



## DF SERIES

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Gas fired make-up air for  
kitchen ventilation

## GAS FIRED MAKE-UP FOR KITCHEN VENTILATION

One of the UK's leading specialists in the design and manufacture of gas fired heating equipment.

To meet the requirements of BS 6173 and DW 172 it is essential to supply tempered replacement air to commercial kitchen areas.

The Nordair Niche DF range provides an economical solution with low running costs and low ongoing maintenance costs.

A comprehensive range of units is available to suit a wide range of commercial applications including restaurants, care homes and school kitchens.

### Variable Air Volume

The VAV variable air volume units incorporate an inverter drive and a high efficiency Nordair Niche box burner with integral combustion air fans to maintain optimum performance as the air flow varies.

For installations already incorporating supply air fans, burner modules can be supplied without a fan section to provide tempered air input.

[For information see DFDPVAV data table]

### Features & Benefits

- Airflows from 0.56m<sup>3</sup>/s to 5m<sup>3</sup>/s
- Fully packaged units require only gas and electrical connections
- Units fully weatherproofed for outdoor installation
- Synthetic grade F6 filtration
- Net thermal efficiency of 100%
- Burner turndown ratio up to 25:1
- Precise temperature control
- Optional variable air volume supply
- Horizontal or vertical units
- Three phase and single phase units available
- Simple installation
- High efficiency
- Reduced running costs
- Simple "user friendly" controls
- CE approved units



## Specification

Nordair Niche kitchen units are designed to be installed to provide tempered and filtered fresh air make-up into commercial kitchens.

The units are of fully insulated weatherproof construction suitable for external installation and comprise the following options:

- Optional air intake cowl incorporating a bird mesh guard
- Filter section with disposable F6 filters
- High efficiency direct gas fired air burner, complete with integral combustion air fans and burner turndown of up to 25:1
- Forward curved centrifugal fan
- Standard units provide a maximum of 450Pa ESP, for higher static pressures consult Nordair Niche.

## Ease of Maintenance

Access to all internal components is provided by means of insulated hinged panels with tamper-proof locks. The units are suitable for three phase electrical supply and are fitted with fully automatic integral controls and safety devices. Single phase units are also available as an option (maximum motor size 2.2kW).

### Certification

The units are CE approved to EN525.

## Controls

Each unit can be supplied with a remote user control panel for installation by the contractor adjacent to other ventilation controls within the kitchen.

### Fan Controller (optional)

Allowing on/off activation and speed control of the supply fan (via the integral inverter) between pre-set minimum and maximum values. The fan controller is normally wired via the current monitor within the gas/ventilation interlock control panel to ensure that a pre-determined minimum supply air rate is achieved before the catering appliances gas solenoid valve can be energised.

### Heater Controller (optional)

Allowing on/off activation of the gas heater and high/low selection of the supply air temperature. A supply air temperature sensor is installed in each unit and minimum (low) and maximum (high) supply air temperatures are adjustable (10°C to 16°C and 19°C to 25°C respectively) at the control panel within each unit.

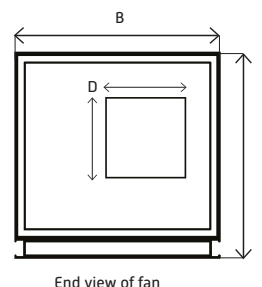
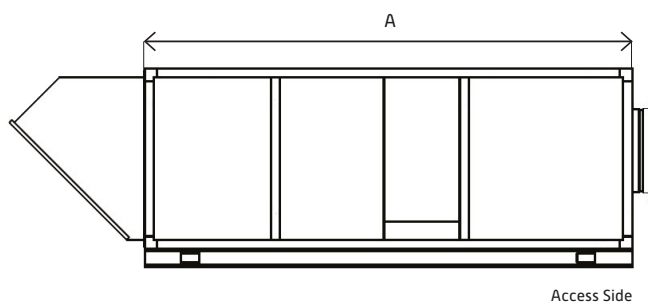
Each unit has integral interlock controls which prevent operation of the heater until a minimum supply air flow rate is available.



## Horizontal External Kitchen Units - MUA & VAV

Note: MUA - make up air units, VAV - variable air volume units with inverter drive.

MODEL		DF1MUA30 DF1VAV30	DF2MUA50 DF2VAV50	DF2MUA75 DF2VAV75	DF3MUA50 DF3VAV50	DF3MUA75 DF3VAV75	DF3MUA150 DF3VAV150	DF4MUA75 DF4VAV75	DF4MUA100 DF4VAV100	DF4MUA150 DF4VAV150	DF4MUA220 DF4VAV220
Max. Heat output Gas Consumption <sup>1</sup>	kW	26	66	92	132	66	132	66	92	132	198
Natural Gas G20 Gas connection	m <sup>3</sup> /h 1/2"	3.0 1/2"	6.0 1/2"	7.0 1/2"	6.0 1/2"	7.0 1/2"	14.0 3/4"	7.0 3/4"	10.0 3/4"	14.0 3/4"	21.0 1"
Max. Airflow	m <sup>3</sup> /s	0.86	1.72	2.16	1.72	2.16	3.08	2.51	3.02	3.85	4.37
DIMENSIONS & WEIGHT DATA											
Length (A)	mm	2120	2420	2420	2610	2640	2640	3240	3240	3240	3240
Width (B)	mm	860	860	860	1100	1100	1100	1250	1250	1250	1250
Height (C)	mm	802	802	802	1102	1102	1102	1352	1352	1352	1352
Outlet (D)	mm <sup>2</sup>	322	322	322	453	453	453	507	507	507	507
Weight	Kg	300	320	320	400	425	430	525	530	570	575



## Horizontal External Kitchen Units - DP VAV

Note: DP VAV - Duct package variable air volume units with inverter drive.

MODEL		F1DP30VAV	DF2DP75VAV	DF3DP100VAV	F4DP220VAV	DF5DP300VAV
Max. Heat output Gas Consumption <sup>1</sup>	kW	26	66	132	198	284
Natural Gas G20 Gas connection	m <sup>3</sup> /h 1/2"	3.0 1/2"	7.0 1/2"	14.0 3/4"	21.0 1"	29.0 1 1/4"
Max. Airflow	m <sup>3</sup> /s	0.86	2.16	3.08	4.37	5.00
DIMENSIONS & WEIGHT						
Length	mm	975	975	1098	1015	1045
Width	mm	860	860	1100	1250	1600
Height	mm	802	802	1102	1352	1802
Weight	Kg	125	125	175	175	225

