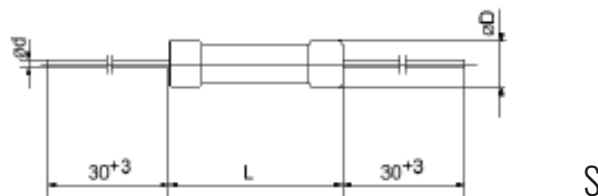




CEMENTED WIREWOUND RESISTORS MODEL BR

GENERAL FEATURES



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Cemented wire wound resistors with axial wire leads, with encaps :

Tolerances				F ($\pm 1\%$), G ($\pm 2\%$)	J ($\pm 5\%$), K ($\pm 10\%$)
1000 h	P_N	(40°C)	$\pm (2\% + r)$	$\pm (5\% + r)$	
1000 h	$0,7 P_N$	(40°C)	$\pm (1\% + r)$		
1000 h	$0,2 P_N$	(40°C)	$\pm (0,2\% + r)$		
r=0,0002	Ohm for	$= < R_N <$	1 Ohm	Other technical parameters are possible on request	
r=0,02	Ohm for	$= < R_N <$	10 Ohm		
r=0,05	Ohm for	$= < R_N = <$	25 Ohm		
r=0,002 R_N	Ohm for	$= < R_N >$	25 Ohm		

Maximun relative change of resistance after electrical power test.

TEST METHODS APPLIED

Short term increase of electrical power : cyclical electrical increase of resistor 80 cycles to t = 50 s with $6,25 P_N$ (0,1 t = on; 0,9 t = off)

Long term test: Dissipation of de resistor for a time of 1000 h with P_N ; $0,7 P_N$ res. $0,2 P_N$

Long term environmental test: Dissipation of the resistor at 40°C and 93% relative humidity over 56 days with P_N ;

Periodical change of temperature: Cyclical dissipation of the wire –wound resistor for 5 periods

Upper Temperature: 155°C 30 min.

Lower Temperature: -55°C 30 min.

GENERAL FEATURES

Mechanical strength of wire leads:

Tractive power

4 x 12 – 5 N9 x 20 – 20 N

6 x 16 – 10 N9 x 32 – 20 N

6 x 23 – 10 N9 x 50 – 20 N

6 x 23 – 10 N12 x 52 – 20 N

Bending strength: 2 bends to 90°

Torsional strength: 2 distortions round 180°

- On request, wire leads can be bended.
- Reference Documents: IEC 115, CECC 40000 / 40200 or DIN 45920 / 45921
- The BR resistors can be loaded with single impulses or very high Voltage (standard impulse 1,2/50 acc. to IEC 115).
- On request, the resistors of the BR series can be executed as fuse resistors

Style	BR 4 x 12	BR 6 x 16	BR 6 x 23	BR 9 x 20	BR 9 x 32	BR 9 x 50	BR 12 x 52
Resistance range	R15 - 5K6	R03 - 10K	R047 - 18K	R10 - 33K	R20 - 51K	R24 - 82K	R33 - 110K
Resistance tolerances	K ($\pm 10\%$) ; J ($\pm 5\%$) ; G ($\pm 2\%$) ; F ($\pm 1\%$)						
Dissipation at Ta=40°C	3 W	4 W	5,5 W	7 W	10 W	15 W	18 W
Dissipation at Ta=70°C	2,5 W	3,5 W	5 W	6 W	9 W	13,5 W	16 W
Limiting voltage	U = RADQ (P _N x R)						
Surface temperature limit	270 °C	270 °C	270 °C	270 °C	350 °C	350 °C	370 °C
Temperature coefficient	+100 x 10 ⁻⁶ /K						
Smallest raster dimension	20 mm	22,5 mm	27,5 mm	27,5 mm	37,5 mm	57,5 mm	57,5 mm
Periodical impulse power f ≥30Hz Ta= 70°C	5 W	7 W	10 W	12 W	18 W	27 W	32 W
Impulse power by switch on Ta= 70°C	31 W	44 W	62,5 W	75 W	112 W	170 W	200 W
Periodical impulse voltage f ≥30Hz Ta= 70°C	140 V	200 V	285 V	440 V	700 V	985 V	1225 V
Impulse voltage	280 V	400 V	570 V	640 V	1000 V	1720 V	1740 V
Dimensions in mm	D max =	4,8	6,0	6,0	10,0	10,0	12,0
	L =	11,6	16,0	22,5	21,6	32,0	52,0
	d =	0,8	0,8	0,8	0,8	0,8	1,0

