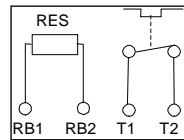




Type series FZG/FZZG/FZDG

65 – 3000 W with terminal box



Cemented wirewound tubular fixed resistor in one- up to three-tubes design, degree of protection IP20 if mounted on an appropriate surface, with side-panels and perforated cover. Fixing parallel to mounting surface. With two connections wired on terminals in attached terminal box with PG11-cable gland.

① if mounted on an appropriate surface

Technologies

- version protected against access to hazardous parts
- connections at terminals up to 20A 2-poles porcelain terminal
- wall mounting or mounting on switch cabinets

Option: temperature switch (..Q)

This type can be equipped with a 180°C temperature switch (TS) (incl. PG9 gland) for temperature monitoring. It is wired on porcelain terminals and monitors an overloading of the resistor by a normally closed contact free of potential (NCC). This signal has to be considered by the customer e.g. by a warning or disconnection of the mains. (Restrictions please look on page T105E)

Warning: There will not be a disconnection of the resistor!
Type designation then: FZ.GQ ...

Contact rating of the signal contact:

- 2 A / 24 VDC (DC11)
- 2 A / 230 VAC (AC11)

You will find suggestions for the dimensioning of the resistor for continuous and short term load at chapter Technical Details, pages T106E and T107E.

Application

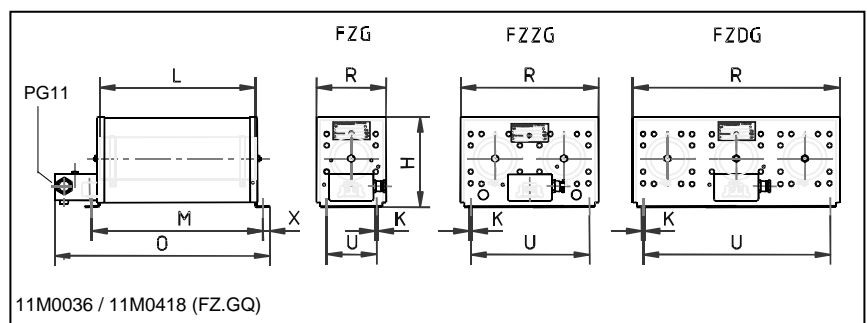
An important application is the use as braking resistor for motor/generator drive of motors with frequency converters. Various applications derive from the compact construction form for wall mounting or mounting on a switch cabinet.

Special design

- Version of low inductance by bifilar winding and therefore of low noise
- up to 35 A with 2-poles flat terminals and PG13,5 cable gland (no temperature switch available)

Electrical and mechanical data

Type series FZ.G.. without TS	typical power in W at 40°C, 100% DCF	production range Ω-value		dimensions in mm							approx. weight in kg
				from	up to	H	K	M	O	R	
FZG 100x35	65	0,22	18k	77	4,5	160	185	66	44	10	0,6
FZG 135x35	100	0,33	10k	77	4,5	195	220	66	44	10	0,7
FZG 200x35	150	0,56	6,8k	77	4,5	260	285	66	44	10	0,8
FZG 330x35	250	1,0	4,7k	77	4,5	390	415	66	44	10	1,2
FZG 160x45	150	0,4	6,8k	87	5,8	220	249	75	48	10	0,8
FZG 200x45	180	0,6	5,6k	87	5,8	260	289	75	48	10	0,9
FZG 300x45	300	1,2	3,9k	87	5,8	360	389	75	48	10	1,2
FZG 300x65	430	6,8	2,7k	120	6,5	330	386	92	64	10	1,8
FZG 400x65	600	10	1,8k	120	6,5	430	486	92	64	10	2,3
FZG 500x65	800	12	1,5k	120	6,5	530	586	92	64	10	2,8
FZG 600x65	1000	15	1,0k	120	6,5	630	686	92	64	10	3,4
FZZG 300x65	860	3,9	1,2k	120	6,5	326	386	185	150	10	3,5
FZZG 400x65	1200	5,6	1,0k	120	6,5	426	486	185	150	10	4,3
FZZG 500x65	1600	6,8	680	120	6,5	526	586	185	150	10	5,2
FZZG 600x65	2000	8,2	560	120	6,5	626	686	185	150	10	6,2
FZDG 300x65	1300	3,3	820	120	6,5	326	386	275	240	10	5,5
FZDG 400x65	1800	4,7	560	120	6,5	426	486	275	240	10	6,5
FZDG 500x65	2400	6,8	470	120	6,5	526	586	275	240	10	7,5
FZDG 600x65	3000	8,2	390	120	6,5	626	686	275	240	10	8,8



Example of dimensioning and selection of a specific unit:

Braking resistor for frequency converter drive with temperature switch:
Short time dissipation 12 kW at 15% DCF, total cycle time shorter than 120 s,
intermediate circuit voltage 650V; resistance value 33 Ω, calculating of continuous
dissipation: 12 kW : 5 = 2,4 kW; choosen: FZDGQ 500x65 – 33

