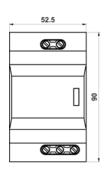


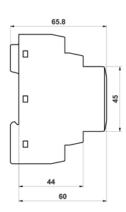
# **Surge Arrester TYPE 3**

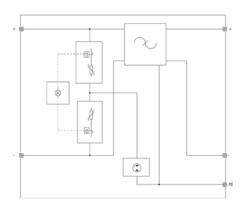
### **VARISTOR & EMC / EMI FILTER**

TYPE 3 / CLASS III / DC / €€









## PZH R3 HF16/\*VDC

PZH R3 HF16/\*VDC is a surge arrester with integrated high-frequency filter designed for DC power supply systems. PZH R3 HF16/\*VDC contains an improved thermal fuse which ensures timely disconnection of the device from the power grid during overheating and thus prevents damage to the PZH R3 HF16/\*VDC. Activation of the thermal fuse is signalled by an integral indicator light. The PZH R3 HF16/\*VDC is a type T3 two-port surge arrester and has been tested according to standards EN 61643-11 (IEC 61643-11:2011). According to standard EN 62305 (IEC 62305:2010), it is installed in the boundary between zones LPZ 2 - LPZ 3, where it limits induced overvoltage and residual overvoltage in power lines. PZH R3 HF16/\*VDC are designed to be mounted on a 35 mm DIN rail using a metal clip.

Manufacturer's recommendation: Install the PZH R3 HF16/\*VDC as close to the device to be protected as possible (no further than 5 m). There must be Hermi's lightning and surge arrester T1 and T2 installed before the PZH R3 HF16/\*VDC.

ТҮРЕ		PZH R3 HF 16/6VDC	PZH R3 HF 16/12VDC	PZH R3 HF 16/24VDC	PZH R3 HF 16/48VDC	PZH R3 HF 16/60VDC	PZH R3 HF 16/120VDC	PZH R3 HF 16/220VDC	
Test class according to EN 61643-11 ed.2 (IEC 61643-11:2011)		TYPE 3, CLASS III							
System					DC				
Nominal voltage	U <sub>N</sub>	6 V =	12 V =	24 V =	48 V =	60 V =	120 V =	220 V =	
Max. continuous operating voltage	U <sub>c</sub>	7,2 V =	14,4 V =	28,8 V =	57,6 V =	72 V =	144 V =	264 V =	
Nominal discharge current I <sub>n</sub> (8/20)	-I <sub>n</sub>	2 kA 3 kA					κA		
Rated load current	-IL	16 A							
Combined impulse	U <sub>oc</sub>	4 kV					6 kV		
Voltage protection level at $U_{OC}$ (+/-)	U <sub>P</sub>	< 350 V	< 350 V	< 400 V	< 500 V	< 550 V	< 900 V	< 1300 V	
Voltage protection level at $U_{\rm oc}$ (+-/PE)		< 300 V				< 400 V	< 600 V	< 800 V	
Response time	t <sub>A</sub>	< 25 ns (+/-) < 100 ns (+-/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		< 3,5 W							
Back-up fuse		16 A							
LPZ		2-3							
Housing material		Polyamid PA6, UL94 V-0							
Degree of protection of enclosure		IP20							
Operating temperature range	9	-40 °C +55 °C							
Cross-section of the connected conductors		2,5 - 4 mm² Cu							
The mounting method / operating position		DIN rail 35 mm / any							
Failure signalisation		optical function signalization target clear - ok optical function signalization target red - fault							
Lifetime		min. 100 000 h							
Weight									
Article number		77 30 142	77 30 143	77 30 144	77 30 145	77 30 146	77 30 147	77 30 148	