

# AC Surge Protectors DS150E Series

**limp  
15 kA**

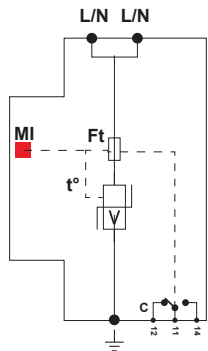
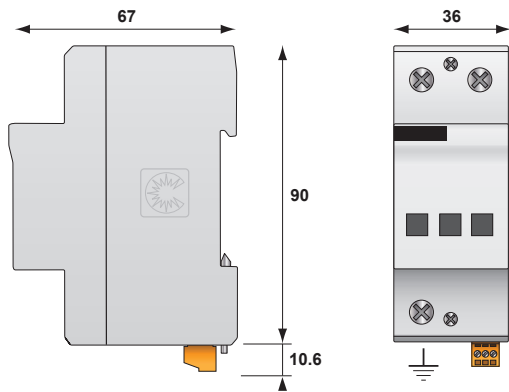


DS150E-300

- **Enhanced Multi-MOV Design**
- **Individual Fault Indicator Windows**
- **limp : 15kA at 10/350µs**
- **Imax : 165kA at 8/20µs**
- **In : 50-70kA at 8/20µs**
- **UL 1449 4th Edition**

## Dimensions and Electrical Diagram

(in mm)



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

## Characteristics

CITELE Part Number	DS150E-480	DS150E-300	DS150E-120
AC network voltage	347V-480V	220-277V	120V-127V
SPD configuration	1-pole	1-pole	1-pole
AC system	All	All	All
Maximum operating voltage	Uc 550 Vac	330 Vac	150 Vac
TOV withstand	Utr 770 Vac	440 Vac	230 Vac
Operating current	Ic < 2 mA	< 2 mA	< 2 mA
Follow current	If none	none	none
Nominal discharge current (IEC/UL) 15 x 8/20 µs impulses	In 50 kA / 20 kA	70 kA / 20 kA	70 kA / 20 kA
Maximum discharge current 8/20 µs withstand	Imax 165 kA	165 kA	165 kA
Maximum discharge current 10/350 µs withstand	limp 15 kA	15 kA	15 kA
Voltage protection rating	Vpr 1500 V	1000 V	600 V
Short-circuit current rating	Sccr 100 kA	100 kA	100 kA

### Associated Disconnection Devices

Thermal disconnecter	Internal
Fuses	Fuses type gG - 125 A max. (see Note 1)
Installation ground fault breaker	Type «S» or delayed

### Mechanical Characteristics

Dimensions	See diagram
Connection	By screw terminals : 6-35 mm <sup>2</sup> / by bus
Disconnection indicator	3 mechanical indicators
Remote signaling of disconnection	Output on changeover contact
Mounting	Symmetrical rail 35 mm
Operating temperature	-40/+85 °C
Protection class	IP20
Housing material	Thermoplastic UL94-V0

### Standards Compliance

IEC 61643-11: International	Low Voltage SPD - Test Class I and II
EN 61643-11: Europe	Low Voltage SPD - Test Class I and II
NF EN 61643-11: France	Parafoudre Basse Tension - Essais Classe I et II
UL1449 4th Edition: USA	Type 4CA

### Part Number

DS150E-480	2322
DS150E-300	1697
DS150E-120	1840

**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 (up to 250 A). For further information, please consult product instructions.



# Multi-Pole AC Surge Protectors

## DS152E, DS153E, DS154E

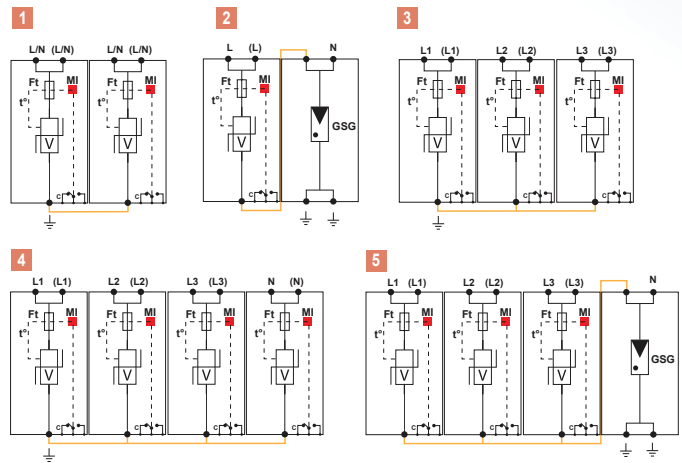
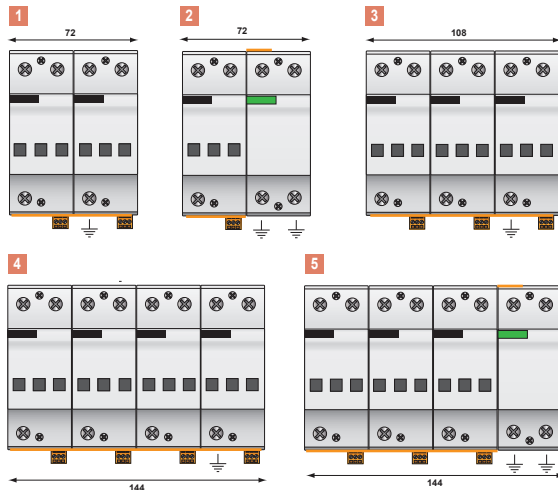


DS15x E-xxx/G

- «x» = Configuration CT1 (common mode)
- «G» = Configuration CT2 (common and differential mode)
- Operating voltage (120, 300, 480)
- «E» = Enhanced «Varistor» technology
- Number of protected poles (2, 3, 4)

DS154E-300/G

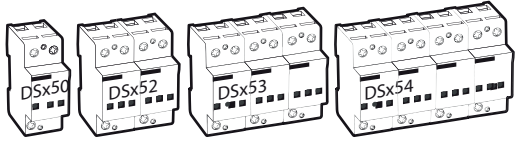
### Dimensions and Electrical Diagrams



Reference	Part Number	Network	AC System	Protection Mode		Iimp Total	Up L/PE	Up L/N	Diagram
				Common	Differential				
DS154E-300/G	2758	277/480 V 3-phase+N	Wye	●	●	100 kA	2.5 kV	2.5 kV	5
DS154E-120/G	2759	120/208 V 3-phase+N	Wye	●	●	100 kA	1.5 kV	1 kV	
DS154E-480	3943	347/600 V 3-phase+N	Wye	●		100 kA	2.5 kV	-	
DS154E-300	3329	277/480 V 3-phase+N	Wye	●		100 kA	2.5 kV	-	4
DS154E-120	-	120/208 V 3-phase+N	Wye	●		100 kA	1 kV	-	
DS153E-480	3481	480 V 3-phase	Delta	●		75 kA	2.5 kV	-	3
DS153E-300	3791	240 V 3-phase	Delta	●		75 kA	2.5 kV	-	
DS153E-120	3408	240 V 2-phase+N	Split phase	●		75 kA	1 kV	-	
DS152E-300/G	3406	277 V 1-phase+N	Single phase	●	●	50 kA	2.5 kV	2.5 kV	2
DS152E-120/G	-	120 V 1-phase+N	Single phase	●	●	50 kA	1.5 kV	1 kV	
DS152E-480	-	277 V 1-phase+N, 2-phase	Single/Split phase	●		50 kA	2.5 kV	-	1
DS152E-300	3723	277 V 1-phase+N, 2-phase	Single/Split phase	●		50 kA	2.5 kV	-	
DS152E-120	3790	120 V 1-phase+N, 2-phase	Single/Split phase	●		50 kA	1 kV	-	

INSTALLATION INSTRUCTIONS - NOTICE D'INSTALLATION  
 NOTICIA DE INSTALACIÓN - INSTALLATIONSHINWEISE  
 ISTRUZIONI PER L'INSTALLAZIONE  
 INSTRUCOES DE INSTALCAO - 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  
 Protetores de Surto CA. - Svodiče přepětí pro AC  
 Устройство защиты от импульсных перенапряжений, AC - 低压浪涌保护器



DS15xE-120 / DS15xE-300 / DS15xE-400  
 DS25xE-120 / DS25xE-300 / DS25xE-400  
 DS15xE-400

## Technical Data

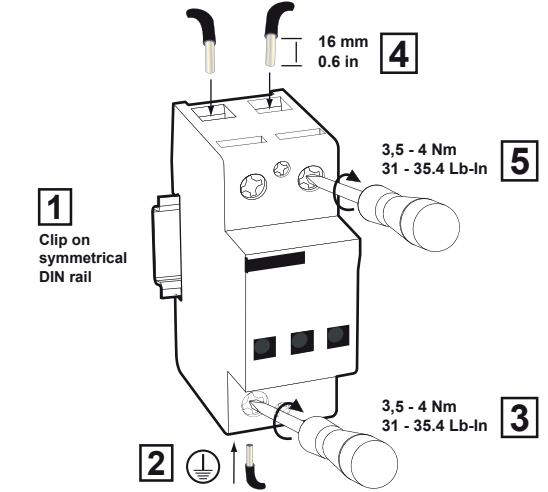
	P/N																												
	DS152E-120	DS152E-120/G	DS153E-120	DS154E-120	DS154E-120/G	DS152E-300	DS153E-300	DS154E-300	DS154E-300/G	DS152E-400	DS153E-400	DS154E-400	DS152E-480	DS153E-480	DS154E-480	DS252E-120	DS252E-120/G	DS253E-120	DS254E-120	DS254E-120/G	DS252E-300	DS253E-300	DS254E-300	DS254E-300/G	DS252E-400	DS253E-400	DS254E-400		
<b>AC Network</b>																													
<b>120 Vac L+N</b>	●	●														●	●												
<b>208 Vac 3L</b>			●															●											
<b>120/208 Vac 3L+N</b>				●	●														●	●									
<b>230 Vac L+N</b>						●	●					IT									●	●						IT	
<b>400 Vac 3L</b>								●					IT									●	●					IT	
<b>230/400 Vac 3L+N</b>									●	●			IT										●	●				IT	
<b>277 Vac L+N</b>													●																
<b>480 Vac 3L</b>														●															
<b>277/480 Vac 3L+N</b>															●														
<b>I<sub>PE</sub>*</b>	< 2 mA / (= 0 mA for G version)																												
<b>I<sub>SCCR</sub>*</b>	50 kA																												
<b>I<sub>max</sub>*</b>	140 kA																												
<b>I<sub>imp</sub>*</b>	15 kA														25 kA														

\*values per pole

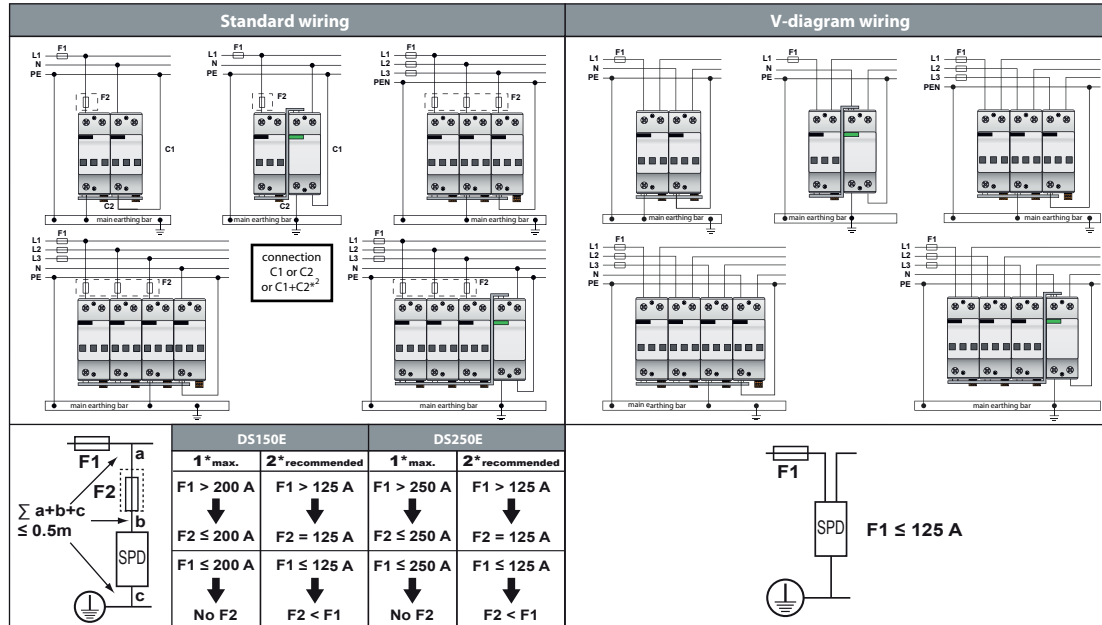
Table 1

## Installation

	min-max Ø	
	6 - 50 mm <sup>2</sup>	11 - 3 AWG
	6 - 35 mm <sup>2</sup>	9 - 3 AWG



## Wiring

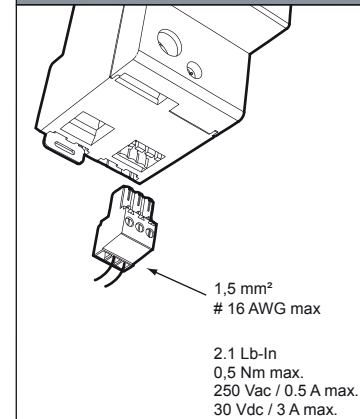


\* depending on national rules

\*\* for Germany both connections are mandatory

Table 2

## Remote contact wiring

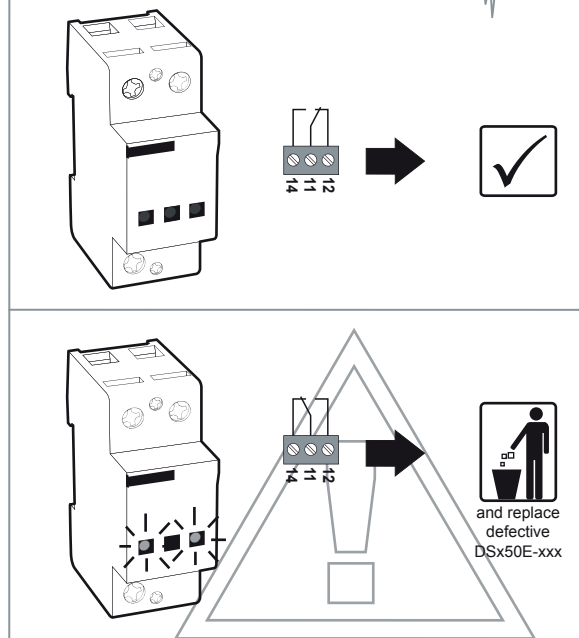


### Remote signal for disconnection information

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

Table 3

## Maintenance





# 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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N110205b



## 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 column 1).
- 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 Colonne 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 Vorsicherungen sind nach der Tabelle 2 zu selektieren und zu installieren (Spalte 1).
- Ist die Anzeige im Sichtfenster auf ROT umgeschaltet, so ist das Modul DEFECT und muss ausgetauscht werden.



## 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.



## 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, колонка 1\*).
- 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, sloupec 1.
- 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；