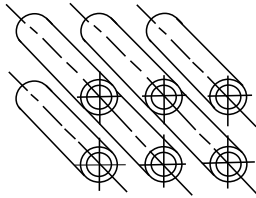


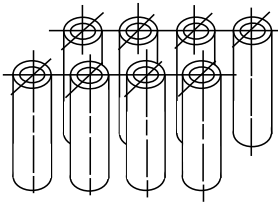


Fixed Wirewound Enamelled High Dissipation Resistors

HORIZONTAL ASSEMBLY



VERTICAL ASSEMBLY



GROUP ASSEMBLY

It is recommended that resistors should be installed with a distance between centres of approximately twice their diameter to aid dissipation efficiency.

Multiplying coefficient applicable to overall power of resistors.

N/E	> 3	3	2	1
1	0.70	0.75	0.80	0.95
2	0.60	0.70	0.75	0.80
3	0.55	0.60	0.70	0.75
4	0.50	0.55	0.65	0.70
5	0.45	0.50	0.60	0.65

L/E	> 3	3	2	1
1	0.85	0.90	0.95	1.00
2	0.65	0.70	0.75	0.92
3	0.65	0.65	0.70	0.90
4	0.65	0.65	0.70	0.88

Notes

- N: Numbers of resistors per stage of line
- L/E: Numbers of stages or line

INTERMITTENT OPERATION OVER LONG PERIODS (NON REPETITIVE)					
TIME (in s)	60	30	15	5	1
K	2	3	4	12	15

Note

- K: Multiplying coefficient applicable to rated power as a function of duration of load

CYCLIC OPERATION				
ENERGISED PERIOD (in s)	5	10	20	15
DE-ENERGISED PERIOD (in s)	60	60	60	30
K	10	6	3	2

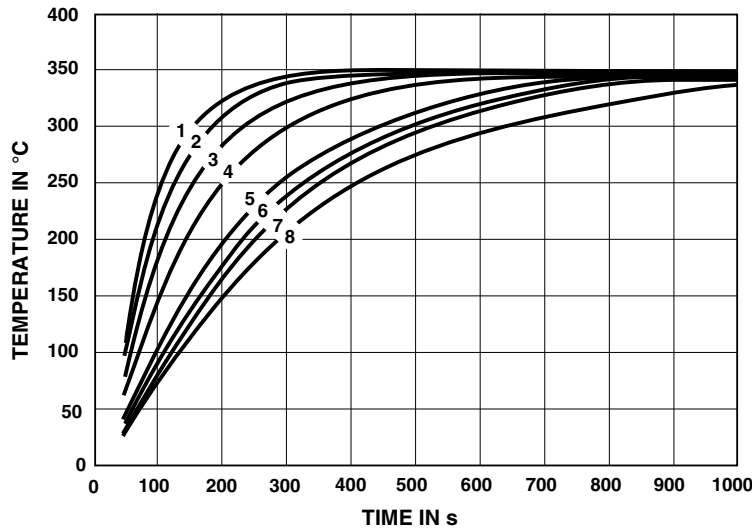
Notes

- K: Multiplying coefficient applicable to rated power
- K: Energised/de-energised period

MOMENTARY OVERLOAD : LESS THAN 100 ms ADMISSIBLE ENERGY FOR ISOLATED OVERLOAD EXPRESSED IN J/Ω										
OHMIC VALUE	RW/RWST MODEL									
	8 x 34	10 x 50	13 x 70	16 x 94	2 x 117	25 x 138	25 x 168	30 x 250	40 x 370	50 x 373
10	0.81	3.23	5.21	12.92	18.97	29.07	32.64	76.05	110.16	149.94
100	0.02	0.12	0.51	0.81	2.1	3.23	3.24	8.16	18.6	18.36
1K	3.86×10^{-3}	12.17×10^{-3}	19.89×10^{-3}	50.66×10^{-3}	0.124	0.124	0.192	0.49	1.3	2.04
10K	1.98×10^{-4}	7.65×10^{-4}	19.21×10^{-4}	38.59×10^{-4}	0.02	0.02	0.02	0.03	0.077	0.077

Fixed Wirewound Enamelled High Dissipation Resistors

THERMAL TIME CONSTANT



Heating is also function of time according to the formula :

$$\Delta QT = \Delta QT \text{ max. } (1 - e^{-\frac{t}{\zeta}})$$

$\Delta QT =$ heater after t seconds of load

$\Delta QT \text{ max.} =$ Maximum heating

e = Base of Naperian logarithms = 2.718

$\zeta =$ Thermal time constant: this varies according to graph of dissipation conditions (see RW wirewound resistor datasheets).

CURVE	STYLE	ζ APPROX. (in s)
1	8 x 34	66
2	10 x 50	78
3	13 x 70	132
4	16 x 94	102
5	20 x 117	204
6	25 x 138	246
7	25 x 168	234
8	30 x 250 40 x 370 50 x 373	300

RESISTOR HEAVILY LOADED OR USED IN A HIGH AMBIENT TEMPERATURE

It is recommended that resistors under these conditions be mounted vertically to facilitate heat exchange, particularly in the case of the larger sizes. Vertical mounting should always be used for tube \varnothing 25 mm, 30 mm, 40 mm and 50 mm. The central hole must never, of course, be totally covered.

EXTENSIVE VIBRATION OR SHOCK

AN collars should not be used as fixings. Use the CS collar brackets for \varnothing 25 mm, 30 mm, 40 mm and 50 mm resistors, or CL clips with SC clip-holders for \varnothing 10 mm to 30 mm resistors (see datasheet document number 50023).

CABINET INSTALLATION

- Use of forced-air cooling.
Under good conditions, heat dissipation can be doubled or even trebled ; surface temperature on resistors should not exceed 450 °C.
Tests should be made by the user.
- Unventilated cabinet.
Do not exceed maximum surface temperature.