



WCR

WATER COOLED, HIGH POWER RESISTORS

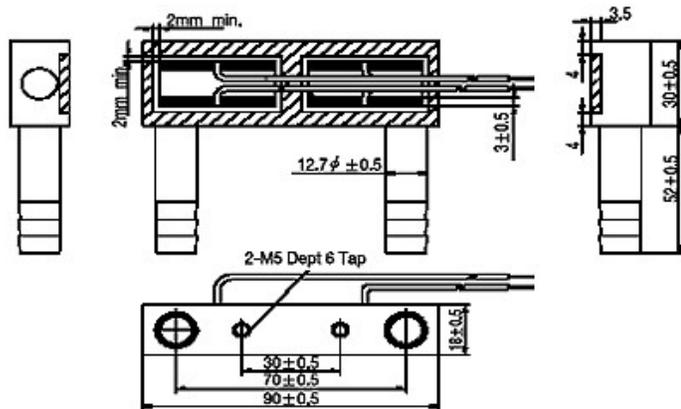
These are 500W & 1000W high power resistors exhibiting very low operating temperatures. These models offer very low inductance and high surge handling capacity. They consist of a flat resistive element with twisted pair leads. A 5kV dielectric strength is ensured with an alumina substrate. The low operating temperature of the element gives a low failure rate in high-density, compact instruments and equipment. These models can be used in snubber resistors, GTO and IGBT in electric power conversion systems.

GENERAL SPECIFICATIONS

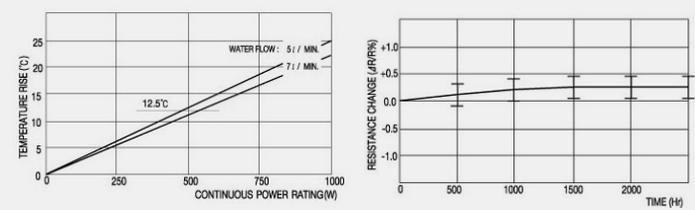
Rated Power	WCR500: 500W (water cooling), WCR1000: 1000W (water cooling)
Resistance Range	10, 20, 40 120 ohms
T.C.R	250ppm/C
Resistance Tolerance	10%
Dielectric Strength	2000VA C Between terminals and fin
Max. Water Pressure	6kg/ cm squared
Volume of water flow	6 liters/min
Std. Water temp.	41C
Min. water temp.	Over dew point
Water temp. rise	1.4C At outlet (power rating)
Fin temp. rise	14.0C On the M5 tapping screw. (rated power)
Surface temp. rise	50.0 C 0 n the Heat sink surface Resistor surface temperature. (rated power)
Max. surf. Temp	110C On the element surface
Pressure loss	0.06 kg/cm squared
Weight	355g



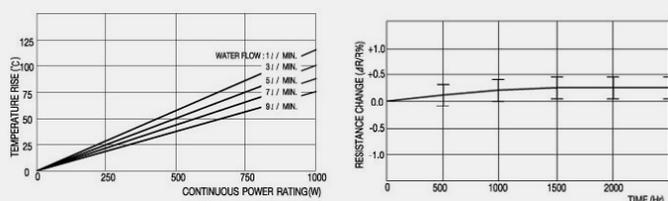
DIMENSIONS



Surface Temperature Rise vs Power Rating & Load Life



Surface Temperature Rise vs Power Rating & Load Life



Cooling Water Temperature Rise vs Power Rating

