

FDC BURNERS DATA

Lanemark FDC series packaged burners are designed to offer low cost, high turndown (gas only) control for process air heating applications in convection ovens and dryers.

FDC series burners are particularly suited to direct fired applications and can be 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.

FDC series burners produce short flame profiles – an important requirement for industrial oven design. Combustion air and gas is progressively mixed within the internal burner cone assembly, guaranteeing stable combustion over a wide range of oven / dryer process airflows.

TYPICAL APPLICATIONS



• Product finishing

- Pre-treatment dryers
- Final treatment ovens for paint drying and curing
- Conveyor and batch ovens

• Textile and fabric dryers

• Rotary moulding machines

• Food processing

• Powder and grain dryers

MODEL	HEAT INPUT RANGE	TYPICAL GAS CONNECTION SIZE
FD5C	9 - 117 kW	¾" BSP
FD5C	9 - 220 kW	1" BSP
FD10C	13 - 350 kW	1" BSP
FD10C	13 - 440 kW	1½" BSP
FD15C	18 - 660 kW	1½" BSP
FD20C	25 - 880 kW	2" BSP
FD25C	45 - 1150 kW	2" BSP
FD30C	45 - 1350 kW	2" BSP
FD35C	45 - 1550 kW	2" BSP



Horizontal arrangement

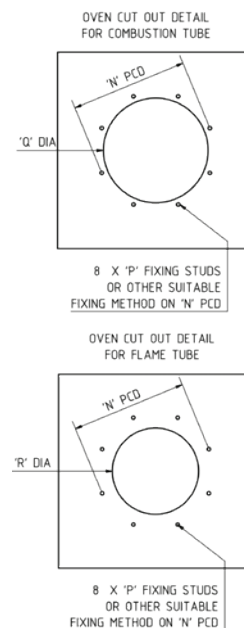
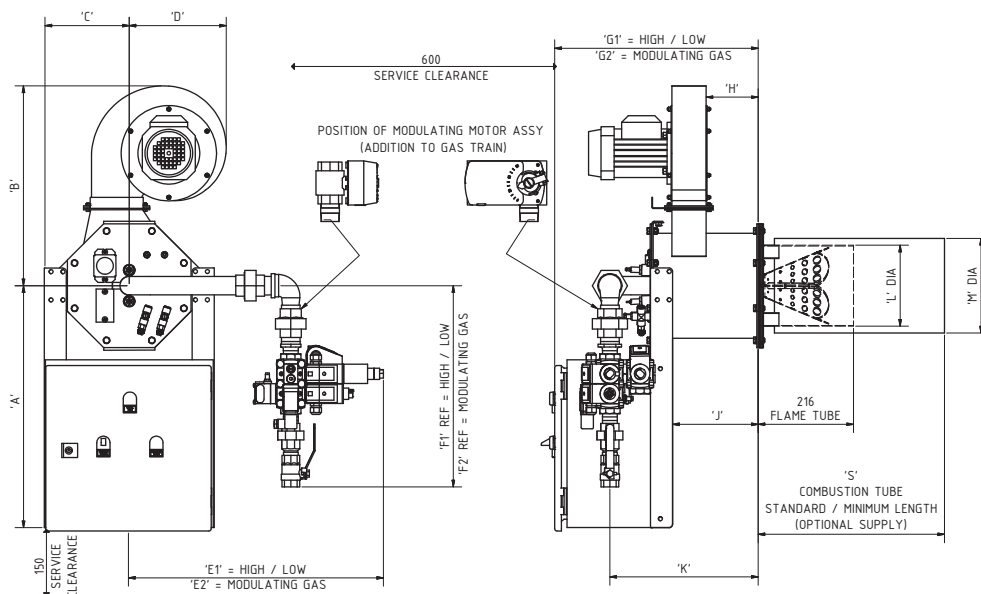
Vertical arrangement

PRODUCT DESCRIPTION



FDC burners comprise a burner windbox, combustion air fan, a manual sliding damper fitted between the combustion air fan and the air entry flange on the burner windbox, a compact monoblock train and gas burner controls mounted within a control panel.

Standard control items include a burner controller, ignition transformer and differential air pressure switch. Two 3-way air valves perform safety checks on the air pressure switch in both open and closed modes each time the burner fires, allowing the independent operation of the combustion air fan in conjunction with oven / dryer main recirculation fans.



Dimensions (mm, except where shown)

MODEL	GAS TRAIN	A	B	C	D	E1	E2	F1	F2	G1	G2	H	J	K	L DIA	M DIA	N PCD	P	Q DIA	R DIA	S
FD5	G96	527	423	193	207	398	506	485	671	355	416	101	156	294	150	175	225	M8x50	195	160	360
FD5	VCD1	527	423	193	207	571	571	426	748	355	439	101	156	294	150	175	225	M8x50	195	160	360
FD10	VCD1	542	452	193	220	577	577	456	591	393	482	118	185	336	183	214	268	M8x50	240	200	410
FD10	VCD2	542	452	193	220	600	600	568	692	393	482	118	185	336	183	214	268	M8x50	240	200	410
FD15	VCD2	581	507	217	218	610	610	571	685	514	577	150	253	430	232	270	330	M8x50	295	250	460
FD20	VCD3	621	562	199	219	640	640	684	842	560	560	177	315	473	267	315	380	M10x50	335	290	510
FD25	VCD3	621	743	199	346	640	640	684	842	560	560	158	325	473	267	315	380	M10x50	335	290	510
FD30	VCD3	646	706	233	375	667	667	705	853	637	695	190	359	550	307	370	445	M10x50	390	330	585
FD35	VCD3	646	795	233	417	667	667	705	853	637	695	185	359	550	307	370	445	M10x50	390	330	585

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	230 V / 1ph / 50 Hz
Flame sensing	Flame electrode	UV scanner
Heat output control	On / off ; High / low. High / low / ultra low	Modulating (gas only) 4-20 mA / 0-10V DC / 3 Wire Direct Drive

Lanemark FDC burners are pre-wired / tested prior to despatch and conform with relevant sections of European Standard EN 746 Part 2 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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