

NORDAIR



DV/DH

Direct gas fired
make-up air units

Introduction

Nordair DV/DH direct fired units are designed as make-up air units to provide a heated supply of fresh air for buildings having extract ventilation. They may also be used as high efficiency space heaters for applications requiring ventilation. In summer the units can be used for 'free cooling' ventilation.

Units are available for indoor applications as DV vertical models or DH horizontal models.

By combining 100% thermal efficiency (based on net CV) and fully modulating burner control the units accurately match the building heat requirements without loss of burner efficiency thereby minimising energy consumption.

General description

Constructed using a rigid aluminium extruded framework with easily removable full size panels for easy service access. All units are fitted with a fully automatic ignition system providing full safety monitoring in conjunction with a differential pressure airflow switch protecting against overheat protection.

To meet the demands of ducted systems double inlet forward curved fans complete with TEFV motors and vee belt drives are fitted, motors are slide rail mounted for belt adjustment. Units are supplied with a 0-10V duct temperature sensor to control burner modulation. Remote control panels are available as an option.

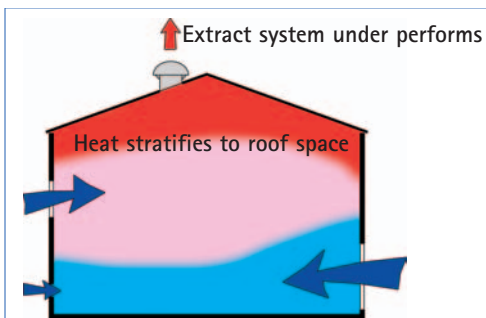
- Choice of 8 unit sizes with heat outputs from 67kW to 395kW and airflows from 0.75m³/s to 7.2m³/s.
- Designed for ducted applications up to 125Pa, for higher static pressure alternative drives and motors may be specified up to 250Pa.
- Fully modulating burner complete with stainless steel mixing plates provides high turndown ratios for precise temperature control.
- CE certified in accordance with EN525.

Options

- Control panel c/w time and space temperature control.
- Optimum start control panel c/w time control and remote sensor to monitor space temperature and adjust the discharge temperature. (Space heating applications only).
- Distribution head complete with adjustable louvres for free blowing applications.
- Air intake screen for applications where fresh air inlet louvres do not incorporate a suitable screen.
- Increased static pressure.

Direct gas fired make-up air

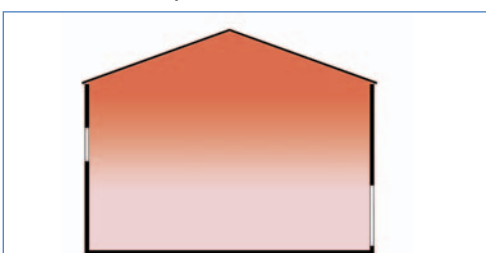
Building without make-up air



- Large influx of cold air at working level.
- Inefficient heating results in significant heat loss through the roof.

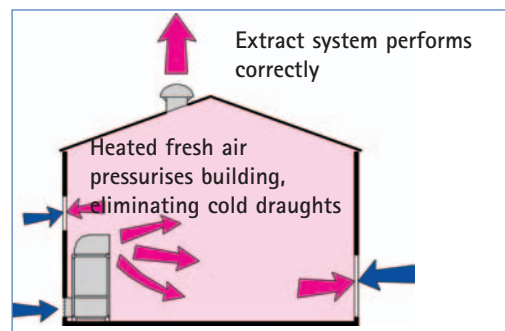
Direct gas fired space heating

Conventional system



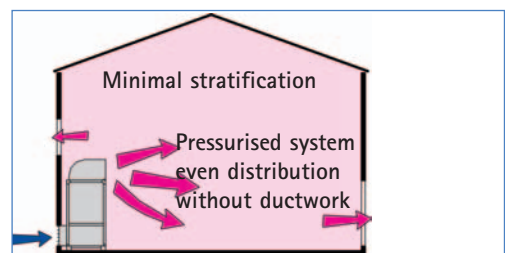
- Stratified uneven heat.

The Nordair system



- Even heat distribution.
- 100% efficiency.

The Nordair system



- 100% efficiency.

Specification and technical data

Model		DV2-75 DH2-75	DV2-150 DH-150	DV4-225 DH-225	DV4-300 DH4-300	DV7-375 DH7-375	DV7-450 DH7-450
Airflow	m ³ /s	1.2	2.4	3.6	4.5	6	7.2
Heat output	kW	67	135	203	270	338	395
Motor size	kW	3	3	4	4	5.5	7.5
ESP with standard drive	Pa	125	125	125	125	125	125
Maximum ESP with uprated drive	Pa	250	250	250	250	250	250
Gas rate	m ³ /hr	7.1	14.2	21.2	28.3	35.4	42.5
Gas connection	mm	20	20	25	25	40	40

Dimensions and weights

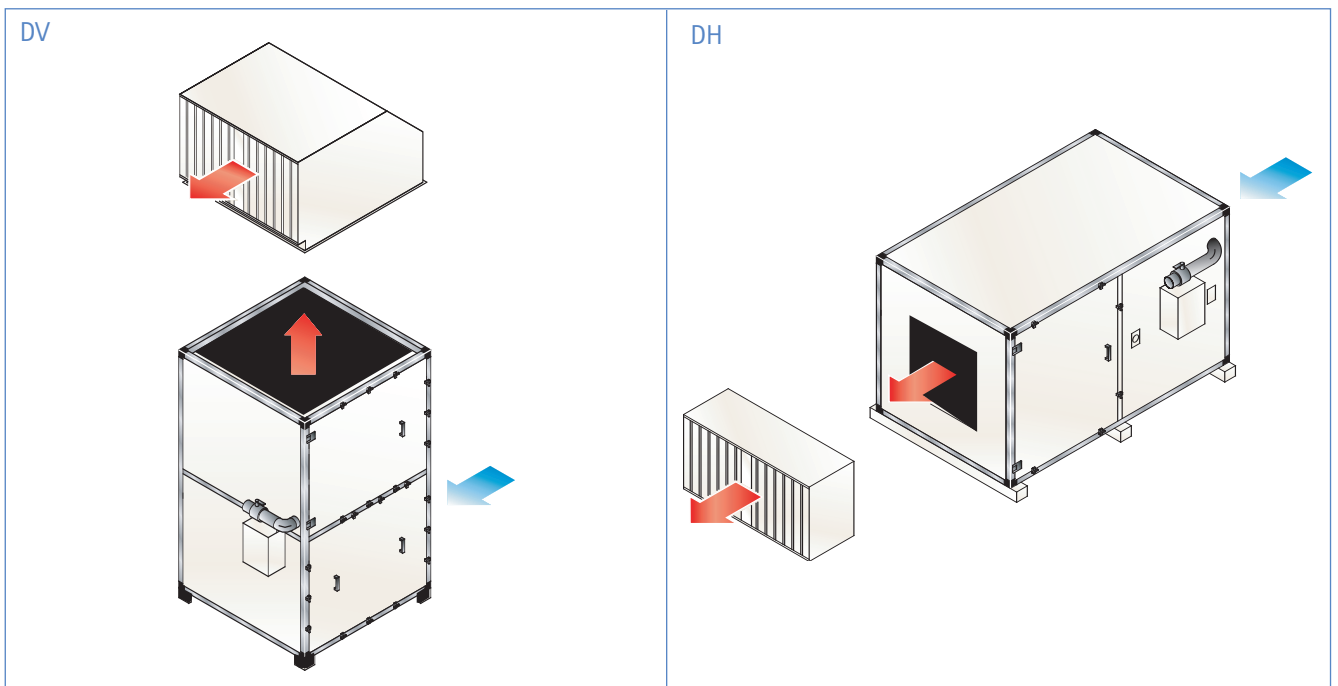
DV Vertical units

Unit	Depth	Width	Height (Ex air outlet discharge box)	Height (Inc air outlet discharge box)	Duct Connection Outlet W x H	Duct Connection Inlet W x H	Weight Approx kg
DV2 75	1000	1000	1950	2510	900 x 900	900x 900	200
DV2 150	1000	1000	1950	2510	900 x 900	900 x 900	215
DV4 225	1250	1250	2450	3210	1150 x 1150	1150 x 1150	275
DV4 300	1250	1250	2450	3210	1150 x 1150	1150 x 1150	290
DV7 375	1500	1500	2450	3900	1400 x 1400	1400 x 1150	420
DV7 450	1500	1500	2450	3900	1400 x 1400	1400 x 1150	450

DH Horizontal units

Unit	Length (Ex discharge head)	Length (Inc discharge head)	Width	Height (Inc Feet)	Duct Connection Outlet W x H	Duct Connection Inlet W x H	Weight Approx kg
DH2 75	1950	2450	1000	1100	404 x 404	1000 x 1000	200
DH2 150	1950	2450	1000	1100	404 x 404	1000 x 1000	215
DH4 225	2450	2950	1250	1300	569 x 569	1250 x 1250	275
DH4 300	2450	2950	1250	1300	569 x 569	1250 x 1250	290
DH7 375	2450	2950	1500	1600	715 x 715	1500 x 1500	420
DH7 450	2450	2950	1500	1600	715 x 715	1500 x 1500	450

Discharge options



Company standards and quality processes

Nordair DV/DH ranges are manufactured to [BS EN ISO 9002:1994](#) and are [CE approved](#). This accreditation has also been independently achieved by the company's Corgi registered Service Department, all members are trained to CITB standards and have gained ACOPS/ACS registration. After sales service can include full remote monitoring of all units via a modem connection.

Nordair offers a standard one-year parts and labour guarantee, optional warranty schemes of up to 10 years are available upon request.

Emissions and the environment

Comfort, environment and economy are the watchwords of Nordair combined heating and ventilation systems. Since the DV/DH ranges reduce fuel costs, they directly reduce consumption of fossil fuels. This has a beneficial impact on the environment by reducing the use of the world's valuable resources and also accounts for the lessening of harmful and warming emissions into the atmosphere.



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