

# Installation Guide

## *smart controls*

# Volt Free Switch Box

For  
**SmartSqrbo**  
and  
**SmartBoxer**  
systems

**NUAIRE**

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MAY 1999

NOTE: THIS IS A DIAGRAMMATIC DRAWING  
INDICATING TYPICAL LAYOUT ONLY

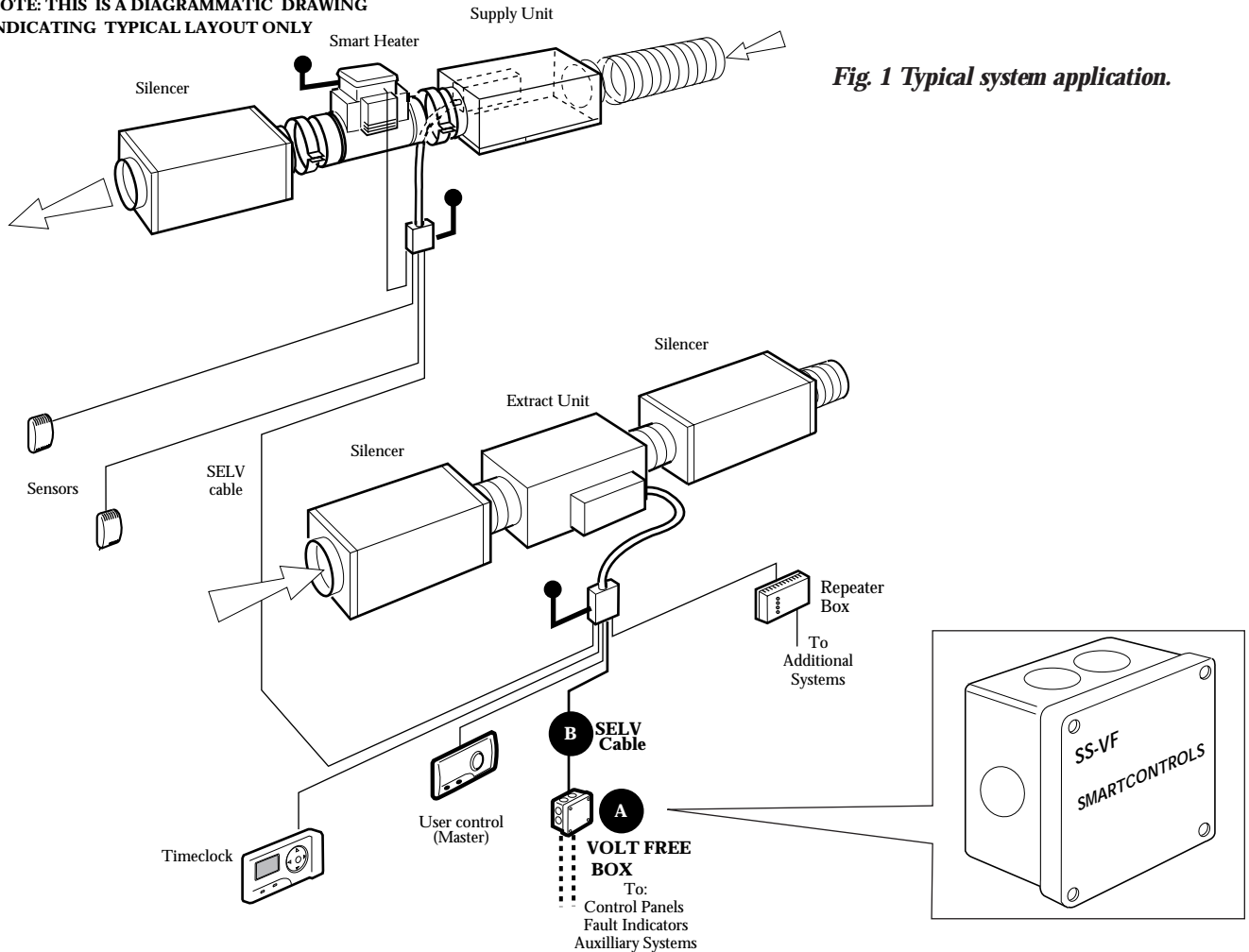


Fig. 1 Typical system application.

### Parts check list

- A** SS-VF Volt Free Box
- B** 1 off 10 metre length of plugged SELV cable

### SS-VF Volt Free Switch Box

Designed to be used with the Smart Sqrbo range of supply and extract fans the Volt Free Box is supplied with a pre-plugged 10m length of communications cable.

The Volt Free Box operates on Safe Extra Low Voltage and is powered from the fan control module

The box is used to connect switch devices into a Smart Sqrbo System

### Communications cable

A 10m length of Safe Extra Low Voltage communications cable (SELV) with plugs attached, is supplied with the sensor. Longer lengths are available from NuAire if required.

## Volt Free Box (SS-VF)

### Installing the Volt Free Box

The VF Box is supplied complete with 10 metres of connecting cable with plugs attached.

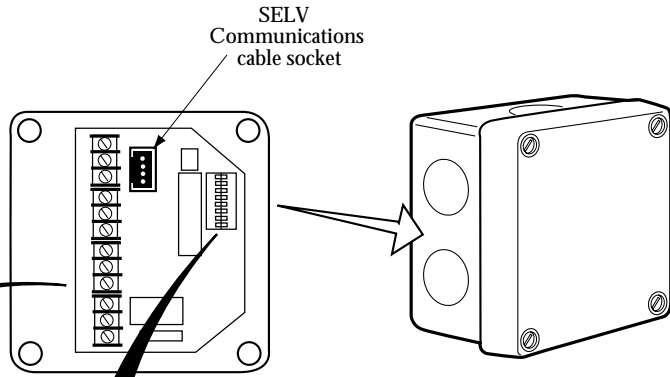
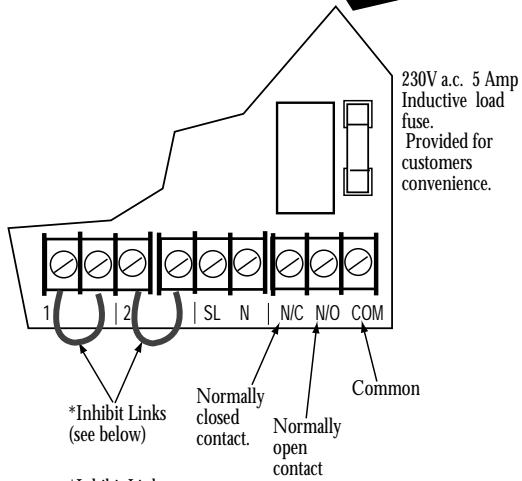


Fig. 2



230V a.c. 5 Amp Inductive load fuse. Provided for customers convenience.

\*Inhibit Links (see below)

Normally closed contact.

Normally open contact

Common

\*Inhibit Links:  
If either of these links is broken, the relay will not be activated. A typical application is for External Stats and/or Overload Trips

### Volt Free Contacts & connections

## Controls Application Service (CAS)

A team of Engineers and technicians is available to provide pre and post order support.

We are on hand to provide help and advice from the most basic use of any NuAire equipment to the more complex applications, maximising on the versatility of our SMART and NetLink control products.

Telephone: **01222 858585**

Facsimile: **01222 858586**

## Volt Free Switch Settings

Relay active on the action below

DIL Switch settings

Action	Switch 1	Switch 2	Switch 3	Switch 4	Switch 5	Switch 6	Switch 7	Switch 8
System off	ON							
Summer mode selected		ON						
Winter mode selected			ON					
System Faults				ON				
Supply unit has failed					ON			
Extract unit has failed						ON		
Supply unit heater is on (Smart heater setting)							ON	
Force relay on Set switch 8 to ON								ON

Note: these switches have no effect when switch 8 is set to ON

Test Relay by setting switch 8 to ON

Fig. 3 Switch settings

## CE DECLARATION OF CONFORMITY

OCTOBER 1998



*We declare that the equipment named below  
conforms to the requirements of EC Council Directive  
relating to Electromagnetic Compatibility*

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<b>Designation of equipment :-</b>	SMART CONTROLS
<b>Equipment Types :-</b>	SS-VF (Volt Free Box)
<b>Relevant EC Council Directives :-</b>	89/336/EEC, 92/31/EEC (EMC) 73/23/EEC, 93/68/EEC (Low Voltage Directive)
<b>Applied Harmonised Standards :-</b>	E50081-1, EN50082-1, EN60204-1
<b>Basis of Self Attestation :-</b>	Quality Assurance to BS EN ISO 9001 BSI Registered Firm Certificate No. FM 149

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**Signature of manufacture representatives :-**

	<b>Name:</b>	<b>Position:</b>	<b>Date:</b>
1)	 C. Biggs	Technical Director	2. 10. 98
2)	 Michael J. Fussell	Manufacturing Director	2. 10. 98

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## Service

As a manufacturer NuAire can provide you with factory trained Service Engineers.

Our Engineers are supported by a comprehensive range of spare parts 'off the shelf'.

If you are an industrial or commercial user, you may be interested in details of NuAire's regular maintenance Service Contracts. This is a worthwhile service that helps you get the most from our products.

Our Service Department will be happy to give you more information.

Please telephone: **01222 858271**

*Technical or commercial considerations may, from time to time, make it necessary to alter the design, performance and dimensions of equipment and the right is reserved to make such changes without prior notice.*

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