



Type series FA 3.. / FS 3..

1,5 – 66 kW with several terminals



FA... Steel-grid fixed resistor unit, degree of protection IP 20 without weatherproof roof,

FS... Steel-grid fixed resistor unit, degree of protection IP 23 with weatherproof roof

In completely closed zinc sheet enclosure with protective grid at the top and bottom. Ceramic insulated flat or bolt terminals of 35 A up to 400 A in variable combinations available.

Ⓜ optional, the type designation would be FA.U 3.. / FS.U 3..

## Technologies

- for middle and high power ratings
- Up to 40 FK-terminals
- continuous dissipation up to 66 kW
- for floor-level mounting
- for outdoor location (FS...)
- optional with temperature switch (TS) wired on two terminals, the type designation would be F.Q. 3...

The necessary terminals are mounted on a terminal strip in the lower part of the device and are accessible after demounting a cover.

By the use of 12 different enclosure sizes – with 3 heights and 4 widths we can well adapt the construction form to the given space. In the range between 14 and 88 steel-grids you can make your choice between smaller and lower forms.

You will find suggestions for the dimensioning of the resistor for short time load at chapter Technical Details, pages T613E to T620E.

## Application

An important application is the use as braking resistor for motor/generator drive of motors with frequency converters, where big power ratings are necessary for outdoor location combined with degree of protection IP 20 or IP 23.

## Special design

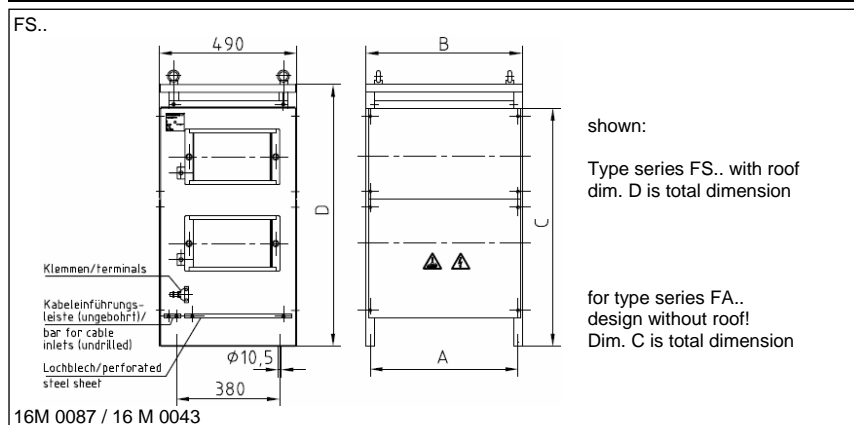
- For special applications also in a four block design
- Enclosure additionally varnished in RAL 7032 or other colours
- Connection parts and enclosure out of stainless steel 1.4301/AISI304

## Electrical and mechanical data

Type FA 3.. / FS 3.. without, FAQ 3.. / FSQ 3.. with TS	max. typical power in kW at 40°C and 100% DCF	production range Ω-value		max. number of steel-grids corresp. to given device size	dimensions in mm				max. weight in kg
		from	to		A	B	C	D only IP23	
F.. 31114..	7,0	0,31	78	14	370	395	460	520	26
F.. 31224..	12,0	0,53	134	24	570	595	460	520	36
F.. 31334..	17,0	0,75	190	34	770	795	460	520	51
F.. 31444..	22,0	0,97	246	44	970	995	460	520	61
F.. 32128..	14,0	0,16	156	28	370	395	710	770	41
F.. 32248..	24,0	0,27	268	48	570	595	710	770	61
F.. 32368..	34,0	0,38	380	68	770	795	710	770	86
F.. 32488..	44,0	0,49	492	88	970	995	710	770	101
F.. 33272..	36,0	0,18	403	72	570	595	960	1100	82
F.. 33302..	51,0	0,25	570	102	770	795	960	1100	112
F.. 33432..	66,0	0,32	739	132	970	995	960	1100	138

This table only represents the maximum number of steel-grids of the specific size of unit and the corresponding maximum typical power. All numbers of steel-grids corresponding to our types between 3 pc. (1,5 kW) und 132 pc. (66 kW) are available. Type code and selection of units see Technical Details pages T613E to T620E.

Type	Max. number of terminals up to					
	FK 35A	BK M6 60A	BK M8 115A	BK M10 170A	BK M10 220A	BK M12 400A
F.. 3.1..	16	10	8	7	7	7
F.. 3.2..	24	16	14	12	12	11
F.. 3.3..	32	23	20	17	17	16
F.. 3.4..	40	30	26	22	22	20



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

see Technical Details pages T613E to T620E