

IJD 2000, 2400

Ducted Fan Coil Units

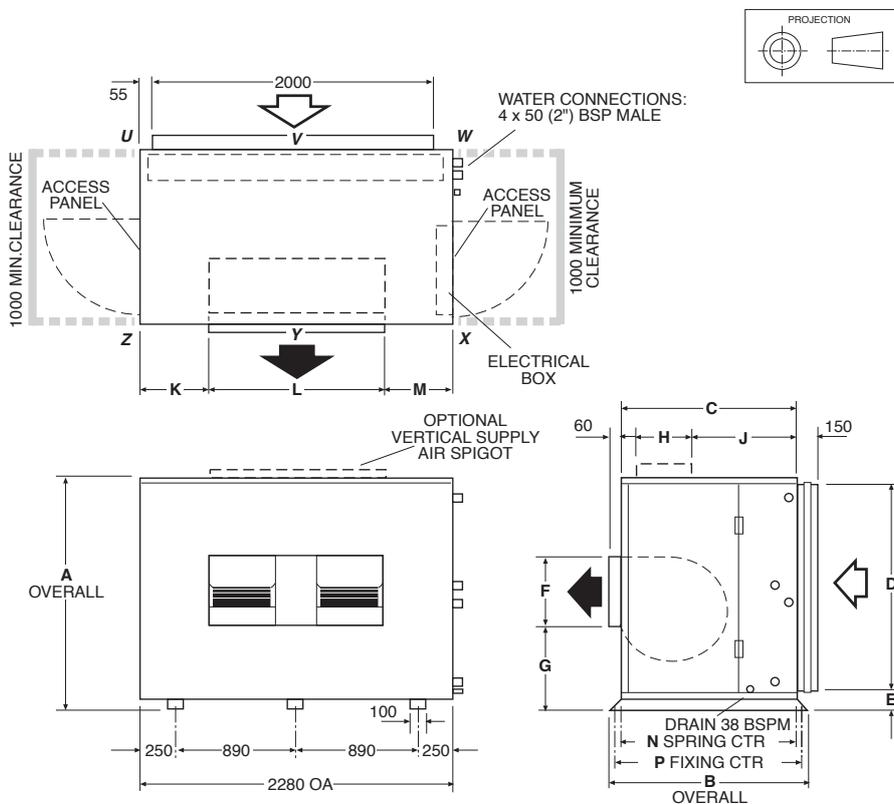
Installation & Maintenance

Dimensions (mm)

Not to Scale

MODEL (4/1 Coil)	Wt (kg) incl. water	POINT LOADS (kg)					
		U	V	W	X	Y	Z
IJD 2000	657	117	133	149	102	86	70
IJD 2400	809	144	163	184	125	106	87

Fig. 1



MODEL	A	B	C	D	E	F	G	H	J	K	L	M	N	P
IJD 2000	1680	1385	1280	1525	120	405	730	405	815	495	1295	495	1297	1347
IJD 2400	1930	1535	1430	1825	75	480	775	480	890	325	1630	325	1447	1497

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

GENERAL

The IJD ducted fan coil units must be installed in accordance with all national and local safety codes.

Options

1. Filters
2. Electric Elements c/w fan run-on timer
3. Polyester powder coat finish

ELECTRIC HEAT (Factory Fitted Option)

Refer to wiring diagram for size of elements supplied. A fan run-on timer for rapid heat dissipation is included with this option. A 24 hour power supply is essential for this timer to function correctly.

INSTALLATION

Positioning & Mounting

Provide 1 m minimum clearance to both ends of the unit.

The unit has a built-in sloping drain tray, therefore mount it level.

Fasten the unit down to a firm flat horizontal base using the six fixing holes provided in the mounting rails. Use the bunged holes provided in the base of the filter box to access the mounting rail holes from above.

When the unit is being installed on a roof it is recommended that the unit is installed on a substantial structure with vibration isolating springs beneath the unit. These springs are not supplied with the unit.

Condensate Drain

The unit has an internal sloping condensate drain tray. The drain exit should be trapped outside the unit cabinet. 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 IJD unit's drain tray.

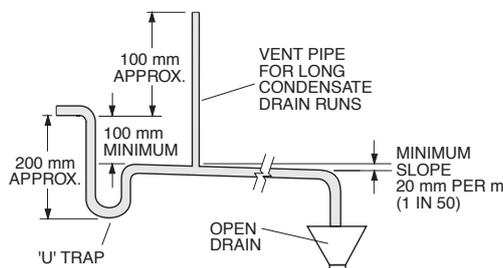
It is essential that the drainage system is checked by pouring water in the drain tray and seeing that it discharges at the end of the drain and does not overflow the drain tray.

ELECTRICAL WIRING

The electrical supply required is: 3 phase 380-415 V a.c. 50 Hz with neutral and earth. The supply to have an isolation switch adjacent to the unit but not attached to the unit. Recommended external circuit breaker size is 40 A/ph.

Fig. 2

Condensate Drain



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

UNITS WITH ELECTRIC HEAT

If electric elements have been included (factory fitted), a 24 hour power supply is required to power the fan run-on timer. Recommended external circuit breaker size for a unit factory fitted with electric elements is 125 A/ph.

This electric heat kit includes both auto (90°C) and manual (120°C) high temp. safety thermostats. If the manual high temp. safety t/stat requires resetting and the auto high temp. safety t/stat does not reset, then the latter needs to be replaced.

FAN SPEED

The fan motor is fitted with a factory set (mid position) 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.

Note: Do not operate the fan without resistance (duct system) connected. Motor will overload if fan is operated in a free blow situation.

COMMISSIONING

1. Check that the thermostat is correctly wired and set at the desired temperature.
2. Check that the air filter (if fitted) is clean.
3. Check that the fan runs freely without vibration.
4. Check the indoor unit's fan belt tension after 20 mins of operation and adjust if necessary.
5. Check the airflow at each air outlet (diffuser) and adjust if necessary.
6. Check the tightness of all electrical connections and sign the check label.
7. Check condensate drain for free drainage.
8. If unit is installed outdoors, touch up any paintwork damage to prevent corrosion.

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.
5. Check air supply at diffuser outlets.

Yearly

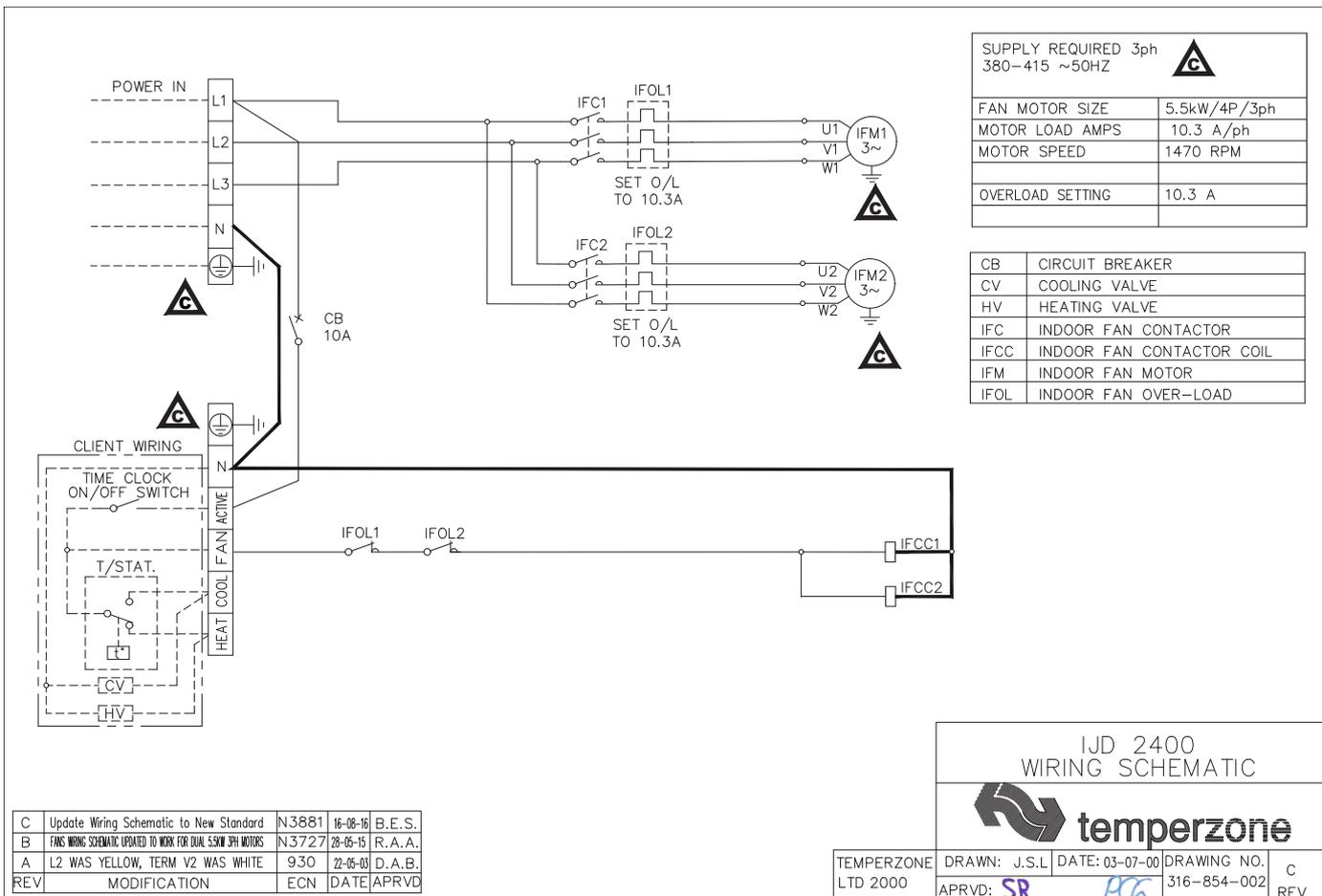
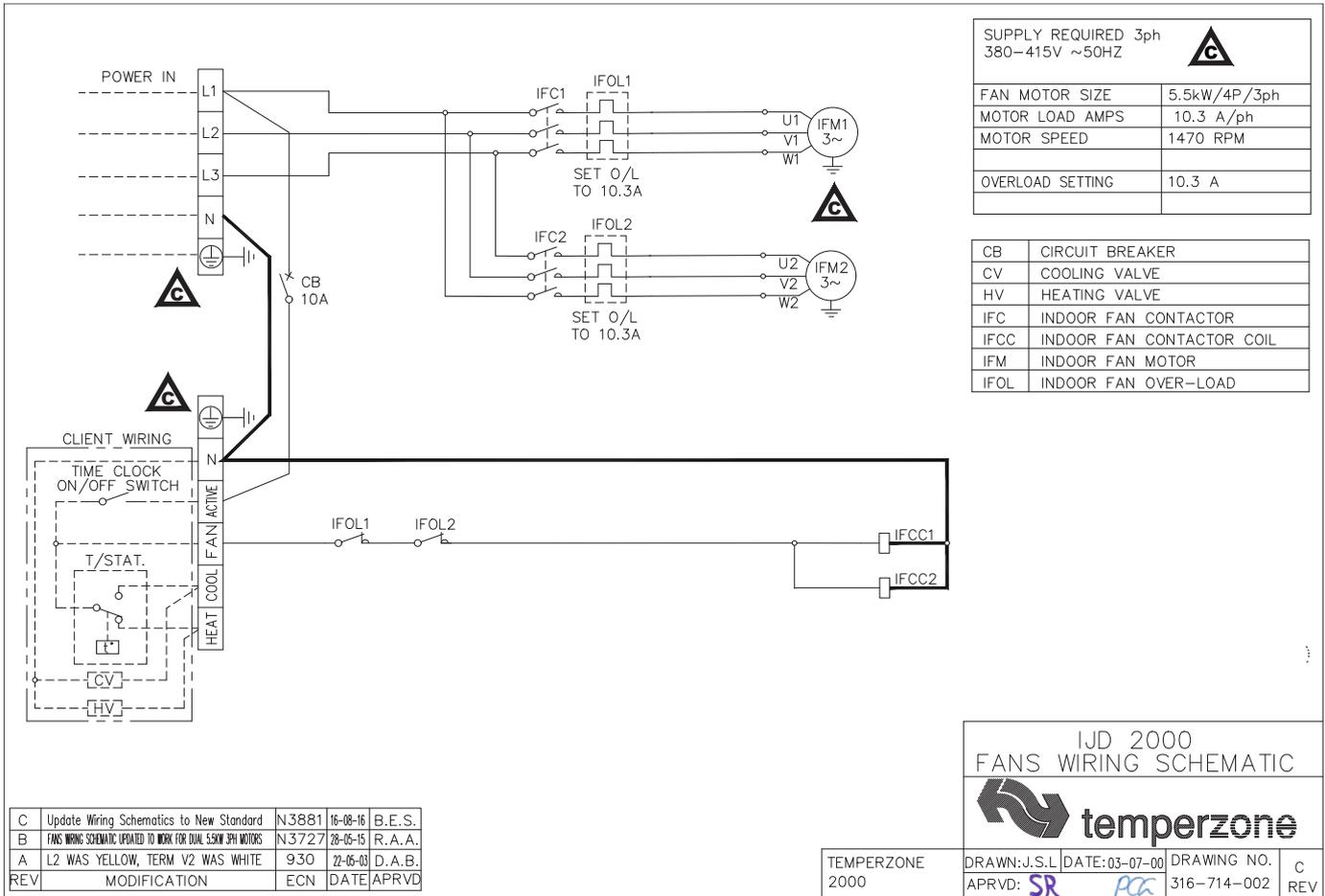
1. Check fan shaft bearings and lubricate with a lithium base grease.
2. If unit is installed outdoors, touch up any paintwork damage to prevent corrosion.

NOTE

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This pamphlet replaces the previous issue no. 2529 dated 06/15.
Wiring revisions C/C/D/E respectively.

Wiring



Standard Unit with Electric Heat

