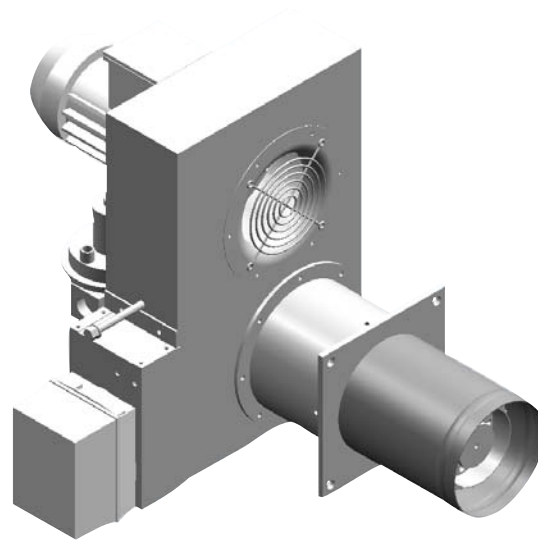


INDIPAK

Gas burners

Maxon INDIPAK burners are nozzle-mix gas burners suitable for indirect fired applications and selected direct air heating applications.



- Compact packaged design
- On-ratio turndown up to 6:1
- Over-all turndown up to 26:1
- Capacities up to 850 kW
- Low emissions (below TA-Luft levels)
- Simple installation and reliable operation requirements
- Gas pressure regulator included
- Low maintenance requirements and easy adjustment
- Control motor included (230 V/50 Hz)
- Observation port included

Principle of operation

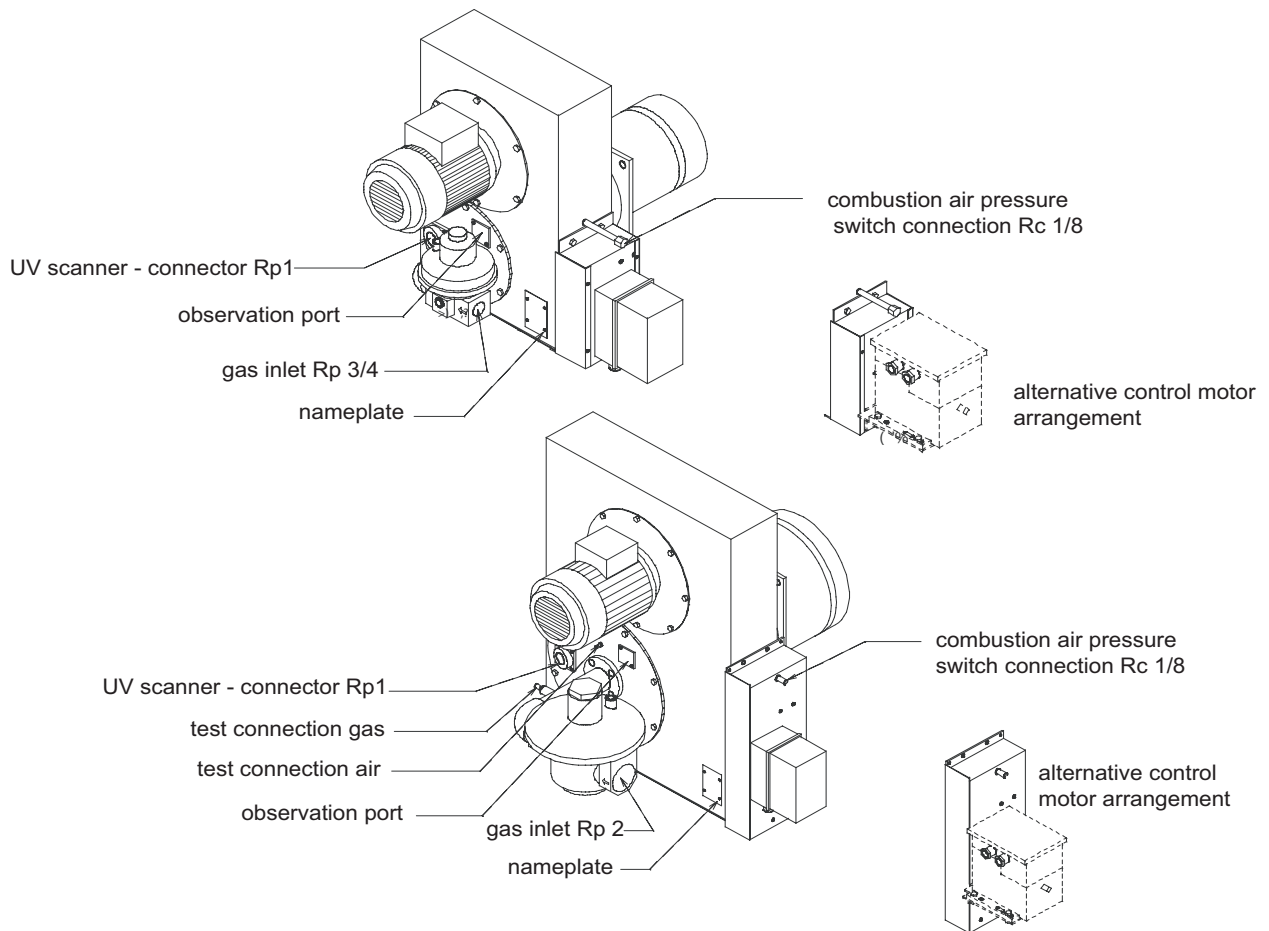
The INDIPAK is a nozzle-mix burner designed for industrial indirect heating applications. This burner is equipped with an integral blower. It also incorporates the gas and air control valves which are linked via a cam to precisely control gas-air ratio for stoichiometric combustion over a part of the wide turn-down range.

Options

- Combustion air filter assemblies
- Combustion air pressure switch
- Ignition transformer
- Limit switches on gas and air valves
- Customer specific control motor

Applications

The INDIPAK burner is especially designed for indirect heating applications, like indirect air heaters.



Specifications INDIPAK

CAPACITY AND SELECTION DATA IN kW
Gross heating value = 10.9 kWh/m³(st), d = 0.6

		INDIPAK 300	INDIPAK 850
Maximum capacity	kW (GHV)	315	865
Minimum capacity	kW (GHV)	12	48
Minimum with 50% excess air		72	143
Overall turndown		26: 1	18: 1
On-ratio turndown		4.4: 1	6: 1
Excess air at maximum position		18%	12%
-Gas pressure at test connection at minimum firing position	mbar	20	14
-Min. gas pressure at regulator inlet	mbar	60	30
CO mg/m ³ @ 3% O ₂ dry at maximum		0	0
at minimum		<80	<20
NOx mg/m ³ @ 3% O ₂ dry max		<120	<130
Motor power	kW	0.55	1.1
Flame length	m	1.2-1.4	1.8-2.0

- (1) - Indicated emissions are for indirect firing, they may change in direct air heating applications.
 (2) - Indicated pressures are differential pressures
 (3) - Capacities are based on 50 Hz powersupply
 (4) - Max. gasregulator inlet pressure:500 mbar for Indipak 300
 200 mbar for Indipak 850

Assembly numbers

	INDIPAK 300	INDIPAK 850
BURNER PACKAGE	300488	300727
Spark ignitor 10mm	018110	018110
Discharge sleeve (1)		
L=200mm (std)	310539	310686
L= 300mm (option)	310863	310882
Low-fire start switch	300733	300731
High-fire start switch	300734	300732
Filter	300331	300884
Control motor	340058	340058

- (1) Other sleeve lengths on request

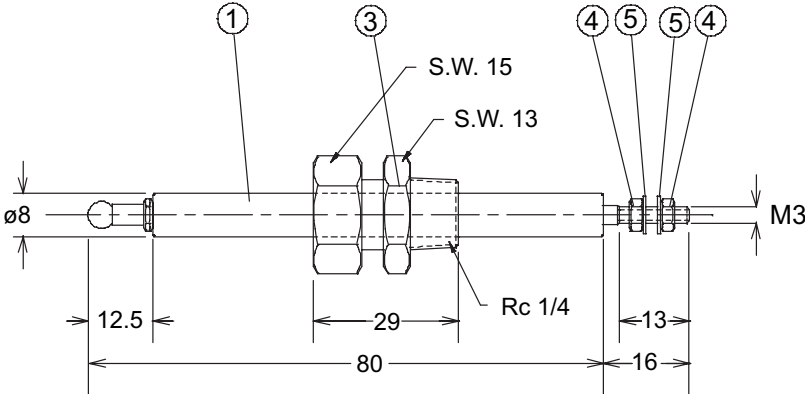


The burner package is standard provided with a pressure regulator and a control motor (230 V/50 Hz).

Options

- discharge sleeve: length L = 300 mm
- pressure switch
- low and high fire switch assemblies
- air filter assembly

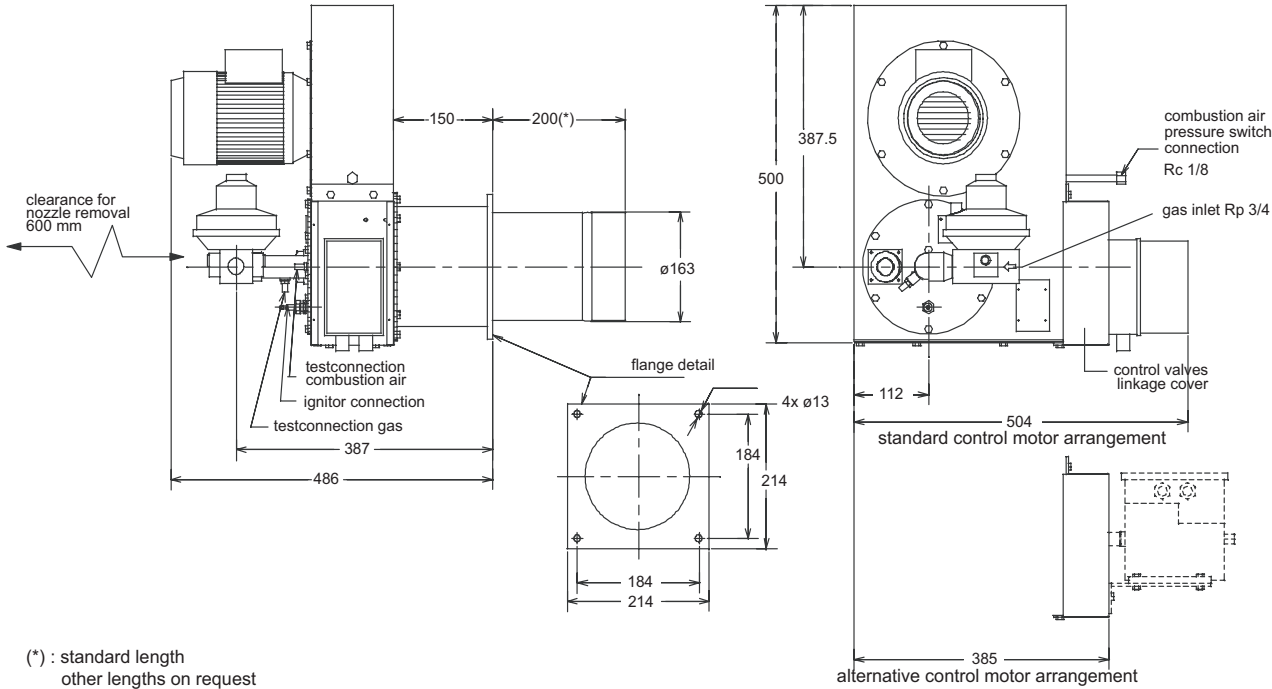
**Maxon INDIPAK burner (gas)
feed through**



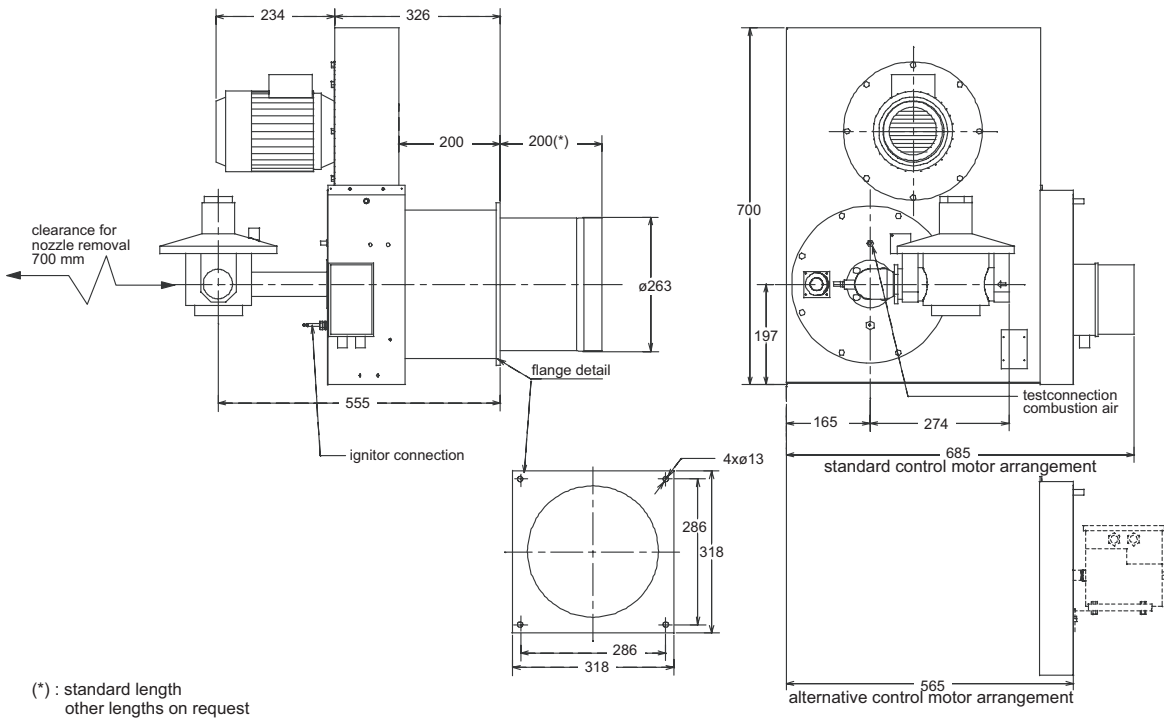
ITEM	QTY	PARTNR.	DESCRIPTION
1	1	310002	FLAME ROD ZE8-80-300 A1
3	1	380004	CONNECTOR Rc 1/4 x 8
4	2	37118	HEX NUT M3
5	2	370048	WASHER M4

Dimensions (in mm unless stated otherwise)

INDIPAK MODEL "300"



INDIPAK MODEL "850"



Specific installation instructions for Maxon INDIPAK burner

Instructions provided by the company responsible for the manufacture of a complete system incorporating Maxon burners take precedence over the installation and operating instructions provided by Maxon. If any of the instructions provided by Maxon are in conflict with local codes or regulations, please contact our nearest branch office or representative.

Before reading following “installation instructions” please refer to the “general instructions” on burner system installation, piping lay-out, pipe size and manifolding, electrical installation and burner installation.



Do not discard packing material until loose items are accounted for.

Burner mounting

Burner may be mounted in any position allowed by automatic control motor orientation. Burner will typically be installed through a wall or insulated air duct. Cut opening at least 15 mm larger in diameter than discharge sleeve to allow for sleeve expansion.

Discharge sleeve must be flush with, or extended beyond interior wall. Combustion air inlet should not be obstructed by insulation. Free space from the burner backplate should be held to remove burner nozzle for maintenance.



Installer must comply with all applicable codes and standards

Specific start - up and adjustment instructions for Maxon INDIPAK burners

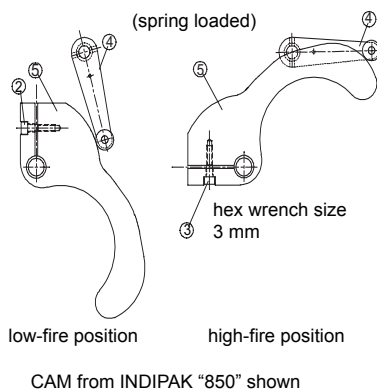
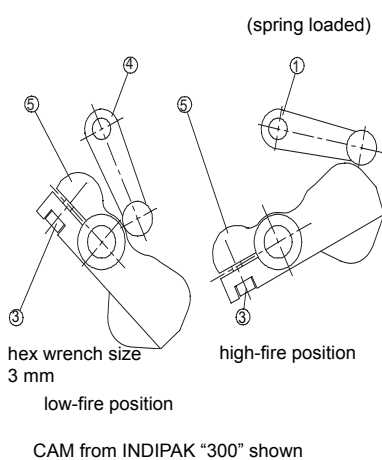
Instructions provided by the company responsible for the manufacture of a complete system incorporating Maxon burners take precedence over the installation and operating instructions provided by Maxon. If any of the instructions provided by Maxon are in conflict with local codes or regulations, please contact our nearest branch office or representative.

Before initiating the following start-up and adjustment procedure, **IT IS IMPORTANT** that a check be made to verify that all of the equipment associated with and necessary to the operation of the INDIPAK burner system has been installed and piped in accordance with the "Specific Installation Instructions". If the burner system is part of a complete heating unit which has been purchased as a complete pre-piped and pre-wired package, it may be assumed that these instructions have already been carried out by the company responsible for the overall installation.

Before starting the burner and proceeding with the adjustment of various regulators, controls, etc. first read the general installation and start-up instructions.

Initial adjustment and light-off should be undertaken only by trained and experienced personnel familiar with combustion systems, with control/safety circuitry and with knowledge of the overall installation.

To start-up an INDIPAK burner for the first time.



- Close main gas cock.
- Establish correct blower direction of rotation (rotating clockwise looking on the back of the burner). See arrow on housing.
- Bleed air from the fuel supply line. Turn the adjusting screw of the pressure regulator completely up to the top (counter clockwise). Make sure that burner gas control valve is in low position (air crank (1) turned down to gas valve cam (2)). See also sketch below. Open main gas cock and energize the spark ignitor. Adjust pressure regulator by increasing gas pressure until min. flame is lighted.
- Observe flame through observation port. Set gas pressure as indicated in the specifications table (see page 1.1.1). Check flame signal. Bring burner to high fire while observing the flame. Check flame signal at all firing rates.
- Adjust gas-air ratio by measuring the oxygen percentage in the exhaust gases in the stack. The gas-air ratio can be adjusted by rotating the valve cam (9) mounted on the control motor shaft. First loosen clamp screw (3) and retighten after adjustment.
- Check operation of all other safety devices such as pressure switches, high temperature limits, etc. and adjust these devices to their correct value.