

## **BMA SERIES**

### **Bracket Mounted Surge Arrester**



#### **FEATURES**

- High current capacity
- Compact design
- Multi-orientation mounting
- Heavy duty earth terminal
- Indoor/outdoor use
- Low residual voltage

#### **Characteristics:**

*Device Specifications as detailed in Table BMAT2*

<b>Terminations</b>	M10 stud and clearance holes
<b>Coating</b>	Epoxy to UL94V-0
<b>Temperature Range</b>	-5° to +50° (95% RH)
<b>Dimensions</b>	as detailed in Drawing No. BMA001 and Table BMAT3
<b>Maximum weight</b>	850g

PD Devices Ltd. offer a range of Bracket Mounted Surge Arresters capable of handling surge currents in excess of 200kA. The device, although designed primarily for applications within the locomotive industry, is not limited to this field. The high current capability and low residual voltage does mean that the arrester can offer protection from the effects of lightning in addition to other line disturbances. To facilitate fitting, the arrester can be mounted in any orientation, with the mounting bracket able to function as a heavy duty earth terminal.



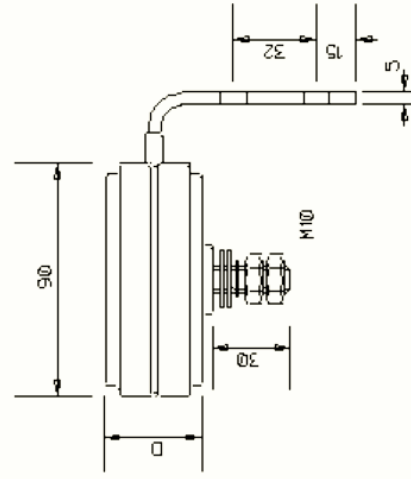
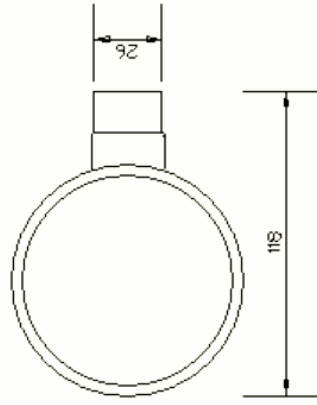
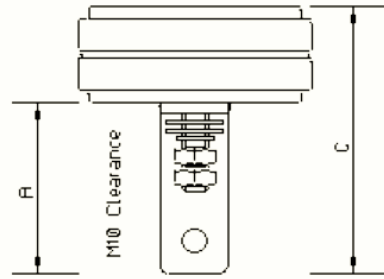
No: GB05/66964

**BMA Series Surge Arrestors (Table BMAT2)**  
**Internal Specification for Finished Assembly**

Type	Reference Voltage (Vref) At 20mA		DC Applications		AC Applications		Peak Residual Voltage				Energy withstand (2ms)
	Minimum	Maximum	Maximum continuous operation voltage	Rated voltage	Maximum continuous operation voltage (rms)	Rated voltage (rms)	200A (8/20 $\mu$ s)	1kA (8/20 $\mu$ s)	10kA (8/20 $\mu$ s)	80kA (4/10 $\mu$ s)	(KJ)
<b>BMA 1</b>	1000	1100	900	960	678	692	1460	1540	1870	3000	20
<b>BMA 1.1</b>	1100	1200	990	1056	746	762	1600	1680	2040	3280	21
<b>BMA 1.2</b>	1200	1300	1080	1152	814	831	1720	1820	2210	3550	22
<b>BMA 1.3</b>	1300	1400	1170	1248	882	900	1850	1960	2380	3830	23
<b>BMA 1.4</b>	1400	1500	1260	1344	950	970	1980	2120	2550	4100	24
<b>BMA 1.5</b>	1500	1600	1350	1440	1018	1039	2120	2250	2720	4370	25
<b>BMA 1.6</b>	1600	1700	1440	1536	1086	1108	2250	2380	2890	4650	26
<b>BMA 1.7</b>	1700	1800	1530	1632	1153	1178	2380	2520	3060	4920	27
<b>BMA 1.8</b>	1800	1900	1620	1728	1221	1247	2510	2660	3230	5190	28
<b>BMA 1.9</b>	1900	2000	1710	1824	1289	1316	2640	2800	3400	5460	29
<b>BMA 2</b>	2000	2100	1800	1920	1357	1385	2780	2940	3570	5740	30
<b>BMA 2.1</b>	2100	2200	1890	2016	1425	1455	2910	3080	3740	6000	31
<b>BMA 2.2</b>	2200	2300	1980	2112	1493	1524	3040	3220	3910	6280	32
<b>BMA 2.3</b>	2300	2400	2070	2208	1561	1593	3170	3360	4080	6560	33
<b>BMA 2.4</b>	2400	2500	2160	2304	1629	1663	3300	3500	4250	6830	34
<b>BMA 2.5</b>	2500	2600	2250	2400	1697	1732	3440	3640	4420	7100	35
<b>BMA 2.6</b>	2600	2700	2340	2496	1764	1801	3570	3780	4590	7380	36
<b>BMA 2.7</b>	2700	2800	2430	2592	1832	1871	3700	3920	4760	7650	37
<b>BMA 2.8</b>	2800	2900	2520	2688	1900	1940	3830	4060	4930	7920	38
<b>BMA 2.9</b>	2900	3000	2610	2784	1968	2009	3960	4200	5100	8190	39

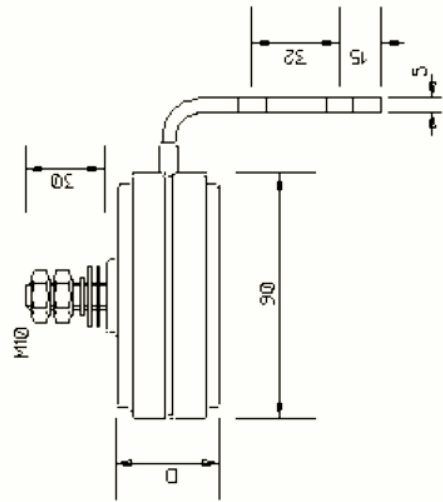
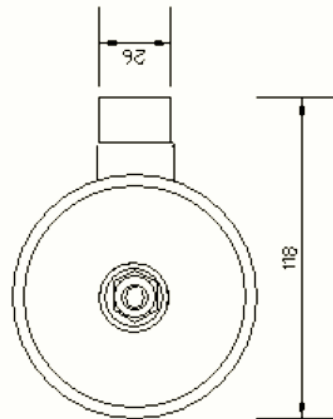
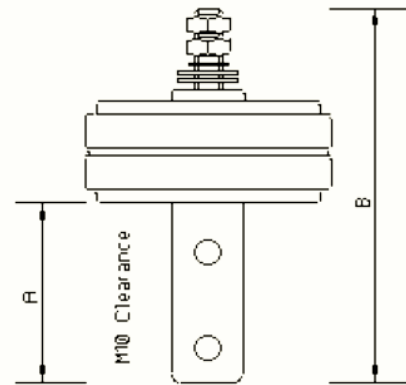
**Diagram BMA001**

Type B



Tolerance +/- 0.5mm, except  
\* dimensions which will depend  
on precise electrical specification

Type A



**BMA Series Surge Arrestors (Table BMAT3)**  
**Finished Assembly and Resistor Dimensions**

Type	Dimensions				Block Size
	A	B	C	D	
	+/- 1.0	+/- 1.0	+/- 1.0	+/- 2.0	
<b>BMA 1</b>	61.5	131	96	37	10
<b>BMA 1.1</b>	61	131.5	96.5	38	10.5
<b>BMA 1.2</b>	60.5	132	97	39	11
<b>BMA 1.3</b>	60	132.5	97.5	40	11.5
<b>BMA 1.4</b>	59.5	133	98	41	12
<b>BMA 1.5</b>	59	133.5	98.5	42	12.5
<b>BMA 1.6</b>	58.5	134	99	43	13
<b>BMA 1.7</b>	58	134.5	99.5	44	13.5
<b>BMA 1.8</b>	57.5	135	100	45	14
<b>BMA 1.9</b>	57	135.5	100.5	46	14.5
<b>BMA 2</b>	56.5	136	101	47	15
<b>BMA 2.1</b>	56	136.5	101.5	48	15.5
<b>BMA 2.2</b>	55.5	137	102	49	16
<b>BMA 2.3</b>	55	137.5	102.5	50	16.5
<b>BMA 2.4</b>	54.5	138	103	51	17
<b>BMA 2.5</b>	54	138.5	103.5	52	17.5
<b>BMA 2.6</b>	53.5	139	104	53	18
<b>BMA 2.7</b>	53	139.5	104.5	54	18.5
<b>BMA 2.8</b>	52.5	140	105	55	19
<b>BMA 2.9</b>	52	140.5	105.5	56	19.5

**Resistor block dimensions are subject to change**

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