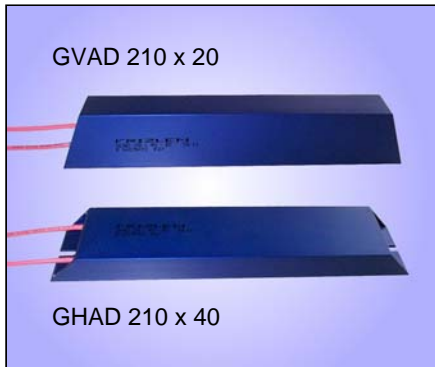


Type series GHAD, GVAD, GAAD, GBAD

50 – 500 W, IP 54, profile x40, x20, x60 and x30



Short-circuit proof wirewound flat resistor, degree of protection IP 54 in blue anodized aluminium enclosure. Design with 2 wires 0,5 m long.

Type series: GHAD, GVAD with 2 Radox-wires, AWG 18/19 (0,82 mm<sup>2</sup>)

Type series: GAAD, GBAD with 2 FEP-wires, AWG 14/19 (1,9 mm<sup>2</sup>)

There are 2 versions available: horizontal – type series GHAD, GAAD  
vertical – type series GVAD, GBAD

③ optionally, type designation would be G.ADU., e.g. GHADU 240x40-180

**Technologies**

- compact construction form in a rectangular profile
- short-circuit proof
- self-extinguishing
- degree of protection IP 54
- suited for rough 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 series can be fitted with a 180°C temperature switch for monitoring, which has 2 connection wires.

Type designation would be: G.ADQ ..

**Application**

Different applications derive from the various dimensions in width, height and length. We provide e.g. 4 different constructions forms for 155 W.

An important application is the use as braking resistor for motor/generator drive of motors with frequency converters. 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.

**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		
GHAD. 100x40	50	75	1,0	3,3k	100	45	40	20	2	82	4,3	145	
GHAD. 150x40	65	100	1,5	4,7k	150	45	40	20	2	132	4,3	215	
GHAD. 210x40	100	150	2,2	6,8k	210	45	40	20	2	192	4,3	300	
GHAD. 240x40	120	180	3,3	10k	240	45	40	20	2	222	4,3	340	
GHAD. 300x40	155	235	4,7	15k	300	45	40	20	2	282	4,3	430	
GHAD. 360x40	190	285	5,6	18k	360	45	40	20	2	342	4,3	515	
GVAD. 100x20	50	75	1,0	3,3k	100	45	20	40	2	82	4,3	145	
GVAD. 150x20	65	100	1,5	4,7k	150	65	20	40	2	132	4,3	215	
GVAD. 210x20	100	150	2,2	6,8k	210	65	20	40	2	192	4,3	300	
GVAD. 240x20	120	180	3,3	10k	240	65	20	40	2	222	4,3	340	
GVAD. 300x20	155	235	4,7	15k	300	65	20	40	2	282	4,3	430	
GVAD. 360x20	190	285	5,6	18k	360	65	20	40	2	342	4,3	515	
GAAD. 165x60	110	165	2,2	6,8k	165	60	60	30	3	146	5,3	590	
GAAD. 215x60	155	235	3,3	10k	215	60	60	30	3	196	5,3	770	
GAAD. 265x60	200	300	4,7	15k	265	60	60	30	3	246	5,3	950	
GAAD. 335x60	270	400	6,8	22k	335	60	60	30	3	316	5,3	1200	
GAAD. 405x60	330	500	8,2	27k	405	60	60	30	3	386	5,3	1450	
GBAD. 165x30	110	165	2,2	6,8k	165	73	30	60	3	146	5,3	590	
GBAD. 215x30	155	235	3,3	10k	215	73	30	60	3	196	5,3	770	
GBAD. 265x30	200	300	4,7	15k	265	73	30	60	3	246	5,3	950	
GBAD. 335x30	270	400	6,8	22k	335	73	30	60	3	316	5,3	1200	
GBAD. 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).

