

# WSPSA1

## 42kV $U_r$ , 33.6kV $U_c$ , polymeric surge arrester



- Metal oxide arrester (ZnO)
- Polymeric Housing
- Outdoor application
- IEC 60099-4; 2014
- Nominal discharge current: 10 kA
- Designation class SL
- Charge current rate (Qrs): 1.6 C (Impulse)
- High current impulse 4/10  $\mu$ s: 100 kA
- Energy Capability (Wth): 6.7 kJ/kV at  $U_r$  (Thermal)
- These arresters meet the requirements of ENA G78 Issue 4 for use as SA1\*

### Product code

PBA1-42



### Marking

PBA1-42  
 $U_r$ : 42.0 kV  $U_c$ : 33.6 kV  
 IEC 60099-4  
 Designation SL  
 $I_{sc}$  65 kA  
 Serial No  
 Energy 6.7 kJ/kV-Ur  
 Nom Disc Curr 10 kA  
 Qrs: 1.6C  
 Manufacturing Year

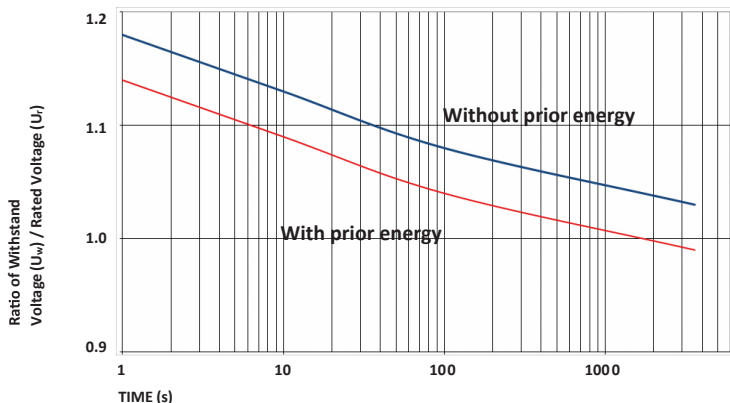


### Surge Arrester Characteristics

Rated voltage	$U_r$	42 kV
Continuous operating voltage	$U_c$	33.6 kV
TOV Capability (With prior energy), 1s	$T_c$	47.8 kV
TOV Capability (With prior energy), 10s	$T_c$	45.7 kV
Rated short circuit current		65 kA
<b>Cantilever Load</b>		
Safe long-term load (SLL)		0.6 kNm
Safe short-term load (SSL)		1.0 kNm
Dry impulse voltage, 1,2/50 $\mu$ s		321 kV
Wet power frequency voltage		122 kV
Flashover Distance		461 mm
Creepage Length		1340 mm
Minimum distance between Phase Centers		348 mm
Minimum distance between Phase to Earth		270 mm
Height		449 mm
Approx. Weight		7.0 kg

### Maximum Residual Voltages

Lightning current impulse, 8/20 $\mu$ s						
I (kA)	1.5	3	5	10	15	20
V (kV)	92.8	97.6	99.7	106	112	117
Steep lightning current impulse, 1/20 $\mu$ s						
I (kA)	10					
V (kV)	111					
Switching current impulse, 30/60 $\mu$ s						
I (A)	125	250	500	1000	2000	3000
V (kV)	80.6	82.9	85.4	88.2	92.4	95.4



### Line terminal options



L1  
M16 stud assembly



L2  
Line Clamp to suit cables up to Ø16 mm



L5  
Line Clamp to suit cables up to Ø35 mm



L6  
Aluminium Stem  
Ø30 x 80mm high



L21  
4 Hole NEMA Pad

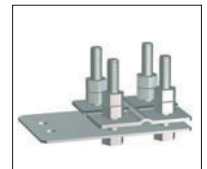
### Ground terminal options



E1  
2 x M10 x 20mm  
Hexagonal headed  
set screws and  
spring washers



E2  
Earth Clamp to suit cables up to Ø16 mm



E5  
Earth Clamp to suit cables from Ø16 mm to 35mm

### Ground terminal options



M7  
Pedestal Base with  
3 x 15mm slots on  
200mm - 254mm  
PCD



M8  
Set of 3 Ø89 x 76  
Polyfibre Base  
Insulators supplied  
with M7 pedestal  
base with 3 x 15mm  
slots on 200mm -  
254mm PCD

\* Suitable for sites with a 50Hz ROP <33kV. Support insulators must have an impulse withstand voltage of >133kV. See ENA Engineering recommendation G78, Issue 4, § 4.4.8.1 for details.