

## **OPERATING AND MAINTENANCE INSTRUCTIONS**

# FIRE EXTINGUISHANT EXTRACT UNITS - SERIES MODEL 'S' & 'Q' & PERMANENT EXTRACT UNITS - SERIES MODEL 'S' & 'Q'

## **DESCRIPTION**

All units are manufactured to a very high standard. A high efficient, single phase, axial flow fan is correctly sized to meet the required performance. The fan is fixed directly to the fan plate located in the main casing. Isolator & insulation fitted to PE units.

The casing, internal section and lid are manufactured from 18 swg mild steel plate. The unit is finished in a polyester, powder coat paint to RAL 9005 (Satin Black). Both ends of the unit are internally flanged and supplied with M4 nutserts as standard. These are for connection to a suitable duct or the optional Puma telescopic wall sleeve and duct and external weather louvre.

## Fire Smoke Damper (FSD)

The Fire Smoke Damper (FSD) is fitted to the air discharge end. The damper should be located as close as possible to the wall cut out, this will maintain the fire integrity of the wall. The fire rating is 2 hours tested to BS 476 Part 20 and BS EN 1634:2008.

## **OPERATION**

The extract unit requires a 230 V ac single phase supply. This supply will normally be interlocked with the fire detection system in relation to power shutdown in the event of fire detection. The extract fan is connected in parallel with the Fire Smoke Damper.

The Fire Smoke Damper commences opening immediately, and is fully open in 75 seconds. The motor will 'Spring Return' on power failure, and shut in approximately 20 seconds.

#### **INSTALLATION**

The unit must be installed with sufficient access to the top of the unit as access to all the units components is via the flat plate lid. The clearance height is not necessary when the units are located underneath raised modular floors as it is assumed that the appropriate floor tile/s are accessible and removable.

The Model 'Q' through-wall mounted series can be removed from its weatherproof outer sleeve, and access to components is via removal of the flat plate lid.

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Model 'Q' units, when located in weatherproof wall sleeves, must be sealed with suitable mastic externally and general installations must comply with any relevant building regulations.

The mains supply cable must be loosely clipped to the wall to allow sufficient slack in cable to enable the unit to be withdrawn from the sleeve for filter removal.

The mains supply to all units must be disconnected at source before removing the lid.

The extract unit is complete with a 0.75mm 2 core mains cable. The supply required is 230 V ac interlocked with the fire detection panel via a firemans key switch.

### SERVICE AND MAINTENANCE

Periodically, the extract unit must be electrically tested to ensure that the supply to the unit is continuous.

The air flow failure switch should be checked for free movement and electrical conductance.

It is recommended that this test is to be carried out twice yearly, or to fit in with existing service and maintenance contracts.

# FAULT FINDING

# FAN FAILS TO RUN

The extract unit is normally wired directly to a fire detection panel. If the fan fails to run, check the supply panel and control circuit first.

- 1. Check there is a voltage at the fan terminal block inside the unit.
- 2. Check all connections.
- 3. If the fan still fails to run, check the motor winding continuity.

## **NOTE**

Most faults/problems can be resolved by following the above, if the unit still fails please contact Puma Products Ltd for technical assistance.



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