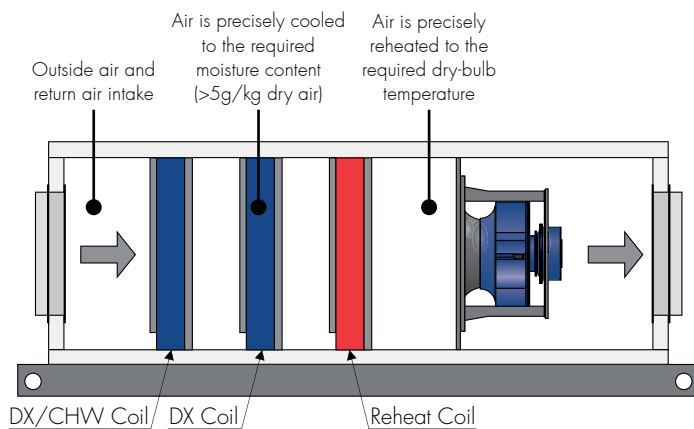
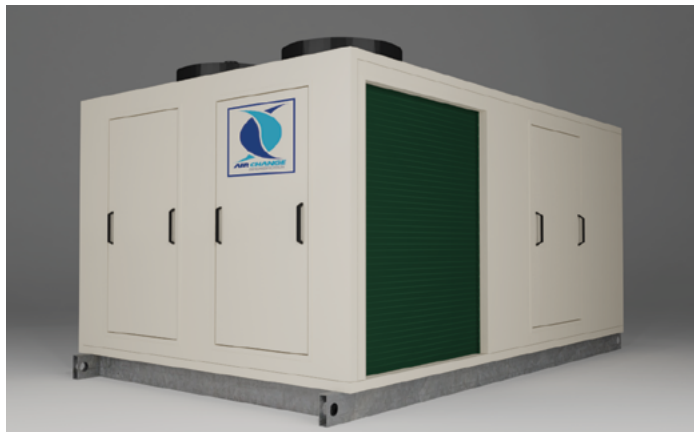


PCU-N-LD 30

Technical Data



Contact your Air Change representative for a psychrometric unit selection

Airflow

Supply Air	3000l/s (nominal)
Outside Air	0 - 100% as per project requirements

Refrigeration

Cooling Capacity	Sized to project requirements
Supply Air Moisture Content	>5g/kg dry air
Cooling Stage 1	DX or CHW Coil (modulating)
Cooling Stage 2	DX Coil (modulating)
Reheat Stage	Hot Gas Reheat Coil (modulating)
Compressor Type	Variable Speed Scroll (BLDC or PMSM Inverter)
Refrigerant	R-410A
Reverse Cycle	Available upon request

Fans

Type	EC Plug
Total Fans	x1 (nominal selection*)
Nominal Power	5.0kW (nominal selection*)
Fan Diameter	560mm (nominal selection*)
Fan Speed (max.)	1750RPM (nominal selection*)
Motor Efficiency Class	IE4
Ingress Protection Class	IP54
Impeller Construction	Non-metallic Composite
Max. External Static Press.	Approx. 750Pa @ 3000l/s
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 DX cooling capacity.

Fans

Type	EC Axial
Total Fans	x4 (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-LD 30 electrical page
Controls	ClimaSync Control System included (refer to PCU ClimaSync page)

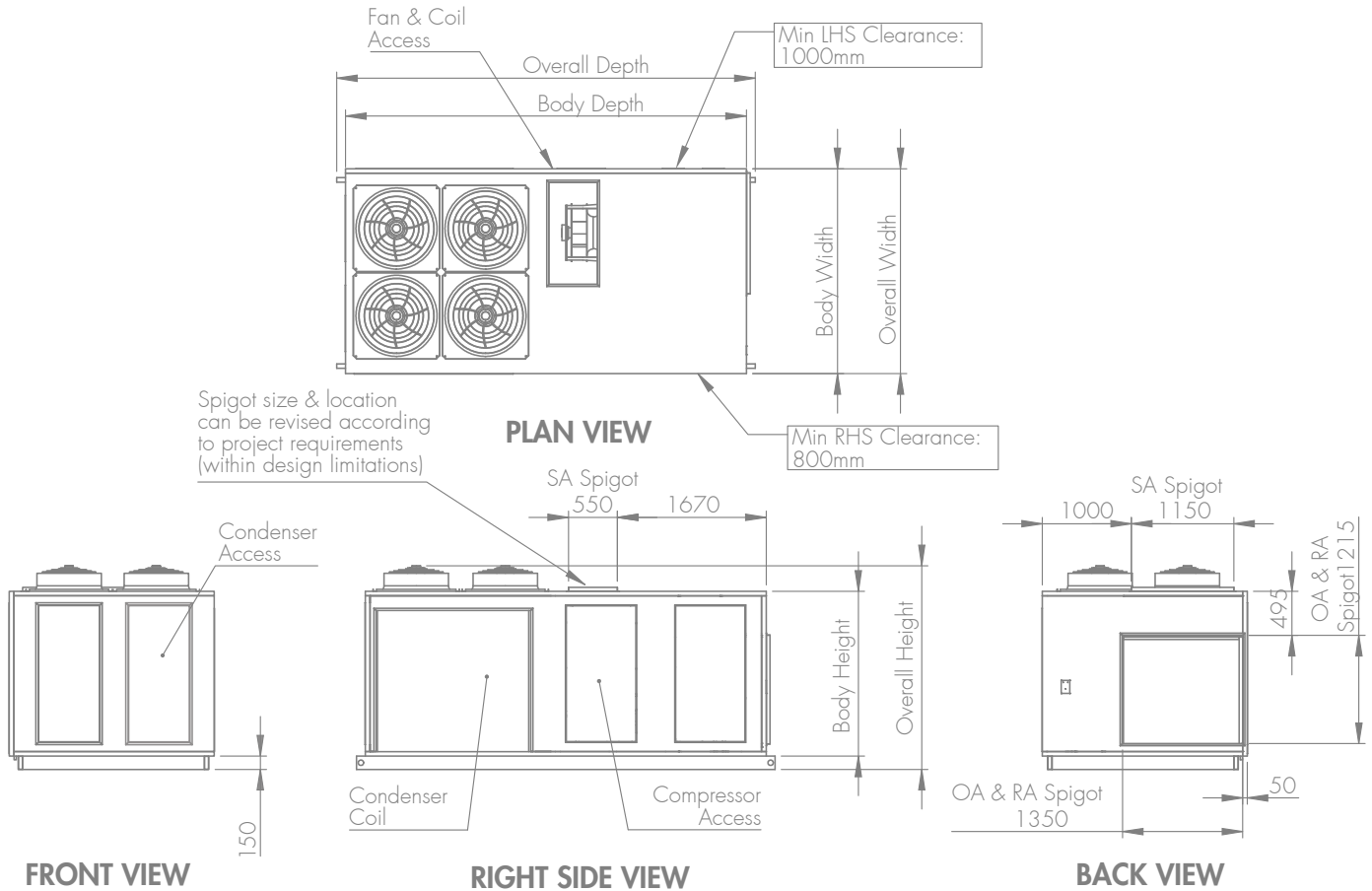
Cabinet

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 RHS with Lifting Lugs
Condenser Configurations	Split or Packaged
Filter Section	Optional with Split Configuration Optional with Packaged Configuration
Filtration Grade	As per project requirements

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Dimensions

 Packaged Configuration (Optional Filter Section Not Shown)*



Indicative Packaged Configuration Dimensions

	Required DX Cooling Capacity		
	60 kW _r (1 st stage CHW)	120 kW _r (full DX system)	180 kW _r (full DX system)
Overall Depth (mm)	3600	4100	4700
Body Depth (mm)	3400	3900	4500
Overall Width (mm)	2100	2300	2300
Body Width (mm)	2100	2300	2300
Overall Height (mm)	2100	2250	2300
Body Height (mm)	1700	1800	1850
Weight (kg)	2250		

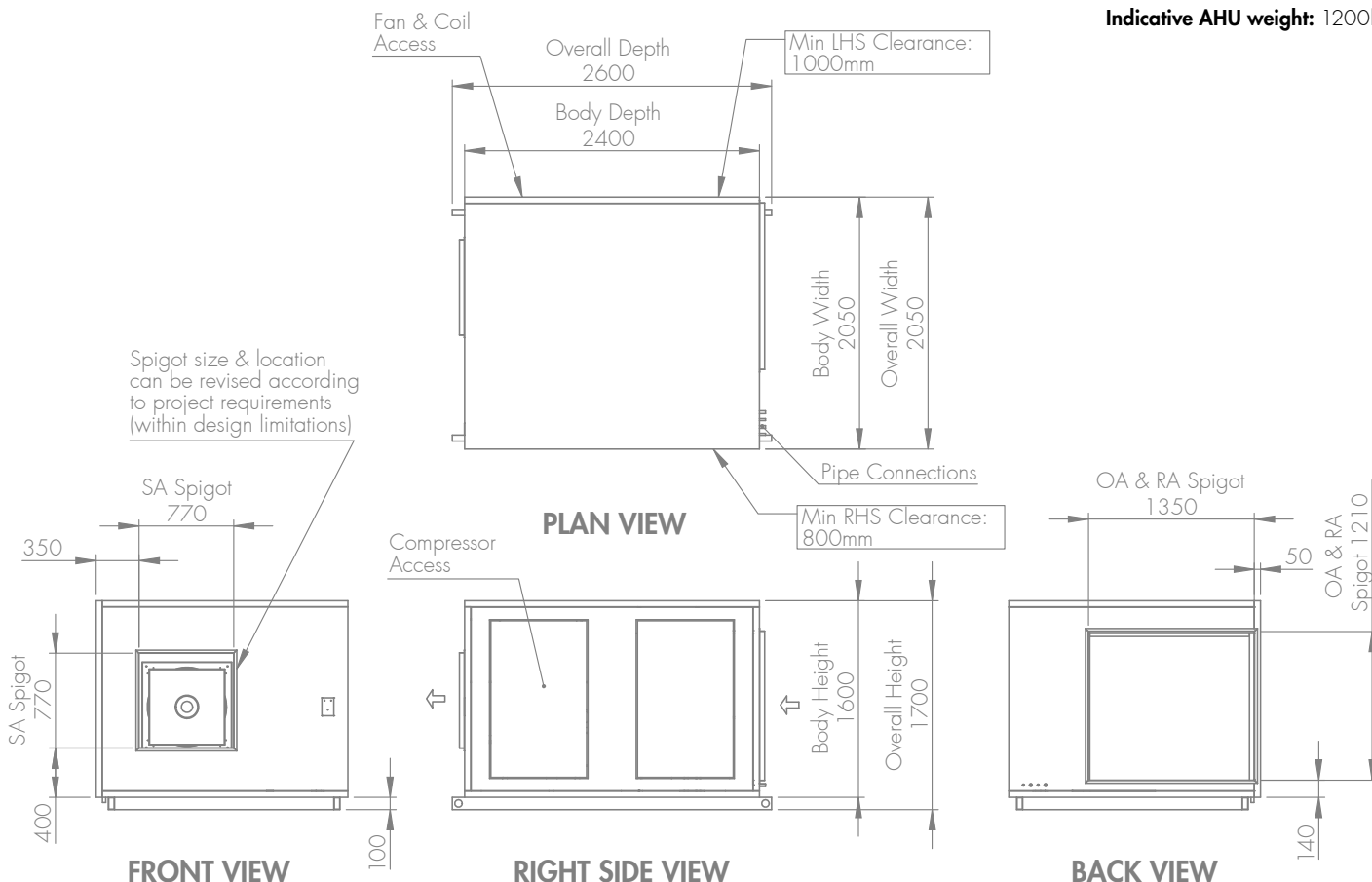
* Dimensions and weight are subject to change, depending on the required DX cooling capacity, design conditions, and other project requirements. Refer to project certified drawings for finalised details.

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Dimensions

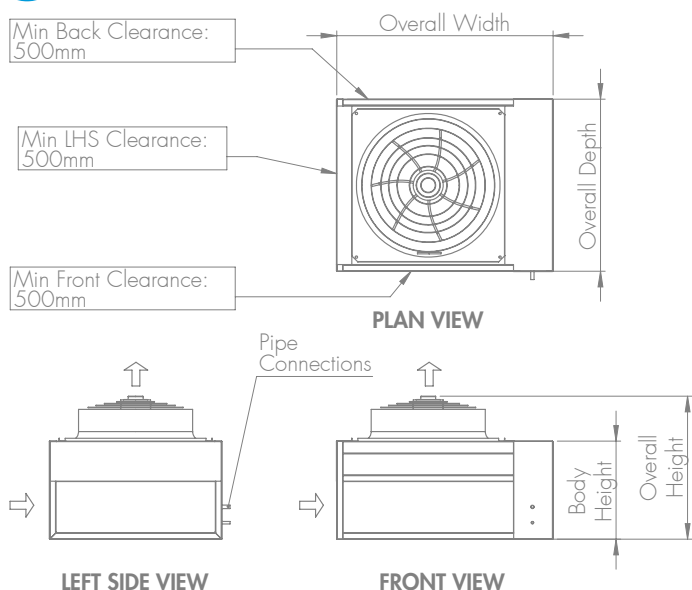
Split Configuration AHU (Optional Filter Section Not Shown)*

Indicative AHU weight: 1200kg



Split Configuration Condensing Unit*

Indicative Condensing Unit Dimensions



	Required DX Cooling Capacity		
	60 kW _r (1 st stage CHW)	120 kW _r (full DX system)	180 kW _r (full DX system)

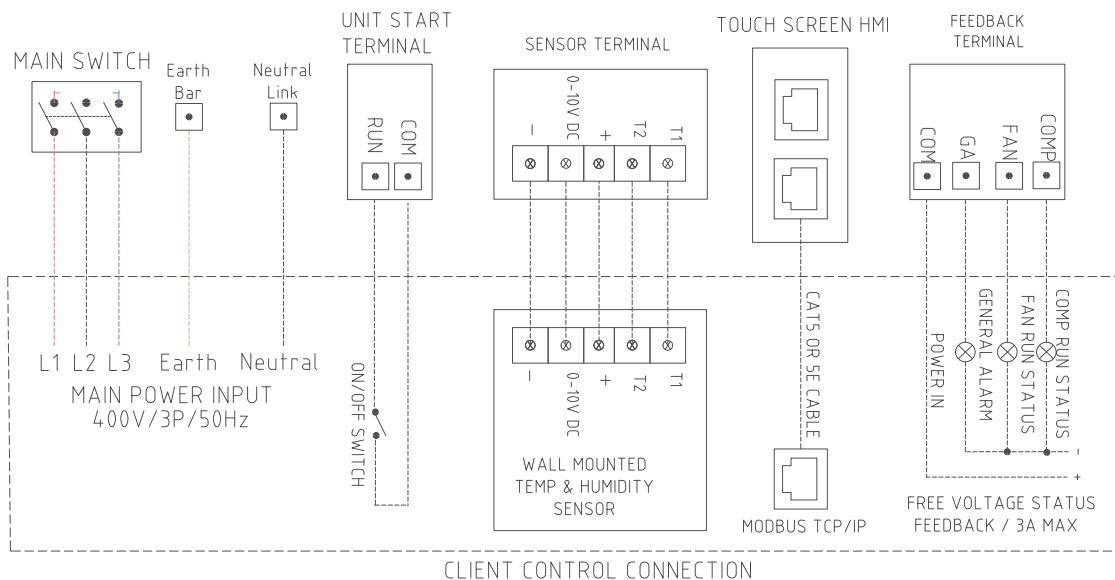
Overall Depth (mm)	1400	1700	1550
Overall Width (mm)	1900	3100	4600
Overall Height (mm)	1400	1400	1400
Body Height (mm)	1100	1100	1100
Weight (kg)	850		

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

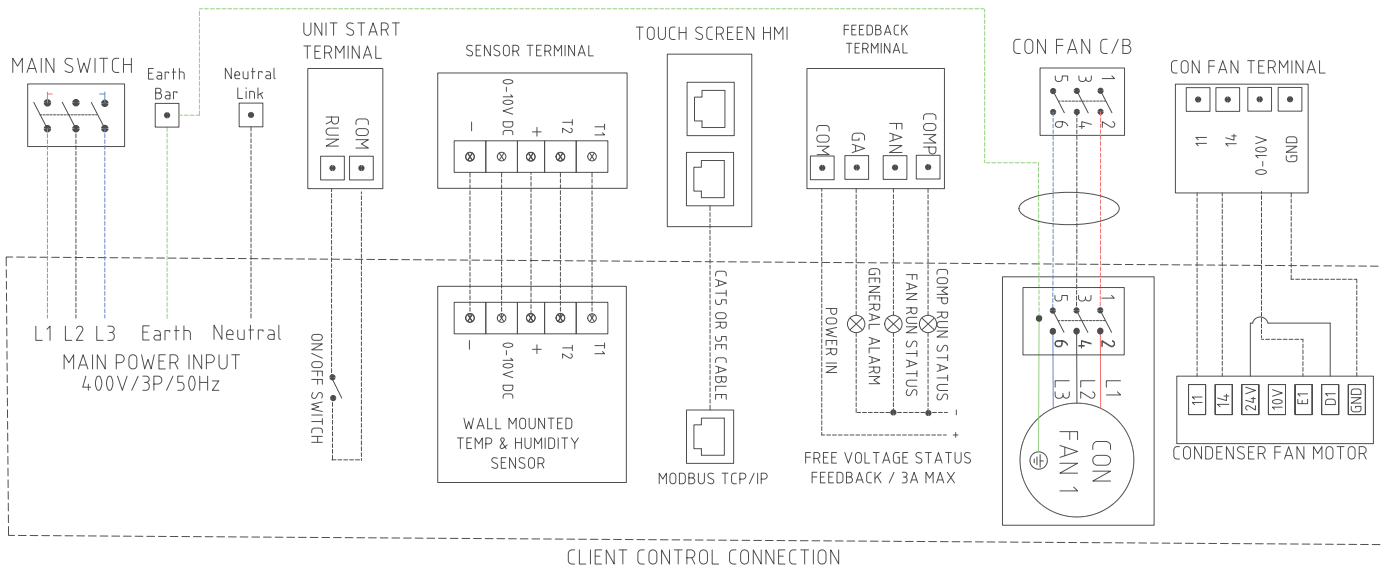
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Electrical

Wiring Diagram — Packaged Configuration*



Wiring Diagram — Split Configuration*



Electrical Input

Indicative Electrical Input details†

Voltage / Phases / Frequency	Required DX Cooling Capacity		
	60 kW _r (1 st stage CHW)	120 kW _r (full DX system)	180 kW _r (full DX system)
Full Load Amps	415V / 3 ph / 50Hz	415V / 3 ph / 50Hz	415V / 3 ph / 50Hz
	80A	106A	149A

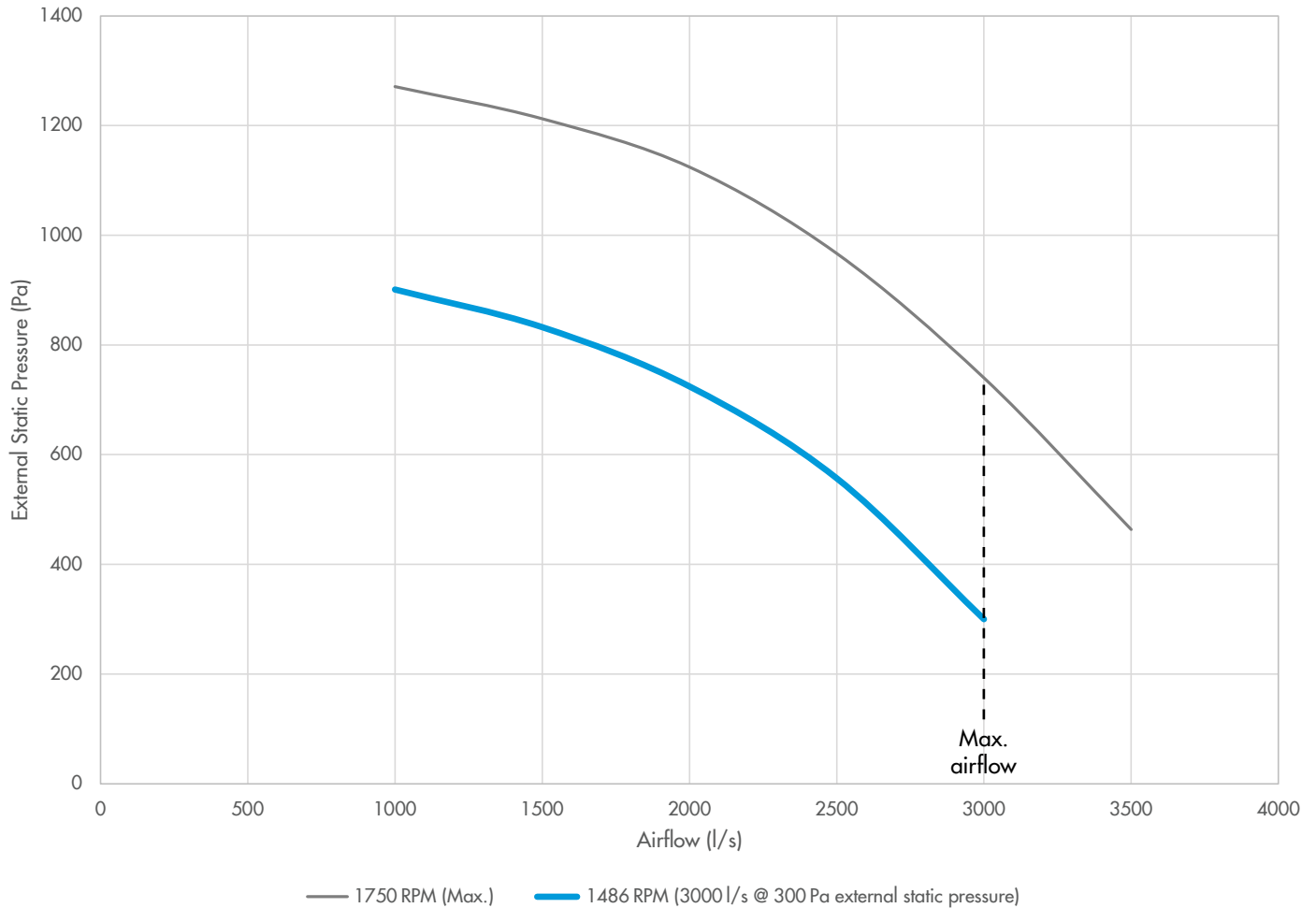
* Connection details are subject to change, depending on project requirements. Refer to project certified electrical diagrams for finalised details.

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

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Airflow & Noise

Supply Air Fan Curve*



* 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)	78	43	66	71	72	71	70	69	64
Non A-weighted (dB)	84	68	80	79	76	71	69	68	65
Outlet									
Frequency (Hz)	sum	63	125	250	500	1000	2000	4000	8000
A-weighted (dB)	85	47	71	75	80	79	76	74	69
Non A-weighted (dB)	89	73	85	83	82	80	74	73	69

† 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.