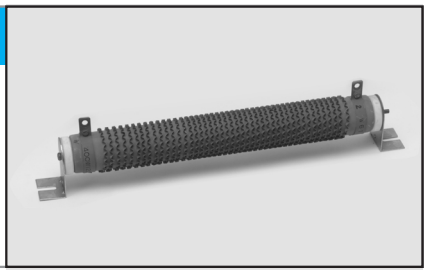
Non-Flammable Wire Wound Fixed Resistors

GENERAL SPECIFICATIONS

Model		Power Rating[W]	Resistance Range[Ω]	Weight[g]	Resistance Tolerance[%]
KR KRIB KRZG	80	120	0.02 ~ 4	40	K (±10)
	100	150	0.03 ~ 5	170	
	120	180	0.03 ~ 6	200	
	150	225	0.04 ~ 8	250	
	200	300	0.05 ~ 10	306	
	300	450	0.08 ~ 15	650	
	400	600	0.10 ~ 20	800	



CHARACTERISTICS

Values in [ ] mean change in Ω after test

Power Rating Load	±[1%+0.05Ω]	(JIS-C-5202, 5-4) 375℃ maximum
Insulation Resistance		100MΩ minimum DC 500V
Dielectric Withstanding Voltage		KR, KRG: AC 2000V for 1minute, KRZG: AC 3000V for 1minute
Temperature Coefficient		±400ppm/℃ maximum
Short Time Overload	±[2%+0.05Ω]	300% rated power 5 seconds
Moisture Resistance (Steady state)	±[2%+0.05Ω], 10MΩ minimum	40℃, 95% RH, DC100V case to terminal, 500 hours
Thermal Shock	±[2%+0.05Ω]	Power rating load 30minutes, -55℃, 15minutes
Vibration		Mount: KRZG 1.5mm 10~55Hz/1minute, X,Y,Z 2 hours each direction
Heat Resistance		375℃ 2 hours
Resistors Strength		30kgf 30 seconds
Terminal Strength		10mm: 20kgf 30seconds, 16mm: 20kgf 30 seconds
Flame Retardancy		100~600% rated power load
Moisture Load Life	±[2%+0.05Ω]	(10% rated power load) 90 minutes on, 30 minutes off, 40℃, 95% RH, 500 hours
Load Life	±[5%+0.05Ω]	(100% rated power load) 90 minutes on, 30 minutes off, 500 hours

SHORT TIME OVER LOAD RATING

	An overload exceeding the nominal current is allowed for a short time of 30 minutes or less.								
Load time seconds	5	10	30	60	180	300	600	900	1800
Max. Amps Rated Load	400%	350%	250%	200%	140%	120%	110%	105%	100%

NEMA STANDARD/ ON-OFF CYCLING

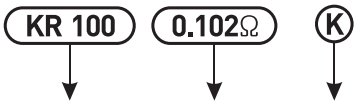
Cycling Time (secs)	5 secs ON 75 secs OFF	10 secs ON 70 secs OFF	15 secs ON 75 secs OFF	15 secs ON 45 secs OFF	15 secs ON 30 secs OFF	15 secs ON 15 secs OFF
Max. Amps Rated Load	290%	215%	185%	160%	150%	125%

*NEMA (National Electric Manufacturers' Association)

CURRENT REDUCTION RATE (%) FOR GROUPED APPLICATIONS

EA	2	3	4	6	9	12	16
%	84	80	78	76	75	73	71

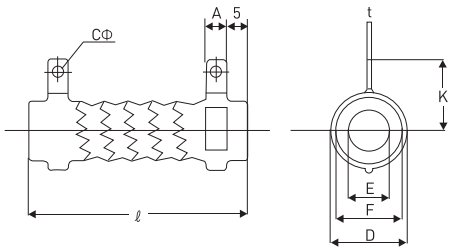
ORDERING PROCEDURE



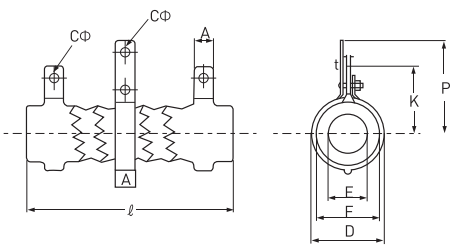
Tel: 82-32-817-4325 Fax: 82-32-817-4329

DIMENSIONS [mm]

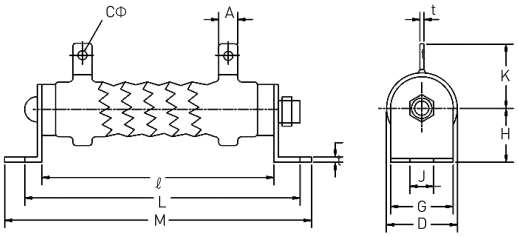
KR type



KRIB type

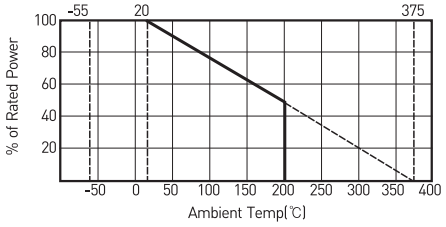


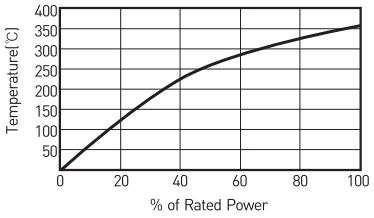
KRZG type



Model	Shape	Dimensions [mm]±2													
		A	C	D	E	F	G	H	J	K	ℓ	I	M	P	t
KR	80	8	4	28	14	26	26	30	6	33	115	150	173	35	1.4
	100	8	4	28	14	26	26	30	6	33	140	175	198	35	1.4
	120	8	4	28	14	26	26	30	6	33	165	200	221	35	1.4
KRIB	150	8	4	28	14	26	26	30	6	33	195	230	253	35	1.4
	200	8	4	28	14	26	26	30	6	33	254	290	313	35	1.4
KRZG	300	12	5.5	42	24	40	40	40	6.5	45	254	300	330	52	1.6
	400	12	5.5	42	24	40	40	40	6.5	45	330	380	407	52	1.6

DERATING CURVE AND TEMPERATURE RISE DATA





STANDARD RESISTANCE VALUES AND MAXIMUM CURRENT

Ohm / Model	0.02	0.03	0.04	0.05	0.06	0.08	0.1	0.15	0.2	0.25	0.3	0.4	0.5	0.6
K-80	77A	63	55	50	45	39	35	28	25	22	20	17	15	14
K-100		71A	61	55	50	43	39	32	27	25	22	19	17	16
K-120		78A	67	60	55	48	43	35	30	27	24	21	19	18
K-150			75A	67A	61	53	47	39	33	30	27	24	21	19
K-200				77A	71	61	55	45	39	35	32	27	24	22
K-300						75A	67	55	47	42	39	33	30	27
K-400							77A	63	55	49	45	39	35	31

Ohm / Model	0.8	1.0	1.5	2.0	2.5	3.0	4.0	5.0	6.0	8.0	10.0	12.0	15.0	20.0
K-80	12A	11	9	7.8	6.9	6.3	5.5							
K-100	14A	12	10	8.6	7.8	7.1	6.1	5.5						
K-120	15A	13	11	9.5	8.5	7.8	6.7	6.0	5.5					
K-150	17A	15	12	11	9.5	8.7	7.5	6.7	6.1	5.3				
K-200	19A	17	14	12	11	10	8.6	7.7	7.1	6.1	5.5			
K-300	24A	21	17	15	13.5	12	10	9.5	8.6	7.5	6.7	6.1	5.5	
K-400	27A	24	20	17	15.5	14	12	11	10	8.7	7.7	7.0	6.3	5.5