



Main application

- Packaging
- Extrusion
- Thermoforming
- Injection moulding
- Textile
- Multizone furnaces

Main features

- 30, 60, 80kW solid state relay
- Current transformers (one or four)
- Fuses-holder (option)

PROFILE

Solid state power unit with four SSR and heat dissipater for use only as replacement in GFX4.

POWER

Power is controlled with double SCR in anti-parallel, zero crossing switching principle, with configurable proportional cycle time. Different load connection are available: monophase, dualphases, three-phases.

FUSES (OPTION)

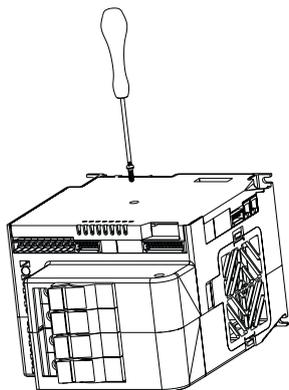
The fuses are orderable on the GFX4 30KW and 60kW model.

Thanks to this, you save time, wiring is simplified, and dimensions in the panel are reduced.

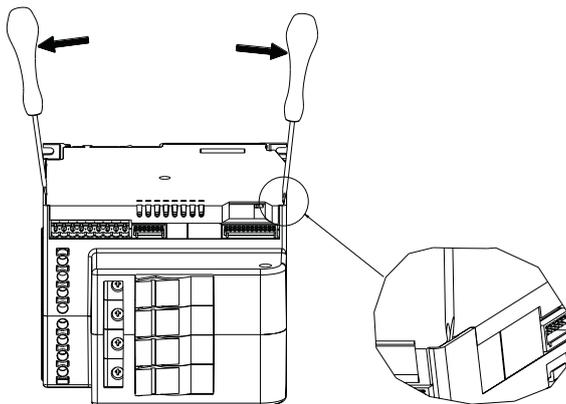
TECHNICAL DATA

INTERNAL CURRENT TRANSFORMERS CT	
Function	Read internal CTs; (The acquisition of current values is valid for voltages in a range 90...530Vac)
Accuracy	2% FS \pm 1 scale point at room temperature of 25°C
POWER (Solid state power units, 4 units)	
Rated voltage	480Vac
Working voltage range	24...530Vac
Non-repetitive voltage	1200Vp
Zero switching voltage	<20V
Rated frequency	50/60Hz self-setting
Rated current AC51	30KW 60KW 80KW 4x16A 4x32A (4x30)* 4x40A (4x40)* (single channel 57A Σ I = 160A)
Non-repetitive overcurrent (t=20msec)	400A 600A 1150A
I ² t for fusion (t=1...10msec)	645A ² s 1010A ² s 6600A ² s
Critical Dv/dt with output deactivated	1000V/ μ sec
Rated isolation voltage	4000V
GENERAL DATA	
Protection	IP20
Work/storage temperature	0...50°C (referred by dissipation curves) / -20...70°C
Relative Humidity	20...85% Ur not condensing
Ambient work conditions	internal use, up to 2000m
Installation	DIN EN50022 RAIL /panel with screws
Installation instructions	Installation category II, pollution level 2 double isolation Maximum surrounding air temperature 50°C (for UL) "UL Open Type" equipment
Weight	models 30Kw, 60Kw, 80Kw 1200g. models 30Kw, 60Kw with fuses 1600g.

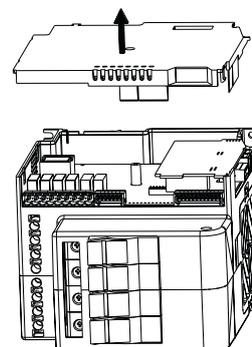
REPLACING THE SSR MODULE



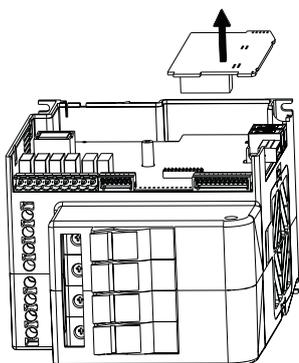
- 1.**
Unscrew the screw on the side cover of the GFX4.



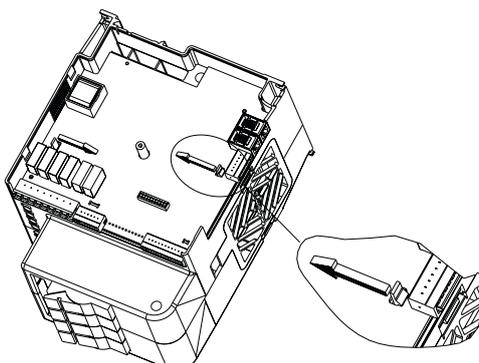
- 2.**
With a small flat-head screwdriver, gently apply leverage at the points indicated to detach the cover from the plastic base.



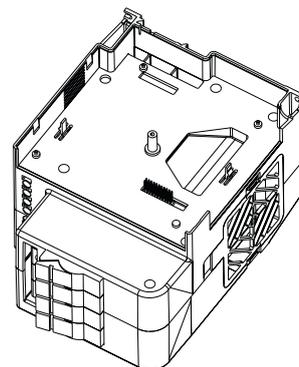
- 3.**
Remove the cover.



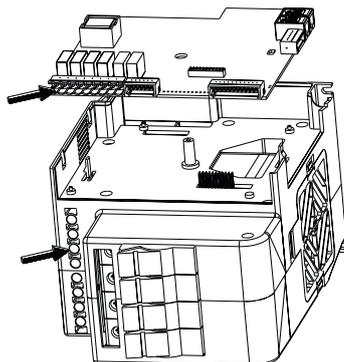
- 4.**
Remove the Fieldbus board (if present on the product) by sliding it vertically off its connectors.



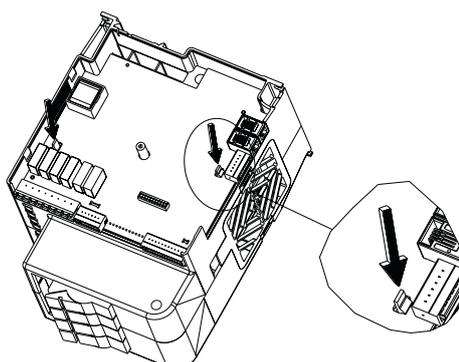
- 5.**
With your fingers, move the two hook tabs as shown in the figure, then lift the CPU board and detach it from the plastic base.



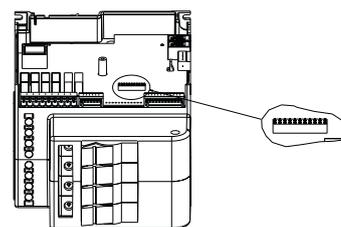
- 6.**
Take the replacement SSR module.



- 7.**
Insert the CPU board by aligning it with the edges of the plastic on the base.
NB: the green connectors on the CPU board must face the external screws of the power terminals.

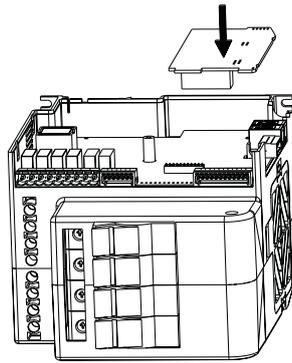


- 8.**
Check that the CPU board is correctly attached to the two hook tabs.

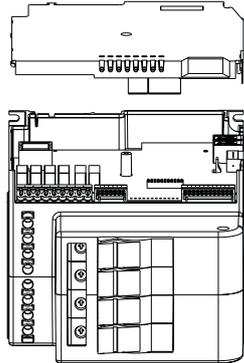


- 9.**
After inserting the board, check that the gold-plated tips of the 22 pins extend from the connector body and can be seen above the female connector.

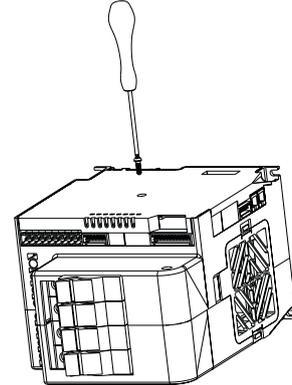
REPLACING THE SSR MODULE



10. Insert the Fieldbus (if present) and check the alignment of the connectors between the two boards.



11. Place the cover on the base, checking that it inserts completely on the plastic base.



12. Fasten the cover by screwing the screw (max. torque 1 Nm).

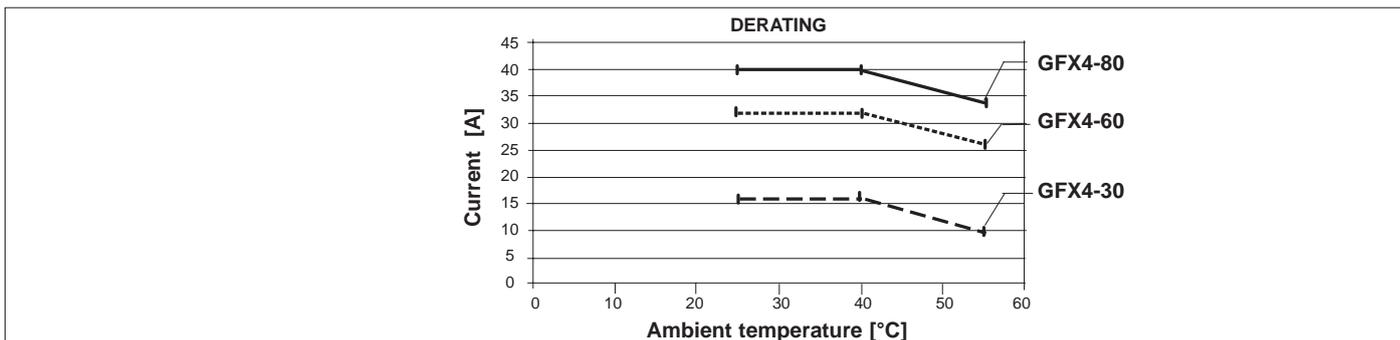
NB.: after replacing the SSR group on the GFX4, the accuracy of load current measurement is 2% full scale.

VOLTAGE / CURRENT TABLE

Model GFX4	Current (Amp)		Voltage (Vac)			Power (kW)		
	max for channel		range	nominal	working	total contemporary	single channel	max for single channel
30 (4x16A)	16		24...530	480	110	(4x16x110) 7	(16x110) 1,7	(1x16x110) 1,7
					230	(4x16x230) 14,7	(16x230) 3,6	(1x16x230) 3,6
					400	(4x16x400) 25,6	(16x400) 6,4	(16x400) 6,4
					480	(4x16x480) 30,7	(16x480) 7,6	(1x16x480) 7,6
60 (4x32A) (4x30A)*	32 (30)*		24...530	480	110	(4x32x110) 14	(32x110) 3,5	(32x110) 3,5
					230	(4x32x230) 29,4	(32x230) 7,3	(1x32x230) 7,3
					400	(4x32x400) 51,2	(32x400) 12,8	(1x32x400) 12,8
					480	(4x32x480) 61,4	(32x480) 15,3	(1x32x480) 15,3
80 (4x40A)	40*	57	24...530	480	110	(4x40x110) 17,6	(40x110) 4,4	(1x57x110) 62,7
					230	(4x40x230) 36,8	(40x230) 9,2	(1x57x230) 13,1
					400	(4x40x400) 64	(40x400) 16	(1x57x400) 22,8
					480	(4x40x480) 76,8	(40x480) 19,2	(1x57x480) 27,3

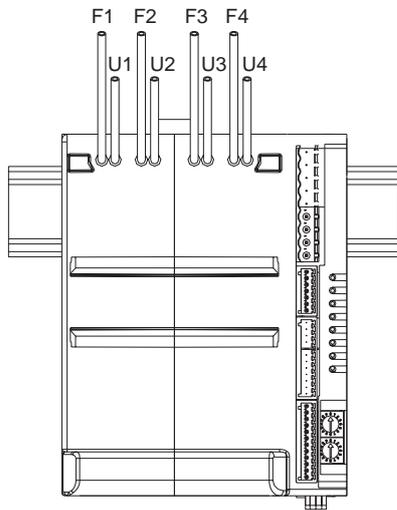
* UL Certificate

DISSIPATION CURVES

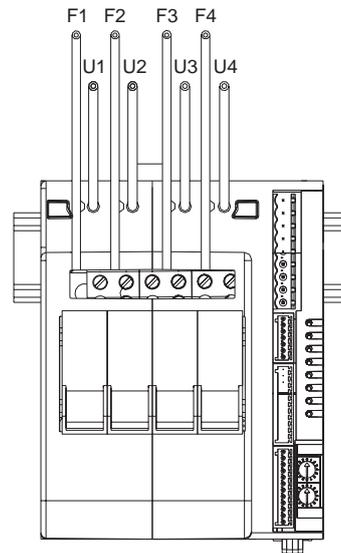


POWER

Model without fuses-holder

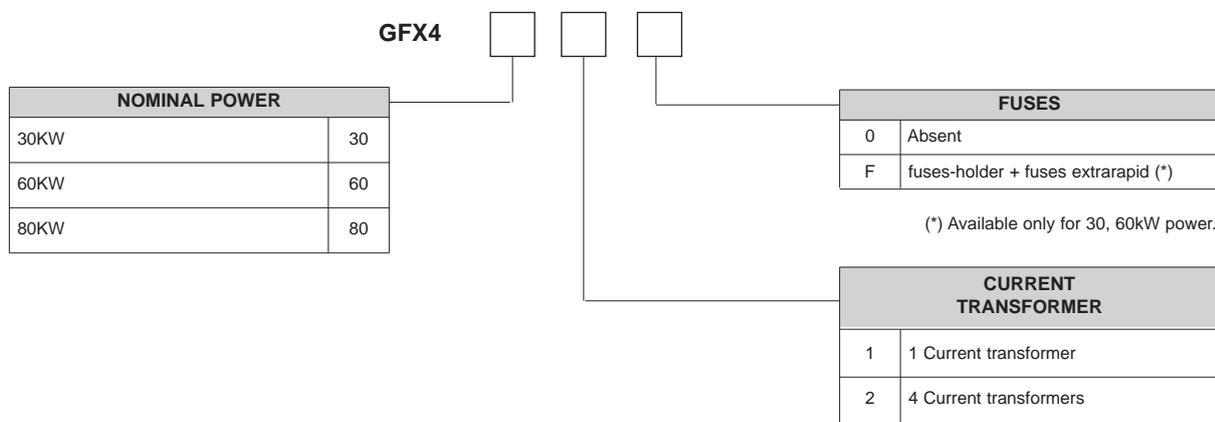


Model with fuses-holder



model	GFX4-30		GFX4-60		GFX4-80	
max current	16A		32A		57A	
	0,2 - 4mm ²	24-12AWG	0,2 - 6mm ²	24-10AWG	0,5 - 16mm ²	20-6AWG
	0,2 - 2,5mm ²	24-14AWG	0,2 - 4mm ²	24-11AWG	0,5 - 10mm ²	20-7AWG
	0,25 - 2,5mm ²	23-14AWG	0,25 - 4mm ²	23-11AWG	0,5 - 10mm ²	20-7AWG
	0,25 - 1,5mm ²	23-16AWG	0,25 - 2,5mm ²	23-14AWG	0,5 - 10mm ²	20-7AWG
	0,5 - 0,6Nm		0,5 - 0,6Nm		1,2 - 1,5Nm	

ORDER CODE



GEFRAN spa reserves the right to make aesthetic or functional changes at any time and without notice.