

# PRODUCT DATA SHEET

## Surge Protective devices

### SPDs for power systems

**Code: 6881021-70**

**Description: Medium voltage SPD ZHP MV 21, code 6881021-70**

#### Description

Heavy duty surge arrester suitable for indoor and outdoor installation in medium voltage systems. It is providing optimum protection and can be installed inside MV transformer's switchgear or distribution boards. It is containing a disconnection mechanism which disconnects the arrester from the network at the end of its lifetime. Its external housing is made out of a blended ethylene, propylene and polymeric synthetic material, which is resistant to water, ultraviolet radiation and contamination. All the raw materials and the final product are 100% tested before approval for final use. Mounting is achieved using an insulating bracket, which provides insulation between the arrester and the earthing system after the disconnection mechanism has operated.



#### Technical characteristics

Protection type EN / IEC 60099-4	Class I
Number of poles	1
Connection between terminals	L-GND (PE)
Nominal operating voltage, $U_r$	21 kV, 50 Hz
Maximum operating voltage, MCOV, $U_c$	17 kV, 50 Hz
High current short duration 4/10 $\mu$ s	100 kA
Switching impulse 250/2000 $\mu$ s	45,5 kV
Nominal current, $I_n$ , (IEC) 8/20 $\mu$ s	10 kA
Duty cycle (IEC)	10 kA
Short circuit withstand	20 kA / 50 Hz
Disconnection time of internal fuse at 5 A, 50 Hz	2 s
Disconnection time of internal fuse at 1000 A, 50 Hz	8 ms
Residual voltage (at $I_n$ : 10 kA, 8/20 $\mu$ s)	62,1 kV
Residual voltage (at 3 kA, 8/20 $\mu$ s)	53,2 kV

Residual voltage (at 5 kA, 8/20μs)	56,3 kV
Residual voltage (at 20 kA, 8/20μs)	70,9 kV
Residual voltage (at 40 kA, 8/20μs)	83,2 kV
Creepage distance	708 mm
Dimensions without bracket, WxH	109x311 mm
Dimensions with bracket, WxHxD	109x311x211,55 mm
Weight	2,68 kg
Installation location	indoor / Outdoor
Operating temperature	-20 oC ÷ +60 oC
Maximum conductor for terminal	50 mm <sup>2</sup>
Certification	REA listed
Installation only by qualified electrician	IEC 60417-6182
ELEMKO management systems	ISO 9001, ISO 14001, ISO 45001