



Type series FKEY 31..

1,0 – 19,5 kW, up to 7,8 MWs, for integration,  
low ohmic values, high energy absorption capacity



Steel-grid fixed resistor block, with side plates, in protection degree IP 00 for high energy absorption capacity, for integration into switch cabinets. Connection directly at the resistor. With 2 additional conducting rolls.

② in preparation

### Technologies

- for high energy absorption capacity
- for high continuous currents
- continuous dissipation up to 19,5 kW
- for integration into switch cabinets
- optional with temperature switch (TS) with fast-on connections 6,3x0,8, type FKEYQ 31.. (Restrictions see on page T614E)

Each resistor device can be equipped with 2 or more connecting lugs. The connections are made with screws M12 at the mounted connecting lugs. The resistor is mounted by means of two side plates.

We achieve a wide range of resistance values and wattage rating by variation of number of steel-grids and resistance values.

Combining of several partial resistors (e.g. 3 phases) in one resistor unit is possible. They are separated by insulation rolls.

You will find suggestions for the dimensioning of the resistor for short time load in chapter "Technical details", please look on page T613E up to T618E. For customer wiring you should use a heat resistant wire.

### Application

Customized solutions like integrating a resistor unit into a switch cabinet, when a very compact design is needed.

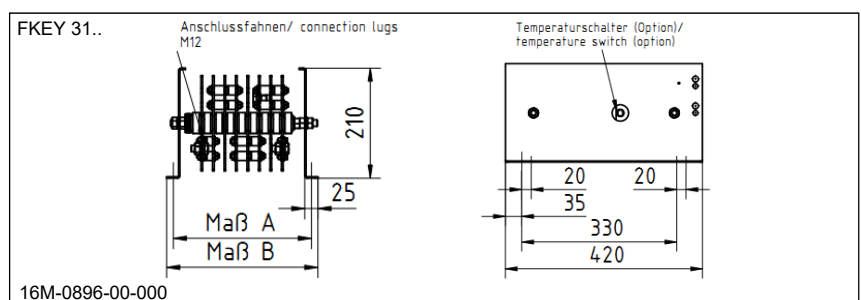
Thus various kinds of solutions are possible for many applications such as:

- FRT resistor
- crowbar resistor
- load resistor
- charge-/discharge resistor
- current limiting resistor

### Electrical and mechanical data

type	one-time energy absorption capacity in kW		typical power in kW at 40°C and 100% ED	production range mΩ-value		max. number of steel-grids corresp. to given device size	dim. in mm		max. weight in kg
	from	up to		from	to		A	B	
FKEY 31004..	300	400	1,0	4,4	200	2	140,5	157	8,0
FKEY 31006..	600	800	2,0	8,8	400	4	184,5	201	10,3
FKEY 31008..	900	1200	3,0	8,8	600	6	228,5	245	12,8
FKEY 31110..	1200	1600	4,0	13,2	800	8	272,5	289	15,3
FKEY 31112..	1500	2000	5,0	17,6	1000	10	316,5	333	17,8
FKEY 31216..	1800	2400	6,0	22	1200	12	360,5	377	20,3
FKEY 31221..	2400	3200	8,0	26,4	1600	16	448,5	465	25,3
FKEY 31326..	3150	4200	10,5	30,8	2100	21	566,5	583	31,5
FKEY 31330..	3900	5200	13,0	39,6	2600	26	676,5	693	37,8
FKEY 31433..	4500	6000	15,0	48,4	3000	30	764,5	781	42,8
FKEY 31436..	4950	6600	16,5	52,8	3300	33	830,5	847	46,5
FKEY 31439..	5400	7200	18,0	61,6	3600	36	896,5	913	50,3
FKEY 31439..	5850	7800	19,5	85,8	3900	39	962,5	979	54,2

This table represents only a selection of our program. All numbers of steel-grids between 2 pcs.. (1,0 kW) and 39 pcs. (19,5 kW) corresponding to our types are available. For the type code and selection of units you will be assisted by us.



### Example of dimensioning and selection of a special unit:

Load resistor for battery, single phase, for continuous dissipation 10 kW, for 32 V DC, resistor value 0,1 Ω; R<sub>cold</sub> = 0,95 x R<sub>soll</sub> = 0,95 x 0,1 Ω = 0,095 Ω; selected: 20 x S305G – 0,0047 = 0,94 Ω, with each 0,5 kW in total 10 kW, type FKEY 3122002 – 0.1, connections on 2 lugs with connection screws M12 at the resistor

