

**XBOXER
UNIVERSAL
HEAT
RECOVERY
UNIT**

CONTENTS

PROUD TO BUILD BRITISH



We've been pioneers in new air technology since 1966. Our heritage is in the design and manufacture of fans and ventilation systems. *We put our energy into efficient ventilation so you don't waste yours.*

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Pioneering

We lead the way in product innovation with a stream of ground-breaking products over decades.



Trusted

We have a reputation for our build quality. We establish long term relationships and are always transparent with our test data.



Agile

We're one of the UK's leading manufacturers, covering both residential and commercial air quality. We offer innovative advice and provide flexible solutions.



Expert

Our team is made up of over 600 people, 50 of which have over 25 years' experience. We have the skills and knowledge to help find the best solution for our customers.



Attentive

We're expert listeners, rising to any challenge and going the extra mile for our customers. We add value by solving problems. We sell solutions, not fans.



Personal

We work closely with our customers and can provide bespoke solutions to meet their specific project needs. Many of our product ranges were developed this way.

“Our expertise, experience and innovation are what makes us stand out from the rest of the market.”

Nuaire.



For help with selecting a unit, speak to us on **02920 858200** or email: enquiries@nuaire.co.uk

ABOUT THE XBOXER FAMILY

Our award-winning Xboxer family is the combination of innovative design, flexible control options and high efficiency, making it the market-leading heat recovery solution.

Xboxer Universal leans on the mechanical credentials of our market leading XBC+ heat recovery units. Both units are designed to filter clean air into a building whilst extracting stale air from the interior, all while retaining heat that would otherwise be lost. Setting itself apart from the market with its high efficiencies, low SFPs and low noise levels.

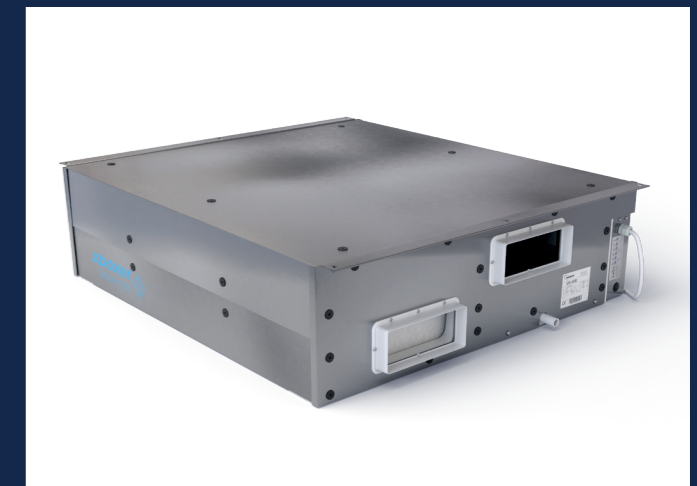
The XBC+ is an innovative space saving solution with the lowest depth by duty unit on the market. This enables us to offer a low-energy solution for a multitude of commercial applications. The combination of innovative design and state-of-the-art controls ensures the best possible indoor air quality while helping save space on-site and money.

The Xboxer Universal is manufactured with a unique casing consisting of internal profiling and external acoustic cladding, this superior acoustic solution is perfect for multiple locations, such as university accommodations, care homes and apartment as they ensure lower noise levels.



XBOXER XBC+

High performance, low noise, and the lowest depth by duty on the market.



XBOXER UNIVERSAL

Class-leading noise levels due to the uniquely designed casing which consist of internal profiling and external acoustic cladding.

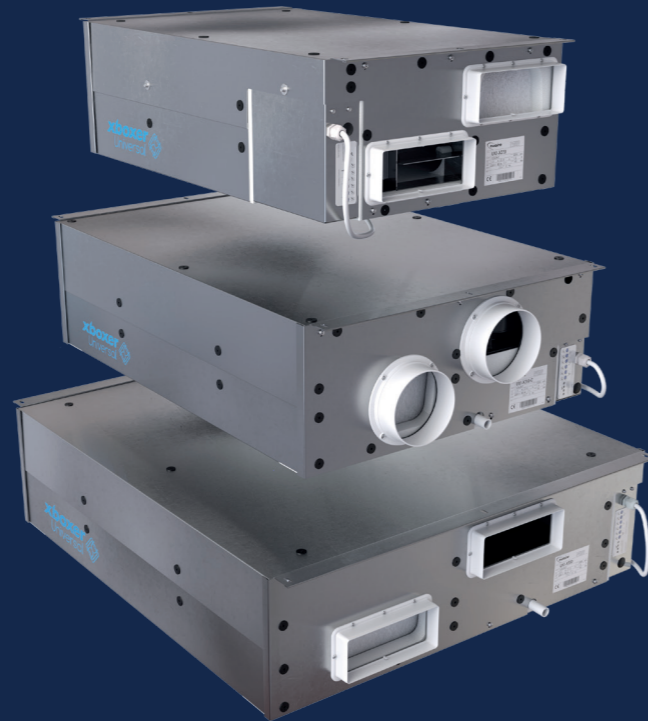
ABOUT XBOXER UNIVERSAL

Xboxer Universal is a range of high performance heat recovery units offering efficiency and control over the air quality within your room.

Units provide tempered air into living areas whilst extracting stale, moisture-laden air from wet areas.

The range is ideal for student accommodation and applications such as meeting rooms and offices.

For a better ventilation solution in multi occupational spaces, choose Nuair.



CODING UNI-X360-C

UNI-X 360 - C
 1 2 3

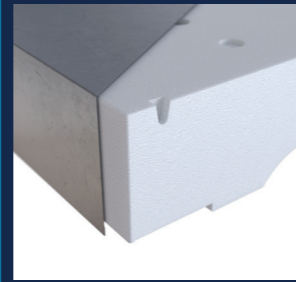
SAMPLE CODING

1. UNI-X range
2. Unit size 220, 360 or 580
3. C – Circular spigots
 No suffix – Rectangular Spigots

▶ **INTEGRAL MOUNTING BRACKET AS STANDARD** helps reduce installation time.



▶ **CLASS LEADING NOISE LEVELS** unique rigid casing design with acoustic cladding.



▶ **G3 FILTERS AS STANDARD** can be easily accessed from the underside of the unit.



▶ **UNITS ARE NOT HANDED** condensate drain is positioned at the front of the unit.



▶ **MULTIPLE SPIGOT OPTIONS** available with either circular or rectangular spigots.



APPLICATION TYPICAL LAYOUTS

For projects where airflow, low noise, and occupant comfort needs to be guaranteed, Xboxer Universal is the perfect solution. Its small, sleek design makes it ideal for any commercial multiple-occupancy space, such as schools, hospitals, offices, care homes and apartment. The unique casing provides a superior acoustic solution reducing noise levels.



We appreciate that spaces with high occupancy levels require unique solutions, with that in mind, we have developed a wide range of ventilation products to ensure the highest levels of indoor air quality with minimal maintenance and occupant interaction.

Nuair's Xboxer Universal is a high-performance heat recovery unit that offers control over the air quality within your space. The purpose-built design provides tempered air while extracting stale, moisture-laden air from wet areas, providing a comfortable living and working environment.

The Xboxer Universal's ability to blend seamlessly into a small living environment while ventilating clusters of rooms make it ideal for apartments care homes and student accommodation. The UNIT comes in three sizes that can accommodate up to 12 clusters of rooms, including a kitchen and communal living space.



SCHOOLS



HOSPITALS



OFFICES



CARE HOMES



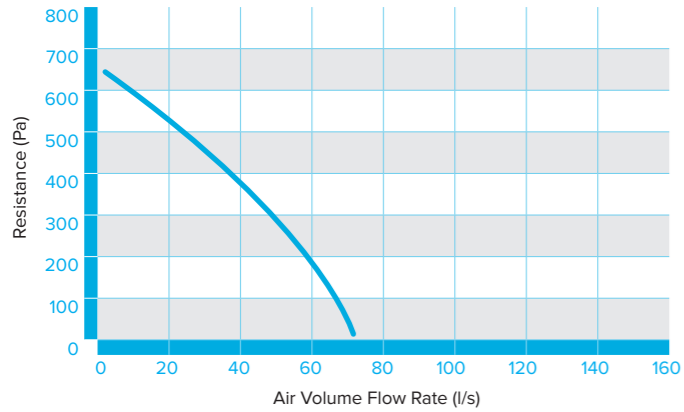
FLATS



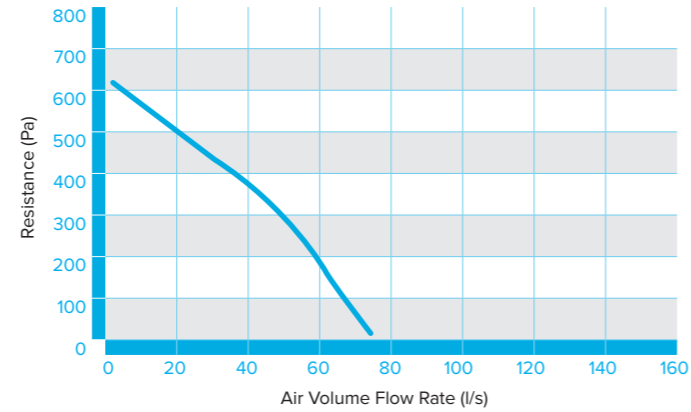
STUDENT ACCOMMODATION

UNI-X-220 & 220-C PERFORMANCE & TECHNICAL INFORMATION

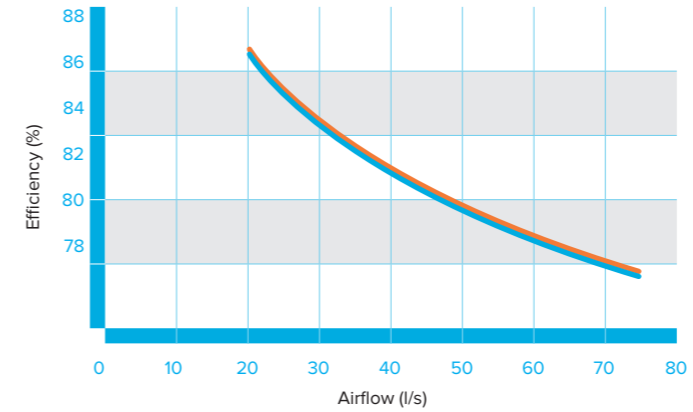
UNI-X-220 RECTANGULAR SPIGOTS PERFORMANCE CURVE



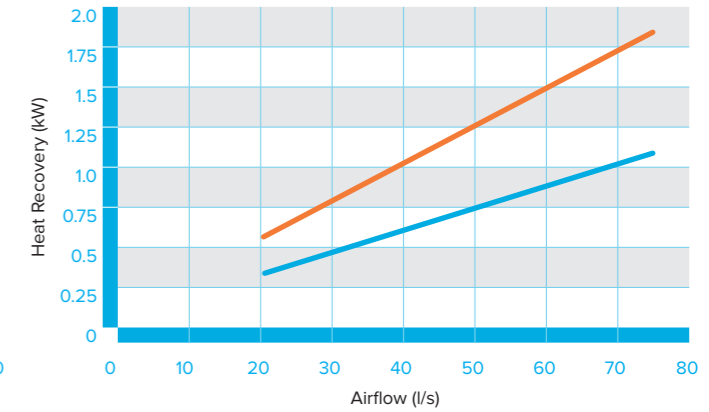
UNI-X-220-C CIRCULAR SPIGOTS PERFORMANCE CURVE



UNI-X-220 & UNI-X-200-C HEAT EXCHANGER EFFICIENCY



UNI-X-220 & UNI-X-200-C HEAT EXCHANGER RECOVERY



TECHNICAL AND ACOUSTIC DATA

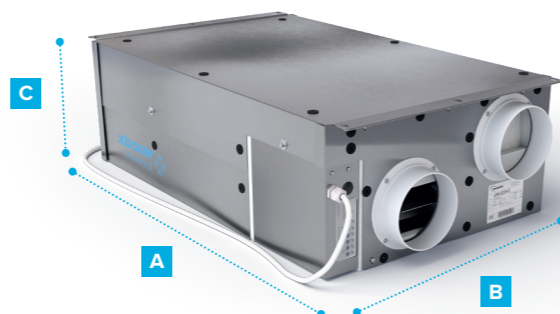
SPIGOT OPTION	FAN CODE	VOLTAGE (V AC)	INPUT POWER (kW)	FLC/SC (A)	FAN SPEED (RPM)	TYPE	SOUND POWER LEVELS RE 1pW (Hz)								
							63	125	250	500	1K	2K	4K	8K	dB @3M
Rectangular	UNI-X220	230	0.17	1.32	3200	Open Extract	54	54	60	59	47	46	36	33	
						Open Supply	54	50	58	54	49	44	34	28	
						Breakout	53	53	59	63	40	34	24	18	39
Circular	UNI-X220-C	230	0.17	1.32	3200	Open Extract	63	57	60	61	43	44	33	31	
						Open Supply	61	52	60	55	46	41	30	26	
						Breakout	53	53	59	63	40	34	24	18	39

EXAMPLE SELECTIONS

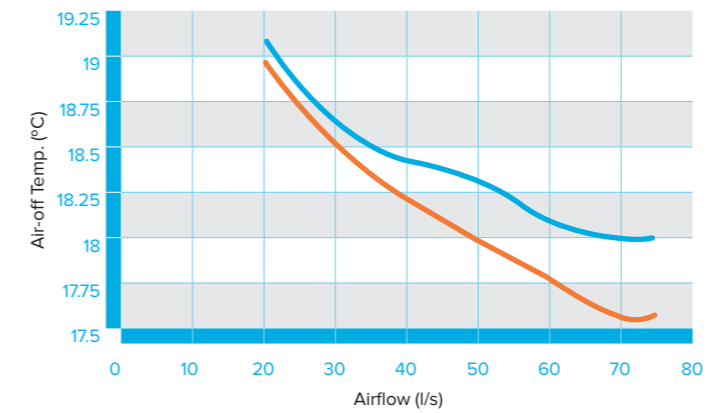
NO. OF BEDS	PLUS KITCHEN / LIVING	DUTY	RESISTANCE	SFP (W/L/S)	dBA
2 bed	1	29 l/s	75 Pa	0.9	36
3 bed	1	37 l/s	75 Pa	1.1	37
4 bed	1	45 l/s	75 Pa	1.4	39

DIMENSIONS (mm) AND WEIGHT (kg)

MODEL	A	B	C	WEIGHT
UNI-X220	979	575	293	40
UNI-X220-C	979	575	293	40



UNI-X-220 & UNI-X-200-C AIR-OFF TEMPERATURE



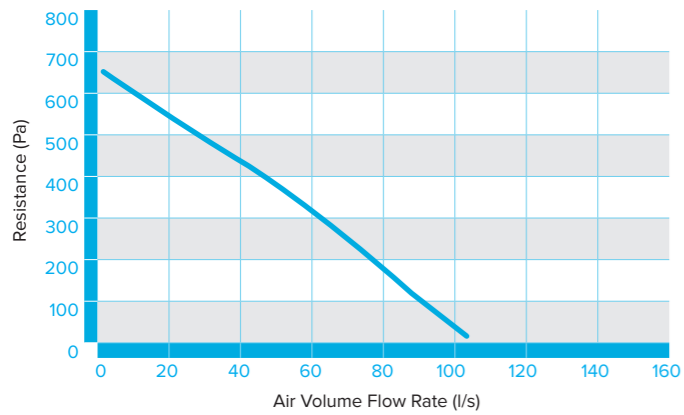
KEY

6° inlet temp
5° inlet temp

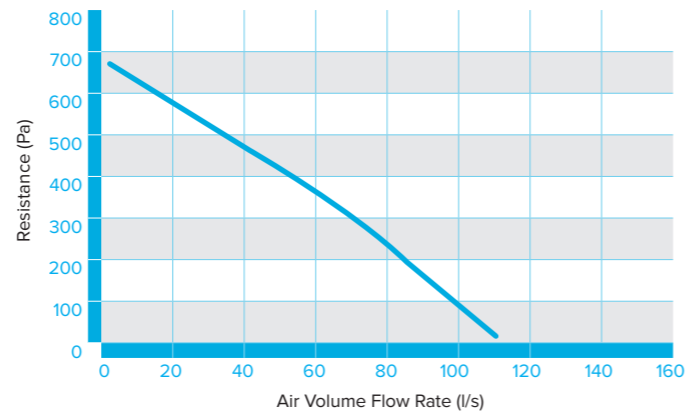
UNI-X-360 & 360-C

PERFORMANCE & TECHNICAL INFORMATION

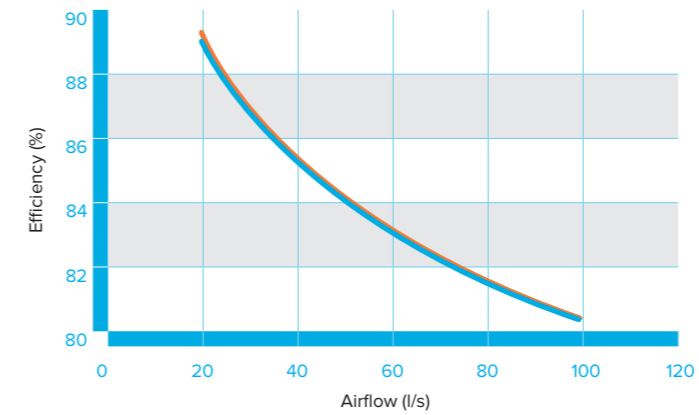
UNI-X-360 RECTANGULAR SPIGOTS PERFORMANCE CURVE



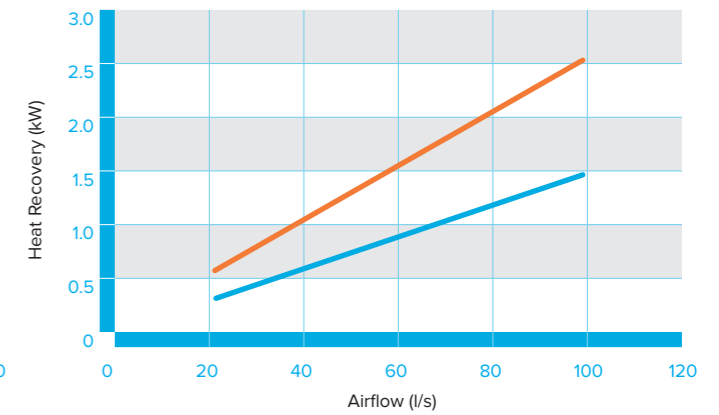
UNI-X-360-C CIRCULAR SPIGOTS PERFORMANCE CURVE



UNI-X-360 & 360-C HEAT EXCHANGER EFFICIENCY



UNI-X-360 & 360-C HEAT EXCHANGER RECOVERY



TECHNICAL AND ACOUSTIC DATA

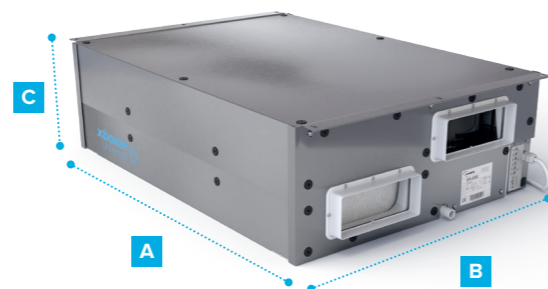
SPIGOT OPTION	FAN CODE	VOLTAGE (V AC)	INPUT POWER (kW)	FLC/SC (A)	FAN SPEED (RPM)	TYPE	SOUND POWER LEVELS RE 1pW (Hz)								
							63	125	250	500	1K	2K	4K	8K	dB @3M
Rectangular	UNI-X360	230	0.17	1.32	3200	Open Extract	57	50	64	61	47	48	40	37	
						Open Supply	56	47	60	60	48	46	37	30	
						Breakout	51	53	63	61	43	39	31	30	39
Circular	UNI-X360-C	230	0.17	1.32	3200	Open Extract	54	57	63	64	48	47	39	37	
						Open Supply	52	54	57	59	49	46	35	29	
						Breakout	55	54	60	61	45	40	31	25	38

EXAMPLE SELECTIONS

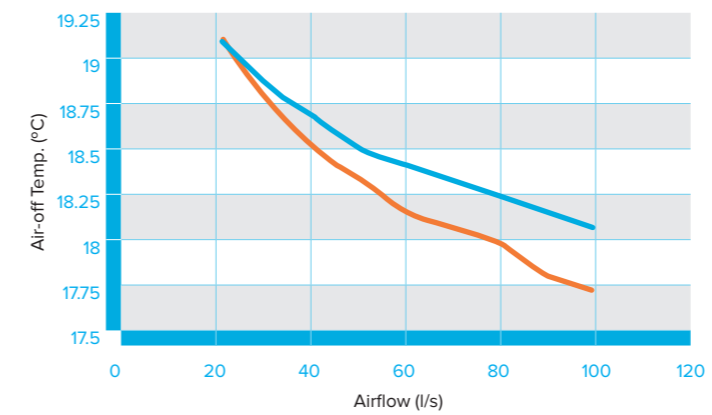
NO. OF BEDS	PLUS KITCHEN / LIVING	DUTY	RESISTANCE	SFP (W/L/S)	dBA
5 bed	1	53 l/s	75 Pa	0.8	35
6 bed	1	61 l/s	75 Pa	0.9	36
7 bed	1	69 l/s	75 Pa	1.1	38
8 bed	1	77 l/s	75 Pa	1.2	39

DIMENSIONS (mm) AND WEIGHT (kg)

MODEL	A	B	C	WEIGHT
UNI-X360	1069	725	293	55
UNI-X360-C	1069	725	293	55



UNI-X-360 & 360-C AIR-OFF TEMPERATURE



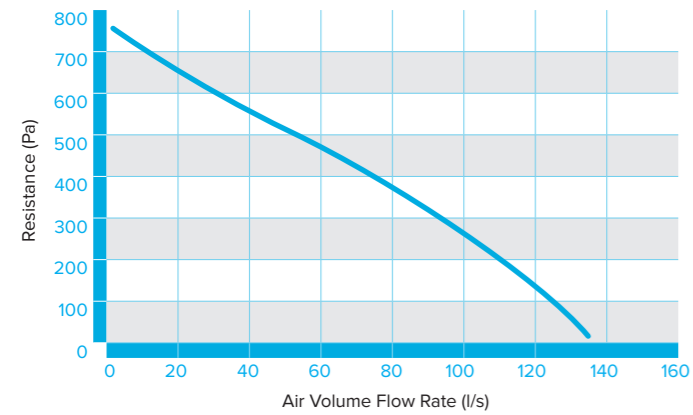
KEY

- 6° inlet temp
- 5° inlet temp

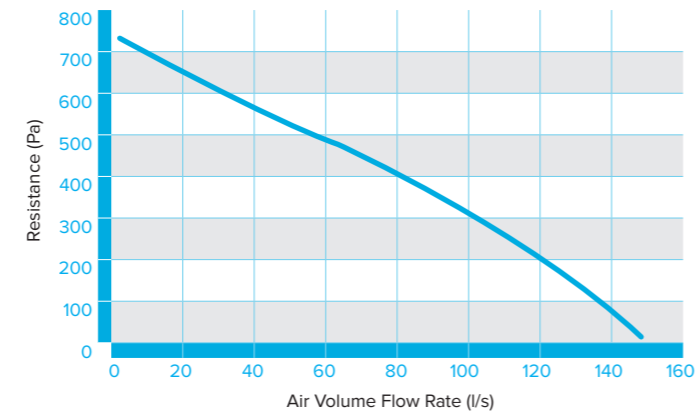
UNI-X-580 & 580-C

PERFORMANCE & TECHNICAL INFORMATION

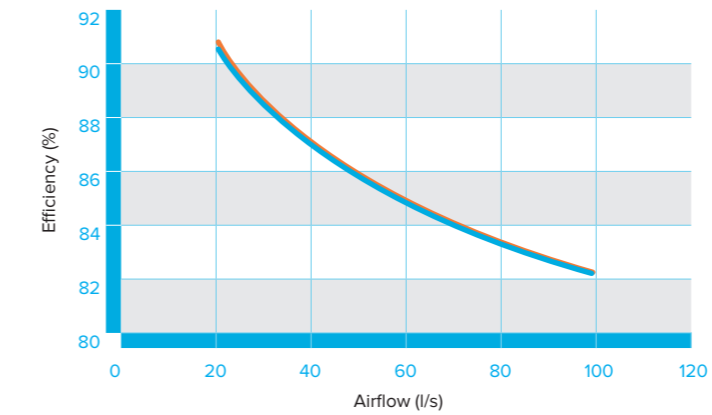
UNI-X-580 RECTANGULAR SPIGOTS PERFORMANCE CURVE



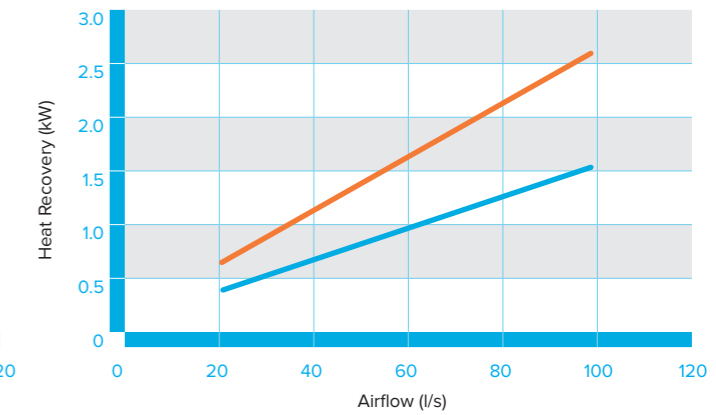
UNI-X-580-C CIRCULAR SPIGOTS PERFORMANCE CURVE



UNI-X-580 & 580-C HEAT EXCHANGER EFFICIENCY



UNI-X-580 & 580-C HEAT EXCHANGER RECOVERY



TECHNICAL AND ACOUSTIC DATA

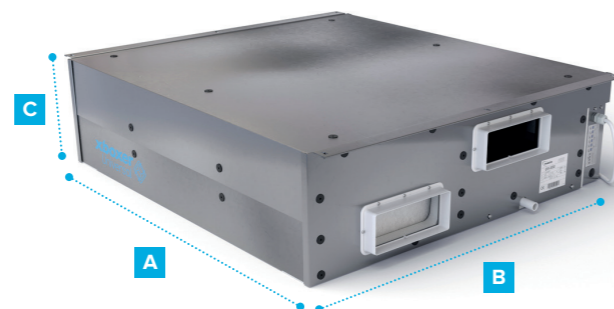
SPIGOT OPTION	FAN CODE	VOLTAGE (V AC)	INPUT POWER (kW)	FLC/SC (A)	FAN SPEED (RPM)	TYPE	SOUND POWER LEVELS RE 1pW (Hz)									
							63	125	250	500	1K	2K	4K	8K	dB @3M	
Rectangular	UNI-X580	230	0.31	2	2860	Open Extract	61	58	68	59	51	52	40	35		
						Open Supply	56	55	65	57	52	49	39	29		
						Breakout	65	67	66	61	48	43	34	29	40	
Circular	UNI-X580-C	230	0.31	2	2860	Open Extract	57	63	69	61	49	51	39	36		
						Open Supply	59	60	66	59	53	48	37	29		
						Breakout	65	68	66	62	49	44	35	30	41	

EXAMPLE SELECTIONS

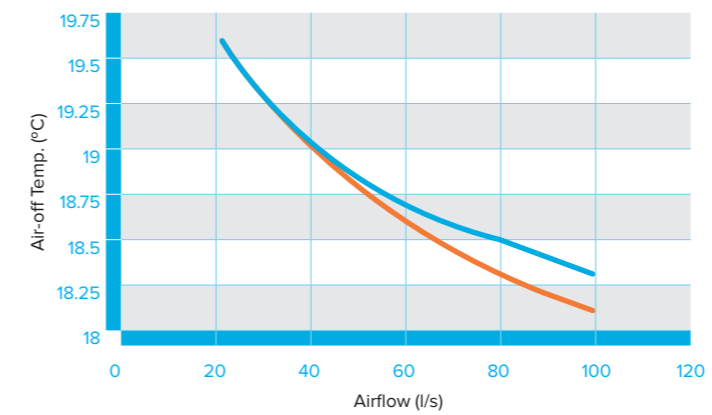
NO. OF BEDS	PLUS KITCHEN / LIVING	DUTY	RESISTANCE	SFP (W/L/S)	dBA
9 bed	1	85 l/s	75 Pa	11	37
10 bed	2	106 l/s	100 Pa	16	40
12 bed	1	109 l/s	100 Pa	16	40

DIMENSIONS (mm) AND WEIGHT (kg)

MODEL	A	B	C	WEIGHT
UNI-X580	1136	989	294	69
UNI-X580-C	1136	989	294	69



UNI-X-580 & 580-C AIR-OFF TEMPERATURE



KEY

- 6° inlet temp
- 5° inlet temp

XBOXER UNIVERSAL CONSULTANT SPECIFICATION

UNIT SPECIFICATION

The unit shall be manufactured from high density EPS (Expanded polystyrene) with galvanised sheet steel casing to provide excellent thermal and acoustic characteristics, while providing a lightweight and low profile casing. Incorporating a high efficiency, aluminium counter flow heat exchanger block with a thermal efficiency of up to 85%. The heat exchanger will be protected by two G3 grade filters in the fresh inlet and system extract air streams, with both filters being accessible from the underside of the unit allowing for quick and easy maintenance.

The unit shall have a maximum height less than 295mm to fit within ceiling voids.

The unit will contain two, low energy, high efficiency EC fan assemblies, with centrifugal backward curved impellers offering IP54 rating and stepless speed control. The fans will have the facility for variable speed control at trickle (continuous background ventilation), and boost speed to allow for individual specific adjustment during commissioning. The motors shall be suitable for use in ambient temperatures of 40°C.

CONTROL OPTIONS

The control shall be capable of 3 speed operation. All versions shall have the following functions integrally mounted with the fan unit on a purpose made PCB, all such components are pre-wired and factory fitted by the manufacturer:

- Independent control of background supply and extract flow rates.
- Independent control of boost speed supply and extract flow rates.
- Independent control of secondary boost speed supply and extract flow rates.
- Integral fan failure indication.
- Integral Switch Live terminal for boost speed commission level, from remote switch eg. light switch.
- Integral Switch Live terminal for secondary boost to commission level from remote switch, eg. wall switch.
- Integral heat exchanger frost protection.
- Automatic summer bypass.

The unit shall be supplied complete with a condensate drip tray and 21.5mm drain connection.

The unit shall be fitted as standard with an automatic 100% bypass facility.

The bypass opens automatically when the supply air exceeds 20°C, this opens the bypass channel via actuators and allow the outside air to bypass the heat exchanger. The air which is bypassed will still pass through the filter to ensure that the air quality remains the same regardless of the external temperatures.

The breakout noise level and power requirements shall be as detailed by the unit manufacturer and in accordance with the ventilation equipment schedule.

XBOXER UNIVERSAL CONSULTANT SPECIFICATION

OPERATION

The unit shall be positioned as indicated on the drawings and shall be in accordance with the particular fan schedule in the specification.

The combined supply and heat recovery unit shall supply filtered fresh air to each to the habitable rooms whilst extracting moisture-laden air from wet areas eg. bathrooms.

The supply air shall be tempered via the counterflow heat exchanger.

The unit shall boost its speed and therefore the ventilation rate as it receives a signal from light/remote switch.

The unit shall have a secondary boost speed in addition to the standard boost speed.

The unit shall have the facility to commission the supply and extract fan independently at all 3 speeds.

UNITS WITH RECTANGULAR SPIGOTS

UNI-X220:

The unit shall be suitable for 220 x 90mm Rectangular ducting.

UNI-X360:

The unit shall be suitable for 220 x 90mm Rectangular ducting.

UNI-X580:

The unit shall be suitable for 220 x 90mm Rectangular ducting.

UNITS WITH CIRCULAR SPIGOTS

UNI-X220-C:

The unit shall be suitable for Ø150mm Circular ducting.

UNI-X360-C:

The unit shall be suitable for Ø150mm Circular ducting.

UNI-X580-C:

The unit shall be suitable for Ø150mm Circular ducting.

CODING UNI-X360-C

UNI-X 360 - C
 1 2 3

SAMPLE CODING

1. UNI-X range
2. Unit size 220, 360 or 580
3. C – Circular spigots
No suffix – Rectangular Spigots



COMMERCIAL

WWW.NUAIRE.CO.UK/COMMERCIAL



RESIDENTIAL

WWW.NUAIRE.CO.UK/RESIDENTIAL



INTERNATIONAL

WWW.NUAIRE.CO.UK/INTERNATIONAL



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