

Filax-2: the ultrafast transfer switch

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The Filax has been designed to switch critical or sensitive loads, such as computers, industrial controls or modern entertainment equipment from one AC source to another.

The priority source typically is the mains, a generator or shore power. The alternate source typically is an inverter.

With its switching time of less than 20 milliseconds sensitive loads will continue to operate without disruption. The Filax is not intended to supply high power household equipment like washing machines, or electric motors.

Open transition transfer

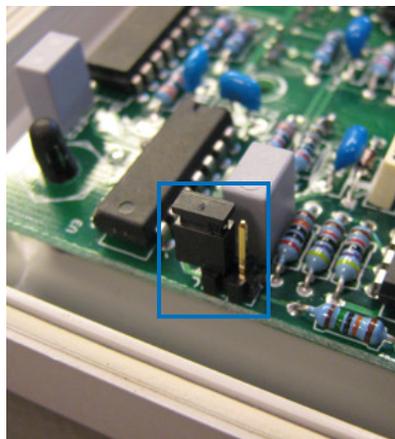
The Filax is an open transition (break before make) transfer switch.

The maximum load transfer time is 16 ms.

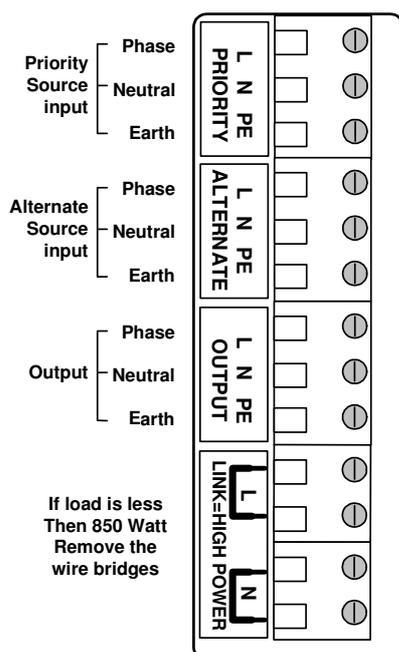
The load is normally supplied by the priority source, and is transferred to the alternate source if:

- The voltage of the priority source drops below the threshold value.
- The frequency of the priority source drops below the low frequency threshold value, or increases beyond the high frequency threshold value.

Reverse transfer from the alternate source to the priority source is initiated when the priority source has operated within the voltage and frequency reverse switching limits during 30 s.



50/60Hz jumper position



Wiring diagram

Filax-2	230V/50Hz	240V/60Hz	110V/50Hz	120V/60Hz
Maximum current	16 A			
Priority source: low voltage switching threshold	180 V	180 V	88 V	90 V
Priority source: low voltage reverse switching threshold	188 V	188 V	92 V	94 V
Priority source: low frequency switching threshold	45 Hz	46 Hz	45 Hz	46 Hz
Priority source: low frequency reverse switching threshold	47 Hz	52 Hz	47 Hz	52 Hz
Priority source: high frequency switching threshold	60 Hz	68 Hz	62 Hz	68 Hz
Priority source: high frequency reverse switching threshold	56 Hz	63 Hz	58 Hz	63 Hz
Priority source: maximum continuous input voltage	260 V	260 V	130 V	130 V
Alternate source: maximum continuous input voltage	260 V	260 V	130 V	130 V
Maximum load transfer time and reverse transfer time	16 ms			
Reverse switching delay (seconds)	30 s			
Operating temperature range	-20 to +50°C			
Humidity (non condensing)	Max 95 %			

LED indicators

Load supplied by priority source	Yellow
Load supplied by alternate source	Yellow
Priority source fault	Red

ENCLOSURE

Material & Colour	ABS RAL7035
Protection category	IP 65
Weight	0,8 kg
Dimensions (h x w x d)	120 x 255 x 75 mm

STANDARDS

Safety	EN 60335-1, EN 60335-2-29
Emission, Immunity	EN55014-1, EN 55014-2, EN 61000-3-3, EN 61000-6-3, EN 61000-6-2, EN 61000-6-1

Installation

- Install the Filax in a dry, well-ventilated area.
- The input cables from the generator/mains, the inverter and the output cables to the appliances should be connected according to the wiring diagram.
- If a load of less than 850 Watts is connected, then the wire bridges should be removed.
- The frequency (50Hz or 60Hz) is set with a jumper. 50Hz no jumper placed. 60Hz jumper placed (see photo). If the jumper is not set for the frequency the voltage switching threshold levels will be incorrect.
- Both inputs must be protected against current levels higher than 16 amps.
- The front of the casing is attached using the four supplied screws.
- The Filax is now ready for use.