



Type 1+2+3 AC surge protector - Single phase

CITEL

DS252VG-300/G



- Type 1+2+3 unipolar surge protector
- 25 kA on 10/350µs impulse
- Low voltage Up
- Internal disconnection, status indicator and remote signaling
- Optimized to TOV
- IEC 61643-11 and UL1449 ed.5 compliance



	Electrical Characteristics																																																																												
<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"> <tr><td>SPD type</td><td></td><td>1+2+3</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>255 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 withstand</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>Residual Current <i>Leakage current to Ground</i></td><td>Ipe</td><td>None</td></tr> <tr><td>Follow current</td><td>If</td><td>None</td></tr> <tr><td>Nominal discharge current <i>15 x 8/20 µs impulses</i></td><td>In</td><td>30 kA</td></tr> <tr><td>Max. discharge current <i>max. withstand @ 8/20 µs by pole</i></td><td>Imax</td><td>70 kA</td></tr> <tr><td>Total Maximum discharge current <i>max. total withstand @ 8/20 µs</i></td><td>Imax Total</td><td>150 kA</td></tr> <tr><td>Impulse current by pole <i>max. withstand 10/350µs by pole</i></td><td>Iimp</td><td>25 kA</td></tr> <tr><td>Total lightning current <i>max. total withstand @ 10/350µs</i></td><td>Itotal</td><td>50 kA</td></tr> <tr><td>Withstand on Combination waveform IEC 61643-11 <i>Class III test: 1.2/50µs - 8/20µs</i></td><td>Uoc</td><td>20 kV</td></tr> <tr><td>Withstand on overvoltages IEEE C62.41.1</td><td></td><td>20 kV</td></tr> <tr><td>Specific energy by pole <i>max. withstand 10/350 µs</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>Residual voltage <i>@ In (8/20 µs)</i></td><td>Up-in</td><td>1.1 kV</td></tr> <tr><td>Protection level L/N <i>@ In (8/20µs)</i></td><td>Up L/N</td><td>1.5 kV</td></tr> <tr><td>Protection level N/PE <i>@ In (8/20µs)</i></td><td>Up N/PE</td><td>1.5 kV</td></tr> <tr><td>Admissible short-circuit current</td><td>Iscrr</td><td>50 000 A</td></tr> </table>		SPD type		1+2+3	Network		230 V single-phase	AC system		TT-TN	Nominal line voltage	Un	230 Vac	Max. AC operating voltage	Uc	255 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 withstand	Temporary Over Voltage N/PE (TOV HT) <i>Without disconnection or with safety disconnection</i>	UT	1200 V/300A/200 ms withstand	Residual Current <i>Leakage current to Ground</i>	Ipe	None	Follow current	If	None	Nominal discharge current <i>15 x 8/20 µs impulses</i>	In	30 kA	Max. discharge current <i>max. withstand @ 8/20 µs by pole</i>	Imax	70 kA	Total Maximum discharge current <i>max. total withstand @ 8/20 µs</i>	Imax Total	150 kA	Impulse current by pole <i>max. withstand 10/350µs by pole</i>	Iimp	25 kA	Total lightning current <i>max. total withstand @ 10/350µs</i>	Itotal	50 kA	Withstand on Combination waveform IEC 61643-11 <i>Class III test: 1.2/50µs - 8/20µs</i>	Uoc	20 kV	Withstand on overvoltages IEEE C62.41.1		20 kV	Specific energy by pole <i>max. withstand 10/350 µs</i>	W/R	156 kJ/ohm	Connection mode(s)		L/N and N/PE	Protection mode(s)		Common/Differential mode	Residual voltage <i>@ In (8/20 µs)</i>	Up-in	1.1 kV	Protection level L/N <i>@ In (8/20µs)</i>	Up L/N	1.5 kV	Protection level N/PE <i>@ In (8/20µs)</i>	Up N/PE	1.5 kV	Admissible short-circuit current	Iscrr	50 000 A
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Technology		VG Technology (MOV+GSG)																																																																											
SPD configuration		Single phase																																																																											
Connection to Network		By screw terminals: 6-35mm ² / by bus																																																																											
Format		1-pole modular box assembled																																																																											
Mounting		Symmetrical rail 35 mm (EN 60715)																																																																											
Housing material		Thermoplastic UL94 V-0																																																																											
Operating temperature	Tu	-40/+85°C																																																																											
Protection rating		IP20																																																																											
Failsafe mode		Disconnection from AC network																																																																											
Disconnection indicator		1 mechanical indicator by pole																																																																											
Remote signaling of disconnection		Output on changeover contact																																																																											
Dimensions		See diagram																																																																											
Weight		0.49 kg																																																																											
Disconnectors																																																																													
Thermal disconnector		Internal																																																																											
Installation ground fault breaker		Type 'S' or delayed																																																																											
Back-up protection device		SFD1-25S-11 / or Fuses Type gG 315 A																																																																											
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DS252VG-300/G

Standards compliance	IEC 61643-11 / EN 61643-11 / UL1449 ed.5
Certification	UL Recognized
Part number	
3403	