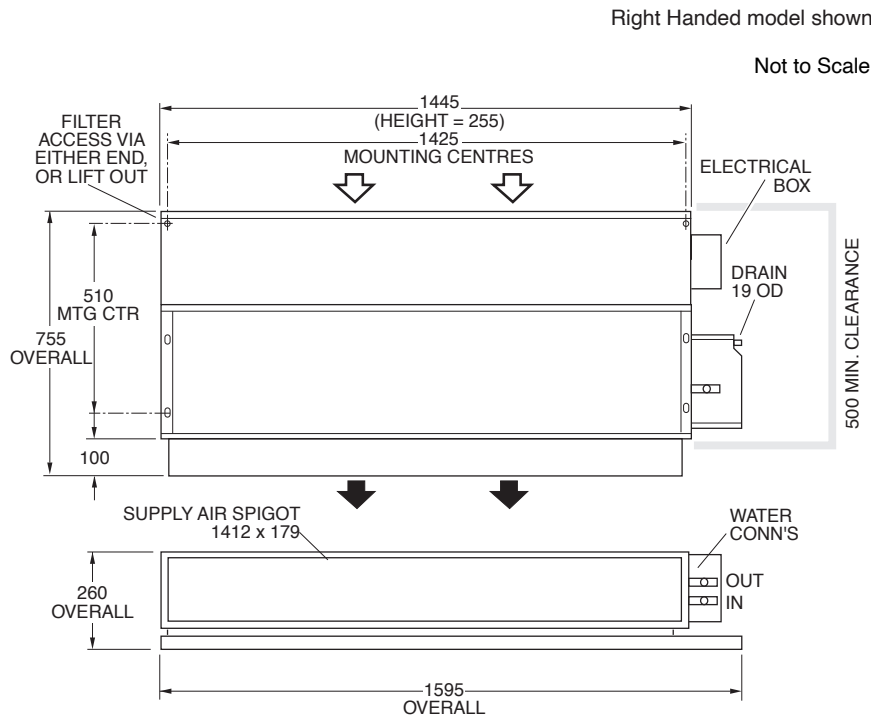


IMDL 130

Ducted Fan Coil Units

Installation & Maintenance

Fig. 1 Dimensions (mm)



Note:

1. Allow adequate clearance for the filter (if fitted) to be removed.
2. IMDL 130 has two half length filters, 2 motors and 3 fans.
3. Left handed models have drain exit nearer supply air side.

NOTE

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

GENERAL

The IMDL ducted fan coil units are available in Standard (-S), Medium (-M) or High (-H) capacity motors, e.g.

- IMDL 130-S, standard cap. 6 pole motor
- IMDL 130-M, medium cap. 4 pole motor
- IMDL 130-H, high capacity 4 pole motor

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

Optional

1. Supply air spigots adaptors, 250 dia (x4).
2. Flexible hoses (uninsulated):
25 BSP (1") part no. 060-085-003.

INSTALLATION

IMDL units are designed to be used with simple, short duct layouts. Units should be located as close to the space to be air conditioned as acoustic criteria allows.

When determining the position of the fan coil unit, allow adequate space around the unit to facilitate water pipe/hose connections, future servicing and maintenance. Ensure there is enough working space in front of the electrical access panel. Allow adequate clearance for the filter to be withdrawn to its full length from either end of the unit. Alternatively the filter may be lifted out of its track.

Provision should be made for access to remove the unit from the ceiling if the need arises.

Left handed models have drain exit on supply air side of the drain tray.

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.

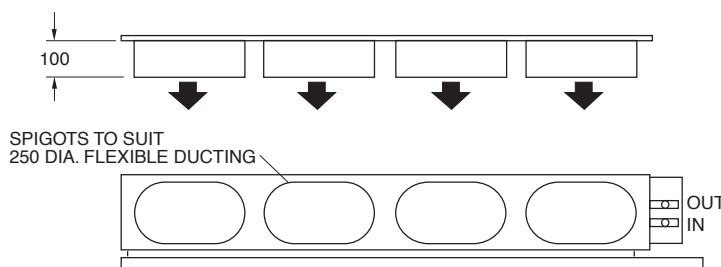
WATER SUPPLY & RETURN

The IMDL unit's IN and OUT water connections are male pipe threaded:
Cold 25 mm BSP
Hot 13 mm BSP

Warning: over-tightening 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 IMDL unit alone, excluding hoses, will withstand 4480 kPa (650 psi).

Fig. 2 Optional Supply Air Spigots



Hoses may need to be insulated to meet local building regulations.

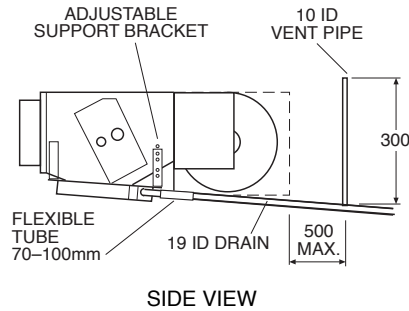
Poor quality water supply must be pre-filtered and it is essential that adequate water treatment is maintained, particularly where open cooling towers are used.

Condensate Drain

The drain should have a slope of at least 1 in 50 and must not be piped to a level above the unit drain tray. Fit a vent pipe within 500 mm of the unit (see Fig.3). Use flexible tube to connect the unit's drain stub to the external drain pipe.

Check the drain by pouring water into the drain tray and ensuring that it clears.

Fig. 3 Condensate Drain



ELECTRICAL WIRING

The electrical supply required is:

1 phase 220-240 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 is 5 amp.

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

INDOOR FAN SPEED

The fan speed can be set to LOW, MED, or HIGH - whichever best suits the application.

ELECTRIC HEAT (Option)

Units installed with electric heat elements include 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.

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

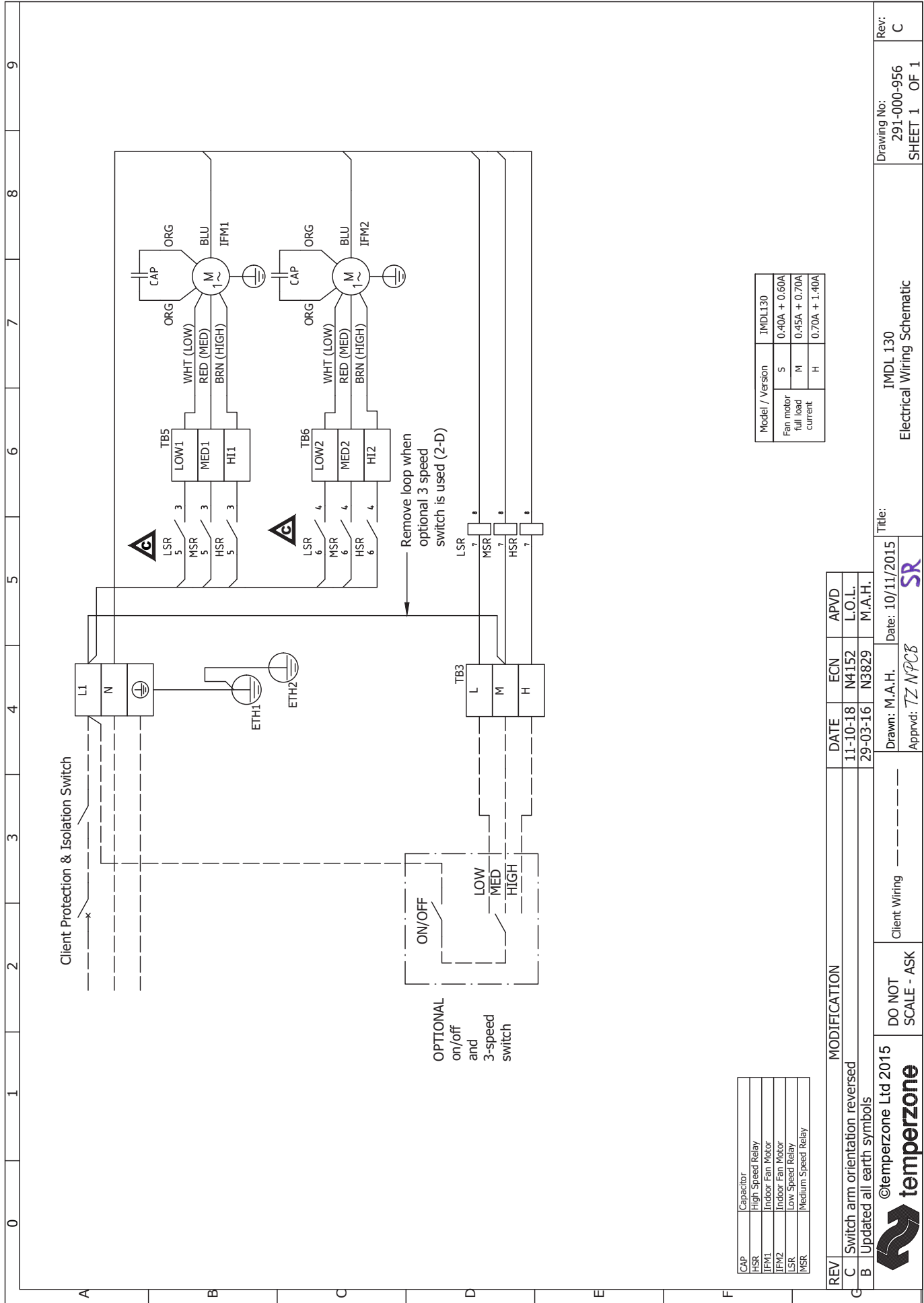
1. Check condensate drain for free drainage.
2. Check heat exchanger coil; vacuum or brush clean as necessary.
3. Check the tightness of the fan.
4. Check that fan motor is free running.
5. Check tightness of electrical connections.
6. Check air supply at diffuser outlets.

NOTE

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

This pamphlet replaces the previous issue no. 3180 dated 05/24.
Fig.3 flex. drain connection

Standard Unit



CAP	Capacitor
HSR	High Speed Relay
IFM1	Indoor Fan Motor
IFM2	Indoor Fan Motor
LSR	Low Speed Relay
MSR	Medium Speed Relay

Model / Version	IMDL130
Fan motor full load current	0.40A + 0.60A
	0.45A + 0.70A
	0.70A + 1.40A

REV	MODIFICATION	DATE	ECN	APVD
C	Switch arm orientation reversed	11-10-18	N4152	L.O.L.
B	Updated all earth symbols	29-03-16	N3829	M.A.H.

DO NOT SCALE - ASK

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Client Wiring

Drawn: M.A.H. Date: 10/11/2015

Apprvd: TZ N PCB

SR

IMDL 130

Electrical Wiring Schematic

Drawing No: 291-000-956

SHEET 1 OF 1

Rev: C

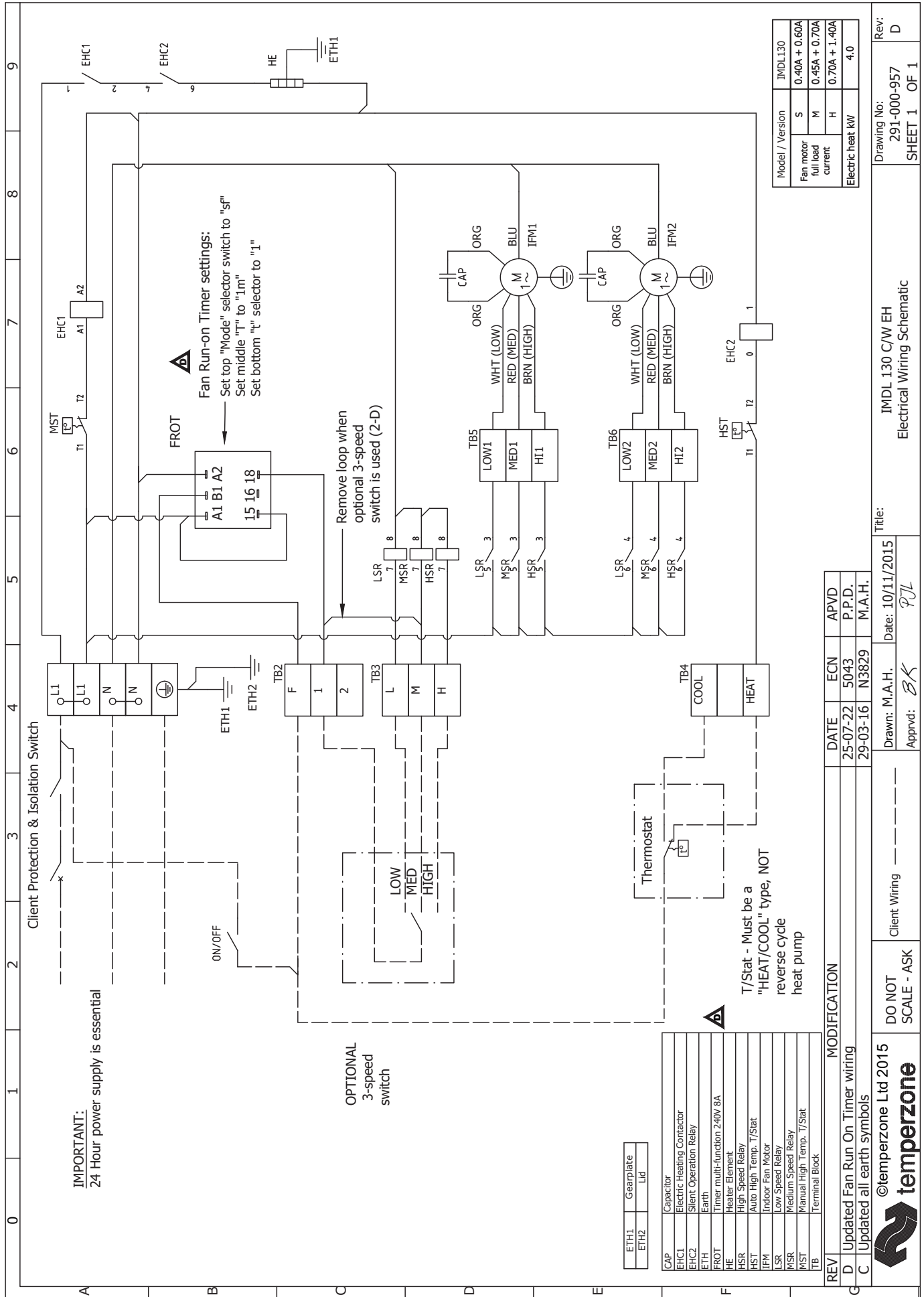
0 1 2 3 4 5 6 7 8 9

Client Protection & Isolation Switch

OPTIONAL on/off and 3-speed switch

Remove loop when optional 3 speed switch is used (2-D)

Standard Unit c/w Electric Heat



REV	MODIFICATION	DATE	ECN	APVD
D	Updated Fan Run On Timer wiring	25-07-22	5043	P.P.D.
C	Updated all earth symbols	29-03-16	N3829	M.A.H.

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Client Wiring

DO NOT SCALE - ASK

Drawn: M.A.H. Date: 10/11/2015

Approved: *PJL*

Title: IMDL 130 C/W EH Electrical Wiring Schematic

Drawing No: 291-000-957 SHEET 1 OF 1

Rev: D