

Type series GAMD, GBMD

110 – 500 W, IP 54, profile x60 and x30



Short-circuit proof wirewound flat resistor, degree of protection IP 54 in blue anodized aluminium enclosure. Design with 2 FEP-wires, AWG 14/19 (2,1 mm²), 1000 V, 0,5 m long.

There are 2 versions available: horizontal – type series GAMD
vertical – type series GBMD

③ optionally, type designation would be G.MDU., e.g. GAMDU 215x60 - 180

Technologies

- rated voltage max. 1100 VDC
- compact construction form in a rectangular profile
- short-circuit proof
- self-extinguishing
- protection degree IP 54
- usable in harsh environment
- higher continuous dissipation by mounting directly onto heat sink or cooling surface

By mounting directly onto an appropriate cooling surface or onto a heat sink the continuous dissipation can be increased resp. the surface temperature can be lowered. Typical factors for an increase are 1,5 up to 5, depending on type, ventilation and size of the cooling surface or heat sink.

Option: temperature switch (..Q)

This type can be fitted with a 180° C temperature switch for monitoring, which has 2 connection wires.

Type designation would be: G.MDQ ...

Application

Different applications derive from the various dimensions in width, height and length.

An important application is the use as braking resistor for motor/generator drive of motors with frequency converters. This type series is for frequency converters with higher voltage. With adequate mechanical protection the resistors can be mounted outside the switch cabinets directly at the fc or motor.

Electrical and mechanical data

| Type series | continuous dissipation in W at 40°C, 100% DCF and surface excess temperature of | | production range Ω-value | | dimensions in mm | | | | | | | weight in g |
|--------------|---|-------|--------------------------|-------|------------------|----|----|----|---|-----|-----|-------------|
| | 200 K Typical power | 250 K | from | up to | A | B | C | D | G | H | J | |
| | | | | | | | | | | | | |
| GAMD. 165x60 | 110 | 165 | 2,2 | 6,8k | 165 | 60 | 60 | 30 | 3 | 146 | 5,3 | 590 |
| GAMD. 215x60 | 155 | 235 | 3,3 | 10k | 215 | 60 | 60 | 30 | 3 | 196 | 5,3 | 770 |
| GAMD. 265x60 | 200 | 300 | 4,7 | 15k | 265 | 60 | 60 | 30 | 3 | 246 | 5,3 | 950 |
| GAMD. 335x60 | 270 | 400 | 6,8 | 22k | 335 | 60 | 60 | 30 | 3 | 316 | 5,3 | 1200 |
| GAMD. 405x60 | 330 | 500 | 8,2 | 27k | 405 | 60 | 60 | 30 | 3 | 386 | 5,3 | 1450 |
| GBMD. 165x30 | 110 | 165 | 2,2 | 6,8k | 165 | 73 | 30 | 60 | 3 | 146 | 5,3 | 590 |
| GBMD. 215x30 | 155 | 235 | 3,3 | 10k | 215 | 73 | 30 | 60 | 3 | 196 | 5,3 | 770 |
| GBMD. 265x30 | 200 | 300 | 4,7 | 15k | 265 | 73 | 30 | 60 | 3 | 246 | 5,3 | 950 |
| GBMD. 335x30 | 270 | 400 | 6,8 | 22k | 335 | 73 | 30 | 60 | 3 | 316 | 5,3 | 1200 |
| GBMD. 405x30 | 330 | 500 | 8,2 | 27k | 405 | 73 | 30 | 60 | 3 | 386 | 5,3 | 1450 |

Note: Excess temperature values of 200 K should not be exceeded in order not to risk the degree of protection!

The given power rating values are valid for 100%CD (continuous dissipation). For short time operation you will find the values in the following table as a function of the duty cycle factor (DCF). Just multiply by the corresponding overload factor (OLF). (Also see pages T306E and T307E).

| ED | 60% | 40% | 25% | 15% | 6% | 3% | 1% |
|----|-----|-----|-----|-----|-----|----|----|
| ÜF | 1,5 | 2,2 | 3,0 | 4,2 | 8,2 | 13 | 22 |

These overload factors are valid for a total cycle time of maximum 120 s.

