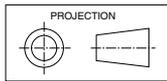


ISD 299KBGD (c/w TZT-701 Controller)

Ducted Split System Indoor Units

Installation & Maintenance

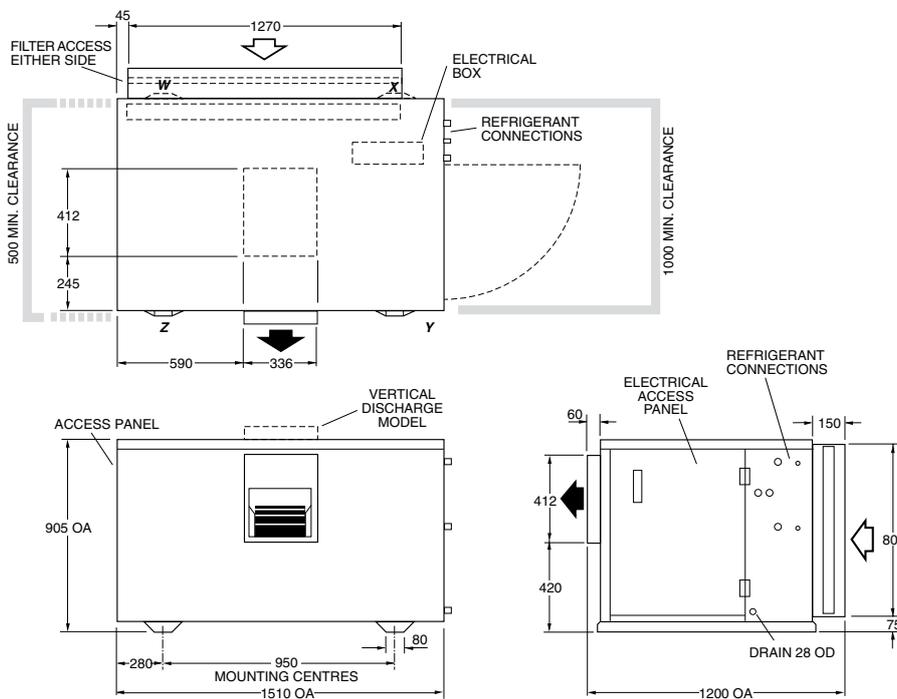
Fig.1 Dimensions (mm)



Not to Scale

CORNER LOADS (kg)			
W	X	Y	Z
69	48	38	60

Net Weight 215 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 299KBGD indoor units are designed to be coupled with the OSA 298RKTB or OSA 298RKTBG (digital) outdoor units. The unit is supplied complete with a TZT-701 room temperature controller. Units must be installed in accordance with all national and local safety codes.

Options

1. Filters
2. TZT-701 Accessories (refer overleaf).

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

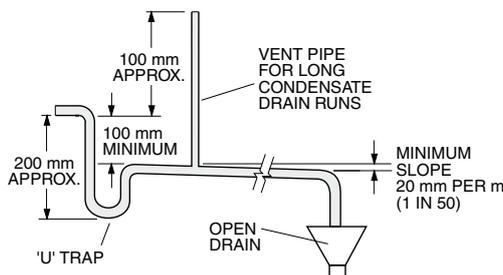
The unit has an internal sloping condensate drain tray. The trap should have a vertical height of at least 100 mm. The drain should have a slope of at least 1 in 50 and must not be piped to a level above the unit drain tray (refer Fig.2).

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

- Liquid : 13 mm OD (1/2") sweat
- Suction : 19 mm OD (3/4") 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.

TZT-701 CONTROLLER

The following components are supplied loose inside the electrical box:

1. TZT-701 Wall Control plaque, including wall mounting plate and battery.
2. 10 m interface lead (electrical box-to-plaque).
3. 10 m interconnecting power lead (ISD indoor unit-to-OSA outdoor unit); 5 core.
4. TZT-701 Installation Instructions booklet.
5. TZT-701 User's Operating Instructions.

Optional

1. Remote return air sensor c/w 5m lead and no case.
2. Remote return air sensor c/w case.
3. Remote return air temperature sensor lead; 1.5, 6, 12 or 25 m.
4. 20 m extended interface lead (electrical box-to-plaque).
5. ISD indoor unit-to-OSA outdoor unit interconnecting power lead; 12.5 m or 25 m; 7 core.

Installation

The TZT-701 Controller PCB is supplied pre-installed in the ISD unit's electrical box.

1. Isolate the ISD unit from power supply, then remove electrical box cover.
2. Remove the TZT-701 Wall Plaque box supplied loose inside the electrical box.
3. Follow the instructions supplied in the TZT-701 Installation document supplied.

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.

Refer to Outdoor Unit Installation Instructions in order to complete the start-up and commissioning procedure for the complete air conditioning system.

Demonstrate the TZT-701 Wall Control to the owner/user, after having first thoroughly familiarised yourself with the User's Operating Instructions. This document is to remain with the owner/user.

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

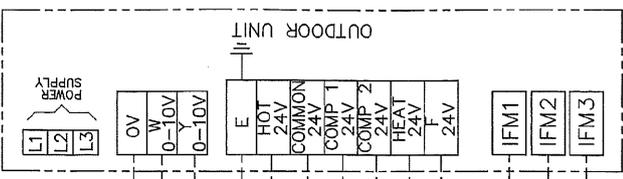
The manufacturer reserves the right to change specifications at any time without notice or obligation. Certified dimensions available on request.

This pamphlet replaces the previous issue no. 3341 dated 03/10.
Wiring revisions B & C.

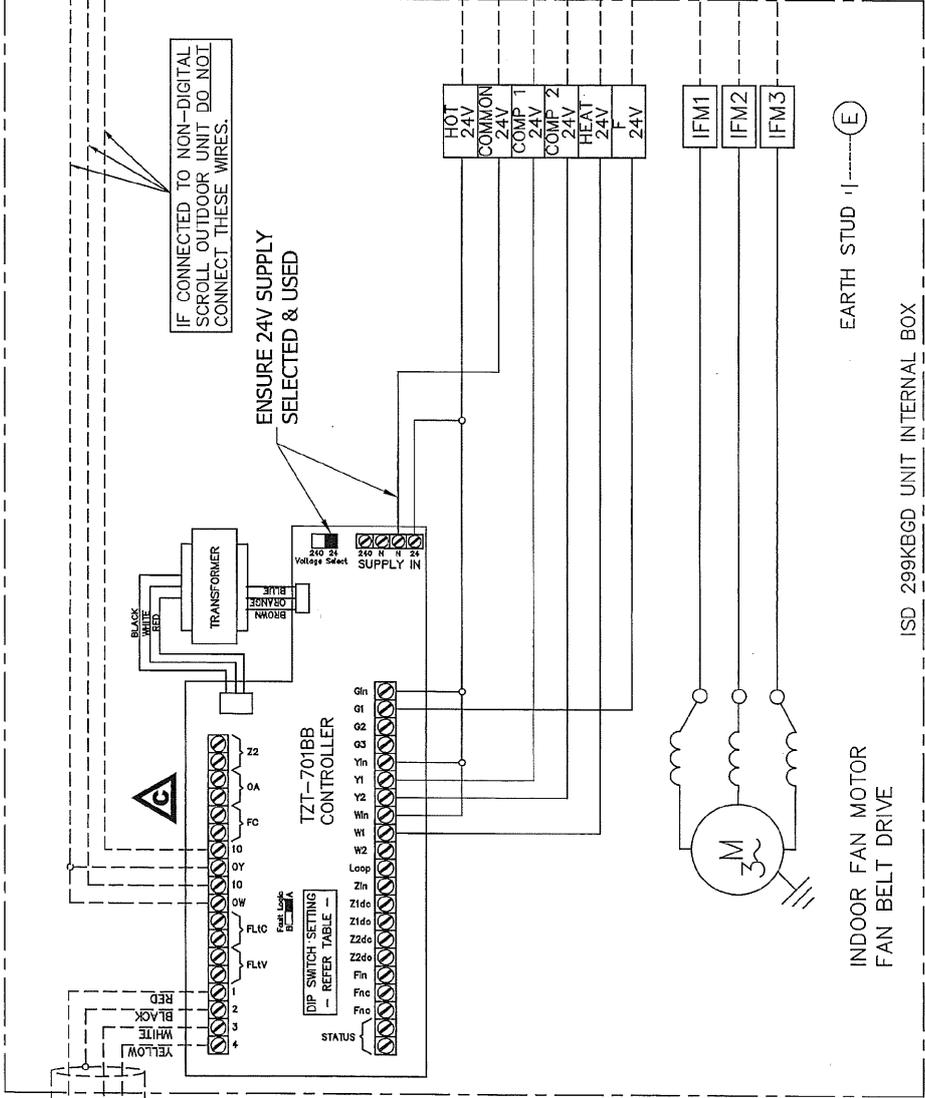
DIP SWITCH SETTINGS

STANDARD SETTING	ON	OFF
1	ON	OFF
2	ON	OFF
3	ON	OFF
4	ON	OFF
5	ON	OFF
6	ON	OFF
7	ON	OFF
8	ON	OFF

USE SHIELDED CABLE



ALTERNATIVELY CAN TERMINATE SHIELD AT INDOOR UNIT



ENSURE 24V SUPPLY SELECTED & USED

EARTH STUD (E)

ISD 299KBGD UNIT INTERNAL BOX

MODEL - ISD 299KBGD
INDOOR FAN MOTOR RUNNING AMPS
2.6A

PLOTTED 29-09-09

Title ISD 299KBGD c/w T/STAT WIRING SCHEMATIC



Drawn KTT	Date 23-02-09	Revision
Scale	535-464-202	C

NOTE: CHECK WIRING BEFORE SWITCHING ON; INCORRECT CONNECTION WILL DAMAGE MOTORS. CLIENT WIRING: Intercorrections between units by client. Double insulated multi-core cable.

ISSUE	MODIFICATION	ECN	DATE	APRVD
C	YELLOW INDDOR COIL SENSOR REMOVED	N2327	09-09-09	D.A.B
B	CONTROL SYSTEM NOW 24V	N2327	08-07-09	KTT
A	DO NOT CONNECT NOTE ADDED	N2254	03-07-09	ROD

