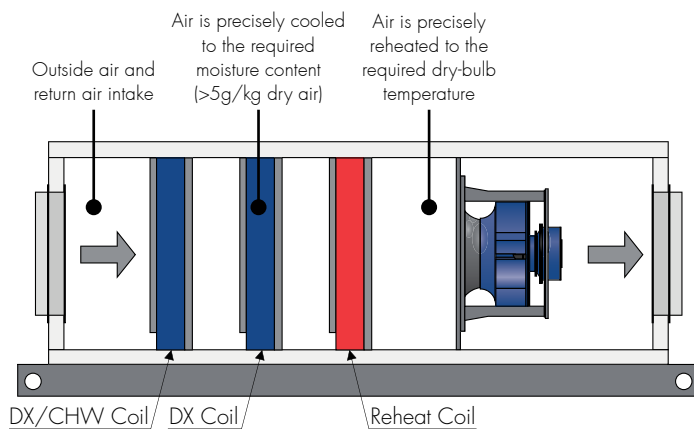


PCU-N-LD 20

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	>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	x2 (nominal selection*)
Nominal Power	2.5kW 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
Max. External Static Press.	Approx. 1050Pa @ 2000l/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	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-LD 20 electrical page
Controls	ClimaSync Control System included (refer to PCU ClimaSync page)

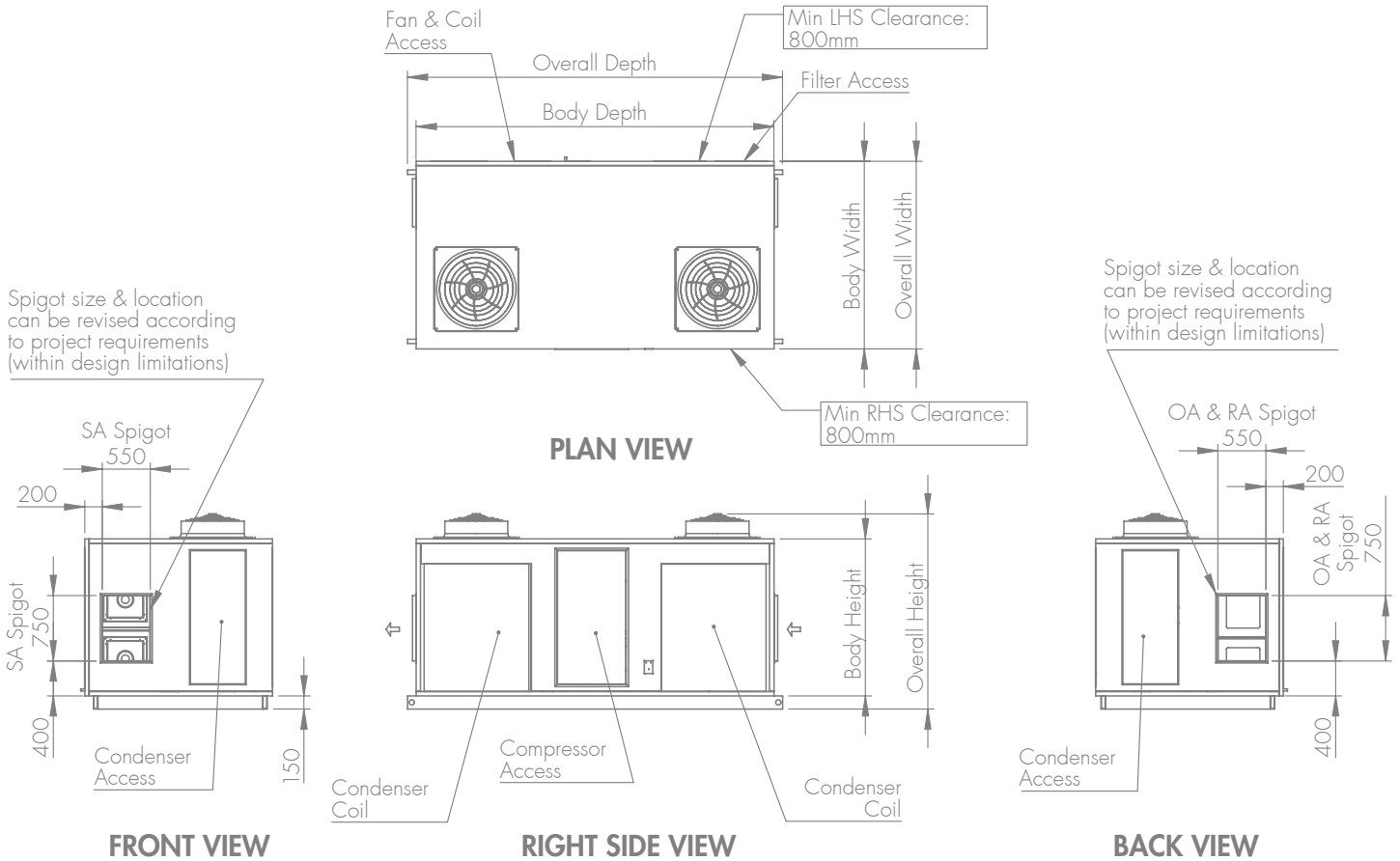
Cabinet

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 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 Deep Bed included with Packaged Config.
Filtration Grade	As per project requirements

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Dimensions

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



Indicative Packaged Configuration Dimensions

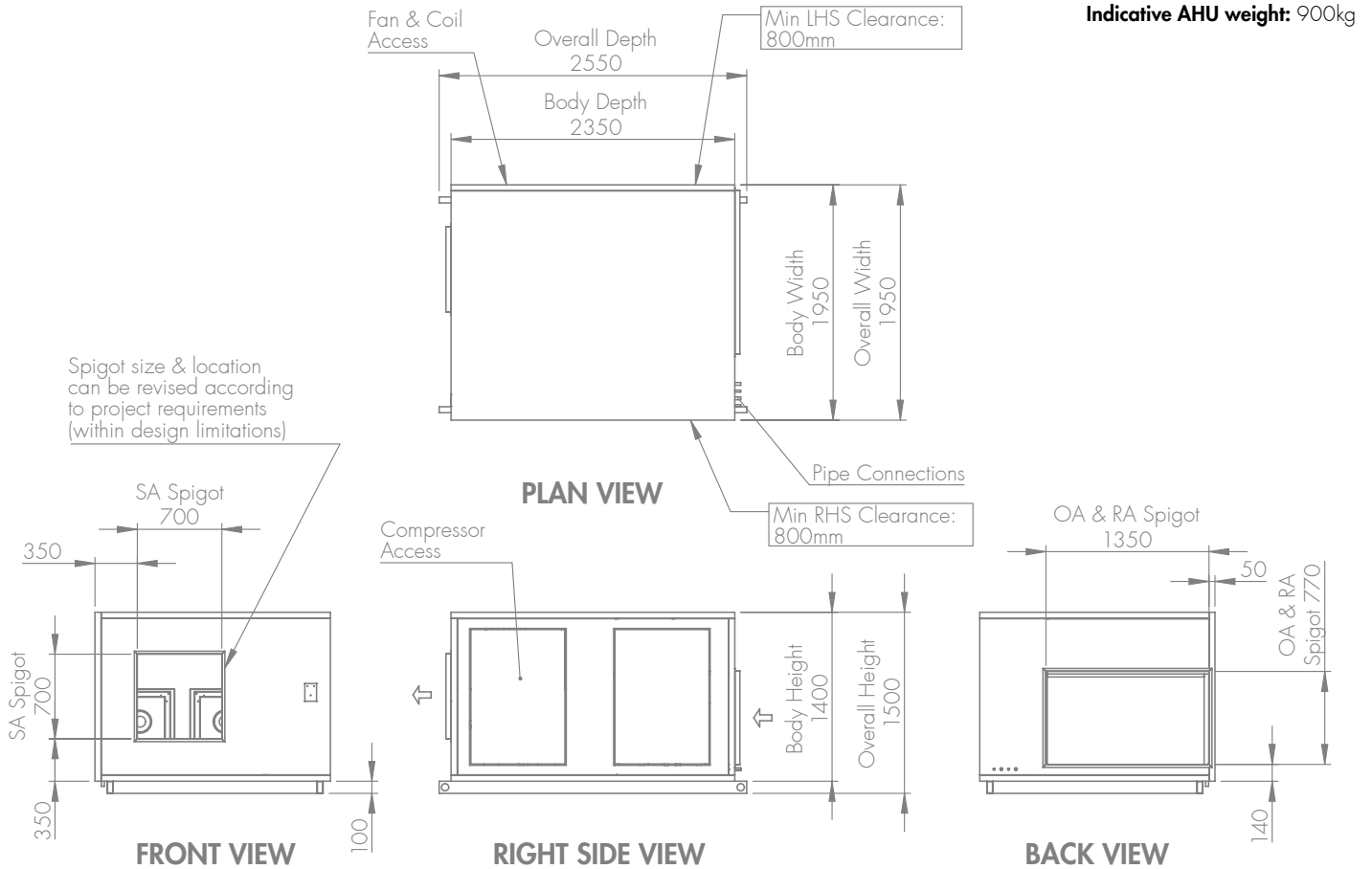
	Required DX Cooling Capacity		
	40 kW _r (1 st stage CHW)	70 kW _r (full DX system)	120 kW _r (full DX system)
Overall Depth (mm)	3900	4300	4300
Body Depth (mm)	3700	4100	4100
Overall Width (mm)	2000	2000	2150
Body Width (mm)	2000	2000	2150
Overall Height (mm)	2200	2200	2250
Body Height (mm)	1800	1800	1800
Weight (kg)	1600		

* 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.

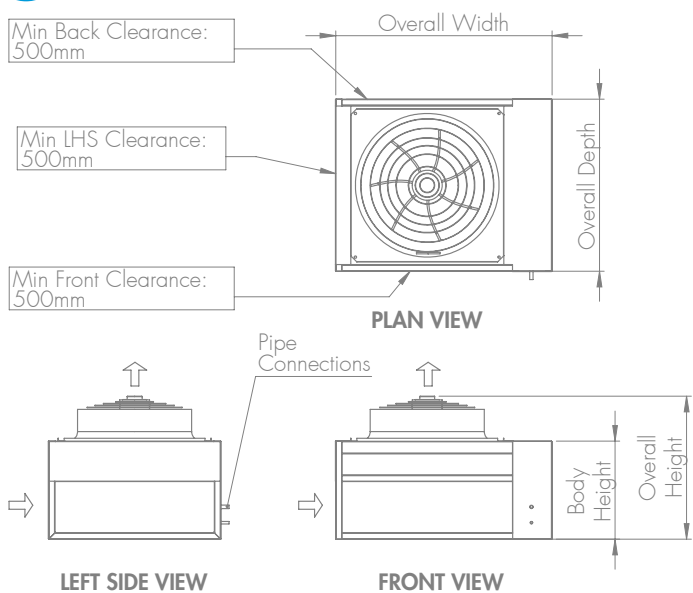
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Dimensions

Split Configuration AHU (Optional Filter Section Not Shown)*



Split Configuration Condensing Unit*



Indicative Condensing Unit Dimensions

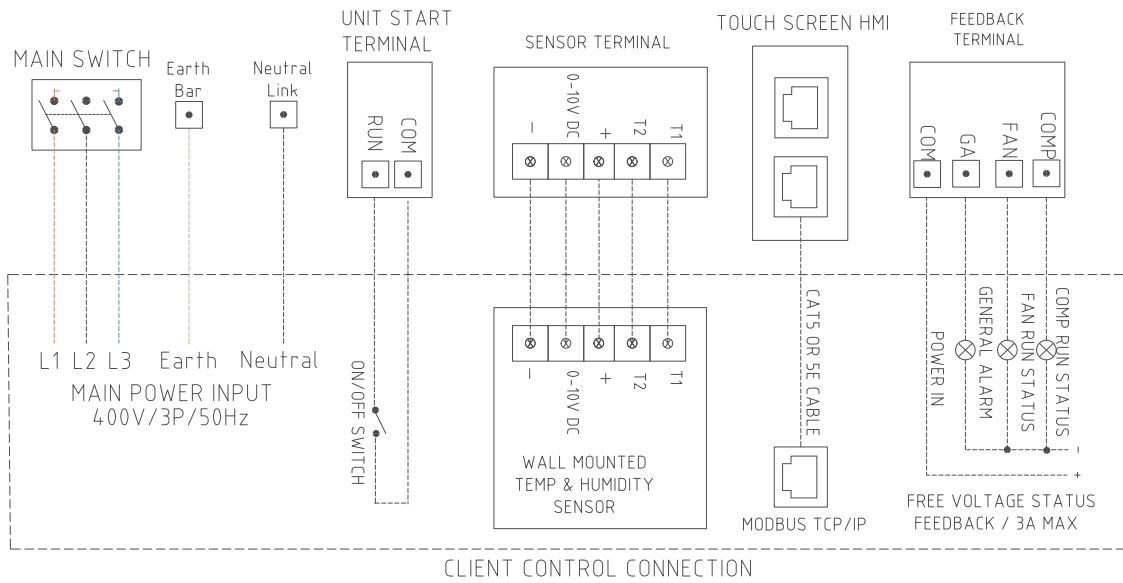
	Required DX Cooling Capacity		
	40 kW _r (1 st stage CHW)	70 kW _r (full DX system)	120 kW _r (full DX system)
Overall Depth (mm)	1550	1550	1700
Overall Width (mm)	1250	2500	3000
Overall Height (mm)	1350	1350	1400
Body Height (mm)	1100	1100	1100
Weight (kg)	600		

* 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.

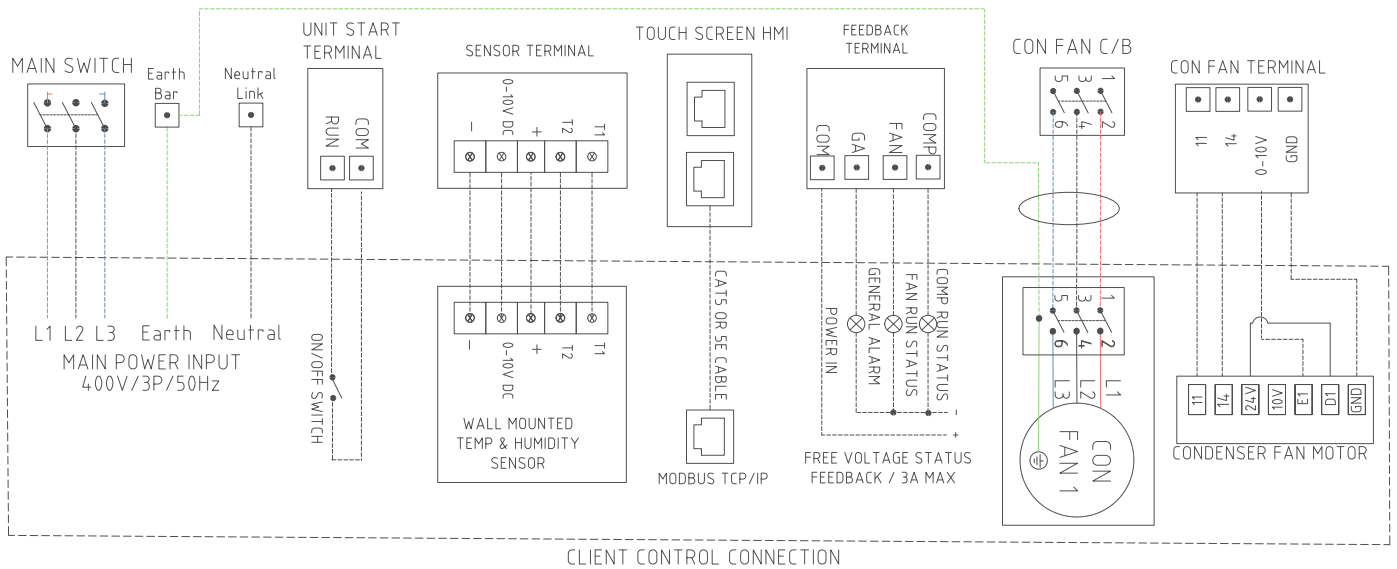
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Electrical

Wiring Diagram — Packaged Configuration*



Wiring Diagram — Split Configuration*



Electrical Input

Indicative Electrical Input details†

Voltage / Phases / Frequency	Required DX Cooling Capacity		
	40 kW _r (1 st stage CHW)	70 kW _r (full DX system)	120 kW _r (full DX system)
Full Load Amps	47A	85A	106A

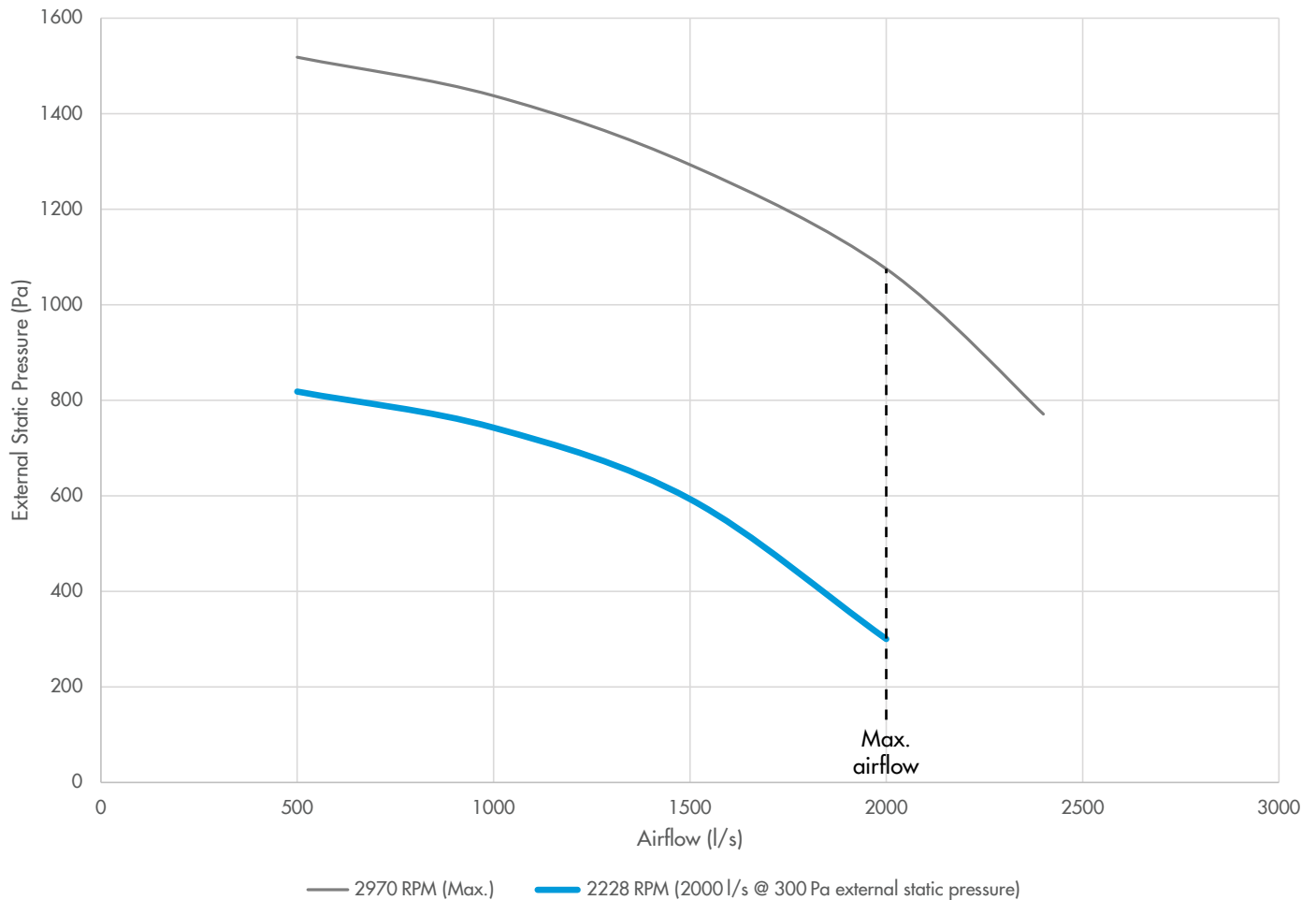
* Connection details are subject to change, depending on project requirements. Refer to project certified electrical diagrams for finalised details.

† 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)†

2000l/s @ 300Pa External Static Pressure									
Inlet									
Frequency (Hz)	sum	63	125	250	500	1000	2000	4000	8000
A-weighted (dB)	77	42	52	70	71	69	71	68	64
Non A-weighted (dB)	81	67	67	78	75	69	70	67	65
Outlet									
Frequency (Hz)	sum	63	125	250	500	1000	2000	4000	8000
A-weighted (dB)	83	44	54	72	74	79	78	73	68
Non A-weighted (dB)	85	69	69	81	77	79	77	72	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.