



Power Supply Systems  
SPDs Class I



<b>DEHNbloc®</b>		<b>Red / Line</b>	
<b>Lightning Current Arrester</b>			
<p>For the integration of power supply lines into lightning protection equipotential bonding systems. For the use in the Lightning Protection Zones Concept at the boundaries of LPZ 0<sub>A</sub> – 1. German Patent.</p> <p>For the protection of low voltage consumer's installations against surges, even at <b>direct lightning strikes</b> (Overvoltage Category IV according to DIN VDE 0110-1:1997-04). Tested with <b>lightning impulse currents</b> (10/350) in accordance with DIN V ENV 61024-1 (VDE V 0185 Part 100), DIN VDE 0185-103. <b>SPD Class I</b> according to IEC 61643-1:1998-02. <b>SPD Type 1</b> according to EN 61643-11:2001. <b>Ableiter der Anforderungsklasse B</b> according to E DIN VDE 0675-6:1989-11 and -6/A1:1996-03.</p> <ul style="list-style-type: none"> <li>– Encapsulated, non-exhausting creepage discharge spark gap</li> <li>– "Breakwater Function" allows energy coordination with downstream varistor-type surge arrester, e.g. <b>DEHNguard</b> and/or the equipment to be protected</li> <li>– Low voltage protection level</li> <li>– Quick response</li> <li>– Application also possible upstream the meter due to high insulation resistance</li> <li>– Multifunctional terminals for conductors and busbars</li> <li>– 3-pole version, 1-pole version (up to 100 kA of lightning impulse current loads 10/350 possible depending on the mains type)</li> </ul> <p>For further information on use, please see also installation instructions Nos. 1205 (DB 3 255) and 1226 (DB 1 255).</p>			
Technical Data:			
<b>Type</b>		<b>DB 3 255</b>	<b>DB 1 255</b>
Rated voltage (max. continuous operating voltage)	$U_c$	255 V / 50 Hz	
Follow current extinguishing capability at $U_c$	$I_f$	3 kA <sub>rms</sub>	
Lightning impulse current (10/350)	$I_{imp}$	100 kA	50 kA
Voltage protection level Lightning impulse sparkover voltage 1.2/50	$U_p$	≤ 4 kV	
Response time	$t_A$	≤ 100 ns	
Backup fuse (only required, if not already provided in mains)		160 A gL/gG	
Short-circuit withstand capability with max. backup fuse		50 kA / 50 Hz	
Operating temperature range	θ	– 40° C ... + 80° C	
Cross-sectional area		min. 10 mm <sup>2</sup> solid/flexible max. 50 mm <sup>2</sup> stranded/35 mm <sup>2</sup> flexible	
Insulation resistance	$R_{isol}$	≥ 10 <sup>3</sup> MΩ	
Mounting on		DIN rail 35 mm in accordance with EN 50022	
Enclosure material		red glass fibre reinforced thermoplastic, UL94-V0	
Degree of protection		IP 20	
Dimension		4 mods., DIN 43880	2 mods., DIN 43880
Approved by		UL, KEMA, VDE	
Test standards		IEC 61643-1:1998-02; EN 61643-11:2001; E DIN VDE 0675-6:1989-11 and -6/A1:1996-03	
<b>DEHNbloc®</b>			
Type		Part No.	
DB 3 255		<b>900 110</b>	
DB 1 255		<b>900 111</b>	

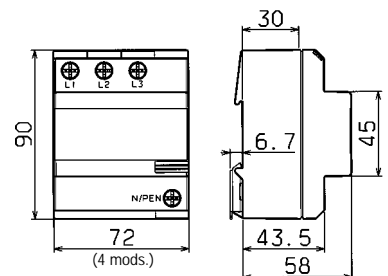
DB 3 255



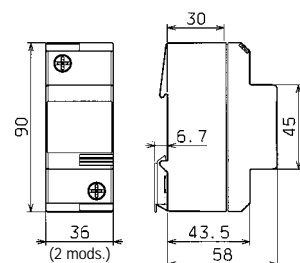
DB 1 255



Dimension drawing DB 3 255



Dimension drawing DB 1 255



Basic circuit diagram DB 3 255

