FS100

Input voltage 24/48/60/110/220 VDC

Output 230VAC/50Hz/100VA

Construction -19“- cassette
-19“- sub racks
-19“- sub racks for wall mounting
-19“- cabinet for wall mounting
- mounting plate for wall mounting

FS200

Input voltage 24/48/60/110/220 VDC

Output 230VAC/50Hz/250VA

Construction -19“- sub racks
-19“- sub racks for wall mounting
-19“- cabinet for wall mounting

General Informations

Application

The inverters of the series FS supply electronic devices with stabilized sine wave voltage, drawing power from a DC source or battery. With the inversion of DC to AC diverse frequencies and voltages other than 50Hz and 230VAC can be obtained. This makes an ideal load application possible. The output is potential free; short-circuit protected, over-load protected and radio frequency interference suppressed. Therefore, these inverters meet the special requirements of all devices, which need a clean and stable sine wave source.

Description

The FS inverters are of a versatile modular construction, which enables an individual application to various requirements. The units FS100 are in 19"-cassettes, on mounting plates or 19"subracks. The units FS200 are only in 19"subracks. The control circuitry and the power switches of the inverter are mounted on a euro-card with a cooling bracket. These units together with the transformers chokes and capacitors are mounted on the chassis and from the complete inverter. The operation and control elements are located on the front panel.

Type Outline and Specifications

Model	Input voltage [VDC]	Output power [VA]		Power input [A typ.]		Input fuse
		continuity	60s	non load at $U_{IN\ NOM}$	non load at $U_{IN\ NOM}$	F1 [AT]
FS121 FS 221	19 - 30 (24)	100 200	150 300	0,6 0,8	5,2 13	10 16
FS131 FS231	38 - 60 (48)	100 250	150 350	0,3 0,4	2,6 6,5	6,3 10
FS141 FS241	45 - 75 (60)	100 250	150 350	0,25 0,35	2,3 5,0	6,3 10
FS151 FS251	85 - 140 (110)	100 250	150 350	0,2 0,3	1,2 2,9	3,15 6,3
FS171 FS271	170 - 280 (220)	100 250	150 350	0,1 0,15	0,6 1,4	1,6 3,15

Input

Ripple	allowed 5 % rms
Polarity protection	cross diode + fuse
Efficiency	73 - 80%, depending on type
Soft start	5sec. typ
Inrush current limit	NTC
Turn off	< U_{MIN}
RFI- interference	„A" acc. EN 50011 B" upon inquiry

General

Construction	EN 60950, Class 1
EMV	EN 61000-6-2 / EN 61000-6-4
Isolation	input/output: 4250VDC input / output / case: 2800VDC
Creepage distance	6,5mm input / output 5mm case / all
Air distance	5mm input / output 5mm case / all
Operation temperature	-10ºC to +50ºC
Storage temperature	-20ºC to +70ºC
Humidity	90% without condensation
Cooling	natural convection

Construction

FS100	19"- cassette 3u
Protection class	IP 20
Weight	6 kg app.
FS100-A	mounting plate
Protection class	IP 20
Weight	6 kg app.
FS200	19"- sub rack 84TE 3u
Protection class	IP 20
Weight	12kg app.

Output

Voltage	230 VAC sine wave
Regulation	static ±3 % dynamic ±8 %
Recovery time	100 ms typ
Frequency	50 Hz ±0,1%
Distortion	5 % typ. at cosφ = 1
Power factor	cosφ0,8 ind. - 0,8 kap.
Crest factor	2,5 admissible
Short circuit protection	electronic
Overload protection	electronic
RFI- interference	„A" acc. EN 50011 „B" upon inquiry

Indication, Alarm

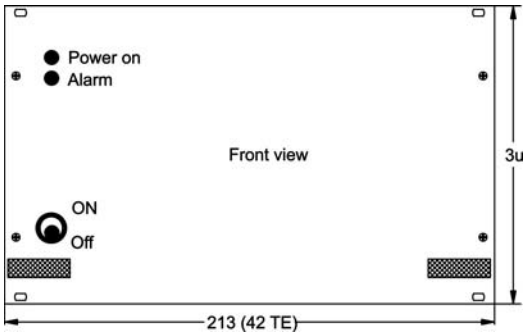
	1. LED green (operation) 2. LED red (Alarm) 3. potential-free contacts: NOC, NCC (30V/1A/max.40W)
Alarm	output voltage out of tolerance
Shut-off	a) input voltage too low b) high temperature

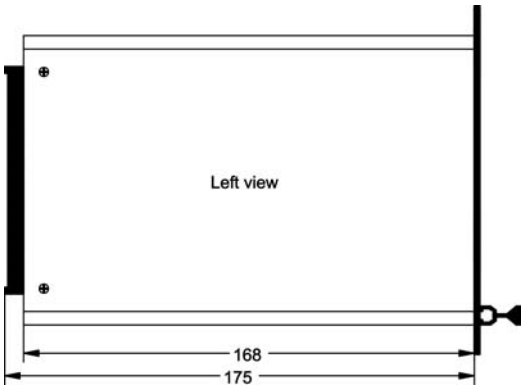
EMV / CE	EN 61000-6-4, EN 61000-6-2

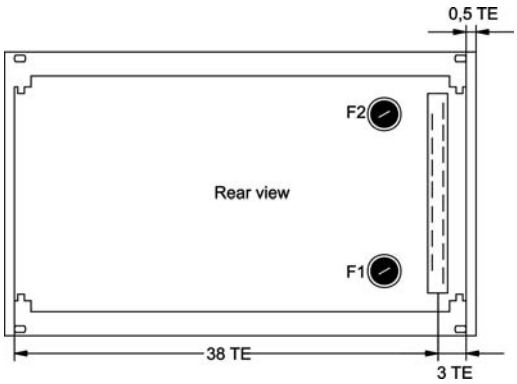
Connector

FS100	rear socket H15 acc. DIN 41612
FS100-A	front terminals
FS200	rear terminals

Dimension FS100 (19“- Cassette)



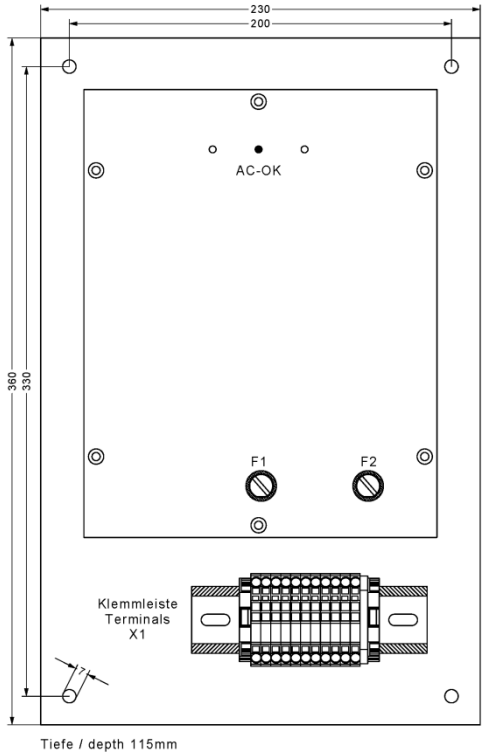




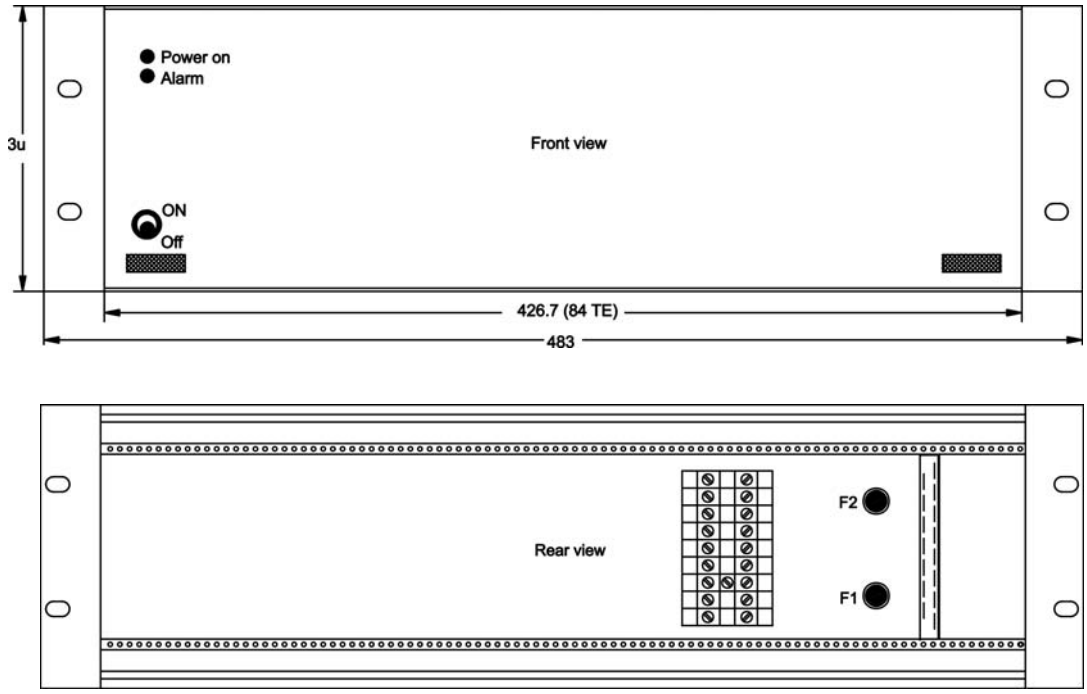
Air Flow

Mounting Position
all dimensions in mm
1TE = 5,08 mm
1u = 44,45 mm

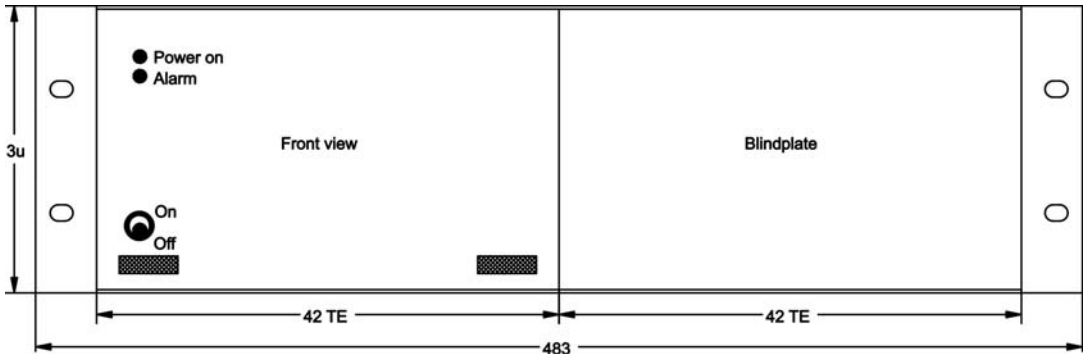
Dimension FS100-A (Mounting Plate)



Dimensions FS200 (19“- Sub rack)



FS100 installed in 19“- sub rack BGT 01



FS200 installed in 19“- sub rack for wall mounting BGW 01