

# Data Sheet

## Type 1+2+3 AC Surge Protector DS100R/TR series

**Imax  
100 kA**



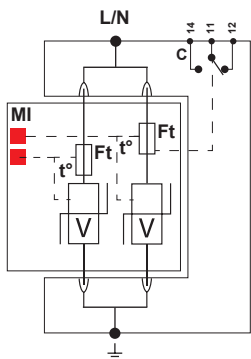
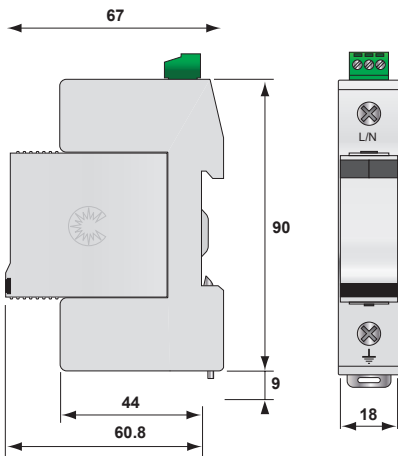
- **Type 1+2+3 Surge Protector**
- **limp : 8 kA**
- **In : 30 kA / I<sub>max</sub> : 100 kA**
- **Pluggable module by phase**
- **Remote Signaling option**
- **IEC 61643-11, EN 61643-11 and UL1449 ed.4 compliance**

**DS10xRS-xxx/G/TR**

- «x» = Configuration CT1 (common mode)
- «G» = Configuration CT2 (common and differential mode)
- Operating voltage
- «S» = Remote signal option
- Number of protected poles (2, 3 or 4)

### Dimensions and Diagram

(en mm)



V : High energy varistor  
Ft : Thermal Fuse  
C : Remote signaling contact  
t : Thermal disconnection system

### Characteristics

CITEL part number	DS101R-230/TR	
Network	230/400V	
Max. operating voltage	U <sub>c</sub>	320 Vac
Temporary overvoltage withstand	U <sub>tr</sub>	440 Vac
Operating current	I <sub>c</sub>	< 1 mA
Leakage current at U <sub>c</sub>		
Follow current	I <sub>f</sub>	none
Impulse current	I <sub>imp</sub>	8 kA
by pole - max withstand 10/350µs		
Nominal discharge current	I <sub>n</sub>	30 kA
15 x 8/20 µs impulses		
Maximum discharge current	I <sub>max</sub>	100 kA
max. withstand 8/20 µs		
Withstand on Combination Wave	U <sub>oc</sub>	10 kV
Protection level (at I <sub>n</sub> )	U <sub>p</sub>	1.4 kV
Residual voltage at 10 kA		1 kV
Residual voltage at 5 kA		0.9 kV
Admissible short-circuit current		25000 A
<b>Associated disconnection devices</b>		
Thermal disconnector	internal	
Fuses	Fuses type gG - 100 A	
Installation ground fault breaker	Type «S» or delayed	
<b>Mechanical characteristics</b>		
Dimensions	see diagram	
Connection	by screw terminals : 2.5-25 mm <sup>2</sup> / by bus	
Disconnection indicator	2 mechanical indicators by pole	
Remote signaling of disconnection	Option DS10xRS - output on changeover contact	
Mounting	symmetrical rail 35 mm	
Operating temperature	-40/+85 °C	
Protection class	IP20	
Housing material	Thermoplastic UL94-V0	
<b>Standards compliance</b>		
EN 61643-11	Europe	Low Voltage SPD - Class II Test
IEC 61643-11	International	Low Voltage SPD - Class II Test
NF EN 61643-11	France	Parafoudre Basse Tension - Essais Classe II
UL1449 ed.3	USA	Low Voltage TVSS
<b>Part number</b>		
		-



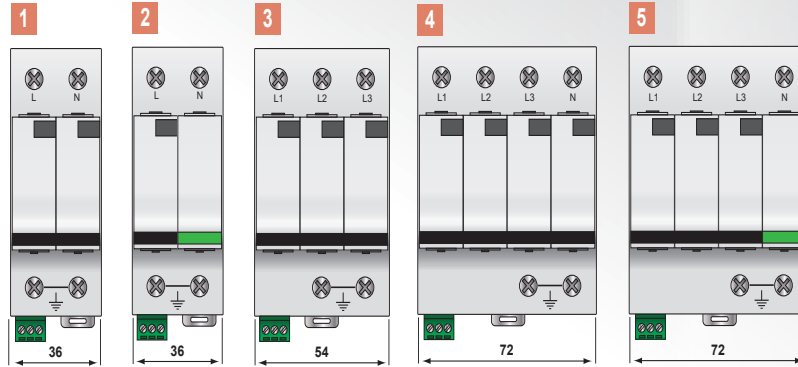
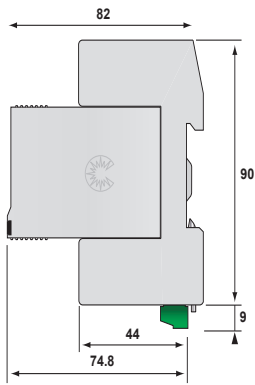
**CITEL**

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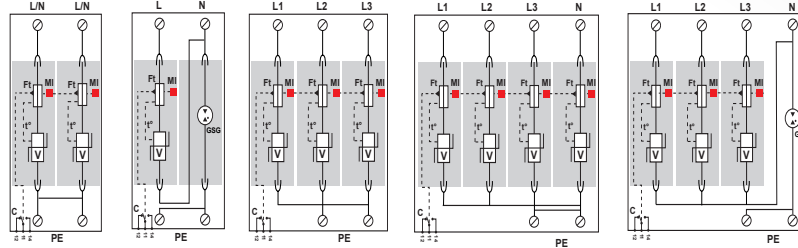
# Data Sheet

## Type 1+2+3 AC Multipolar Surge Protector DS102R/TR, DS103R/TR, DS104R/TR

### Dimensions and Diagram



V : High energy MOV  
Mi : Disconnection indicator  
Ft : Thermal fuse  
t° : Thermal disconnection mechanism  
C : contac for remote signal



### Characteristics

Références	Part number	Network	AC system	Protection mode		Iimp total 10/350µs	Up L/PE	Up L/N	Diagram
				common	differential				
DS104RS-230/G/TR	-	230/400 V 3-phase+N	TT-TNS	●	●	32 kA	1.5 kV	1.4 kV	5
DS104R-230/TR	-	230/400 V 3-phase+N	TNS	●		32 kA	1.4 kV	-	4
DS103R-230/TR	-	400 V 3-phase	TNC	●		24 kA	1.4 kV	-	3
DS102RS-230/G/TR	-	230 V single phase	TT-TN	●	●	16 kA	1.5 kV	1.4 kV	2
DS102R-230/TR	-	230V single phase	TN	●		16 kA	1.4 kV	-	1

