



SOLLATEK DATA SHEET NO:

10910776

# FREOGUARD

VOLTAGE PROTECTION FOR ALL FRIDGES, FREEZERS AND COOLERS


**Protection against:**


## Description

Motors generally, and refrigeration compressors specifically, are susceptible to damage from under voltage.

The motor (particularly the compressor in a refrigeration system) draws more current to compensate for the lower mains supply voltage, burning out its windings, or at least reducing its useful life.

Over-voltage is potentially damaging to all electrical and electronic equipment. One particularly damaging condition can occur when the supply returns after the mains has been off, as reinstatement of the supply is frequently accompanied by high voltage surges and transients.

## Function

The FreoGuard protect equipment by disconnecting the mains supply when it goes either below or above pre-set acceptable limits. It also has an Intelligent time delay\* providing added protection against frequent stops and starts.

## TimeSave™

The FreoGuard has a built-in microprocessor which adds the advanced feature TimeSave.™ TimeSave™ means that when the mains returns to normal, the FreoGuard checks the duration of the OFF time. If the unit has been off for more than 3 minutes then it will reconnect the mains within 30 seconds rather than the standard 3 minutes. This means the Sollatek FreoGuard will give you more vital working time than any other protection unit.

## Feature

- Microprocessor controlled
- Under-voltage protection by disconnection
- Over-voltage protection by disconnection
- Automatic re-connect on return of normal mains
- 3 minute intelligent start-up delay
- Uses the Sollatek TimeSave™ feature
- No need to switch off appliances when supply fails
- Surge and spike protection
- Circuit encapsulated and hermetically sealed for protection against moisture, dust and insects
- 3 LEDs indicate the state of the mains supply
- Simple to connect with 3 industry standard 0.25" spade terminals suitable for push-on crimps
- 16 Amps or 30 Amps capacity to handle almost all single phase refrigeration applications
- Loss of neutral protection (TOV of 415 V)

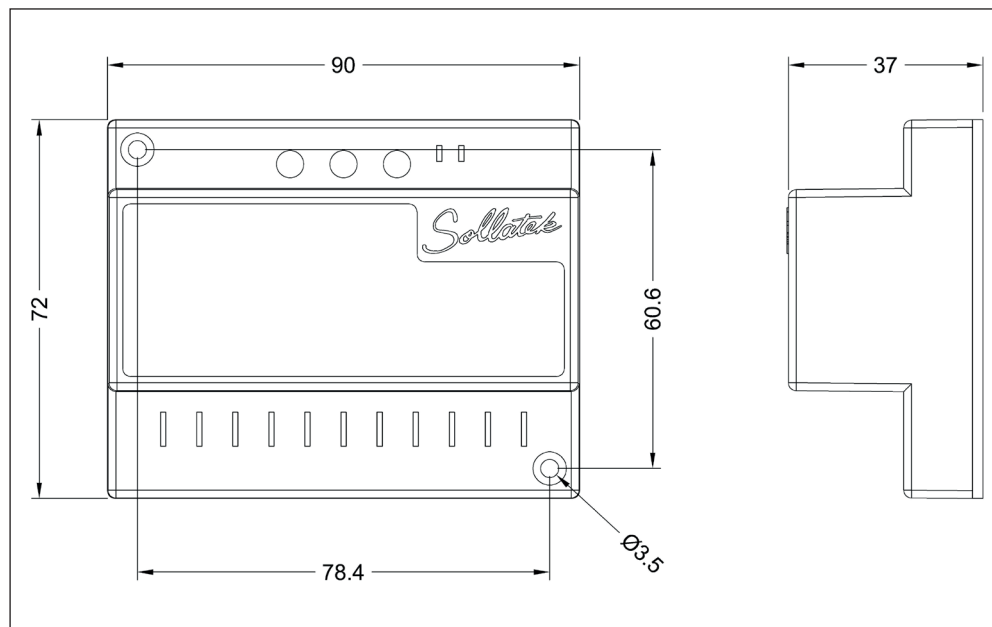
## LED Description

- |          |              |                            |
|----------|--------------|----------------------------|
| ● Red    | Voltage Bad  | Supply to Compressor OFF   |
| ● Yellow | Voltage Good | Compressor OFF - Wait Mode |
| ● Green  | Voltage Good | Supply to Compressor ON    |

## Technical Specification

Voltage	Nominal Voltage	220 / 230 240 V 110 / 115 / 120 V	
	Frequency	50/60 Hz	
Current	Current Rating	16 Amps	30 Amps
	Inrush Current	70 Amps	70 Amps
Voltage Protection	Voltage Limits @230 V	High Voltage Disconnect:	266 V
		High Voltage Reconnect:	261 V
		Low Voltage Reconnect:	186 V
		Low Voltage Disconnect:	180 V
	@115 V	High Voltage Disconnect:	133 V
		High Voltage Reconnect:	130 V
		Low Voltage Reconnect:	93 V
Low Voltage Disconnect:		90 V	
Surge/Spike Response Time	<10 ns		
Max. Spike/Surge Discharge	6.5 kA (8/20 $\mu$ s surges)		
Spike Protection	160 J		
Temporary Over Voltage (TOV)	415 V		
General	Start-up Delay	3 minutes	
	TimeSave Delay	10 - 30 seconds	
	LEDs	3 x Status LEDs Red: Output Off ; Yellow: Wait Mode ; Green: Output on	
	Production Test Feature	Removes the 3 minute start-up delay for quicker and convenient testing	
Environmental	Protection	Electronics sealed for protection against water, humidity, dust and insects	
Mechanical	Mounting	Double sided adhesive pad or Screw mounting base	
	Unit Dimensions	90 x 71 x 31 mm	
	Unit Weight	400 g	
Shipping	Carton Quantity	50 units	
	Packing Dimensions	510 x 540 x 140 mm	
	Carton Weight	20 kg	

## Dimensional Drawing



For more information on the Sollatek product range visit [www.sollatek.com](http://www.sollatek.com)



Product Code	Description
92344500	FreoGuard 16A 180/186 to 260/266V RoHS
92344400	FreoGuard 30A 115V uP Controller
92344300	FreoGuard 30A 180/186 to 260/266V RoHS