



**NEW CITEL PV SPD**

- Type 2+3 surge protector for Photovoltaic
- CTC Technology
- VG Technology
- Discharge currents  $I_{max}/I_{total}$ : 40/60 kA (8/20 $\mu$ s)
- Common/Differential mode protection
- Remote signaling
- IEC 61643-31, EN 61643-31, EN 50539-11, UL1449 ed.5 compliance
- Certified EN 61643-31 and IEC 61643-31



**Electrical Characteristics**

SPD type		2+3
Network		PV 1500 Vdc
Nominal PV voltage	$U_{ocstc}$	1250 Vdc
Max. PV operating voltage	$U_{cpv}$	1500 Vdc
Residual Current <i>Leakage current to Ground</i>	$I_{pe}$	None
PV Permanent Operating current <i>Current consumption at <math>U_{cpv}</math></i>	$I_{cpv}$	None
Follow current	$I_f$	None
Nominal discharge current <i>15 x 8/20 <math>\mu</math>s impulses</i>	$I_n$	20 kA
Max. discharge current <i>max. withstand @ 8/20 <math>\mu</math>s by pole</i>	$I_{max}$	40 kA
Total Maximum discharge current <i>max. total withstand @ 8/20 <math>\mu</math>s</i>	$I_{max}$ Total	60 kA
Withstand on Combination waveform IEC 61643-11 <i>Class III test: 1.2/50<math>\mu</math>s - 8/20<math>\mu</math>s</i>	$U_{oc}$	6 kV
Current withstand short circuit PV	$I_{scpv}$	15 000 A
Connection mode(s)		+/-/PE
Protection mode(s)		Common/Differential mode
Protection level +/- <i>@ <math>I_n</math> (8/20<math>\mu</math>s)</i>	$U_p$	4.8 kV
Protection level +/-PE (-/PE) <i>@ <math>I_n</math> (8/20<math>\mu</math>s)</i>	$U_p$	4.8 kV
Protection level at 5 kA <i>@ 5 kA (8/20<math>\mu</math>s)</i>	$U_p$	4.0 kV
Protection level at $U_{oc}$ <i>@ <math>U_{oc}</math> (1.2/50 <math>\mu</math>s)</i>	$U_p$	3,5 kV

**Mechanical Characteristics**

Technology		VG Technology (MOV+GSG)
Connection to Network		By screw terminals: 2.5-25mm <sup>2</sup> (35mm <sup>2</sup> ) / by bus
Format		Compact monobloc box
Mounting		Symmetrical rail 35 mm (EN 60715)
Housing material		Thermoplastic UL94 V-0
Operating temperature	$T_u$	-40/+85°C
Protection rating		IP20
Failsafe mode		All pole disconnection from PV network
Disconnection indicator		1 mechanical indicator - Red/Green
Remote signaling of disconnection		Output on changeover contact
Max. Voltage/Current for remote signaling		250 V / 0.5 A (AC) / 30 V / 3 A (DC)
Dimensions		See diagram - 2.5TE (EN43880)
Weight		0.290 kg

**Disconnectors**

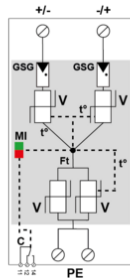
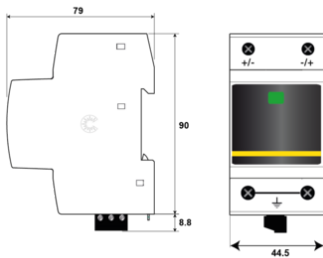
Thermal disconnector		CTC Technology integrated
Back-up protection device		Without

**Standards**

Standards compliance		IEC 61643-31 / EN 61643-31 / EN 50539-11 / UL1449 ed.5
Certification		KEMA

**Part number**

65122103



V: High-energy varistor  
GSG: Specific gas tube  
Ft: Thermal fuse  
C: Remote signaling contact  
t\*: Thermal disconnection system  
MI: Mechanical status indicator

