

Air Staged Ultra-Low NO_x HTR Hot Air Burner

FEATURES:

- ▶ High Temperature Radiation via High Speed Combustion
- ▶ Exceptionally Low NO_x
- ▶ Internal Air Staging
- ▶ Single Air Connection
- ▶ No Protrusions into Furnace
- ▶ Extra Rugged Port Block and Mounting Plate Construction
- ▶ Optional Mounting Plate Designs: Lug Type for Roof Mounting / Square Type for Side Wall Mounting

CAPABILITIES:

- ▶ High Thermal Release
- ▶ Flat Profile Flame
- ▶ High Temperature Radiation without Flame Impingement
- ▶ Pinpoint Heat Placement
- ▶ High Turndown Capability
- ▶ Nominal Capacity Range: 1MM - 3MM BTU/hour

APPLICATIONS:

- ▶ Reheat Furnaces
- ▶ Forging Furnaces
- ▶ Continuous Strip Reheating
- ▶ Aluminum Chip Melting
- ▶ Galvanizing
- ▶ Tube Upsetting



CONTROLS:

- ▶ Pressure Balance Ratio Regulator
- ▶ Mass Balance Control

BURNER IGNITION:

- ▶ Pilot
- ▶ Direct Spark

FUEL:

- ▶ Natural Gas
- ▶ Coke Oven Gas

2180 Series

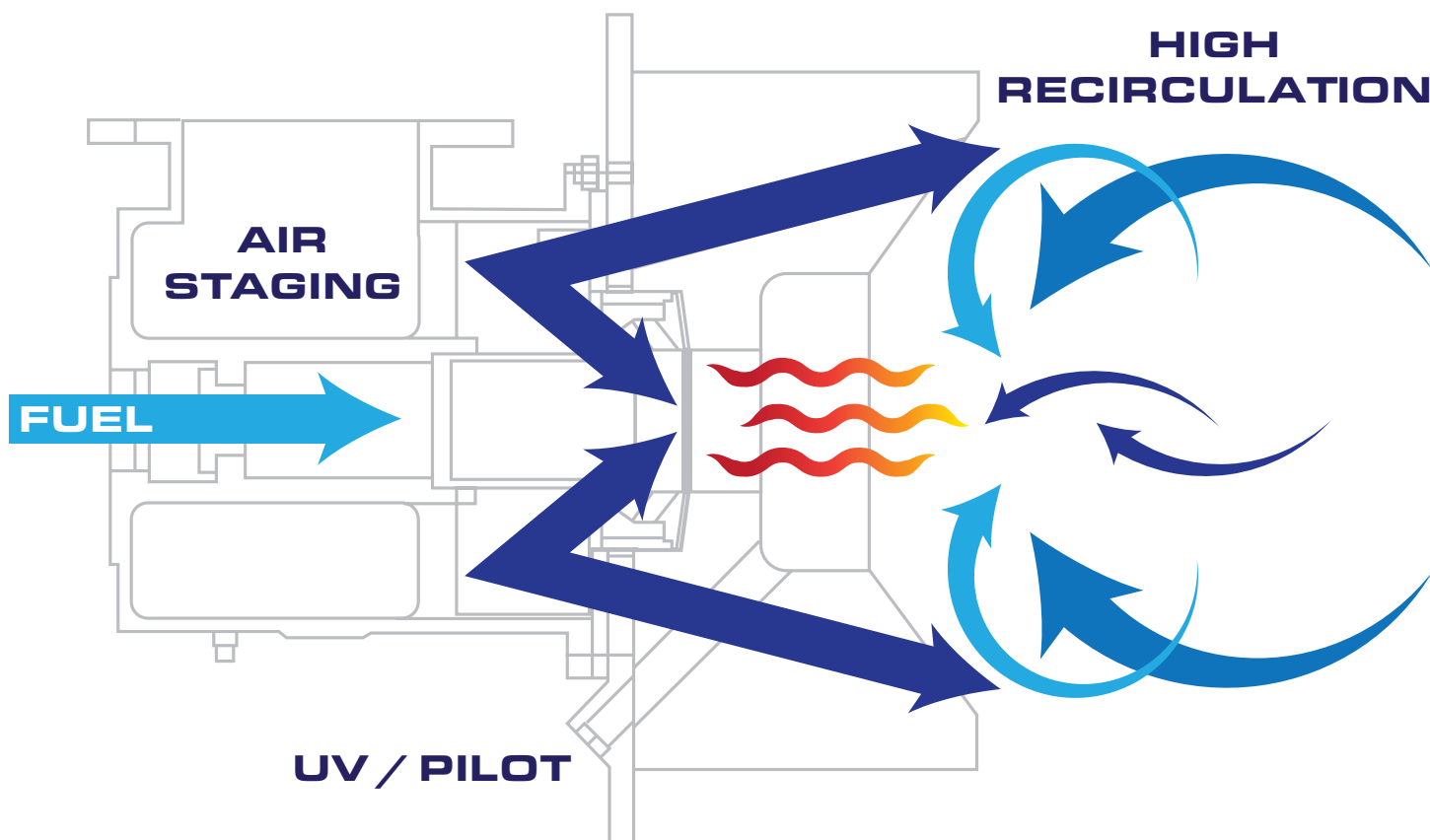
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2180 Series Capacity Chart

CATALOG NO.	NOMINAL CAPACITY (MM BTU/HR HHV)	COMBUSTION AIR FLOW AT 20" WCDP (50 MBAR) AND 800°F (427°C)		NATURAL GAS FLOW AT 14" WCDP (35 MBAR) AND 70°F (21°C)	
		SCFH	Nm ³ /hr	SCFH	Nm ³ /hr
040	1.05	11,550	309	1,050	28
060-A	1.31	14,410	386	1,310	35
060-B	1.82	20,020	537	1,820	49
080-A	2.82	31,020	832	2,820	76
080-B	3.27	35,970	964	3,270	88

The 2180 Series Burner is primarily designed for moderately oxidizing to slightly reducing ratios. Careful consideration should be given to the turndown requirements so that for a given application the appropriate air pressure is selected.

2180 Ultra Low NO_x Recirculation Pattern

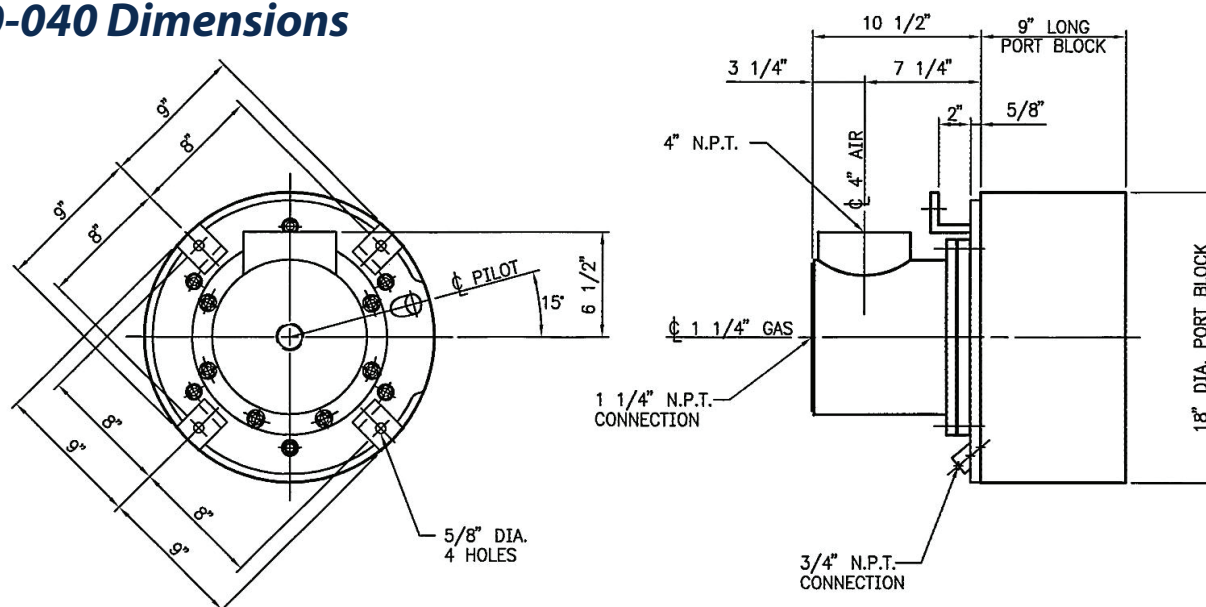


CAUTION: The improper use of combustion equipment can result in a condition hazardous to people and property. Users are urged to comply with National Safety Standards and/or Insurance Underwriters recommendations

2180 Series

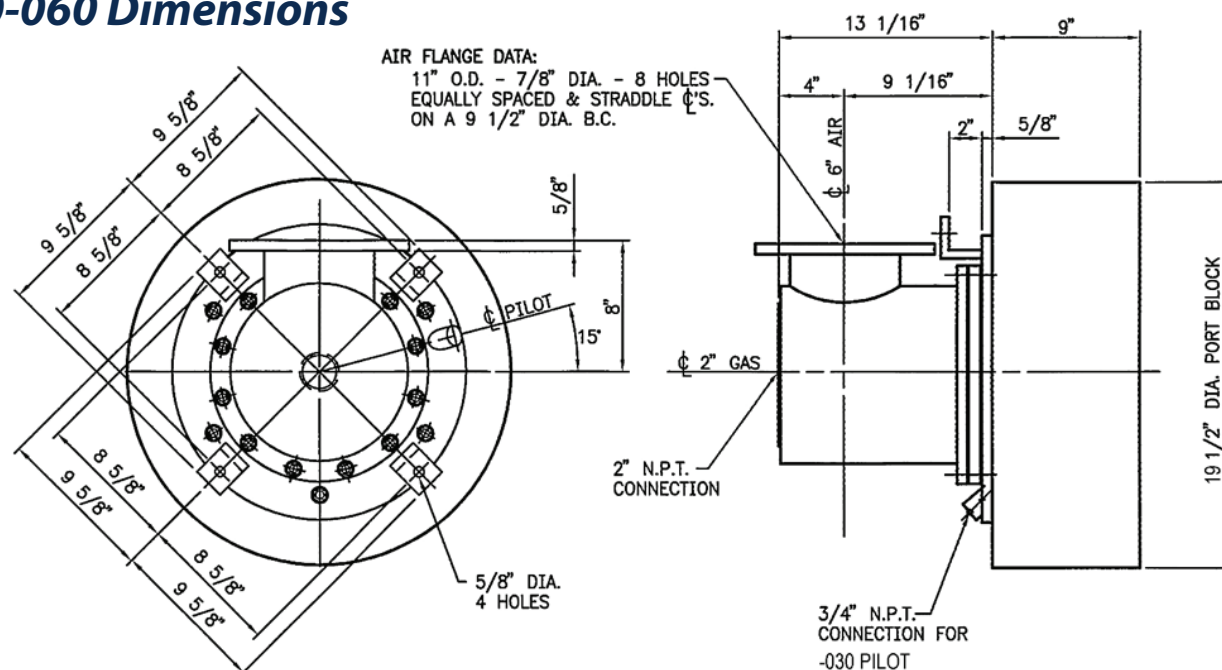
Air Staged Ultra-Low NO_x HTR Hot Air Burner

2180-040 Dimensions



Burner Assembly with Round Port Block and Lug Mounting Plate with Pilot Provision Only

2180-060 Dimensions

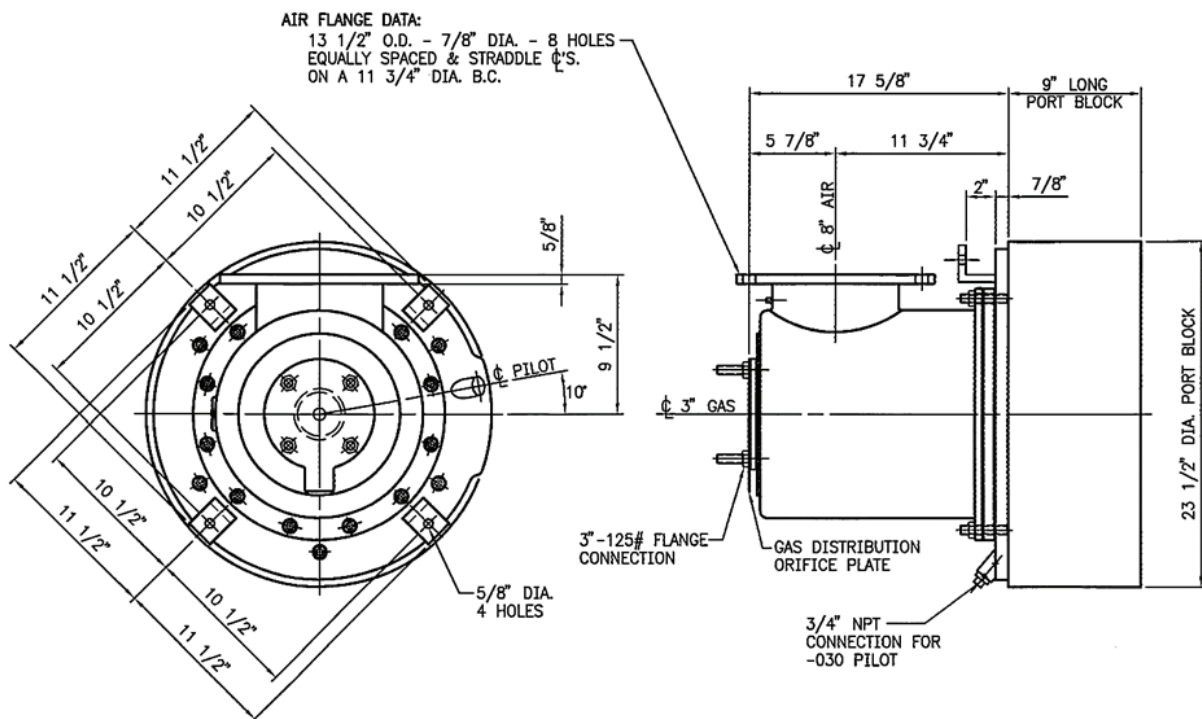


Burner Assembly with Round Port Block and Lug Mounting Plate with Pilot Provision Only

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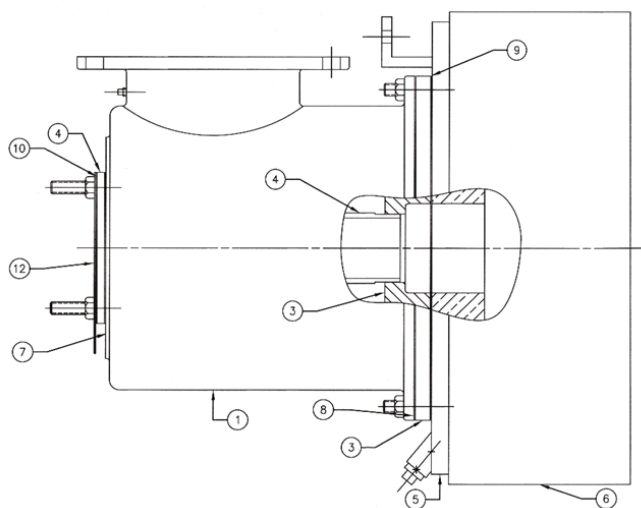
Air Staged Ultra-Low NO_x HTR Hot Air Burner

2180-080 Dimensions



Burner Assembly with Round Port Block and Lug Mounting Plate with Pilot Provision Only

2180 Series Spare Parts



Number	Description
01	Burner Body
03	Air Nozzle Assembly
04	Gas Nozzle Assembly (-080 only)
05	Mounting Plate – Lug Type
06	Port Block – Round 9" Long
07	Gas Nozzle Gasket (-080 only)
08	Body Gasket
09	Air Nozzle Gasket
10	Gas Orifice Gasket (-080 only)
12	Gas Orifice (-080 only) 2180-040 and -060 burners have gas orifices that are inside the burner body.

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