

C-B8

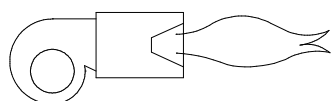
rev. 09/95

ICAM



TYPE PP
GAS BURNER

COMTHERM
PACKAGE BURNER



THE PP BURNER

The 'PP' series of gas burners are pre-packaged fan assisted units designed to suit virtually all types of low temperature gas fired application; typical applications include the firing of box ovens, industrial dryers and air heaters.

The PP burners utilise the well proven Comtherm PH burner head and combustion system.

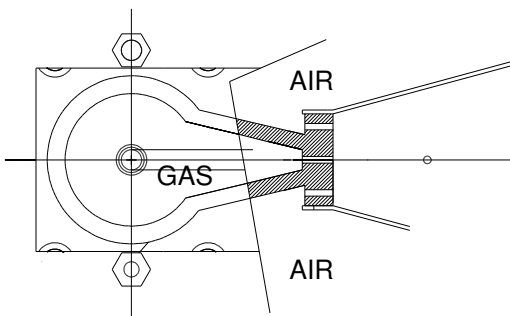
- ◆ **The burner system produces a wide flame spread and therefore relatively short flame; this feature makes the burner ideal for applications where chamber length is restricted.**

The 'PP' burners have been designed with ease of maintenance and installation a top priority, all parts of the burner including the gas manifold and combustion head can be removed without unbolting the burner off the mounting flange. For ease of maintenance and service the spark plug and flame sensor are externally mounted.

A heat resistant peepsight is fitted in the casing of all burners allowing visual inspection of the flame during operation.

The nozzle mix design of the burner and the progressive air mixing feature of the combustion head ensure that burners can operate with high turn down capability; turndown ratios up to 40:1 are possible depending on burner applications and selection.

Sectional drawing of nozzle used on PP burners



COMPLETE PREPACKAGED BURNERS

Each burner unit is supplied with a packaged and prepped valve assembly, including the safety valves and controls necessary to form a fully pre-packaged combustion module.

All burners have an integral combustion air fan, air pressure switch, ignition spark plug and flame sensor; all the electrical components on the burner are prewired to a terminal enclosure mounted on the burner assembly.

The electrical terminal enclosure would normally be fitted with burner run and flame failure indication lights.

Burners are normally supplied complete with a gas valve assembly consisting of pilot/start valve assembly, safety shut off valves, pressure switches and governors; the exact type of valve assembly will depend on the application and the country of installation.

Burners are normally fitted with complete prewired automatic ignition and flame safety equipment.

Most types of flame failure and automatic ignition control units can be supplied; utilising either flame rectification or ultra-violet flame sensing equipment.

Burners can be supplied with extra large control consoles containing special control gear and switchgear to suit the requirements of any specific application; burners can be supplied with special valve arrangements; standard burners are supplied with right handed assemblies unless otherwise specified.

Fully prebuilt burner packages are fully tested and the operation of all components checked before despatch from the factory.

SPECIAL APPLICATIONS

As well as the standard range of PP burners, the burners can be supplied with special side firing combustion tubes and for continuous running burner fan applications.

Special versions of PP burners can be supplied with a split manifold system - effectively producing two flame zones on the burner head and making possible turn down performances of up to 80:1.

GAS SUPPLY

Series PP burners can be supplied for operation on natural or LP gases and are available in eighteen basic sizes, ranging from nominal thermal capacities of 30KW to 1760KW

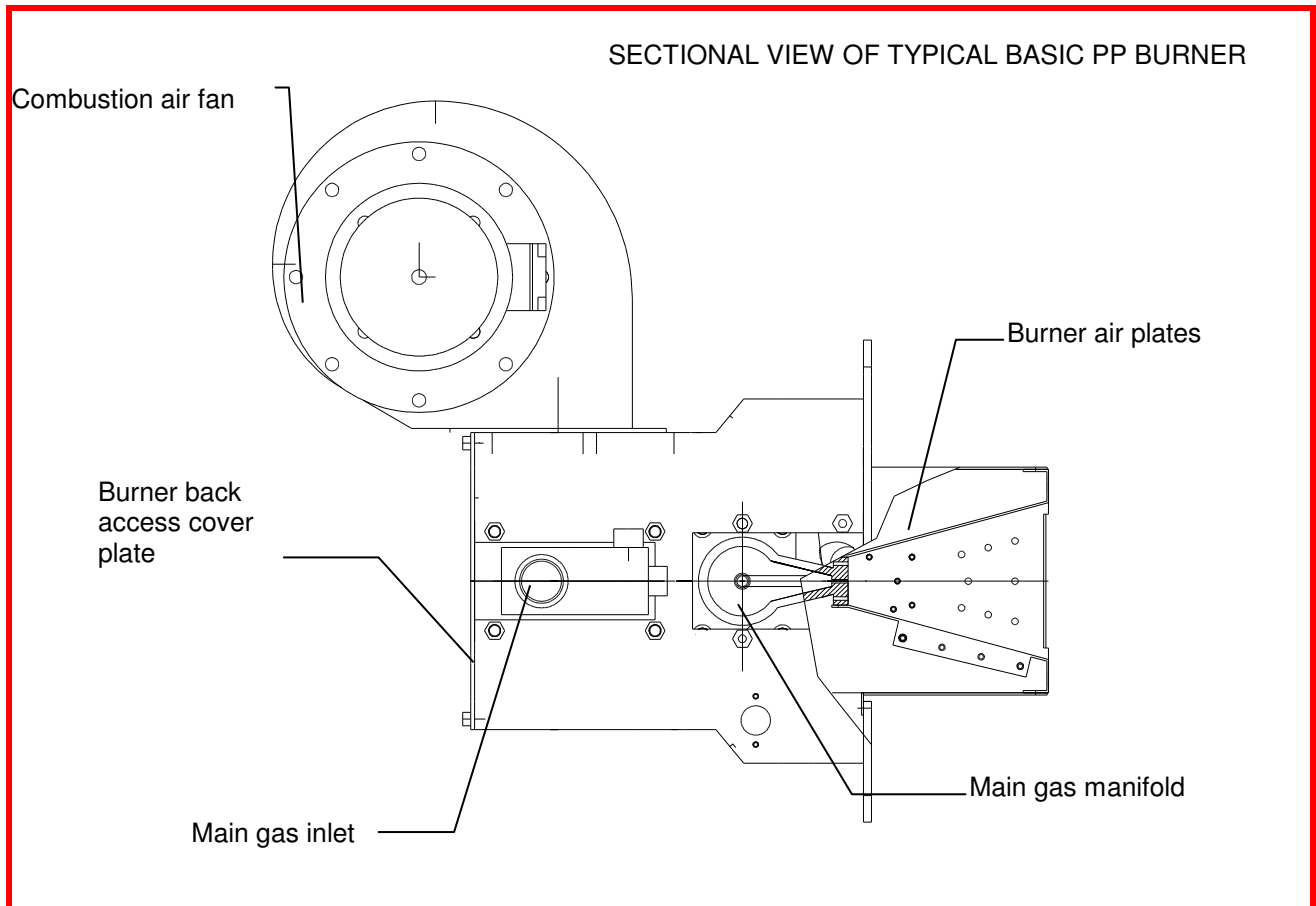
All valve assemblies on the burners are sized to suit an inlet gas pressure of 17.5 mbar (natural gas) or 30mbar (LP gases). Burners can be supplied to suit other gas types and supply pressures.

TYPES OF CONTROL AVAILABLE

Size PP01 to PP21 burners are available as on-off, high-low, or modulation(gas only) models.

Sizes PP22 to PP46 are available as high-low or full modulation (gas only) models.

Sizes PP22 to PP46 are also available as full modulation (gas and air)(E type economy models).



THREE HEAT INPUT RATES

The PP burner is manufactured in three basic gas manifold and air plate designs making possible a burner range with heat input concentrations of 60kW, 290kW and 580kW per 300mm length of burner gas manifold.

The flame length produced by the PP burner is obviously shorter than that produced by conventional burners and does depend on burner setting, combustion chamber conditions and application.

Nominal flame lengths that can be achieved for heat inputs of 60kW, 290kW and 580kW per 300mm length of burner gas manifold are 300mm, 700mm and 1000mm respectively..

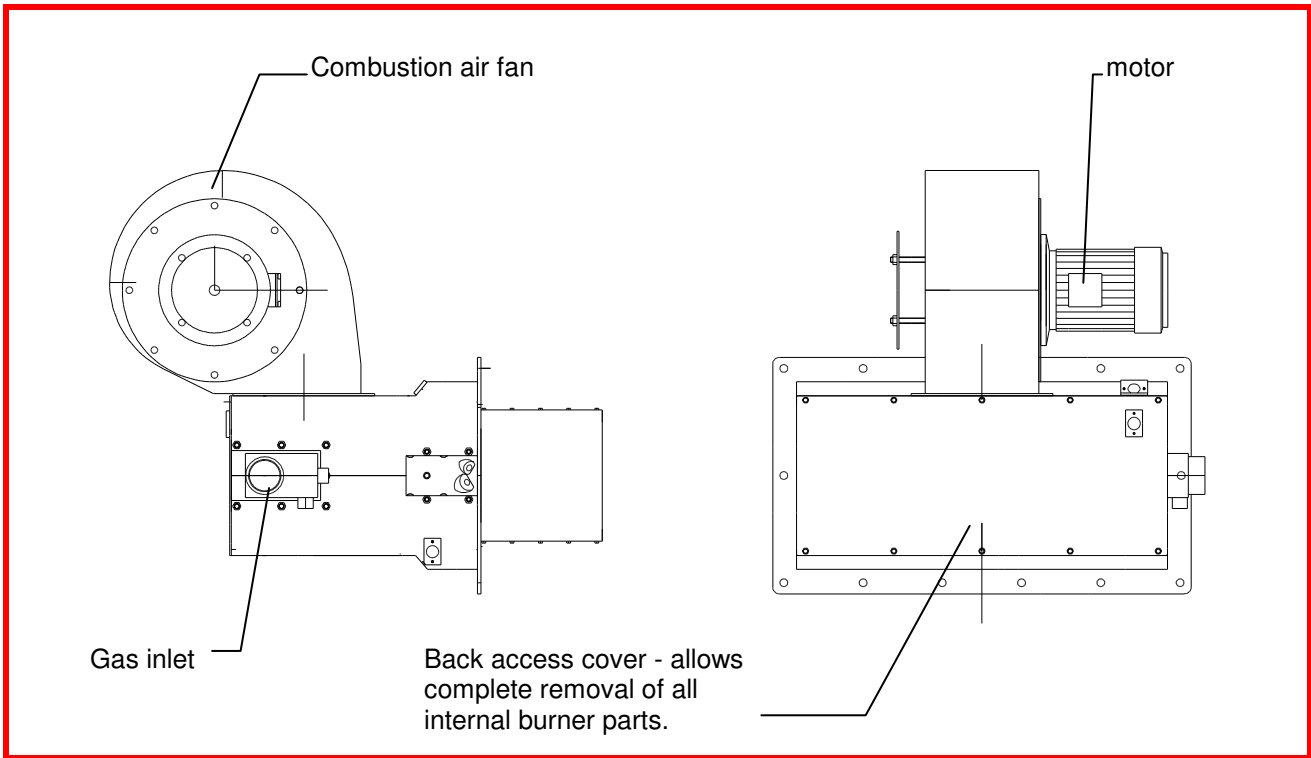
ELECTRICAL SUPPLY

PP01 & PP02 burners are supplied for single phase electrical supply only.

PP11 to PP22 burners are available fitted with single phase or three phase fan motors.

PP24 to PP46 burners are only supplied fitted with three phase T.E.F.C. motors.

Burners can be supplied to suit almost all types of electrical power supply; including 220/380/440v three phase (50 or 60Hz) power supply and with 110/120v or 220/240v control circuits. Burners to suit other electrical supply voltages can be supplied specially to suit a specific application requirement.



USEFUL FACTS TO ASSIST IN BURNER SELECTION.

1KW = 3412 Btu.hr = 859Kcal.hr = 3.6MJ.hr.

1mbar = 0.4" w.c. = 10mm w.c. = 100Pa.

WHEN ORDERING PP GAS BURNERS PLEASE SPECIFY THE FOLLOWING INFORMATION:-

Type of gas

gas supply pressure (to inlet of burner valve assembly)

Electric supply data :

Burner motor voltage (1 or 3 phase)

Control circuit voltage (1 phase)

Type of temperature control required. i.e. On-off high/low, modulation etc.

Valve and burner specification required.

Country of installation

Details of application.

INSTALLATION, COMMISSIONING AND MAINTENANCE :-

If required a complete delivery, installation and commissioning service can be supplied, including the manufacture and installation of associated steel fabrications and ductwork.

An installation and maintenance manual is supplied for all burners; commissioning must be carried out by competent engineers in accordance with the instructions in the manual.

Maintenance and service contracts are available - this normally includes scheduled site visits by our engineer and the free of charge supply of burner consumables such as ignition electrode and flame rectification electrode.

A selection of information data sheets (C-B8-INF***) are available showing physical dimensions of types of PP burners and some technical detail.

A selection of complete general arrangement drawings (M3-PP-) are available showing burner assemblies complete with valve assembly and ancillary equipment.

ICAM

ICAM B.V.

Spoorlaan 37 A

Tel: 0297-264444

E-mail: info@icam.nl

3645 EK Vinkeveen

Fax: 0297-266690

http://www.icam.nl

