

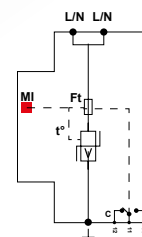
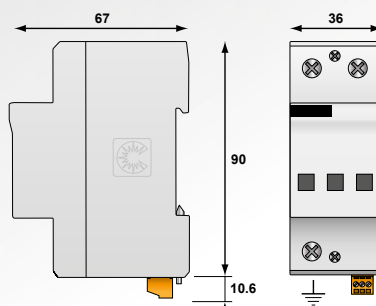
Type 1 + 2 Surge Protector DS250E series

CITEL

**Imp
25 kA**



DS250E-300



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

- Type 1 + 2 unipolar Surge Protector
- Imp : 25 kA on 10/350 μ s impulse
- I_{max} : 140 kA on 8/20 μ s impulse
- Internal disconnections, status indicators and remote signaling
- IEC 61643-11, EN 61643-11 and UL1449 ed.4 compliance

DS25x E-xxx/G

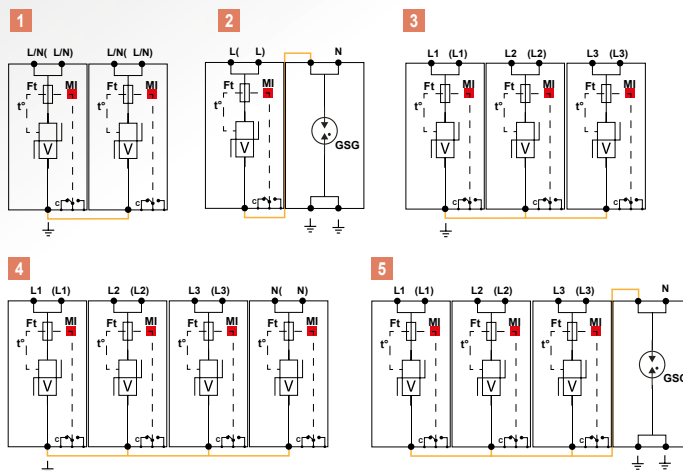
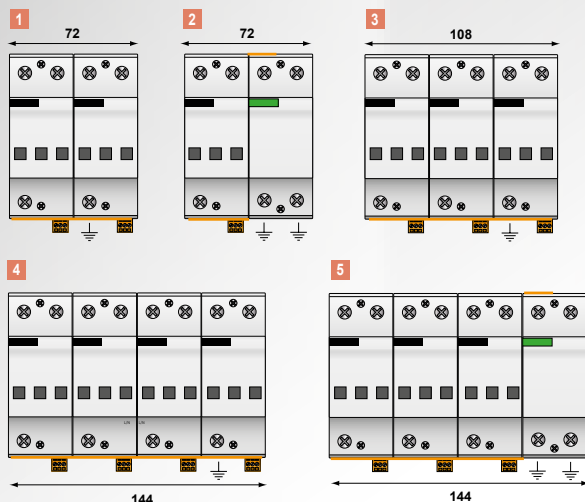
- « » = Configuration CT1 (common mode)
- «G» = Configuration CT2 (common and differential mode)
- Operating voltage
- «E» = «Multi-Varistor» technology
- Number of protected poles (2, 3 o 4)

Characteristics

CITEL Model		DS250E-400	DS250E-300	DS250E-120
Description		Type 1+2 AC surge protector 1-pole		
Network		230/400V	230/400V	120/208V
Max. AC operating voltage	Uc	440 Vac	330 Vac	150 Vac
Temporary Over Voltage (TOV) Characteristics - 5 sec.	UT	580 Vac withstand	335 Vac withstand	180 Vac withstand
Temporary Over Voltage (TOV) Characteristics - 120 mn	UT	770 Vac disconnection	440 Vac disconnection	230 Vac disconnection
Residual current - Leakage current at Uc	Ipe	< 3 mA	< 3 mA	< 3 mA
Max. Load current (if connection serie)	IL	100 A	100 A	100 A
Follow current	If	None	None	None
Nominal discharge current - 15 x 8/20 μs impulses	In	50 kA	70 kA	70 kA
Max. discharge current -max. withstand @ 8/20 μs by pole	I _{max}	140 kA	140 kA	140 kA
Impulse current by pole - max. withstand 10/350μs	I _{imp}	25 kA	25 kA	25 kA
Specific energy by pole	W/R	156 kJ/ohm	156 kJ/ohm	156 kJ/ohm
Protection level	Up	2.5 kV	2.5 kV	1 kV
Admissible short-circuit current	I _{scsr}	50000 A	50000 A	50000 A
Associated disconnectors				
Thermal disconnector		internal		
Fuses		Fuse type gG - 315 A		
Installation ground fault breaker		Type «S» or delayed		
Mechanical characteristics				
Dimensions		see diagram		
Connection to Network		By screw terminals : 6-35 mm² / by bus		
Disconnection indicator		3 mechanical indicators		
Remote signaling of disconnection		output on changeover contact		
Mounting		Symmetrical rail 35 mm (EN60715)		
Operating temperature		-40/+85°C		
Protection rating		IP20		
Housing material		Thermoplastic UL94-V0		
Standards compliance		IEC 61643-11 / EN 61643-11 / UL1449 ed.4		
Certification		EAC		
Part number		3731	2730	3106



Type 1 + 2 Multipolar Surge Protector DS252E, DS253E, DS254E



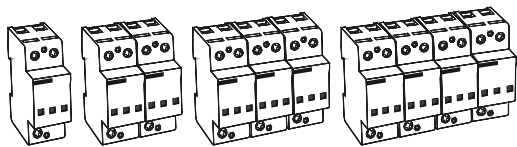
V : High energy varistor network
GSG : Specific gas Tube
Ft : Thermal fuse
C : Remote signaling contact
t° : Thermal disconnection system
MI : Disconnection indicator



DS254E-300/G

Model	P/N	Network	AC system	Protection Mode	I _{total}	Up L/PE	Up L/N	Up N/PE	Diagram
DS254E-300/G	3411	230/400 V 3-phase+N	TT-TNS	L/N and N/PE	100 kA	-	2.5 kV	1.5 kV	5
DS254E-120/G	3831	120/208 V 3-phase+N	TT-TNS	L/N and N/PE	100 kA	-	1 kV	1.5 kV	
DS254E-400	3732	230/400 V 3-phase+N	IT	L/PE and N/PE	100 kA	2.5 kV	-	2.5 kV	4
DS254E-300	3371	230/400 V 3-phase+N	TNS	L/PE and N/PE	100 kA	2.5 kV	-	2.5 kV	
DS254E-120	3961	120/208 V 3-phase+N	TNS	L/PE and N/PE	100 kA	1 kV	-	1 kV	3
DS253E-400	3939	230/400 V 3-phase	IT	L/PE	75 kA	2.5 kV	-	-	
DS253E-300	3350	230/400 V 3-phase	TNC	L/PE	75 kA	2.5 kV	-	-	
DS253E-120	3887	120/208 V 3-phase	TNC	L/PE	75 kA	1 kV	-	-	2
DS252E-300/G	3404	230 V 3-phase	TT-TN	L/N and N/PE	50 kA	-	2.5 kV	1.5 kV	
DS252E-120/G	3904	120 V single phase	TT-TN	L/N and N/PE	50 kA	-	1 kV	1.5 kV	1
DS252E-400	3952	230 V single phase	IT	L/PE and N/PE	50 kA	2.5 kV	-	2.5 kV	
DS252E-300	3962	230 V single phase	TN	L/PE and N/PE	50 kA	2.5 kV	-	2.5 kV	
DS252E-120	3951	120 V single phase	TN	L/PE and N/PE	50 kA	1 kV	-	1 kV	

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



DS150E & DS250E 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%

AC Network

120 Vac L+N	●	●														●	●													
208 Vac 3L			●														●													
120/208 Vac 3L+N				●	●												●	●												
230 Vac L+N					●	●			IT												●	●			IT					
400 Vac 3L						●			IT												●			IT						
230/400 Vac 3L+N							●	●		IT												●	●			IT				
277 Vac L+N											●																			
480 Vac 3L												●																		
277/480 Vac 3L+N													●																	
N/PE only																											●	●	●	●

Characteristics

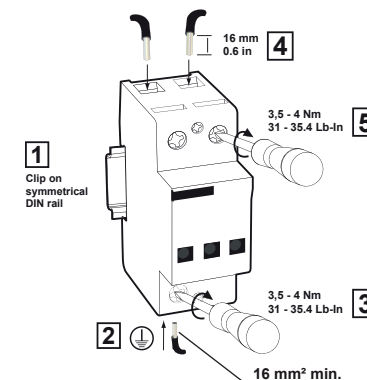
I _{PE} *	< 3 mA (= 0 mA for G version)				None
I _{SCCR} *	50kA				N/A
I _{max} *	140kA				150kA
I _{imp}	15kA		25kA		50kA 100kA

*values per pole

Table 1

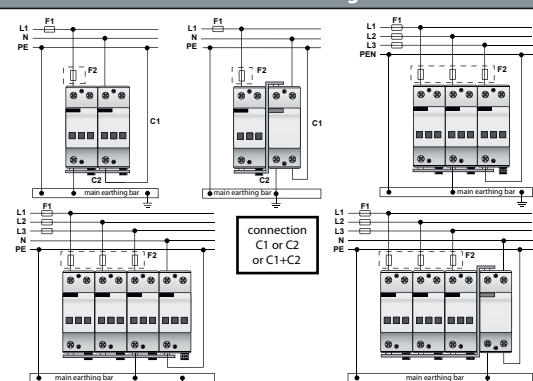
Installation

	min-max	Ø
	6 - 50 mm²	11 - 3 AWG
	6 - 35 mm²	9 - 3 AWG



Wiring

Standard wiring



connection
C1 or C2
or C1+C2

	DS150E	DS250E
F1 > 125 A	F2 = 125 A	F2 = 315 A
F1 ≤ 125 A	F2 ≤ F1	F2 ≤ F1
	No F2	No F2

*for Germany both connections are mandatory : Solution ① or ②

V-diagram wiring

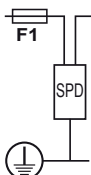
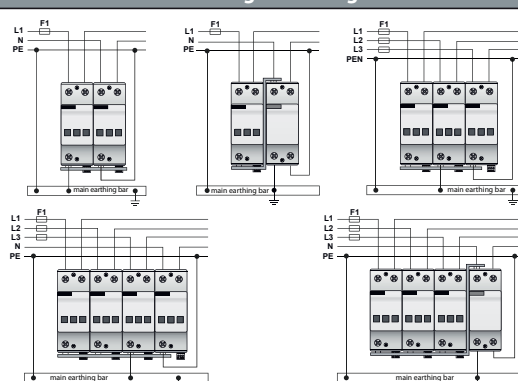
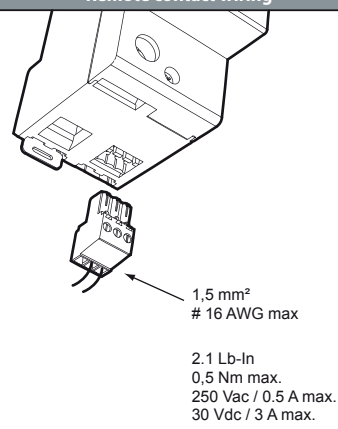


Table 2

Remote contact wiring

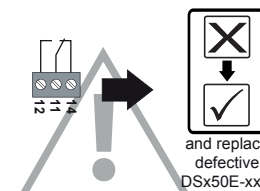
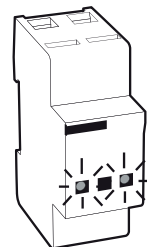
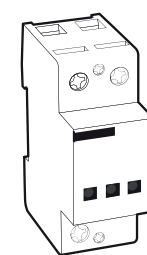


Remote signal for disconnection information

- 11-12 Closed = SPD OK
- 11-14 Open = SPD OK
- 11-12 Open = SPD disconnect
- 11-14 Closed = SPD disconnect

Table 3

Maintenance



and replace
defective
DSx50E-xxx



CITEL

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



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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.



ATENCION !

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.



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.



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.



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.



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.



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 Vorsicherungen 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.



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 fúsisveis de protecção a montante da protecção (ver quadro 2).
- Caso o indicador vermelho esteja activo, dever-se-á substituir a protecção.



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;