210 Series

Dividohm® Vitreous Enamel Adjustable Power

FEATURES

- Terminals suitable for soldering or bolt connection.
- Adjustable lug supplied
- High wattage applications
- All-welded construction
- Rugged lead free vitreous enamel coating.
- Flame resistant coating
- Additional adjustable lugs available
- RoHS compliant product available. Add “E” suffix to part number to specify

Choose Ohmite’s 210 Type adjustable resistors for applications requiring settings at different resistance values. These wirewound resistors are equipped with an adjustable lug, making them ideal for adjusting circuits, obtaining odd resistance values and setting equip ment to meet various line voltages. 210 Type resistors feature a hollow core to permit secure fastening with spring-type clips or thru bolts with washers. They also offer the durability of lead free vitreous enamel coating and all-welded construction. Mounting brackets not included with resistors.

SERIES SPECIFICATIONS

Series	Wattage	Ohms	Core Code	Voltage	Standard Terminal
D12	12	1.0-10K	D	565	57
D25	25	1.0-25K	K	625	40
D50	50	1.0-100K	K	1625	40
D75	75	1.0-100K	K	2625	40
D100	100	1.0-100K	M	2845	40
D175	175	1.0-100K	P	3595	46
D225	225	1.0-100K	P	4595	46
D500	500	1.5-15K	S	4970	45
D1000	1000	3.0-27.7K	S	8900	45

Other sizes available; contact Ohmite. Also available in low cost Centohm or Silicone coating; contact Ohmite.

CHARACTERISTICS

Adjustability	10% to 90% of full value. Wattage is proportional to this adjusted resistance value.
Coating	Lead free vitreous enamel. Large models (500 watts and up) are supplied in Silicone Ceramic. Also available in low-cost Centohm coating; Consult factory.
Core	Tubular ceramic.
Terminals	Solder coated radial lug. RoHS solder composition is 96% Sn, 3.5% Ag, 0.5% Cu
Adjustable terminal	Nickel plated steel. (Screwdriver type adjustable lug supplied standard. Other types, including silver contact units, available.)
Derating	Linearly from 100% @ +25°C to 0% @ +350°C.
Tolerance	±10% (K)
Power rating	Based on 25°C free air rating. The stated wattage rating applies only when the entire resistance is in the circuit. Setting the lug at an intermediate point reduces the wattage rating by approximately the same proportion. Example: If the lug is set at half resistance, the wattage is reduced by approx. one-half.
Overload	10 times rated wattage for 5 seconds.
Temperature coefficient	±260 ppm/°C
Dielectric withstanding voltage	1000 VAC: 12 to 100 watt rating. 3000 VAC: 175 and 225 watt rating (measured from terminal to mounting bracket)
Max. amps	To calculate, use the formula $\sqrt{P/R}$.

Power limitations for high resistance values: When resistance exceeds the resistance values listed below, derate the Power Rating by 25% to improve reliability:

Power rating	Resistance value
12W	4,500Ω
25W	9,000Ω
50W	20,000Ω
75W	35,000Ω
100W	50,000Ω

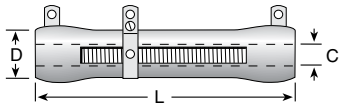
No power derating necessary for ratings higher than 100W.

210 Series

Dividohm® Vitreous Enamel
Adjustable Power

DIMENSIONS

(in. / *mm*)



Series	Wattage	L	D	C	Core Code	Standard Terminal
D12	12	1.75 / 44.4	0.313 / 7.94	0.188 / 4.76	D	57
D25	25	2.0 / 50.8	0.562 / 14.3	0.313 / 7.94	K	40
D50	50	4.0 / 101.6	0.562 / 14.3	0.313 / 7.94	K	40
D75	75	6.0 / 152.4	0.562 / 14.3	0.313 / 7.94	K	40
D100	100	6.5 / 165.1	0.750 / 19.1	0.50 / 12.7	M	40
D175	175	8.5 / 215.9	1.125 / 28.6	0.75 / 19.1	P	46
D225	225	10.5 / 266.7	1.125 / 28.6	0.75 / 19.1	P	46
D500	500	12.0 / 304.8	2.50 / 63.5	1.75 / 44.5	S	45
D1000	1000	20.0 / 508.0	2.50 / 63.5	1.75 / 44.5	S	45

ORDERING INFORMATION

Coating
Blank = Vitreous
C = Centohm
S = Silicone

RoHS Compliant

D 2 5 K 1 0 0 E

Series | **Wattage** | **Tolerance** J = 5%, K = 10% | **Ohms** 1R0 = 1Ω, 250 = 250Ω, 1K0 = 1,000Ω, 25K = 25,000Ω, 25K5 = 25,500Ω

Made-to-order Parts

Core Diameter See "Core and Terminal Selection" | **Terminal Type** See "Resistor Terminals for Tubular Cores" | **RoHS Compliant**

2 1 0 5 0 K 4 0 5 R 0 0 J E

Coating 210 = Vitreous, 410 = Silicone Ceramic, 610 = Centohm | **Wattage** | **Ohms** R500 = 0.500Ω, 1R00 = 1Ω, 250R = 250Ω, 1K00 = 1,000Ω, 25K0 = 25,000Ω, 25K5 = 25,500Ω | **Tolerance** J = 5%, K = 10%

See 270 series custom core and terminal info

Standard Values

Ohmic value	Part No. Prefix ➤ Suffix ▼	Wattage: D12K (12)	D25K (25)	D50K (50)	D75K (75)	D100K (100)	D175K (175)	D225K (225)	D500K (500)	D1000K (1000)
1.0	1R0E	✔	✔	✔	✔	✔	✔	✔		
2	2R0E	✔	✔	✔	✔	✔	✔	✔		
3	3R0E		✔	✔	✔	✔	✔	✔		
4	4R0E			✔		✔	✔	✔		
5	5R0E	✔	✔	✔	✔	✔	✔	✔	✔	✔
7.5	7R5E	✔	✔							
10	10RE	✔	✔	✔	✔	✔	✔	✔		
15	15RE	✔	✔		✔					
20	20RE	✔	✔							
25	25RE	✔	✔	✔	✔	✔	✔	✔		
50	50RE	✔	✔	✔	✔	✔	✔	✔		
75	75RE	✔	✔	✔						
100	100E	✔	✔	✔	✔	✔	✔	✔		
150	150E	✔	✔	✔						
200	200E	✔	✔	✔	✔					
250	250E	✔	✔	✔	✔	✔	✔	✔		
300	300E	✔	✔	✔	✔					
400	400E	✔	✔	✔	✔					
500	500E	✔	✔	✔	✔	✔	✔	✔	✔	✔
750	750E	✔	✔	✔	✔					
800	800E		✔	✔						
1,000	1K0E	✔	✔	✔	✔	✔	✔	✔	✔	✔
1,250	1K25E	✔	✔							
1,500	1K5E	✔	✔	✔	✔	✔	✔	✔		
2,000	2K0E	✔	✔	✔	✔					
2,500	2K5E	✔	✔	✔		✔	✔	✔		
3,000	3K0E	✔	✔	✔						
4,000	4K0E	✔								
5,000	5K0E	✔	✔	✔		✔	✔	✔		
6,000	6K0E		✔							
7,000	7K0E	✔	✔							
7,500	7K5E	✔	✔	✔						
10,000	10KE	✔	✔	✔	✔	✔	✔			
12,000	12KE									
15,000	15KE		✔	✔						
20,000	20KE		✔	✔	✔					
25,000	25KE		✔	✔						
50,000	50KE			✔		✔				
100,000	100KE			✔		✔	✔			

✔ = Standard values; check availability at www.ohmite.com

50KΩ and 100KΩ resistance values involve very fine resistance wire and should not be used in critical applications without burn-in and/or thermal cycling.