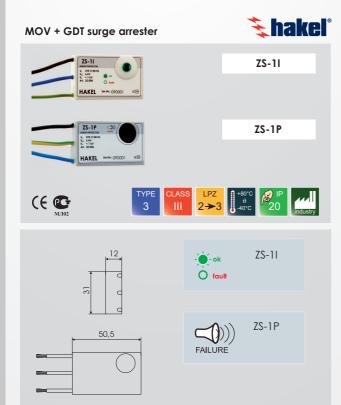
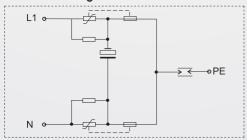
# **SURGE ARRESTER - VARISTOR**

ZS-11, ZS-1P are surge arresters type 3 according to EN 61643-11 and IEC 61643-1 designed for installation into electrical installation systems, e.g.: cable ducts and flush-mounted sockets as an additional protection. These devices are suitable supplements of socket distribution which are protected by PI-k protector. The right function of ZS-11 type is indicated by green LED diode. When the indicator is off, the device must be replaced or technically checked. ZS-1P contains an acoustic fault indicator (buzzer).

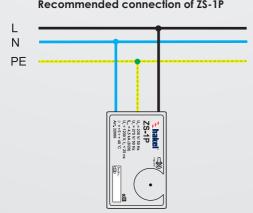


Type ZS-1I/ZS-1P		
Nominal voltage	$U_N$	230 V AC
Max. continuous operating voltage	$U_C$	275 V AC
Nominal discharge current In(8/20)	I <sub>n</sub>	3 kA (L/N, L/PE) 5 kA (N/PE)
Combined impulse	U <sub>OC</sub>	6 kV (L/N,L/PE) 10 kV (N/PE)
Voltage protection level at U <sub>OC</sub>	U <sub>P</sub>	<1 kV (L/N)
		<1 kV (L/PE)
		<1,2 kV (N/PE)
Power loss at winding temp. 20°C		<0,5 W
Response time	t <sub>A</sub>	<25 ns (L/N)
		<100 ns (L/PE, N/PE)
Recommended backup fuse		16 A
Temporary overvoltage (TOV)	U <sub>T</sub>	335V/5 s (L/N)
		$1200V + U_0/200 \text{ ms (L/PE)}$
Lifetime		min. 100.000 h
Failure indication		
ZS-11		green LED diode
ZS-1P		inbuilt piezosiren
Weight	m	20/30 g
Article number		
ZS-1I		32 004
ZS-1P		32 006

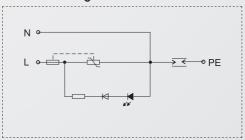
### Basic circuit diagram of ZS-1P



## **Recommended connection of ZS-1P**



### Basic circuit diagram of ZS-11



## Recommended connection of ZS-11

