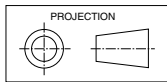


ISD 430KB, 461K

Ducted Split System Indoor Units

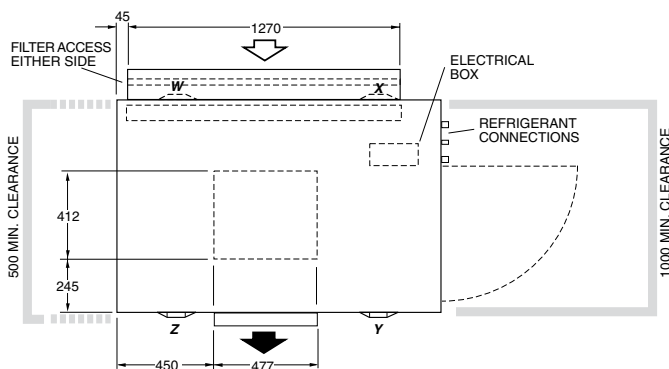
Installation & Maintenance

Fig.1 Dimensions (mm)

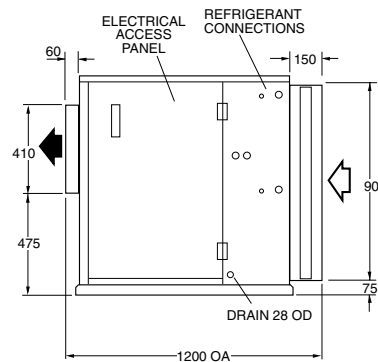
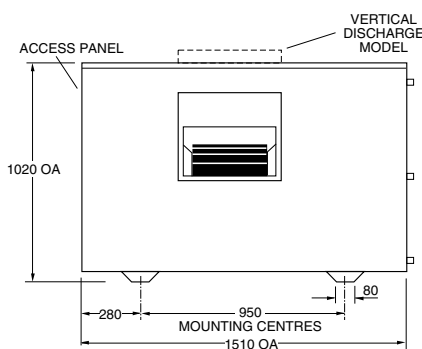


Not to Scale

MODEL	CORNER LOADS (kg)			
	W	X	Y	Z
ISD 430KB	60	72	63	50
ISD 461KB	60	72	63	50



Net Weight
 ISD 430KB 245 kg
 ISD 461K 245 kg



NOTE

The manufacturer reserves the right to change specifications at any time without notice or obligation. Certified dimensions available on request.

GENERAL

These ISD indoor units are designed to be coupled with their respective OSA outdoor units. Units must be installed in accordance with all national and local safety codes.

Combinations

- One ISD 430KB with one OSA 430RKTB
- One ISD 430KB with one OSA 430RKTGB
- One ISD 461K with one OSA 460RKT

Option

- Filters
- SAT-2 Controller kit (for non-digital sys.) or TZT-701 Controller kit (for digital systems).

INSTALLATION

Unpacking

The unit's supply air spigot has been secured inside the unit for ease of shipping. Remove the spigot and secure it in place using the existing screws.

Positioning & Mounting

Provide sufficient clearance to the access panels.

Mount on a suitable level platform using vibration isolators. Access to fixing centres beneath the return air spigot can be made via the removeable bungs in the spigot's base.

Condensate Drain

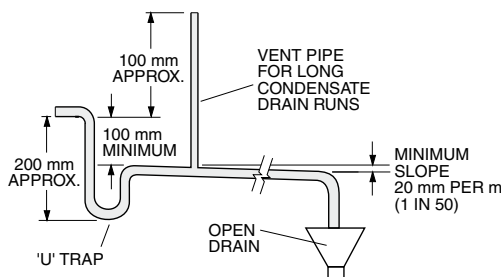
The unit has an internal sloping condensate drain tray. The trap should have a vertical height of at least 100 mm. The drain should have a slope of at least 1 in 50 and must not be piped to a level above the unit drain tray (refer Fig.2).

For long condensate pipe runs, fit a vent pipe near the drain trap. The top of the vent pipe must be at least 100 mm above the ISD unit's drain tray.

It is essential that the drainage system for the evaporator is checked by pouring water in the drain tray and seeing that it discharges at the end of the drain and does not overflow the drain tray.

Fig. 2

Condensate Drain



INDOOR-OUTDOOR UNIT CONNECTIONS

Refer to the relevant OSA Outdoor Unit 'Installation & Maintenance' pamphlet for piping instructions. For wiring connections, refer to the Outdoor Unit wiring diagram.

REFRIGERATION PIPING

Pipe Connection Sizes & Type

ISD 430KB

Liquid : 13 mm OD (1/2") sweat

Suction : 22 mm OD (7/8") sweat

ISD 461K

Liquid : 16 mm OD (5/8") sweat
 Suction : 32 mm OD (1 3/8") sweat

The ISD is shipped from the factory with a pressurised holding charge of nitrogen. Immediately before removing any brazed pipe connection's seal, reduce holding charge to atmospheric pressure.

Warning: failure to do so may cause injury.

Refer to the Outdoor Unit 'Installation & Maintenance' pamphlet for evacuation procedure and piping requirements.

ELECTRICAL WIRING

The electrical supply required (via the Outdoor Unit) is specified on the Outdoor Unit's wiring diagram.

Electrical work must be carried out by a qualified electrician in accordance with local supply authority regulations and the wiring diagram.

In a free blow or low resistance application, beware of exceeding the fan motor's full load amp limit (refer Outdoor Unit's wiring diagram).

To make the indoor fan switch off during de-ice cycle, refer to the Outdoor Unit wiring diagram for the appropriate changes.

INDOOR FAN SPEED

The fan motor is fitted with a factory set adjustable pitch pulley. One revolution of adjustment is equal to 7% change in air volume flow rate.

To change the fan speed loosen the motor mounting plate hold down screws, loosen the pulley grub screws and turn the pulley flange the desired amount. The pulley adjustment is locked by tightening the grub screws in the keyways.

When setting air flows ensure that the pulleys are in alignment. Tension the belt by adjusting the motor mounting plate.

COMMISSIONING

Indoor Unit

1. Check that the thermostat is correctly wired and set at the desired temperature.
2. Check that any air filter (if fitted) is clean.
3. Check that the fan runs freely without vibration.
4. Check the airflow at each air outlet (diffuser) and adjust if necessary.
5. Check condensate drain for free drainage.
6. Run the unit in cooling mode and heating mode.

MAINTENANCE

Weekly For First Four Weeks

1. Check air filter (if fitted); vacuum clean as necessary.
2. Check condensate drain for free drainage.

Monthly

Check air filter (if fitted); vacuum clean as necessary.

Six Monthly

1. Check condensate drain for free drainage.
2. Check heat exchanger coil; vacuum or brush clean as necessary.
3. Check the tightness of the fan, motor mountings, pulley and belt tension.
4. Check that fan motor is free running.
5. Check tightness of electrical connections.
6. Check air supply at diffuser outlets.

WARNING

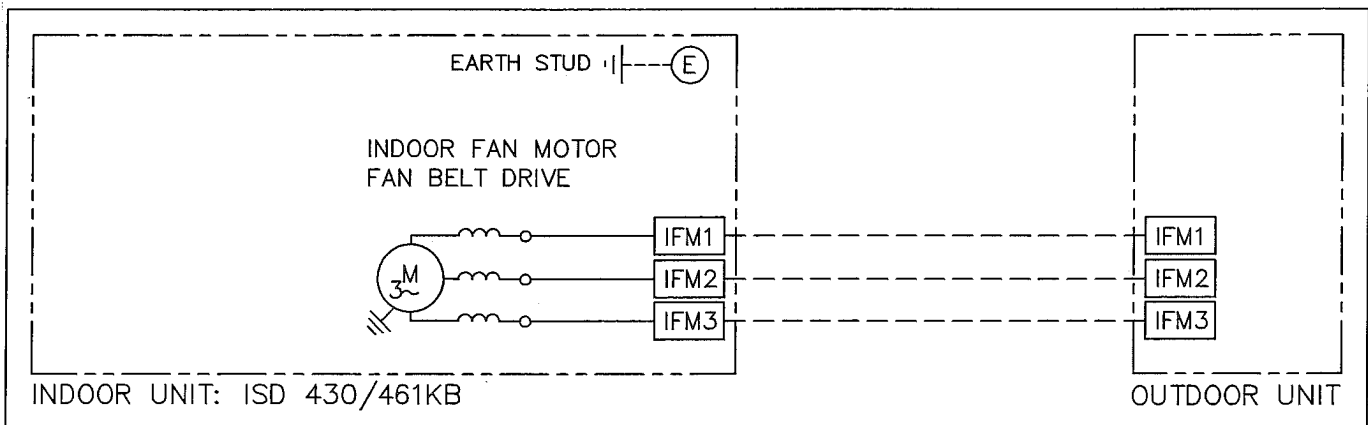
This unit is designed for use ONLY with the refrigerant HFC-410A (R410A). The use of other refrigerants is NOT authorised or approved by the manufacturer and may cause operational problems such as poor performance and efficiency, loss of capacity, degradation of materials and refrigerant leaks.

The use of flammable or explosive materials as a refrigerant creates the additional risks of fire and explosion which may result in property damage, personal injury or death.

NOTE

The manufacturer reserves the right to change specifications at any time without notice or obligation. Certified dimensions available on request.

This pamphlet replaces the previous issue no. 3352 dated 06/10. Optional t/stats added.



MODEL — ISD	430/461KB	PLOTTED 30-01-09	Title ISD 430/461KB WIRING SCHEMATIC					
INDOOR FAN MOTOR FULL LOAD AMPS/PH	4.7A							
NOTE: CHECK WIRING BEFORE SWITCHING ON, INCORRECT CONNECTION WILL DAMAGE MOTORS.		CLIENT WIRING ——— Interconnections between units by client. Double insulated multi-core cable.						
ISSUE	MODIFICATION	ECN	DATE	APRVD	Drawn KTT	Date 07-11-08	Drawing No. 525-544-002	Revision
					Scale	<i>MSd B.L.</i>		