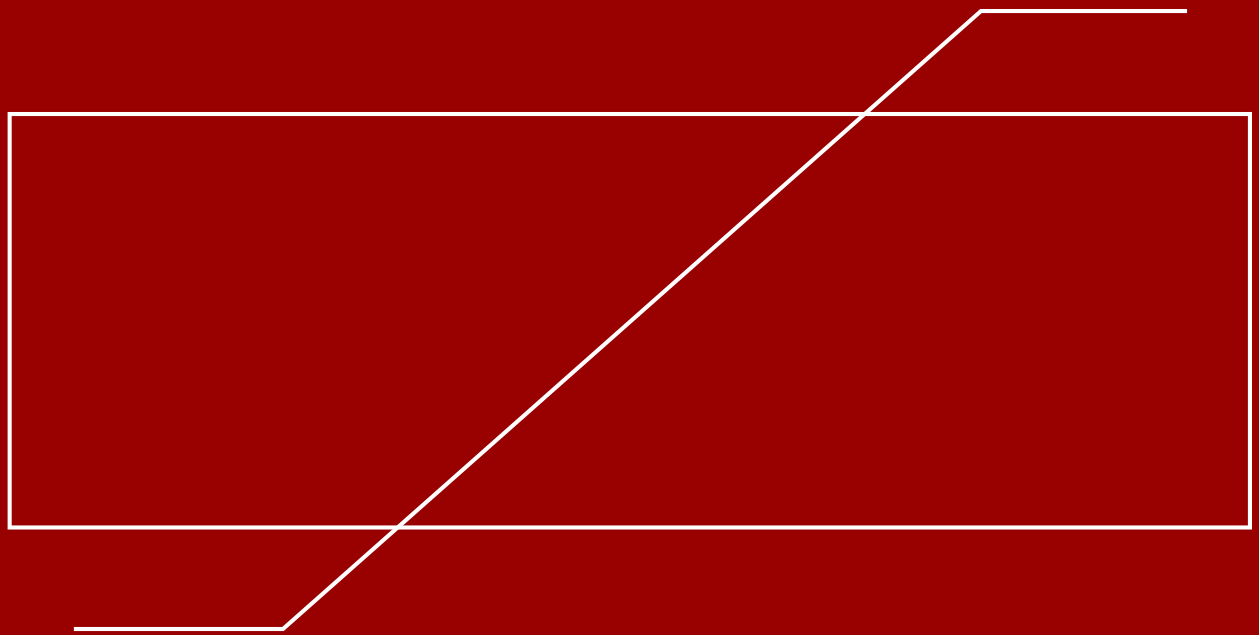
Medium Voltage (4.5kv)

OBLUM
50 YEARS OF EXCELLENCE

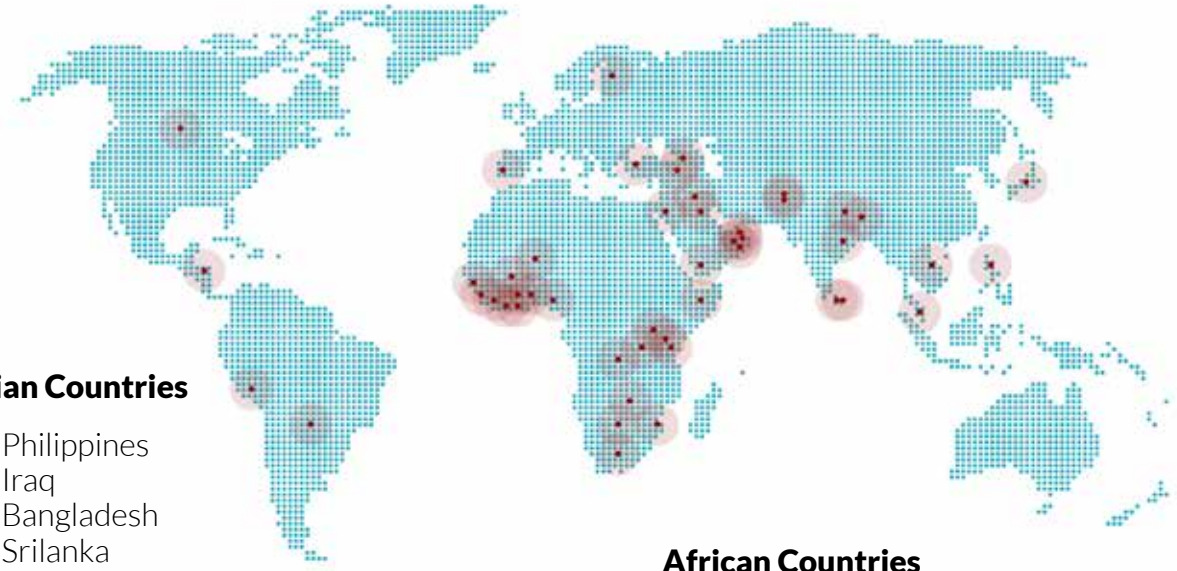
Pioneering Cutting-Edge Solutions for Tomorrow

Powering Progress for Over Half a Century: We've been at the forefront of electrical polymer surge arresters manufacturing, continuously innovating for 50+ years, delivering solutions that energize the world.



Global Presence

Oblum business operations are present in multiple geographies across the globe. We are committed to our vision of driving positive change in the environment and in the lives of people.



Asian Countries

- Philippines
- Iraq
- Bangladesh
- Srilanka
- Turkey
- Abu Dhabi
- Bhutan
- Malaysia
- Nepal
- Uganda
- Uae
- Afghanistan
- Vietnam
- Sharjah
- Nigeria
- Colombo
- Kabul
- Jordan
- Kenya
- Yemen
- Dubai
- Armenia
- Georgia
- Japan
- Kuwait

South American Countries

- Peru
- Paraguay

North American Countries

- Nicaragua
- Canada

European Countries

- Finland
- Spain

African Countries

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- Rwanda
- Togo
- Mali
- Zambia
- Burkina Faso
- Mozambique
- Congo
- Tanzania
- Uganda
- South Africa
- Ivory Coast
- Ethiopia
- Botswana
- Liberia
- Transco Clsg
- Ghana
- Sierra Leone
- Gambia

Medium Voltage (4.5kv)

INDOOR SPF			
S No	**Description**	**4.5kV 10kA SL**	**4.5kV 10kA SM**
	Model	**SPF**	**SPF**
	OUTDOOR/ INDOOR	**INDOOR**	**INDOOR**
	System earthing	**solidly / ineffectively earthed sytem**	**solidly / ineffectively earthed sytem**
1	Highest system voltage kV rms	3.6	3.6
2	Nominal system voltage kVrms	3.3	3.3
3	Ur - Rated voltage kVrms	4.5	4.5
4	Uc - MCOV(kVrms)	3.8	3.8
5	In - NDC (8/20µs) kA	10	10
6	Arrester classification	Station Low duty	Station Medium Duty
7	Qrs (IEC 99-4 Ed.3) in coulomb	1	1.6
8	Wth (IEC 99-4 Ed.3) in kJ/kV	4	7
9	Qth (IEC 99-4 Ed.3) in coulomb		
10	Max RDV kVp		
	a) 5kA	13	12
	b) 10kA	14	13
	c) 20kA	15	14
11	Max. Switch. Imp. RDV(kVp)		
		11	
			10.4
12	Max. Steep Current impulse RDV(kVp) at NDC	15	14
13	High current impulse withstand value (4/10 µs) kA	100	100kA
14	TOV (kVp)		
	i. 0.1	8	8
	ii. 1.0Sec	7.6	7.6
	iii. 10.0Sec	7.3	7.3
	iv. 100.0Sec	6.9	6.9
15	Short circuit current kA	25/31.5 (as applicable)	25/31.5 (as applicable)
16	Insulation Withstand		
	a) Lightning Impulse (kVp)	As per IEC 60099-4 2014	As per IEC 60099-4 2014
	b) Power frequency kVrms	As per IEC 60099-4 2014	As per IEC 60099-4 2014
	c) Switching Imp (Wet)(kVp)	NA	NA
17	Rated frequency (Hz)	48 to 62	48 to 62
18	Leakage current		
	a. IR at MCOV in µA	Less than 400	Less than 400
	b. IC at MCOV in mA	About 1.2	About 1.4
19	Reference voltage in Volt at Reference current in mA	> 4.5kV at 2mA	> 4.5kV at 3mA
20	Partial discharge P.D	10pC	10pC
21	Creepage distance-mm (min) Phase to Phase	NA	NA
22	Max. Cantilever strength of arrester Kgf	NA	NA

DISTRIBUTION MEDIUM DUTY			
S No	**Description**	**4.5kV 5kA DM**	**4.5kV 10kA DH**
	Model	**PBW**	**PBW**
	OUTDOOR/ INDOOR		
	System earthing		
1	Highest system voltage kV rms	3.6	3.6
2	Nominal system voltage kVrms	3.3	3.3
3	Ur –Rated voltage kVrms	4.5	4.5
4	Uc -MCOV(kVrms)	3.8	3.8
5	In –NDC (8/20µs) kA	5	10
6	Arrester classification	Distribution Medium Duty	Distribution High duty
7	Qrs(IEC 99-4 Ed.3) in coulomb	0.2	0.4
8	Wth (IEC 99-4 Ed.3) in kJ/kV		
9	Qth (IEC 99-4 Ed.3) in coulomb	0.7	1.1
10	Max RDV kVp		
	a)5kA	15	13
	b)10kA	17	14
	c)20kA		16
11	Max. Switch. Imp. RDV(kVp)	NA	NA
12	Max. Steep Current impulse RDV(kVp) at NDC	17	16
13	High current impulse withstand value (4/10 µs) kA	65	100
14	TOV (kVp)		
	i. 0.1	8	8
	ii.1.0Sec	7.6	7.6
	iii. 10.0Sec	7.3	7.3
	iv. 100.0Sec	6.9	6.9
15	Short circuit current kA	25/31.5 (as applicable)	25/31.5 (as applicable)
16	Insulation Withstand		
	a)Lightning Impulse (kVp)	As per IEC 60099-4 2014	As per IEC 60099-4 2014
	b)Power frequency kVrms	As per IEC 60099-4 2014	As per IEC 60099-4 2014
	c)Switching Imp (Wet)(kVp)	NA	NA
17	Rated frequency (Hz)	48 to 62	48 to 62
18	Leakage current		
	a.IR at MCOV in µA	Less than 400	Less than 400
	b. IC at MCOV in mA	About 1.2	About 1.2
19	Reference voltage in Volt at Reference current in mA	> 4.5kV at 1mA	> 4.5kV at 1mA
20	Partial discharge P.D	10pC	10pC
21	Creepage distance-mm (min) Phase to Phase	25mm/kV /31mm/kV (as applicable)	25mm/kV /31mm/kV (as applicable)
22	Max. Cantilever strength of arrester Kgf	NA	NA

MEDIUM STATION PBW			
S No	**Description**	**4.5kV 5kA DM**	**4.5kV 10kA DH**
	Model	**PBW**	**PBW**
	OUTDOOR/ INDOOR		
	System earthing		
1	Highest system voltage kV rms	3.6	3.6
2	Nominal system voltage kVrms	3.3	3.3
3	Ur –Rated voltage kVrms	4.5	4.5
4	Uc -MCOV(kVrms)	3.8	3.8
5	In –NDC (8/20µs) kA	10	10
6	Arrester classification	Station Low duty	Staion Medium Duty
7	Qrs(IEC 99-4 Ed.3) in coulomb	1	1.6
8	Wth (IEC 99-4 Ed.3) in kJ/kV	4	7
9	Qth (IEC 99-4 Ed.3) in coulomb		
10	Max RDV kVp		
	a)5kA	13	12
	b)10kA	14	13
	c)20kA	15	14
11	Max. Switch. Imp. RDV(kVp)		
		11	
		10.4	
12	Max. Steep Current impulse RDV(kVp) at NDC	15	14
13	High current impulse withstand value (4/10 µs) kA	100	100
14	TOV (kVp)		
	i. 0.1	8	8
	ii.1.0Sec	7.6	7.6
	iii. 10.0Sec	7.3	7.3
	iv. 100.0Sec	6.9	6.9
15	Short circuit current kA	25/31.5 (as applicable)	25/31.5 (as applicable)
16	Insulation Withstand		
	a)Lightning Impulse (kVp)	As per IEC 60099-4 2014	As per IEC 60099-4 2014
	b)Power frequency kVrms	As per IEC 60099-4 2014	As per IEC 60099-4 2014
	c)Switching Imp (Wet)(kVp)	NA	NA
17	Rated frequency (Hz)	48 to 62	48 to 62
18	Leakage current		
	a.IR at MCOV in µA	Less than 400	Less than 400
	b. IC at MCOV in mA	About 1.2	About 1.4
19	Reference voltage in Volt at Reference current in mA	> 4.5kV at 2mA	> 4.5kV at 3mA
20	Partial discharge P.D	10pC	10pC
21	Creepage distance-mm (min) Phase to Phase	25mm/kV /31mm/kV (as applicable)	25mm/kV /31mm/kV (as applicable)
22	Max. Cantilever strength of arrester Kgf	150	150

MEDIUM STATION PBC			
S No	**Description**	**4.5kV 10kA SL**	**4.5kV 10kA SM**
	Model	**PBC**	**PBC**
	OUTDOOR/ INDOOR		
	System earthing		
1	Highest system voltage kV rms	3.6	3.6
2	Nominal system voltage kVrms	3.3	3.3
3	Ur –Rated voltage kVrms	4.5	4.5
4	Uc -MCOV(kVrms)	3.8	3.8
5	In –NDC (8/20µs) kA	10	10
6	Arrester classification	Station Low duty	Station Medium Duty
7	Qrs(IEC 99-4 Ed.3) in coulomb	1	1.6
8	Wth (IEC 99-4 Ed.3) in kJ/kV	4	7
9	Qth (IEC 99-4 Ed.3) in coulomb		
10	Max RDV kVp		
	a)5kA	13	12
	b)10kA	14	13
	c)20kA	15	14
11	Max. Switch. Imp. RDV(kVp)		
		11	
		10.4	
12	Max. Steep Current impulse RDV(kVp) at NDC	15	14
13	High current impulse withstand value (4/10 µs) kA	100	100
14	TOV (kVp)		
	i. 0.1	8	8
	ii.1.0Sec	7.6	7.6
	iii. 10.0Sec	7.3	7.3
	iv. 100.0Sec	6.9	6.9
15	Short circuit current kA	40	40
16	Insulation Withstand		
	a)Lightning Impulse (kVp)	As per IEC 60099-4 2014	As per IEC 60099-4 2014
	b)Power frequency kVrms	As per IEC 60099-4 2014	As per IEC 60099-4 2014
	c)Switching Imp (Wet)(kVp)	NA	NA
17	Rated frequency (Hz)	48 to 62	48 to 62
18	Leakage current		
	a.IR at MCOV in µA	Less than 400	Less than 400
	b. IC at MCOV in mA	About 1.2	About 1.4
19	Reference voltage in Volt at Reference current in mA	> 4.5kV at 2mA	> 4.5kV at 3mA
20	Partial discharge P.D	10pC	10pC
21	Creepage distance-mm (min) Phase to Phase	25mm/kV /31mm/kV (as applicable)	25mm/kV /31mm/kV (as applicable)
22	Max. Cantilever strength of arrester Kgf	150	150

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