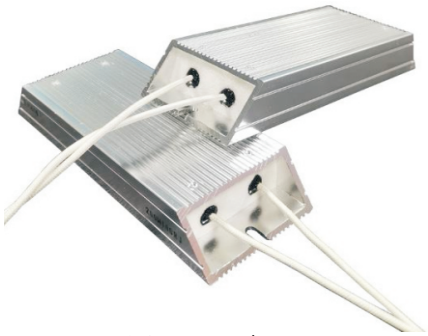
MNT Aluminium Case resistor

Catalogue

MNT Aluminium Case resistor



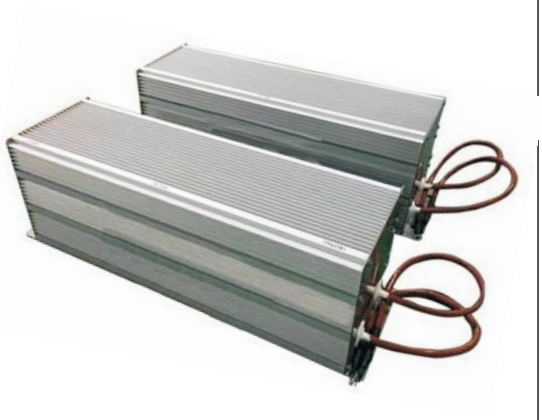
MNT 4020/6030
40W~800W

MNT 7045/50107
1KW~2KW

MNT 12840
2KW~3KW

MNT 17565
4KW~6KW

MNT 175145
8KW~12KW



MNT 175220
15KW~30KW

Features

I .High power, fast heat dissipation, high shock resistance,high stability, long service life, can brake frequently and instantaneously, can work for a long time, resistance value will not change too much, product consistency is high.

Application

Inverter, servo motor, servo driver, power load, elevator,lifting, medium frequency furnace, electric furnace, induction heating equipment industry, new energy vehicle manufacturing, wind power pitch system, wind power electronic control system and converter, solar photovoltaic inverter industry, small and medium-sized wind turbine (including grid connected / off grid type), medical equipment Machinery industry (such as paper machine), communication industry, rail transit, railway locomotive, power system, fan load, mining equipment, transformer, CNC machine tool, reactive power compensation device, laser industry, aviation, shipbuilding, military industry, State Grid, engineering supporting, major universities and design and research institutes.

Product structure

Ⅰ.The core parts of the resistance core are made of insulating and high temperature resistant materials as the resistance framework, evenly wound with high-quality alloy wires, and sealed with high-quality and high thermal conductivity organic quartz sand, so that the metal aluminum shell and the core parts of the resistance are closely combined into a solid entity, free from the influence of external air and dust, It has high stability and thermal conductivity.

Ⅱ.The aluminum shell is made of high-quality industrial 6063 aluminum, and the surface is treated with high-temperature anodizing silver mist or bright silver to achieve better appearance and insulation heat dissipation effect.

Ⅲ According to the resistance to bear different current size, the leading end is connected with high-quality high-temperature braided wire (no fuzzing, no allergy) or copper guide, stainless steel guide, which is convenient for customers to connect at will.

Ⅳ We have 46 aluminum shell models of different styles to facilitate customer selection; Can accept a variety of non-standard customization, all-round to meet customer needs.

Ordering Information

Example:

MNT	4020	50	J	100R0	C1	N
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Series Name	Size	Power	Resistance	Resistance	T.C.R	No Sense Code

(1)Type: MNT Series

(2)Size:4020,6030,7045,50107,12840,17565,175145,175220

(3)Power Rating: 40=40W,50=50W,100=100W,200=200W,800=800W.....

(4)Tolerance: G=±2%,J=±5%,K=±10%

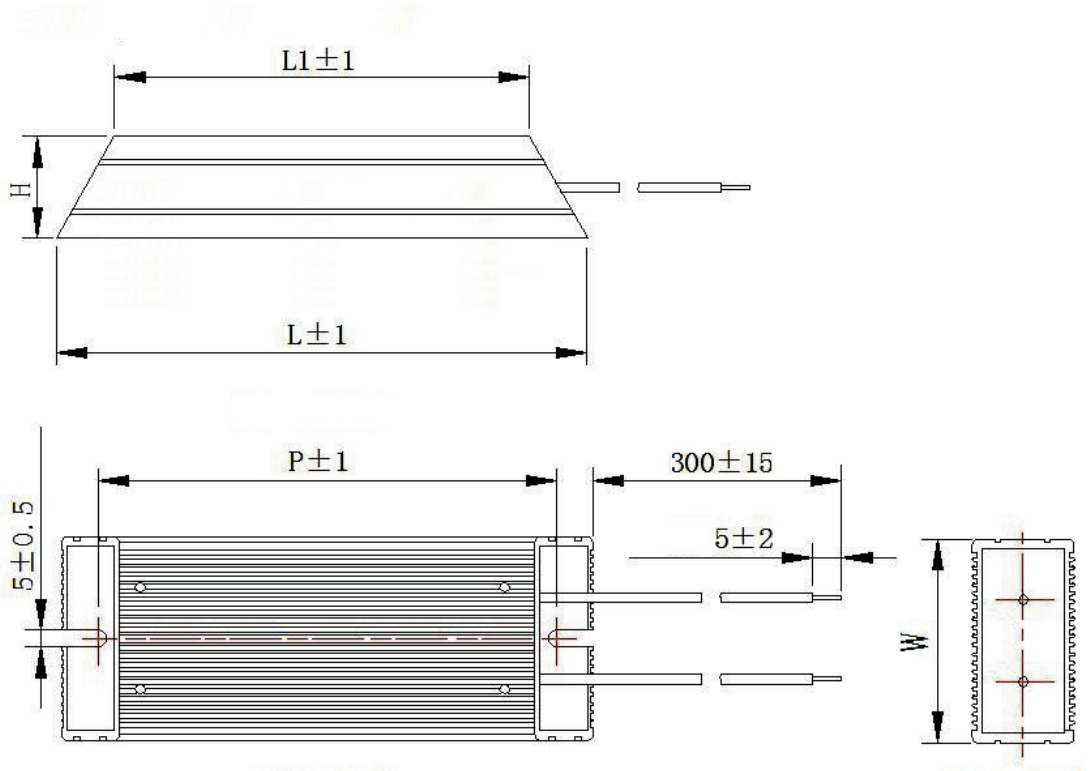
(5)Resistance Value:R100=0.1Ω,1R00=1Ω,10R0=10Ω,100R0=100Ω

(6)T.C.R:C4=±20PPM/℃,C2=±50PPM/℃,C1=±100PPM/℃

(7)No Sense Code: N

Dimensions

MNT 4020/6030 40W-800W



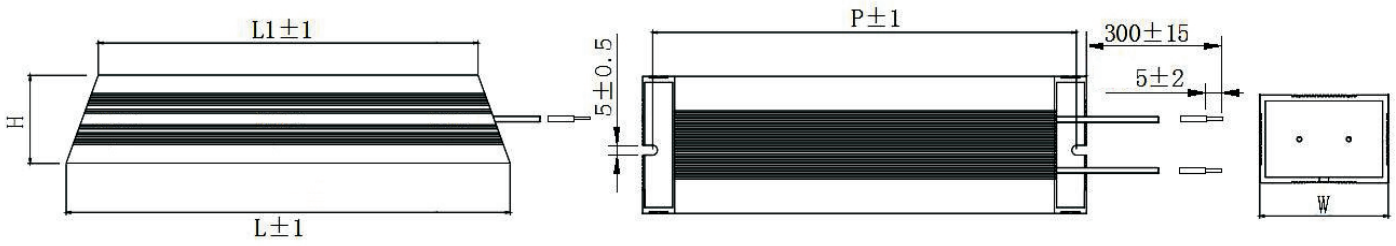
Type	Rated power (25℃)	Resistance Range(Ω)	Dimensions (mm)					Note
			L±3.0	W±0.5	H±0.5	P±1.0	L1±1.0	
MNT 4020	40W	0.1Ω～100KΩ	90	40	20	75	60	1.Resistance value can be customized according to customer requirements 2.Resistance tolerance is generally ±5%, or ±1% ~ ±5% according to customer requirements 3.The lead end uses white braided high temperature wire, can withstand the temperature of 300℃, the end strip 5mm 4.The dimensions of part W and part H are interchangeable
	50W-60W		115	40	20	100	85	
	80W-100W		140	40	20	125	110	
	120W-150W		185	40	20	170	155	
MNT 6030	200W-250W		165	60	30	150	130	
	300W		215	60	30	200	180	
	400W		265	60	30	250	230	
	500W-600W		335	60	30	320	300	
	700W-800W		365	60	30	350	330	

Note: if there are special requirements or parameters beyond the above standard can be negotiated supply, can be changed as follows

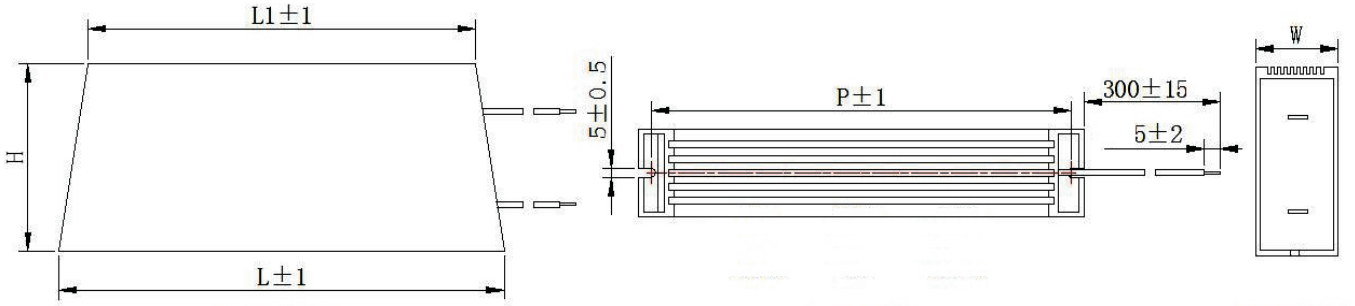
1.Dimensions of aluminum case
2.Color of aluminum case.
3.Dimensions of mounting holes
4.Center distance of mounting hole
5.Material, wire diameter and length of lead end

MNT 7045/50107 1KW-2KW

MNT 7045



MNT 50107



Type	Rated power (25℃)	Resistance Range(Ω)	Dimensions (mm)					Note
			L±3.0	W±0.5	H±0.5	P±1.0	L1±1.0	
MNT 7045	1.0KW	0.1Ω～100KΩ	335	70	45	320	300	1.Resistance value can be customized according to customer requirements 2.Resistance tolerance is generally ±5%, or ±1%～±5% according to customer requirements 3.The lead end uses white braided high temperature wire, can withstand the temperature of 300℃, the end strip 5mm 4.The dimensions of part W and part H are interchangeable
	1.2KW		400	70	45	385	365	
	1.5KW		450	70	45	435	415	
	2.0KW		500	70	45	485	465	
MNT 50107	1.0KW		335	50	107	320	300	
	1.2KW		400	50	107	385	365	
	1.5KW		450	50	107	435	415	
	2.0KW		500	50	107	485	465	

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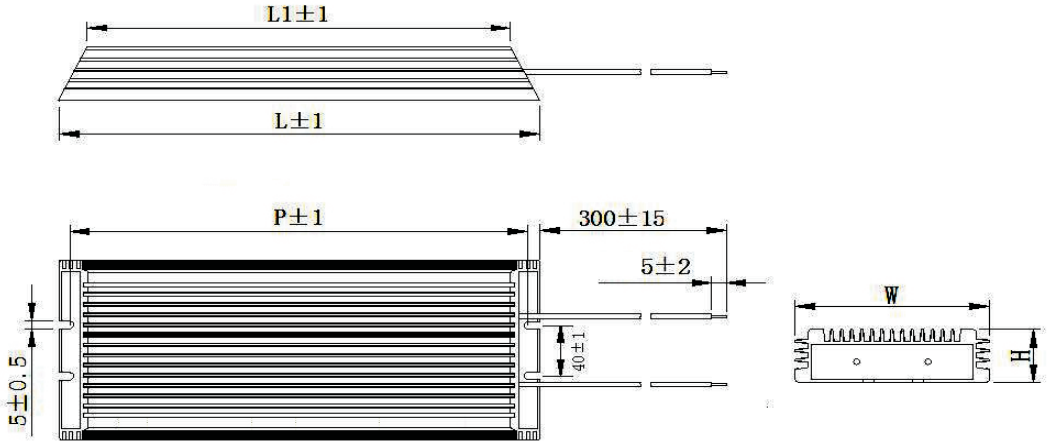
2.Color of aluminum case.
3.Dimensions of mounting holes
4.Center distance of mounting hole
5.Material, wire diameter and length of lead end

MNT 12840 2KW-3KW



Type	Rated power (25℃)	Resistance Range(Ω)	Dimensions (mm)					Note
			L±3.0	W±0.5	H±0.5	P±1.0	L1±1.0	1.Resistance value can be customized according to customer requirements 2.Resistance tolerance is generally ±5%, or ±1% ~ ±5% according to customer requirements 3.The lead end uses white braided high temperature wire, can withstand the temperature of 300℃, the end strip 5mm 4.The dimensions of part W and part H are interchangeable
MNT 12840	2.0KW	0.1Ω～100KΩ	265	128	40	250	235	
	2.5KW		290	128	40	275	260	
	3.0KW		335	128	40	320	300	

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2.Color of aluminum case.
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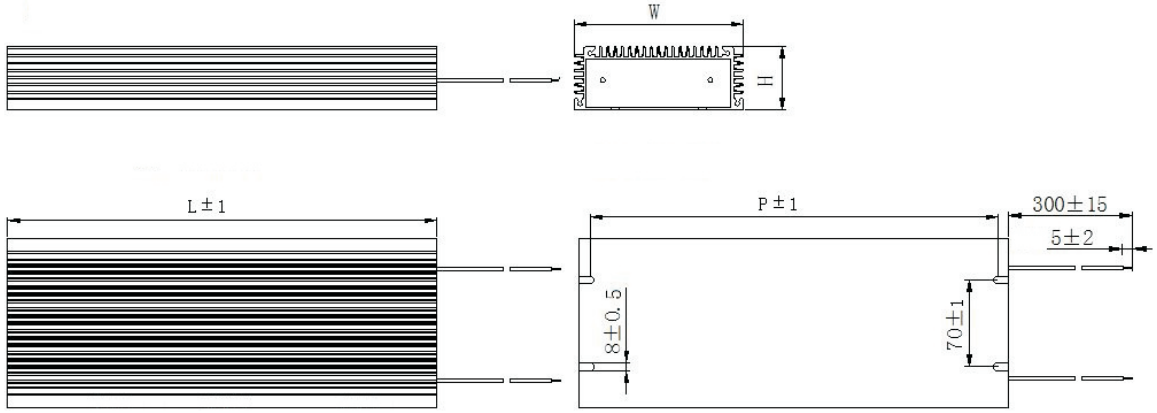
5.Material, wire diameter and length of lead end

MNT 17565 4KW-6KW



Type	Rated power (25℃)	Resistance Range(Ω)	Dimensions (mm)					Note
			L±3.0	W±0.5	H±0.5	P±1.0	L1±1.0	1.Resistance value can be customized according to customer requirements 2.Resistance tolerance is generally ±5%, or ±1% ~ ±5% according to customer requirements 3.The lead end uses white braided high temperature wire, can withstand the temperature of 300℃, the end strip 5mm 4.The dimensions of part W and part H are interchangeable
MNT 17565	4.0KW	0.1Ω～100KΩ	400	175	65	380	235	
	5.0KW		500	175	65	480	260	
	6.0KW		600	175	65	580	300	

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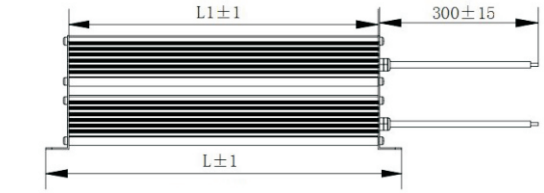
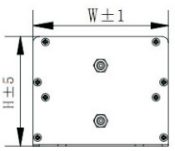
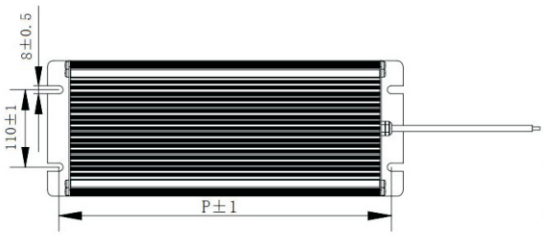
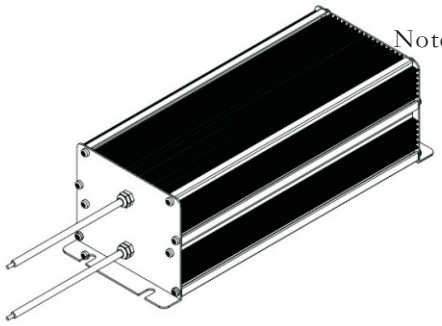
5.Material, wire diameter and length of lead end

MNT 175145 8KW-12KW









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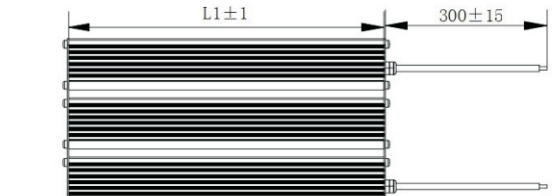
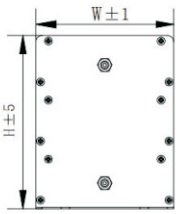
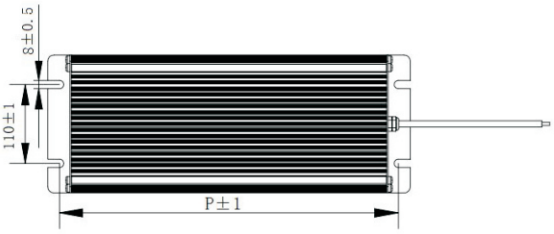
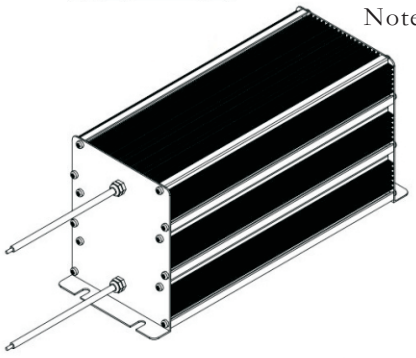
MNT 175145	8.0KW	0.1Ω～100KΩ	494	175	145	472	450	
	10KW		594	175	145	572	550	
	12KW		644	175	145	622	600	

MNT 175220 15KW-30KW









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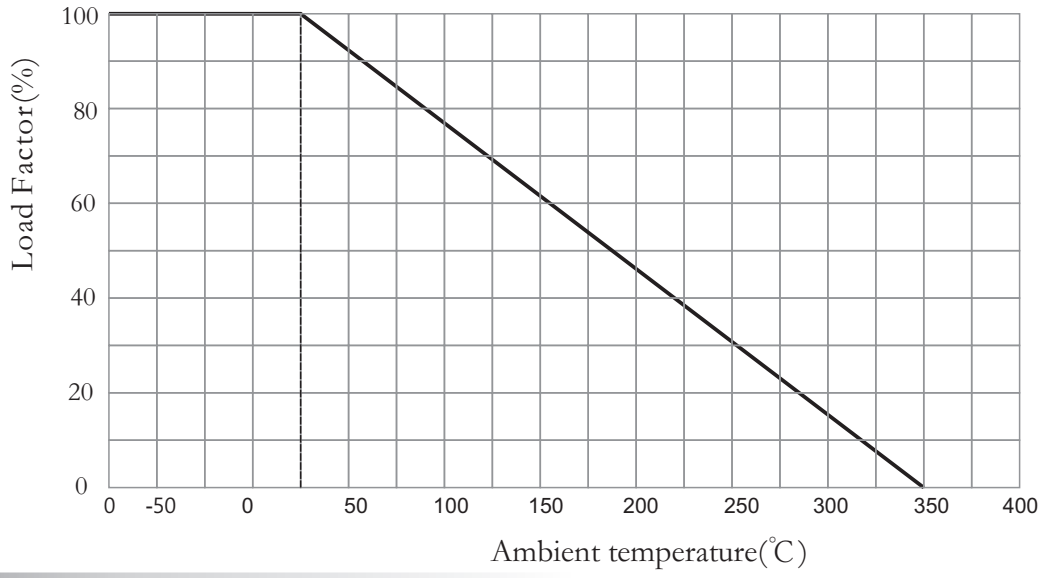
			L±3.0	W±0.5	H±0.5	P±1.0	L1±1.0	1.Resistance value can be customized according to customer requirements 2.Resistance tolerance is generally ±5%, or ±1%～±5% according to customer requirements 3.The lead end uses white braided high temperature wire, can withstand the temperature of 300℃, the end strip 5mm 4.The dimensions of part W and part H are interchangeable
MNT 175220	15KW	0.1Ω～100KΩ	494	175	220	472	450	
	20KW		544	175	220	522	500	
	25KW		594	175	220	572	550	
	30KW		644	175	220	622	600	

Derating curve



Power And Resistance etc

Type	Power Rating at 25℃ (W)	Resistance Range(Ω)	Tolerance	T.C.R PPM/℃	Insulation resistance(V)	Dielectric withstanding voltage (V)
MNT 4020	40W	0.1Ω～100KΩ	±0.5% ±1% ±2% ±5% ±10%	±250PPM/℃ Max	1000VDC	2000VDC 1 minute
	50W-60W					
	80W-100W					
	120W-150W					
MNT 6030	200W-250W					
	300W					
	400W					
	500W-600W					
	700W-800W					
MNT 7045	1.0KW					
	1.2KW					
	1.5KW					
	2.0KW					
MNT 50107	1.0KW					
	1.2KW					
	1.5KW					
	2.0KW					
MNT 12840	2.0KW					
	2.5KW					
	3.0KW					
MNT 17565	4.0KW					
	5.0KW					
	6.0KW					
MNT 175145	8.0KW					
	10.0KW					
	12.0KW					
MNT 175220	15.0KW					
	20.0KW					
	25.0KW					
	30.0KW					

Performance

Test item	Test condition	Specifications
Resistance tolerance	JIS-C-5202 5-1	Resistance Nominal Tolerance 1≤R 1>R ±5%(J) ±10%(K)
Temperature coefficient	JIS-C-5202 5-2	±250PPM/℃ Max
Power rating load	JIS-C-5202 5-4 40℃, power rating 1H	△R≤ ±(1%+0.1Ω)Surface temperature up ≤350℃MAX
Short-term overload	JIS-C-5202 5-5, 500% rated power 5 seconds	Free or appearance or structural irregularity △R≤ ±(2%+0.1Ω)
Insulation resistance	JIS-C-5202 5-6 1000V DC	100 MΩ Min
Dielectric withstanding voltage	JIS-C-5202 5-7, 2000V DC 1 minute	Free or appearance or structural irregularity △R/R≤ ±(0.1%+0.05Ω)
Terminal strength	JIS-C-5202 6-1 MNI 8kg 30s	Free of appearance or structural irregularity
Resistor strength	JIS-C-5202 6-2 MNI 30kg 30s	Free of appearance or structural irregularity
Vibration	JIS-C-5202 6-3 1.5mm,10-50-10Hz min X-Y-Z 2 hours each	Free or appearance or structural irregularity Surface coating crack△R≤ ±(1%+0.05Ω)
Thermal shock	JIS-C-5202 7-3 Room temp 30 minutes	Resistor free of structural irregularity crack
	ON-55℃ 15 minutes OFF	of silicon cement surface △R≤ ±(2%+0.1Ω)
Humidity	JIS-C-5202 7-5, 40℃ 90%RH 240H	Free or appearance or structural irregularity Surface coating crack ΔR/R≤ ±(3%+0.1Ω)
Load life	JIS-C-5202 7-10, 90Min ON-30Minutes OFF 500H	Free of appearance or structural irregularity Discoloration of marking △R≤ ±(3%+0.1Ω)