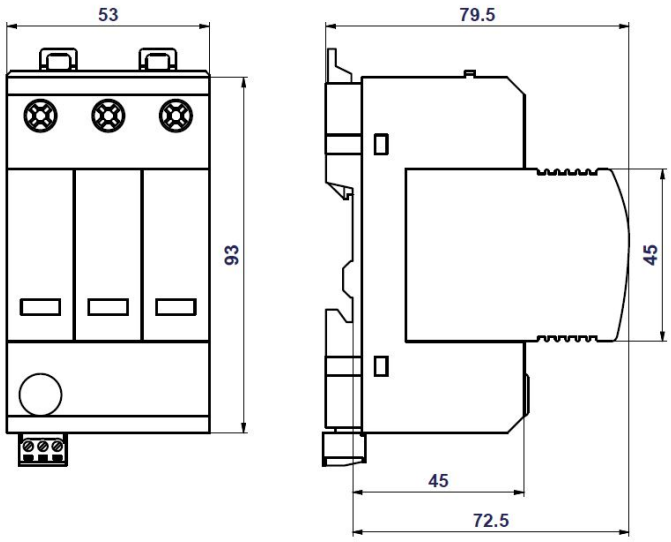
Lightning and surge arresters – (TYP 1 +2)

TYP1+2, CLASS I+II





PIVM PV 600 DS Vseries

PIVM PV 600 DS Vseries is a lightning and surge arrester type 1+2 intended for photovoltaic systems (PV) according to EN 61643-31. It is installed as close as possible to the inverter on the DC side according to EN 62305 for equipotential bonding of positive and negative busbars of photovoltaic systems, which ensures the elimination of transient overvoltage that originates during the atmospheric discharges (including direct lightning strike to the PV system) 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 DS types).The position of the applied HAKEL SPD can be horizontal, vertical, rotated by 90 or 180 degrees and this position does not affect the SPD function or the specified parameters.

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

Typ		**PIVM PV 600 DS Vseries**
Test class according to EN 61643-11:2012 and IEC 61643-11:2011		TYP1+2, CLASS I+II
Maximum continuous operating voltage	U_C	600 V DC
Max. voltage of PV generator	U_{OCSTC}	U OCSTC < U CPV /1,2 = 500 V
Short-circuit current rating for PV application	I_{SCPV}	10 kA
Impulse discharge current for class I test (10/350)	I_{imp}	6,5 kA
Charge	Q	3,25 As
Specific energy for class I test	W/R	10 kJ/Ω
Application		L+/L-, L+/PE, L-/PE
Maximum discharge current	I_{max}	40 kA
Nominal discharge current for class II test (8/20)	I_n	20 kA
Voltage protection level at I_n	U_p	< 2,6 kV
Response time	t_A	< 25 ns
LPZ		0-1 and higher
Housing material		Polyamid PA6, UL94 V-0
Degree of protection of enclosure		IP20
Operating temperature	ϑ	-40°C ... +70 °C

PIVM PV 600 DS Vseries		T1: 6 mm² (L, N), 16 mm² (PE, PEN) T2: 2,5 mm² (L, N), 6 mm² (PE, PEN)
Range of clamps fastening		2,5 ÷ 35 mm² (solid) / 2,5 ÷ 25 mm² (wire)
Method of assembly		DIN rail 35 mm
Failure signalisation (S)		green - ok / red - failure
Potential free signal contact (DS) (recommended cross-section of remote monitoring max.1 mm^2)		AC: 250 V / 1,5 A, DC: 250 V / 0,1 A
Weight	m	300 g
Lifetime		min.100 000 h
Article number		
PIVM PV 600 DS Vseries		**16 071**

