA	40 kA
Protection level	U_p	1,25 kV	1,8 kV
Admissible short-circuit current	I_{sccr}	25000 A	25000 A
Current Source generator		1mA	
Un min (MOV)		387 V AC	
Un max (MOV)		473 V AC	
Associated disconnectors			
Thermal disconnector		internal	
Fuses		gG 125 A	
Installation ground fault breaker		Type "S" or delayed	
Mechnical characteristics			
Dimensions		see diagram	
Connection to Network		By screw terminals: 2,5-25 mm² / 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		Thermoplast UL94-V0	
Standards compliance		IEC 61643-11 / EN 61643-11	

Dimensions



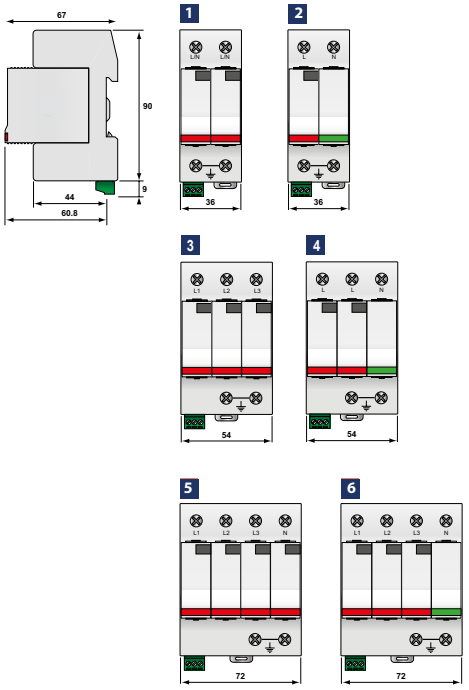
V: High-energy varistor
Ft: Thermal fuse
C: Remote signaling contact
t°: Thermal disconnection system
Mi : Disconnection indicator

ETITEC V T2

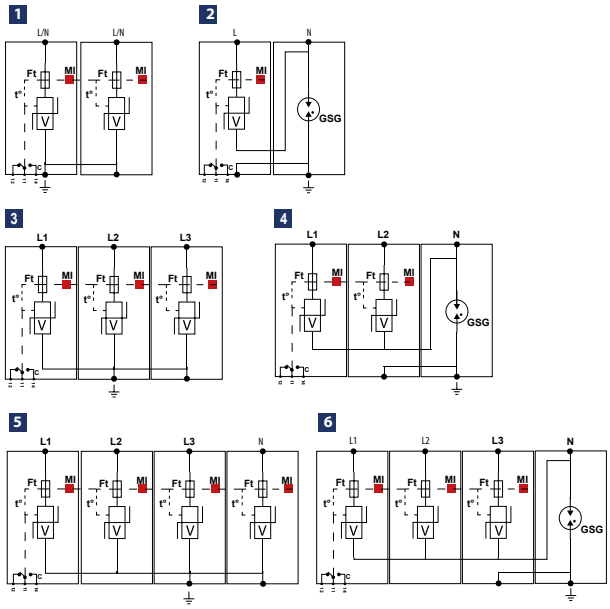
Type	Code No.	I_n/I_{max} (8/20) [kA]	U_c [V AC]	Network	g	
ETITEC V T2 255/20 1+0	002442952	20/40	255	TNC	107	1/72
ETITEC V T2 255/20 2+0	002442953	20/40	255	TNC-S	263	1/36
ETITEC V T2 255/20 1+1	002442954	20/40	255	TT	216	1/36
ETITEC V T2 255/20 3+0	002442955	20/40	255	TNC	319	1/24
ETITEC V T2 255/20 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

Dimensions



Internal Configuration



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

Description
- Compact single-phase Type 2 / Compact 3-phase Type 2
- In : 20 kA
- Imax : 40 kA
- 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 8/20µs)
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

Description		Compact 1-phase Type 2 Surge Protector - 230 V - Pluggable			Compact 3-phase+N Type 2 surge protector - 230/400 V - Pluggable		
Network	U_o	230 V 1-ph	230 V 1-ph	230 V 1-ph	230/400 V 3-ph	230/400 V 3-ph	230/400 V 3-ph
Connection mode		L/PE & N/PE	L/PE & N/PE	L/N & N/PE	L/PE & N/PE	L/PE & N/PE	L/N & 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 min	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 Uc	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 µs impulses	I_n	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA
Max. discharge current -max. withstand @ 8/20 µs by pole	I_{max}	40 kA	40 kA	40 kA	40 kA	40 kA	40 kA
Protection level CM/DM* @In (8/20µs) and @ 6kV (1.2/50µs)	U_p	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	I_{scr}	10000 A	10000 A	10000 A	10000 A	10000 A	10000 A
Current Source generator		1mA	1mA	1mA	1mA	1mA	1mA
Un min (MOV)		387 V AC	387 V AC	387 V AC	387 V AC	387 V AC	387 V AC
Un max (MOV)		473 V AC	473 V AC	473 V AC	473 V AC	473 V AC	473 V AC
Associated disconnectors							
Thermal disconnector		internal					
Fuses		Fuses Type gG - 50 A					
Installation ground fault breaker		Type "S" or delayed					
Mechnical 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		Thermoplast UL94-V0					
Standards compliance		IEC 61643-11 / EN 61643-11					

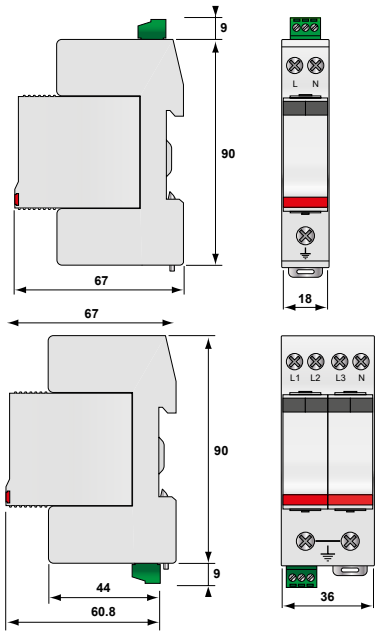
ETITEC V 2T2

Type	Code No.	I_n/I_{max} (8/20) [kA]	U_c [V AC]	Network	g	
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

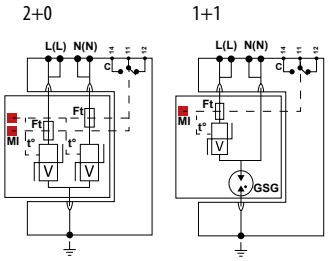
ETITEC V 2T2 255/20 2+0 RC

ETITEC V 2T2 255/20 4+0

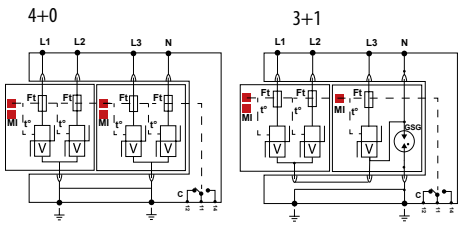
Dimensions



Internal Configuration



V : High energy varistor
GSG : Specific GDT
Ft : Thermal fuse
C : Remote signaling contact
t° : Thermal disconnection system
MI: Disconnection indicator



V : High energy varistor
GSG : Specific GDT
Ft : Thermal fuse
C : Remote signaling contact
t° : Thermal disconnection system
MI : Disconnection indicator

Type 3 (weak type2) multipole SPDs

Description
- Compact single-phase SPD / Compact 3-phase SPD
- In : 5 kA
- Imax : 15 kA
- Pluggable module
- Remote signaling contact (option)
- IEC 61643-11 and EN 61643-11 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 8/20µs)
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

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

ETITEC L3 255/3/6

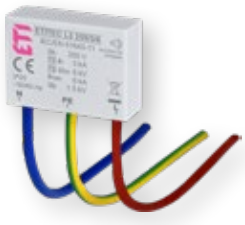
These very compact surge protectors can be integrated in the very small volumes of certain lights (linear LEDs). The surge protection circuit is equipped with an end of life indicator buzzer in order to indicate the disconnection of the surge protector.

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

ETITEC V 2T3

Type	Code No.	I_n/I_{max} (8/20) [kA]	U_{oc} [kV]	U_c [V AC]	Network	g	
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

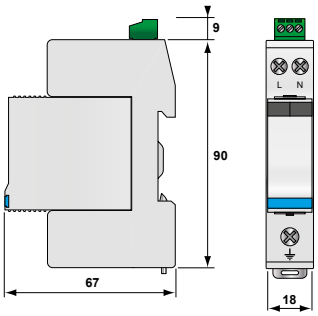
ETITEC V 2T3 255/5 3+1

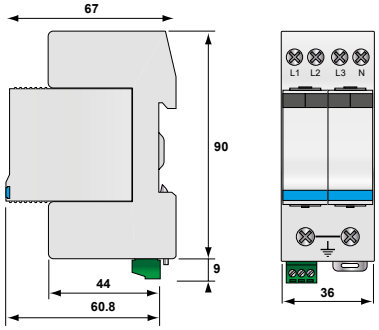

ETITEC L3 255/3/6

ETITEC V 2T3

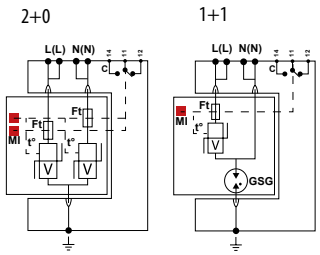
Description		Compact 1-phase Type 2 (and 3) surge protector - 230 V -Pluggable			Compact 3-phase+N Type 2 (and 3) surge protector - 230/400 V - Pluggable		
Network	U_o	230 V 1-ph	230 V 1-ph	230 V 1-ph	230/400 V 3-ph	230/400 V 3-ph	230/400 V 3-ph
Connection mode		L/PE & N/PE	L/PE & N/PE	L/N & N/PE	L/N & N/PE	L/N & N/PE	L/N & 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 min	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 Uc	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 µs impulses	I_n	5 kA	5 kA	5 kA	5 kA	5 kA	5 kA
Max. discharge current -max. withstand @ 8/20 µs by pole	I_{max}	15 kA	15 kA	15 kA	15 kA	15 kA	15 kA
Withstand on overvoltages IEEE C62.41.1	U_{oc}	10 kV	10 kV	10 kV	10 kV	10 kV	10 kV
Protection level CM/DM* @In (8/20µs) and @ 6kV (1.2/50µs)	U_p	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	I_{scr}	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					
Mechnical characteristics							
Dimensions		see diagram					
Connection to Network		by screw terminals: 1,5-10mm² (L/N) or 2,5-25mm² (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		Thermoplast UL94-V0					
Standards compliance		IEC 61643-11 / EN 61643-11					

Dimensions

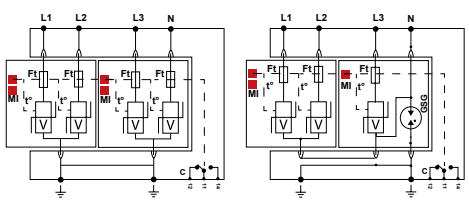




Internal Configuration



V : High energy varistor
Ft : Thermal fuse
C : Remote signaling contact
t° : Thermal disconnection system
GSG: Specific GDT
MI : Disconnection indicator



V : High energy varistor
Ft : Thermal fuse
C : Remote signaling contact
t° : Thermal disconnection system
GSG: Specific GDT
MI : Disconnection indicator

LED lighting protection

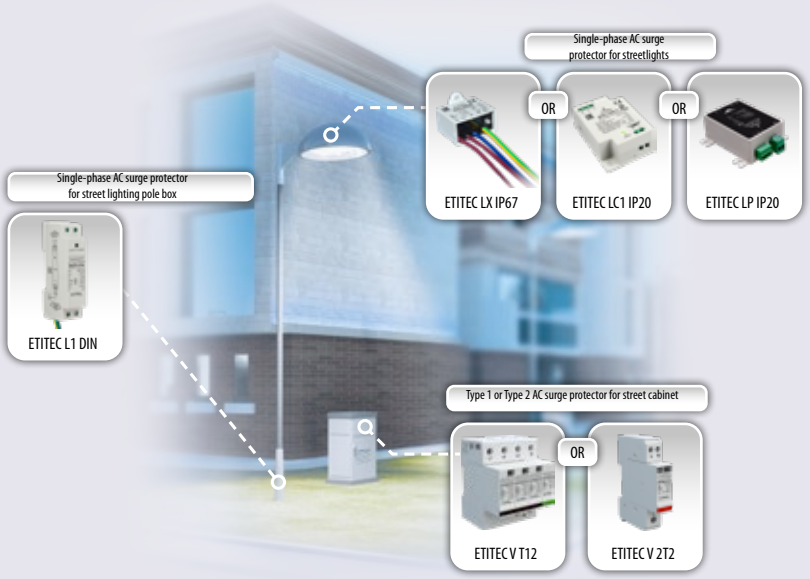
ETITEC LC1 IP20 range is a compact solution surge protectors to be installed in small spaces. These devices are available in 2 types of connectors (screw terminal or spring) and in two orientations wiring (input / output opposite or input / output on the same side) in order to adapt to the installation 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 disconnector 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.	Supply 230 V AC
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.	
ETITEC LP2 IP20				Type 2 + 3, protection class II, screw terminal for double insulated fixtures.	
ETITEC LC1 IP20		Compact, hard-wired surge protector type 2 and type 3	Compact. Many configurations	Type 2 + 3, protection class I (GDT to earth), screw terminal, very compact	
ETITEC LX1 IP67		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 LX2 IP67				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 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 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 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

Type	Code No.	I_n/I_{max} (8/20) [kA]	U_{oc} [kV]	U_c [V AC]	I_L [A]	g	
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


ETITEC LC1 IP20


ETITEC LP2 IP20


ETITEC LX1 IP67


ETITEC LP1 IP20


ETITEC L1 DIN

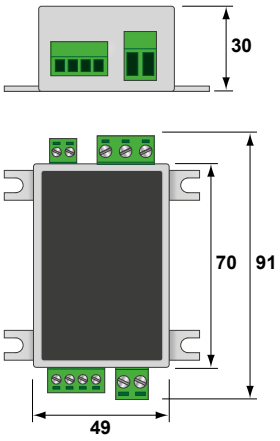

ETITEC LX1 IP67

ETITEC LP

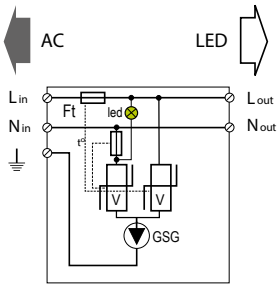
Type	ETITEC LP1 IP20	ETITEC LP2 IP20
Network	220-240 V single phase	
Protection mode(s)	CM/DM	
Max. AC operating voltage	305 VAC	
Max. Load current	2,5 A	
Residual current - Leakage current at Uc	x	
Nominal discharge current - 15 x 8/20 µs impulses	5 kA	
Max. discharge current -max. withstand @ 8/20 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	
Mechnical characteristics		
Connection to Network	Screw 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 min	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
Mechnical 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	

Dimensions

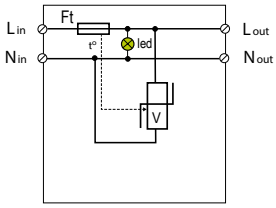
ETITEC LP1 IP20
ETITEC LP2 IP20



Internal Configuration



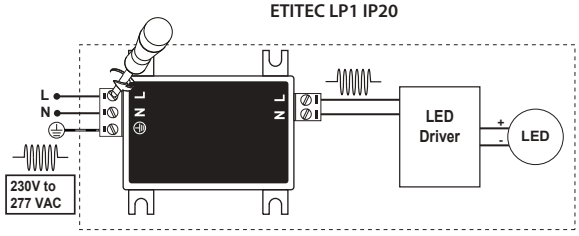
ETITEC LP1 IP20



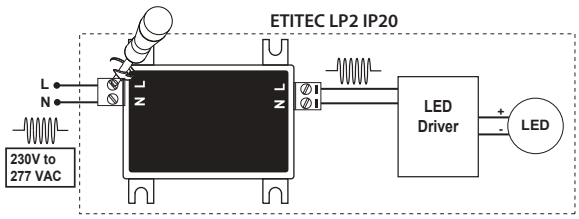
ETITEC LP2 IP20

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

ETITEC LP1 IP20

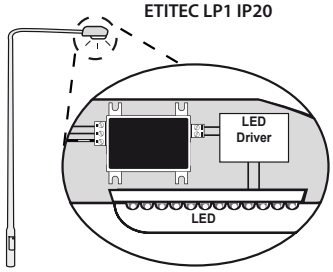


ETITEC LP2 IP20

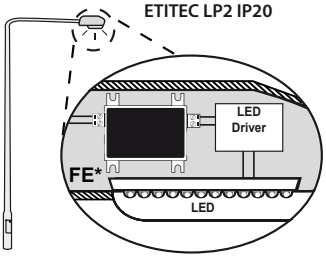


Індикатор стану LED ON = OK
Індикатор стану LED OFF + LED AC OFF= ПОШКОДЖЕННЯ

ETITEC LP1 IP20



ETITEC LP2 IP20

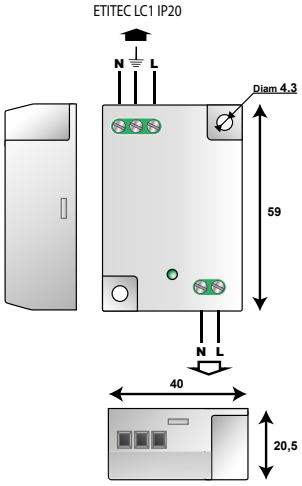


*FE - Робоче (функціональне) заземлення

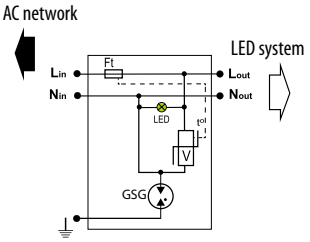
ETITEC LC1 IP20

Description		Surge protectors for LED lighting system Class 1
Network	U_o	220-240 V single phase
AC system		TT/TN
Protection mode(s)		CM/DM
Max. AC operating voltage	U_c	320 VAC
Max. Load current	I_L	5 A
Residual current - Leakage current at Uc	I_{pe}	x
Temporary Over Voltage (TOV) Characteristics - 5 sec.	U_t	335 Vac withstand
Temporary Over Voltage (TOV) Characteristics - 120 min	U_T	440 Vac disconnection
Temporary Over Voltage N/PE (TOV HT)	U_T	1200 V/300A/200 ms disconnection
Nominal discharge current - 15 x 8/20 µs impulses	I_n	5 kA
Max. discharge current -max. withstand @ 8/20 µs by pole	I_{max}	10 kA
Total lightning current - max. total withstand @ 8/20 µs	I_{total}	20 kA
Withstand on Combination waveform - Class III test	U_{oc}	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)	U_p	1.5 kV/ 1.5 kV
Admissible short-circuit current	I_{sccr}	10000 A
Associated disconnectors		
Thermal disconnector		internal
Installation ground fault breaker		Type "S" or delayed
Mechnical characteristics		
Dimensions		see diagram
Connection to Network		Screw (2.5 mm² 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		Thermoplast UL94-V0
Standards compliance		EN 61643-11 / IEC 61643-11

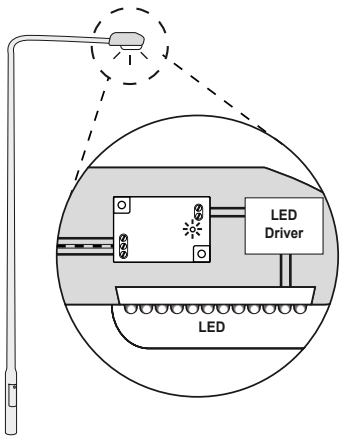
Dimensions

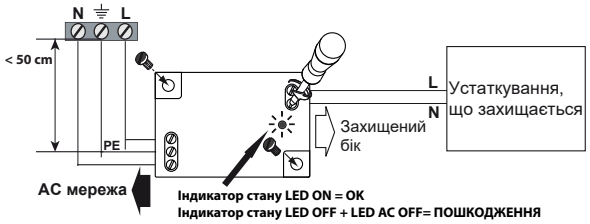


Internal Configuration



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

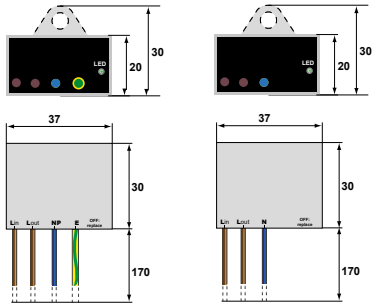




ETITEC LX

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 min	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	
Mechnical characteristics		
Dimensions	see diagram	
Connection to Network	by wires :1.5 mm² (L/N) & 2.5 mm² (PE)	by wires :1.5 mm² (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	

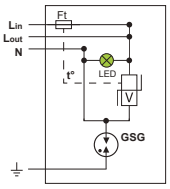
Dimensions



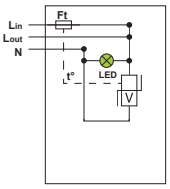
ETITEC LX1 IP67 ETITEC LX2 IP67

Internal Configuration

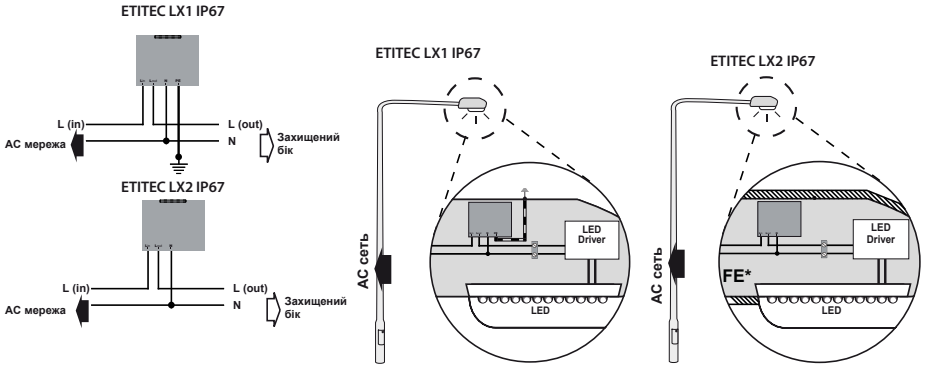
ETITEC LX1 IP67



ETITEC LX2 IP67



V : Varistor
GSG: Specific gas tube
Ft : Thermal fuse
LED : Disconnection indicator
t° : Thermal system disconnection



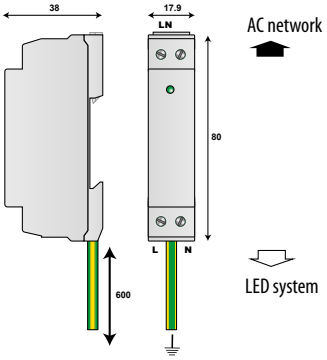
*FE - Робоче (функціональне) заземлення

Індикатор стану LED ON = OK
Індикатор стану LED OFF + LED AC OFF= ПОШКОДЖЕННЯ

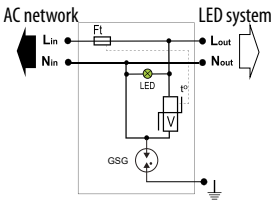
ETITEC L1 DIN

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 min	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
Mechnical 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

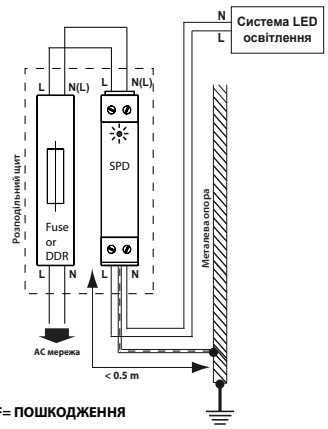
Dimensions

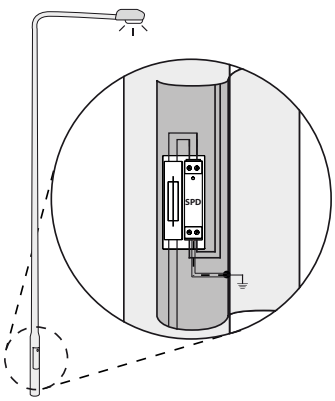


Internal Configuration



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





Індикатор стану LED ON = OK
Індикатор стану LED OFF + LED AC OFF= ПОШКОДЖЕННЯ

ETITEC Surge arresters ETITEC

Surge arrester ETITEC T WENT group B, EN/IEC/VDE: T1, T2/I,II/B+C

Description

ETITEC T WENT is surge arrester for indoor installation, internal protection of electrical system. Group WENT surge protection is in accordance with VDE class B, C. This protection corresponds to IEC category I, II. The protection is made on the main distribution box, as the first level of protection against lightning strikes and partial direct or indirect strikes. It's compact design demands small requirement for space for a complete 3-phase protection . It can be used in single or three phase network systems: TT, TNC, TNC-S. In case of permanent arrestor damage, thermal protection is activated which signalizes faulty arrester.

*Note: First number of designation 1+0, 2+0, 3+1 etc. indicates the number of varistors. Second one means the following: number 0 indicates there is no gas discharge tube (GDT), number 1 indicates there is. GDT element is required in TT systems.

ETITEC T WENT

Type	320/25
In accordance with	IEC/EN 61643-11
Category IEC/EN/VDE	I, II/ T1, T2 / B+C
Max. continuous operating voltage (AC) Uc	320 V
Nominal AC voltage Uo	230V 50-60 Hz
TOV immunity UT (AC)	334 V/5s withstand 438 V/120 min safe failure
Impulse current (10/350) Iimp	25 kA
Nominal discharge current (8/20) In	25 kA
Max. discharge current (8/20) Imax	100 kA
Protection level Up - at In	<1,5 kV
Follow current Ifi	100 ARMS
Response time tA	< 25 ns
Residual current Ipe at Uref	< 0,3 mA
Current source generator	1 mA
Un min (MOV)	459
Un max (MOV)	561 V
Voltage step generator	100 V/s
Un min (GDT)	480 V
Un max (GDT)	720 V
Thermal decoupler	✓
Torque	3,0 Nm
Back-up fuse (if mains > 160A)	250 A gG
Short-circuit current rating ISCCR	50 kA / 50 Hz
Temperature range	- 40oC ...+70oC
Cross-section of connection wire	min. 6mm^2; max. solid, rigid strended 35mm^2; flexible 25mm^2
Mounting	indoors on top hat fixing rail 35 mm (EN 60715)
Degree of protection	IP 20
Casing material	PA
Dimensions	2 TE ... 8 TE
Indication of disconnector operation	
Permissible humidity	5% - 95%
Additional data for ETITEC T WENT-RC	
Remote signalisation (RC)	✓
Switching capability (RC)	AC: 250V/0,5A; DC:125V/0,2A
Cross-section of connection wire (RC)	max. 1.5 mm2
Torque (RC)	0,25 Nm

Advantages:
- remote signalisation - auxiliary contact (only RC type)
- mounting on DIN rail
- connection up to 35mm2
- high discharge currents
- high degree of protection
- varistor is the protective element
- IEC/EN 61643-11
- RoHS compliant

ETITEC T WENT I_{imp}=25kA

Type	Code No.	I_{imp} (10/350) [kA]	I_n/I_{max} (8/20) [kA]	U_c [V AC]	Network	g	
ETITEC T WENT 320/25 1+0	002440364	25	25/100	320	TNC	295	1/7
ETITEC T WENT 320/25 2+0	002440366	25	25/100	320	TNC-S	560	1/3
ETITEC T WENT 320/25 1+1	002440367	25	25/100	320	TT	490	1/3
ETITEC T WENT 320/25 3+0	002440368	25	25/100	320	TNC	840	1/3
ETITEC T WENT 320/25 3+1	002440369	25	25/100	320	TT	1050	1/2
ETITEC T WENT 320/25 4+0	002440370	25	25/100	320	TNC-S	1120	1/2
ETITEC T WENT 320/25 1+0 RC	002440365	25	25/100	320	TNC	300	1/7
ETITEC T WENT 320/25 2+0 RC	002440371	25	25/100	320	TNC-S	570	1/3
ETITEC T WENT 320/25 1+1 RC	002440372	25	25/100	320	TT	490	1/3
ETITEC T WENT 320/25 3+0 RC	002440373	25	25/100	320	TNC	860	1/3
ETITEC T WENT 320/25 3+1 RC	002440374	25	25/100	320	TT	1060	1/2
ETITEC T WENT 320/25 4+0 RC	002440375	25	25/100	320	TNC-S	1140	1/2

* RC -> remote signalisation

ETITEC T WENT 320/25 3+1 RC

Type of network and nr. of SPD poles

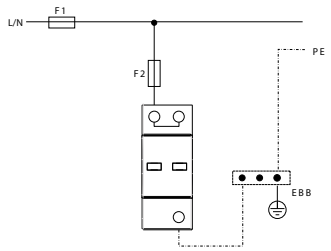
Network	Nr of poles (SPD configuration)
TNC 1 phase	1+0
TNC 3 phase	3+0
TNS 1 phase	2+0 / 1+1
TNS 3 phase	4+0 / 3+1
TT 1 phase	1+1
TT 3 phase	3+1

At TNC, TNS, TT systems with U_n=230V, recommended U_c value of SPD is 275V.

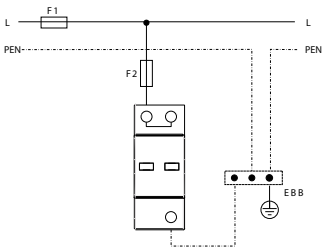
Protection configurations for various power systems

ETITEC T WENT I_{imp}=25 kA

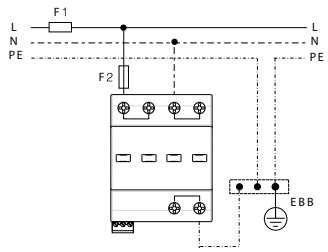
TN-S Network - Single-phase, 1+0 (T-connection)



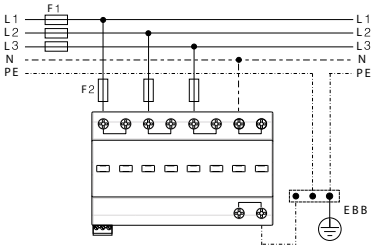
TN-C Network - Single-phase, 1+0 (T-connection)



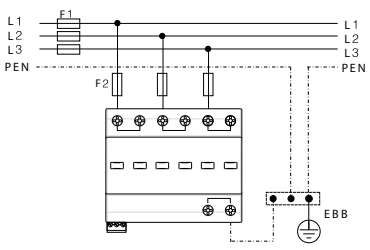
TN-S Network - Single-phase, 2+0 (T-connection)



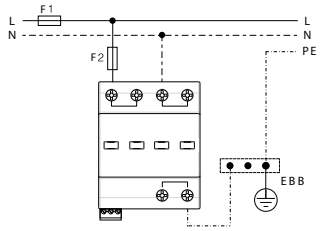
TN-S Network - Three-phase, 1+0 (T-connection)



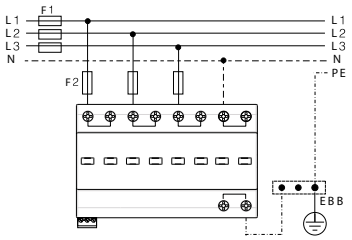
TN-C Network - Three-phase, 1+0 (T-connection)



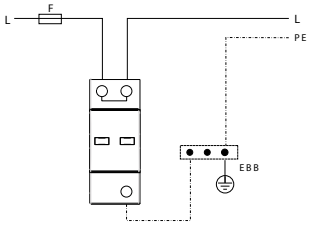
TT Network - Single-phase, 1+0 (T-connection)



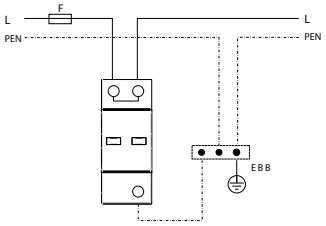
TT Network - Three-phase, 1+0 (T-connection)



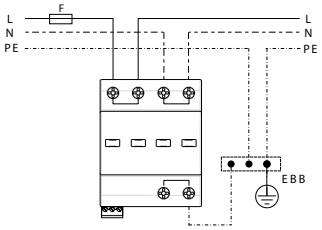
TN-S Network - Single-phase, 1+0 (V-connection)



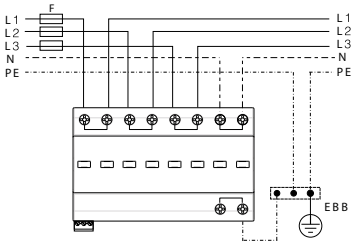
TN-C Network - Single-phase, 1+0 (V-connection)



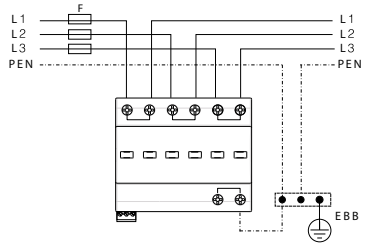
TN-S Network - Single-phase, 2+0 (V-connection)



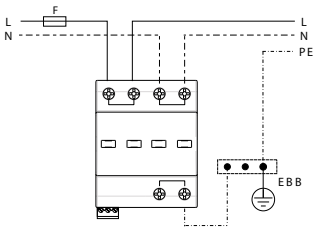
TN-S Network - Three-phase, 4+0 (V-connection)



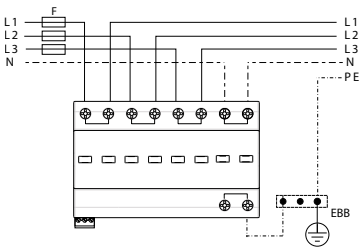
TN-C Network - Three-phase, 3+0 (V-connection)



TT Network - Single-phase, 1+1 (V-connection)



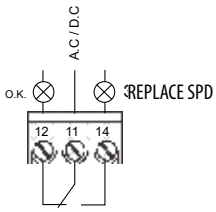
TT Network - Three-phase, 3+1 (V-connection)



Remote signalization connection / Back-up fuse

Back-up fuse
F1 > 250 A gG → F2 = 250 A gG
F1 ≤ 250 A gG → F2 = not needed
F ≤ 100 A gG

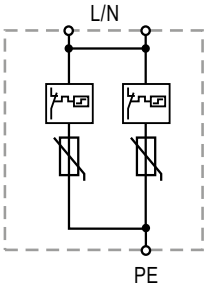
A.C.	250V / 0.5A
D.C.	250V / 0.1A
	125V / 0.2A
	75V / 0.5A



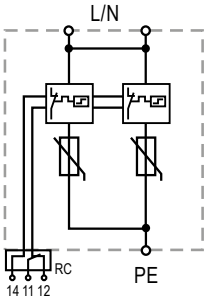
Internal Configuration

ETITEC T WENT I_{imp}=25 kA

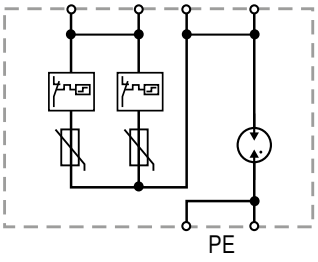
ETITEC T WENT 320/25 1+0



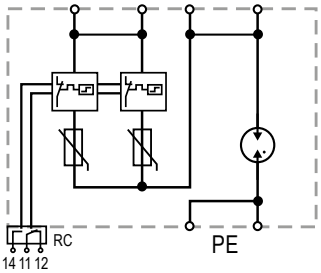
ETITEC T WENT 320/25 1+0 RC



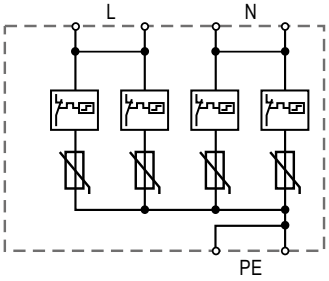
ETITEC T WENT 320/25 1+1 RC



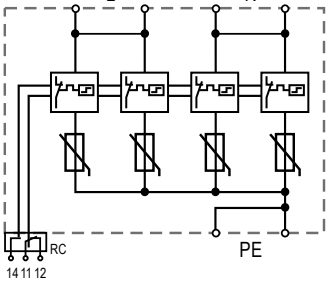
ETITEC T WENT 320/25 1+1 RC



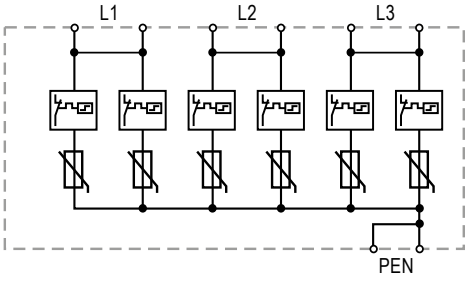
ETITEC T WENT 320/25 2+0 RC



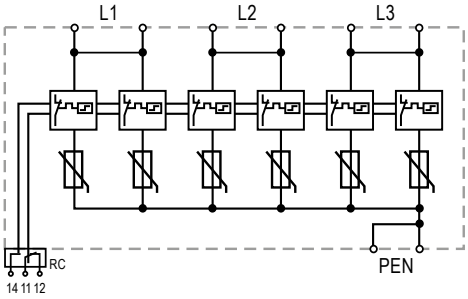
ETITEC T WENT 320/25 2+0 RC



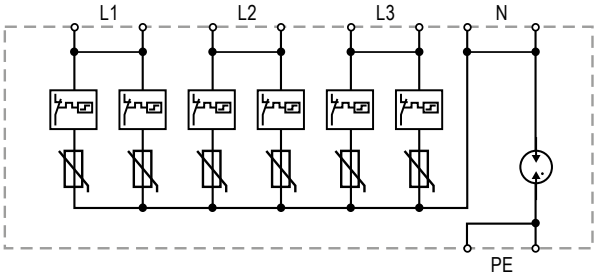
ETITEC T WENT 320/25 3+0



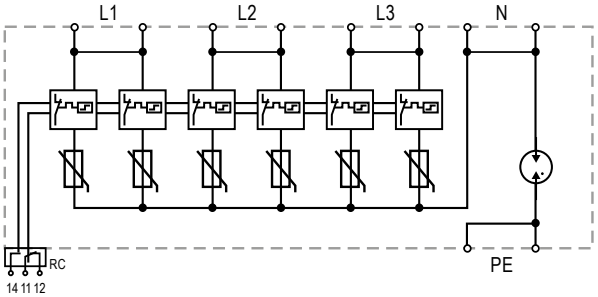
ETITEC T WENT 320/25 3+0 RC



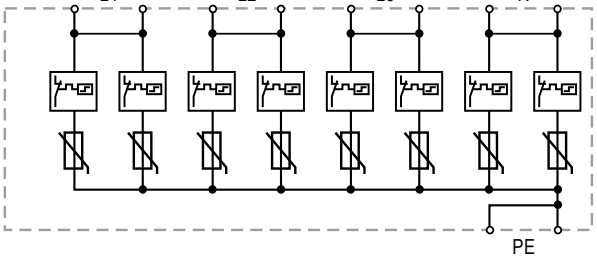
ETITEC T WENT 320/25 3+1



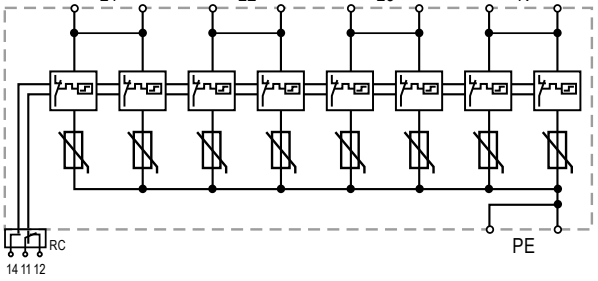
ETITEC T WENT 320/25 3+1 RC



ETITEC T WENT 320/25 4+0

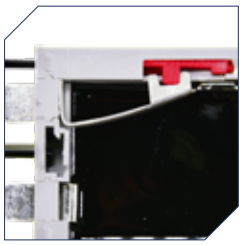


ETITEC T WENT 320/25 4+0 RC

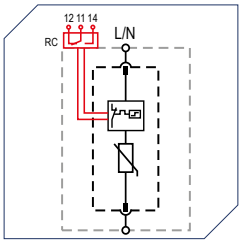


Surge arrester ETITEC ML T123 EN/IEC/VDE: T1, T2, T3/I, II,III/B+C+D

Each surge arrester includes thermal protection that disconnects it from the network if the current exceeds the maximum allowable value (I_{max}).



Made with high-quality varistors.



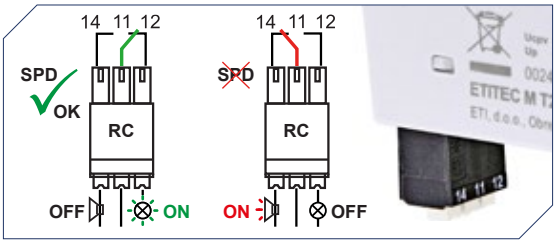
The marking provides key technical parameters and connection details, including maximum conductor cross-sections: 35 mm² (solid) and 25 mm² (stranded).

Visual indicator for varistor status: red for fault, green for OK.

All surge arresters feature alignment elements to prevent incorrect installation of modules from other groups.

All surge arresters allow for quick module replacement. A locking latch prevents accidental removal and improves vibration resistance.

The dual grounding terminal enables an additional connection for the grounding conductor.



Snapper for quick DIN rail mounting

Removable self-locking contacts for remote fault signaling (RC).

When using multiple single-pole surge arresters, busbars and conductors can be connected simultaneously at the top and bottom.

ETITEC ML T123 is a surge arrester for complete overvoltage protection in standard modular housing. Protection corresponds to all categories of overvoltage protections: IEC categories I, II, III and EN Type 1, Type 2, Type 3. Groups B, C, D by VDE. It's intended for installation in main distribution board or in power distribution enclosure in front of energy meter, as the first level of protection against lightning strikes, partial direct, indirect atmospheric discharges and induced surges. Due to the housing of standard modular size, it can be installed also in any sub-distribution board. In case of permanent arrestor damage, thermal protection is activated which signalizes faulty arrester. Consequently only the SPD module has to be replaced, while base unit remains fixed on DIN rail.
Compliance: IEC 61643-11:2011, EN 61643-11:2012+A11:2018

Advantages:

- remote signalisation (RC version only)
- DIN rail mounting (EN 60715)
- spring-loaded fixing for easy mounting on DIN rail
- latching mechanism for extra reliable module holding
- High performance MOV inside
- The earth connection terminal allows additional connection 2nd earth conductor (V connection type)
- Coding system prevents wrong module insertion
- Each module is equipped with a thermal disconnection system which disconnects faulty device from power supply in case of MOV overload due to high energy surge, TOV or ageing
- connection up to 35mm^2

ETITEC ML T123

Type	ETITEC ML T123 300/12,5 (1+0), (2+0), (3+0)	ETITEC ML T123 300/12,5 (1+1), (3+1)
In accordance with	IEC 61643-11:2011, EN 61643-11:2012+A11:2018	
Category IEC/EN/VDE	T1, T2, T3/I, II, III/B+C+D	
Nominal AC voltage (50/60Hz) Uo	240V	
Max. continuous operating voltage (AC) Uc	300 V (L-N)	300 V (L-N) / 305 (N-PE)
Impulse discharge current per pole (10/350) Iimp	12,5 kA	12,5 kA/50 kA
Nominal discharge current (8/20) In	20 kA	20 kA (L-N)/50 kA(N-PE)
Max. discharge current (8/20) Imax	40 kA	40 kA (L-N)/100 kA(N-PE)
TOV immunity UT (AC)	337 V (L-N)/5s withstand 442V/120 min (L-N) safe fail	442V/120 min (L-N) Safe fail, 1200V (N-PE) withstand 200ms
Charge	1500 V / 900V	1500 V / 900V (L-N)/(N-PE)
Voltage Protection level for Type2 / for Type 3 Up	6 kV	
Open circuit voltage Type 3 test Uoc	-	100 A_{RMS} (N-PE)
Follow current Ifi	< 25 ns	<25 ns (L-N) / < 100 ns (N-PE)
Response time tA	< 0,3 mA	
Residual current Ipe at Uref	✓	
Thermal decoupler	4,5 Nm	
Torque	160 A gG	
Back-up fuse (if mains > 160A)	25 kA / 50 Hz	
Short-circuit current rating ISCCR	- 40°C ...+85°C	
Temperature range		
Cross-section of connection wire	35 mm^2 (solid, stranded) / 25 mm^2 (flexible)	
Mounting	IP 20 indoors on top hat fixing rail 35 mm (EN 60715)	
Degree of protection		
Casing material	1 TE ... 4 TE thermoplastic, extinguishing degree UL 94 V-0	
Dimensions		
Fault indication (visual)	OK - green indicator / faulty - RED indicator	
Fault indication (remote contacts)	✓ (version with RC contact)	
Additional data for ETITEC B-RC	✓	
Remote signalisation (RC)	AC: 250V/1A; DC: 48V/0,5A; 24V/0,5A	
Switching capability (RC)	max. 1.5 mm2 (single-core)	
Cross-section of connection wire (RC)		

ETITEC ML T123

Type	Code No.	I_{imp} (10/350) [kA]	I_n/I_{max} L-N/N-PE (8/20) [kA]	U_c [V AC]	Network	g	
ETITEC ML T123 300/12,5 1+0	002440661	12,5	20/40	300	TNC	161	1/12
ETITEC ML T123 300/12,5 1+0 RC	002440662	12,5	20/40	300	TNC	182	1/12
ETITEC ML T123 300/12,5 2+0	002440663	12,5	20/40	300	TNC-S	344	1/7
ETITEC ML T123 300/12,5 2+0 RC	002440664	12,5	20/40	300	TNC-S	353	1/7
ETITEC ML T123 300/12,5 3+0	002440665	12,5	20/40	300	TNC	553	1/5
ETITEC ML T123 300/12,5 3+0 RC	002440666	12,5	20/40	300	TNC	562	1/5
ETITEC ML T123 300/12,5 4+0	002440667	12,5	20/40	300	TNC-S	680	1/4
ETITEC ML T123 300/12,5 4+0 RC	002440668	12,5	20/40	300	TNC-S	689	1/4
ETITEC ML T123 300/12,5 1+1	002440669	12,5	20/40+50/100	300	TN, TT	332	1/7
ETITEC ML T123 300/12,5 1+1 RC	002440670	12,5	20/40+50/100	300	TN, TT	338	1/7
ETITEC ML T123 300/12,5 3+1	002440671	12,5	20/40+50/100	300	TN, TT	667	1/4
ETITEC ML T123 300/12,5 3+1 RC	002440672	12,5	20/40+50/100	300	TN, TT	676	1/4

* RC -> remote signalisation.
**The first digit of the value (1+0), (1+1), (2+0), (3+0), (3+1), (4+0) indicates the number of varistors (MOVs); the second digit of the value (1+0), (1+1), (2+0), (3+0), (3+1), (4+0) shows the presence (1) or absence (0) of the GDT element (TT network systems);
note: the values of Iimp and In/Imax - indicated per one pole

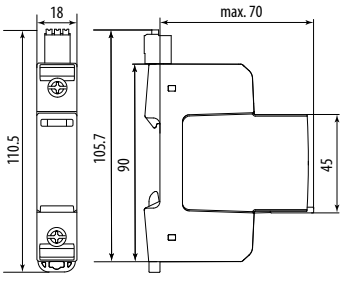
ETITEC ML T123 300/12,5 2+0

ETITEC ML T123 300/12,5 3+0

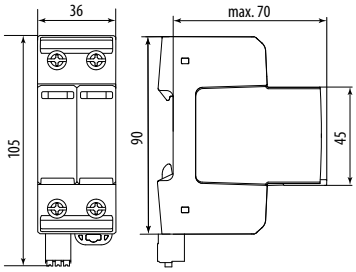
ETITEC ML T123 300/12,5 3+1

Dimensions

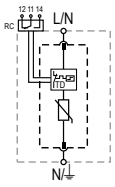
ETITEC ML T123
300/12,5 (1+0) RC



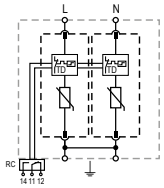
ETITEC ML T123
300/12,5 (2+0) RC/ ...(1+1) RC



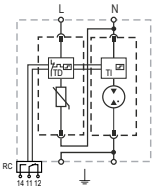
Internal Configuration



ETITEC ML T123
300/12,5 (2+0) RC

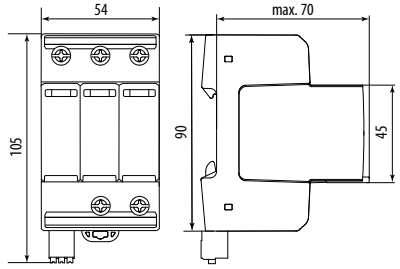


ETITEC ML T123
300/12,5 (1+1) RC

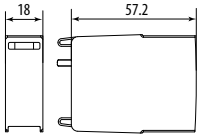


Dimensions

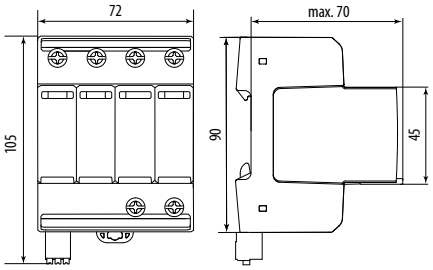
ETITEC ML T123
300/12,5 (3+0) RC



Modification module
ETITEC ML T123
300/12,5

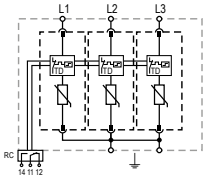


ETITEC ML T123
300/12,5 (4+0) RC/ ...(3+1) RC

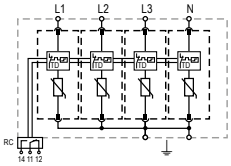


Internal Configuration

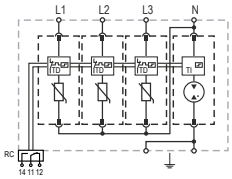
ETITEC ML T123
300/12,5 (3+0) RC



ETITEC ML T123
300/12,5 (4+0) RC



ETITEC ML T123
300/12,5 (3+1) RC



Surge arrester ETITEC group C T2

EN/IEC/VDE: T2/II/C

Description

ETITEC C T2 is surge arrester for indoor application. Group C surge protection is in accordance with VDE class C. This protection corresponds to IEC class II. The protection is made at the subdistribution board, as the second level of protection against overvoltage indirect lightning strikes. In case of permanent arrester damage, thermal protection is activated which signalize faulty arrester. ETITEC C T2 255/20 G is an overvoltage arrester with gas discharge tube for protection against indirect lightning strikes. It is used as a galvanic separation between N-PE conductor in TT network systems.

*Note: First number of designation 1+0, 2+0, 3+1 etc. indicates the number of varistors. Second one means the following: number 0 indicates there is no gas discharge tube, number 1 indicates there is.

Advantages:

- optical indication of faulty device (green ok, red false)
- remote signalisation (RC version only)
- DIN rail mounting (EN 60715)
- high discharge currents
- high degree of protection
- varistor is the protective element
- metal snapper, new way of mounting on DIN rail (easier, quicker)
- round-off shape compatible with ETIMAT
- modular design
- IEC/EN 61643-11
- RoHS compliant
- connection up to 35mm^2

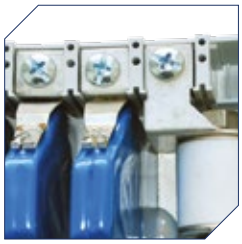
- Alignment elements to prevent incorrect installation of modules from other groups.

- Removable contacts for remote fault signaling (RC).

- Metal snapper for quick DIN rail mounting.

- Each surge arrester is equipped with thermal protection that disconnects it from the electrical network if the current exceeds the allowable Imax value.

- A spark gap is used as a galvanic isolation between N and PE conductors in TT grounding systems.



- Visual indicator for varistor status: red = fault, green = OK.

- Special busbars for single pole SPD into multipole connection can be used.

- The markings on product provide key technical parameters and connection details.

- Mechanical indicator for visual and remote fault signaling (visible = OK, hidden = fault).

ETITEC C T2

Type	275/20	440/20	255/20 G
In accordance with		IEC/EN 61643-11	
Category IEC/EN/VDE		II/T2/C	
Max. continuous operating voltage (AC) Uc	275	440	255
Nominal AC voltage Uo		230 V 50-60 Hz	
TOV immunity UT (AC)	335 V/5s withstand	335 V/5s withstand	1200 V
	440 V/120 min safe disconnection	440 V/120 min withstand	-
Nominal discharge current (8/20) In		20 kA	
Max. discharge current (8/20) Imax		40 kA	
Charge			
Protection level Up - at In (8/20)	<1,5 kV	<2,0 kV	<1,5 kV
Follow current Ifi		x	>100 A
Response time tA		< 25 ns	< 100 ns
Residual current Ipe at Uref		< 0,2 mA	-
Current source generator		1mA	
Un min (MOV)		459V	
Un max (MOV)		561V	
Voltage step generator		100V/s	
Un min(GDT)		480V	
Un max (GDT)		720V	
Thermal decoupler		✓	-
Torque		3,0 Nm	
Back-up fuse (if mains > 125A)		125 A gG	-
Short-circuit current rating ISCCR		25 kA / 50 Hz	-
Temperature range		- 40oC ...+70oC	
Cross-section of connection wire		min. 6mm^2, max. single strand 35mm^2, multi-strand 25mm^2	
Mounting		indoors on top hat fixing rail 35 mm (EN 60715)	
Degree of protection		IP 20	
Casing material		thermoplastic; extinguishing degree UL 94 V-0	
Dimensions		1 TE ... 4 TE	
Indication of disconnector operation		red flag	
Permissible humidity		5% - 95%	
Additional data for ETITEC C-RC			
Remote signalisation (RC)		✓	-
Switching capability (RC)		AC: 250V/0.5A; 125V/3A	-
Cross-section of connection wire (RC)		max. 1.5 mm2	-
Torque (RC)		0,25 Nm	-

Type of network and nr. of SPD poles

Network	Nr of poles (SPD configuration)
TNC 1phase	1+0
TNC 3 phase	3+0
TNS 1 phase	2+0 / 1+1
TNS 3 phase	4+0 / 3+1
TT 1 phase	1+1
TT 3 phase	3+1
IT 1 phase	2+0
IT 3 phase	4+0

At TNC, TNS, TT systems with U_n=230V, recommended U_c value of SPD is 275V.
At IT system, recommended U_c value of SPD is 440V.

ETITEC C T2

Type	Code No.	I_n/I_{max} (8/20) [kA]	U_c [V AC]	Network	g	
ETITEC C T2 275/20 1+0	002440393	20/40	275 VAC	TNC	128	1/12
ETITEC C T2 275/20 1+0 RC	002440394	20/40	275 VAC	TNC	133	1/12
ETITEC C T2 275/20 4+0	002440395	20/40	275 VAC	TNC-S	456	1/3
ETITEC C T2 275/20 4+0 RC	002440396	20/40	275 VAC	TNC-S	471	1/3
ETITEC C T2 275/20 2+0	002440397	20/40	275 VAC	TNC-S	244	1/7
ETITEC C T2 275/20 2+0 RC	002440398	20/40	275 VAC	TNC-S	249	1/7
ETITEC C T2 275/20 3+0	002440399	20/40	275 VAC	TNC	352	1/5
ETITEC C T2 275/20 3+0 RC	002440400	20/40	275 VAC	TNC	357	1/5
ETITEC C T2 275/20 1+1	002440401	20/40	275 VAC	TT	225	1/7
ETITEC C T2 275/20 1+1 RC	002440402	20/40	275 VAC	TT	230	1/7
ETITEC C T2 275/20 3+1	002440403	20/40	275 VAC	TT	441	1/3
ETITEC C T2 275/20 3+1 RC	002440404	20/40	275 VAC	TT	446	1/3
ETITEC C T2 440/20 1+0	002440405	20/40	440 VAC	IT	130	1/12
ETITEC C T2 440/20 1+0 RC	002440406	20/40	440 VAC	IT	145	1/12
ETITEC C T2 440/20 4+0	002440407	20/40	440 VAC	IT	466	1/3
ETITEC C T2 440/20 4+0 RC	002440408	20/40	440 VAC	IT	471	1/3
ETITEC C T2 440/20 2+0	002440409	20/40	440 VAC	IT	247	1/7
ETITEC C T2 440/20 2+0 RC	002440410	20/40	440 VAC	IT	252	1/7
ETITEC C T2 440/20 3+0	002440411	20/40	440 VAC	IT	356	1/5
ETITEC C T2 440/20 3+0 RC	002440412	20/40	440 VAC	IT	,361	1/5
ETITEC C T2 255/20 G	002440413	20/40	255 VAC		118	1/12
MODUL ETITEC C T2 275/20	002440414	20/40	275 VAC		56	12/12
MODUL ETITEC C T2 440/20	002440415	20/40	440 VAC		58	12/12
MODUL ETITEC C T2 255/20 G	002440416	20/40	255 VAC		36	12/12

* RC -> remote signalisation Note: In - defined per single pole

ETITEC C T2 275/20 1+0 ETITEC C T2 275/20 1+0 RC

ETITEC C T2 275/20 4+0

MODUL ETITEC C T2 275/20

Connection terminals

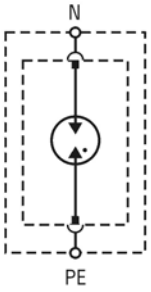
Type	code No.	g		Connection terminals for
IZ16/1F/2/ETITEC	002921081	9	50/600	2 modules connection
IZ16/1F/3/ETITEC	002921082	15	50/600	3 modules connection
IZ16/1F/4/ETITEC	002921083	20	50/600	4 modules connection

For module width 17,8 mm.

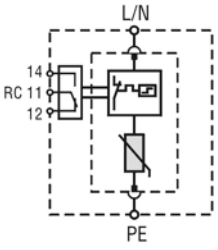
IZ16/1F/2/ETITEC IZ16/1F/3/ETITEC

IZ16/1F/3/ETITEC

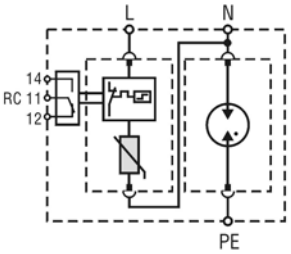
Internal Configuration



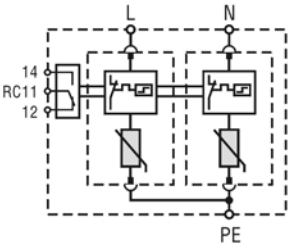
ETITEC C T2 G



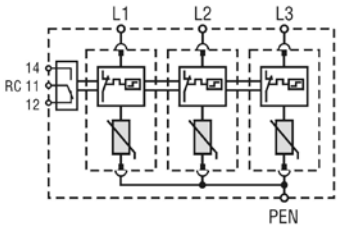
ETITEC C T2 1+0 RC



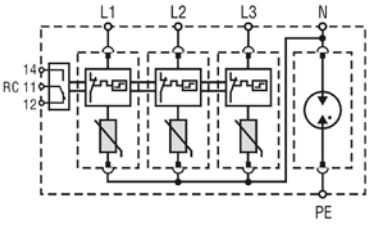
ETITEC C T2 1+1 RC



ETITEC C T2 2+0 RC



ETITEC C T2 3+0 RC



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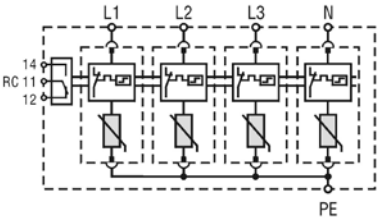
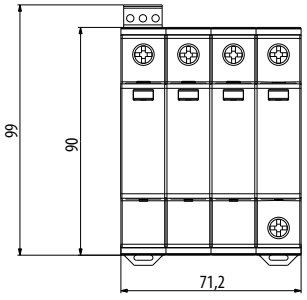
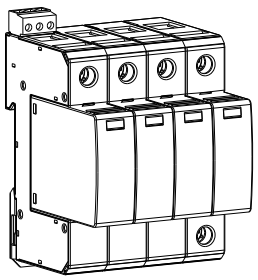


ETITEC C T2 4+0 RC

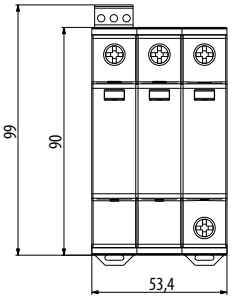
Dimensions

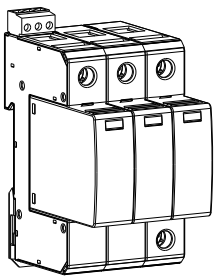
ETITEC C T2 275/20 4+0 RC
ETITEC C T2 275/20 3+1 RC



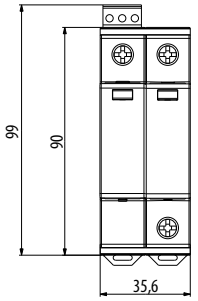


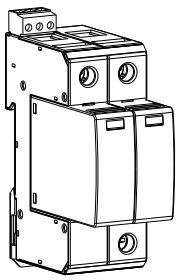
ETITEC C T2 275/20 3+0 RC



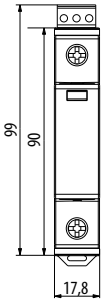


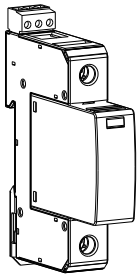
ETITEC C T2 275/20 2+0 RC
ETITEC C T2 275/20 1+1 RC

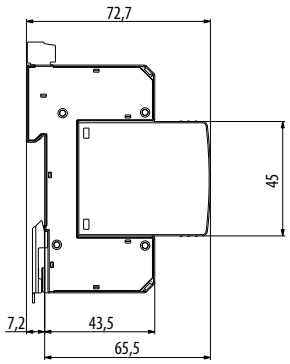




ETITEC C T2 275/20 1+0 RC

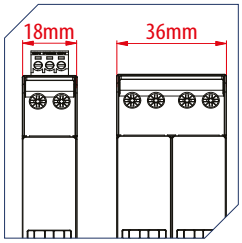




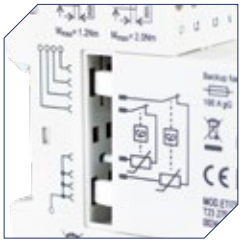


Surge arrester ETITEC group CM T2+T3

EN/IEC/VDE: T2,T3/II,III/C,D



ETITEC CM T23 features a compact design, allowing 2+0 and 1+1 surge arresters in a 1-module device, and 4+0 and 3+1 configurations in a 2-module device.



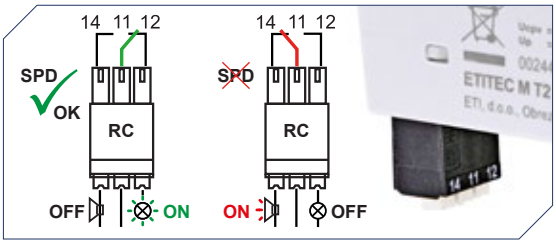
Alignment elements to prevent incorrect installation of modules from other groups.

The product marking provides key technical parameters and connection details, including maximum conductor cross-sections:
PE: 35 mm² (solid) / 25 mm² (stranded)
L, N: 10 mm² (solid) / 6 mm² (stranded).

Each surge arrester is equipped with thermal protection that disconnects it from the electrical network if the current exceeds the permissible I_{max} value.

Visual indicator for varistor status: red = fault, green = OK.

Quick module replacement



Remote fault signaling (RC)

Snapper for quick DIN rail mounting.

Description

- Compact single-phase Type 2 / Compact 3-phase Type 2
- In : 20 kA
- Imax : 40 kA
- Location of Use: Sub-distribution Boards
- Mode of Protection: L-PE, N-PE
- IEC/EN Category: Class II+III / Type 2+3
- Housing: Modular Design, Pluggable module (possible to replace)
- Mounting: 35mm DIN rail
- Compliance: IEC 61643-11:2011 EN 61643-11:2012+A11:2018
- Fault indication: visual - red flag (false)
- Remote signaling contact as an option (RC)

Type designation:
ETITEC CM T23 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

Advantages:

- space saving (reduces required space in distribution board by 50%)
- remote signalisation (RC version only)
- DIN rail mounting (EN 60715)
- varistor is the protective element
- metal snapper, new way of mounting on DIN rail (easier, quicker)
- modular design
- IEC/EN 61643-11
- RoHS compliant
- connection up to 35mm^2

ETITEC CM T2+T3

Type	ETITEC CM T23 275/20 2+0 (RC), 4+0 (RC)	ETITEC CM T23 275/20 1+1 (RC), 3+1 (RC)
In accordance with	IEC/EN 61643-11	
Category IEC/EN/VDE	II,III/T2,T3/C,D	
Max. continuous operating voltage (AC) Uc	275	L-N: 275; N-PE: 255V
Nominal AC voltage Uo	230 V 50-60 Hz	
TOV immunity Ut (AC)	335 V/5s withstand	335 V/5s withstand
	440 V/120 min safe disconnection	440 V/120 min safe disconnection
Nominal discharge current (8/20) In	20 kA	
Max. discharge current (8/20) Imax	40 kA	
Charge		
Protection level UP T2+T3	1,5 kV	1,5 kV
Protection level UP T3 only	1,0 kV	L-N: 1,0 kV; N-PE: 0,3 kV
Open Circuit Voltage of Combination Wawe Generator (1.2/50 µs) Uoc	6 kV	
Short Circuit Current of Combination Wawe Generator (8/20 µs) Icw	3 kA	
Response time tA	< 25 ns	L-N: < 25 ns; N-PE: < 100 ns
Number of ports	1	
Thermal decoupler	✓	
Torque	L, N: 1,2 Nm, PE: 2,0 Nm	
Back-up fuse	100 A gG	
Short-circuit current rating ISCCR	25 kA	
Temperature range	- 40°C ...+85°C	
Cross-section of connection wire	L, N: 10 mm^2 (Solid, Stranded) / 6 mm^2 (Flexible); PE: 35 mm^2 (Solid,Stranded) / 25 mm^2 (Flexible)	
Mounting	indoors on top hat fixing rail 35 mm (EN 60715)	
Degree of protection	IP 20B (built-in)	
Dimensions	1 TE ... 2 TE	
Indication of disconnector operation	red flag	
Permissible humidity	5% - 95%	
Additional data for ETITEC CM-RC		
Remote signalisation (RC)	✓	
Switching capability (RC)	AC: 250V/0.5A; DC: 250V/0.5A, 125V/0,2A, 75V/0,5A	
Cross-section of connection wire (RC)	max. 1.5 mm^2	
Torque (RC)	0,4 Nm	

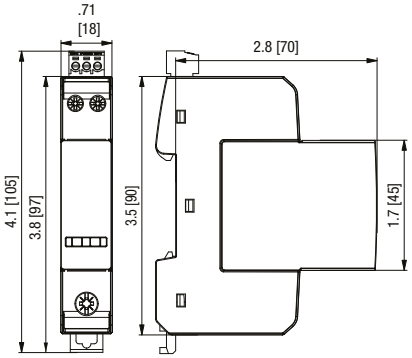
ETITEC CM

Type	Code No.	I_n/I_{max} (8/20) [kA]	U_{oc} [kV]	U_c [V AC]	Network	g	
ETITEC CM T23 275/20 2+0	002440650	20/40	6	275	TNS	152	1/15
ETITEC CM T23 275/20 2+0 RC	002440651	20/40	6	275	TNS	157	1/15
ETITEC CM T23 275/20 4+0	002440652	20/40	6	275	TNS	281	1/8
ETITEC CM T23 275/20 4+0 RC	002440653	20/40	6	275	TNS	287	1/8
ETITEC CM T23 275/20 1+1	002440654	20/40	6	275	TT/TNS	207	1/15
ETITEC CM T23 275/20 1+1 RC	002440655	20/40	6	275	TT/TNS	212	1/15
ETITEC CM T23 275/20 3+1	002440656	20/40	6	275	TT/TNS	413	1/8
ETITEC CM T23 275/20 3+1 RC	002440657	20/40	6	275	TT/TNS	419	1/8
MOD.ETITEC CM T23 275/20	002440658	20/40	6	275	-	78,5	1/24
MOD.ETITEC CM T23 275/20 G	002440659	20/40	6	255	-	65,5	1/24

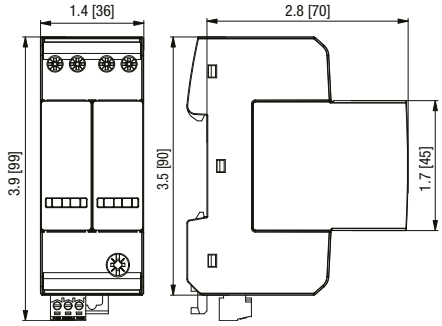
* RC -> remote signalisation. Note: I_n/I_{max} - defined per single pole

ETITEC CM T23 275 20 (4+0, 2p, TNC-S)

Dimensions



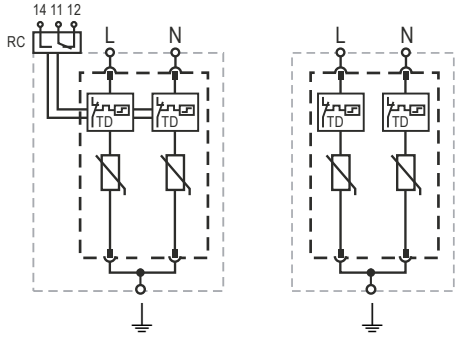
ETITEC CM T23 275/20 2+0 (RC), ETITEC CM T23 275/20 1+1 (RC)



ETITEC CM T23 275/20 4+0 (RC), ETITEC CM T23 275/20 3+1 (RC)

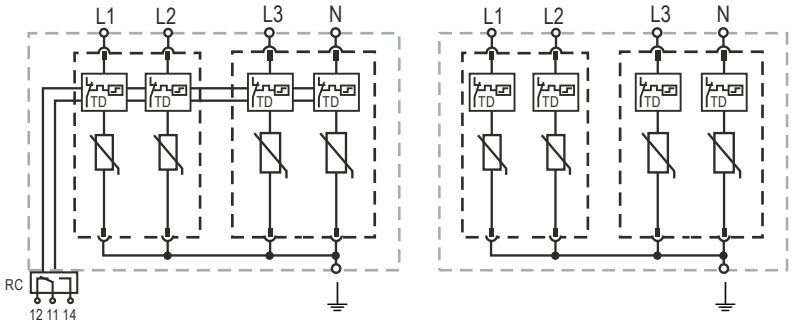
Internal Configuration

ETITEC CM T23 275/20 2+0 (RC)



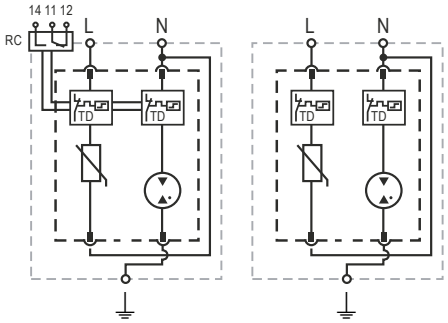
	Legend
L	Line Conductor Terminal
N	Neutral Conductor Terminal
z	PE Conductor Terminal
RC	Remote Contacts Terminal
TD	Thermal Disconnector

ETITEC CM T23 275/20 4+0 (RC)



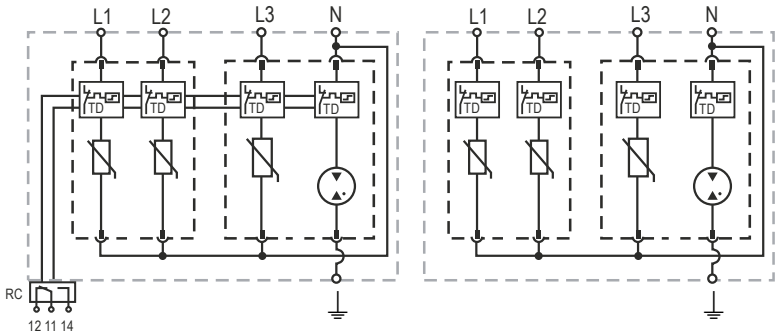
	Legend
L	Line Conductor Terminal
N	Neutral Conductor Terminal
z	PE Conductor Terminal
RC	Remote Contacts Terminal
TD	Thermal Disconnector

ETITEC CM T23 275/20 1+1 (RC)



	Legend
L	Line Conductor Terminal
N	Neutral Conductor Terminal
z	PE Conductor Terminal
RC	Remote Contacts Terminal
TD	Thermal Disconnector

ETITEC CM T23 275/20 3+1 (RC)



	Legend
L	Line Conductor Terminal
N	Neutral Conductor Terminal
z	PE Conductor Terminal
RC	Remote Contacts Terminal
TD	Thermal Disconnector

Surge arrester ETITEC group D T3

EN/IEC/VDE: T3/III/D

Description

ETITEC D T3 is a surge arrester for indoor application. Group D surge protection is in accordance with VDE class D. This protection corresponds to IEC category III, EN Type 3 . The protection should be installed immediately before the protected load. This is protection against indirect lightning strikes. In case of permanent arrester damage, thermal protection is activated, which signalizes faulty arrester. Consequently only the SPD module has to be replaced, while base unit remains fixed on DIN rail.

Advantages:

- optical indication of faulty device (green ok, red false)
- remote signalisation (RC version only)
- DIN rail mounting (EN 60715)
- high discharge currents
- high degree of protection
- varistor is the protective element
- metal snapper, new way of mounting on DIN rail (easier, quicker)
- round-off shape compatible with ETIMAT
- modular design
- IEC/EN 61643-11
- RoHS compliant
- connection up to 35mm^2

ETITEC D T3

Type	275/3	440/3
In accordance with	IEC/EN 61643-11	
Category IEC/EN/VDE	III/T3/D	
Max. continuous operating voltage (AC) Uc	275	440
Nominal AC voltage Uo	230 V 50-60 Hz	
TOV immunity UT (AC)	335 V/5s withstand	335 V/5s withstand
	440 V/120 min safe disconnection	440 V/120 min withstand
Uoc	10 kV	
Max. discharge current (8/20) Imax	10 kA	
Charge		
Protection level Up - at In (8/20)	<1,4 kV	<1,6 kV
Follow current Ifi	x	
Response time tA	< 25 ns	
Residual current Ipe at Uref	< 0,3 mA	
Thermal decoupler	✓	
Torque	3,0 Nm	
Back-up fuse (if mains > 63A)	125 A gG	
Short-circuit current rating ISCCR	25 kA / 50 Hz	
Temperature range	- 40°C ...+70°C	
Cross-section of connection wire	min. 6mm^2, max. single strand 35mm^2, multi-strand 25mm^2	
Mounting	indoors on top hat fixing rail 35 mm (EN 60715)	
Degree of protection	IP 20	
Casing material	thermoplastic; extinguishing degree UL 94 V-0	
Dimensions	1 TE	
Indication of disconnector operation	red flag	
Permissible humidity	5% - 95%	
Additional data for ETITEC D-RC		
Remote signalisation (RC)	✓	
Switching capability (RC)	AC: 250V/0.5A; 125V/3A	
Cross-section of connection wire (RC)	max. 1.5 mm^2	
Torque (RC)	0,25 Nm	

ETITEC D T3

Type	Code No.	U_{oc}/I_n (8/20) [kA]	U_c [V AC]	g	
ETITEC D T3 275/3 1+0	002440417	10kV/3kA	275	130	1/12
ETITEC D T3 275/3 1+0 RC	002440418	10kV/3kA	275	135	1/12
ETITEC D T3 440/3 1+0	002440419	10kV/3kA	440	132	1/12
ETITEC D T3 440/3 1+0 RC	002440420	10kV/3kA	440	137	1/12
MODUL ETITEC D T3 275/3	002440421	10kV/3kA	275	58	12
MODUL ETITEC D T3 440/3	002440422	10kV/3kA	440	60	12

* RC -> remote signalisation

Note: I_n - defined per single pole

ETITEC D T3 275/3 1+0 RC

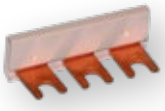
MODUL ETITEC D T3 275/3

Connection terminals

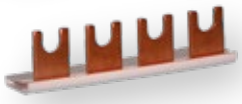
Type	code No.	g		Connection terminals for
IZ16/1F/2/ETITEC	002921081	9	50/600	2 modules connection
IZ16/1F/3/ETITEC	002921082	15	50/600	3 modules connection
IZ16/1F/4/ETITEC	002921083	20	50/600	4 modules connection

For module width 17,8 mm.

IZ16/1F/2/ETITEC



IZ16/1F/3/ETITEC

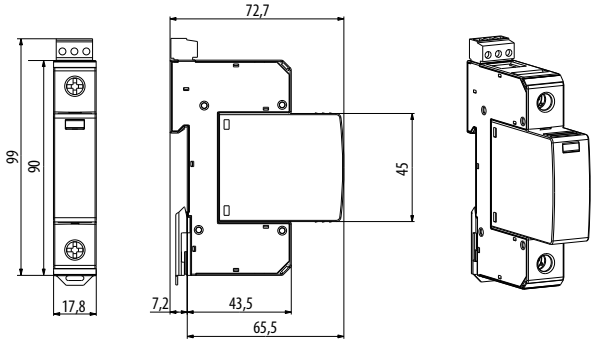


IZ16/1F/3/ETITEC

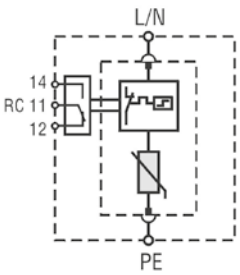
Application: Connection terminals are designed to connect modular surge ETITEC for multi-module assemblies (multi). Connections are made at the terminals ground - PE

Dimensions

ETITEC D T3 275/3 1+0 RC



Internal Configuration



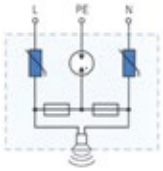
ETITEC D 255/3 MINI

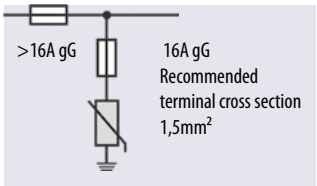
Electrical	
Nominal AC voltage Uo	230V
Max. continuous operating voltage (AC) Uc	275V
Open Circuit Voltage of the Combination Wave Generator (1,2/50 µs) Uoc	Uoc=6kV
	(L+N-PE) Uoc total=10kV
Short-Circuit Current of the Combination Wave Generator (8/20 µs) Icw	3kA
Protection level Up - at In (8/20)	(L-N) Up=1,5kV
	(L-PE)/(N-PE) Up=1,7kV
Response time tA	<100ns
Back-up fuse (if mains > 16A)	B 16 A
Short-circuit current rating ISCCR	1 kA
TOV immunity UT (AC)	337 V/5s withstand
Mechanical and Environmental	
Temperature range	-40°C ... +85°C
Permissible humidity	5% ... 95%
Cross-section of connection wire	1 mm^2(stranded)
Mounting	cable ducts
Degree of protection	IP 20
Housing material	thermoplastic; extinguishing degree UL 94 V-0
Thermal decoupler	✓
Fault Indication	Buzzer

ETITEC D 255/3 MINI

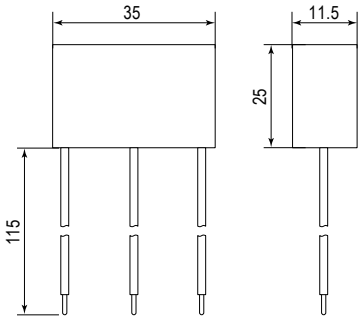
Type	Code No.	g	
ETITEC D 255/3 MINI	002441632	25	1

Internal Configuration





Dimensions

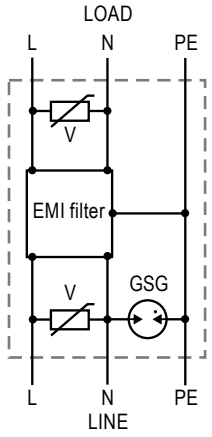


ETITEC FILT D 20/275F 8A G is an electromagnetic interference (EMI) and overvoltage protective device of class III. It is designed for complete protection and is installed directly in front of protected devices on DIN rail. Protected electrical device is safe against effects of overvoltage, electrostatic voltage and electromagnetic interferences. These disturbances, which are present in all electrical systems, are caused by other electrical devices, by switching manoeuvres, by defects in electrical network and by other activities, such as welding.
Applications: Protecting devices such as: TV, PC, Server, Control and regulation devices,..

Technical data ETITEC FILT D

In accordance with	IEC-61643-1
Category IEC / VDE	III / D
Connection:	TN-S, TT
Protecting:	L/N-PE
Protective elements:	GDT, MOV and EMI filter
Max. continuous operating voltage (AC/DC) Uc	275/50 Hz
Combination wave(1.2/50-8/20)Uoc/Isc	6kV/3kA
Max. Load current IL	8A
Protection level Up	≥800V
Asymetrical attenuation	<70 dB @ 5MHz
Terminal cross section	1,5 mm^2(stranded)
Indication	Light
Housing	Thermoplastic
Dimensions (w*h*d)	33 x 90 x 57 mm

Internal Configuration



V : Varistor
GSG: Specific gas tube

ETITEC FILT D

Type	Code No.	g	
ETITEC FILT D 20/275F 8A G	002441712	94	1

ETITEC Surge arresters M60 series

Combined Lightning Current and Surge Arrester T12 or T23 for direct mounting on 60 mm busbar systems (5 or 10mm thickness). Can be used in industry or other applications where 60mm busbar system is used. No additional adapters or accessories needed. T2 available also with integrated fuse (see M60F), no additional prefuse needed for SPD overcurrent protection. Pluggable design enables also simple module replacement.

Features:
- optical indication of faulty device (green ok, red false)
- remote signalisation (RC version only)
- MOV (metal oxide varistor) technology, no coprdination needed

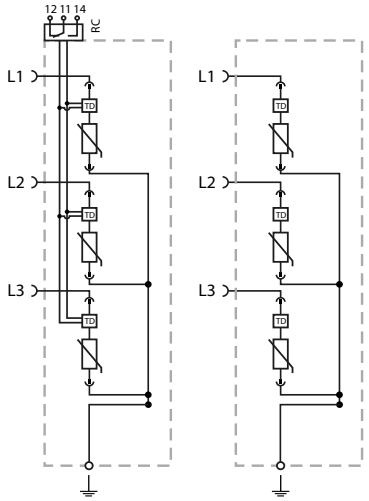
Surge arrester ETITEC M60

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

Technical Data

		ETITEC M60 T12 300/12,5 3+0 (RC)
IEC Electrical		
Nominal AC Voltage (50/60Hz)	U_o / U_n	240 V
Maximum Continuous Operating Voltage (AC)	U_c	300 V
Nominal Discharge Current (8/20 µs)	I_n	20 kA
Maximum Discharge Current (8/20 µs)	I_{max}	50 kA
Impulse Discharge Current (10/350 µs)	I_{imp}	12.5 kA
Specific Energy	W/R	39 kJ / Ω
Charge	Q	6.25 As
Voltage Protection Level	U_p	1500V
Response Time	t_A	< 25ns
Overcurrent Protection (max)		160 A gG
Short-Circuit Current Rating (AC)	I_{SCCR}	25 kA
TOV Withstand 5s	U_T	337 V
TOV Safe Fail 120min	U_T	442 V
Number of Ports		1
Additional Electrical Parameters (Tests performed within internal laboratory)		
Residual Voltage 5 kA (8/20 µs)	U_{res}	1100 V
Overcurrent Protection (min)		160 A gG
Mechanical & Environmental		
Operating Temperature Range	T_a	-40 °C to +85 °C
Permissible Operating Humidity	RH	5%...95%
Altitude (max)		4000 m
Terminal Screw Torque	M_{max}	PH2 / 4.5 Nm
Conductor Cross Section (max)		35 mm² (Solid, Stranded) / 25 mm² (Flexible)
Mounting		60 mm Busbar Systems
Degree Of Protection		IP 20 / IP 40 in combination with cover
Housing Material		Thermoplastic: Extinguishing Degree UL 94 V-0
Operating State / Fault Indication		Green Flag / Not Green Flag
Remote Contacts (RC)		Optional
RC Switching Capacity		AC: 250V/ 1A, 125V/ 1A; DC: 48V/0.5A, 24V/0.5 A, 12V/0.5A
RC Conductor Cross Section (max)		1.5 mm² (Solid)

Internal Configuration



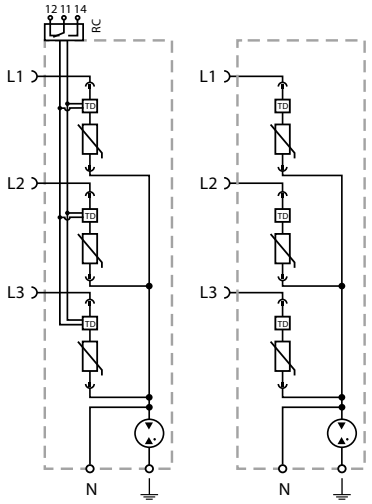
Legend

L	Line Busbar Terminal
Z	PEN Conductor Terminal
RC	Remote Contacts Terminal (Optional)
TD	Thermal Disconnector

Technical Data

			ETITEC M60 T12 300/12,5 3+1 (RC)
IEC Electrical			
Nominal AC Voltage (50/60Hz)		U_o / U_n	240 V
Maximum Continuous Operating Voltage (AC)	(L-N)	U_c	300 V
	(N-PE)	U_c	305 V
Nominal Discharge Current (8/20 µs)	(L-N)/(N-PE)	I_n	20 kA / 80 kA
Maximum Discharge Current (8/20 µs)	(L-N)/(N-PE)	I_{max}	50 kA / 100 kA
Impulse Discharge Current (10/350 µs)	(L-N)/(N-PE)	I_{imp}	12.5 kA / 50 kA
Specific Energy	(L-N)/(N-PE)	W/R	39 kJ / Ω / 625 kJ / Ω
Charge	(L-N)/(N-PE)	Q	6.25 As / 25As
Voltage Protection Level	(L-N)/(N-PE)	U_p	1500V / 1500V
Follow Current Interrupt Rating	(N-PE)	I_{fi}	100A
Response Time	(L-N)/(N-PE)	t_A	< 25ns / < 100ns
Overcurrent Protection (max)			160 A gG
Short-Circuit Current Rating (AC)		I_{SCCR}	25 kA
TOV Withstand 5s	(L-N)	U_T	337 V
TOV Safe Fail 120min	(L-N)	U_T	442 V
TOV Withstand 200ms	(N-PE)	U_T	1200 V
Number of Ports			1
Additional Electrical Parameters (Tests performed within internal laboratory)			
Residual Voltage 5 kA (8/20 µs)		U_{res}	1100 V / 305 V
Overcurrent Protection (min)			160 A gG
Mechanical & Environmental			
Operating Temperature Range		T_a	-40 °C to +85 °C
Permissible Operating Humidity		RH	5%...95%
Altitude (max)			4000 m
Terminal Screw Torque		M_{max}	PH2 / 4.5 Nm
Conductor Cross Section (max)			35 mm² (Solid, Stranded) / 25 mm² (Flexible)
Mounting			60 mm Busbar Systems
Degree Of Protection			IP 20 / IP 40 in combination with cover
Housing Material			Thermoplastic: Extinguishing Degree UL 94 V-0
Operating State / Fault Indication			Green Flag / Not Green Flag
Remote Contacts (RC)			Optional
RC Switching Capacity			AC: 250V/ 1A, 125V/ 1A; DC: 48V/0.5A, 24V/0.5 A, 12V/0.5A
RC Conductor Cross Section (max)			1.5 mm² (Solid)

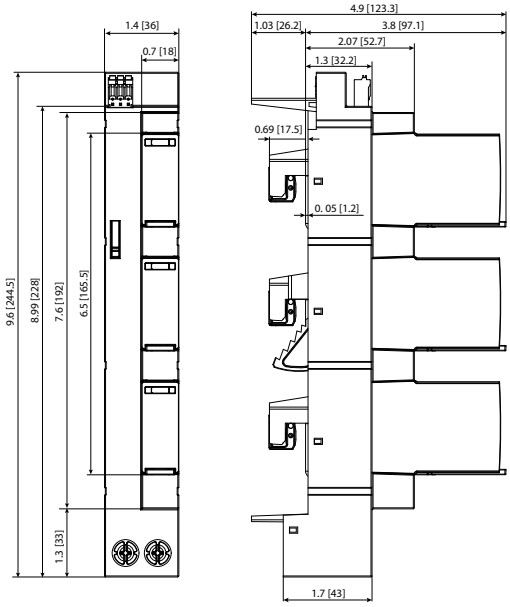
Internal Configuration



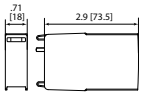
Legend

L	Line Busbar Terminal
Z	PE Conductor Terminal
N	Neutral Conductor Terminal
RC	Remote Contacts Terminal (Optional)
TD	Ther mal Disconnector

Dimensions



inches
[mm]



ETITEC M60 T12

Type	Code No.	I_{imp} (10/350) [kA]	I_n/I_{max} (8/20) [kA]	U_c [V AC]	Network	g	
ETITEC M60 T12 300/12,5 3+0	002440850	12,5	20/50	300	TN-C	569	1/20
ETITEC M60 T12 300/12,5 3+0 RC	002440851	12,5	20/50	300	TN-C	577	1/20
ETITEC M60 T12 300/12,5 3+1	002440852	12,5	20/50	300	TT, TN-S	610	1/20
ETITEC M60 T12 300/12,5 3+1 RC	002440853	12,5	20/50	300	TT, TN-S	617	1/20

Replacement module

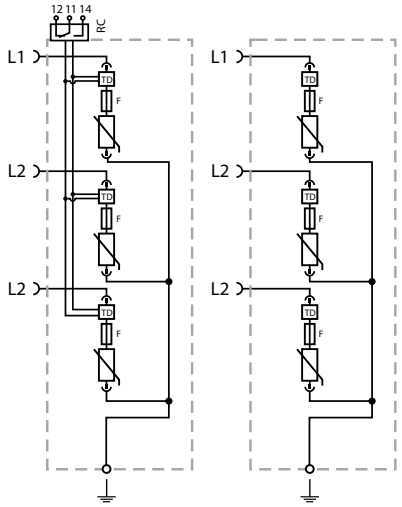
Type	Code No.	For use with	g	
MOD.ETITEC M60 T12 300/12,5	002440862	ETITEC M60 T12 300/12,5	104	1/28

Surge arrester ETITEC M60F with Integrated Fuse EN/IEC/VDE: T2,T3/II,III/C,D

Technical Data

		ETITEC M60F T23 300/20 3+0 (RC)
IEC Electrical		
Nominal AC Voltage (50/60Hz)	U_o / U_n	240 V
Maximum Continuous Operating Voltage (AC)	U_c	300 V
Nominal Discharge Current (8/20 µs)	I_n	20 kA
Maximum Discharge Current (8/20 µs)	I_{max}	40 kA
Voltage Protection Level	U_p	1500V
Open Circuit Voltage of Combination Wave Generator (1.2/50 µs)	U_{oc}	6 kV
Short Circuit Current of Combination Wave Generator (8/20 µs)	I_{cw}	3 kV
Response Time	t_A	< 25ns
Overcurrent Protection (max)		not required
Short-Circuit Current Rating (AC)	I_{SCCR}	
TOV Withstand 5s	U_T	337 V
TOV Safe Fail 120min	U_T	442 V
Number of Ports		1
Additional Electrical Parameters (Tests performed within internal laboratory)		
Residual Voltage 5 kA (8/20 µs)	U_{res}	1150 V
Overcurrent Protection (min)		not required
Mechanical & Environmental		
Operating Temperature Range	T_a	-40 °C to +85 °C
Permissible Operating Humidity	RH	5%...95%
Altitude (max)		4000 m
Terminal Screw Torque	M_{max}	PH2 / 4.5 Nm
Conductor Cross Section (max)		35 mm² (Solid, Stranded) / 25 mm² (Flexible)
Mounting		60 mm Busbar Systems
Degree Of Protection		IP 20 / IP 40 in combination with cover
Housing Material		Thermoplastic: Extinguishing Degree UL 94 V-0
Operating State / Fault Indication		Green Flag / Not Green Flag
Remote Contacts (RC)		Optional
RC Switching Capacity		AC: 250V/ 1A, 125V/ 1A; DC: 48V/0.5A, 24V/0.5A, 12V/0.5A
RC Conductor Cross Section (max)		1.5 mm² (Solid)

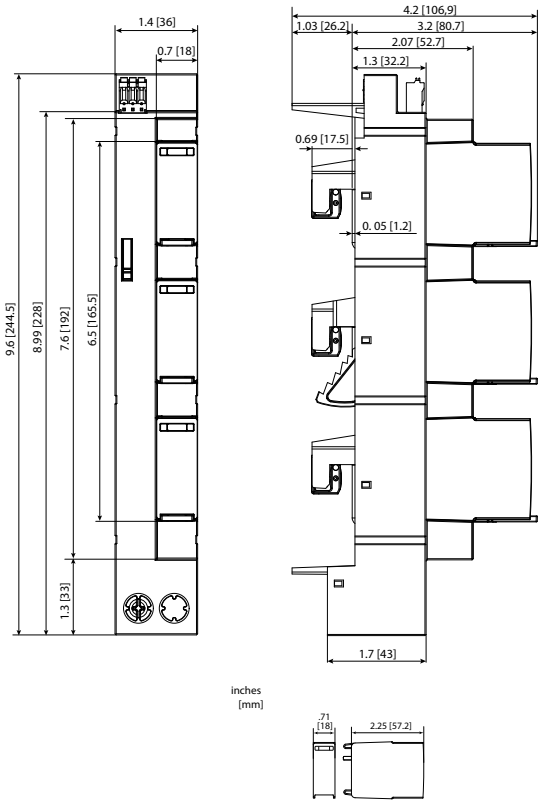
Internal Configuration



Legend

L	Line Busbar Terminal
Z	PEN Conductor Terminal
RC	Remote Contacts Terminal (Optional)
TD	Ther mal Disconnector
F	Integrated Surge Adapted Backup Fuse

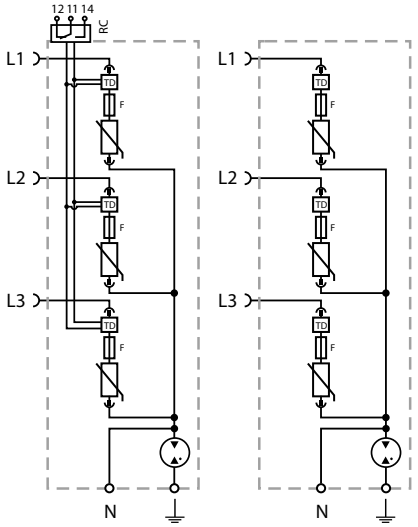
Dimensions



Technical Data

			ETITEC M60F T23 300/20 3+1 RC
IEC Electrical			
Nominal AC Voltage (50/60Hz)		U_o / U_n	240 V
Maximum Continuous Operating Voltage (AC)	(L-N)	U_c	300 V
	(N-PE)	U_c	305 V
Nominal Discharge Current (8/20 µs)	(L-N)/(N-PE)	I_n	20 kA / 40 kA
Maximum Discharge Current (8/20 µs)	(L-N)/(N-PE)	I_{max}	40 kA / 65 kA
Voltage Protection Level	(L-N)/(N-PE)	U_p	1500V / 1500V
Open Circuit Voltage of Combination Wave Generator (1.2/50 µs)	(L-N)/(N-PE)	U_{oc}	6 kA / 6 kA
Short Circuit Current of Combination Wave Generator (8/20 µs)	(L-N)/(N-PE)	I_{cw}	3 kA / 3 kA
Follow Current Interrupt Rating	(N-PE)	I_{fi}	100A
Response Time	(L-N)/(N-PE)	t_A	< 25ns / < 100ns
Overcurrent Protection (max)			not required
Short-Circuit Current Rating (AC)		I_{SCCR}	
TOV Withstand 5s	(L-N)	U_T	337 V
TOV Safe Fail 120min	(L-N)	U_T	442 V
TOV Withstand 200ms	(N-PE)	U_T	1200 V
Number of Ports			1
Additional Electrical Parameters (Tests performed within internal laboratory)			
Residual Voltage 5 kA (8/20 µs)		U_{res}	1150 V
Overcurrent Protection (min)			not required
Mechanical & Environmental			
Operating Temperature Range		T_a	-40 °C to +85 °C
Permissible Operating Humidity		RH	5%...95%
Altitude (max)			4000 m
Terminal Screw Torque		M_{max}	PH2 / 4.5 Nm
Conductor Cross Section (max)			35 mm² (Solid, Stranded) / 25 mm² (Flexible)
Mounting			60 mm Busbar Systems
Degree Of Protection			IP 20 / IP 40 in combination with cover
Housing Material			Thermoplastic: Extinguishing Degree UL 94 V-0
Operating State / Fault Indication			Green Flag / Not Green Flag
Remote Contacts (RC)			Optional
RC Switching Capacity			AC: 250V/ 1A, 125V/ 1A; DC: 48V/0.5A, 24V/0.5A, 12V/0.5A
RC Conductor Cross Section (max)			1.5 mm² (Solid)

Internal Configuration



Legend

L	Line Busbar Terminal
N	Neutral Conductor Terminal
⏚	PE Conductor Terminal
RC	Remote Contacts Terminal (Optional)
TD	Thermal Disconnector
F	Integrated Surge Adapted Backup Fuse

ETITEC M60F T23 with integrated fuse

Type	Code No.	I_n/I_{max} (8/20) [kA]	U_{oc}/I_n	U_c [V AC]	Network	g	
ETITEC M60F T23 300/20 3+0	002440858	20/40	6kV/3kA	300	TN-C	463	1/20
ETITEC M60F T23 300/20 3+0 RC	002440859	20/40	6kV/3kA	300	TN-C	471	1/20
ETITEC M60F T23 300/20 3+1	002440860	20/40	6kV/3kA	300	TT, TN-S	499	1/20
ETITEC M60F T23 300/20 3+1 RC	002440861	20/40	6kV/3kA	300	TT, TN-S	507	1/20

Replacement module

Type	Code No.	For use with	g	
MOD.ETITEC M60F T23 300/20	002440864	ETITEC M60F T2 300/20	69	1/28

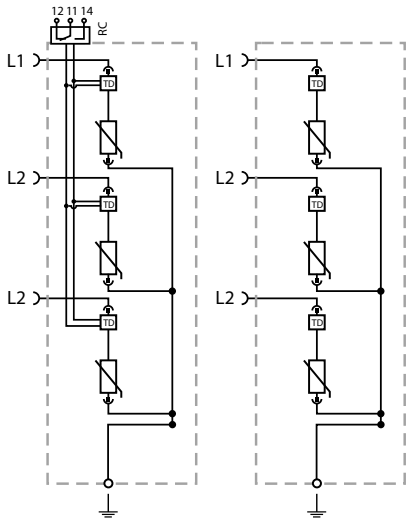
Surge arrester ETITEC M60

EN/IEC/VDE: T2,T3/II,III/C,D

Technical Data

		ETITEC M60 T23 300/20 3+0 (RC)
IEC Electrical		
Nominal AC Voltage (50/60Hz)	U_o / U_n	240 V
Maximum Continuous Operating Voltage (AC)	U_c	300 V
Nominal Discharge Current (8/20 µs)	I_n	20 kA
Maximum Discharge Current (8/20 µs)	I_{max}	50 kA
Voltage Protection Level	U_p	1500V
Response Time	t_A	< 25ns
Overcurrent Protection (max)		160 A gG
Short-Circuit Current Rating (AC)	I_{SCCR}	25 kA
TOV Withstand 5s	U_T	337 V
TOV Safe Fail 120min	U_T	442 V
Number of Ports		1
Additional Electrical Parameters (Tests performed within internal laboratory)		
Residual Voltage 5 kA (8/20 µs)	U_{res}	1000 V
Overcurrent Protection (min)		80 A gG
Mechanical & Environmental		
Operating Temperature Range	T_a	-40 °C to +85 °C
Permissible Operating Humidity	RH	5%...95%
Altitude (max)		4000 m
Terminal Screw Torque	M_{max}	PH2 / 4.5 Nm
Conductor Cross Section (max)		35 mm² (Solid, Stranded) / 25 mm² (Flexible)
Mounting		60 mm Busbar Systems
Degree Of Protection		IP 20 / IP 40 in combination with cover
Housing Material		Thermoplastic: Extinguishing Degree UL 94 V-0
Operating State / Fault Indication		Green Flag / Not Green Flag
Remote Contacts (RC)		Optional
RC Switching Capacity		AC: 250V/ 1A, 125V/ 1A; DC: 48V/0.5A, 24V/0.5A, 12V/0.5A
RC Conductor Cross Section (max)		1.5 mm² (Solid)

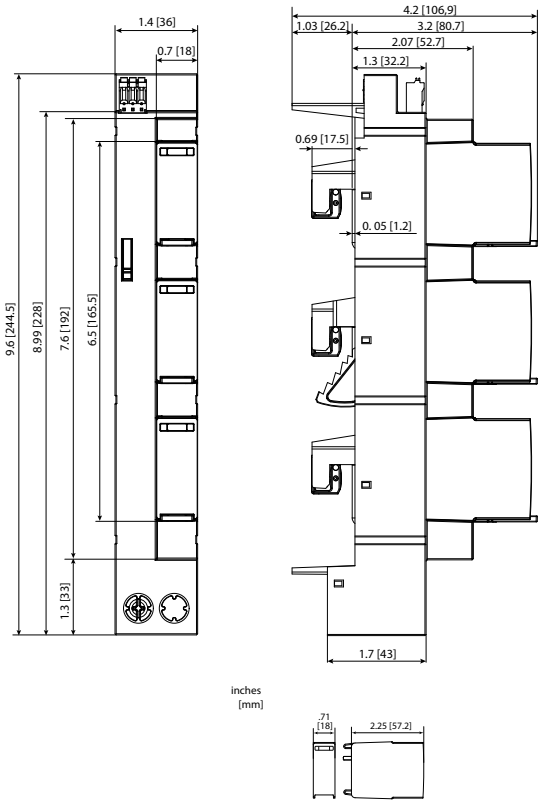
Internal Configuration



Legend

L	Line Busbar Terminal
Z	PEN Conductor Terminal
RC	Remote Contacts Terminal (Optional)
TD	Thermal Disconnector

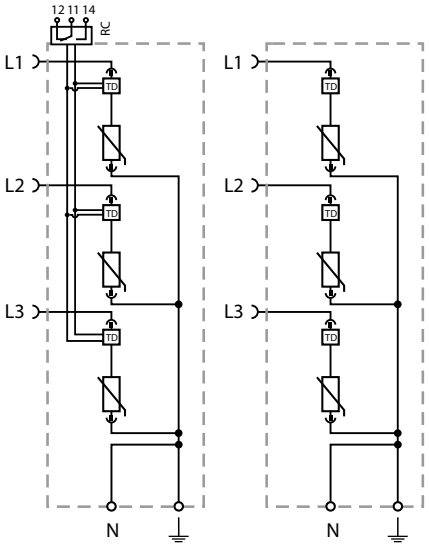
Dimensions



Technical Data

			ETITEC M60 T23 300/20 3+1 RC
IEC Electrical			
Nominal AC Voltage (50/60Hz)		U_o / U_n	240 V
Maximum Continuous Operating Voltage (AC)	(L-N)	U_c	300 V
	(N-PE)	U_c	305 V
Nominal Discharge Current (8/20 µs)	(L-N)/(N-PE)	I_n	20 kA / 40 kA
Maximum Discharge Current (8/20 µs)	(L-N)/(N-PE)	I_{max}	40 kA / 65 kA
Voltage Protection Level	(L-N)/(N-PE)	U_p	1500V / 1500V
Follow Current Interrupt Rating	(N-PE)	I_{fi}	100A
Response Time	(L-N)/(N-PE)	t_A	< 25ns / < 100ns
Overcurrent Protection (max)			160 A gG
Short-Circuit Current Rating (AC)		I_{SCCR}	25 kA
TOV Withstand 5s	(L-N)	U_T	337 V
TOV Safe Fail 120min	(L-N)	U_T	442 V
TOV Withstand 200ms	(N-PE)	U_T	1200 V
Number of Ports			1
Additional Electrical Parameters (Tests performed within internal laboratory)			
Residual Voltage 5 kA (8/20 µs)		U_{res}	1000 V / 305 V
Overcurrent Protection (min)			80 A gG
Mechanical & Environmental			
Operating Temperature Range		T_a	-40 °C to +85 °C
Permissible Operating Humidity		RH	5%...95%
Altitude (max)			4000 m
Terminal Screw Torque		M_{max}	PH2 / 4.5 Nm
Conductor Cross Section (max)			35 mm² (Solid, Stranded) / 25 mm² (Flexible)
Mounting			60 mm Busbar Systems
Degree Of Protection			IP 20 / IP 40 in combination with cover
Housing Material			Thermoplastic: Extinguishing Degree UL 94 V-0
Operating State / Fault Indication			Green Flag / Not Green Flag
Remote Contacts (RC)			Optional
RC Switching Capacity			AC: 250V/ 1A, 125V/ 1A; DC: 48V/0.5A, 24V/0.5A, 12V/0.5A
RC Conductor Cross Section (max)			1.5 mm² (Solid)

Internal Configuration



Legend

L	Line Busbar Terminal
N	Neutral Conductor Terminal
Z	PE Conductor Terminal
RC	Remote Contacts Terminal (Optional)
TD	Ther mal Disconnector

ETITEC M60 T23

Type	Code No.	I_n/I_{max} (8/20) [kA]	U_{oc}/I_n	U_c [V AC]	Network	g	
ETITEC M60 T23 300/20 3+0	002440854	20/40	6kV/3kA	300	TN-C	527	1/20
ETITEC M60 T23 300/20 3+0 RC	002440855	20/40	6kV/3kA	300	TN-C	535	1/20
ETITEC M60 T23 300/20 3+1	002440856	20/40	6kV/3kA	300	TT, TN-S	563	1/20
ETITEC M60 T23 300/20 3+1 RC	002440857	20/40	6kV/3kA	300	TT, TN-S	571	1/20

Replacement module

Type	Code No.	For use with	g	
MOD.ETITEC M60 T23 300/20	002440863	ETITEC M60 T2 300/20	66	1/28