



SUMMARY FAN DATA SHEET

Nuaire, Western Industrial Estate, Caerphilly, CF83 1NA, United Kingdom. email:info@nuaire.co.uk

UK Commercial enquiries T:029 2085 8200 UK Residential enquiries T:029 2085 8500 International enquiries T:+44.29 2085 8497

Whilst the information given on this data sheet is fan specific, it is in summary and reference to the product selection catalogue and installation & maintenance documents is recommended.

This data sheet produced on 03 Oct 2024 14:32 using software version 5.8.4588.0

Project: 23/19807/COM

LORETO COLLEGE MANCHESTER

Location: HRU1

Technical Data

XBC+

Fan Code: **XBC65HA-NNN-T-LS1W**

Installation Manual Links: **671949**

Supply

Required duty: 0.525 m³/s at 200 Pa

Actual duty: 0.573 m³/s at 238 Pa

Actual at required flow: 0.525 m³/s at 283 Pa

Extract

Required duty: 0.525 m³/s at 200 Pa

Actual duty: 0.573 m³/s at 238 Pa

Actual at required flow: 0.525 m³/s at 283 Pa

When speed controlled to required duty:

Motor input power: **0.704 kW**

Specific Fan Power: **1.3 W/(l/s)**

At full speed:

Motor input power: 0.914 kW

Specific Fan Power: 1.6 W/(l/s)

Maximum Fan Speed: 1,850 RPM

Electrical Supply: 230V 1 Phase 50 Hz

Nominal Motor Rating 1 kW

Motor Current (flc): 6 A

Motor Current (sc): 6 A

Max. operating temp: 40°C

Weight: 514 kg

Sound Data

Noise calculated speed controlled to required duty (91.68%)

Sound Power Levels re 1 pWatts (Hz):

Hz	63	125	250	500	1k	2k	4k	8k	dBA
Breakout	69	67	54	49	43	39	33	18	33
Induct Intake	77	77	70	64	62	57	46	32	47
Induct Supply	81	83	77	72	70	66	59	52	54
Induct Discharge	83	83	77	73	70	67	59	53	55
Induct Extract	79	77	68	65	62	58	46	33	47
For 100% speed:	+2	+2	+2	+2	+2	+2	+2	+2	

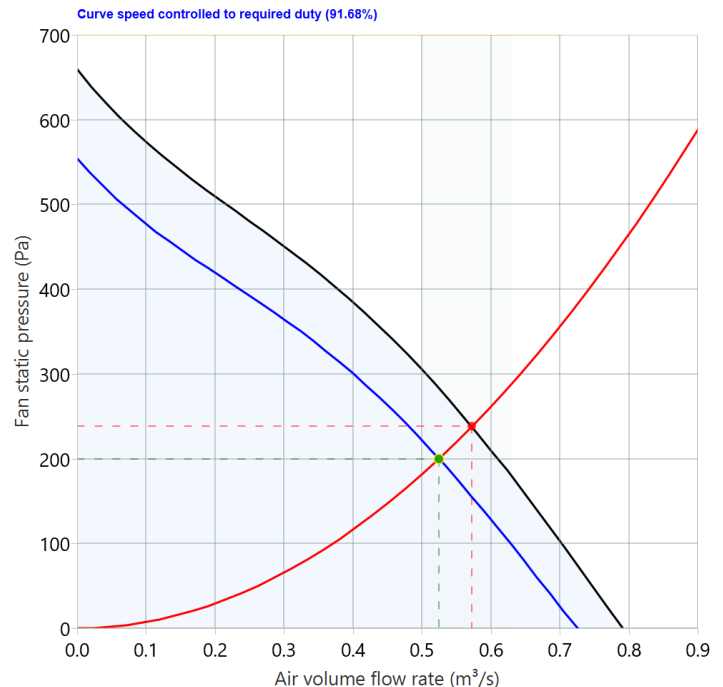
dBA is spherical at 3 metres. For hemi-spherical add 3 dBA.

Please note that the noise data stated on this data sheet for the unit and/or silencer is tested in accordance with UK, European and International industry laboratory standards. However onsite conditions may vary and we would recommend that this information is verified by an acoustic specialist in order to ensure its suitability for the intended application.

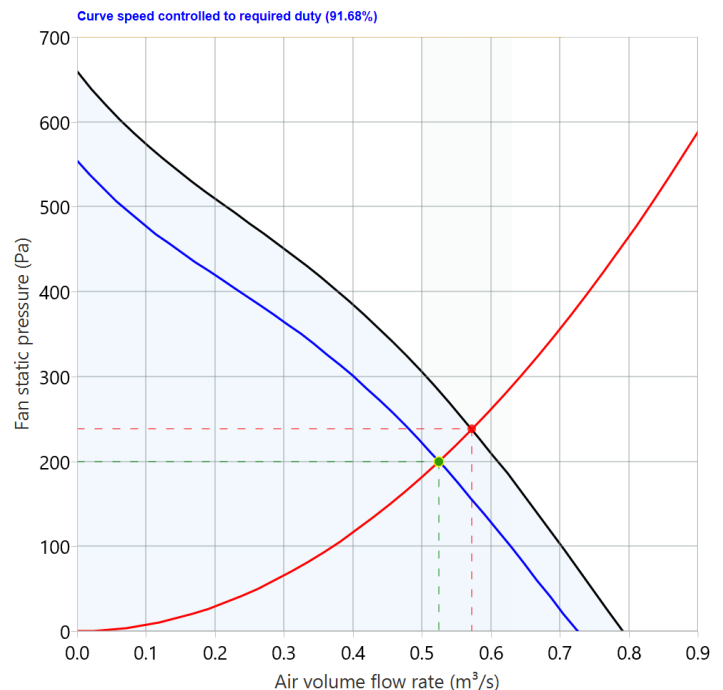
Specification

XBC65HA-NNN-T-LS1W. Nuaire XBOXER Supply & Extract HX unit. Incorporating high efficiency Counterflow plate heat exchanger 100% bypass facility (patent app. for) automatic control and actuator. Backward curved impellers, IP54 EC motors and speed control. Double skinned construction (patented). G4 Supply G4 Extract panel filters (spares included). EcoSmart Adapt Trend control of ventilation/heating, allowing unitary control and full BMS integration via BACnet IP (integration by others). EcoSmart Adapt Trend control of ventilation allowing unitary control and full BMS integration via BACnet IP (by others). For ceiling/underfloor/slab mounted applications. Supply/Discharge connections on unit centreline; Intake/Extract connections are configurable on site to either side of unit. Rotational side mounted control. Unit will be supplied LEFT HANDED. Weatherproof. 5 year warranty (UK and Ireland only)

Performance Chart (supply)



Performance Chart (extract)



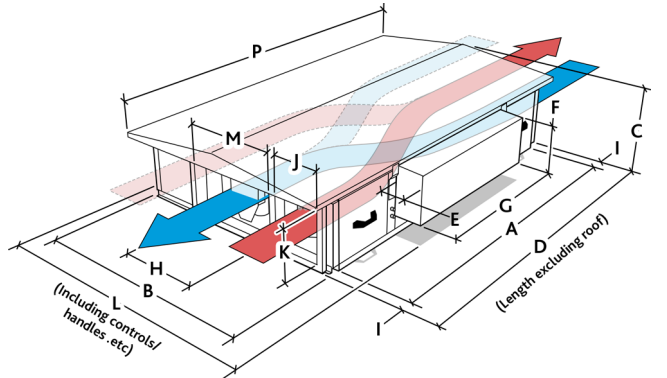
Additional Notes

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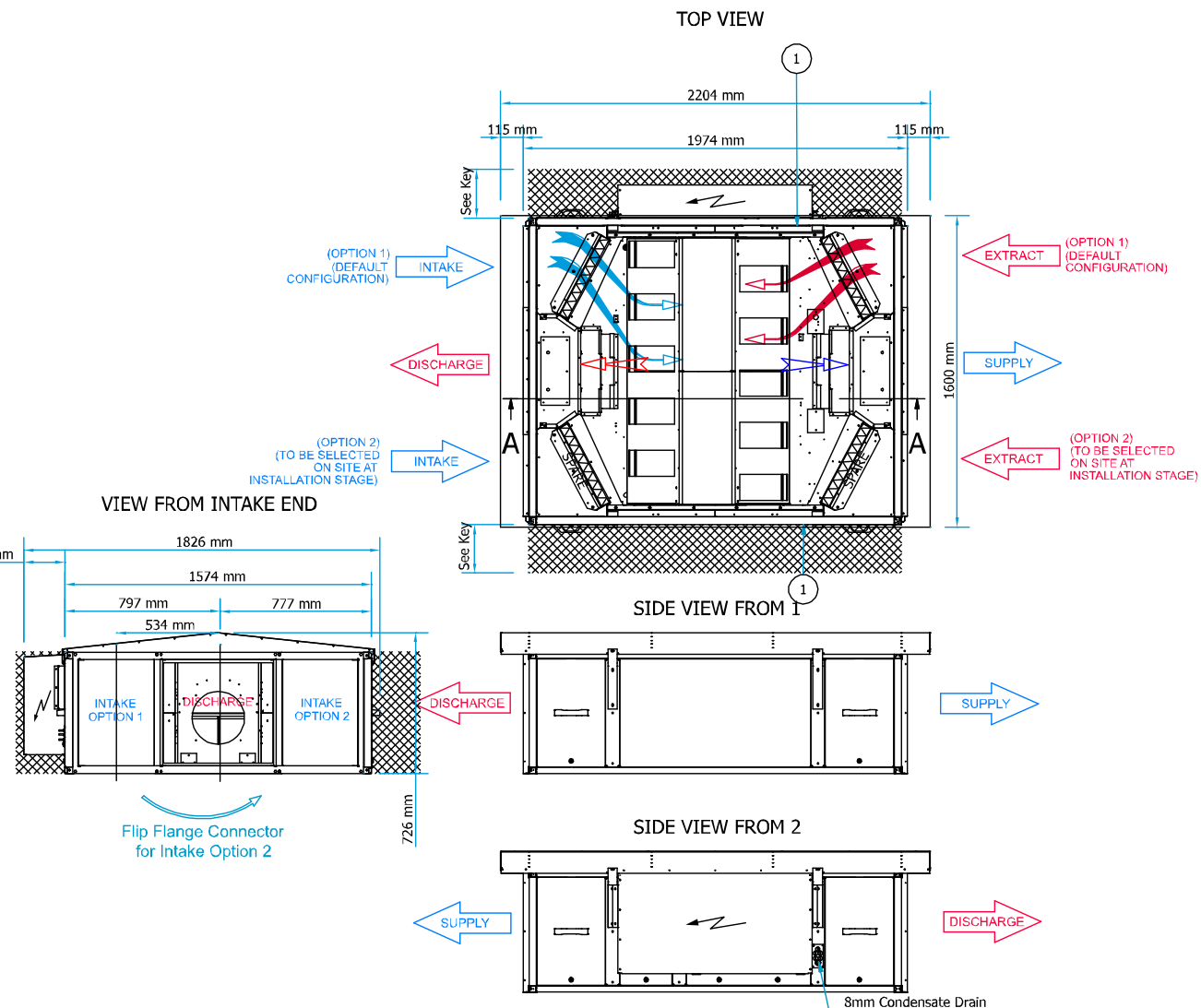
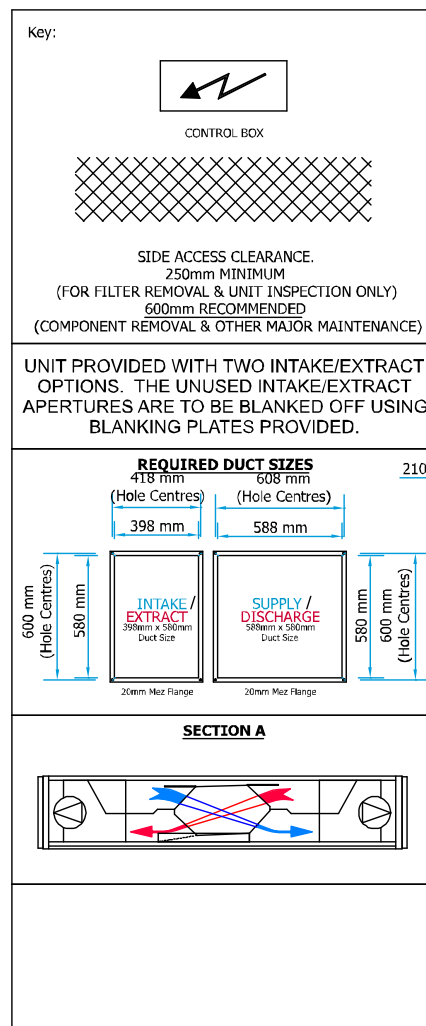
Fan Dimensions



A	B	C	D	E	F	G	H	I
1913	1570	725	1973	171	503	997	535	30
J	K	L	M	P	kg			
398	580	1759	588	2204	514.0			
Length: Width: Height:								
1913	1570	725						

Drawing is for dimensional purposes only. Dimensions in mm.

Please see selected ancillaries section for additional dimensions for any requested additional ancillaries.



You can download this CAD drawing from http://www.nuaire.info/CAD/xbcplus65-hn-l_w.dwg

Please Note: This drawing details the factory-standard unit ONLY (unless silencers are shown too). The total length or footprint may differ from that shown depending on the additional ancillaries offered on the quote or if the unit code ends in -QA*****

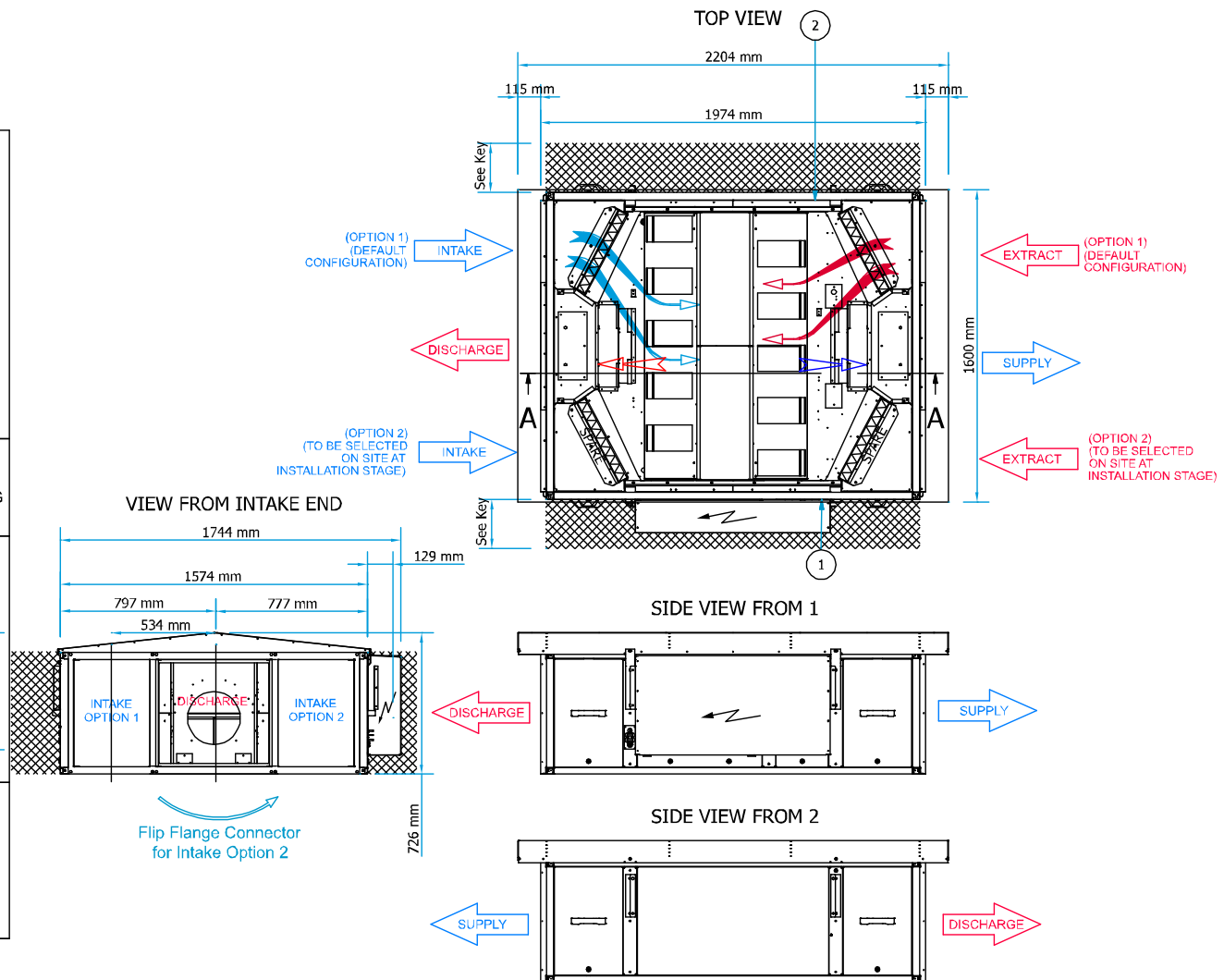
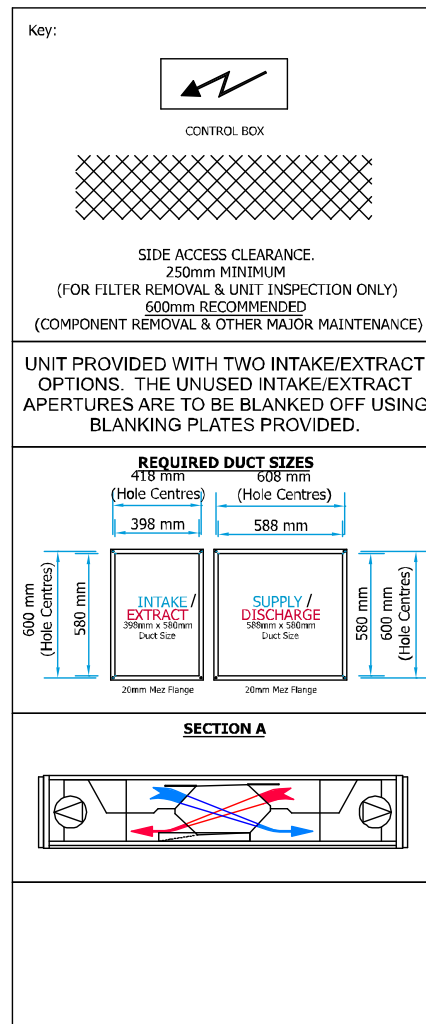
Please DO NOT sign this drawing to confirm handings.
Please request the official handing drawings from Nuaire.

Drawing generated automatically by Nuaire Selector

Do NOT scale from this drawing.



Nuaire, Western Ind Est, Caerphilly, Wales, CF83 1NA
Tel: 02920 858 8200 <https://www.nuaire.co.uk>



You can download this CAD drawing from http://www.nuaire.info/CAD/xbcplus65-hn-r_w.dwg

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Project: 23/19807/COM

LORETO COLLEGE MANCHESTER

Location: EF1 Staff Rooms

Technical Data

DE - DAVE Extract Fans

Fan Code: **DE4-ES**

Installation Manual Links: **611280**

Required duty: **0.1 m³/s at 150 Pa**

Actual duty: **0.154 m³/s at 357 Pa**

Actual at required flow: **0.1 m³/s at 443 Pa**

When speed controlled to required duty (64.89%):

Motor Input Power: **0.05 kW**

Specific Fan Power: **0.5 W/(l/s)**

Velocity at required duty: **2.037 m/s**

At full speed:

Motor Input Power: **0.181 kW**

Specific Fan Power: **1.2 W/(l/s)**

Maximum Fan Speed: **2,550 RPM**

Electrical Supply: **230V, 1 Phase, 50 Hz**

Nominal Motor Rating: **0.17 kW**

Motor current (flc): **1.35 A**

Motor starting current (sc): **1.35 A**

Max. operating temp: **60°C**

Weight: **35 kg**

All Ecosmart fans feature soft-starting and stepless variable speed control. A switch disconnector is required to isolate the fan from the electrical supply.

Sound Data

Acoustic performance to ISO 13347 and AMCA 300.

Noise calculated speed controlled to required duty (64.89%)

Sound Power Levels re 1 pWatts (Hz):

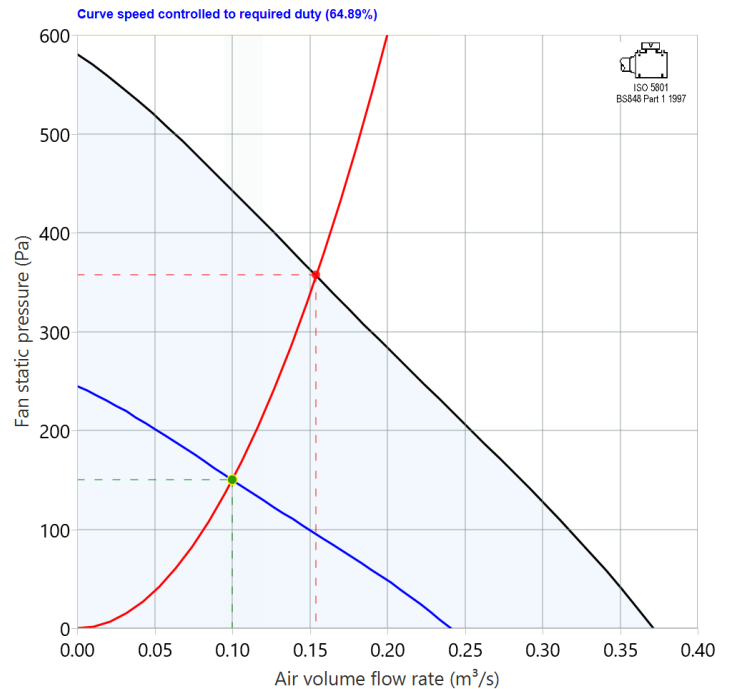
Hz	63	125	250	500	1k	2k	4k	8k	dBA
Induct Inlet	70	68	57	56	46	44	45	44	
Induct Outlet	78	78	60	53	49	49	43	45	
Breakout	54	52	43	36	27	23	18	<16	22
For 100% speed:	+3	+4	+5	+7	+10	+10	+10	+10	

dBA is hemi-spherical at 3 metres. For spherical deduct 3 dBA.

Values shown are for inlet Lw, outlet Lw sound power & breakout levels for: Installation Type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction.

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Performance Chart



Additional Notes

Selected Ancillaries

2 x CFCH25

Hi-temp flexible connector

1 x ES-LCD

Ecosmart LCD Touch Screen User Control (White)

CFCH25 - Hi-temp flexible connector

Weight:

0.5 kg

Specification

Dave high performance extract fan, standard case with patented 'Floating fan' construction. Single skin, with infill panels and manufactured from heavy gauge, corrosion resistant Magnelis steel. The unit is suitable for internal or external mounting, in any orientation and incorporates a full length top or bottom access panel. The fan impeller and EC motors are selected to provide optimum performance and energy efficiency conforming to Part L regulations. Units are suitable for operation in ambient temperatures of up to 60°C (sizes 1-5), 40°C (sizes 6-7) and are Class L2 leakage. The unit shall be controlled by an integrated Ecosmart control mounted externally to the case. The fans shall have the following energy saving and operational functions integrally installed with in it, all components will be pre-wired and fitted by the manufacturer:

- Integral Frequency inverter/speed controller.
- Integral adjustable run-on timer.
- Maximum and minimum speed adjustment/setting (trickle and boost).
- Volt free run & failure/status indication.
- 0-10V BMS interface for remote operation.
- Multiple low voltage sockets for interconnection of sensors or fans.
- Background ventilation/trickle enable switch.

The unit is supplied with circular spigots and set of four mounting brackets. The Fan unit shall have a 5 year warranty. The product warranty applies to the UK mainland and in accordance with Clause 14 of our Conditions of Sale. Customers purchasing from outside of the UK should contact Nuaire International Sales office for further details.

CFCH25

Circular flexible connector without flanges. Flexible duct material is flameproof and resistance to heat up to 400°C, chemicals, ozone, oil and grease. The material is airtight, waterproof and tested to BS476 Part 7. Supplied complete with fixing straps.

ES-LCD

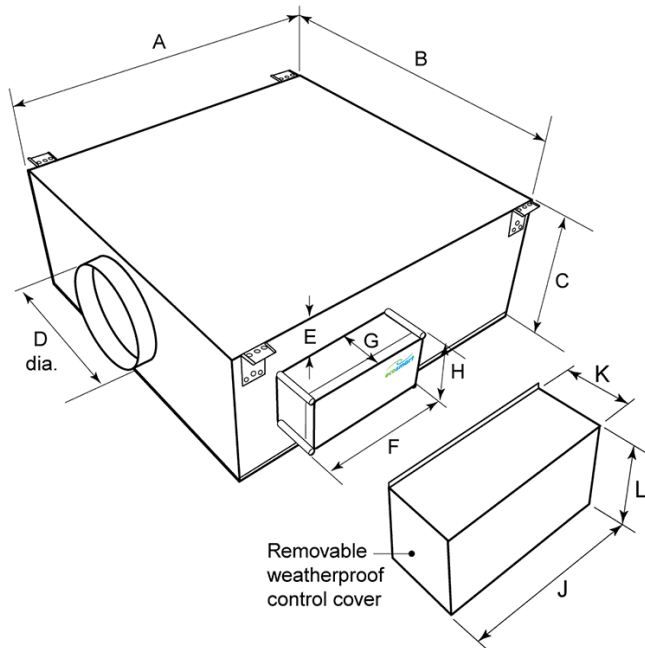
LCD touch screen ventilation user control panel in white compatible with Ecosmart system. Control has built in time clock. Supplied with pre-plugged 10m length of communication cable.

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Fan Dimensions



A	B	C	D	E	F	G	H	J
605	848	380	250	131	370	96	150	470
K	L	kg						
120	170	35.0						
Length:	Width:	Height:						
605	848	380						

Drawing is for dimensional purposes only. Dimensions in mm.

Please see selected ancillaries section for additional dimensions for any requested additional ancillaries.