



MCB INDUSTRIE

RCEC 400



Power Resistors Cooled by Auxiliary Heatsink (Not supplied)

- Thick film technology
- System without external radiation
- High power / Volume ratio
- Non inductive
- Screw on outputs
- Possible configuration with 2 or 3 resistors

GENERAL CHARACTERISTICS

Dielectric base :	alumina	
Resistive circuit :	Thick film	
Encapsulation :	resin filled in housing	
Ω Serial :	E12	
Tolerance on ohmic value :	$\pm 10\% / \pm 5\%$ on request	
Insulation :	$10^5 \text{ M}\Omega$ 500V DC	
Temperature coefficient :	$\pm 150 \text{ ppm } ^\circ\text{C}$ (typical)	
Temperature limits:	$-55^\circ\text{C} \text{ to } +150^\circ\text{C}$	
Materials in accordance with UL 94-V0		
Type	Single value	Double value
PUISANCE MAXIMUM à 75°C	400 W	2 x 180W
Min. Ohm value :	1 Ω	1,5 Ω
Max Ohm value :	1 M Ω	1 M Ω

ADDITIONAL CHARACTERISTICS :

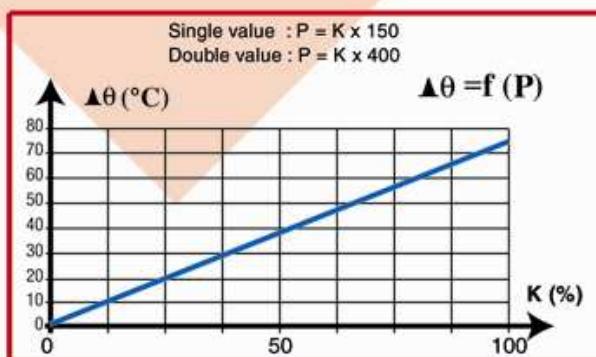
Type	Single value	Double value
Max.operating voltage between terminals	4000V	
Withstand voltage (Vrms 50Hz 1mn)	6000V	
Partial discharge	< 20 pC at 5000Veff	
Creep distance	> 42mm	
Clearance distance	> 12mm	>10mm
CTI Index		> 600
Self inductance		< 40 nH
Weight		75 g

PERFORMANCES

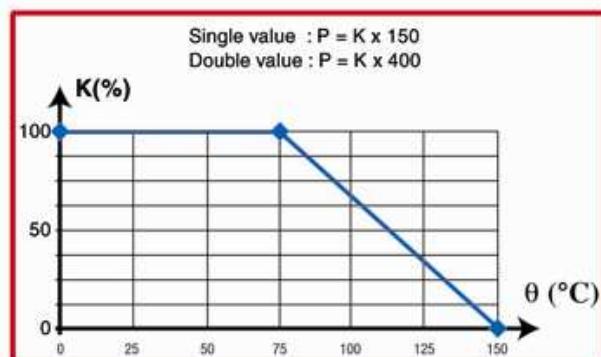
TESTS	CONDITIONS	REQUIREMENTS	TYPICAL VALUES
Overload single value	800 W / 10s	2 %	0,2 %
Overload double value	2 x 360 W /10s	2 %	0,2%
Damp heat	56 days 40°C 95% HR	2% or 0,05 Ω *	0,2 %
VRT	-55 +125°C 5 cycles	2% or 0,05 Ω *	0,2 %
Shocks	IEC 60115-4 clause 2-3-6	0,5% or 0,05 Ω *	0,25 %
Vibrations	IEC 60115-4 clause 2-3-2	0,5% or 0,05 Ω *	0,25 %
Terminals strenght	130 Ncm /100 N	1% or 0,05 Ω *	0,1 %
Endurance	2000 cycles Pn 30mn / 30mn	5 %	0,2 %

* The higher of either value

DISSIPATION

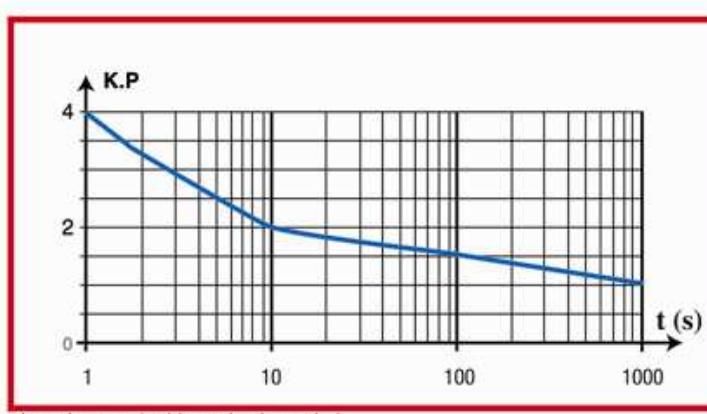


Overall thermal resistance 0,1875°C/W (Double value : 0,2083°C/w)
 Temperature rise as a function of the power applied



Permanent applicable power as function of heatsink temperature

OVERLOAD



Intermittent overload (exceptional operation)

ENERGY

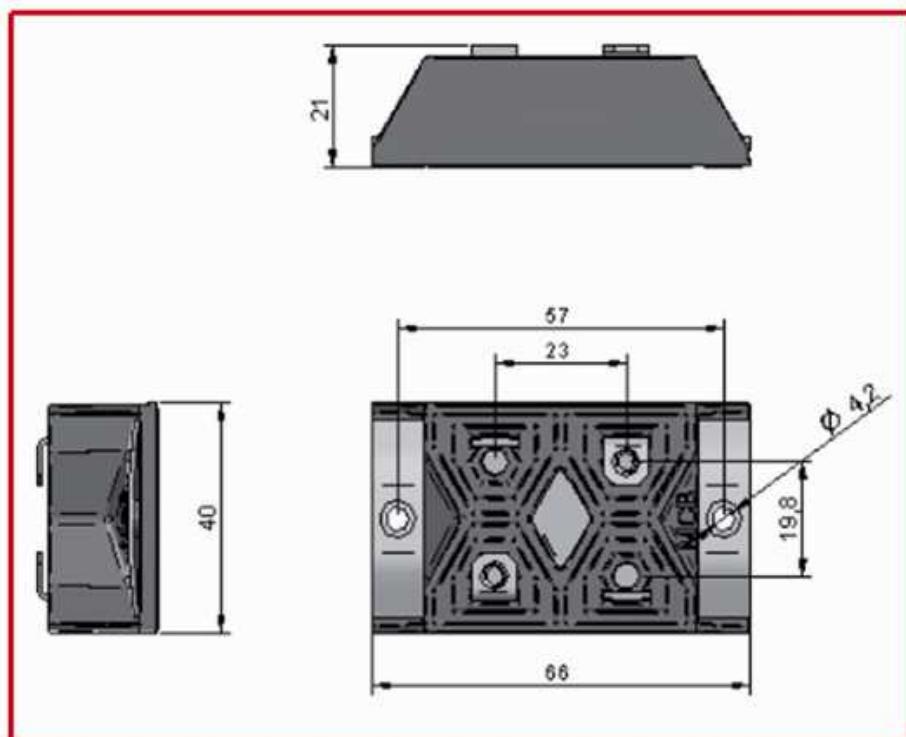
Single Value

Repetitive operation : $2 J / \tau = 50\mu s$
 Other values of τ : Consult us

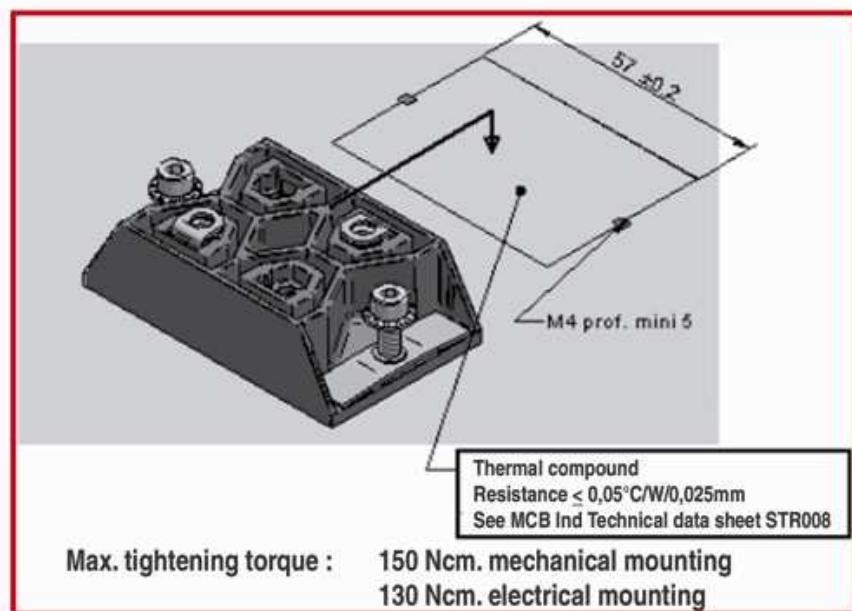
Double Value

Repetitive operation: $2 \times 1 J / \tau = 50\mu s$
 Other values for τ : Consult us

DIMENSIONS



ASSEMBLY



COOLING

The temperature of the heatsink may be maintained at the specified values with :

- forced air ventilation-
- internal circulation of a cooling liquid

Heatsink contact surface : Ra $6,3 \mu \text{VV}$

Evenness defect : 0,05 mm max

Surface temperature gradient (isotherm) : 20 °C max

Thermal compound not supplied (Resistance $\leq 0,05^\circ\text{C} / \text{W} / 0,025 \text{ mm}$)

THE USER MUST SELECT THE THERMAL RESISTANCE OF THE HEATSINK ACCORDING TO THE POWER APPLIED

HOW TO MAKE YOUR ORDER

