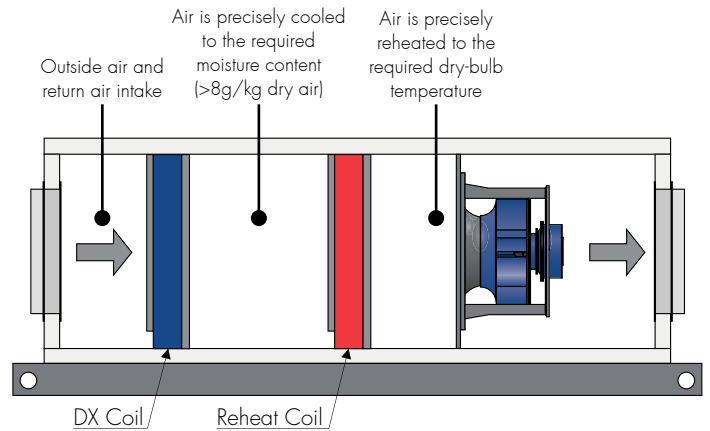


PCU-N-D 20

Technical Data



Contact your Air Change representative for a psychrometric unit selection



Airflow

Supply Air	2000l/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	x2 (nominal selection*)
Nominal Power	2.5 kW ea. (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



Fans

Type	EC Axial
Total Fans	x2 (nominal selection†)
Nominal Power	3.1 kW ea. (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 20 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 ² /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.

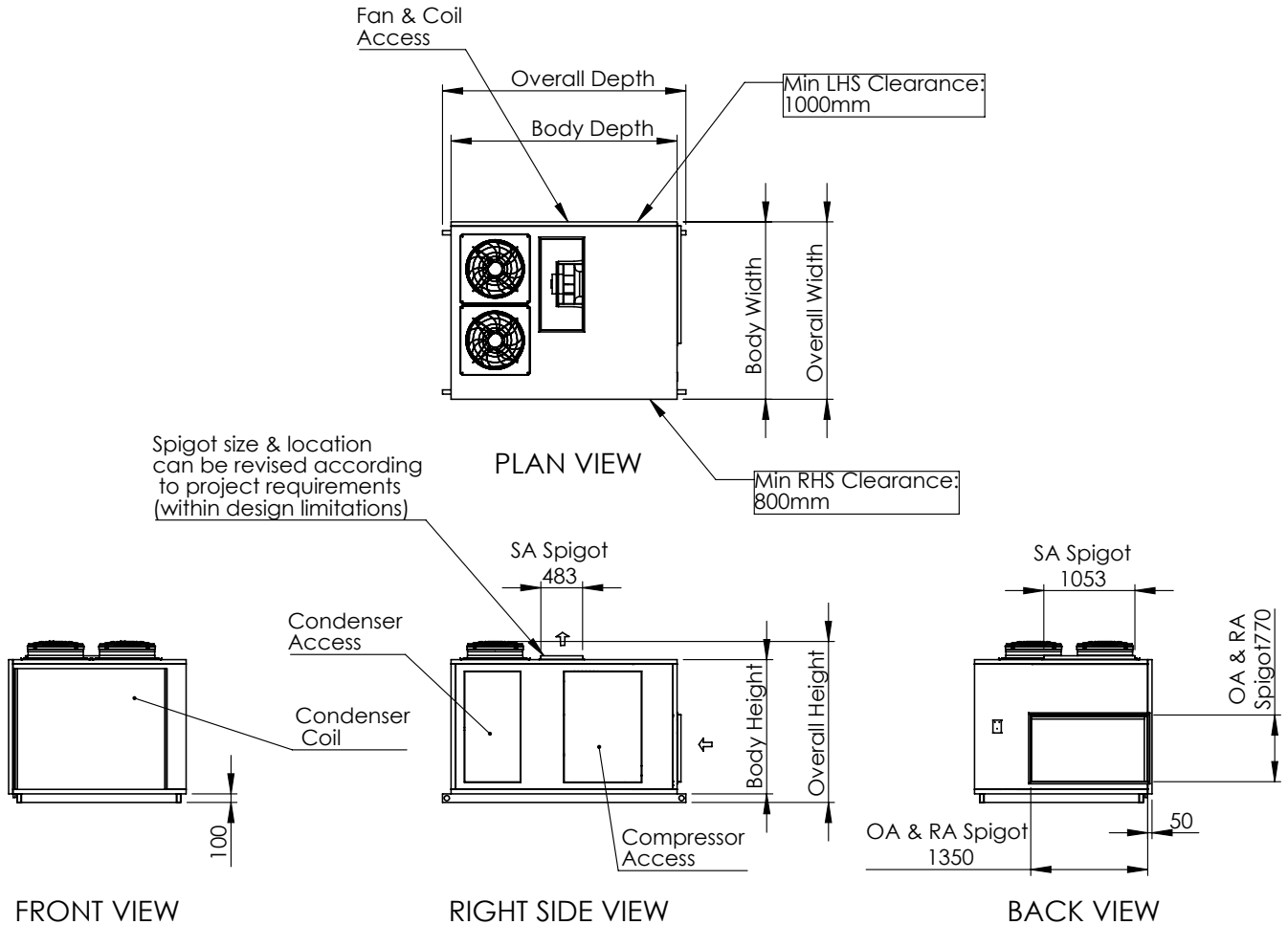
* Supply air fan selection options are available.

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

PCU-N-D 20

Dimensions

 Packaged Configuration (Filter Section Not Included)*



Indicative Packaged Configuration Dimensions

	Required Cooling Capacity		
	50kW _r	80kW _r	110kW _r
Overall Depth (mm)	2900	2900	3400
Body Depth (mm)	2700	2700	3200
Overall Width (mm)	2050	2050	2200
Body Width (mm)	2050	2050	2200
Overall Height (mm)	1900	1900	2000
Body Height (mm)	1600	1600	1700
Weight (kg)	1450		

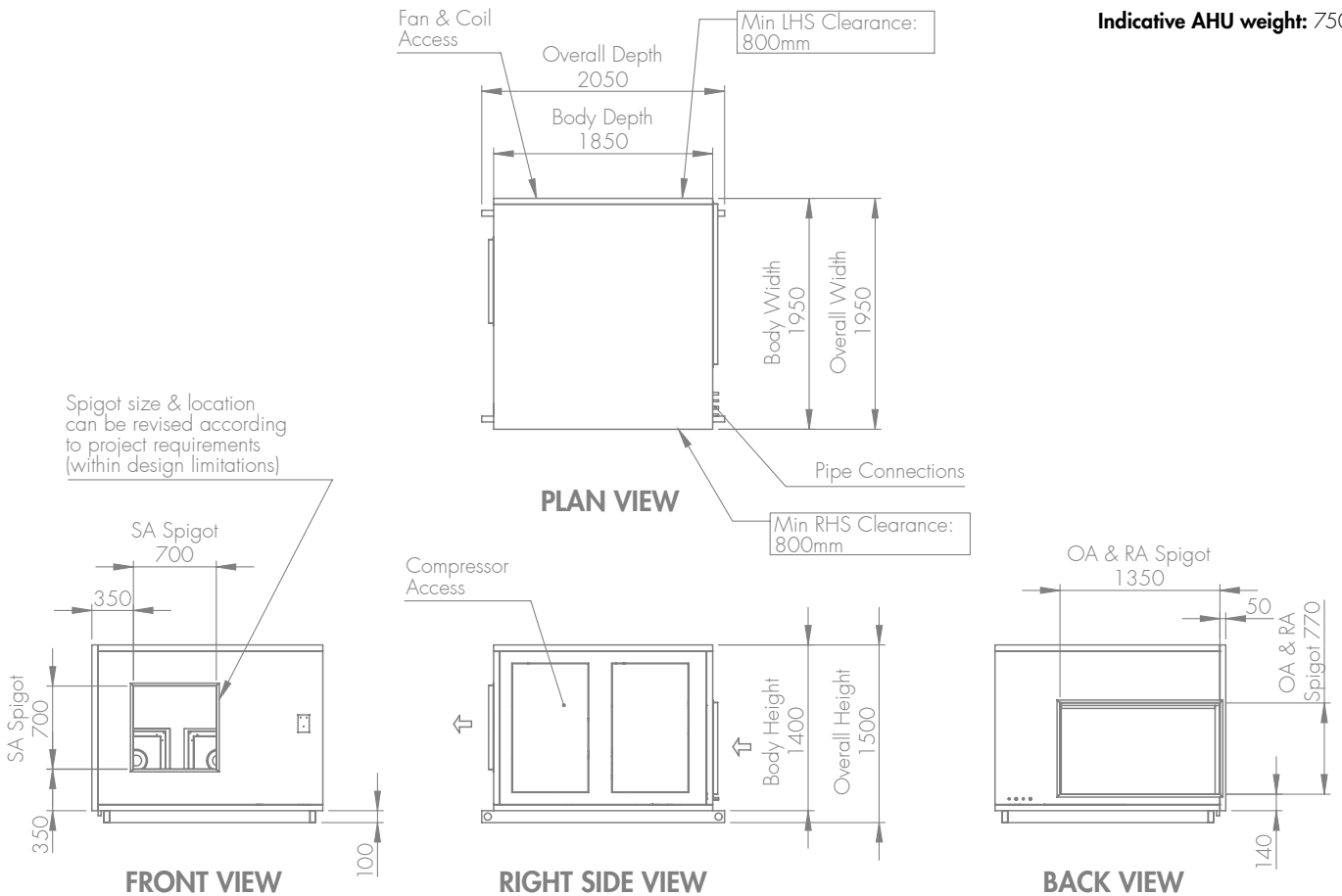
* Dimensions and weight are subject to change, depending on the required cooling capacity, design conditions, and other project requirements. Refer to project certified drawings for finalised details.

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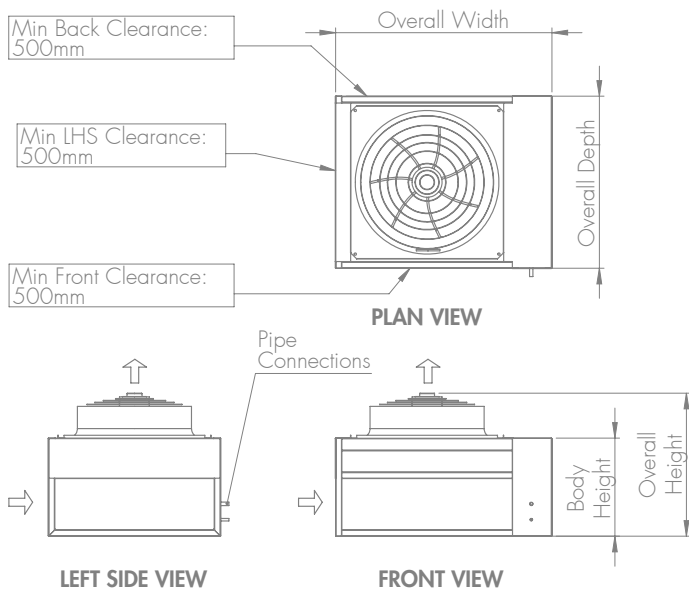
Dimensions

Split Configuration AHU (Optional Filter Section Not Shown)*

Indicative AHU weight: 750kg



Split Configuration Condensing Unit*



Indicative Condensing Unit Dimensions

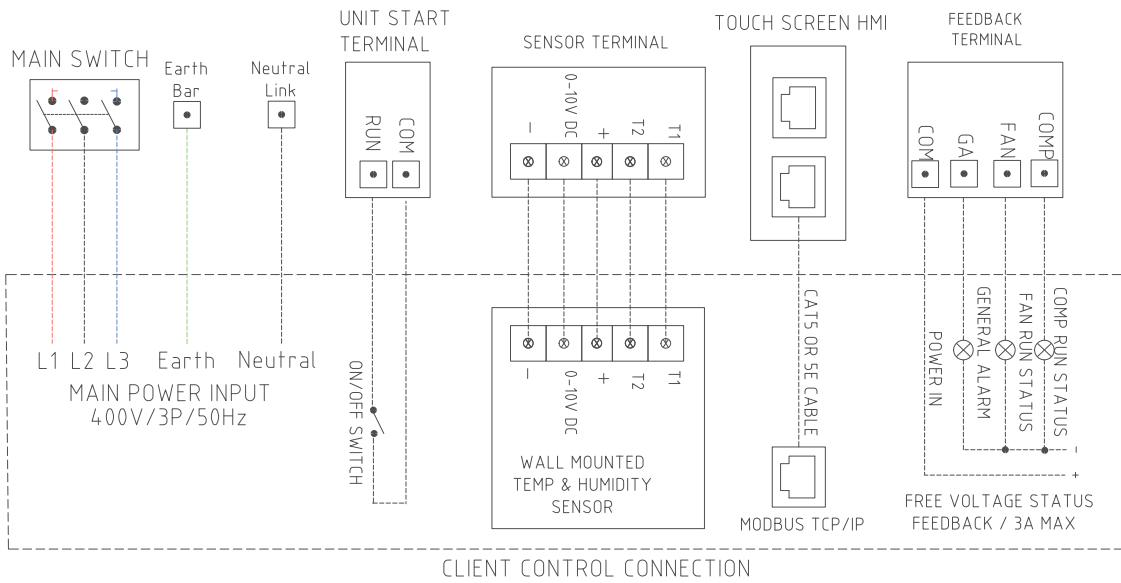
	Required Cooling Capacity		
	50kW _r	80kW _r	110kW _r
Overall Depth (mm)	1500	1250	1500
Overall Width (mm)	1600	2700	2900
Overall Height (mm)	1400	1350	1400
Body Height (mm)	1100	1100	1100
Weight (kg)	500		

*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.

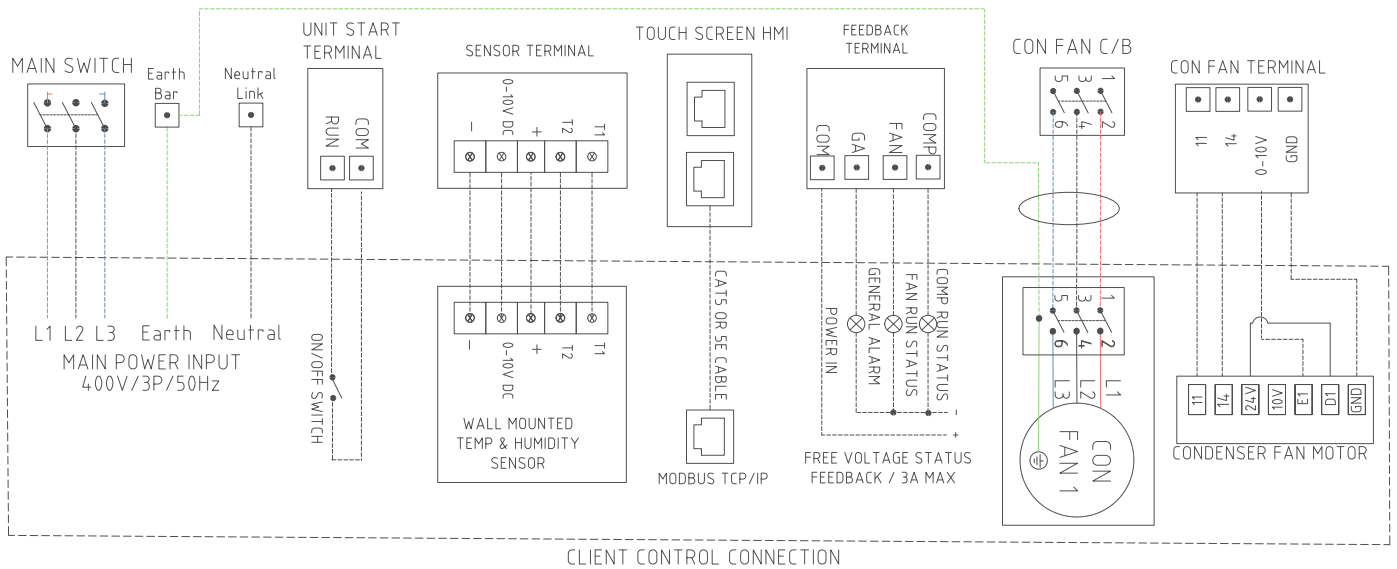
PCU-N-D 20

Electrical

Wiring Diagram — Packaged Configuration*



Wiring Diagram — Split Configuration*



Electrical Input †

Voltage / Phases / Frequency	Required Cooling Capacity		
	50kW _r	80kW _r	110kW _r
Full Load Amps	45A	63A	82A

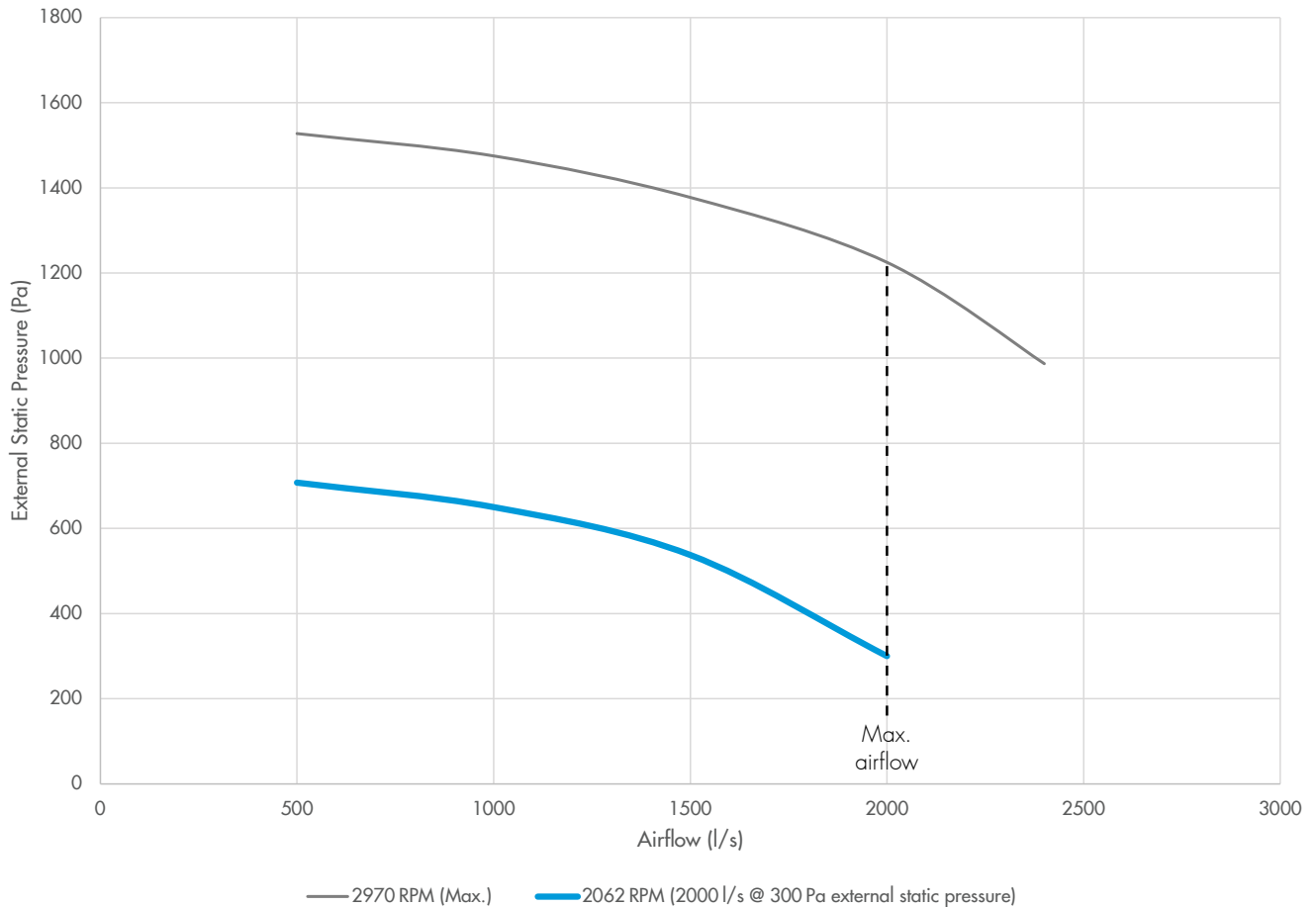
* Connection details are subject to change, depending on project requirements. Refer to project certified electrical diagrams for finalised details.

† 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 20

Airflow & Noise

Supply Air Fan Curve*



Fan Absorbed Power (2000l/s @ 300Pa ESP): 1.66kW

* 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)†

2000l/s @ 300Pa External Static Pressure									
Inlet									
Frequency (Hz)	sum	63	125	250	500	1000	2000	4000	8000
A-weighted (dB)	75	41	52	66	70	67	68	66	63
Non A-weighted (dB)	79	67	67	75	73	67	67	65	65
Outlet									
Frequency (Hz)	sum	63	125	250	500	1000	2000	4000	8000
A-weighted (dB)	81	43	54	69	73	77	75	71	67
Non A-weighted (dB)	83	68	69	78	76	77	74	70	68

† 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.