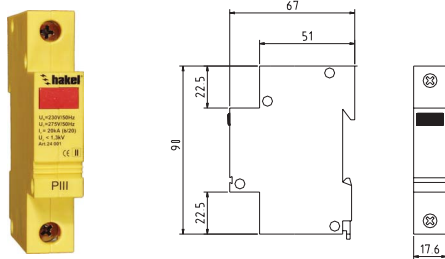
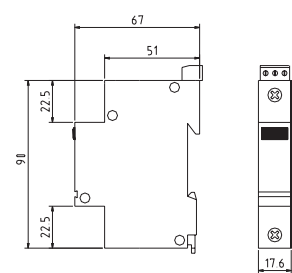


PIII
PIIIT



PIII DS
PIIIT DS



PIII*

Surge arrester class II according to IEC 61643-1:1998 and EN 61643-11:2002 (2nd stage protection). To be placed into the secondary switchboards. Models PIII* contains a special ZnO varistors with $I_{max}(8/20) = 40kA$ or $I_{max}(8/20) = 20kA$ (see models PIIIT). They are manufactured in a compact range for nominal voltages of 60V, 120V, 230V, 280V, 400V, 500V and 720V. The recommended use is in the Lightning Protection Zones Concept at the boundaries of LPZ 0_B -1 and more according to IEC 1312-1 in low voltage power supply systems TNC and TNS, but it can also be used in TT and IT systems. PIII DS (PIIIT DS) can be used in applications, where the remote monitoring of failure is required. This type has the same construction as PIII (PIIIT), but it also contains potential free contact for remote monitoring of failure.

Type		PIII 60 PIII 60 DS	PIII 120 PIII 120 DS	PIII 230 PIII 230 DS	PIII 280 PIII 280 DS	PIII 400 PIII 400 DS	PIII 500 PIII 500 DS	PIII 720 PIII 720 DS	PIIIT 230 PIIIT 230 DS	PIIIT 280 PIIIT 280 DS
Arrester class acc. to IEC 61643-1:1998 and EN 61643-11:2002		II								
Nominal voltage	U_N	60V	120V	230V	280V	400V	500V	720V	230V	280V
Max. continuous operating voltage	U_C	75V	144V	275V	320V	480V	600V	865V	275V	320V
Max. discharge current $I_{max}(8/20)$	I_{max}	40kA						20kA		
Nominal discharge current $I_n(8/20)$	I_n	15kA	20kA	20kA	20kA	15kA				
Voltage protection level at I_n	U_p	< 350V	< 850V	< 1,3kV	< 1,3kV	< 2kV	< 2,5kV	< 3,3kV	< 1,3kV	< 1,3kV
Response time	t_A	<25ns								
Recommended back-up fuse		160AgL/gG						100 AgL/gG		
Short-circuit withstand capability	I_P	60kA _{rms}						30kA _{rms}		
Operating temperature range	ϑ	-40 to +80°C								
Cross-section of connected conductors (at tightening moment of clamps 3Nm)		6÷25mm ² (solid) 6÷16mm ² (flexible)								
Protection type		IP 20								
Housing material		SLOVAMID 6FRC2								
Mounting on		DIN rail 35mm								
Lifetime		100 000hrs								
Potential free signal contact		el. strength against surrounding circuits						3750V _{rms}		
		el. strength against network circuit						3750V _{rms}		
		insulation resistance						2x10 ⁷ Ω		
		max. switching current						~ 0,5A		
		max. switching voltage						~ 250V		
Weight		98g	98g	98g	98g	100g	110g	135g	90g	90g
Article number		24002	24120	24 001	24 320	24 009	24 010	24 014	24 015	24 018
		24021	24121	24 020	24 321	24 040	24 025	24 070	24 016	24 019

Mechanical failure indication

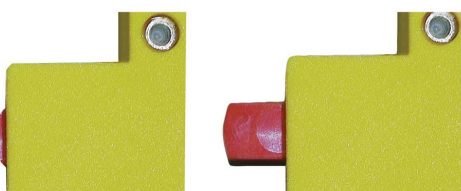
Is indicated by a red signalling target. If the red target is pushed in, the device is fully functional. The red target pushed out signals a damage of the protecting unit.

Connection of remote monitoring

As long as the unit PIII DS (PIIIT DS) is functional, the contacts 1-2 are connected. This applies if the unit is alive or also if there is absence of voltage. If there is a damaged varistor in the unit because of heat effect due to overload, the contacts 2-3 are connected.

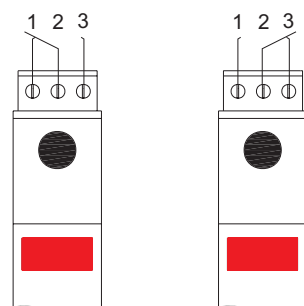
Operation

Failure

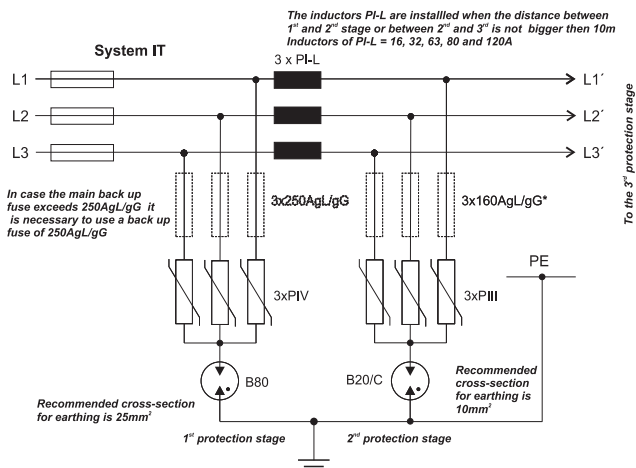
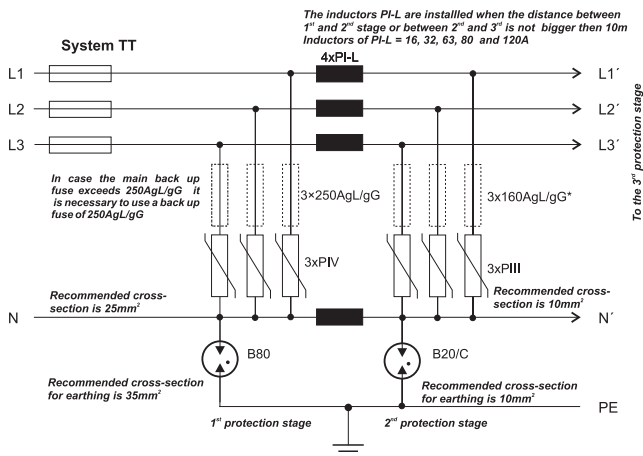
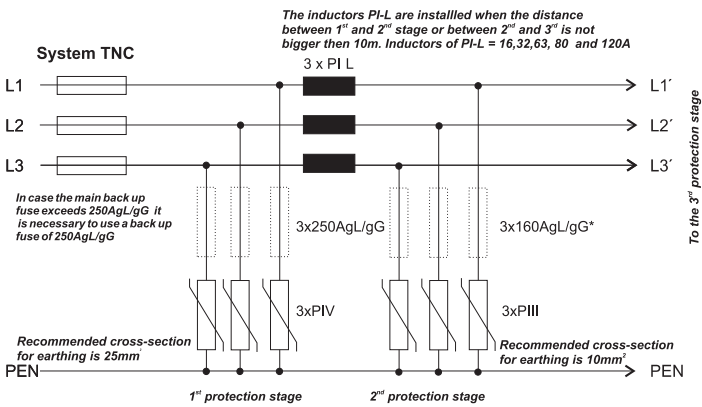
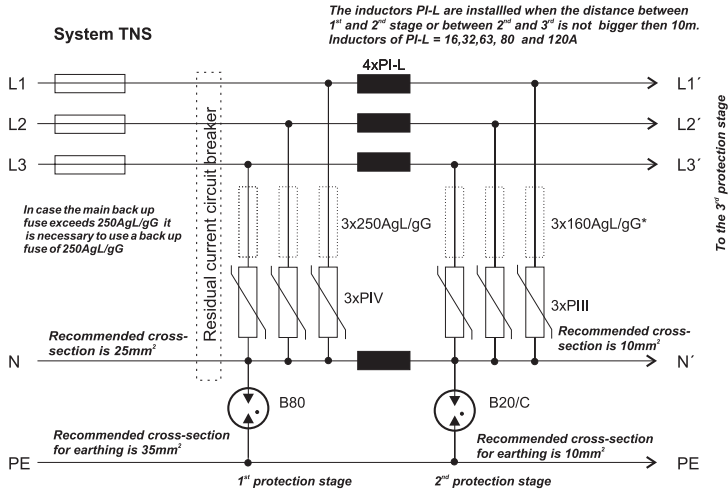


Operation

Failure



Recommended applications of surge arresters PIII*



*It is necessary to use a back-up fuse of 100AgL/gG for the type PIII 720 and PIII 720 DS.