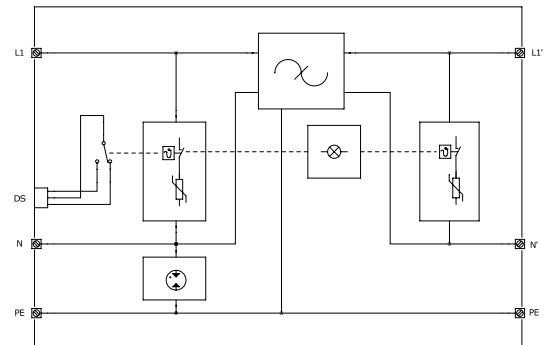
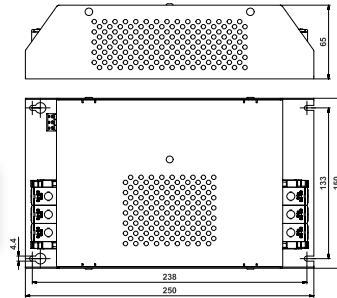
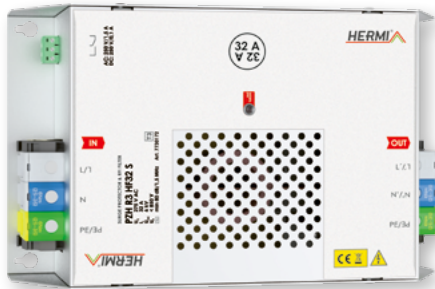


# Surge Arrester TYPE 3

 TYPE  
3

VARISTOR &amp; EMC / EMI FILTER

TYPE 3 / CLASS III / TN-C-S / TN-S / CE



## PZH R3 HF32 S, 50 S, 63 S, 80 S, 125 S, 160 S

PZH R3\* S is a two-stage surge arrester. A high-frequency filter is integrated between these two stages. The PZH R3\* S includes an upgraded thermal fuse which ensures the timely disconnection of the PZH R3\* S from the mains supply when the varistor overheats and prevents the PZH R3\* S from any damage. The activation of the thermal fuse is signalled by an integrated light indication with the possibility of using the switch contact for remote monitoring (S) to signal the fault. PZH R3\* S is a two-port surge arrester type T3 tested according to the standard EN 61643-11 ed.2 (IEC 61643-11: 2011). According to EN 62305 ed.2 (IEC 62305: 2010) it is to be installed at the interface of LPZ 2 - LPZ 3 zones where it limits the induced overvoltage and residual overvoltage in power lines. PZH R3\* S is installed to the switchboard base by four screws.

**Manufacturer's recommendation:** PZH R3\* S is to be installed as close as possible to the protected device (max. 5 m). In front of PZH R3\* S must be installed a lightning arrester T1 and surge arrester T2 from Hermi.

TYPE	PZH R3 HF32 S	PZH R3 HF50 S	PZH R3 HF63 S	PZH R3 HF80 S	PZH R3 HF125 S	PZH R3 HF160 S
Test class according to EN 61643-11 ed.2 (IEC 61643-11:2011)	TYP 3, CLASS III					
System	TN-C-S, TN-S					
Max. continuous operating voltage	$U_c$ 275 V AC					
Rated load current	$I_L$ 32 A	50 A	63 A	80 A	125 A	160 A
Combined impulse	$U_{oc}$ 6 kV (L/N, L/PE); 10 kV (N/PE)					
Voltage protection level at $U_{oc}$	$U_p$ < 850 V (L/N); < 1,5 kV (L/PE); < 1,2 kV (N/PE)					
Nominal discharge current $I_n$ (8/20)	$I_n$ 3 kA (L/N, L/PE); 5 kA (N/PE)					
Temporary overvoltage (TOV)	$U_T$ 337 V/5 s (L/N); 1200 V/0,2 s (N/PE)					
Response time	$t_A$ < 25 ns (L/N); < 100 ns (L/PE, N/PE)					
Asymmetrical attenuation of filter (band-stop filter)	min. 80 dB at 4 MHz; min. 40 dB (0,15 ÷ 30 MHz)					
Power loss at winding temp. 20 °C	< 4 W	< 7 W	< 9 W	< 12 W	< 20 W	
Back-up fuse	32 A	50 A	63 A	80 A	125 A	160 A
LPZ	2-3					
Housing material	Metal plate 1 mm					
Degree of protection of enclosure	IP20					
Operating temperature range	$\theta$ -40 °C ... +55 °C					
Cross-section of the connected conductors	10 mm <sup>2</sup>		16 mm <sup>2</sup>	25 mm <sup>2</sup>	35 mm <sup>2</sup>	50 mm <sup>2</sup>
Tightening moment of clamps	3 Nm				10 Nm	
The mounting method / operating position	By screws M4 on chassis / any					
Failure signalisation	light off - ok / light on - fault					
Potential free signal contact (S) (recommended cross-section of remote monitoring max. 1 mm <sup>2</sup> )	AC: 250 V / 1,5 A, DC: 250 V / 0,1 A					
Lifetime	min. 100 000 h					
Weight	720 g	1450 g	1450 g	1520 g	1780 g	1830 g
Article number	<b>77 30 172</b>	<b>77 30 173</b>	<b>77 30 174</b>	<b>77 30 175</b>	<b>77 30 176</b>	<b>77 30 177</b>