

Type 2+3 AC Surge Protector DS40VG series

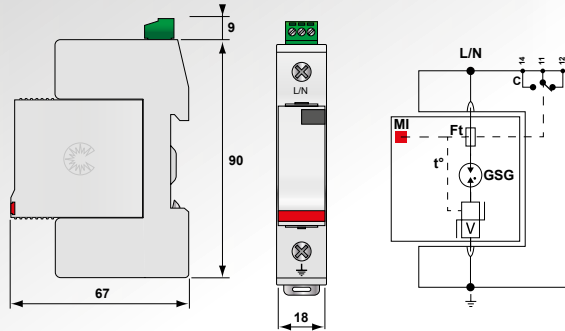


CITEL

**Imax
40 kA**



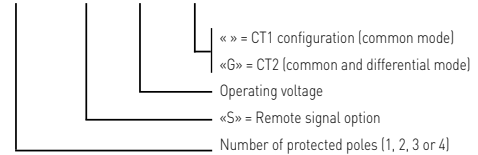
DS41VG-120



GSG: Specific GDT
V: Varistor
Ft: Thermal fuse
C: Remote signaling contact
t°: Disconnection system
MI : Mechanical indicator

- Type 2 + 3 surge protector
- In 20 kA / I_{max} 40 kA
- Pluggable module
- Follow and operating current : none
- No ageing
- Optional remote signaling state
- Optimized to TOV
- EN 61643-11, IEC 61643-11 and UL 1449 ed.4 compliance

DS4x VGx-xxx/G



Characteristics

CITEL Model	DS41VG-230	DS41VG-120
Description	Type 2+3 AC surge protector - one-phase - pluggable	
Network	230/400 V	120/208V
Max. AC operating voltage	Uc 255 Vac	150 Vac
Temporary Over Voltage (TOV) Characteristics - 5 sec.	UT 335 Vac withstand	180 Vac withstand
Temporary Over Voltage (TOV) Characteristics - 120 mn	UT 440 Vac withstand	230 Vac withstand
Residual current - Leakage current at U _c	I _{pe} None	None
Follow current	I _f None	None
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
Withstand on Combination waveform - Class III test	U _{oc} 6 kV	6 kV
Protection level @ I _n	U _{p-in} 0.8 kV	0.6 kV
Protection level	U _p 1.25 kV	1.25 kV
Admissible short-circuit current	I _{scrr} 25000 A	25000 A
Associated disconnectors		
Thermal disconnector	internal	
Fuses	Fuses Type gG - 50 A*	
Installation ground fault breaker	Type «S» or delayed	
Mechanical characteristics		
Dimensions	see diagram	
Connection to Network	By screw terminals: 2.5-25 mm ² / by bus	
Disconnection indicator	1 mechanical indicator	
Remote signaling of disconnection	option DS41VGS-230 : output on changeover contact	option DS41VGS-120 : output on changeover contact
Spare unit	DSM40VG-230	DSM40VG-120
Mounting	Symmetrical rail 35 mm (EN60715)	
Operating temperature	-40/+85°C	
Protection rating	IP20	
Housing material	Thermoplastic UL94-V0	
Standards compliance	IEC 61643-11 / EN 61643-11 / UL1449 ed.4	
Certification	EAC	
Part number	331751	331651

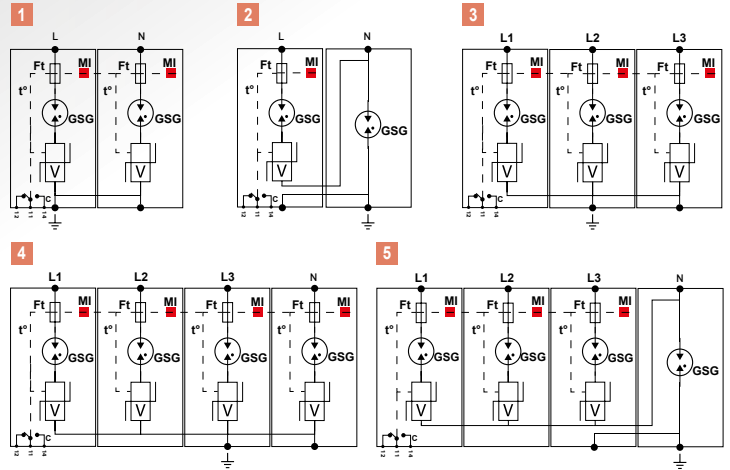
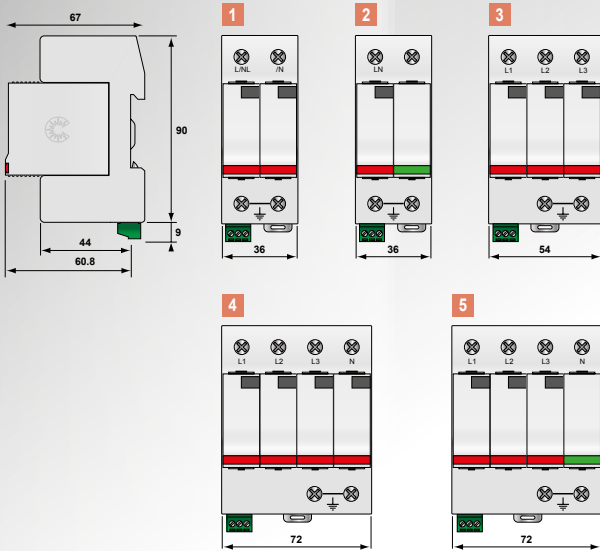
Note 1: Rating in compliance with NF C15-100 art.534.1.3.5.

In order to increase service continuity, higher rating can be used. For further information, please consult product instructions.





Type 2+3 Multipolar Surge Protector DS42VG, DS43VG, DS44VG



GSG: Specific GDT
 V: Varistor
 Ft: Thermal fuse
 C: Remote signaling contact
 t°: Disconnection system
 Mi: Mechanical indicator



DS44VG-230/G



Model	P/N	Network	AC system	Protection Mode	I _{total}	Up L/PE	Up L/N	Up N/PE	Diagram
DS44VG-230/G	461562	230/400 V 3-phase+N	TT-TNS	L/N and N/PE	100 kA	-	1.25 kV	1.5 kV	5
DS44VG-120/G	461662	120/208 V 3-phase+N	TT-TNS	L/N and N/PE	100 kA	-	1.25 kV	1.5 kV	
DS44VG-230	461552	230/400 V 3-phase+N	TNS	L/PE and N/PE	160 kA	1.25 kV	-	1.25 kV	4
DS44VG-120	461652	120/208 V 3-phase+N	TNS	L/PE and N/PE	160 kA	1.25 kV	-	1.25 kV	
DS43VG-230	461553	230/400V 3-phase	TNC	L/PE	120 kA	1.25 kV	-	-	3
DS43VG-120	461653	120/208V 3-phase	TNC	L/PE	120 kA	1.25 kV	-	-	
DS42VG-230/G	461561	230 V single phase	TT-TN	L/N and N/PE	80 kA	-	1.25 kV	1.5 kV	2
DS42VG-120/G	461661	120V single phase	TT-TN	L/N and N/PE	80 kA	-	1.25 kV	1.5 kV	
DS42VG-230	461551	230V single phase	TN	L/PE and N/PE	80 kA	1.25 kV	-	1.25 kV	1
DS42VG-120	461651	120V single phase	TN	L/PE and N/PE	80 kA	1.25 kV	-	1.25 kV	



CITEL

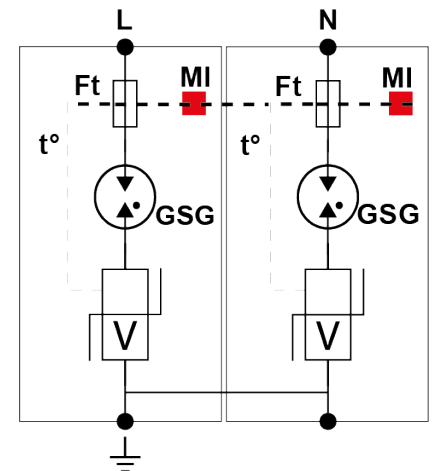
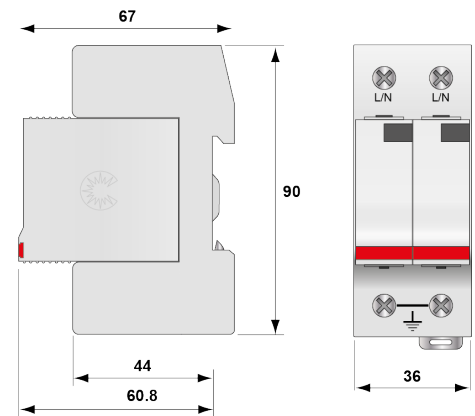


DS42VG-230



- Type 2 + 3 AC Multipolar surge protector
- I_n : 20 kA
- I_{max} total: 80 kA
- Pluggable module
- Follow and operating current : none
- No ageing
- Optional remote signaling state
- Optimized to TOV
- EN 61643-11, CEI 61643-11, UL1449 ed.4 compliance

Electrical Characteristics		
SPD type <i>following IEC test</i>		2+3
Network		230 V single-phase
AC system		TN
Nominal line voltage	U_n	230 Vac
Max. AC operating voltage L-N	U_c	255 Vac
Temporary Over Voltage (TOV) Characteristics - 5 sec. <i>without disconnection</i>	U_T	335 Vac withstand
Temporary Over Voltage (TOV) Characteristics - 120 mn <i>without disconnection or with safety disconnection</i>	U_T	440 Vac withstand
Residual Current <i>Leakage current to Ground</i>	I_{pe}	None
Operating current <i>Continuous current at U_c</i>	I_c	None
Follow current	I_f	None
Nominal discharge current <i>15 x 8/20 μs impulses</i>	I_n	20 kA
Max. discharge current <i>max. withstand @ 8/20 μs by pole</i>	I_{max}	40 kA
Total Maximal discharge current <i>max. total withstand @ 8/20 μs</i>	I_{max} <i>Total</i>	80 kA
Withstand on Combinaison waveform IEC 61643-11 <i>Class III test: 1.2/50μs - 8/20μs</i>	U_{oc}	6 kV
Withstand on overvoltages IEEE C62.41.1		20 kV
Admissible short-circuit current	I_{sccr}	25000 A
Connection mode(s)		L/PE and N/PE
Protection mode(s)		Common mode
Residual voltage <i>@ I_n (8/20 μs)</i>	U_{p-in}	0.8 kV
Protection level L/PE <i>@ I_n (8/20μs)</i>	U_p L/PE	1.25 kV
Internal short circuit protection		No
Internal Thermal protection		Yes



V: High-energy varistor
 GSG: Specific Gas Tube
 Ft: Thermal fuse
 t°: Thermal disconnection system
 MI: Disconnection indicator



CITEL

Mechanical Characteristics	
Technology	VG
SPD configuration	Single phase
Connection to Network	By screw terminals: 2.5-25 mm ² / by bus
Format	Plug-in modular box
Mounting	Symmetrical rail 35 mm (EN60715)
Housing material	Thermoplastic UL94-V0
Operating temperature	-40/+85°C
Protection rating	IP20
Failsafe behavior	Disconnection
Disconnection indicator	1 mechanical indicator by pole
Spare module(s)	DSM40VG-230
Remote signaling of disconnection	option DS42VGS-230 : output on changeover contact
Dimensions	See diagram
Disconnectors	
Thermal disconnector	Internal
Installation ground fault breaker	Type 'S' or delayed
Fuses	Fuses type gG - 50 A
Standards	
Standards compliance	IEC 61643-11 / EN 61643-11 / UL1449 4ed.
Certification	EAC
Part Number	461551



CITEL

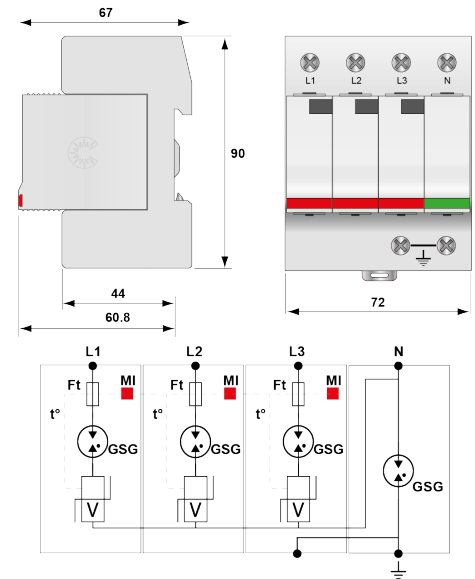


DS44VG-230/G



- Type 2 + 3 AC Multipolar surge protector
- In : 20 kA
- I_{max} total: 100 kA
- Pluggable module
- Follow and operating current : none
- No ageing
- Optional remote signaling state
- Optimized to TOV
- EN 61643-11, CEI 61643-11, UL1449 ed.4 compliance

Electrical Characteristics		
SPD type <i>following IEC test</i>		2+3
Network		230/400 V 3-phase+N
AC system		TT-TNS
Nominal line voltage	<i>U_n</i>	230 Vac
Max. AC operating voltage L-N	<i>U_c</i>	255 Vac
Temporary Over Voltage (TOV) Characteristics - 5 sec. <i>without disconnection</i>	<i>U_T</i>	335 Vac withstand
Temporary Over Voltage (TOV) Characteristics - 120 mn <i>without disconnection or with safety disconnection</i>	<i>U_T</i>	440 Vac withstand
Temporary Over Voltage N/PE (TOV HT) <i>without disconnection or with safety disconnection</i>	<i>U_T</i>	1200 V/300A/200 ms withstand
Residual Current <i>Leakage current to Ground</i>	<i>I_{pe}</i>	None
Follow current	<i>I_f</i>	None
Nominal discharge current <i>15 x 8/20 μs impulses</i>	<i>I_n</i>	20 kA
Max. discharge current <i>max. withstand @ 8/20 μs by pole</i>	<i>I_{max}</i>	40 kA
Total Maximal discharge current <i>max. total withstand @ 8/20 μs</i>	<i>I_{max Total}</i>	100 kA
Withstand on Combination waveform IEC 61643-11 <i>Class III test: 1.2/50μs - 8/20μs</i>	<i>U_{oc}</i>	6 kV
Withstand on overvoltages IEEE C62.41.1		20 kV
Admissible short-circuit current	<i>I_{sc}</i>	25000 A
Connection mode(s)		L/N and N/PE
Protection mode(s)		Common/Differential mode
Residual voltage <i>@ I_n (8/20 μs)</i>	<i>U_{p-in}</i>	0.8 kV
Protection level L/N <i>@ I_n (8/20 μs)</i>	<i>U_{p L/N}</i>	1.25 kV
Protection level N/PE <i>@ I_n (8/20 μs)</i>	<i>U_{p N/PE}</i>	1.5 kV
Internal short circuit protection		No
Internal Thermal protection		Yes



V: High-energy varistor
 GSG: Specific Gas Tube
 Ft: Thermal fuse
 t°: Thermal disconnection system
 MI: Disconnection indicator



CITEL

Mechanical Characteristics	
Technology	VG
SPD configuration	3-phase+Neutral
Connection to Network	By screw terminals: 2.5-25 mm ² / by bus
Format	Plug-in modular box
Mounting	Symmetrical rail 35 mm (EN60715)
Housing material	Thermoplastic UL94-V0
Operating temperature	-40/+85°C
Protection rating	IP20
Failsafe behavior	Disconnection
Disconnection indicator	1 mechanical indicator by pole
Spare module(s)	DSM40VG-230+DSM80G-600
Remote signaling of disconnection	option DS44VGS-230/G : output on changeover contact
Dimensions	See diagram
Disconnectors	
Thermal disconnector	Internal
Installation ground fault breaker	Type 'S' or delayed
Fuses	Fuses type gG - 50 A
Standards	
Standards compliance	IEC 61643-11 / EN 61643-11 / UL1449 4ed.
Certification	EAC
Part Number	461562

N110206e



INSTALLATION INSTRUCTIONS - NOTICE D'INSTALLATION
 NOTICIA DE INSTALACIÓN - INSTALLATIONSHINWEISE
 ISTRUZIONI PER L'INSTALLAZIONE
 INSTRUCOES DE INSTALACAO - MONTÁŽNÍ NÁVOD
 РУКОВОДСТВО ПО МОНТАЖУ - 安装指导书

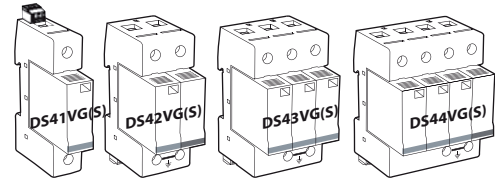
AC surge protector - Parafoudre Basse Tension
 Protectiones Baja Tension

Überspannungsschutz für Niederspannungsnetze

Scaricatori da sovratensioni per rete di energia

Protetor de Surto CA. - Svodiče přepětí pro AC

Устройство защиты от импульсных перенапряжений, AC - 低压浪涌保护器



DS40VG Series

Technical Data

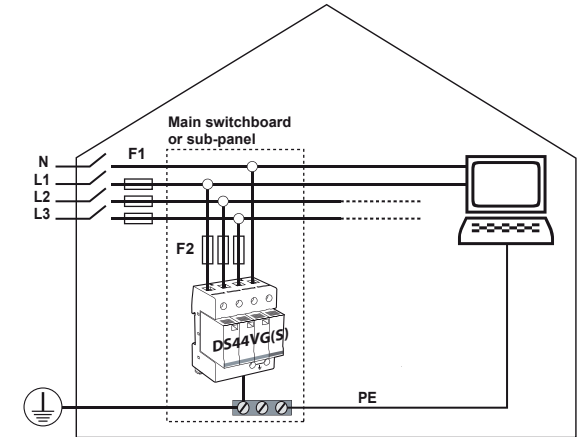
2000 m max. 6500 ft max. -40/+85°C max. -40/+185°F max. IP20 indoor use only Humidity range 5% to 95%	P/N																							
	DS42VG(S)-120	DS42VG(S)-120/G	DS42VG(S)-230	DS42VG(S)-230/G	DS42VG(S)-277	DS42VG(S)-277/G	DS42VG(S)-280	DS42VG(S)-280/G	DS43VG(S)-120	DS43VG(S)-230	DS43VG(S)-277	DS43VG(S)-280	DS44VG(S)-120	DS44VG(S)-120/G	DS44VG(S)-230	DS44VG(S)-230/G	DS44VG(S)-240/M	DS44VG(S)-277	DS44VG(S)-277/G	DS44VG(S)-280	DS44VG(S)-280/G	DS44VG(S)-350/M		
AC Network																								
120 Vac L+N	●	●																						
208 Vac 3L																								
120/208 Vac 3L+N																								
230 Vac L+N			●	●	●	●	●	●																
240 Vac 3L																								
230/400 Vac 3L																								
400 Vac 3L																								
230/400 Vac 3L+N																								
Characteristics																								
IPE*																							0 mA	
I _{SCCR} *																							25 kA	
I _{max} *																							40 kA	

*values per pole

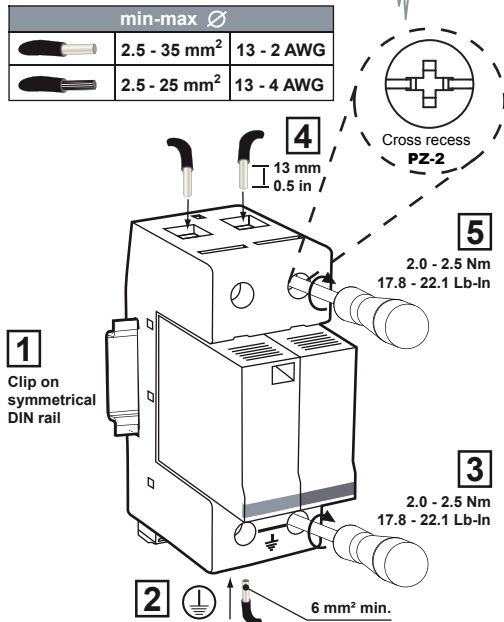
Remote signal option: S: e.g DS44VGS-230/G

Table 1

Installation



Installation



Wiring

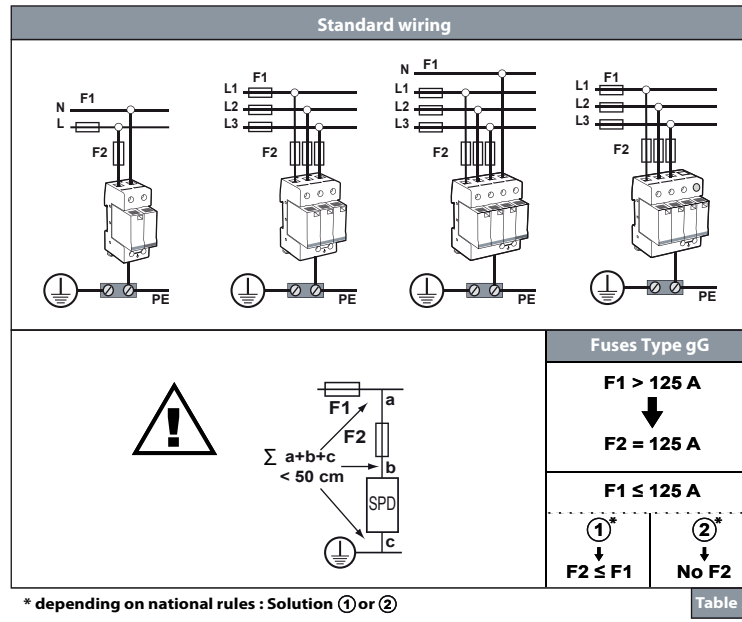


Table 2

Maintenance

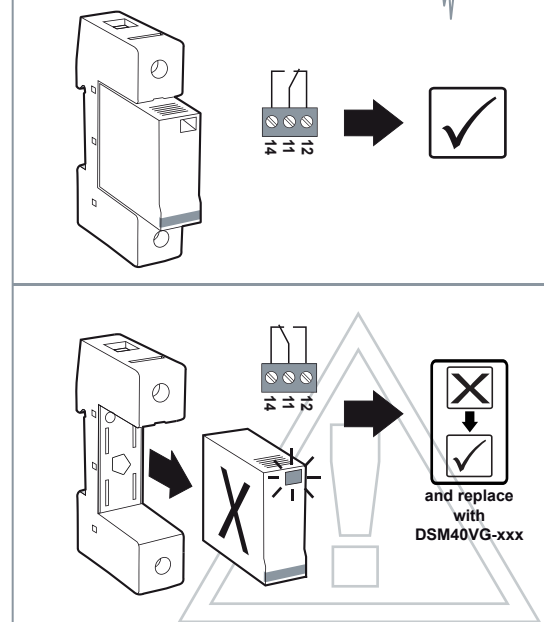


Table 3



CITEL

SAFETY INSTRUCTIONS
 CONSIGNES DE SECURITE
 SICHERHEITSHINWEISE
 ADVERTENCIA DE SEGURIDAD
 AVVERTENZE IMPORTANTI
 AVISOS IMPORTANTES
 МЕРЫ БЕЗОПАСНОСТИ
 BEZPEČNOSTNÍ POKYNY
 安全須知



*This document could be modified without notice.
 Updated Information on Website.*

*Ce document peut être modifié sans préavis.
 Informations à jour sur site web.*

*Änderungen am Dokument ohne Ankündigung möglich.
 Aktuelle Informationen finden Sie auf unserer Webseite.*

*Este documento puede ser modificado sin previo aviso.
 Información actualizada en el sitio web.*

*Questo documento può essere modificato senza preavviso.
 Informazioni attualizzate disponibili sul sito web.*

*Este documento pode ser modificado sem aviso prévio.
 Informação atualizada no website.*

*В документ могут вноситься изменения.
 Актуальную информацию смотрите на нашей
 WEB-странице.*

*Změny v tomto dokumentu jsou možné bez předchozího
 upozornění.*

Aktuální informace najdete na naší webové stránce.

*本文件的修改恕不另行通知。
 查看最新文件请登陆公司网站。*

www.citel.fr
www.citel.de
www.citel.us
www.citel.com.cn
www.citel.ru
www.citel.in

2, rue Troyon 92316 Sèvres CEDEX France



ATTENTION !

GB

- Installation must be performed only by electrically skilled operator.
- National electrical installation rules must be followed.
- The unit must be used only as surge protector and according the conditions described in this document.
- Surge protectors must be selected in relation with an dedicated AC network (see Table 1)
- Dedicated fuses must be installed in the surge protector branch (see Table 2).
- In case of red indicator, the surge protector must be replaced.



ATTENTION !

FR

- L'installation ne doit être effectuée que par un opérateur électricien dûment qualifié.
- Les règles générales d'installation électrique nationales doivent être respectées.
- Le produit est uniquement destiné à un usage parafoudre et doit être utilisé dans les conditions décrites dans ce document.
- Les parafoudres sont utilisés en fonction d'un réseau BT déterminé (voir table 1)
- Des fusibles dédiés doivent être installés dans les branches du parafoudre (voir table 2).
- En cas d'indicateur passant au rouge, le parafoudre doit être remplacé.



WARNING !

D

- Die Montage und der Anschluss des Gerätes dürfen nur durch eine Elektrofachkraft durchgeführt werden.
- Nationale Installations Vorschriften sind zu beachten.
- Das Gerät ist nur im Rahmen dieser Installationshilfe und seiner technischen Daten zu verwenden.
- Die Ableiter sind nach der Niederspannungsnetzform auszuwählen (siehe Tabelle 1).
- Die Versicherungen sind nach der Tabelle 2 zu selektieren und zu installieren.
- Ist die Anzeige im Sichtfenster auf ROT umgeschaltet, so ist das Modul DEFEKT und muss ausgetauscht werden.



ATENCIÓN !

ES

- Solo un operador eléctrico capacitado puede realizar la instalación.
- Las reglas generales nacionales de instalación eléctrica deben ser respetadas.
- El producto solo tiene un uso de protección contra sobretensiones transitorias y debe ser utilizado en las condiciones mencionadas en este documento.
- Las protecciones contra sobretensiones transitorias se usan en relación con una red de baja tensión determinada (ver tabla 1).
- Fusibles dedicados deben ser instalados aguas arriba de la protección, en la conexión en paralelo (ver tabla 2).
- Se debe sustituir la protección cuando el indicador esta puesto en rojo.



ATTENZIONE !

IT

- L'installazione deve essere fatta solamente da elettricisti qualificati.
- Devono essere rispettate le regolamentazioni nazionali e locali riguardanti l'installazione di apparati elettrici.
- L'unità deve essere usata solo come protezione da sovratensioni e secondo le condizioni descritte in questo documento.
- Le protezioni da sovratensione devono essere scelte in funzione della corrente alternata di rete (vedere la tabella 1).
- Fusibili dedicati devono essere installati nel ramo protetto da sovratensione (vedere la tabella 2).
- Nel caso in cui si accenda l'indicatore rosso, l'unità di protezione da sovratensione deve essere sostituita.



AVISO !

PT

- A instalação deve ser feita por um electricista habilitado.
- Devem ser seguidas todas as regras de segurança indicadas pelo operador eléctrico.
- Esta protecção deve ser utilizada apenas como protecção contra sobretensões e de acordo com as condições mencionadas neste documento.
- A protecção deve ser escolhida de acordo com a rede eléctrica AC (ver quadro 1).
- Devem ser instalados fúsiveis de protecção a montante da protecção (ver quadro 2).
- Caso o indicador vermelho esteja activo, dever-se-á substituir a protecção.



ВНИМАНИЕ!

RUS

- монтаж и подключение изделия должны производиться только специалистами-электриками.
- необходимо учитывать требования местных норм и стандартов.
- изделие может использоваться только для защиты от импульсных перенапряжений в соответствии с настоящей инструкцией.
- параметры сети должны соответствовать характеристикам изделия (см. таблицу 1).
- обязательна установка токовых предохранителей соответствующего номинала (таблица 2).
- при обнаружении индикатора состояния красного цвета изделие должно быть заменено.



VAROVÁNÍ

CZ

- Montáž a připojení svodiče přepětí smí provádět pouze pracovník s příslušnou elektrotechnickou kvalifikací.
- Je zapotřebí dodržovat zásady bezpečnosti práce i platné národní elektrotechnické předpisy.
- Svodič přepětí se smí používat pouze v souladu se svými technickými parametry a podle těchto montážních pokynů.
- Svodiče přepětí je zapotřebí zvolit a používat tak, aby odpovídaly napájecí síti (viz tabulka 1).
- Potřeba instalace pojistek pro předjištění před svodiče a jejich volba - viz tabulka 2.
- Pokud ukazatel správné funkce má ČERVENOU barvu, pak svodič/modul je VADNÝ a musí být vyměněn.



安全須知!

中文

- 产品安装只能由具备专业资质的人员实施；
- 请遵守国家电气安装相关规范；
- 本产品仅作为浪涌保护器且在本文件所规定的条件下使用；
- 请根据不同的电源网络制式选用浪涌保护器，参见 Table 1；
- 请在浪涌保护器前端安装规定的熔断器，参见 Table 2；
- 当状态指示变为红色时，须及时更换浪涌保护器；