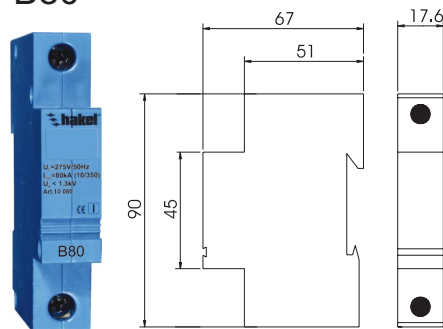
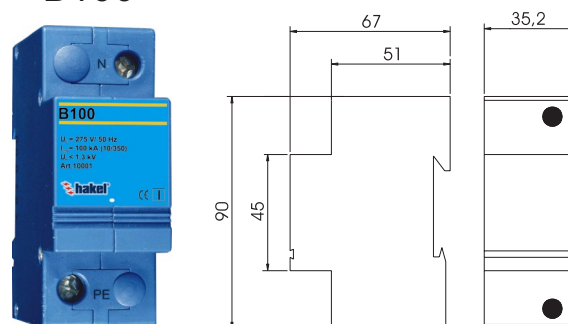


B80

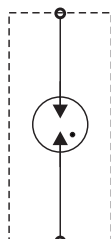


B100

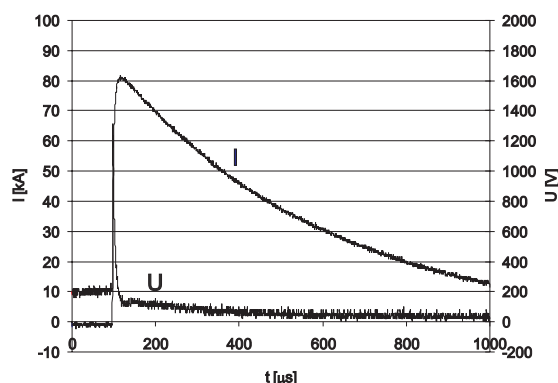
**B80, B100**

Modules B80 and B100 are one part of modular units of surge protection intended for mounting on DIN rail 35mm. They are used for the protection of L.V. power supply systems against surges at direct lightning stroke. Therefore, they create an integral part of building protection and its installations against surge effects. B80 and B100 contain a high power gas discharge tube rated for max. lightning impulse current  $I_{imp} = 80kA$  (10/350) and  $I_{imp} = 100kA$  (10/350). These arresters are mainly used if there is an overhead line as a low voltage supply to a building or if they are residual current circuit breakers in protected facility. Both types fulfil construction demands posed on class I for lightning arresters. The recommended use is in the Lightning Protection Zones Concept at the boundaries of LPZ 0<sub>A(B)</sub> – 1 according to IEC 1312-1 in low voltage power supply systems TNS, TT and IT. Both types are in these applications mainly used for equipotential bonding between N and PE (equipotential busbar).

Type		B80	B100
Arrester class acc. to IEC 61643-1:1998, EN 61643-11:2002		I	
Rated voltage (max. continuous operating voltage )	$U_C$	275V/50Hz	
Insulation resistance	$R_i$	>1000MΩ	
Max. discharge current $I_{max}$ (8/20)	$I_{max}$	120kA	150kA
Nominal discharge current $I_n$ (8/20)	$I_n$	60kA	75kA
Max. lightning impulse current $I_{imp}$ (10/350)	$I_{imp}$	80kA	100kA
Charge	$Q$	40As	50As
Specific energy	W/R	1600kJ/Ω	2500kJ/Ω
Voltage protection level at $I_{imp}$	$U_p$	< 1,3kV	
Follow current extinguishing capability at $U_C$	$I_f$	100A <sub>rms</sub>	
Response time	$t_A$	<100ns	
Lightning impulse sparkover voltage 1,2/50μs	$U_p$	<1,5kV	
Operating temperature range	θ	-40 to +80°C	
Recommended cross-section of the connected conductors (at tightening moment of clamps 4Nm)		25mm <sup>2</sup> (solid) 16mm <sup>2</sup> (flexible)	50mm <sup>2</sup> (solid) 25mm <sup>2</sup> (flexible)
Protection type acc. to ČSN EN 60529		IP20	
Mounting on		DIN rail 35mm	
Housing material		SLOVAMID 6FRC2	
Housing colour		blue	
Weight	m	140g	210g
Article Number		10 080	10 001

**Basic circuit diagram  
B80 and B100**

The typical B80 response to a stroke of test impulse  $I_{imp}$  (10/350)= 80kA



The typical B100 response to a stroke of test impulse  $I_{imp}$  (10/350)= 100kA

