

TCAH SERIES

TECHRITE TCAH SERIES Air Heat Burners have been designed for use on a wide range of applications including Ovens, Process Heating, Dryers, Make Up, Air Systems etc.

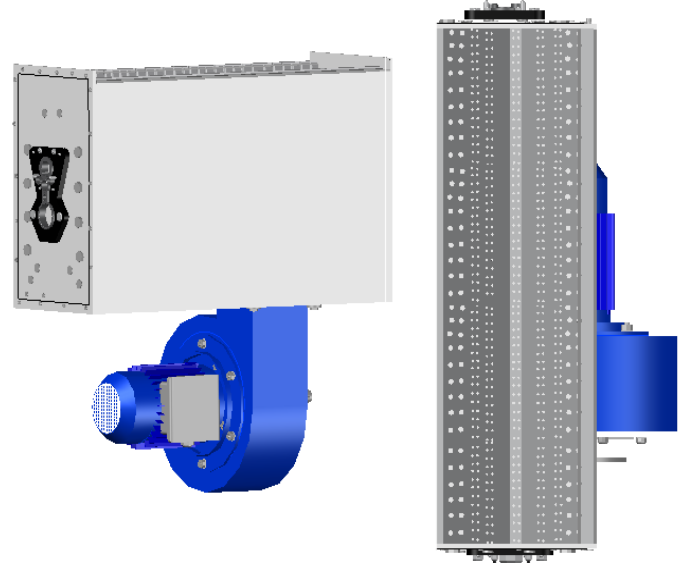
TCAH Burners are designed to burn either Propane or Natural Gas. TCAH Burners are suitable for use in fresh air or recirculating air systems on either the pressure or suction side of the circulating fan. Having its own combustion air supply the burner is independent of the oven recirculating system oxygen content.

The packaged design allows ease of installation using the mounting brackets provided. Connection of a gas train and electrical wiring from a burner management control to the fan motor, igniter and flame rod completes the system.

PRINCIPAL OF OPERATION

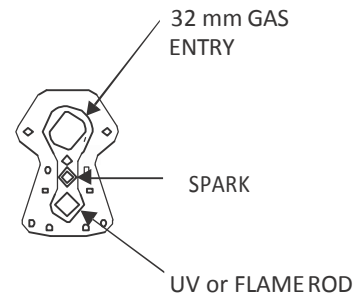
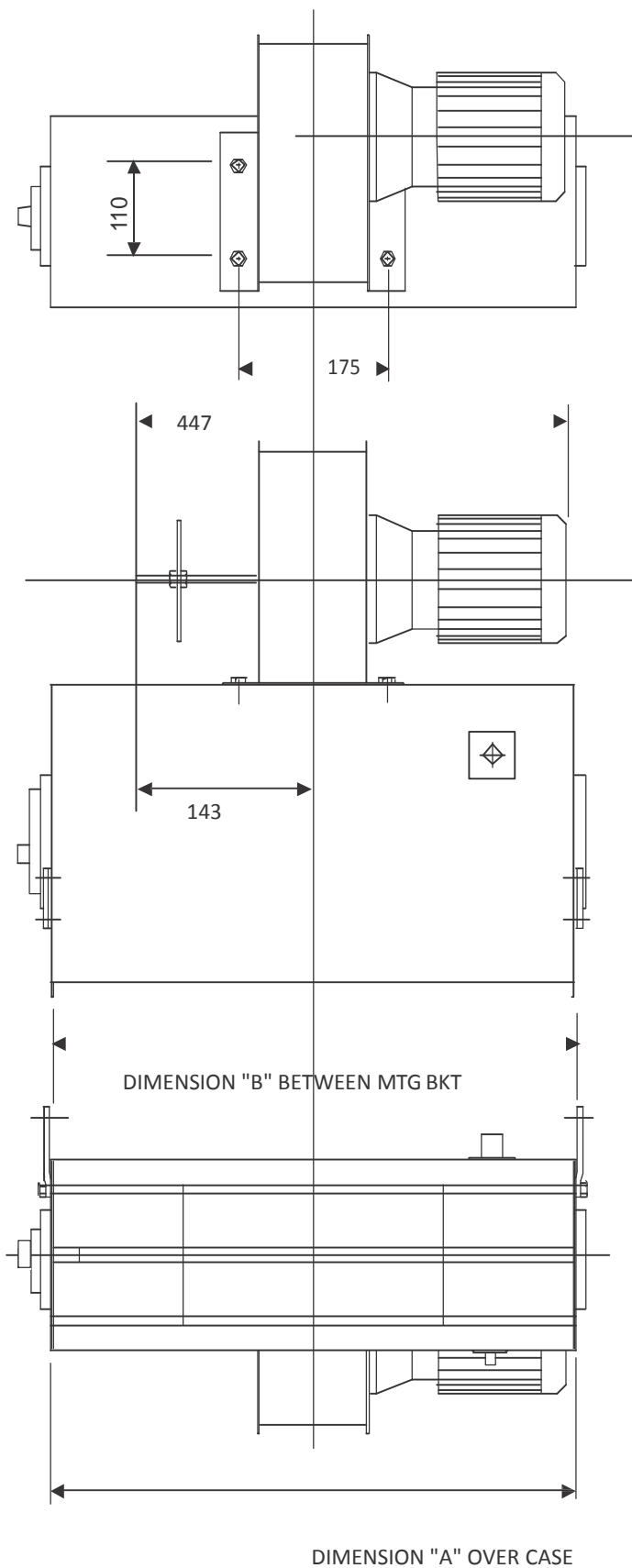
Combustion Air from blower is manifolded into back of TCAH Burner housing. Main Gas enters through gas inlet (32mm). Combustion Air passes through ports in air diffusion plate and is directed through aeration ports in the mixing plates. Flame rod or UV scanner is positioned to monitor the pilot and/or main flame in the trough between the mixing plates. The spark igniter is located below the flame rod or UV scanner.

MODEL No.	NOMINAL CAPACITY
TCAH500	500 MJ/HR
TCAH 1000	1000 MJ/HR
TCAH 1500	1500 MJ/HR
TCAH 2000	2000 MJ/HR
TCAH 3000	3000 MJ/HR
TCAH 4000	4000 MJ/HR

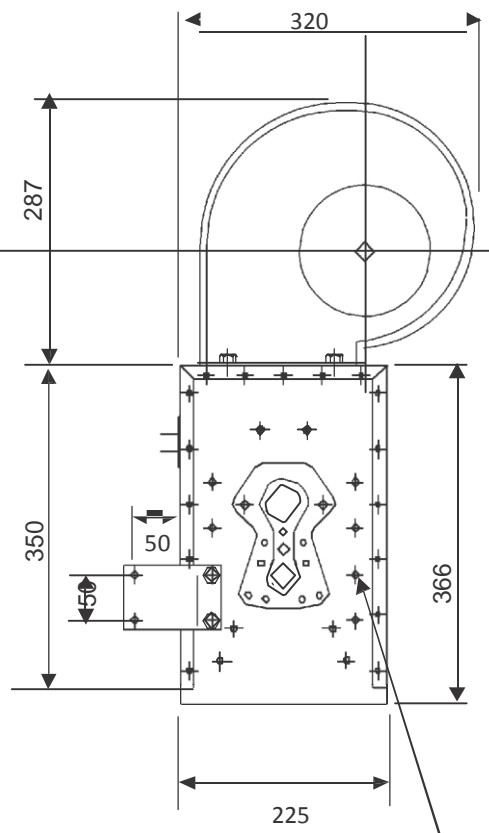


FEATURES

- NOZZLE MIXING LINE BURNER
- UP TO 40 TO 1 TURNDOWN FIRES IN STILL AIR OR AIR STREAM
- CLEAN COMBUSTION
- INTEGRAL COMBUSTION AIR FAN
- DESIGNED FOR PROPONE OR NATURAL GAS FUELS
- SIMPLE INSTALLATION
- LOW PROFILE WITH MINIMUM AIR FLOW OBSTRUCTION
- ALL CONNECTIONS ON ONE SIDE AND CAN BE NOMINATED LEFT OR RIGHT AT TIME OF ORDER

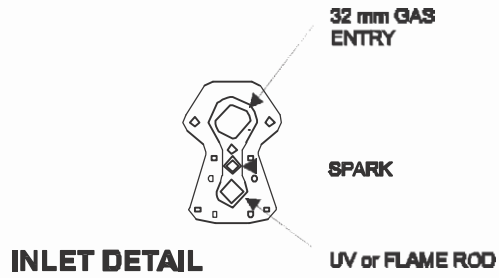


INLET DETAIL

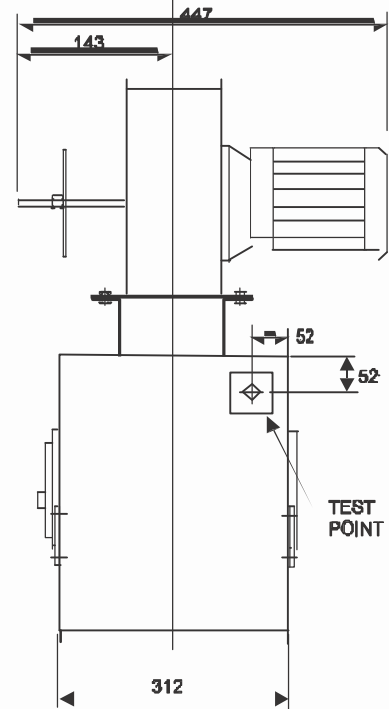
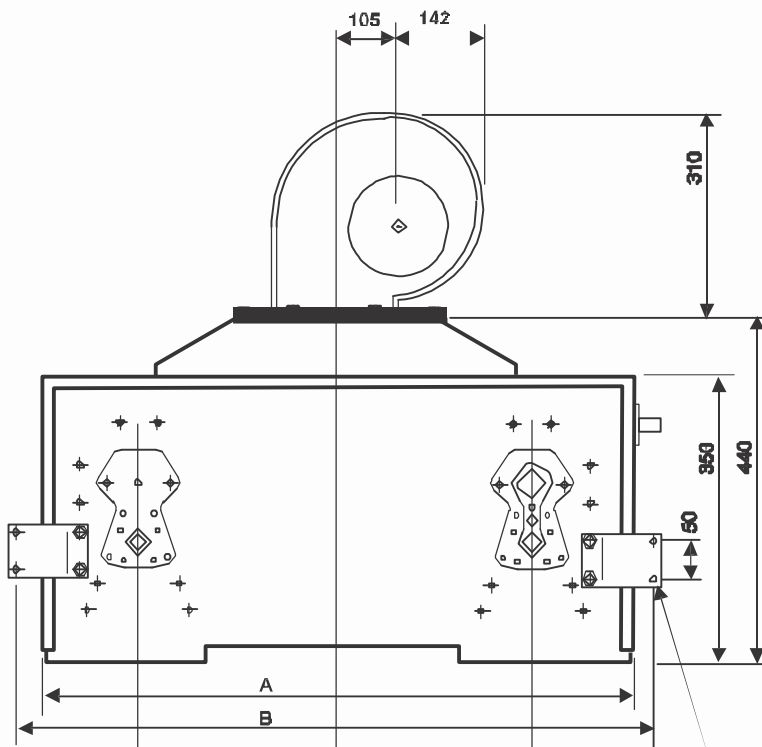
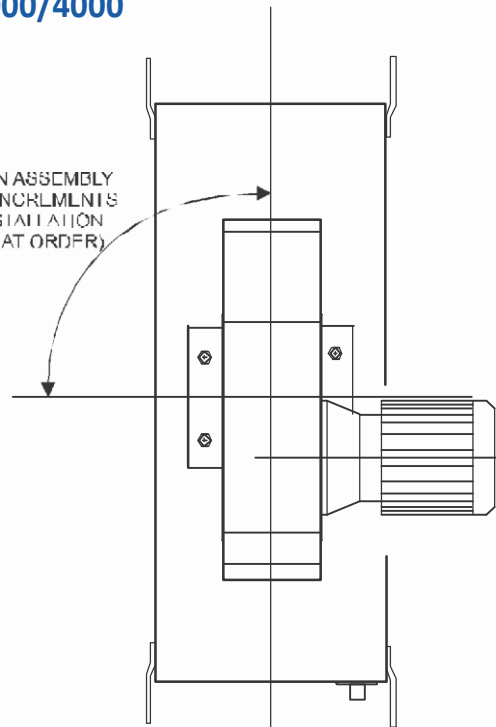


MOUNTING HOLES

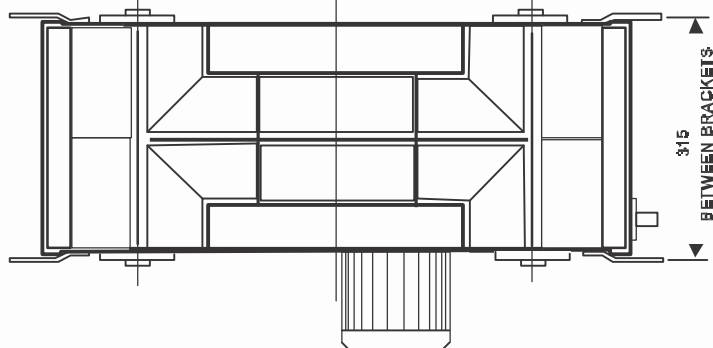
MODEL No.	DIM 'A'	DIM 'B'
TCAH 500	158	162
TCAH 1000	310	314
TCAH 1500	463	467
TCAH 2000	615	619
TCAH 3000	531	637
TCAH 4000	838	996



ROTATE FAN ASSEMBLY
AT 90 DEG INCREMENTS
TO SUIT INSTALLATION
(NOMINATE AT ORDER)



7.0 DIA MOUNTING HOLES



MOUNTING BRACKET ALLOW 3 POSITIONS TOP
AND BOTTOM.

ADDITIONAL BRACKETS AVAILABLE.

MODEL No.	NOMINAL GAS PRESSURE(NAT/LPG)	FLAME LENGTH (metres)	*BLOWER MOTOR SIZE	COMBUSTION AIR VOLUME (scfm)	CAPACITY
TCAH 500	2kPa/0.8kPa	0.7...1.0	0.25 kW	233	500 MJ/HR
TCAH1000	2kPa/0.8kPa	0.7...1.0	0.55 kW	360	1000 MJ/HR
TCAH1500	2kPa/0.8kPa	0.7...1.0	0.55 kW	530	1500 MJ/HR
TCAH2000	2kPa/0.8kPa	0.7...1.0	0.55 kW	530	2000 MJ/HR
TCAH3000	2kPa/0.8kPa	0.7...1.0	0.55 kW	530	3000 MJ/HR
TCAH4000	2kPa/0.8kPa	0.7...1.0	1.1 kW	784	4000 MJ/HR

*Standard motor provided is 3 phase. Single phase available as an extra cost option.

INSTALLATION AND DESIGN

The TCAH Burner is normally used to provide process temperatures higher than ambient and it is important to consider temperature limitations of equipment and materials downstream of the burner. It is recommended that the burner nose be positioned away from any panelling or ductwork to ensure good circulation of air around the flame box otherwise overheating may occur to burner and adjacent ductwork.

Allow a minimum of 400mm clearance around burner profile to prevent hot spots. It is important to allow adequate distance from front of burner to nearest point of possible flame impingement.

The standard TCAH Burner is normally supplied with blower for firing on suction side of circulating fan. It is possible to operate the burner on pressure side of the fan however gas and combustion air pressures need to be elevated to overcome resistance against which the burner is to be operated.

COMMISSIONING

Start up and commissioning of TCAH Burners should only be carried out by qualified and licensed personnel.

Techrite Controls reserves the right to change or modify specifications and dimensions as dictated by general demand, availability or changes in codes of practice or Australian Regulations without prior warning.



WARNING

Please read the operating instructions before use! This equipment must be installed to the requirements of the local authorities, both gas and electrical.

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