

Surge arrester POLIM-C..LB



Overvoltage protection of

- Cable sheath
- Motors

Application

- Alternating current (AC)
- Indoor

Technical data

Surge arrester with metal oxide resistors without spark gaps (MO surge arrester), direct molded silicone housing, grey color, designed and tested according to IEC 60099-4.

Nominal discharge current I_n 8/20 μ s	10 kA peak
Line discharge class (LD)	2
High current impulse I_{hc} 4/10 μ s	100 kA peak
Long duration current impulse	550 A / 2000 μ s

The thermal stability of the MO surge arrester is proved in the operating duty test according to LD 2, which gives an energy input of 5.5 kJ/kV (U_c).

Power frequency voltage versus time characteristic (TOV) with prior energy input

$t = 1$ s	$U_{TOV} = 1.31 \times U_c$
$t = 3$ s	$U_{TOV} = 1.28 \times U_c$
$t = 10$ s	$U_{TOV} = 1.25 \times U_c$

Mechanical loads

Torque moment	30 Nm
Tensile strength axial	1000 N

General data

Ambient air temperature	-60 to +40 °C (for higher values contact manufacturer)
Altitude	up to 1800 m (for higher values contact manufacturer)
Frequency of system voltage	16.7/50/60 Hz



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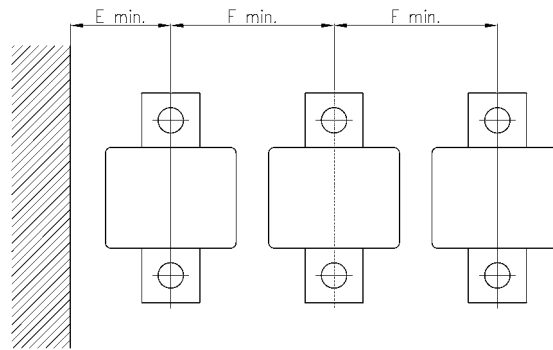
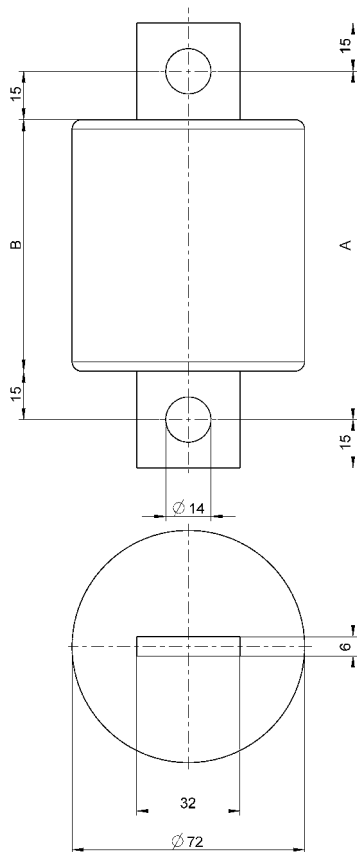
Electrical data

U_c Continuous operating voltage	U_r Rated voltage	Residual voltage U_{res} in kV peak at specified impulse current									
		wave 1/... μ s		wave 8/20 μ s					wave 30/60 μ s		
kV	kV	5 kA	10 kA	1.0 kA	2.5 kA	5 kA	10 kA	20 kA	125 A	250 A	500 A
rms	rms	peak	peak	peak	peak	peak	peak	peak	peak	peak	peak
2.3	2.88	8.7	9.7	6.8	7.2	7.5	7.9	9.1	5.9	6.1	6.4
3.0	3.75	11.2	12.3	8.8	9.3	9.8	10.3	11.8	7.7	8.0	8.3
4.0	5.0	14.8	16.1	11.8	12.5	13.1	13.8	15.8	10.3	10.7	11.1
4.8	6.0	17.5	19.0	14.1	14.9	15.6	16.5	18.9	12.3	12.8	13.2

Housing

U_c Continuous operating voltage	Creepage distance	Flashover distance	Recommended minimum clearances		Height A	Height B	Weight	Insulation withstand voltage of empty housing			
			E_{min}	F_{min}				1.2/50 μ s		1 min dry	
kV rms	mm	mm	mm	mm	mm	mm	kg	required values acc. to IEC	guaranteed	required values acc. to IEC	guaranteed
2.3	93	93	42	77	85.5	55.5	< 0.62	11.9	60	4.8	14
3.0	93	93	49	77	85.5	55.5	< 0.65	15.4	60	6.3	14
4.0	115	115	60	92	108	78	< 0.87	21.0	60	8.4	14
4.8	115	115	69	104	108	78	< 0.91	25.0	60	9.9	14

Dimensions (mm)



Standard dimensions without accessories (may be subject to changes)
 Dimensions according outline drawing 1HC0020135
 Outline drawings with accessories on request

Structure of type designation

POLIM-C 4.0 LB
 Type of arrester _____
 U_c = Continuous operating voltage _____
 Housing _____

For further information please contact:

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For detailed information regarding the dimensioning of our products see the following ABB documents:

- Application guidelines
Overvoltage protection
Metal oxide surge arresters in medium voltage systems
- Application guidelines
Overvoltage protection
Metal oxide surge arresters in railway facilities

For pdf or print version please send E-mail to:
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