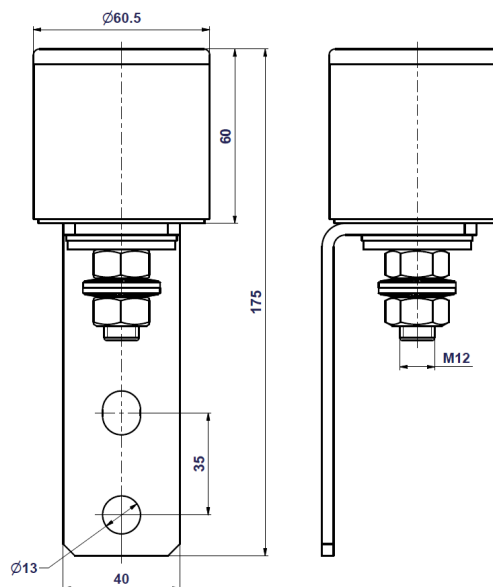


Low voltage limiter for railway application



HGS 100 RW

It is range of voltage limiters designed for overvoltage protection of personnel and equipment in DC and AC rail traction systems. It is recommended to install this limiter between the current return path and non-electrified parts of structures laying adjacent to the rails. Internal construction of HGS is based at application of high power gas-filled gas discharge tube (GDT), which is built in to stainless steel box. In case of overvoltage, HGS100 RW 500V generates a durable conductive path between the overloaded area and the railway's substation. This results in increased current loads that are sensed at the substation, tripping the safety switch and thus protecting personnel and equipment. In addition, all overvoltages generated by lightning are effectively limited by Hakeł's internal construction of HGS100 RW 500V. All requirements given by EN 50122-1 and IEC 61643-1/A11 relating to electrical safety earthing for this specific use are also fulfilled.

Typ		HGS 100 RW
Examinations according to		IEC 61643-11/A11, EN 50122-1
DC Spark-over voltage in ionised mode		300 - 500 V
Sparkover voltage		> 250 Vrms
Voltage protection level at Uoc 6kV		< 1200 V
Maximum discharge current	I_{max}	200 kA
Nominal discharge current for class II test (8/20)	I_n	100 kA
Impulse discharge current for class I test (10/350)	I_{imp}	150 kA
Charge	Q	75 As
Specific energy for class I test	W/R	5500 kJ/Ω
Short time withstand current Iw	I_w	up to 8 kArms / 100 msec (AC - mode) up to 20 kA / 30 msec (DC - mode)
Behaviour after substantial overloading		internal short circuit inside HGS body
Insulation resistance at 100 V DC	R_i	> 1 GΩ
Capacitance at 1 MHz	C	< 35 pF
Degree of protection of enclosure		IP66
Operating and Storage Temperature		-40 ... +90 °C
Weight	m	950 g
Climatic Category (IEC 60068-1)		40/90/21
Article number		

