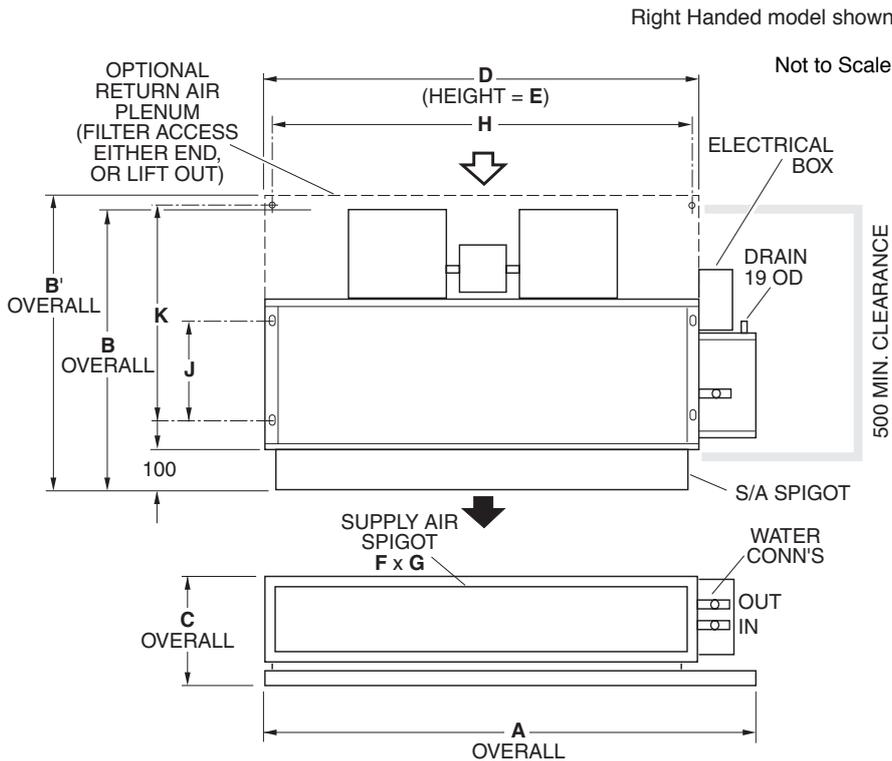


# IMDL 40, 60, 90, 130

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

MODEL	A	B	B'	C	D	E	F	G	H	J	K	WATER CONN'S BSP MALE	
												COLD	HOT
IMDL 40	680	640	715	250	550	245	512	170	525	225	470	20	13
IMDL 60	930	640	715	250	795	245	762	170	775	225	470	20	13
IMDL 90	1195	680	755	260	1050	255	1012	179	1025	265	510	25	13
IMDL 130	1595	680	755	260	1445	255	1412	179	1425	265	510	25	13

**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**

- Flexible hoses, available from temperzone:
- 13 BSP (1/2") part no. 060-085-001
  - 20 BSP (3/4") part no. 060-085-002
  - 25 BSP (1") part no. 060-085-003.

**INSTALLATION**

**Positioning & Mounting**

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

If the optional Return Air Plenum with filter is to be used, allow adequate clearance for the filter to be withdrawn to its full length from either end of the unit.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.

If the Electric Heat Kit option is to be used, allow adequate clearance for servicing.

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.

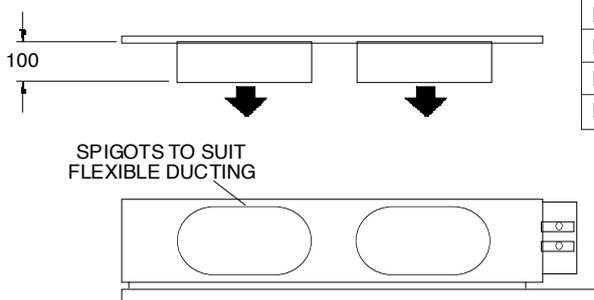
**WATER SUPPLY & RETURN**

The IMDL unit's IN and OUT water connections are male pipe threaded (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 IMD 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.

**Fig. 2 Optional Supply Air Spigots**



MODEL	SPIGOTS
IMDL 40	200 dia (x2)
IMDL 60	250 dia (x2)
IMDL 90	250 dia (x3)
IMDL 130	250 dia (x4)

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

### 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 fuse size is 5 amp H.R.C.

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.

### 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.

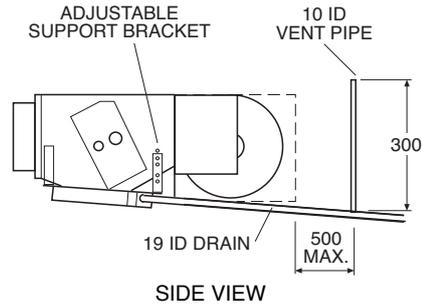
#### Six Monthly

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

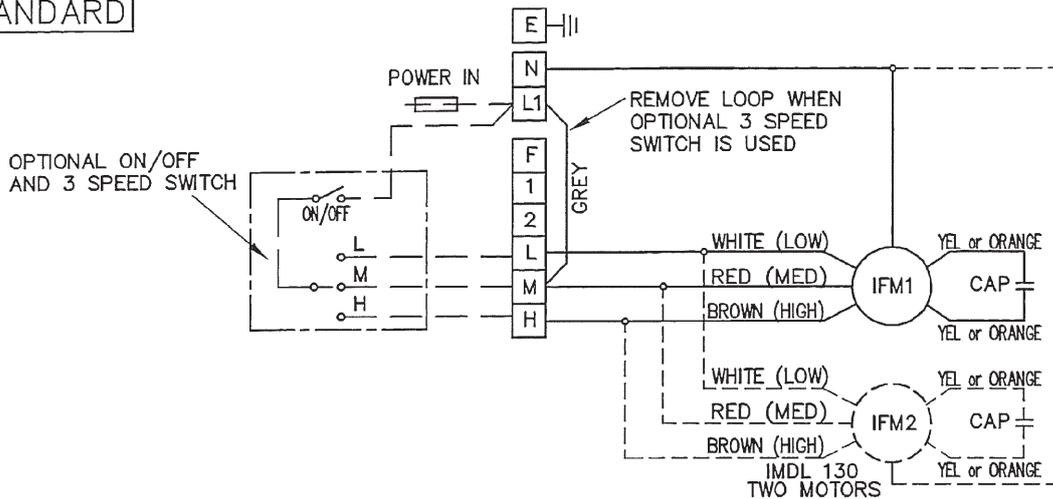
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**Fig. 3 Condensate Drain**



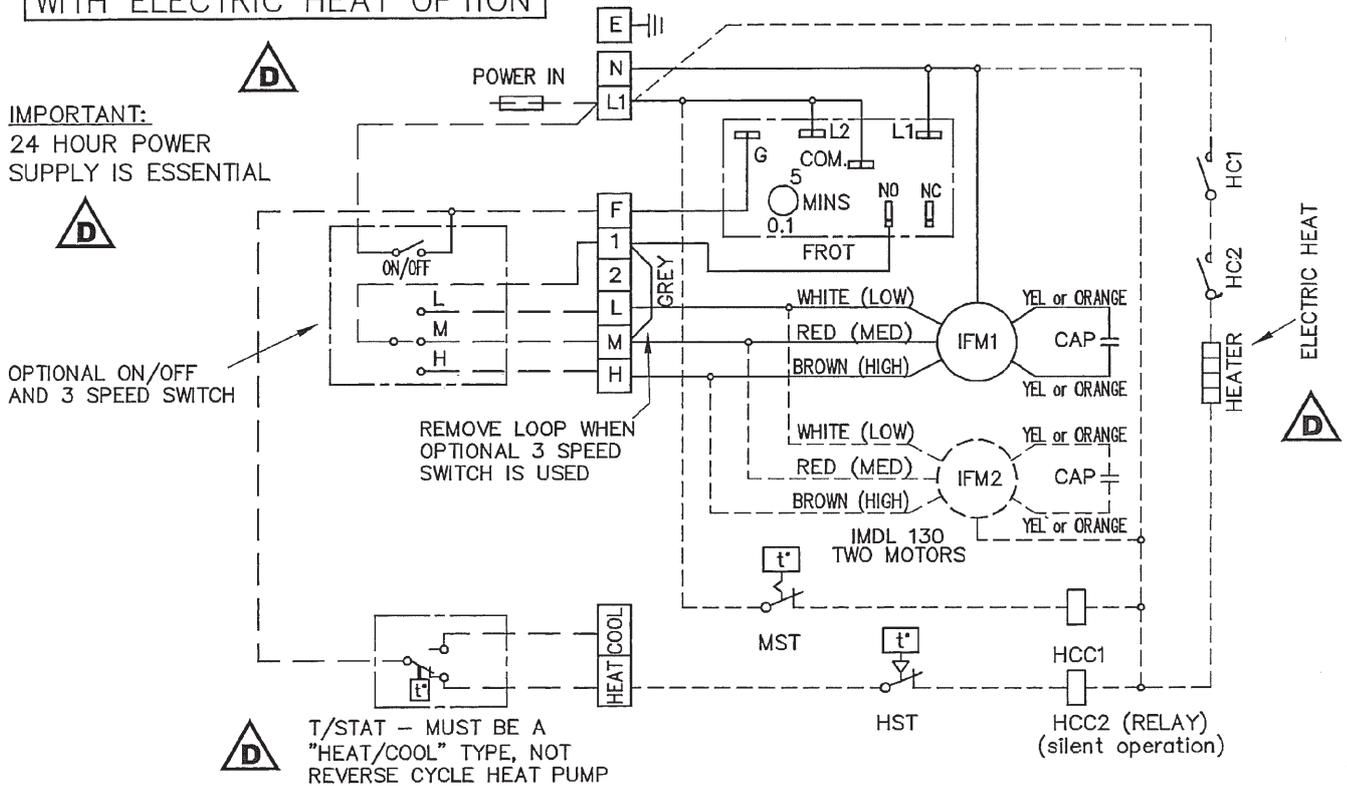
This pamphlet replaces the previous issue no. 3180a dated 09/09. Water Connections.

**STANDARD**



**WITH ELECTRIC HEAT OPTION**

**IMPORTANT:**  
24 HOUR POWER  
SUPPLY IS ESSENTIAL



MODEL		IMDL 40	IMDL 60	IMDL 90	IMDL 130
FAN MOTOR FLA (A)	S Version	0.40	0.60	0.60	0.4 + 0.6
	M Version	0.45	0.60	0.70	0.45 + 0.7
	H Version	0.60	0.70	1.40	0.7 + 1.4
ELEC. HEAT	SIZE kw	1.5	2.0	3.0	4.0

APS	AIR PRESSURE SWITCH
CAP	CAPACITOR
HC	HEATING CONTACTOR
HCC	HEATING CONTACTOR COIL
HST	AUTO HIGH TEMP. T/STAT
IFM1	INDOOR FAN MOTOR
IFM2	INDOOR FAN MOTOR (IMDL 130 ONLY)
MST	MANUAL HIGH TEMP. T/STAT
FROT	FAN RUN ON TIMER

CLIENT WIRING ———  
Interconnections between units by clients.  
Double insulated multi-core cable.

**NOTE:** CHECK WIRING BEFORE SWITCHING ON.  
INCORRECT CONNECTION WILL DAMAGE MOTOR.

Title **IMDL 40/60/90/130**  
**WIRING SCHEMATIC**



Drawn L.H.Z.	Date 16-02-01	Drawing No.	Revision
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