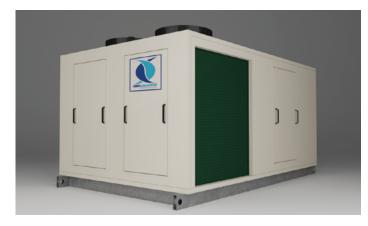
### PCU-N-D 30

#### **Technical Data**

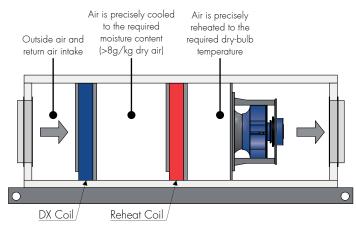


Outside Air 0 - 100% as per project requirements   Refrigeration Cooling Capacity Sized to project requirements   Supply Air Moisture Content >8 g/kg dry ai   Cooling Stage DX Coil (modulating   Reheat Stage Hot Gas Reheat Coil (modulating   Compressor Type Variable Speed Scrotter   (BLDC or PMSM Inverter Refrigerant   Refrigerant R-4104   Reverse Cycle Available upon request   Fans Type   Total Fans x1 (nominal selection*   Fan Diameter 560 mm (nominal selection*   Fan Speed (max.) 1750 RPM (nominal selection*   Motor Efficiency Class IE4   Ingress Protection Class IP54   Max. External Static Press. Approx. 900 Pa @ 30001/4   Speed Control Integrated Constant Volume Control			
Outside Air 0 - 100% as per project requirements   Refrigeration   Cooling Capacity Sized to project requirements   Supply Air Moisture Content >8 g/kg dry ai   Cooling Stage DX Coil (modulating   Reheat Stage Hot Gas Reheat Coil (modulating   Compressor Type Variable Speed Scrot   (BLDC or PMSM Inverter   Refrigerant R-4104   Reverse Cycle Available upon request   Fans Type   Type EC Plug   Total Fans x1 (nominal selection*   Fan Diameter 560 mm (nominal selection*   Fan Speed (max.) 1750 RPM (nominal selection*   Motor Efficiency Class IE2   Impeller Construction Non-metallic Composite   Max. External Static Press. Approx. 900 Pa @ 30001/3   Speed Control Integrated Constant Volume Control	➡	Airflow	
Refrigeration   Cooling Capacity Sized to project requirement:   Supply Air Moisture Content >8 g/kg dry ai   Cooling Stage DX Coil (modulating   Reheat Stage Hot Gas Reheat Coil (modulating   Compressor Type Variable Speed Scrol   (BLDC or PMSM Inverter   Refrigerant R-4104   Reverse Cycle Available upon reques   Fans Type EC Plug   Total Fans x1 (nominal selection*   Nominal Power 5.0 kW (nominal selection*   Fan Speed (max.) 1750 RPM (nominal selection*   Motor Efficiency Class IE2   Ingress Protection Class IP52   Impeller Construction Non-metallic Composite   Max. External Static Press. Approx. 900 Pa @ 30001/2   Speed Control Integrated Constant Volume Control		Supply Air	30001/s (nominal)
Cooling Capacity Sized to project requirement:   Supply Air Moisture Content >8 g/kg dry ai   Cooling Stage DX Coil (modulating   Reheat Stage Hot Gas Reheat Coil (modulating   Compressor Type Variable Speed Scrol   (BLDC or PMSM Inverter   Refrigerant R-4104   Reverse Cycle Available upon reques   Fans Total Fans x1 (nominal selection*   Nominal Power 5.0 kW (nominal selection*   Fan Speed (max.) 1750 RPM (nominal selection*   Motor Efficiency Class IE4   Ingress Protection Class IP54   Max. External Static Press. Approx. 900 Pa @ 30001/4   Speed Control Integrated Constant Volume Control		Outside Air C	) - 100% as per project requirements
Supply Air Moisture Content >8 g/kg dry ai   Cooling Stage DX Coil (modulating   Reheat Stage Hot Gas Reheat Coil (modulating   Compressor Type Variable Speed Scrol   (BLDC or PMSM Inverter (BLDC or PMSM Inverter   Refrigerant R-4104   Reverse Cycle Available upon request   Fans Type   Total Fans x1 (nominal selection*   Nominal Power 5.0 kW (nominal selection*   Fan Speed (max.) 1750 RPM (nominal selection*   Motor Efficiency Class IE4   Ingress Protection Class IP54   Impeller Construction Non-metallic Composite   Max. External Static Press. Approx. 900Pa @ 30001/4   Speed Control Integrated Constant Volume Control	鱳	Refrigeration	
Cooling Stage DX Coil (modulating   Reheat Stage Hot Gas Reheat Coil (modulating   Compressor Type Variable Speed Scrol   (BLDC or PMSM Inverter   Refrigerant R-4104   Reverse Cycle Available upon request   Fans Type   Type EC Plug   Total Fans x1 (nominal selection*   Nominal Power 5.0 kW (nominal selection*   Fan Diameter 560 mm (nominal selection*   Fan Speed (max.) 1750 RPM (nominal selection*   Motor Efficiency Class IE2   Impeller Construction Non-metallic Composite   Max. External Static Press. Approx. 900 Pa @ 30001/4   Speed Control Integrated Constant Volume Control	· ·	Cooling Capacity	Sized to project requirements
Reheat Stage Hot Gas Reheat Coil (modulating   Compressor Type Variable Speed Scrol   (BLDC or PMSM Inverter   Refrigerant R-4104   Reverse Cycle Available upon request   Fans Type EC Plug   Total Fans x1 (nominal selection*   Nominal Power 5.0 kW (nominal selection*   Fan Diameter 560 mm (nominal selection*   Fan Speed (max.) 1750 RPM (nominal selection*   Motor Efficiency Class IE2   Impeller Construction Non-metallic Composite   Max. External Static Press. Approx. 900 Pa @ 30001/3   Speed Control Integrated Constant Volume Control		Supply Air Moisture Conte	ent >8 g/kg dry air
Compressor Type Variable Speed Scrol (BLDC or PMSM Inverter   Refrigerant R-4104   Reverse Cycle Available upon request   Fans Type   Total Fans x1 (nominal selection*   Nominal Power 5.0 kW (nominal selection*   Fan Diameter 560 mm (nominal selection*   Fan Speed (max.) 1750 RPM (nominal selection*   Motor Efficiency Class IE2   Ingress Protection Class IP52   Impeller Construction Non-metallic Composite   Max. External Static Press. Approx. 900 Pa @ 30001/3   Speed Control Integrated Constant Volume Control		Cooling Stage	DX Coil (modulating)
(BLDC or PMSM Inverter Refrigerant R-4104 Reverse Cycle Available upon reques Fans Type EC Plug Total Fans x1 (nominal selection* Nominal Power 5.0kW (nominal selection* Fan Diameter 560 mm (nominal selection* Fan Speed (max.) 1750 RPM (nominal selection* Motor Efficiency Class IE2 Ingress Protection Class IP52 Impeller Construction Non-metallic Composite Max. External Static Press. Approx. 900 Pa @ 30001/3 Speed Control Integrated Constant Volume Control		Reheat Stage	Hot Gas Reheat Coil (modulating)
Refrigerant R-4104   Reverse Cycle Available upon request   Fans Type   Total Fans x1 (nominal selection*   Nominal Power 5.0 kW (nominal selection*   Fan Diameter 560 mm (nominal selection*   Fan Speed (max.) 1750 RPM (nominal selection*   Motor Efficiency Class IE4   Ingress Protection Class IP54   Impeller Construction Non-metallic Composite   Max. External Static Press. Approx. 900 Pa @ 30001/4   Speed Control Integrated Constant Volume Control		Compressor Type	Variable Speed Scroll
Reverse Cycle Available upon request   Fans Type EC Plug   Total Fans x1 (nominal selection*   Nominal Power 5.0 kW (nominal selection*   Fan Diameter 560 mm (nominal selection*   Fan Speed (max.) 1750 RPM (nominal selection*   Motor Efficiency Class IEZ   Ingress Protection Class IP52   Impeller Construction Non-metallic Composite   Max. External Static Press. Approx. 900 Pa @ 30001/2   Speed Control Integrated Constant Volume Control			(BLDC or PMSM Inverter)
Fans   Type EC Plug   Total Fans x1 (nominal selection*   Nominal Power 5.0 kW (nominal selection*   Fan Diameter 560 mm (nominal selection*   Fan Speed (max.) 1750 RPM (nominal selection*   Motor Efficiency Class IE2   Ingress Protection Class IP52   Impeller Construction Non-metallic Composite   Max. External Static Press. Approx. 900 Pa @ 30001/3   Speed Control Integrated Constant Volume Control		Refrigerant	R-410A
Type EC Plug   Total Fans x1 (nominal selection*   Nominal Power 5.0 kW (nominal selection*   Fan Diameter 560 mm (nominal selection*   Fan Speed (max.) 1750 RPM (nominal selection*   Motor Efficiency Class IE2   Ingress Protection Class IP52   Impeller Construction Non-metallic Composite   Max. External Static Press. Approx. 900 Pa @ 30001/3   Speed Control Integrated Constant Volume Control		Reverse Cycle	Available upon request
Total Fans x1 (nominal selection*   Nominal Power 5.0 kW (nominal selection*   Fan Diameter 560 mm (nominal selection*   Fan Speed (max.) 1750 RPM (nominal selection*   Motor Efficiency Class 162   Ingress Protection Class 1952   Impeller Construction Non-metallic Composite   Max. External Static Press. Approx. 900 Pa @ 30001/3   Speed Control Integrated Constant Volume Control	5	Fans	
Nominal Power 5.0 kW (nominal selection*   Fan Diameter 560 mm (nominal selection*   Fan Speed (max.) 1750 RPM (nominal selection*   Motor Efficiency Class 162   Ingress Protection Class 1952   Impeller Construction Non-metallic Composite   Max. External Static Press. Approx. 900 Pa @ 30001/3   Speed Control Integrated Constant Volume Control		Туре	EC Plug
Fan Diameter 560 mm (nominal selection*   Fan Speed (max.) 1750 RPM (nominal selection*   Motor Efficiency Class IE2   Ingress Protection Class IP52   Impeller Construction Non-metallic Composite   Max. External Static Press. Approx. 900 Pa @ 30001/2   Speed Control Integrated Constant Volume Control		Total Fans	x1 (nominal selection*)
Fan Speed (max.) 1750 RPM (nominal selection*   Motor Efficiency Class IE2   Ingress Protection Class IP52   Impeller Construction Non-metallic Composite   Max. External Static Press. Approx. 900 Pa @ 30001/3   Speed Control Integrated Constant Volume Control		Nominal Power	5.0kW (nominal selection*)
Motor Efficiency Class IE4 Ingress Protection Class IP54 Impeller Construction Non-metallic Composite Max. External Static Press. Approx. 900 Pa @ 30001/3 Speed Control Integrated Constant Volume Control		Fan Diameter	560mm (nominal selection*)
Impeller Construction Non-metallic Composite   Max. External Static Press. Approx. 900 Pa @ 30001/3   Speed Control Integrated Constant Volume Control	.=	Fan Speed (max.)	1750 RPM (nominal selection*)
Impeller Construction Non-metallic Composite   Max. External Static Press. Approx. 900 Pa @ 30001/3   Speed Control Integrated Constant Volume Control	ly Ai	Motor Efficiency Class	IE4
Impeller Construction Non-metallic Composite   Max. External Static Press. Approx. 900 Pa @ 30001/3   Speed Control Integrated Constant Volume Control	ddn	Ingress Protection Class	IP54
Speed Control Integrated Constant Volume Control	S	Impeller Construction	Non-metallic Composite
		Max. External Static Press	. Approx. 900Pa @ 30001/s
or via External Speed Signa		Speed Control	Integrated Constant Volume Control
			or via External Speed Signal

\* Supply air fan selection options are available.

<sup>+</sup> Condenser fan selection is dependent on the required cooling capacity.

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Contact your Air Change representative for a psychrometric unit selection

15 10 11 11 11 11 11 11 11 11 11 11 11 11	Fans					
	Туре	EC Axial				
	Total Fans	x4 (nominal selection <sup>†</sup> )				
	Nominal Power	3.1 kW ea. (nominal selection <sup>†</sup> )				
Air	Fan Diameter	800mm (nominal selection <sup>†</sup> )				
<b>Condenser Air</b>	Fan Speed (max.)	1100 RPM (nominal selection <sup>†</sup> )				
nde	Motor Efficiency Class	IE4				
ပိ	Ingress Protection Class	, IP54				
	Speed Control	Integrated Head Pressure Control				
4	Electrical & Contr	ols				
	Electrical Input	415V / 3ph / 50Hz				
	Full Load Amps	Refer to PCU-IN-D 30 electrical page				
	Controls	ClimaSync Control System included				
		(refer to PCU ClimaSync page)				
$\mathbb{N}$	Cabinet					
	Weatherproof	Yes				
	Panel Construction	50 mm 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 RHS with Lifting Lugs				
	Condenser Configuration	ons Split or Packaged				
	Filter Section	Optional with Split Configuration				
		Optional with Packaged Configuration				
	Filtration Grade	As per project requirements				

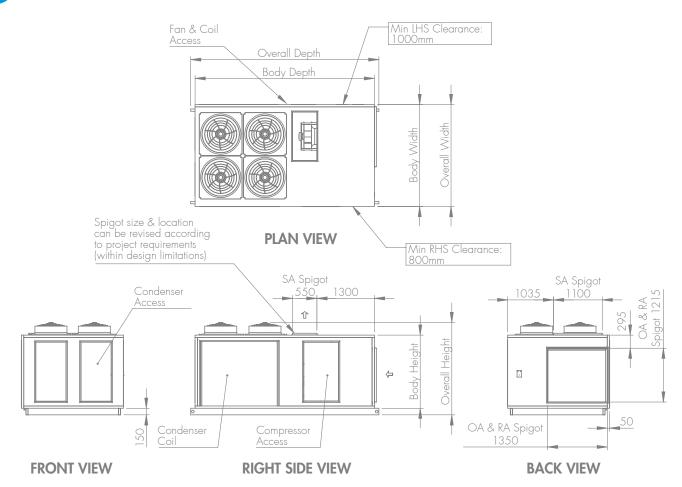
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### PCU-N-D 30

#### **Dimensions**

Packaged Configuration (Optional Filter Section not Shown)\*



Indicative Packaged Configuration Dimensions

	Required Cooling Capacity					
	80kWr	120kWr	160kWr			
Overall Depth (mm)	3400	3700	4250			
Body Depth (mm)	3200	3500	4050			
Overall Width (mm)	2000	2300	2300			
Body Width (mm)	2000	2300	2300			
Overall Height (mm)	2050	2100	2100			
Body Height (mm)	1650	1650	1650			
Weight (kg)		1850				

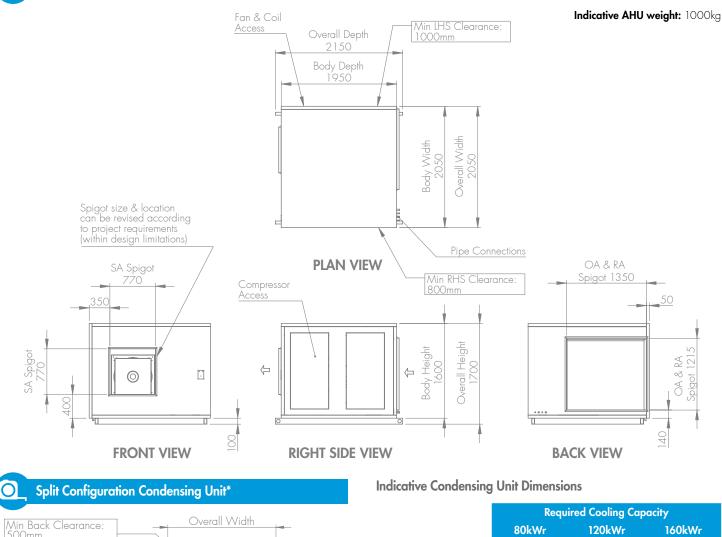
\* Dimensions and weight are subject to change, depending on the required cooling capacity, design conditions, and other project requirements. Refer to project certified drawings for finalised details.



### PCU-N-D 30

#### **Dimensions**

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



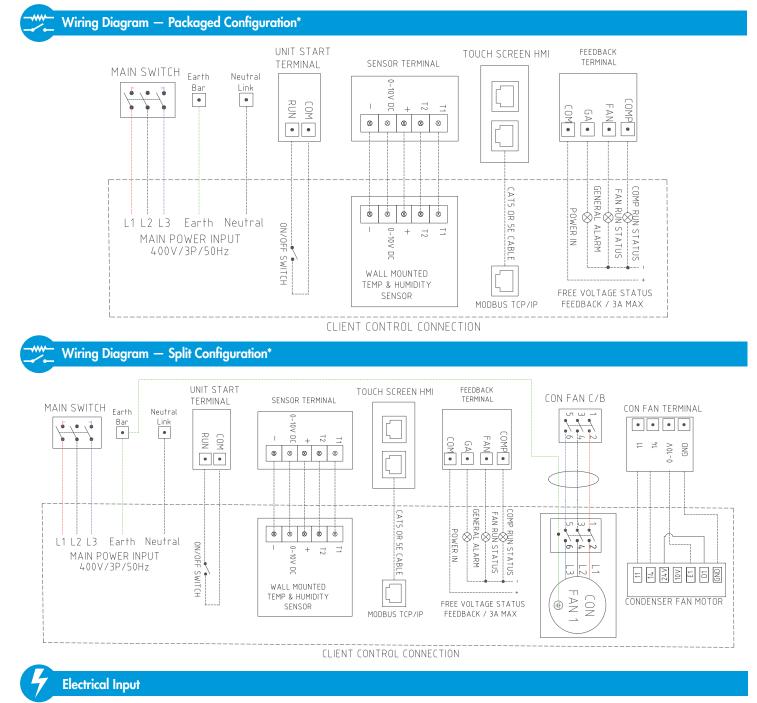
Min Back Clearance: 500mm	Overall Width	
Min LHS Clearance: 500mm	Overall Depth	
Min Front Clearance: 500mm	Pine Plan VIEW	
	Pipe Connections	Overall Height
LEFT SIDE VIEW	FRONT VIEW	

	Required Cooling Capacity						
	80kWr	120kWr	160kWr				
Overall Depth (mm)	1250	1750	1800				
Overall Width (mm)	2700	2700	3300				
Overall Height (mm)	1350	1400	1400				
Body Height (mm)	1100	1100	1100				
Weight (kg)		700					

\* 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 30

#### **Electrical**



#### Indicative Electrical Input details<sup>†</sup>

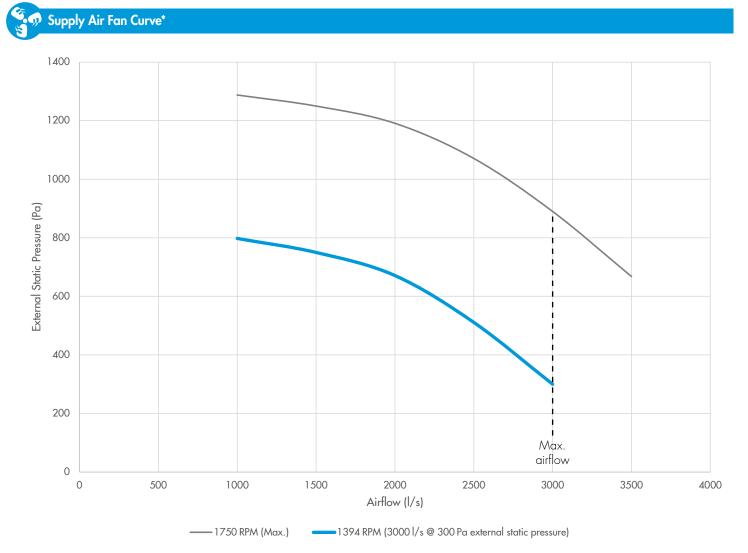
	Required Cooling Capacity				
	80kWr	120kWr	160kWr		
Voltage / Phases / Frequency	415V / 3ph / 50Hz	415V / 3ph / 50Hz	415V / 3ph / 50Hz		
Full Load Amps	80A	106A	149A		

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

<sup>+</sup> 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 30

#### **Airflow & Noise**



\* 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)†

3000l/s @ 300Pa External Static Pressure									
Inlet									
Frequency (Hz)	sum	63	125	250	500	1000	2000	4000	8000
A-weighted (dB)	77	44	66	70	71	70	69	68	64
Non A-weighted (dB)	84	70	80	78	74	70	68	67	65
Outlet									
Frequency (Hz)	sum	63	125	250	500	1000	2000	4000	8000
A-weighted (dB)	84	47	71	74	78	78	74	73	68
Non A-weighted (dB)	89	73	85	82	81	78	73	72	69
1.					,				

<sup>†</sup> 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.