



POWER RESISTOR COOLED BY AUXILIARY HEATSINK (not supplied)

- Technology : thick film deposited on ceramic
- Cold system without external radiation
- High power/volume ratio
- Non inductive
- Easy assembly, self-calibrated pressure (400 N)

GENERAL CHARACTERISTICS

| | |
|--|-------------------------------|
| Dielectric base: | alumina |
| Resistive circuit: | cermet |
| Encapsulation: | resin filled case |
| Ω Serie: | E12 |
| Standard tolerance: | ±5% or ±10% |
| Insulation: | 10 ⁵ MΩ at 500 Vcc |
| Temperature coefficient: | ± 150 ppm/°C (typical) |
| Temperature range: | -55°C to +150°C |
| Materials complies with the standard UL 94-V0 | |
| MAXIMUM POWER at 75 °C: (heatsink surface temperature) | 750 W |
| Min. ohm value: | 1 Ω |
| Max. Ohm value: | 1 MΩ |

SPECIFIC CHARACTERISTICS

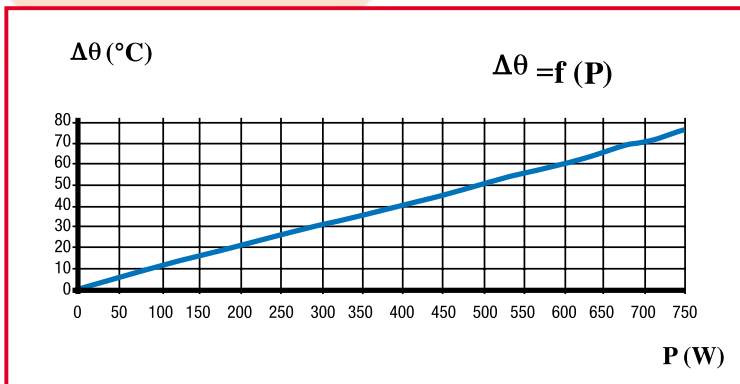
| TYPE | 750 | 750H | 750HV |
|--|--------------------------|--------|--------|
| Max. operating voltage between terminals | 5000V | | |
| Max. test voltage (Vrms 50 Hz 1 min) | 7000V | 12000V | 12000V |
| Creeping distance | 42 mm | 42 mm | 75 mm |
| Clearance distance | 12 mm | 26 mm | 30 mm |
| Capacitance/ground | 120 pf | | |
| Capacitance/parallel | 40 pf | | |
| Self inductance | ≤40 nH | | |
| Partial discharge | ≤500 pC/7000 Vrms | | |
| | ≤10 pC/5000 Vrms | | |
| | Other cases : consult us | | |
| Weight | 120g max | | |

PERFORMANCES

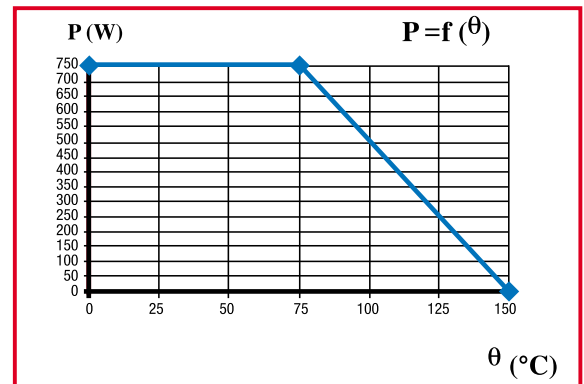
| TESTS | CONDITIONS | REQUIREMENTS | TYPICAL VALUES MCB Ind |
|--------------------|---|--|---------------------------|
| Overload | 1200W / 10s $\theta = 70^\circ\text{C}$ | 2 % | 0,2 % |
| Damp heat | 56 days 40°C 95% HR | 2% ou $0,05\ \Omega^*$ Insul > $10^3\ \text{M}\Omega$ | 0,2 % |
| VRT | $-55 + 125^\circ\text{C}$ 5 cycles | 2% ou $0,05\ \Omega^*$ | 0,2 % |
| Shock | 40A / 4000 | $0,5\%$ ou $0,05\ \Omega^*$ | 0,25 % |
| Vibrations | 500 / 10 | $0,5\%$ ou $0,05\ \Omega^*$ | 0,25 % |
| Terminals strength | 200Ncm / 200N | 1% ou $0,05\ \Omega^*$ | 0,1 % |
| Endurance | 2000 cycles Pn 30mn on / 30mn off | 5 % | 0,2 % |

*The higher of either value

DISSIPATION

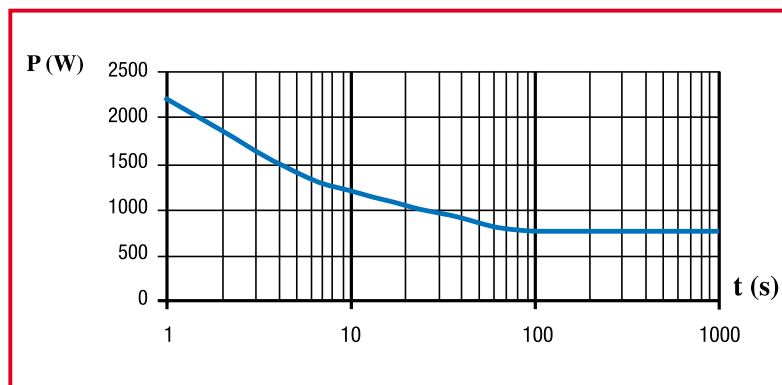


Overall thermal resistance 0, $10^\circ\text{C}/\text{W}$ (see assembly)
Temperature rise as a function of the power applied



Permanent applicable power as a function of heatsink temperature

OVERLOAD



Intermittent overload (exceptional operation) Heatsink temperature 70°C

ENERGY

$R < 390\ \Omega$

Repetitive operation : $8\ \text{J} / T = 50\ \mu\text{s}$

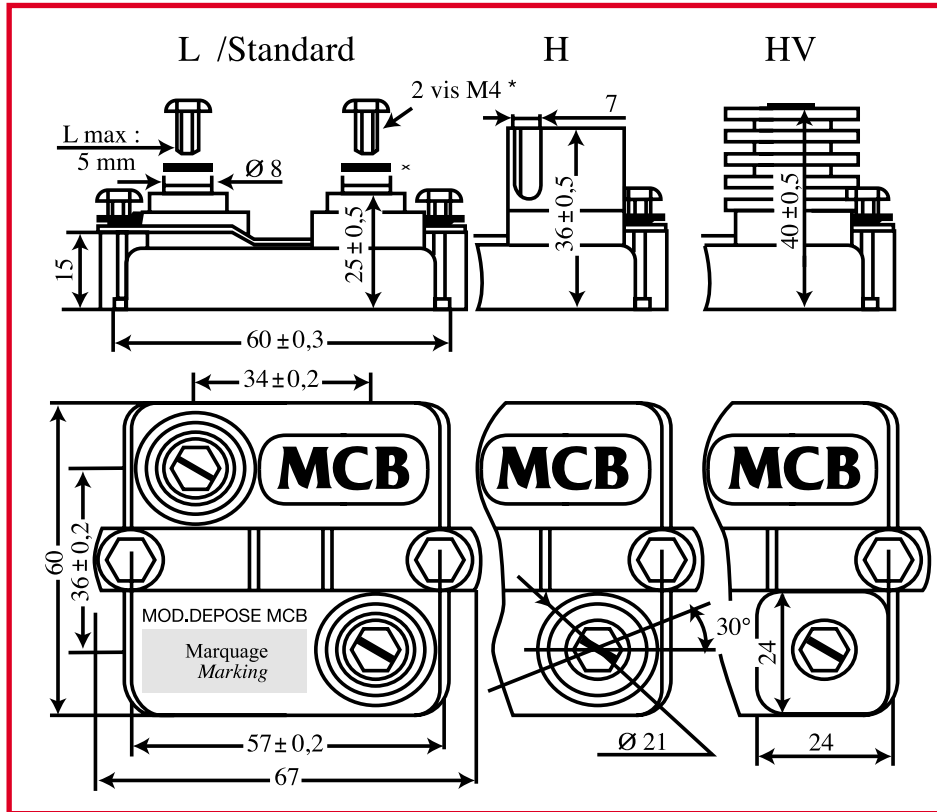
Accidental operation : $20\ \text{J} / T = 50\ \mu\text{s} / 120\ \text{impulsions max}$

$R \geq 390\ \Omega$

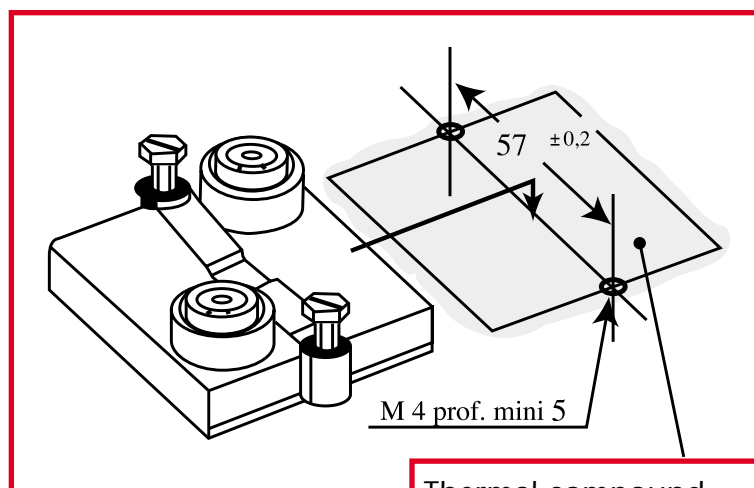
Repetitive operation : $4\ \text{J} / T = 50\ \mu\text{s}$

Other T values : consult us

DIMENSIONS



ASSEMBLY



Thermal compound
Resistance $\leq 0,05$ °C / W / 0,025 mm
See MCB Ind technical data sheet STRO08

Screws and bolts supplied
Max. tightening torque: 200 Ncm. mechanical mounting
200 Ncm electrical connections

COOLING

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

- forced air ventilation
- internal circulation of a liquid cooling

Heatsink contact surface:

Ra 6,3 μ ▽▽

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 OUT YOUR ORDER

