

Ventilation Engineers and Controlled Environment Specialists

# SFA 1

# SUPPLY FAILURE ALARM MAINS FAILURE AND OVER TEMPERATURE ALARM WITH BATTERY CHARGER

PLEASE READ IMPORTANT INFORMATION



# Welco Engineering Ltd

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### **HEALTH AND SAFETY AT WORK**



#### DANGER ELECTRIC SHOCK RISK

#### ELECTRIC DEVICES CAN CONSTITUTE A SAFETY HAZARD

It is the responsibility of the user to ensure that the installation and maintenance of the product are carried out in strict compliance with any relevant instructions, regulations, codes of practice or bylaws in force.

This equipment should only be installed and commissioned by appropriately qualified personnel who have read and fully understood this users manual. If in doubt contact your supplier or Welco Engineering Ltd. for technical advice.

Every care has been taken to ensure that the contents of this instruction booklet are accurate, however no liability is accepted for any consequence of its use.

The manufacturers reserve the right to revise the product specification and other technical features resulting from improvement and continual development.

## SFA 1 SPECIFICATIONS

Supply	230v 50hz -6% +10% 12va.
Battery Ratings	12v 1.2 AH.
Output	12v.d.c. 1a max to charge battery
Hooter Supplies	. 12v.d.c.
Alarm indicating signal	24v d.c.
Over temperature thermostat contacts	Normally Closed
Supply Failure Alarm Delay	Approx. 5 Seconds

#### DESCRIPTION

The SFA 1 Supply Failure Alarm system provides the user with , detection of public electricity supply failure and an over temperature within a given environment, The internal 12v battery circuit is maintained fully charged by the trickle charging circuitry so that when an emergency occurs the SFA 1 provides a 12v supply to drive a suitable hooter.

If the public electricity supply fails an approximate five-second delay occurs before the relay contacts change over and operates the hooter via the internal 12v supply.

The operation of the hooter will be maintained, until the supply returns or the internal batteries discharge.

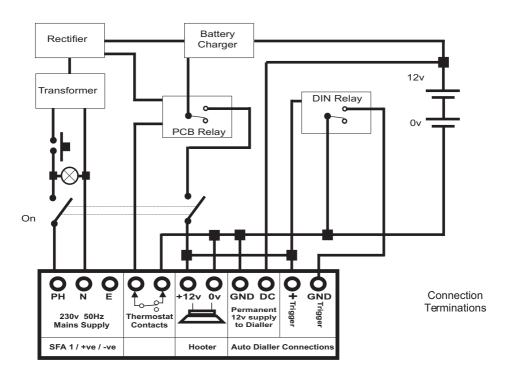
The over temperature terminations are connected to an external thermostat, the contacts of which must be made until the temperature exceeds the maximum desired. Again the hooter will maintain operation until the temperature has fallen below the set desired maximum value or the internal battery discharges. Link the over temperature terminations together [ext link] if this facility is not required. A test button is provided on the front panel for weekly testing of the alarm system `also a switch to isolate the 12v hooter and the 230v supplies.

#### BATTERY CONNECTIONS AND CHARGING

It is essential that the internal batteries are connected with the correct polarity (RED wire to Positive, BLACK wire to Negative) to the battery terminals. Failure to connect correctly will cause damage to the circuitry for which Welco Engineering Ltd cannot accept responsibility.

The battery charging rate is set by the manufacturer and should not require any further adjustment, however if necessary, it is possible to increase or decrease the charging rate by adjustment of the potentiometer on the circuit board marked Vr1. It is advisable to consult Welco Engineering Ltd before any adjustments are made.

#### SFA 1 SYSTEM CONNECTIONS



### Welco Engineering Ltd.

For over 40 year's Welco EngineeringLtd. have specialised in the design, manufacture and installation of state of the art electrical and electronic control systems and equipment for agriculture and industry.

The company offers large comprehensive range of standard manufactured products to satisfy the majority of environmental control requirements, and a service to build to customers specific requirements.

Welco Engineering Ltd., also offer a consultancy service, based on engineers considerable knowledge and expertise in resolving the many environmental problems associated with intensive livestock production units

#### Welco PRODUCT RANGE

- Fan Speed Controllers.
- Automatic Fan Controllers with switched Heater Interlocks
- Electronic Sequential fan Controllers.
- PRESCON 2 Digital Air-Pressure controller.
- Lighting Control Systems.
- Total Refurbishment Programmes.
- Maintenance Contracts.

### Welco Engineering Ltd.

- Welco MICROLIGHT
  "Dawn to Dusk" Conrols
- High and Low Temperature Alarms
- Supply failure Alarms
- Alarm Monitoring Systems
- Magnetically Held Door Control Systems
- MICRO-STAT Digital Thermosat.
- MICRO-TIMER Digital Cycle Timer.
- Transducers, Sensors and Thermostats.
- Vent Drive Motors/ linear Actuators and Power Supplies
- STICK Microcomputer Total
   Environment Controller

For further details of any product or service please do not hesitate to contact us:-

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