



## Type 1+2 AC surge protector single-phase

# CITEL

## DS502E-320/G



- ↳ Type 1 + 2 multipolar AC surge protector
- ↳  $I_{imp}$  total : 100 kA (10/350 $\mu$ s impulse)
- ↳  $I_{max}$  : 200 kA (8/20 $\mu$ s impulse)
- ↳ Internal disconnections, status indicator and remote signaling
- ↳ Conforme NF EN 61643-11, IEC 61643-11, UL1449 ed.5



	<b>Electrical Characteristics</b>																																																																			
<p>V: High-energy varistor GSG: Specific gas tube Ft: Thermal fuse C: Remote signaling contact t*: Thermal disconnection system MI: Disconnection indicator</p>	<table border="1"> <tbody> <tr><td>SPD type</td><td></td><td>1+2</td></tr> <tr><td>Network</td><td></td><td>230 V single-phase</td></tr> <tr><td>AC system</td><td></td><td>TT-TN</td></tr> <tr><td>Nominal line voltage</td><td>Un</td><td>230 Vac</td></tr> <tr><td>Max. AC operating voltage</td><td>Uc</td><td>320 Vac</td></tr> <tr><td>Max. load current <i>if series connection</i></td><td>IL</td><td>100 A</td></tr> <tr><td>Temporary Over Voltage (TOV) Characteristics - 5 sec. <i>Without disconnection</i></td><td>UT</td><td>335 Vac withstand</td></tr> <tr><td>Temporary Over Voltage (TOV) Characteristics - 120 mn <i>Without disconnection or with safety disconnection</i></td><td>UT</td><td>440 Vac disconnection</td></tr> <tr><td>Temporary Over Voltage N/PE (TOV HT) <i>Without disconnection or with safety disconnection</i></td><td>UT</td><td>1200 V/300A/200 ms withstand</td></tr> <tr><td>Follow current</td><td>If</td><td>None</td></tr> <tr><td>Nominal discharge current <i>15 x 8/20 <math>\mu</math>s impulses</i></td><td>In</td><td>50 kA</td></tr> <tr><td>Max. discharge current <i>max. withstand @ 8/20 <math>\mu</math>s by pole</i></td><td><math>I_{max}</math></td><td>200 kA</td></tr> <tr><td>Impulse current by pole <i>max. withstand 10/350<math>\mu</math>s by pole</i></td><td><math>I_{imp}</math></td><td>50 kA</td></tr> <tr><td>Total lightning current <i>max. total withstand @ 10/350<math>\mu</math>s</i></td><td><math>I_{total}</math></td><td>100 kA</td></tr> <tr><td>Specific energy by pole <i>max. withstand 10/350 <math>\mu</math>s</i></td><td>W/R</td><td>156 kJ/ohm</td></tr> <tr><td>Connection mode(s)</td><td></td><td>L/N and N/PE</td></tr> <tr><td>Protection mode(s)</td><td></td><td>Common/Differential mode</td></tr> <tr><td>Protection level L/N <i>@ In (8/20<math>\mu</math>s)</i></td><td>Up L/N</td><td>1.8 kV</td></tr> <tr><td>Protection level N/PE <i>@ In (8/20<math>\mu</math>s)</i></td><td>Up N/PE</td><td>1.5 kV</td></tr> <tr><td>Residual voltage L/N at 5 kA <i>@ 5 kA (8/20<math>\mu</math>s)</i></td><td>Up-5kA</td><td>1.2 kV</td></tr> <tr><td>Protection level N/PE at 5 kA <i>@ 5 kA (8/20<math>\mu</math>s)</i></td><td>Up-5kA</td><td>1.2 kV</td></tr> <tr><td>Admissible short-circuit current</td><td><math>I_{sc}</math></td><td>50 000 A</td></tr> </tbody> </table>		SPD type		1+2	Network		230 V single-phase	AC system		TT-TN	Nominal line voltage	Un	230 Vac	Max. AC operating voltage	Uc	320 Vac	Max. load current <i>if series connection</i>	IL	100 A	Temporary Over Voltage (TOV) Characteristics - 5 sec. <i>Without disconnection</i>	UT	335 Vac withstand	Temporary Over Voltage (TOV) Characteristics - 120 mn <i>Without disconnection or with safety disconnection</i>	UT	440 Vac disconnection	Temporary Over Voltage N/PE (TOV HT) <i>Without disconnection or with safety disconnection</i>	UT	1200 V/300A/200 ms withstand	Follow current	If	None	Nominal discharge current <i>15 x 8/20 <math>\mu</math>s impulses</i>	In	50 kA	Max. discharge current <i>max. withstand @ 8/20 <math>\mu</math>s by pole</i>	$I_{max}$	200 kA	Impulse current by pole <i>max. withstand 10/350<math>\mu</math>s by pole</i>	$I_{imp}$	50 kA	Total lightning current <i>max. total withstand @ 10/350<math>\mu</math>s</i>	$I_{total}$	100 kA	Specific energy by pole <i>max. withstand 10/350 <math>\mu</math>s</i>	W/R	156 kJ/ohm	Connection mode(s)		L/N and N/PE	Protection mode(s)		Common/Differential mode	Protection level L/N <i>@ In (8/20<math>\mu</math>s)</i>	Up L/N	1.8 kV	Protection level N/PE <i>@ In (8/20<math>\mu</math>s)</i>	Up N/PE	1.5 kV	Residual voltage L/N at 5 kA <i>@ 5 kA (8/20<math>\mu</math>s)</i>	Up-5kA	1.2 kV	Protection level N/PE at 5 kA <i>@ 5 kA (8/20<math>\mu</math>s)</i>	Up-5kA	1.2 kV	Admissible short-circuit current	$I_{sc}$	50 000 A
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