



DF Series

GAS FIRED MAKE-UP AIR FOR KITCHEN VENTILATION



NORDAIR
NICHE COMBINED
HEATING AND
VENTILATION

DF Series

GAS FIRED MAKE-UP AIR FOR KITCHEN VENTILATION



Introduction

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.



Features

- Airflows from 0.56m³/s to 5m³/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

Benefits

- Simple installation
- High efficiency
- Reduced running costs
- Simple "user friendly" controls
- CE approved units

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)



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 weather-proof 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 200Pa ESP, for higher static pressures consult Nordair Niche
- VAV units are ECA listed and supplied complete with inverter drive and Nordair Niche box burner

Ease of Maintenance

Access to all internal components is provided by means of insulated hinged panels with tamperproof 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.

Enhanced Capital Allowances (ECA)



The Government's Enhanced Capital Allowance scheme actively encourages industry and commerce to reduce energy consumption by promoting the use of energy efficient equipment.

Variable air volume models are eligible for enhanced capital allowances

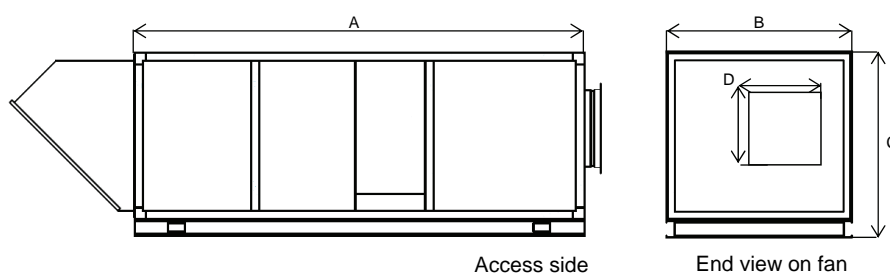


This symbol verifies that the product has been independently assessed and qualifies for the ECA scheme, an upfront tax relief enabling businesses that invest in energy-saving equipment to claim 100% first-year capital allowances against their taxable profits.

Horizontal External Kitchen Units - MUA & VAV

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

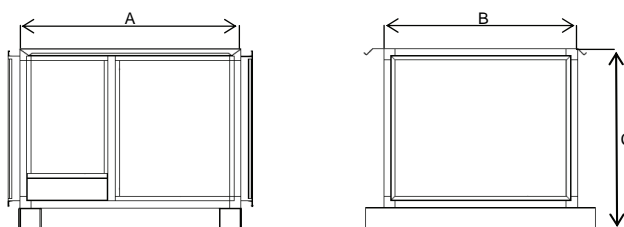
Technical Data						
Model		DF1MUA30	DF2MUA75	DF3MUA100	DF4MUA150	DF5MUA220
		DF1VAV30	DF2VAV75	DF3VAV100	DF4VAV150	DF5VAV220
Maximum heat output	kW	26	66	92	132	198
Gas consumption¹						
Natural Gas G20	m ³ /h	3.0	7.0	10.0	14.0	21.0
Gas connection		½"	½"	¾"	¾"	1"
Maximum Airflow	m ³ /s	0.86	1.80	2.88	4.00	5.00
Maximum motor rate	kW	2.2	3.0	4.0	5.5	5.5
Maximum full load current	amps	5	6	9	12	12
Dimensions & weight data						
Length (A)	mm	2420	2420	2700	3240	3540
Width (B)	mm	860	860	1100	1250	1500
Height (C)	mm	802	802	1102	1352	1802
Outlet (D)	mm ²	229	322	453	507	638
Weight	Kg	260	275	350	475	575



Horizontal External Kitchen Units - DP VAV

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

Technical Data						
Model		DF1DP30 VAV	DF2DP75 VAV	DF3DP100 VAV	DF4DP220 VAV	DF5DP300 VAV
	Maximum heat output	kW	26	66	132	198
Gas consumption¹						
Natural Gas G20	m ³ /h	3.0	7.0	14.0	21.0	29.0
Gas connection		½"	½"	¾"	1"	1¼"
Maximum Airflow	m ³ /s	0.86	2.16	3.08	4.37	5.00
Dimensions & weight data						
Length	mm	975	975	1095	1015	1045
Width	mm	860	860	1100	1250	1600
Height	mm	802	802	1102	1352	1802
Weight	Kg	125	125	175	175	225



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