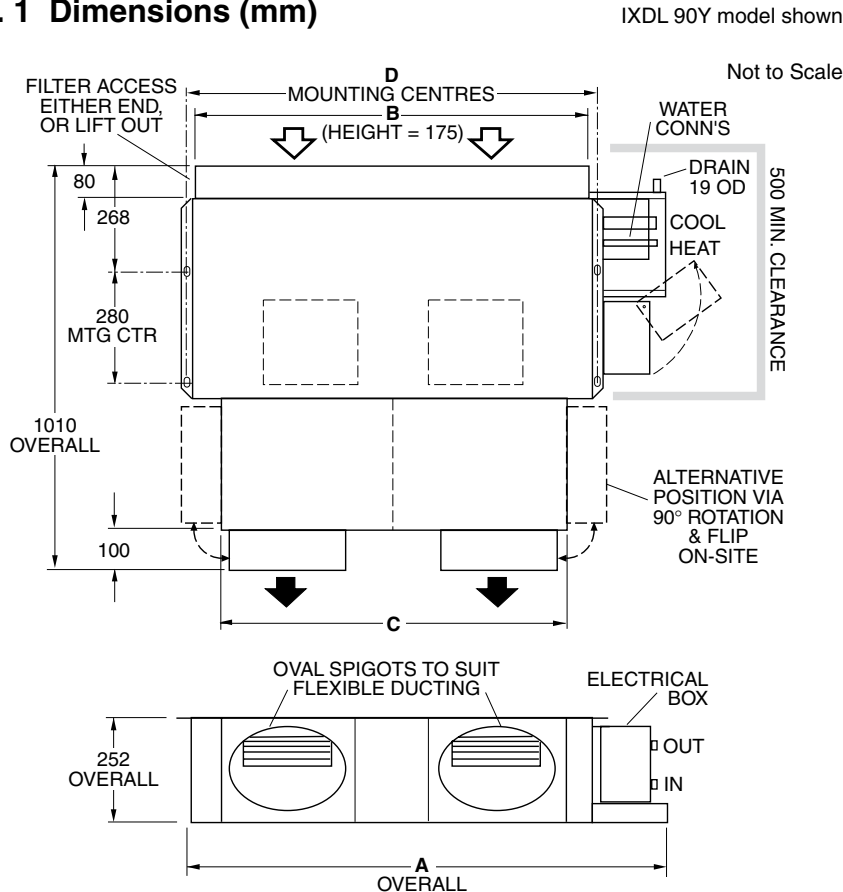


IXDL 40/90/130/160/200 Y-3/1 (c/w EC motor)

Ducted Multizone Fan Coil Units

Installation & Maintenance

Fig. 1 Dimensions (mm)



Note:

1. Allow adequate clearance for the filter (if fitted) to be removed.
2. IXDL have two half length filters, except the IXDL 40Y which is one piece.

MODEL	A	B	C	D	S/A SPIGOTS	WATER CONN'S BSP MALE		NO. FANS/ OUTLETS/ ZONES
						COLD	HOT	
IXDL 40Y	705	473	323	529	250 dia (x1)	25	13	1
IXDL 90Y	1205	973	820	1030	250 dia (x2)	25	13	2
IXDL 130Y	1605	1373	1252	1430	250 dia (x3)	25	13	3
IXDL 160Y	1954	1722	1630	1780	250 dia (x4)	25	13	4
IXDL 200Y	2355	2122	2037	2178	250 dia (x5)	25	13	5

GENERAL

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

Optional

Flexible hoses, available from temperzone:
 - 13 BSP (1/2") part no. 060-085-001
 - 25 BSP (1") part no. 060-085-003.

INSTALLATION

Positioning & Mounting

Provide 500 mm minimum clearance to the electrical box end of the unit.

Allow adequate clearance for the filter to be withdrawn from either end of the unit. To make it easy, the filter is in two half lengths (except IXDL 40Y). Alternatively the filter may be lifted out of its track.

Corner supply air spigots are mounted on an 'L' shaped plate that can be unscrewed, rotated and flipped on site to achieve a side exit position.

Install the unit suspended on threaded rods or bolts and locking nuts (not supplied). Alternatively mount each unit on vibration isolators on a suitable platform.

The unit must be installed level. Use the adjustable support bracket (see figure 3) to lower the drain pipe outlet and provide a slope in the drain tray.

WATER SUPPLY & RETURN

The IXDL unit's IN and OUT water connections are male pipe threaded (refer Fig. 1). **Warning:** overtightening of connections to the main water supply may damage the unit.

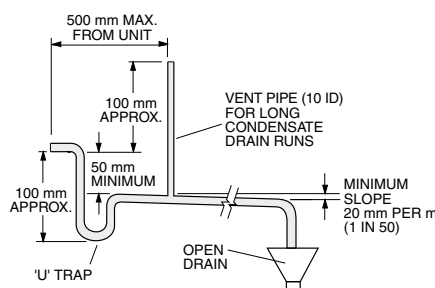
It is recommended you use two **temperzone** 600 mm flexible high pressure water hoses. These have female pipe threaded connections at each end. Maximum water pressure for each hose is 1720 kPa (250 psi). The IXDL unit alone, excluding hoses, will withstand 4480 kPa (650 psi).

Poor quality water supply must be pre-filtered and it is essential that adequate water treatment is maintained, particularly where open cooling towers are used.

Condensate Drain

The condensate drain should be trapped outside the unit cabinet. The trap should have a vertical height of at least 50 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).

Fig. 2 Condensate Drain



cont'd...

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 IXDL 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.

ELECTRICAL WIRING

The electrical supply required (including voltage fluctuation limits) is:
1 phase 200-252 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 5 amp.

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

FAN SPEED

The fan speed of each fan can be independently and variably controlled by separate 0–10V dc inputs. The fans will operate once 1.0V dc is reached and will stop when the voltage drops below 0.7V dc. Maximum speed is reached at 10V dc input.

It is unlikely that voltages of more than about 6–7 volts dc will be required to meet the on site performance requirements. Higher voltages may cause water carry over within the unit (off the coil).

Independent control of each fan/motor allows tailoring to meet the specific requirements of each zone. Each fan has a taco terminal which gives feedback of the fan/motors current performance.

If the air returning to the indoor unit is regularly expected to be above 50%RH, then the coil face velocity should be limited to be 2.5 m/s or less (refer Air Handling graph in Technical Data pamphlet).

High humidity levels can occur in tropical or subtropical conditions, and/or when heavily moisture laden fresh air is introduced. Select a fan speed voltage that avoids water carry-over problems.

COMMISSIONING

1. Check that the thermostat is correctly wired and set at the desired temperature.
2. Check that the air filter is clean.
3. Check that the fan runs freely without vibration.
4. Check condensate drain for free drainage.

MAINTENANCE

Weekly For First Four Weeks

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

Monthly

Check air filter; vacuum clean as necessary.

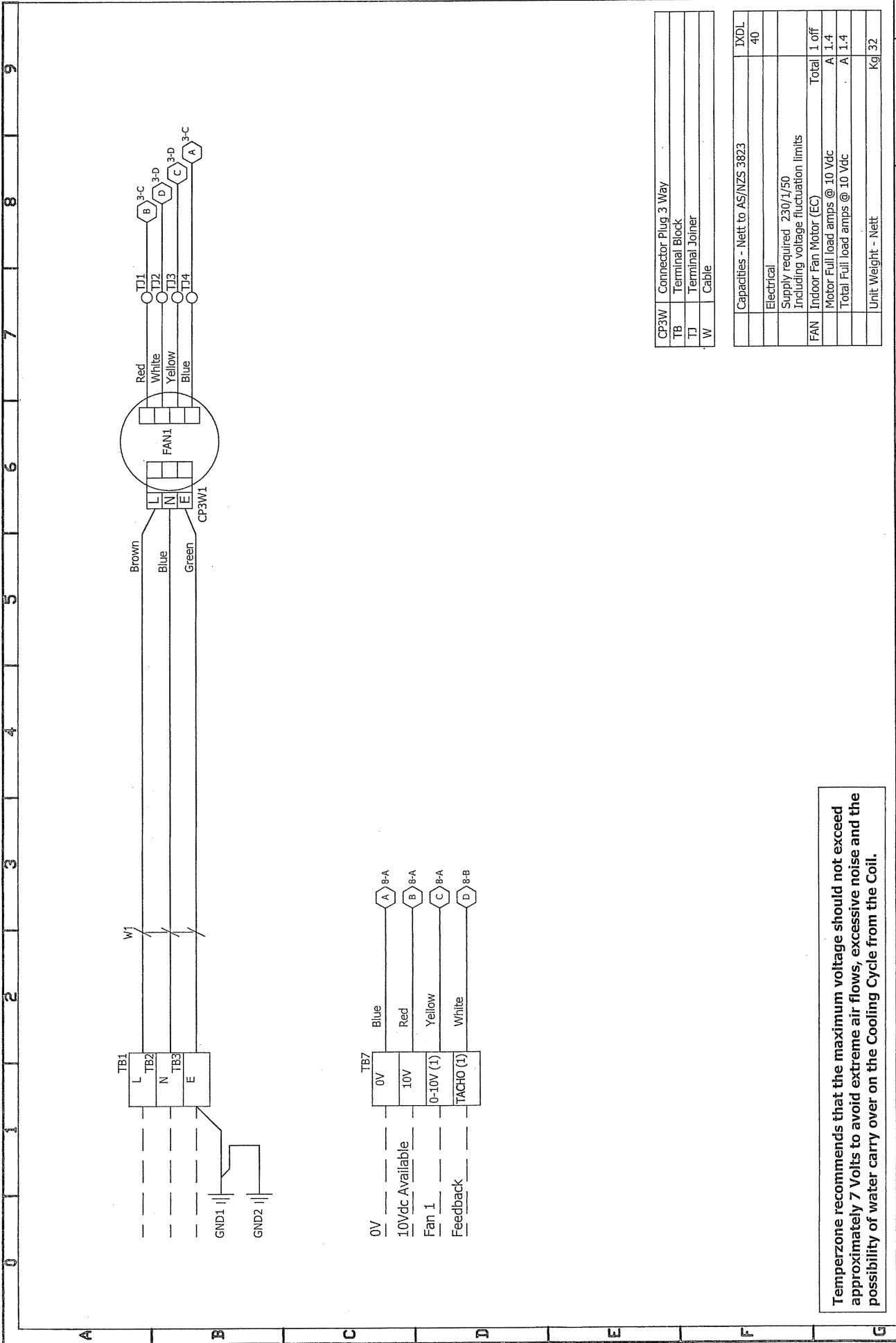
Six Monthly

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.
4. Check that fan motor is free running.
5. Check tightness of electrical connections.
6. Check air supply at diffuser outlets.

NOTE

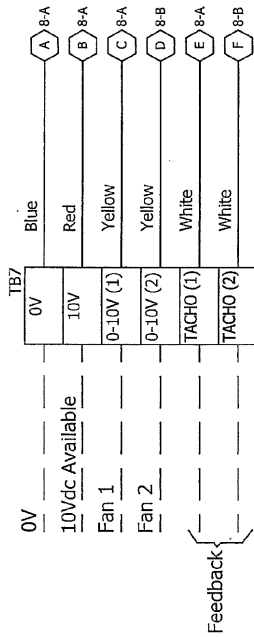
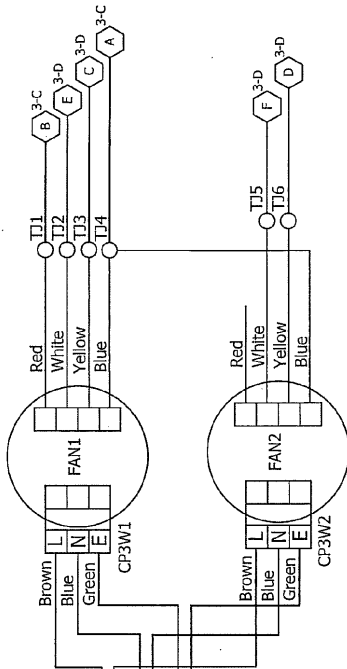
The manufacturer reserves the right to change specifications at any time without notice or obligation. Certified dimensions available on request.

IXDL 40Y



Temperzone recommends that the maximum voltage should not exceed approximately 7 Volts to avoid extreme air flows, excessive noise and the possibility of water carry over on the Cooling Cycle from the Coil.

0 1 2 3 4 5 6 7 8 9



Temperzone recommends that the maximum voltage should not exceed approximately 7 Volts to avoid extreme air flows, excessive noise and the possibility of water carry over on the Cooling Cycle from the Coil.

CP3W	Connector Plug 3 Way
TB	Terminal Block
TJ	Terminal Joiner
W	Cable

Capacities - Nett to AS/NZS 3823	IXDL
	90
Electrical	
Supply required - 230V/150	
Including voltage fluctuation limits	
FAN	Indoor Fan Motor (EC)
	Total
	Motor Full load amps @ 10 Vdc
	A 1.4
	Total Full load amps @ 10 Vdc
	A 2.8
Unit: Weight - Nett	Kg/49

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DO NOT SCALE - ASK

Client: Wiring

Drawn: J.S.L. Date: 10-07-13

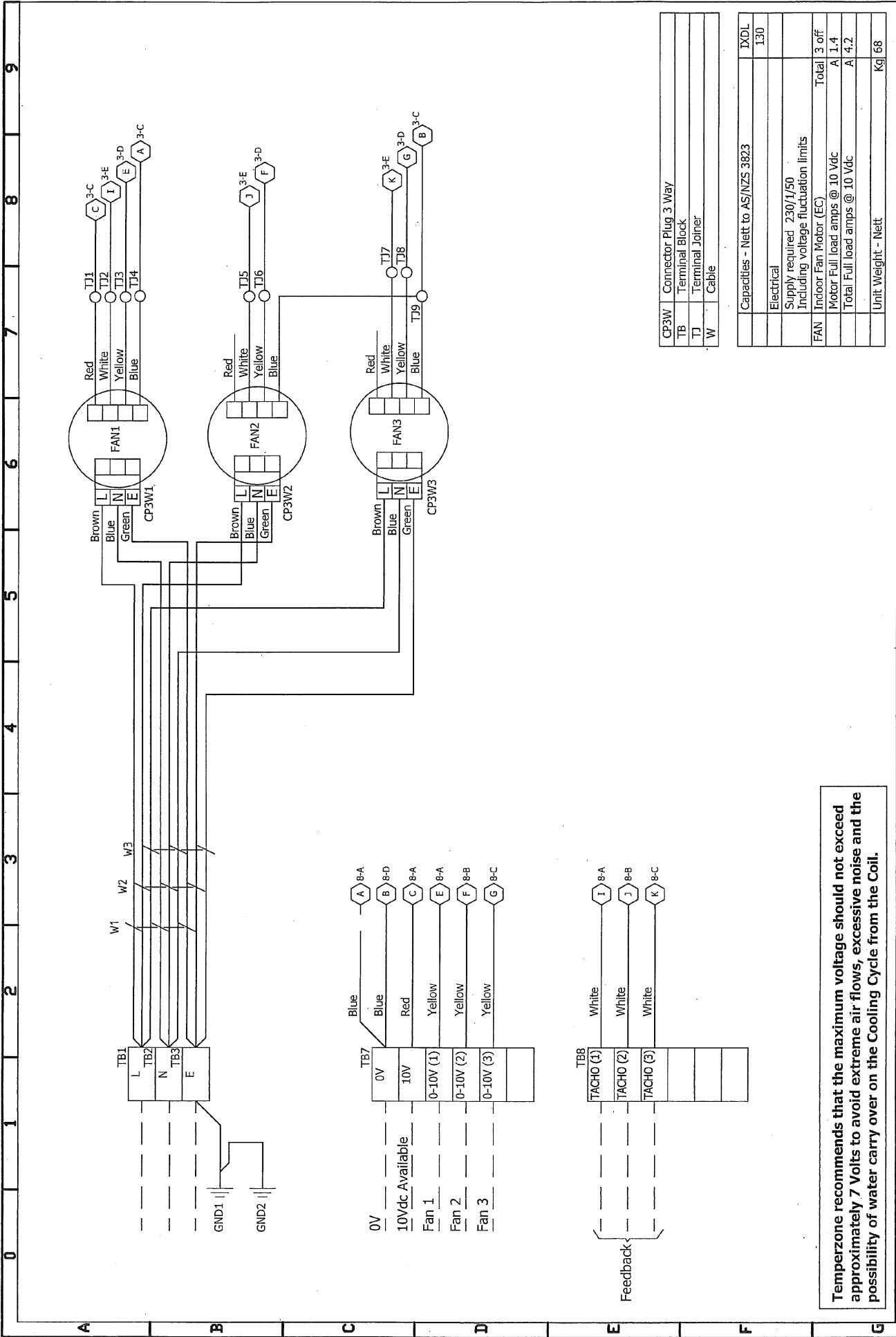
Approved: P.C.C.

Title: IXDL 90Y Wiring Schematic

Drawing No: 291-000-565 SHEET 1 OF 1

Rev: A

IXDL 130Y



CP3W	Connector Plug 3 Way
TB	Terminal Block
TJ	Terminal Joiner
W	Cable

Capacities - Nett to AS/NZS 3823	IXDL
Electrical	130
Supply required 230V/1/50	
Including voltage fluctuation limits	
FAN	Indoor Fan Motor (EC)
	Total 3 off
Motor Full load amps @ 10 Vdc	A 1.4
Total Full load amps @ 10 Vdc	A 4.2
Unit Weight - Nett	Kg 68

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DO NOT SCALE - ASK

Client Wiring

Drawn: J.S.L. Date: 10-07-13

Approved: P.C.F.

Title: IXDL 130Y Wiring Schematic

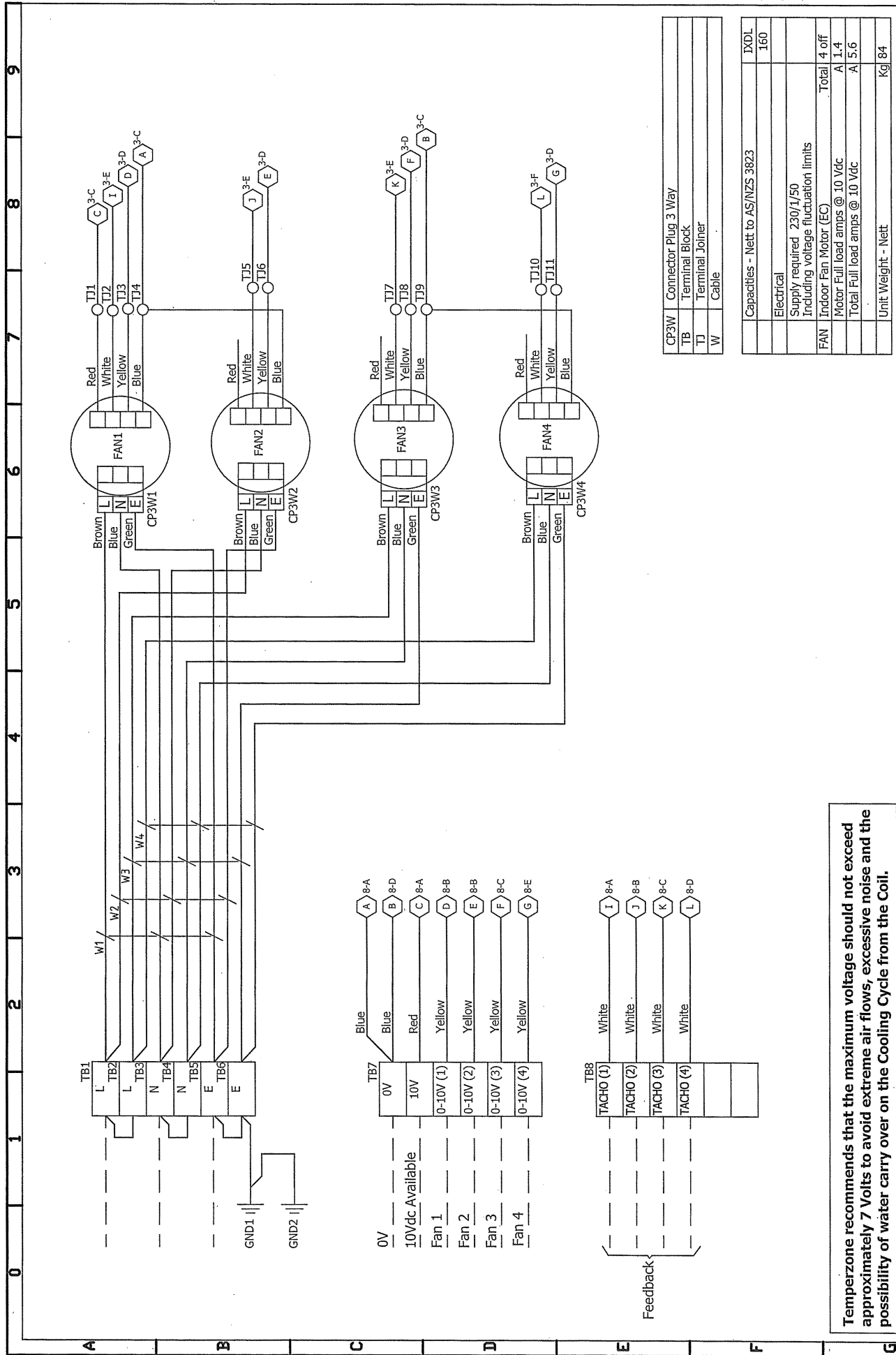
Drawing No: 291-000-564 SHEET 1 OF 1

Rev: A

Temperzone recommends that the maximum voltage should not exceed approximately 7 Volts to avoid extreme air flows, excessive noise and the possibility of water carry over on the Cooling Cycle from the Coil.



IXDL 160Y



IXDL 160Y	Rev: A
Wiring Schematic	Drawing No: 291-000-553
	SHEET 1 OF 1
Drawn: J.S.L.	Date: 03-07-13
Apprvd: P.C.A.	
Client Wiring	
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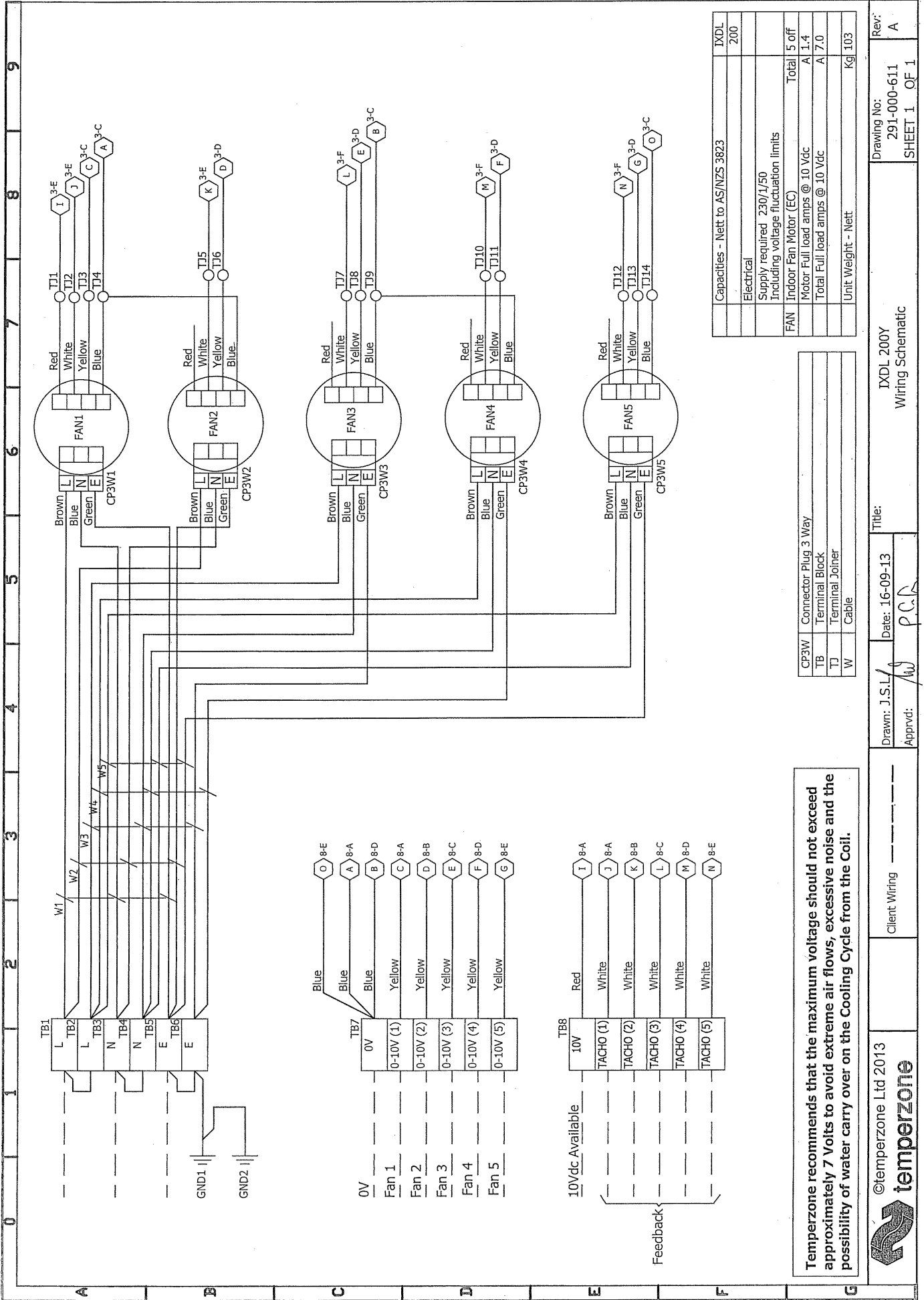


Temperzone recommends that the maximum voltage should not exceed approximately 7 Volts to avoid extreme air flows, excessive noise and the possibility of water carry over on the Cooling Cycle from the Coil.

CP3W	Connector Plug 3 Way	IXDL	160
TB	Terminal Block	Electrical	
TJ	Terminal Joiner	Supply required 230V/1/50	
W	Cable	Including voltage fluctuation limits	
		FAN	Total 4 off
			Motor Full load amps @ 10 Vdc A 1.4
			Total Full load amps @ 10 Vdc A 5.6
			Unit Weight - Nett Kgl 84

Capacities - Nett to AS/NZS 3823	IXDL	160
Electrical		
Supply required 230V/1/50		
Including voltage fluctuation limits		
FAN	Total 4 off	
Motor Full load amps @ 10 Vdc	A 1.4	
Total Full load amps @ 10 Vdc	A 5.6	
Unit Weight - Nett	Kgl 84	

IXDL 200Y



Capacities - Nett to AS/NZS 3823	IXDL
Electrical	200
Supply required 230V/1/50	
Including voltage fluctuation limits	
FAN Indoor Fan Motor (EC)	Total 5 off
Motor Full load amps @ 10 Vdc	A 1.4
Total Full load amps @ 10 Vdc	A 7.0
Unit Weight - Nett	Kg 103

CP3W	Connector Plug 3 Way
TB	Terminal Block
TJ	Terminal Joiner
W	Cable

Temperzone recommends that the maximum voltage should not exceed approximately 7 Volts to avoid extreme air flows, excessive noise and the possibility of water carry over on the Cooling Cycle from the Coil.



