

# SCG-250-500-R01

## VLD - for DC traction / VLD class 1 (SCG)

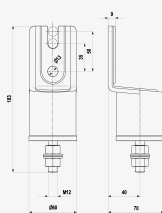
Voltage limiting device

VLD class 1, type VLD-F

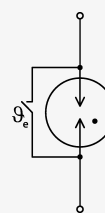
- the VLD is used to restrict excessive high contact voltages arising on exposed conductive parts of a railway equipment in case of a disturbance (short-circuit) in AC and DC railway electric traction systems, thus ensuring protection to persons that may come into contact with the parts mentioned
- in case of an overload caused by short-circuit or long-term withstand current the internal patented (PV CZ2017248) short-circuiting device intervenes by establishing a permanent short circuit across the protective element
- in the event of a failure connection between a live power supply part of the traction system and an exposed conductive part (e.g. due to the overhead power line fall) the VLD protects the parts affected by causing a short circuit, which results in turning off of the power supply
- the integrated protective element effectively eliminates high impulse overvoltage induced into the traction mains or railway equipment by a lightning strike
- the SCG is connected between the protected part and the return circuit
- easy mounting, installation right away on the protected equipment



Product dimensions



Basic circuit diagram



Parameter name	Parameter value
Class VLD according to EN 50526-2	1
Type VLD according to EN 50122-1	F
Short-circuit current (@ 300 ms)	$I_{SCC}$ 5.0 kA
Leakage current at $U_w$	$I_L$ < 1 $\mu$ A
Non-triggering voltage	$U_w$ 260.00 V
High charge impulse (10/350)	$I_{imp-hc}$ 50.00 kA
Lightning current impulse (8/20)	$I_{imp-n}$ 100.00 kA

High current impulse (8/20)	$I_{\text{imp-high}}$	100.00 kA
Nominal triggering DC voltage*	$U_{\text{Tn}}$	480 V
Maximal residual voltage at $I_r$	$U_{\text{RES}}$	35.00 V
Maximal residual voltage at $I_w$	$U_{\text{RES}}$	100.00 V
Instantaneous triggering voltage*	$U_{\text{Ti}}$	480.00 V
Short time withstand current (@ 60 ms)	$I_w$	1.0 kA
Response time	$t_a$	10 000 ns
Degree of protection		IP 67
Range of ambient temperatures (min/max)		-40 / 70 °C
According to standard		EN 50122-1, EN 50526-2
Weight		0.84 kg
ETIM Class		EC002496
Customs tariff number		85363030
EAN		8595090561552
		*in ionized mode
Order number		A06155