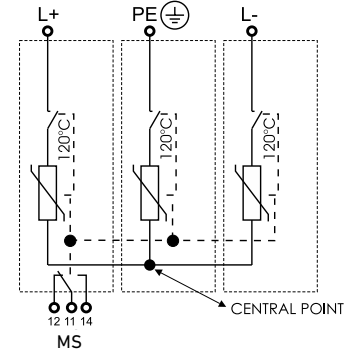
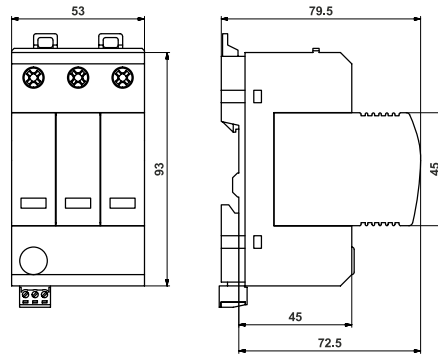


PV Lightning and Surge Arrester TYPE 1 + 2

TYPE 1+2
VARISTOR
TYPE 1 + 2 / CLASS I + II / CE


PZH R1 PV/800/7 M, PZH R1 PV/1000/7 M, PZH R1 PV/800/7 MS, PZH R1 PV/1000/7 MS

PZH R1 PV are the lightning and surge arresters type 1+2 according to EN 61643-11 and IEC 61643-11 and UTE C 61-740-51. These arresters are recommended for use in the Lightning Protection Zones Concept at the boundaries of LPZ 0-2 (according to IEC EN 62305) for equipotential bonding of positive and negative busbars of photovoltaic systems and elimination of transient overvoltage that originates during the atmospheric discharges or switching processes. Particular varistor sectors, connected between the terminals L+, L- and PE, are equipped with internal disconnectors, which are activated when the varistors fail (overheat). Operational status indication of these disconnectors is partly visual (discoloration of the signal field) and partly remote monitoring (by potential free change over contacts – only MS types).

The marking **M** specifies a type of construction with removable module.

TYPE		PZH R1 PV/800/7 M, PZH R1 PV/800/7 MS	PZH R1 PV/1000/7 M, PZH R1 PV/1000/7 MS
Test class according to IEC EN 61643-11 and EN 50539-11		TYPE 1+2, CLASS I+II	
Max. continuous operating voltage	U_{cpv}	800 V DC	1000 V DC
Open circuit voltage of PV generator	U_{OCSTC}	$U_{OCSTC} < U_{CPV}/1,2 = 730 \text{ V}$	$U_{OCSTC} < U_{CPV}/1,2 = 830 \text{ V}$
Short circuit withstand	I_{SCPV}	100 A	
Lightning impulse current (10/350)	I_{imp}	6,5 kA	
- charge	Q	3,25 As	
- specific energy	W/R	10 kJ/Ω	
Application		L+/L-, L+/PE, L-/PE	L+/L-, L+/PE, L-/PE
Max. discharge current (8/20)	I_{max}	40 kA	
Nominal discharge current (8/20)	I_n	15 kA	
Voltage protection level at I_n (L+/L-)	U_p	< 3,3 kV	< 3,4 kV
Voltage protection level at I_n (L-/PE)	U_p	< 1,65 kV	< 1,9 kV
Response time	t_A	< 25 ns	
LPZ		0-2	
Housing material		Polyamid PA6, UL94 V-0	
Protection type		IP20	
Operating temperature range	θ	-40°C ... +70 °C	
Cross-section of the connected conductors (at tightening moment of clamps 4 Nm)		25 mm ² (solid)	16 mm ² (wire)
Mounting on		DIN rail 35 mm	
Failure signalisation		green - ok / red - failure	
Potential free signal contact (MS) (recommended cross-section of remote monitoring max.1 mm ²)		AC: 250 V / 0,5 A, DC: 250 V / 0,1 A	
Weight		390 g	400 g
Lifetime		min. 100 000 h	
Article number		77 16 073 (M), 77 16 074 (MS)	77 16 076 (M), 77 16 077 (MS)
VARISTOR-BASED SPARE MODULE		PZH R1 PV/800/7 MODULE	PZH R1 PV/1000/7 MODULE
Article number		77 16 075	77 16 078