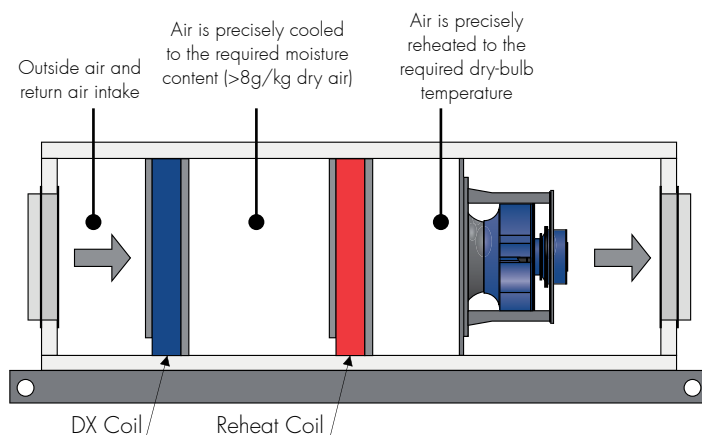


## PCU-N-D 10

### Technical Data



Contact your Air Change representative for a psychrometric unit selection



#### Airflow

Supply Air	1000l/s (nominal)
Outside Air	0 - 100% as per project requirements



#### Refrigeration

Cooling Capacity	Sized to project requirements
Supply Air Moisture Content	>8g/kg dry air
Cooling Stage	DX Coil (modulating capacity)
Reheat Stage	Hot Gas Reheat Coil (modulating capacity)
Compressor Type	Variable Speed Scroll (BLDC Inverter)
Reheat Valve	Modulating 3-Way Refrigeration Valve
Refrigerant	R-410A
Reverse Cycle	Available upon request



#### Fans

Type	EC Plug
Total Fans	x1 (nominal selection*)
Nominal Power	2.5kW (nominal selection*)
Fan Diameter	350mm (nominal selection*)
Fan Speed (max.)	2970RPM (nominal selection*)
Motor Efficiency Class	IE4
Ingress Protection Class	IP54
Impeller Construction	Non-metallic Composite
Speed Control	Integrated Constant Volume Control or via External Speed Signal

\* Supply air fan selection options are available.

† Condenser fan selection is dependent on the required cooling capacity.



#### Fans

Type	EC Axial
Total Fans	x1 (nominal selection†)
Nominal Power	3.1 kW (nominal selection†)
Fan Diameter	800 mm (nominal selection†)
Fan Speed (max.)	1100RPM (nominal selection†)
Motor Efficiency Class	IE4
Ingress Protection Class	IP54
Speed Control	Integrated Head Pressure Control



#### Electrical & Controls

Electrical Input	415V / 3ph / 50Hz
Full Load Amps	Refer to PCU-N-D 10 electrical page
Controls	ClimaSync Control System included (refer to PCU ClimaSync page)



#### Cabinet

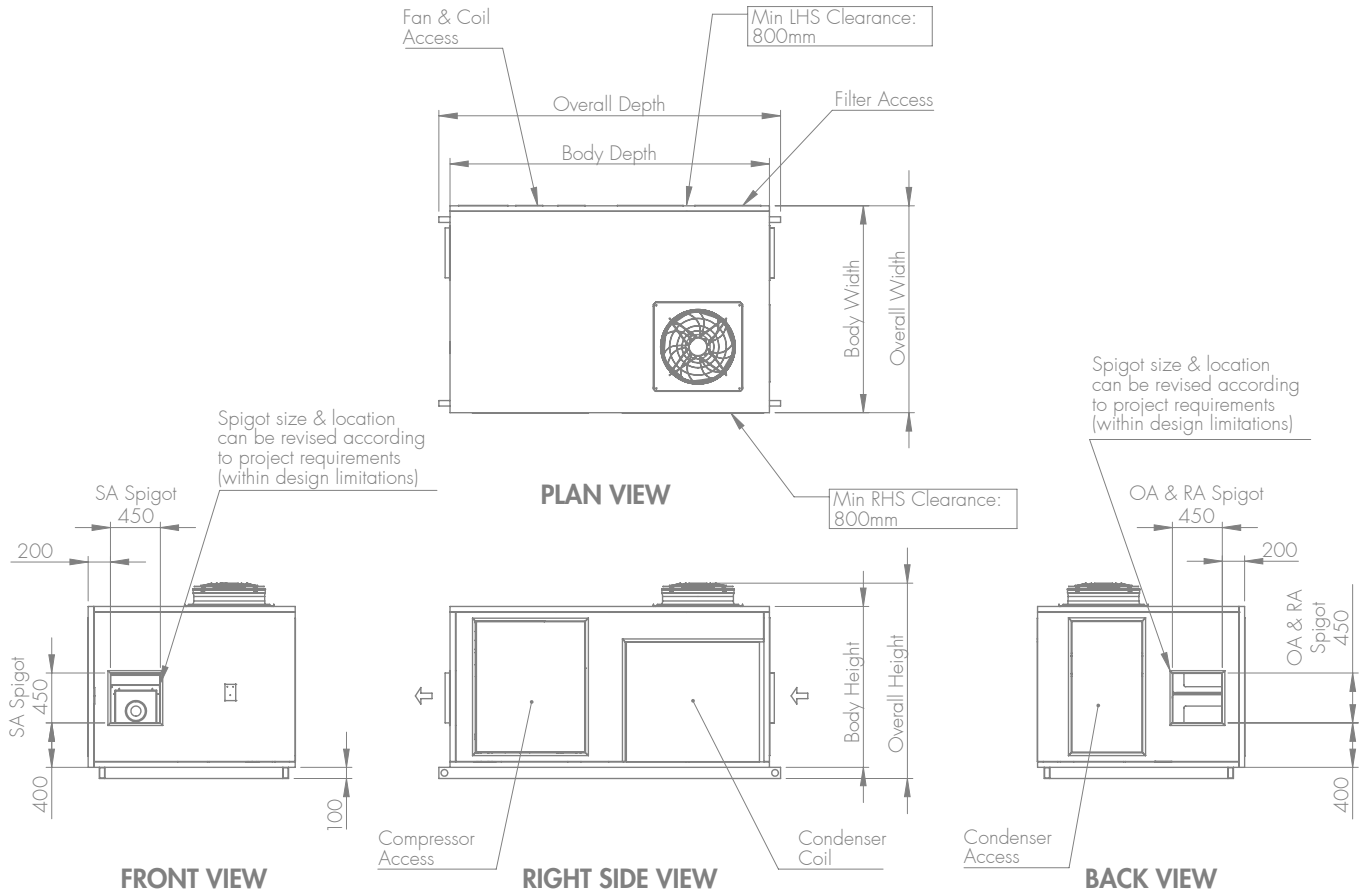
Weatherproof	Yes
Panel Construction	50mm PIR Sandwich Panel (FM Approved 4880/4881 - Class 1)
Panel Finish	Colorbond "Surfmist"
Panel R-Value	2.63 K.m <sup>2</sup> /W
Panel Joiner Material	UV Resistant Polymer
Base Frame	Galvanised Steel with Lifting Lugs
Condenser Configurations	Split or Packaged
Filter Section	Optional with Split Configuration Deep Bed included with Packaged Config.

## PCU-N-D 10

### Dimensions



**Packaged Configuration (Filter Section for 550mm Deep Bed Filters Included)\***



### Indicative Packaged Configuration Dimensions

	Required Cooling Capacity		
	25kW <sub>r</sub>	40kW <sub>r</sub>	55kW <sub>r</sub>
Overall Depth (mm)	3100	3100	3100
Body Depth (mm)	2900	2900	2900
Overall Width (mm)	1900	1900	2050
Body Width (mm)	1900	1900	2050
Overall Height (mm)	1650	1750	2000
Body Height (mm)	1300	1400	1600
Weight (kg)	900		

\* Dimensions and weight are subject to change, depending on the required cooling capacity, design conditions, and other project requirements. Refer to project certified drawings for finalised details.

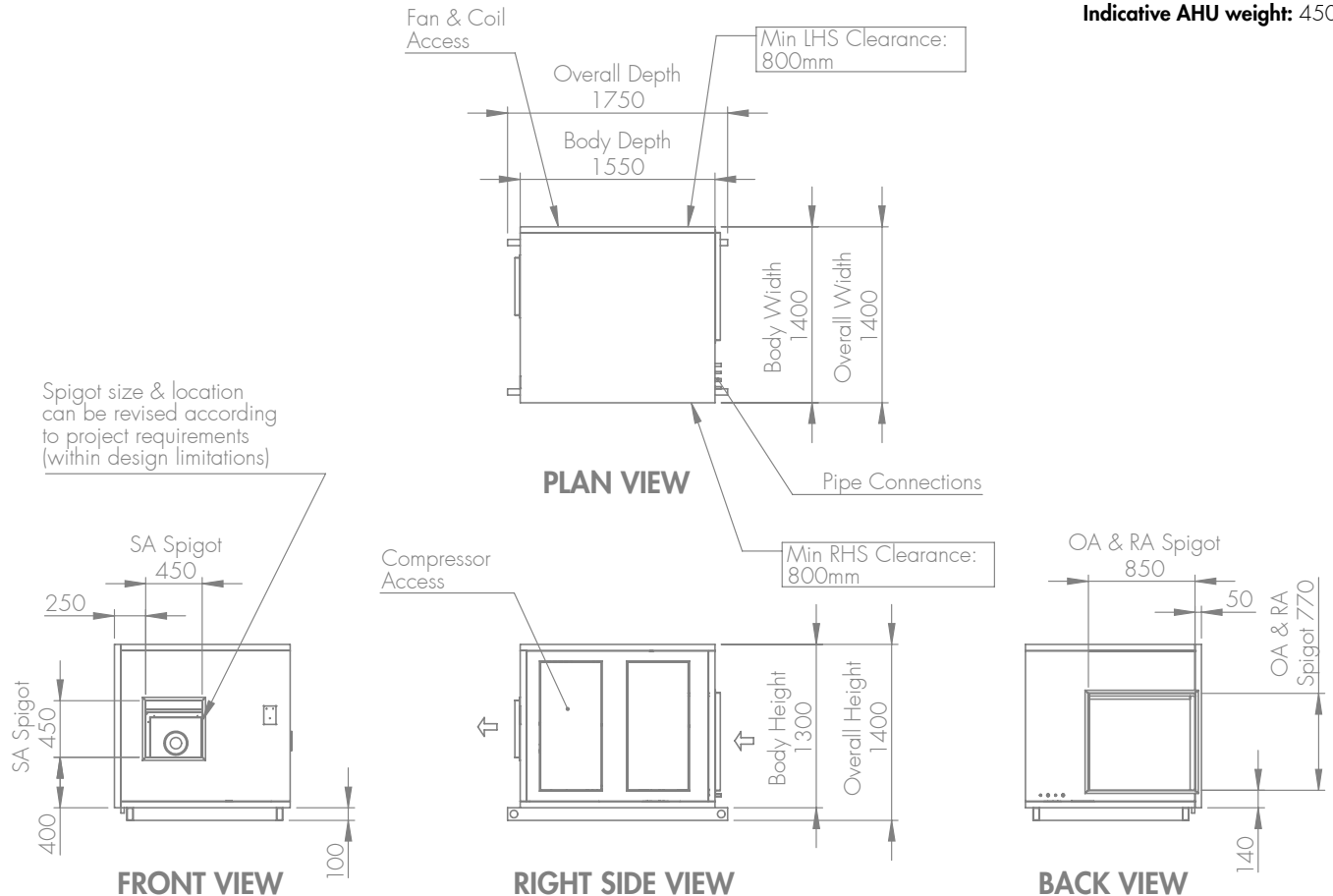
## PCU-N-D 10

### Dimensions

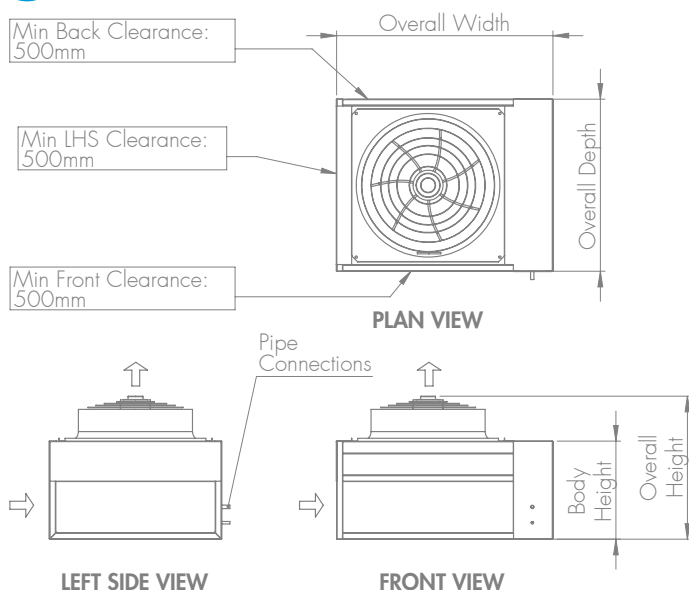


Split Configuration AHU (Optional Filter Section Not Shown)\*

Indicative AHU weight: 450kg



Split Configuration Condensing Unit\*



### Indicative Condensing Unit Dimensions

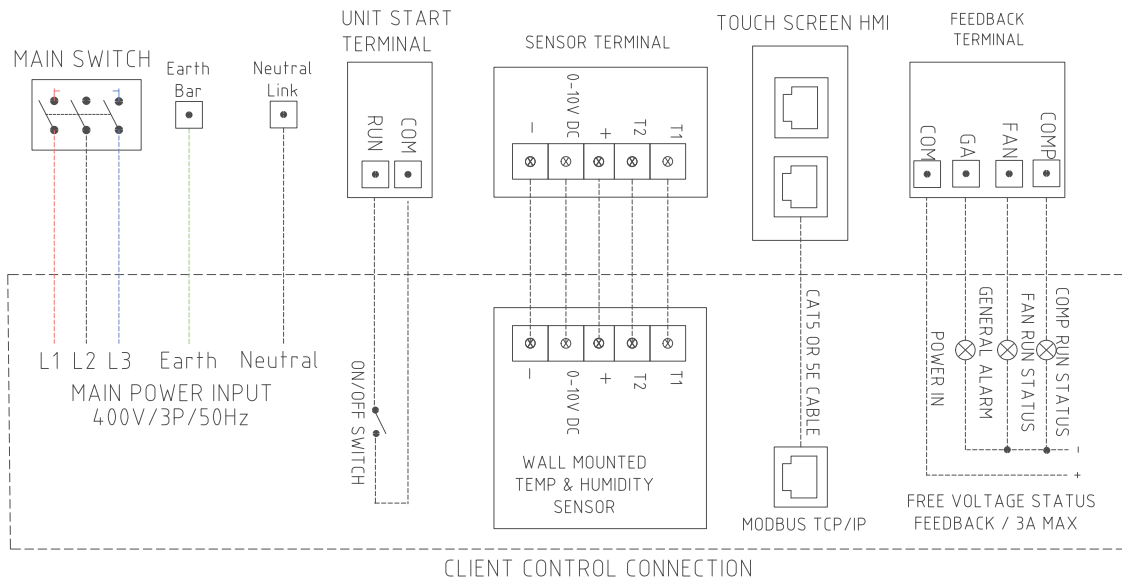
	Required Cooling Capacity		
	25kW <sub>r</sub>	40kW <sub>r</sub>	55kW <sub>r</sub>
Overall Depth (mm)	1100	1350	1500
Overall Width (mm)	1200	1400	1600
Overall Height (mm)	950	1350	1400
Body Height (mm)	700	1100	1100
Weight (kg)	300		

\* Dimensions and weight are subject to change, depending on the required cooling capacity, design conditions, and other project requirements. Refer to project certified drawings for finalised details.

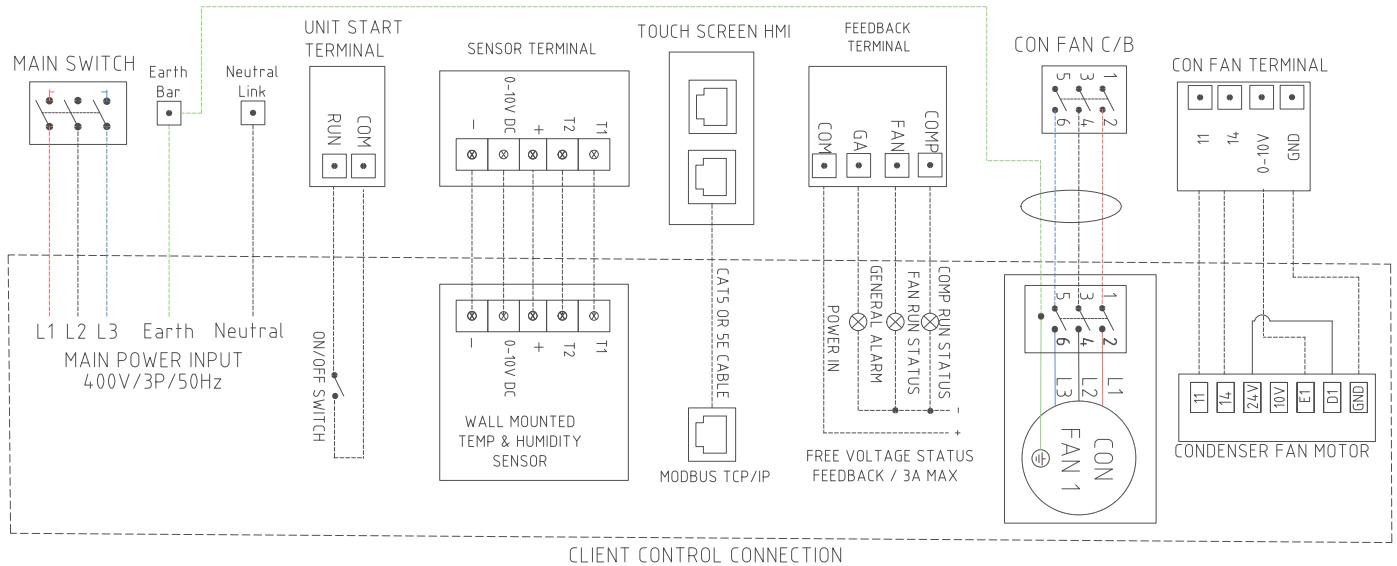
## PCU-N-D 10

### Electrical

#### Wiring Diagram — Packaged Configuration\*



#### Wiring Diagram — Split Configuration\*



#### Electrical Input †

	Required Cooling Capacity		
	25kW <sub>r</sub>	40kW <sub>r</sub>	55kW <sub>r</sub>
Voltage / Phases / Frequency	415V / 3ph / 50Hz	415V / 3ph / 50Hz	415V / 3ph / 50Hz
Full Load Amps	25A	33A	42A

\*Connection details are subject to change, depending on project requirements. Refer to project certified electrical diagrams for finalised details.

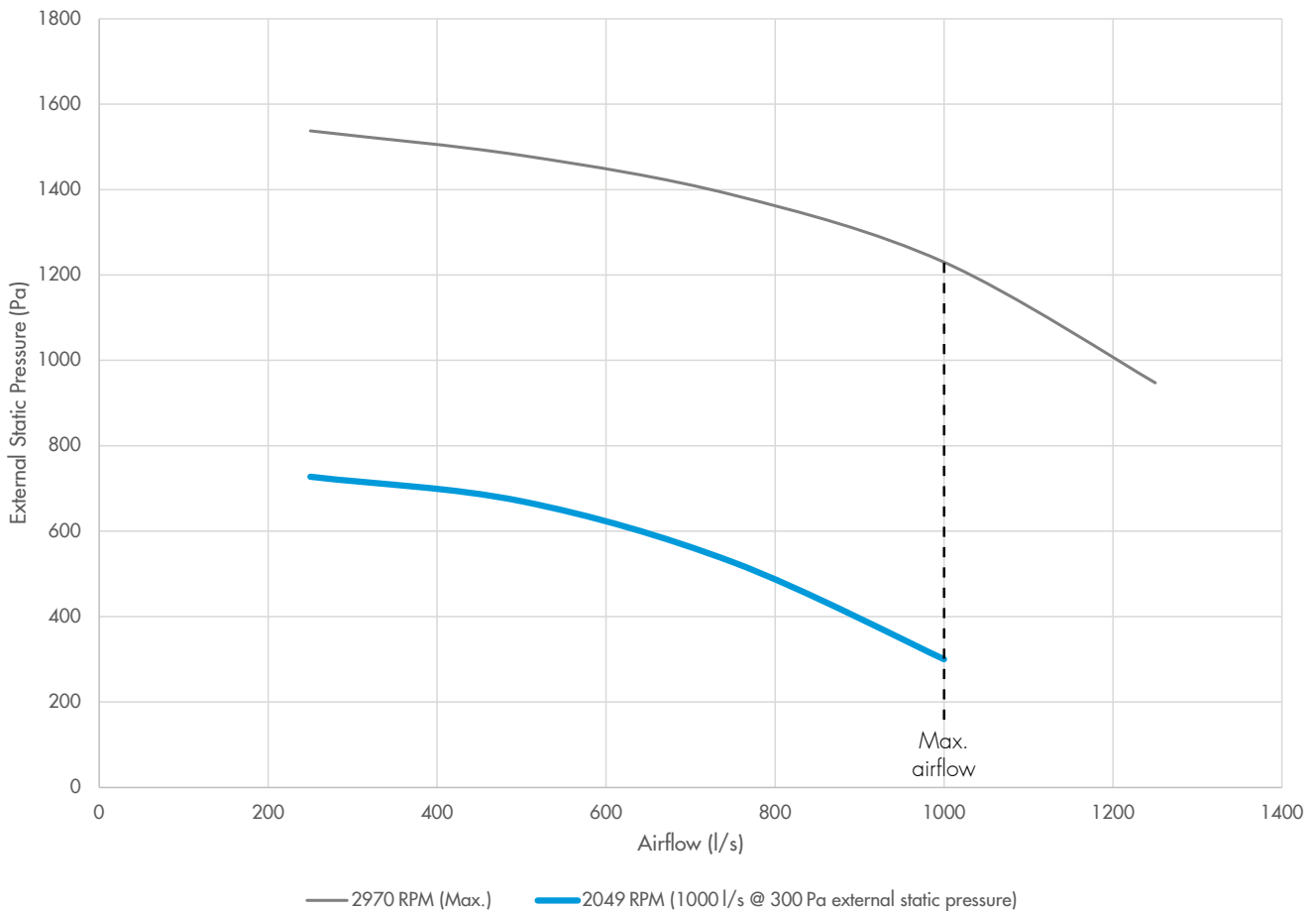
† Power details are subject to change, depending on the required cooling capacity and other project requirements. Refer to project certified electrical diagrams for finalised details.

## PCU-N-D 10

## Airflow &amp; Noise



## Supply Air Fan Curve\*



Fan Absorbed Power (1000l/s @ 300Pa ESP): 813W

\* Fan curve makes allowance for internal pressure drop of unit (excluding filters). This pressure drop is subject to change, depending on project requirements. Supply air fan selection options are available.



## Supply Air Fan Acoustics (Sound Power)†

## 1000l/s @ 300Pa External Static Pressure

Inlet									
Frequency (Hz)	sum	63	125	250	500	1000	2000	4000	8000
A-weighted (dB)	71	37	48	61	66	63	64	61	59
Non A-weighted (dB)	75	62	63	70	69	63	63	60	60
Outlet									
Frequency (Hz)	sum	63	125	250	500	1000	2000	4000	8000
A-weighted (dB)	78	40	51	65	70	74	72	68	64
Non A-weighted (dB)	80	65	66	74	73	74	71	67	65

† Noise data considers supply air fans only, excluding compressor noise and condenser fan noise. Noise attenuation by the cabinet is also not considered. Filter pressure drop to be factored into the 300Pa external static pressure allowance.