

Emergency and Smoke Extract Induction/Impulse Fans

General Specification

The PVE range of Soffit Mounted Induction/Impulse fan casings are manufactured from 3mm mild steel roll formed and automatically welded. Our special jointing arrangement means that no flanges are required to fix attenuators ensuring a lower profile unit and therefore greater traffic freedom within the car park. The casings are de-greased, cleansed and powder coated to ensure a long lasting finish in any standard RAL colour to suit architects or developers request.

Impeller

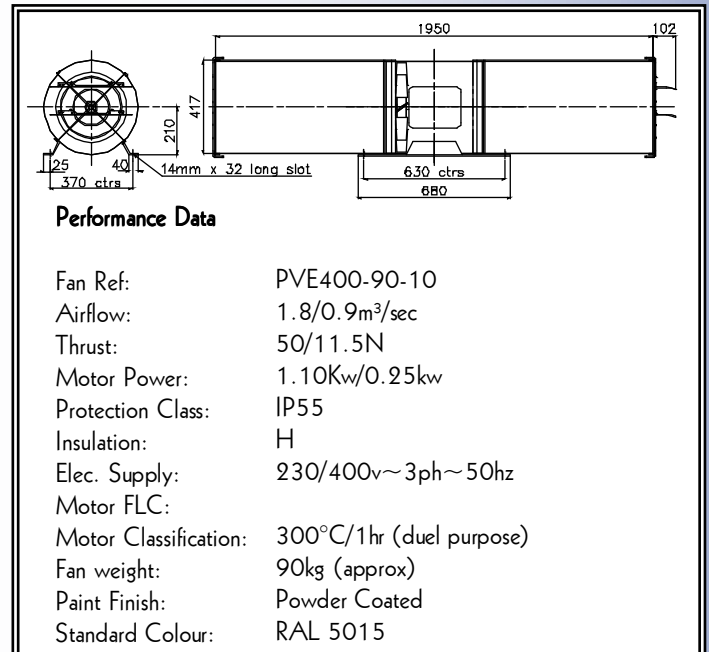
PVE Induction fans are all fitted with adjustable pitch impellers of true aerofoil shape. Blades are manufactured from high quality pressure die cast aluminium alloy (LM6). All impeller blades are factory set at the correct angle to ensure optimum aerodynamic performance and assembled impellers have blades locked and pinned as an extra safeguard under high temperature conditions. Impeller hubs are also manufactured from die cast aluminium alloy (LM24) and the complete assembly is balanced to grade 6.3 ensuring low levels of operational vibration and long life. Due to the potentially high operation temperature impellers are supplied in a natural finish.

Motors

For ease of maintenance and easy replacement worldwide PVE use totally enclosed metric frame motors to IP 55. Standard high temperature motors designed and tested for the specific application.

Our motors are designed especially for use under normal day-to-day ventilation and will if required run continually in this mode switching to smoke clearance mode when conditions within the parking facility dictate for use at 200 or 300°C for set length of times.

Motors are of cast iron frame construction with windings of class H insulation. Temperature resistant flying leads are brought out of the casing and connected prior to testing and despatch to a high temperature isolator featuring a lockable On / Off feature.



Induction Silencer

In order to create optimum performance, PVE have designed silencers with a unique aerodynamic shape to generate up to 60N of thrust. Our silencers casings are manufactured in 1.5mm mild steel, and contain a galvanised perforated labyrinth of 1 mm. Between the surfaces we provide a high density sound absorbing non flammable mineral wool to class A2 acc to DIN 4102. Silencers are fitted with a spun inlet cone to ensure optimum performance.

Grilles

Protection grilles manufactured in stainless steel are fitted at either end of PVE induction fans as standard. The discharge side featuring a specially designed diffuser to ensure floor to soffit movement of gases.

Finish

All PVE fans are powder coated as standard providing the optimum long lasting finish. Whilst we prefer to finish all fans in the European standard RAL blue. We are in control of our own manufacture and therefore our induction fans can be finished in any standard RAL colour at no extra cost to suit architects design, developer's preference or corporate policy.