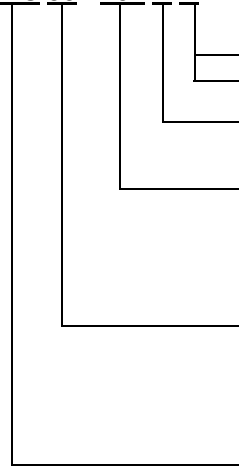


The content of this specification may change without notification 12/14/07

Custom solutions are available.

HOW TO ORDER

RWC 50 - 102 K B



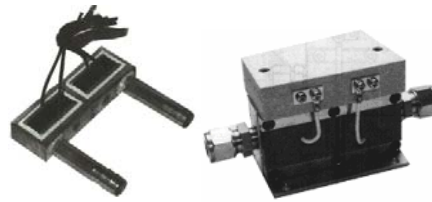
Packaging
B = bulk

Tolerance
K = $\pm 10\%$

Resistance (Ω)
1R0 = 1.0
100 = 10
101 = 100
102 = 1.0K

Rated Power
50A = 500 W
50B = 500 W
100 = 1,000 W
200 = 2,000 W

Series
Water Cooled High Power Resistor



FEATURES

- Small size 500W, 1Kw, and 2Kw water-cooled non-inductive resistor with very low resistor temperature while in operation
- Flat plate resistance and twisted pair leads and special terminal structure (patent) have shown excellent surge absorption performance
- Resistors are insulated from case by high purity alumina substrate, and are guaranteed voltage-proof to 5kV

APPLICATIONS

- Surge suppression resistors for power thyristors and IGBT,
- Power supply for electric power conversion system and industrial apparatus
- High output AC motor controls

SPECIFICATIONS

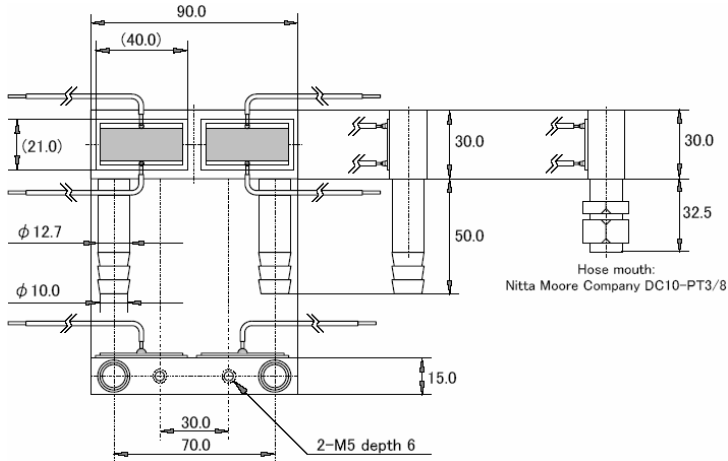
Model	RWC50A	RWC50B	RWC-100	RWC-200
Rated Power	500 W (250 W/resistor element)	500 W	1,000 W	2,000 W
Max. Applied Power	700 W (350 W/resistor element)			
Resistance Range Ω	0.10 ~ 1.0K	0.22 ~ 1.0K	0.22 ~ 1.0K	0.22 ~ 1.0K
EIA Values	All	All	All	All
TCR (ppm/ $^{\circ}$ C)	± 250	± 250	± 250	± 250
Tolerance	$\pm 10\%$	$\pm 10\%$	$\pm 10\%$	$\pm 10\%$
Inductance (typical)	Series: 40nH/Dual resistor	0.1uF		
Capacitance (typical)	Parallel: 160pF/dual resistor	300pF	600pF	1200pF
Hose Mouth	Standard: nipple	-	-	-
Water Temperature	+41 $^{\circ}$ C max at inlet, > dew point	41 $^{\circ}$ C*	41 $^{\circ}$ C*	41 $^{\circ}$ C*
Volume of Water Flow	2 liters/minute minimum	6 liters/min	6 liters/min	6 liters/min
Minimum Water Temp.	-	Over due point	Over due point	Over due point
Water Pressure Loss	0.06Kg/cm ²	0.1kgf/cm ²	0.1kgf/cm ²	0.1kgf/cm ²
Max. Water Pressure	-	10Kg/cm ²	10Kg/cm ²	10Kg/cm ²
Water Temperature Rise	1.4 $^{\circ}$ C	1.4 $^{\circ}$ C**	3.0 $^{\circ}$ C**	6.0 $^{\circ}$ C**
Case Temperature Rise	14 $^{\circ}$ C	14 $^{\circ}$ C	14 $^{\circ}$ C	14 $^{\circ}$ C
Surface Temperature Rise	50 $^{\circ}$ C	50 $^{\circ}$ C	50 $^{\circ}$ C	50 $^{\circ}$ C
Max. Surface Temp. Rise	110 $^{\circ}$ C	110 $^{\circ}$ C	110 $^{\circ}$ C	110 $^{\circ}$ C
Continuous Impulse Load	Peak Power 37kW/10 microsec./10kHz (ref. only)	-	-	-
Damaged Impulse Load	100kW/70 microsec.	-	-	-
Terminal Codes	Teflon Insulated Wire (0.18/30, outer diameter 2mm, blue), 200mm length	-	-	-
Dielectric Strength	AC 2000V, 60 sec. (between terminal and case)	-	-	-
Max Operating Voltage	1000V AC	-	-	-
Withstanding Voltage	-	2000V AC	2000V AC	2000V AC
Insulation Resistance	1,000Meg ohm min. (between terminal and case)	-	-	-
Load Life	$\pm 2\%$ (rating 500W, 1000 hours)	-	-	-
Humidity	$\pm 2\%$ (rating x 0.1, 1000 hours continuous load)	-	-	-
Weight	350g	3kg	5kg	10kg

*at inlet

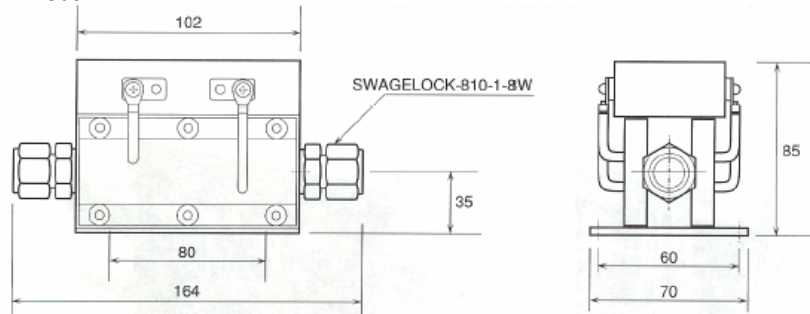
** at outlet at rated power

SCHEMATIC & DIMENSIONS (mm)

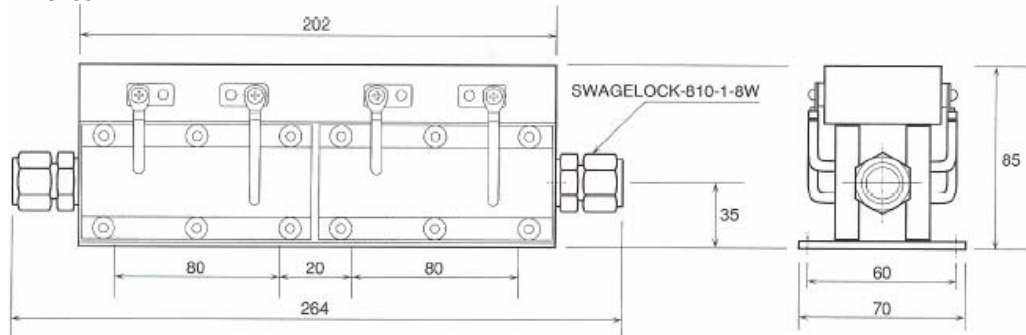
RWC50A



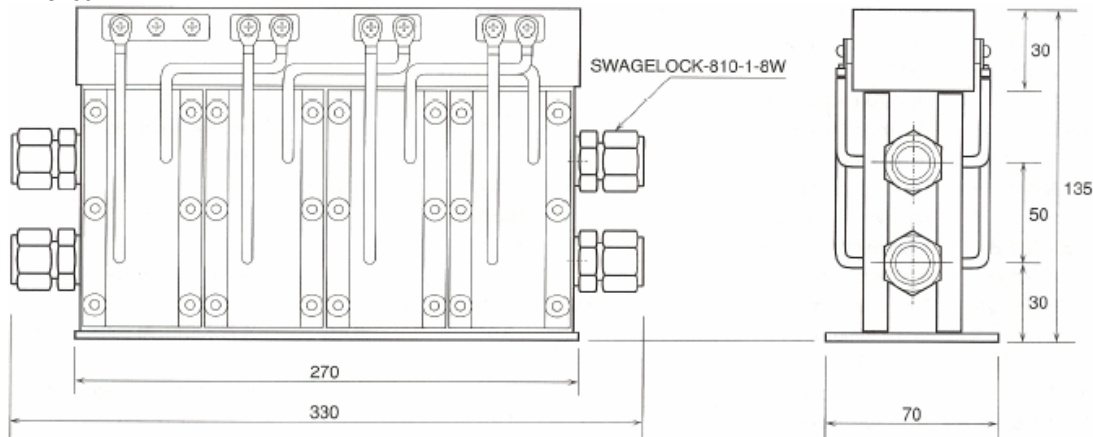
RWC50B



RWC100

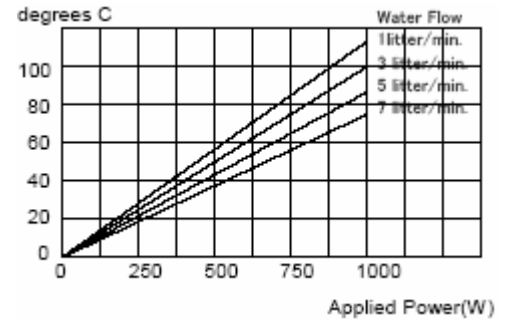


RWC200



TEMPERATURE RISE (RWC50A)

Resistor Surface Temperature Rise



Case Temperature Rise

