

Type series GXAD / GXMD

100 – 300 W, IP 40, profile x70



1100V
DC

848V
DC

IP
40



Short-circuit proof wirewound flat resistor, in blank aluminium enclosure. With different sizes and for different voltages. PT Design with 2 PTFE-wires, AWG 14/19 (mind. 1,9 mm²), 0,5 m long.

Type series: GXAD.. rated voltage max. 848 VDC

Type series: GXMD.. rated voltage max. 1100 VDC

③ optionally with different UL - certification, see page T305E, type designation would be GX.DU..., e.g. GXADU 216x70 - 33

Technologies

- rated voltage max. 1100 VDC
- very flat, compact construction form
- short-circuit proof
- self-extinguishing
- degree of protection IP 40
- higher continuous dissipation by mounting directly onto heat sink or cooling surface
- compact construction form

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.

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	
GXAD – 848 V							
GXMD – 1100 V							
GX.D 110 x 70	100	150	2,7	3,3k	110	98	300
GX.D 160 x 70	150	225	4,7	5,6k	160	148	420
GX.D 216 x 70	200	300	6,8	8,2k	216	204	550

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.

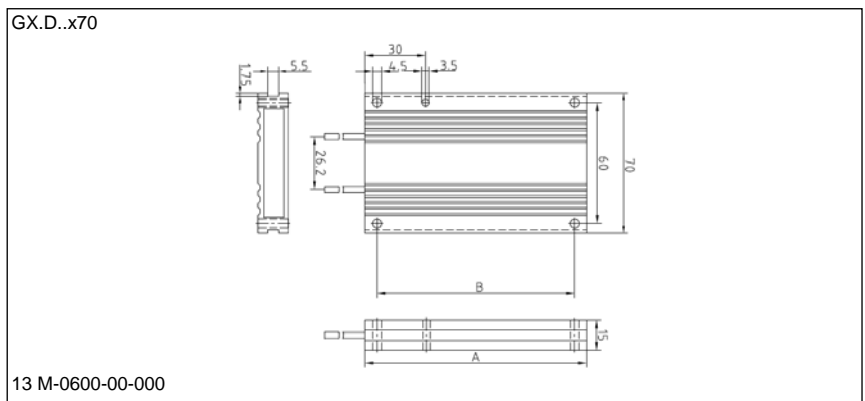
Application

E.g. as brake-resistor for frequency converters (fc). Based on the small sizes these resistors can be mounted directly to the housing of a fc.

Special design

- E.g. with higher protection degree IP54/67

You will find further examples on page T317E.



Example of dimensioning and selection of a specific unit:

Braking resistor for frequency converter drive, short time power: 1,2 kW at 6% DCF, total cycle time shorter than 120 s, intermediate voltage circuit 1050 V; resistance value 100 Ω; calculating of continuous dissipation: 1,2 kW : 8,2 = 146 W; degree of protection IP54.
Selected: GXMD 160 x 70 – 100 with continuous dissipation 150 W

GXMD 160 x 80 - 100

ohmic value ± 10%

width

length

type series for 1100 VDC