LANEMARK COMBUSTION ENGINEERING

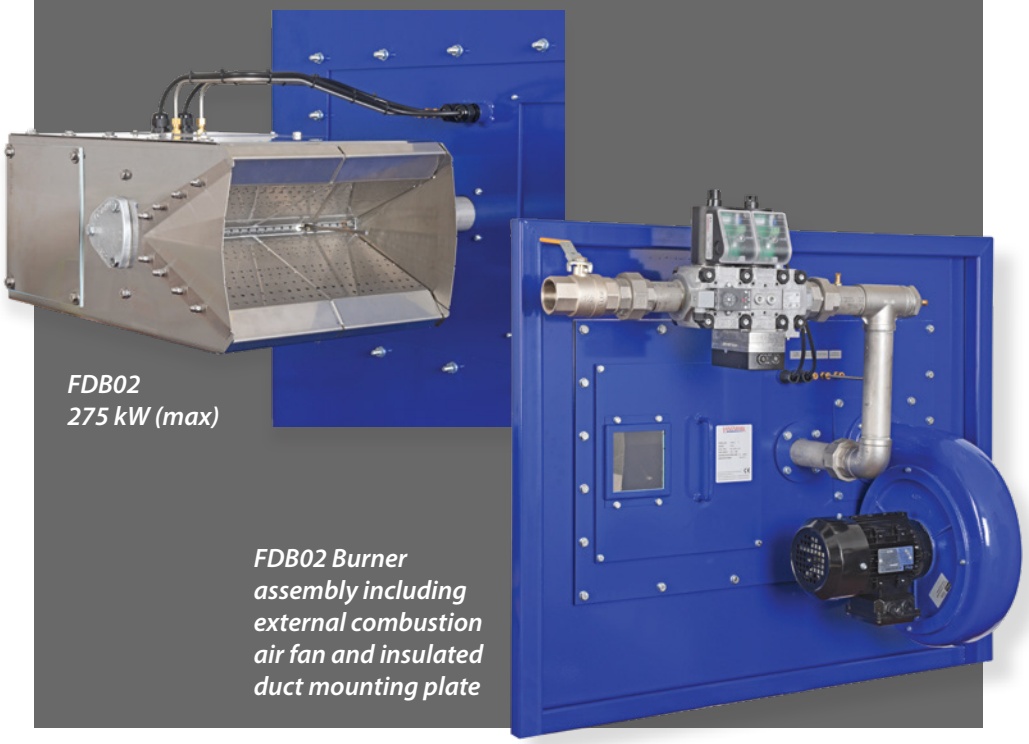
FDB BURNERS DATA

Lanemark FDB series packaged burners offer flexible, high turndown (gas and air) control for process air heating applications in convection ovens, dryers and spray booths where maximum combustion efficiency, short flame lengths and minimum emissions are of prime importance.

FDB series direct fired gas burners can be mounted within an enclosure or duct or mounted directly on to the wall of a dryer, oven or process air heating duct to operate either in line with, or at 90° to, the process airflow.

Variable combustion air fan speed control combined with modulating monoblock gas valve technology ensures that safe and efficient gas / air ratios are maintained even under changeable plant operating conditions.

Lanemark's DbCalc© software is available to determine burner ratings.



FDB02
275 kW (max)

FDB02 Burner assembly including external combustion air fan and insulated duct mounting plate

MODEL	MAX HEAT INPUT RANGE	BURNER LENGTH	TYPICAL GAS CONNECTION SIZE
FDB01	9 - 175 kW	184 mm	1" BSP
FDB02	13 - 275 kW	337 mm	1" BSP
FDB02	13 - 350 kW	337 mm	1½" BSP
FDB03	18 - 525 kW	490 mm	1½" BSP
FDB04	18 - 600 kW	642 mm	1½" BSP
FDB04	25 - 700 kW	642 mm	2" BSP
FDB05	30 - 875 kW	795 mm	2" BSP
FDB06	30 - 925 kW	947 mm	2" BSP
FDB06	45 - 1050 kW	947 mm	CALL
FDB07	45 - 1225 kW	1099 mm	CALL
FDB08	45 - 1400 kW	1252 mm	CALL

TYPICAL APPLICATIONS

- **Paint spray booth air heating – spray and bake cycles**
- **Paint drying and curing ovens**
- **HVAC air replacement schemes for factories, warehouses, distribution centres …**
- **Crop dryers**

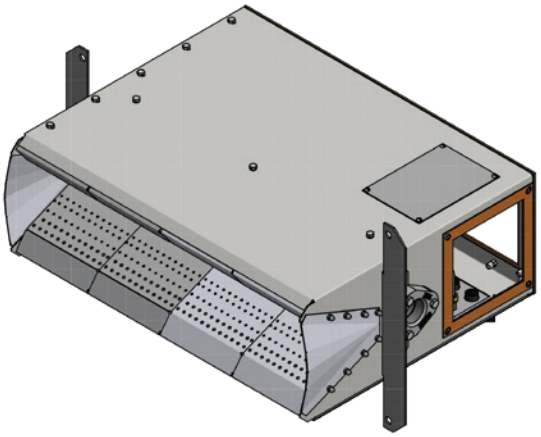
PRODUCT DESCRIPTION

Lanemark FDB Duct Burner systems are supplied in a packaged or semi-packaged format. In a packaged format the Lanemark Midco VA Burner housing is supplied fitted to a mounting plate, which is designed to be bolted to the side of the process air duct – normally supplied by others, but available on request.

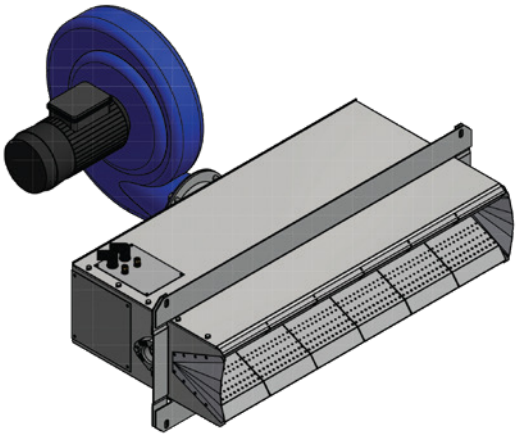
Each FDB Duct Burner system can include a compact pre-piped modulating gas valve train and control panel that can either be supplied attached to the mounting plate or as a separate assembly to be installed on site at a convenient location within 3 metres of the burner location.

The control panel includes, as standard, burner controller, ignition transformer, differential air pressure switch and two 3-way air valves which enable an air pressure switch safety check to be carried out at burner start up. Additional control components, including temperature controllers, can also be included when requested.

FDB BURNERS



FDB04 Burner and side combustion air connection flange

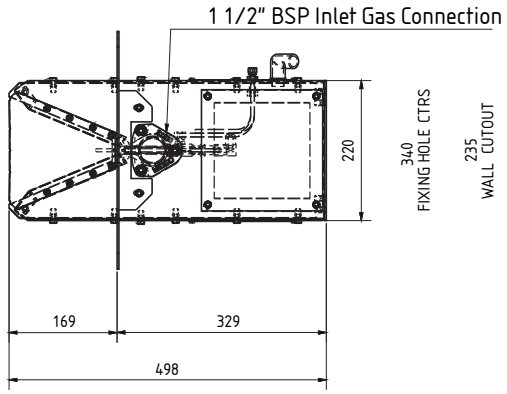


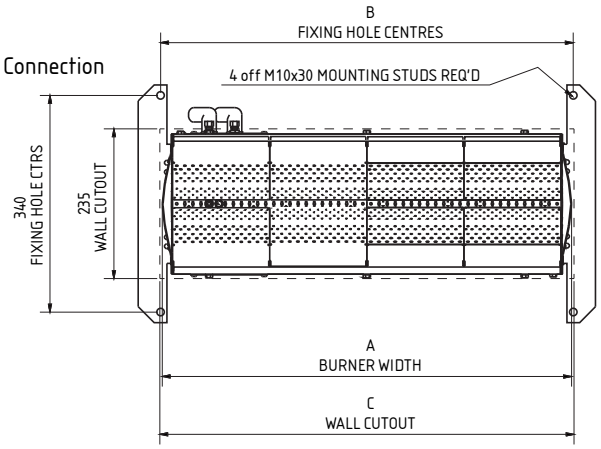
FDB06 Burner and rear mounted combustion air fan

Dimensions (mm, except where shown)

Model	A	B	C
FDB01	185	190	195
FDB02	337	343	345
FDB03	490	492	500
FDB04	642	648	650
FDB05	795	800	805
FDB06	947	952	1000
FDB07	1099	1105	1110
FDB08	1252	1257	1260

For higher capacities, contact Lanemark





SPECIFICATIONS	STANDARD EQUIPMENT	OPTIONS
Fuels	Natural gas	Propane
Control voltages	230 V / 1ph / 50 Hz	110 V / 1ph / 50-60 Hz
Combustion air fan electrical supplies	400 V / 3ph / 50 Hz or 230 V / 3ph / 50Hz	-
Flame sensing	Flame electrode	UV scanner
Heat output control	Modulating (gas only) 4-20 mA / 0-10 V DC / 3 Wire Direct Drive	Ultra low

Lanemark FDB burners are pre-wired / tested prior to despatch and conform with relevant sections of BS EN ISO 13577-2:2023 or NFPA 86 for US applications.

LANEMARK BurnerCare

All Lanemark burners benefit from Lanemark's BurnerCare customer support. BurnerCare services can include burner system installation, commissioning / start-up, system training, regular servicing and the supply of spare parts. BurnerCare can provide a service agreement plan incorporating a rapid response facility individually designed to ensure the continued, reliable operation of Lanemark equipment worldwide.

All illustrations are for guidance only. For reasons of continuous development, Lanemark Combustion Engineering Limited reserves the right to alter specifications without prior notice.

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