

Type series GAND, GBND

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



GBND 405 x 30



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 mm<sup>2</sup>), 1000 V, 0,5 m long.

There are 2 versions available: horizontal – type series GAND  
vertical – type series GBND

③ optionally, type designation would be G.NDU..., e.g. GANDU 215x60 - 82

**Besondere Merkmale**

- rated voltage max. 1400 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.NDQ ...

**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. They are perfectly suited for rough environments because of their high degree of protection. With adequate mechanical protection the resistors can be mounted outside the switch cabinets directly at the fc or motor.

**Special design**

- Mit Temperaturschalter (Type G.ADQ ..)

**Electrical and mechanical data**

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

	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.

