



SOLLATEK FSPx RANGE

COMPLETE VOLTAGE STABILISATION AND PROTECTION FOR ALL REFRIGERATION AND OEM APPLICATIONS

Description

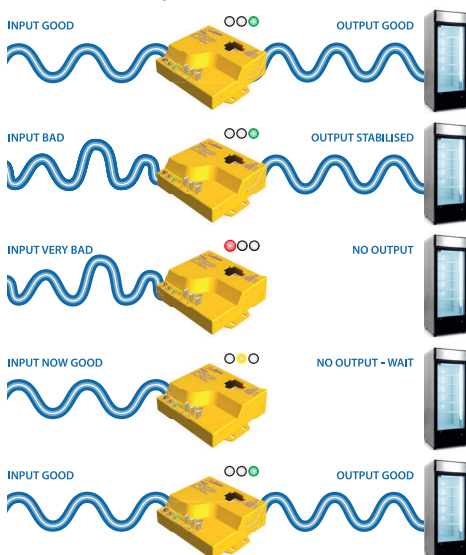
Regulated and stable voltage supply is vital to maximise equipment efficiency and reduce damage and downtime. The FSPx range is an intelligent stabiliser and protector ideal for environments where mains supply is unreliable and fluctuating.

The FSPx range ensures supply is corrected within good working voltage limits and in the event the voltage is too extreme, it will disconnect the power and provide an intelligent start-up delay.

There are 2 models within the range, FSPE and FSP, depending on the required correction range and required nominal voltage, 230 V or 115 V. Sollatek can fully customise transformers to meet your current rating requirement.

The FSPx range are made from two discrete components: the electronic control module and the power transformer. The transformer plugs into the module very simply with a quick connect plug avoiding errors and speeding up production and service.

Operating Principle



Features

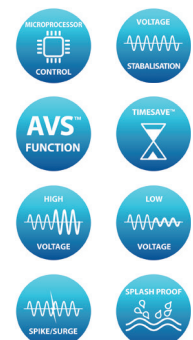
- Two models providing different input voltage ranges: FSPE & FSP
- 230 V or 115 V nominal voltage versions available
- Complete voltage protection (high, low, spike or surge protection)
- Frequency compensated and noise-free measurements
- Unique zero voltage switching to achieve clean pure stabilised power
- High and low voltage protection - disconnects the compressor when mains voltage is outside operating range
- Reconnects the compressor once the voltage has remained within acceptable limits for 3 minutes
- TIME SAVE™ intelligent delay to reduce off-time when the appliance has been without power for more than 3 minutes
- Intelligent delay disabled for the first 30 minutes of continuous operation for ease of testing
- Controller encapsulated for water resistance and protection against environmental conditions in rugged applications
- Transformer shrouded for mechanical and splash proof protection

Model Capability Comparison

	FSPE	FSP
LVD	✓	✓
Extra Large Boost	✓	✗
Large Boost	✓	✓
Small Boost	✓	✓
1:1	✓	✓
Buck	✓	✓
HVD	✓	✓

LVD: Low Voltage Disconnect
 HVD: High Voltage Disconnect

Features



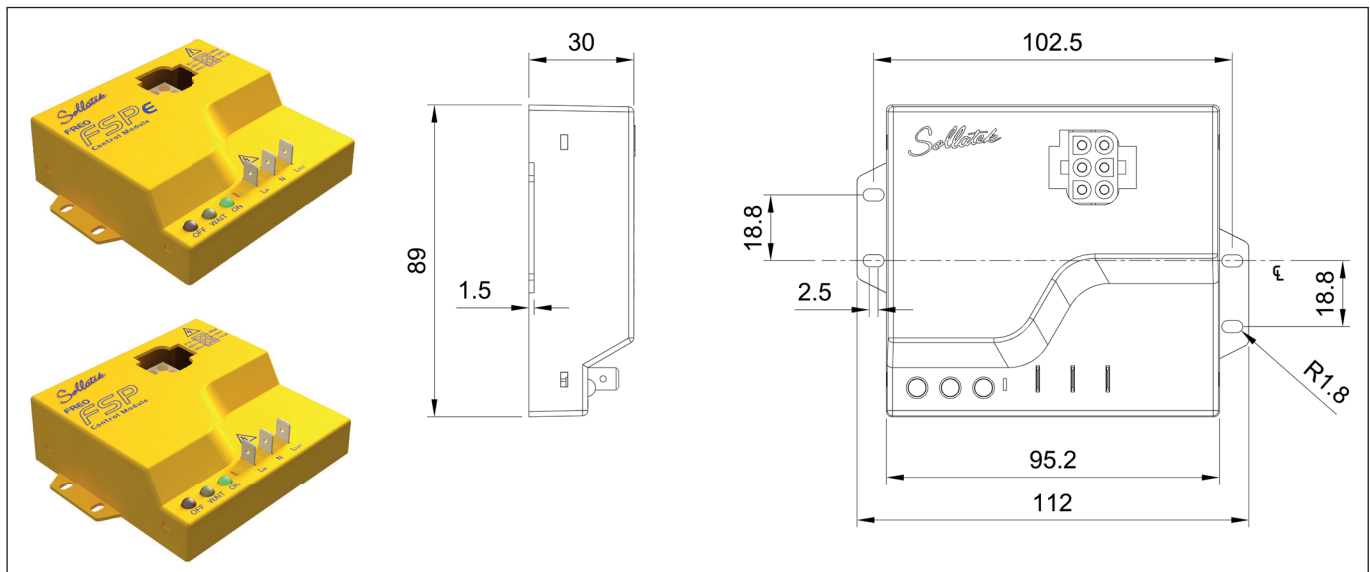
Technical Specification

Power Supply	
Nominal Voltage	230 V or 115 V
Input Voltage Range	Depending on model. See Input / Voltage table
Regulated Voltage Range	Depending on model. See Input / Voltage table
Maximum Output Current	Depending on model. See Transformer table
Working Frequency	50/60 Hz
Spike Protection	143 J, 6500 A (8/20 s) Resonse Time: <10 ns
General	
LED Indication	Red: Bad Voltage (high / low Voltage) Yellow: Wait Mode Green: ON
Wait Time*	3 min
Standard Delay	10 to 30 s
Blind Time	Undervoltage: 2 s Overvoltage: 0.5 s
.Technology	Zero Voltage Switching Response Time: <0.1 s
Performance	Thermal Endurance: Continuously rated @ full load @ full boost Overvoltage Endurance: Continuous running @ max permisssble input voltage
Connectors	
Power (Lin, N & Lout)	3 x 0.25" (6.35 mm) Faston Tabs
Transformer	6-way connector plug
Mechanical	
Mounting	Controller: 4x self-tapping screw Transformer: 4x self-tapping screws
Controller Dimensions	112 x 89 x 30 mm
Controller Weight	
Transformer Dimensions	See Transformer Dimension Table
Environmental	
Moisture Resistance	Encapsulated circuit board
Operating Temperature	-10°C to +55°C
Certiifcation	
Safety	CE, HC Compatible
Flamemability	UL94 V-0 @ 1.5 mm GWFI: 960 °C ; GWIT: 850 °C

* To allow for ease of testing, units are shipped with wait time disabled until 30 minutes of continuous operation has elapsed.

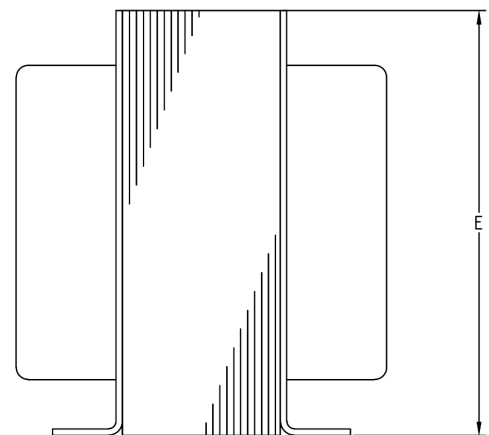
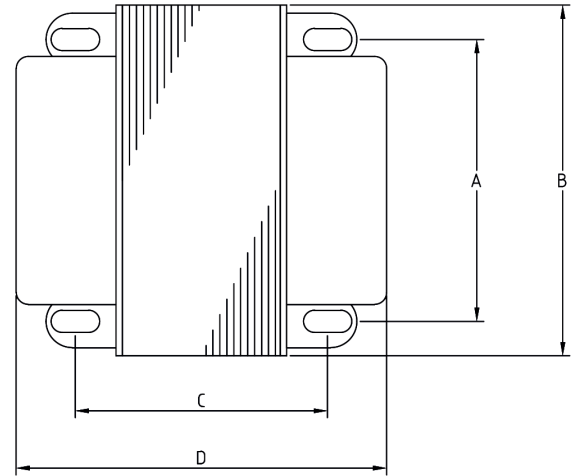
Electronic Controller Modules & Dimensions

The same controller enclosure is used for both models. models can be indentified by the printing of the model number on the top of the enclosure.



Input and Output Voltage Response

Input Voltage	Output Voltage		
	FSPE	FSP	
	230 V	115 V	230 V
70	OFF	OFF	OFF
73		91	
80		100	
85		107	
90		113	
95		108	
100		114	
110		110	
120		120	
130		116	
140	125		
145	130		
148	230	OFF	OFF
150	233		
155	211		
160	218		
170	232		
171	233		
180	209		
182	212		
190	221		
200	233		
210	210		
220	220		
230	230		
240	205		
250	214		
260	222		
270	231		
280	239		
290	OFF	258	OFF
295		OFF	
300		OFF	



Transformer Dimensions

Part number	Long-term current (A)	Short-term Current (A)	Nominal Voltage (VAC)	Transformer Size (mm)					
				A	B	C	D	E	
FSPE	FSPE2A	2.25	3.00	230	63	80	67	104	98
	FSPE03	3.00	4.00	230	63	80	80	117	98
	FSPE4B	4.50	6.00	230	79	95	101	136	115
FSP	FSP04-1	4.00	5.33	115	48	63	52	89	78
	FSP06-1	6.00	8.00	115	63	80	52	89	98
	FSP08-1	8.00	10.67	115	63	80	57	94	98
	FSP02-2	2.00	2.67	230	48	63	57	95	78
	FSP04-2	4.00	5.33	230	63	80	62	99	98
	FSP06-2	6.00	8.00	230	63	80	77	114	98
	FSP08-2	8.00	10.67	230	79	100	88	116	120

Note: Other sizes can be manufactured subject to requirement. MOQ may apply.

Part Number Key

FSPx	YY	-Z
Controller Model	Current (Amps)	Nominal Voltage
FSPE1 (up to 3 A)	01 = 1A	1 = 115 V
FSPE2 (up to 6 A)	1A = 1.25 A	2 = 230 V
FSP (up to 8 A)	1B = 1.5 A	
	1C = 1.75 A	* If voltage is omitted, then 230 V is assumed

