

**AIR ROTATION SYSTEM
INSTALLATION AND OPERATING MANUAL**



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WARNINGS

- 1 This appliance must only be installed by a competent person in accordance with the requirements of the Codes of Practice or the rules in force.
- 2 All external wiring **MUST** comply with the current IEE wiring regulations.
- 3 Warning this appliance must be earthed.

Part No. 703060



1. Introduction.

Before installation, check that the appliance as described on the packaging label is in accordance with the correct type and model as specified on the data plate and complies with the site requirements.

The unit is delivered wrapped in heavy duty polythene and should be checked to ensure that it has been delivered undamaged.

Please read this document before commencing installation. The onus rests with the installer to ensure that all relevant manuals are read and understood, especially with regard to any safety instructions stipulated by the manufacturer.

Check that the local electricity supply, type of gas and pressure of the appliance are compatible.

The installation must comply with the requirements and recommendations of British Standard BS 6230. "Installation of Gas Fired Forced Convection Air Units for Commercial and Industrial Space Heating".

These instructions are only valid for the country of use indicated on the appliance, for example GB - IE. If these symbols are not shown it is necessary to obtain appropriate technical instructions, which will provide information concerning the necessary modification of the appliance for use in the country concerned. Such instructions may be obtained from your supplier upon request.

Health and Safety

Nordair Niche units must be installed in accordance with the relevant provisions of the Gas Safety (Installations and Use) Regulations 1998. Due account should also be taken of any obligations arising from the Health and Safety at Works Act 1974 or relevant codes of practice. In addition the installation must be carried out in accordance with the current IEE wiring regulations (BS 7671), BS 6896 (Industrial & Commercial) and any other relevant British Standards and Codes of Practice by a qualified installer. Isolate all electrical supplies to the unit & controller before proceeding.

For your own safety we recommend the use of safety boots and leather faced gloves when handling sharp or heavy items. The use of protective eye wear is also recommended.

Warranties

Unauthorised modification of this appliance or departure from use in the manner for which it was intended by the manufacturer or installed in a manner contrary to these instructions, may constitute a hazard and jeopardise all warranties. Deviations should only be carried out after formal consent has been obtained from the manufacturer.

Caution

Ensure that the environment in which the unit is to be installed will not create a hazard, i.e. where excessive (volatile) dust, flammable or corrosive substances and/or vapours and combustible materials may be present.

Suitable protection should be given to prevent damage to the appliance, for example from fork lift trucks.

When installing outdoor units care must be taken to ensure that unauthorised access to the building cannot be gained via the appliance or its ductwork system

This appliance has been tested and set according to the data plate before leaving the factory.

After installation the appliance must be fully commissioned and the settings re-checked.

This appliance incorporates CE approved Indirect Gas Fired Heat Exchange modules.

Quality Products

This Nordair Niche range of IDF indirect fired units are manufactured in the EC and supplied in accordance with BS EN 9002: Quality Assurance System.

Certificates of Conformity are available from the Quality Control department at Nordair Niche.

Product Information

Nordair Niche IDF units are available with heat outputs from 50 to 600kW.

All IDF units are fitted with a pre-tested and set induced draught burner. A sequential control box is fitted to each burner to provide safety.

Note No asbestos or soldered joints are present in the construction of the unit.

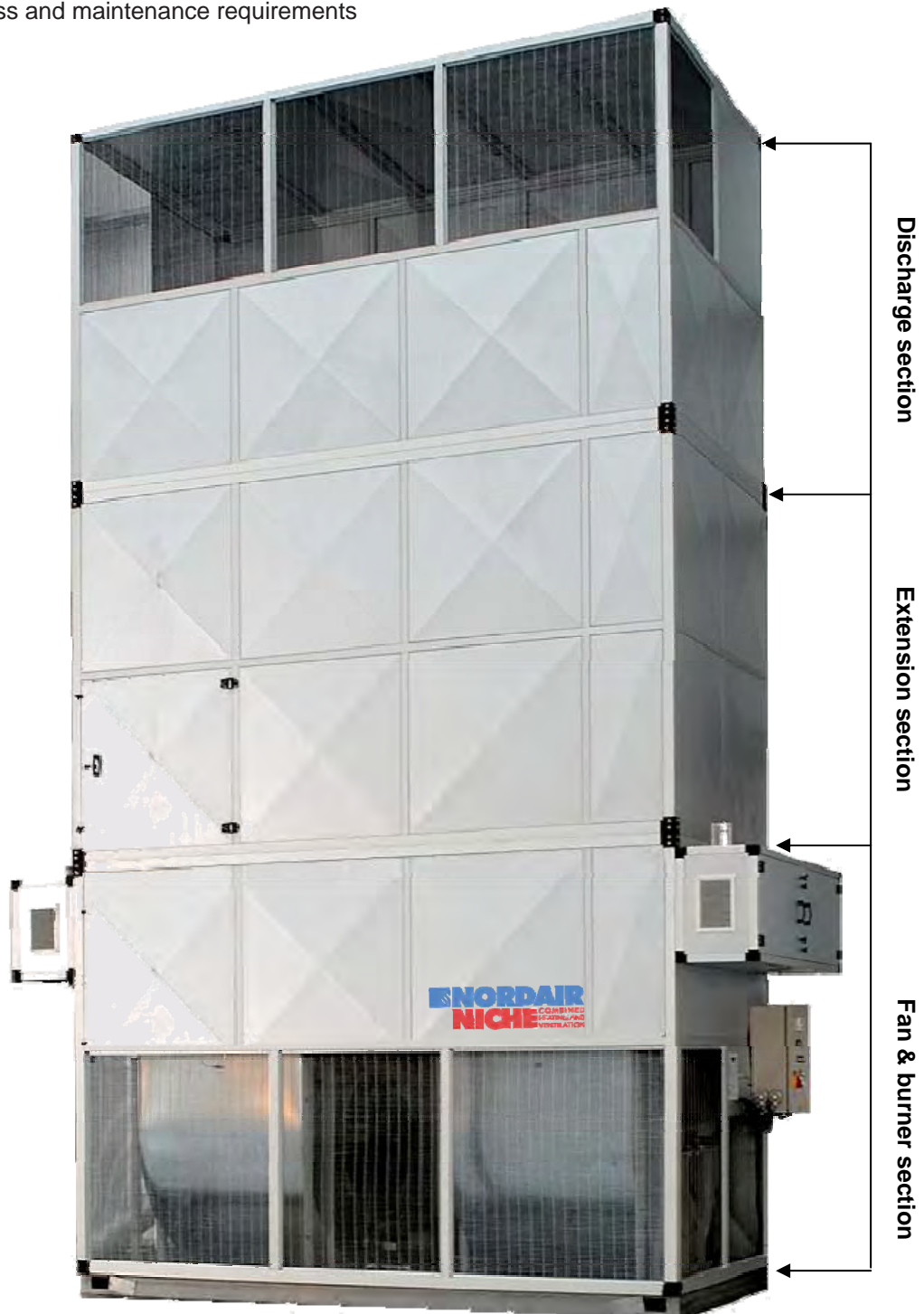
Before final location of the product the following criteria should always be considered in placing the unit: -

- Flue outlet access
- Placing for efficient distribution of warm air
- Gas supply
- Electrical services
- Combustion air supply (when applicable)
- Service access and maintenance requirements

Warnings

Units should not be installed in a corrosive or solvent atmosphere (i.e. near plating or degreasing plants), in areas where there is a fire risk, or any other environment, which is detrimental to the unit or its operation.

Consult BS 6230 for further information on hazardous arrears.

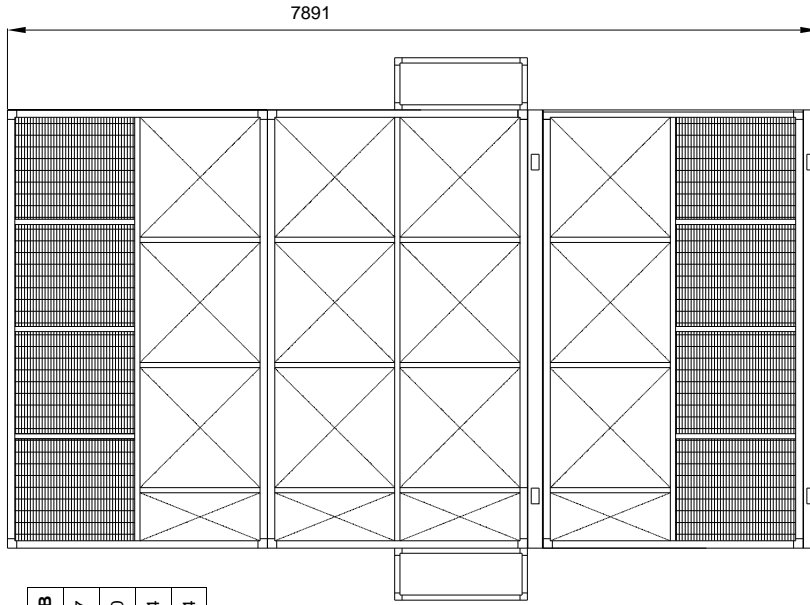


2. Technical Data.

| Unit Ref. | Air Flow Max (m³/s) | Motor Size (kW) | Heat module (qty/ref) | Heat input (gross) | Heat input (net) | Heat Output (kW) | Gas rate (m³/h) |
|--------------|---------------------|-----------------|-----------------------|--------------------|------------------|------------------|-----------------|
| IDF5-50VAR | 5.00 | 3.0 | 1 x 8050 | 62.0 | 55.9 | 50 | 5.92 |
| IDF5-75VAR | | | 1 x 8075 | 91.5 | 82.4 | 75 | 8.73 |
| IDF5-100VAR | | | 1 x 8100 | 120.0 | 108.4 | 100 | 11.45 |
| IDF8-75VAR | 8.00 | 4.0 | 1 x 8075 | 91.5 | 82.4 | 75 | 8.73 |
| IDF8-100VAR | | | 1 x 8100 | 120.0 | 108.4 | 100 | 11.45 |
| IDF8-125VAR | | | 1 x 8125 | 153.5 | 138.3 | 125 | 14.63 |
| IDF8-150VAR | | | 1 x 8150 | 182.9 | 164.8 | 150 | 17.44 |
| IDF10-100VAR | 10.00 | 5.5 | 1 x 8100 | 120.0 | 108.4 | 100 | 11.45 |
| IDF10-125VAR | | | 1 x 8125 | 153.5 | 138.3 | 125 | 14.63 |
| IDF10-150VAR | | | 1 x 8150 | 182.9 | 164.8 | 150 | 17.44 |
| IDF10-175VAR | | | 1 x 8175 | 211.8 | 190.8 | 175 | 20.19 |
| IDF10-200VAR | | | 1 x 8200 | 244.2 | 220.0 | 200 | 23.28 |
| IDF13-100VAR | 13.00 | 2 x 4.0 | 2 x 8050 | 124.0 | 111.8 | 100 | 11.84 |
| IDF13-150VAR | | | 2 x 8075 | 183.0 | 164.8 | 150 | 17.46 |
| IDF13-200VAR | | | 2 x 8100 | 240.0 | 216.8 | 200 | 22.90 |
| IDF13-250VAR | | | 2 x 8125 | 306.9 | 276.6 | 250 | 29.26 |
| IDF16-150VAR | 16.00 | 2 x 4.0 | 2 x 8075 | 183.0 | 164.8 | 150 | 17.46 |
| IDF16-200VAR | | | 2 x 8100 | 240.0 | 216.8 | 200 | 22.90 |
| IDF16-250VAR | | | 2 x 8125 | 306.9 | 276.6 | 250 | 29.26 |
| IDF16-300VAR | | | 2 x 8150 | 365.8 | 329.6 | 300 | 34.88 |
| IDF21-200VAR | 21.00 | 2 x 7.5 | 2 x 8100 | 240.0 | 216.8 | 200 | 22.90 |
| IDF21-250VAR | | | 2 x 8125 | 306.9 | 276.6 | 250 | 29.26 |
| IDF21-300VAR | | | 2 x 8150 | 365.8 | 329.6 | 300 | 34.88 |
| IDF21-350VAR | | | 2 x 8175 | 423.5 | 381.6 | 350 | 40.38 |
| IDF21-400VAR | | | 2 x 8200 | 488.4 | 440.0 | 400 | 46.56 |
| IDF27-300VAR | 27.00 | 2 x 11.0 | 2 x 8150 | 365.8 | 329.6 | 300 | 34.88 |
| IDF27-350VAR | | | 2 x 8175 | 423.5 | 381.6 | 350 | 40.38 |
| IDF27-400VAR | | | 2 x 8200 | 488.4 | 440.0 | 400 | 46.56 |
| IDF27-500VAR | | | 4 x 8125 | 613.9 | 553.1 | 500 | 58.52 |
| IDF32-350VAR | 32.00 | 2 x 11.0 | 2 x 8175 | 423.5 | 381.6 | 350 | 40.38 |
| IDF32-400VAR | | | 2 x 8200 | 488.4 | 440.0 | 400 | 46.56 |
| IDF32-500VAR | | | 4 x 8125 | 613.9 | 553.1 | 500 | 58.52 |
| IDF32-600VAR | | | 4 x 8150 | 731.6 | 659.2 | 600 | 69.76 |

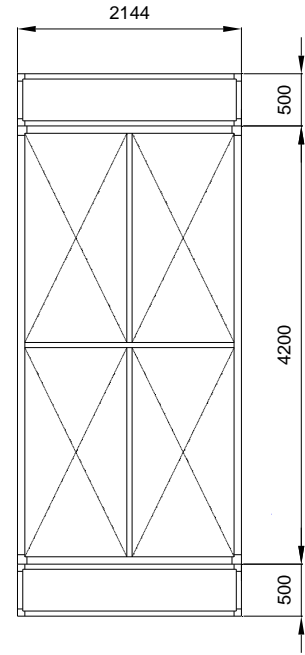
3. Overall Dimensions.

MODEL IDF32



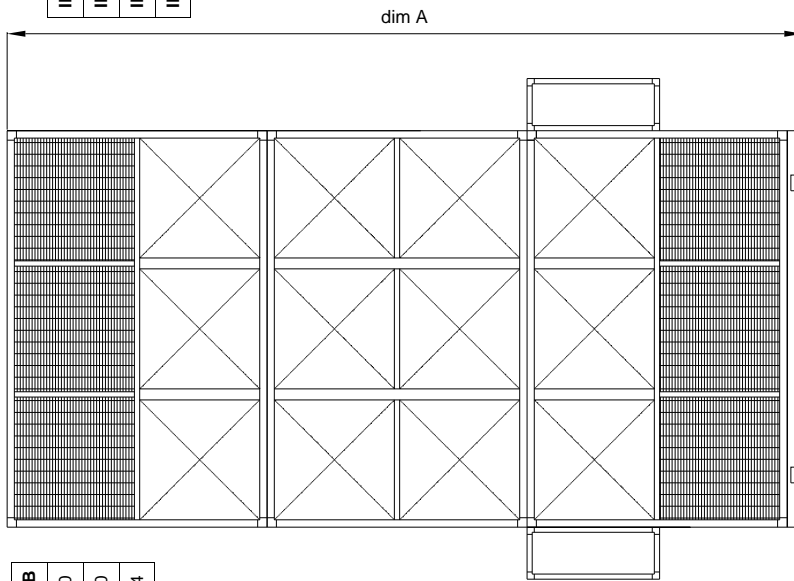
| | dim A | dim B |
|-------|-------|-------|
| IDF13 | 7378 | 1627 |
| IDF16 | 7471 | 1800 |
| IDF21 | 7605 | 2144 |
| IDF27 | 7758 | 2144 |

FRONT ELEVATION



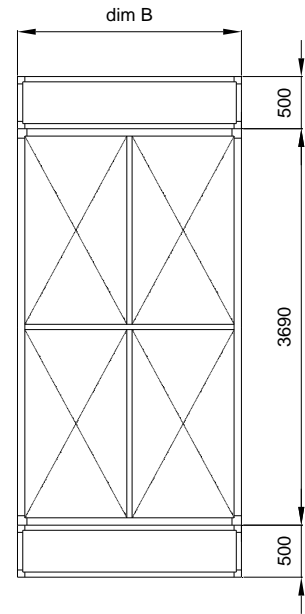
PLAN VIEW

MODELS IDF13 to 27



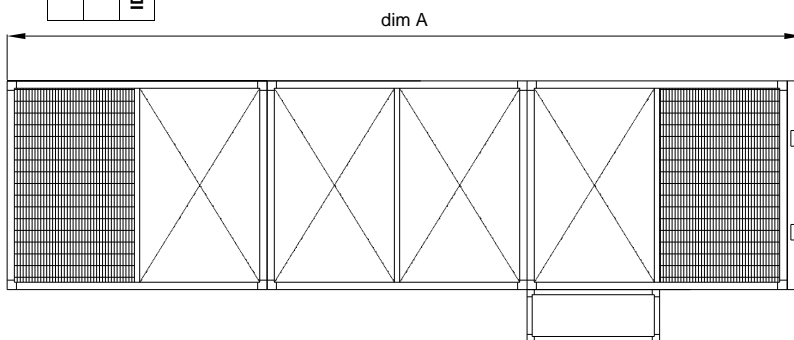
| | dim A | dim B |
|-------|-------|-------|
| IDF5 | 7223 | 1250 |
| IDF8 | 7451 | 1760 |
| IDF10 | 7581 | 2144 |

FRONT ELEVATION

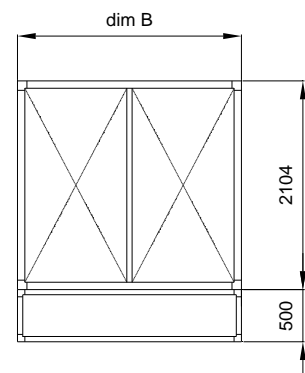


PLAN VIEW

MODELS IDF5 to 10



FRONT ELEVATION



PLAN VIEW

4. Installation Details.

4.1 Unit Installation

Check that the local electricity supply, type of gas and pressure of the appliance are compatible with the unit data badge.

The unit must be installed in accordance with the rules in force and the relevant requirements of any fire regulations or insurance company's requirements appertaining to the area in which the unit is located.

The units should not be located in hazardous areas. Consult BS6230 for guidance.

4.2 Clearances and Positioning:

The Unit is designed to be floor mounted only.

When designing a system, allowance must be made so equipment can be serviced after installation and for the fitting of any spares, which may be required.

Units must be installed with a minimum access clearance of 1 meter at each side for general maintenance purposes and operation.

Consideration should also be given to long term replacement of the heat exchanger section whereby a minimum access requirement of 1.8 meters would be required to withdraw and replace a heat exchanger section. The unit should therefore not be sited any closer than this to permanent walls or immovable objects.

To allow adequate air distribution a minimum clearance of 5 meters should be maintained from the air outlet grilles.



To enable the discharge section to be positioned using an extended Hiab crane, a minimum clear height above the unit of 1.5 meters is required.

We also recommend a minimum distance of 500mm from the wall to the unit.



WARNING!

No unit shall be installed where there is a foreseeable risk of flammable particles, gases, vapours or corrosion inducing gases or vapours being drawn into either the heated air stream or the air for combustion.

4.3 Handling The Equipment.

The units are supplied in three sections. The base section is mounted on a base frame with access points for lifting.

Each unit should be positioned onto a prepared flat level concrete floor.

IMPORTANT!

Ensure the base is level, use levelling bolts and pack were necessary.

Each section must be lifted into position using a suitably sized crane, with lifting bars or lifting straps threaded through the lifting points.

When using lifting straps sling spreaders must be used to provide clearance between the appliance and the slings.

An alternative method is utilising a high lift fork lift truck, using the brackets and screwed rod **which can be provided on request.**

When siting the appliance and unloading, extreme care must be exercised to ensure that the slings employed do not damage the casing.



NB When lifting the main unit fan section sling spreaders must be used to provide clearance between the appliance and the slings, or use the fork truck lifting points on the base frame.

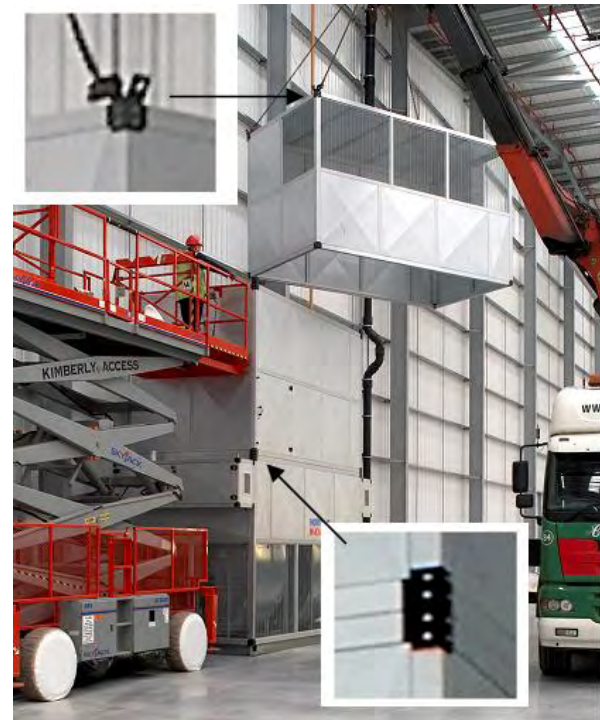


The mating faces of each section require a bead of silicone around one of the faces, before lowering the top section and bolting together using the corner brackets (and mid brackets where used).

Each section also incorporates a lifting bracket at each corner, to bolt the frames together these are replaced with assembly brackets once in the unit is in position and bolted together.

Finally the plates covering the lifting access points should be fitted to close the base frame and the base frame should be sealed around the

external perimeter using the silicone sealant provided.



A full and unobstructed return air path to the unit must be provided.

Alternative method utilising a high lift fork lift truck



Position top section on lower section using suitable fork lift truck.



Ensure forks are all the way through the unit.



Lower top section corner by corner, keep space equal at all times.



Use brackets and screwed rod supplied to support top section over lower section at each corner.

The mating faces of each section require a bead of silicone around one of the faces, before lowering the top section and bolting together using the corner brackets (and mid brackets where used).



Once in place bolt together using angled brackets supplied.

In addition, where there is a risk of damage to the unit caused by fork lift trucks etc then the unit should be protected with suitable barrier rails.



4.4 Ventilation Requirements

The space in which the unit is situated must be adequately ventilated.

Where the air change of the heated space is 0.5/ hour or more, additional natural ventilation will not be necessary.

Where the air change of the heated space is lower than 0.5/hour, the following requirements shall apply:

2cm²/kW of the net heat input of natural ventilation at low level.

For full details, refer to Standard BS6230

5. Flue System & Combustion Air Supply.

5.1 Flue System

The flue system must be made to the following specifications:

1. Mechanically robust.
2. Resistant to internal and external corrosion.
3. Non-combustible and durable under the conditions to which they are to be subjected.
4. Aluminium or stainless steel flue is recommended.

The appliance has a fan assisted flue and a gasket sealed flue system should be used.

5.2 Design

Flue must be a type acceptable to current standards.

Facilities should be made for the disconnection of the flue from the unit to aid servicing and inspection.

This appliance does not require a draught diverter.

The products combustion must be flued to the outdoor atmosphere.

The flue should terminate in a freely exposed position and must be situated as to prevent the products of combustion entering the building via any opening.

Flues must be terminated with an approved terminal fitting.

The flue installation must be designed to the latest gas regulations and any local environmental standards. Flue systems must comply with national and local regulations.

The flue system must be supported independently and not supported by the unit.

Where a flue passes through a combustible roof, ceiling or floor, the flue pipe should be surrounded with a metal sleeve, the size of which should be sufficient to provide a space not less than 25mm between the flue pipe and the sleeve when positioned.

5.3 Maximum flue lengths

The fan assisted flues are suitable for a maximum flue length of 9 meters when used as

a type B fanned flued appliance i.e. the combustion air is drawn from the heated space.

When used as a type C balanced flue appliance with fresh air being drawn from outside for the combustion air supply the maximum flue length would be 9 meters plus 9 meters of combustion air pipe.

n.b. deduct 1.5 meters from flue length for every 90° elbow.

| Unit Ref. | Flue Dia (mm) |
|------------------------------------|--------------------|
| IDF5VAR | 1 x 130 |
| IDF8VAR | 1 x 130 |
| IDF10VAR | 1 x 130 |
| IDF13VAR | 2 x 130 |
| IDF16VAR | 2 x 130 |
| IDF21VAR | 2 x 130 |
| IDF27VAR 200-400kW 500kW | 2 x 130 4 x 130 |
| IDF32VAR 350-400kW 500-600kW | 2 x 130 4 x 130 |

5.4 Flue terminal

An approved flue terminal must be fitted. Outlet openings should be provided preferably all round, or at least on opposite sides.

It is important that roof terminals are located so that it is not likely to be subjected to wind pressures which could restrict or reverse the flow of combustion products through the flue.

The ideal position is above the highest point on the roof. It is absolutely essential that the terminal is positioned so that it is freely exposed to any wind and is not shielded by any roof structure or object to such a degree that they create undesirable pressure regions around the terminal.

Preferred positions are:

- At or above the ridge of a pitched roof by means of a roof terminal.
- Above the intersection with a pitched roof.

The pitch or angle of the roof will determine the required flue height from the base of the terminal.

6. Gas & Electrical connections

6.1 Gas

Connection to gas service may only be carried out by appropriately qualified persons. The gas installation must comply with the rules in force using materials appropriate for gas installations. Check that the gas category is in accordance with the data described on the unit.

An adequate gas supply sized to provide the dynamic pressure for the volume required for the unit/s is essential to maintain the nominal heat input. Other gas fired plant using the same gas service must also be taken into account.

A 90° action, positive isolating ball valve must be fitted adjacent to the appliance, fitted in a manner to facilitate access to the burners for servicing purposes.

Ensure that the gas service has been tested and purged in accordance with prescribed practice prior to commissioning and setting the appliance into service.

Gas Connection Size

| Model | Pipe Size |
|----------|------------|
| IDF5VAR | ¾" BSP x1 |
| IDF8VAR | ¾" BSP x1 |
| IDF10VAR | ¾" BSP x1 |
| IDF13VAR | 1¼" BSP x2 |
| IDF16VAR | 1¼" BSP x2 |
| IDF21VAR | 1¼" BSP x2 |
| IDF27VAR | 1¼" BSP x2 |
| IDF32VAR | 1¼" BSP x2 |

Ensure that the gas supply is filtered and it is free of swarf or debris before connecting to the appliance.

The minimum inlet gas pressure for natural gas should be 17.5mbar at the inlet when running.

The appliance governors are suitable for a maximum supply pressure of 50mbar where gas supply pressures may exceed this value and additional gas pressure regulator must be installed in the supply line.

All gas pipe work and electrical connections must be adequately supported and must not support any of the units weight or rely on the strength of the burner gas pipe work.

6.2 Electrical

The electrical installation may only be carried out by appropriately qualified persons observing the rules in force. The unit must be earthed.

Check the electrical specification is in accordance with the specification on the appliance data plate. A unique appliance wiring diagram is supplied as a separate document with the manual, plus an additional copy attached to the unit.

Ensure that power will be supplied at all times to the unit, even when it's control is switched in the "HEAT OFF" mode. This is necessary to ensure that the air circulating fan can operate independently of the heating control. Where controls are not provided by Nordair Niche, then ancillary controls must be installed to provide timed heat cycles, room comfort temperature levels, frost, override of air circulation etc.

Before commissioning, any work on the appliance the Auto/Off/On switch should be switched to the 'Off' position and the air circulation fan(s) have stopped.

All cable and gas service entry points to outdoor appliances must be sealed to prevent ingress of water.

If it is necessary to change the rotation of blower to match the direction indicated on blower housing then three phase motors can be altered by switching two phases of the supply to the motor.

On units fitted with centrifugal forward curved fans, the speed setting for static pressure imposed by the air distribution system will govern the motor loading. The units are manufactured for the duty specified on the data badge.

Refer to section Drives general and adjustments for instructions on adjusting the fan speed and motor load factors.

After the electrical installation has been completed the appliance should be tested prior to the commissioning of the gas fired heat exchanger module(s). Check to ensure: • Earth continuity • Resistance to earth • Phase supply to correct terminals • Current rating and circuit breaker value

In addition to the above requirements check to ensure that the fan performance and motor load factors are correct for the application and in accordance with the appliance data plate.

7. Commissioning & Testing

7.1 General

The Nordair Niche IDF unit is fitted with Indirect Gas Fired Heat Exchanger(s) as detailed in the technical data sheet. The following instructions must be read and understood prior to commencing work and must be followed for all commissioning and service operations.

Only persons formally qualified to work on gas fired apparatus may carry out commissioning and testing.

Visually check full system to see if it is in accordance with our manual and to current GAS SAFE legislation and IEE regulations and to this manual.

Check combustion air is adequate in plant room or surrounding area.

Check contractors electrical wiring is correct and terminated tight and fuse ratings are correct.

Ensure that the gas pipe work is sized correctly and relative documents for soundness and purging are available. It is the responsibility of the commissioning engineer to check for soundness from the main inlet to servicing stop tap on inlet of valve.

Ensure that the inlet pressure is no greater than 50mbar static and no less than 17.5mbar running.

On completion of the commissioning all adjustable devices are to be sealed with suitable tamper evident seal.

7.2 Electrical check

After completion of the installation and before switching on the electrical supply to the appliance, a qualified electrician must carry out a preliminary check. The following must be checked:

- Check to ensure that electrical cables/wiring do not touch the hot combustion collector box.
- Check that all wiring is connected in accordance with the appliance circuit diagram.
- Be certain that the correct fuse value and cable size has been provided.
- Check to ensure that the appliance is earthed by conducting an earth continuity test. Connect a test meter, one lead to the appliance earth terminal and the other to

the mains incoming earth point at the electrical isolator. A resistance reading of 1,0 ohm or less must be indicated. If a higher reading is obtained, check all cable connections to ensure adequate security and cleanliness. If problem still exists, it may be necessary to consult the electricity supply undertaking.

- Carry out a polarity test. Connect one lead of a suitable AC voltmeter to earth and connect the other lead to the live supply terminal (L) at the unit.
- Switch ON the power to the unit and check for correct voltage. The same result should be obtained by connecting the test leads between live and neutral. Connect the voltmeter test leads to N and E. A reading of $\pm 0V$ should be obtained. If these tests do not conform with the above, there is a fault which must be rectified before proceeding further with the commissioning.
- Ensure that an electrical isolator with two pole separation with a minimum air break between poles of 3,0 mm has been fitted adjacent to the unit.
- Check that the low and high level temperature sensor are fitted.
- Avoid location in draughty areas or where it may be influenced by heat sources e.g, the sun, process plants, etc. The low level temperature sensor or thermostat should be mounted on a vibration free surface and mounted about 1.5 metres above floor level.

7.3 Gas connection

The whole of the gas service installation including the meter must be inspected, tested for soundness and purged in accordance with current regulations.

Caution Never use a flame for checking gas soundness.

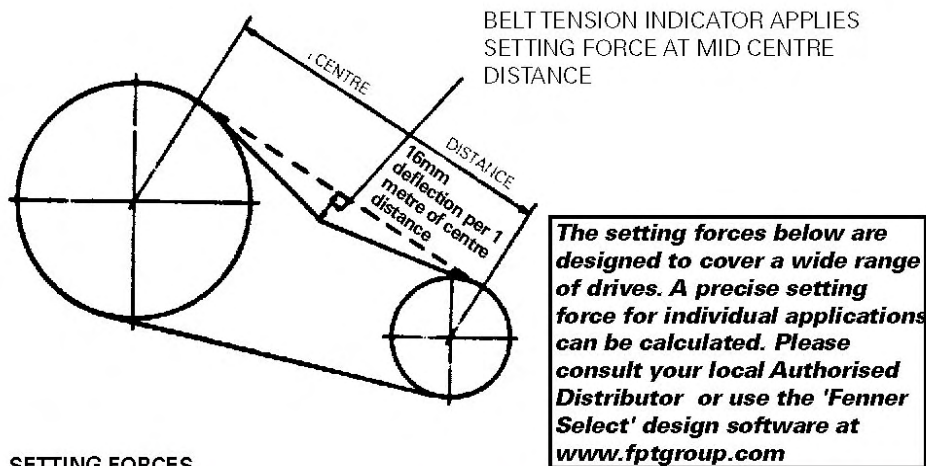
For unit module commissioning and testing please refer to appendix 1

On completion of the commissioning all adjustable devices are to be sealed with suitable tamper evident seal.

8. Routine Maintenance Schedule.

| | Monthly | 3 Monthly | 6 Monthly | Annually |
|--------------------|---------|-----------|-----------|----------|
| Fan shaft bearings | | | | x |
| Motors | | | | x |
| Belts and Pulleys | | x | | |
| Heat Exchangers | | | | x |
| External surfaces | | | | x |

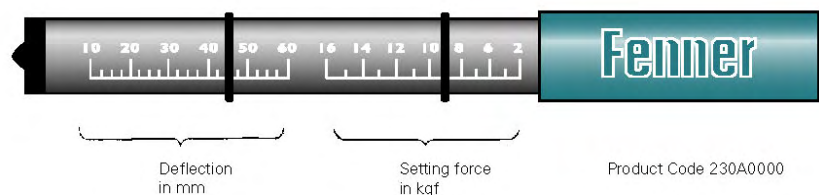
8.1 Belt tensioning procedure using a belt tension indicator



SETTING FORCES

| Belt Section | Setting force to deflect belt 16 mm per metre of span | | | | |
|-----------------|---|---|-------------|--|------|
| | Small pulley diameter (mm) | Basic setting forces Newtons (N) kilograms (kgf) | | 1.25 x setting forces Newtons (N) kilograms (kgf) | |
| SPZ | 56 to 71 | 16 | 1.6 | 20 | 2.0 |
| | 75 to 90 | 18 | 1.8 | 22 | 2.2 |
| | 95 to 125 | 20 | 2.0 | 25 | 2.5 |
| XPZ & QXPZ | over 125 | 22 | 2.2 | 28 | 2.8 |
| | 80 to 100 | 22 | 2.2 | 28 | 2.8 |
| SPA | 106 to 140 | 30 | 3.0 | 38 | 3.9 |
| | 150 to 200 | 36 | 3.7 | 45 | 4.6 |
| XPA & QXPA | over 200 | 40 | 4.0 | 50 | 5.1 |
| | 112 to 160 | 40 | 4.0 | 50 | 5.1 |
| SPB | 170 to 224 | 50 | 5.1 | 62 | 6.3 |
| | 236 to 355 | 62 | 6.3 | 77 | 7.9 |
| XPB & QXPB | over 355 | 65 | 6.6 | 81 | 8.3 |
| | 224 to 250 | 70 | 7.1 | 87 | 8.9 |
| SPC & QXPC | 265 to 355 | 92 | 9.4 | 115 | 12.0 |
| | over 375 | 115 | 12.0 | 144 | 15.0 |
| 8V | 335 & above | 150 | 15.0 | 190 | 19.0 |
| Z | 56 to 100 | 5 to 7.5 | 0.5 to 0.8 | | |
| A (& HA banded) | 80 to 140 | 10 to 15 | 1.0 to 1.5 | | |
| B | 125 to 200 | 20 to 30 | 2.0 to 3.1 | | |
| C | 200 to 400 | 40 to 60 | 4.1 to 6.1 | | |
| D | 355 to 600 | 70 to 105 | 7.1 to 10.7 | | |

FENNER BELT TENSION INDICATOR



9. User Instructions.

Display this near your heater. For safe and satisfactory operation, these instructions should be read and fully understood.

9.1 General

For continued safe and efficient operation, this heater should be serviced regularly by a competent service engineer. A full after sales service is available from Nordair Niche. Read the warranty and ensure that the heater is operated within the terms of the warranty. Maintain free access to the heater for servicing and do not restrict the air supply to the heater.

For your safety

- Ensure that the heater is properly earthed.
- If a gas leak is suspected, turn off the gas supply and contact the gas supplier immediately.
- **DO NOT USE A NAKED FLAME** to inspect gas leaks.

9.2 To turn the heater on

1. Turn 'ON' the gas supply and the electrical supply to the heater.
2. The time and temperature control if the heater is under the dictates of a time temperature controller and will start automatically.

Notes

- On initial start-up, several attempts may be required to purge the air from the multifunctional control valve.
- If the heater will not 'start' on initial start-up, the ignition controller may be in lock-out position. Depress the reset button.

9.3 Normal operating sequence

1. On time signal start, main supply fan starts.
2. Room sensor calling for heat, flue venter commences a purge period followed by ignition of the main flame.
3. Below room set point, the burner will fire at maximum heat input, until room set point is achieved. Depending on the type of control fitted i.e. modulating, high/low or on/off, the heater input will be reduced accordingly.
4. Room temperature exceeding room set point will shut down the burner. Main supply fan will continue to run.
5. On time schedule shutdown the burner and main fan is shut down. Outside of the time schedule frost protection will start the heater. If the room temperature falls below the frost set point.

Note

The fan will continue to operate until the heat exchanger has cooled down.

To shut down the heater for a short period - Override the time/temperature controller to 'off'. To reinstate the heater operation, override the controller to 'ON'.

To shut down the heater for an extended period - Override the time/temperature controller to 'OFF'. Isolate the gas and electrical supplies.

Operation note

If a momentary interruption to the gas occurs, the burner will automatically lockout. Burner lockout must be manually reset.

If the heater continues to lockout after 3 or 4 consecutive attempts at ignition, contact Nordair Niche Service Department or your own service company.

In the event of the heater going into an overheat condition, wait 30 seconds before resetting. If the heater continues to go to overheat after 3 or 4 consecutive attempts, contact Nordair Niche Service Department or your own service company.

9.4 Maintenance and service

To ensure safe and efficient operation, this heater should be serviced at least annually. It is strongly recommended that the installing heater engineer or Nordair Niche Service Division be contacted to provide the necessary service.

Retain on file a copy of the service instructions for this heater. Retain service record of annual maintenance.

To clean the appliance cabinet, wipe the surfaces with a damp cloth, containing a mild detergent.

Appendices

1. An OEM set of burner instructions are included with this manual under a separate document.
2. A general arrangement drawing is included with this manual under a separate document.
3. A full set of wiring diagrams are included with this manual under a separate document.

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