



# QSS

## Installation, Operation & Maintenance Manual

### Introduction

Designed for internal applications, the QSS range encompasses 7 models of direct driven centrifugal single fan units with airflow duties from 392 to 3974 m<sup>3</sup>/hr (0.109 to 1.10m<sup>3</sup>/s). Motor windings are fitted with an auto-reset thermal cut-out. Motors are pre-wired to an external terminal box.

### General Construction

Casework is manufactured from 0.9mm thick galvanised sheet steel with an 'O' class foam insulation to provide acoustic insulation. Barrier mat / foam sandwich lining is available as an option for enhanced acoustic applications. Access is via a removable top cover, with fan mounted on a slide out plate.

### Inspection Upon Receipt Of Goods

Immediately upon receipt of any goods, a careful inspection should be undertaken to ensure neither damage has occurred nor parts missing. Particular attention should be paid to the fan impellor, motor shaft, anti-vibration mounts, flexible connection, coil connection & casework.

In the event of such damage or loss having occurred, inform AVT (01264 356 415) WITHIN 3 WORKING DAYS of the delivery date, giving the serial number which can be found on the nameplate. After this period we will be unable to entertain any claim for loss or damage.

### Handling

Units being craned into position must be handled with care to avoid damage.

### Installation

When installing our equipment, the following must be observed.

Safety: It is the responsibility of the installer to ensure that the installation complies with the legal regulations and the current HEALTH AND SAFETY AT WORK ACT.

Ambient Temperatures: The range of units covered by this manual are designed for use in an environment where the ambient air temperature is unlikely to exceed 40°C.

Mounting: All centrifugal fan units MUST be mounted so that the fan shaft is horizontal. Failure to comply will result in fan failure.

### Positioning

All units should be mounted on a completely flat base.

QSS units have integral mounting points.

Duct Connections: Adjoining ductwork should always be independently supported to avoid undue stress on the unit casing. Impellers are statically and dynamically balanced, anti-vibration mounts and fast clamps are available to suit.

Access: All units are designed with easily removable components for maintenance purposes. Sufficient room should be allowed to allow components to be withdrawn.

### Electrical Wiring

Electrical supply must be fully isolated before attempting to affect any work on the unit. All wiring should be carried out by a competent electrician and should comply fully with the current I.E.E. Wiring regulations.

Wiring diagrams are provided within the motor terminal box.

The electrical supply must be as stated on the nameplate.

When the wiring is complete, check for free & correct rotation of the fan impellor

### Maintenance

6 Monthly: The fan impellor should be carefully cleaned with a brush. This will prevent the impellor from becoming unduly dirty and become unbalanced.

12 Monthly: The security and integrity of all fastenings should be checked. Particular attention should be paid to the impellor fixing onto the fan shaft

### Spares

Model	Fan Assembly	AV's Set	Fast Clamp
QSS125	FQS1001	AVM1	KLB125
QSS150	FQS1001	AVM1	KLB150
QSS200	FQS1002	AVM1	KLB200
QSS250	FQS1004	AVM2	KLB250
QSS315	DCF1001	AVM2	KLB315
QSS400	DCF1002	AVM2	KLB400
QSS500	DCF1003	AVM2	KLB500