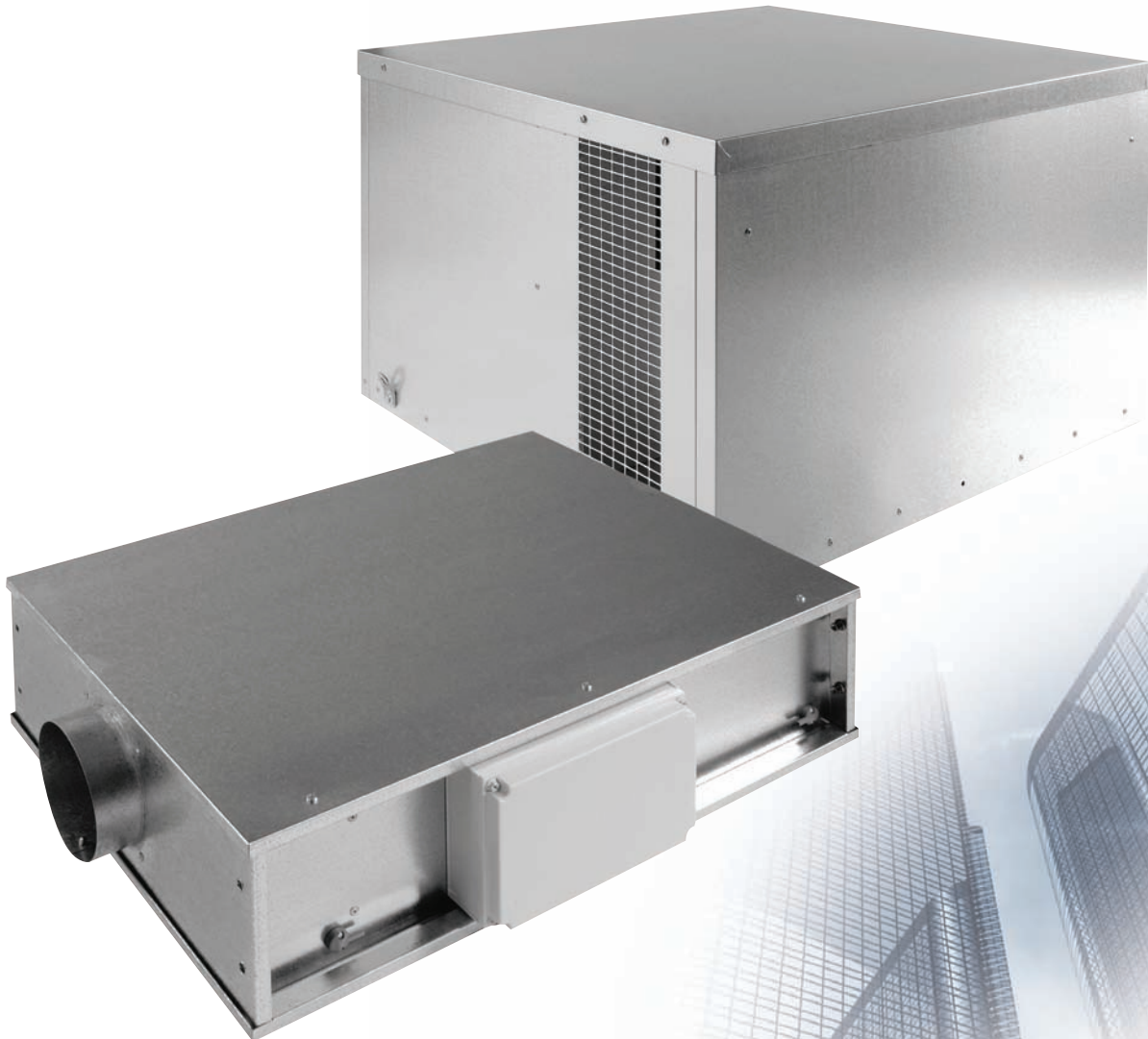


## CONSTANT PRESSURE SINGLE FANS

ENERGY SAVING CENTRAL EXTRACT SYSTEM THAT PRECISELY  
VENTILATES INDIVIDUAL ROOMS DEPENDING ON  
THEIR REQUIREMENTS.



## BENEFITS

### QUIETEST SYSTEMS

Nuairé's unique integrated silencer means that your systems acoustic requirements both induct (suction side) and breakout are maintained whilst saving space on site.

### QUIET OPERATION

Does not generate noise by throttling back on balancing dampers required in conventional systems.

### TRUE DEMAND VENTILATION

Only the areas requiring ventilation receive ventilation.

### SAVES ENERGY

Up to 70% saving over conventionally controlled central systems.

- Not needlessly extracting conditioned air
- Fan speed/motor power dictated by demand requirement.

### UNIQUE DIRECT ACTING MULTI-POSITION DAMPER/GRILLE

Ensures operation only when room occupied with integrated PIR.

### PRE-WIRED

All components assembled, wired and tested at the Nuairé manufacturing facility.  
- Simply plug and go.

### ENHANCED CAPITAL ALLOWANCE COMPLIANT

Immediate benefits to your client.

### INTEGRATED SILENCER

Sizes 6 and 9.

### DUCT MOUNTED VERSION OF DAMPER

For unobtrusive flexibility.

### TWIN OR SINGLE

Twin or single fan options are available.

### WARRANTY

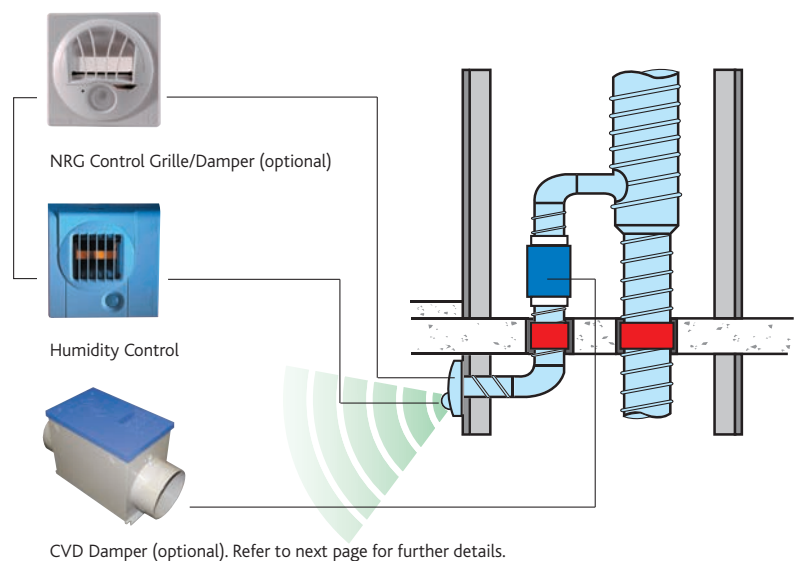
Ecosmart Constant Pressure fans have a 5 year warranty.

Note: For further details on Constant Pressure single fan options, please contact Nuairé.

Note: These units have the pressure sensor configured for extract application. For supply applications please contact Nuairé.

### WHAT IS CONSTANT PRESSURE?

Constant Pressure Variable Volume systems (CPVV) are systems of fans, controls & sensors installed in a ducted system. The system is intended to provide continuous background ventilation when the served space is unoccupied and will automatically increase the ventilation rate when occupied to the design requirement.



**PERFORMANCE - CVD DAMPER**

A nominal pressure drop must be allowed in order to ensure adequate airflow through the damper.

To ensure the airflow pattern through the damper produces consistent readings; the pressure drop across the damper should not exceed the recommended value.

Recommended values are listed in the table below and shown in the performance envelope of each damper.

Code	Nominal design pressure	Maximum across damper*
CVD100	60Pa	120Pa
CVD125	70Pa	140Pa
CVD150	80Pa	160Pa
CVD200	90Pa**	200Pa

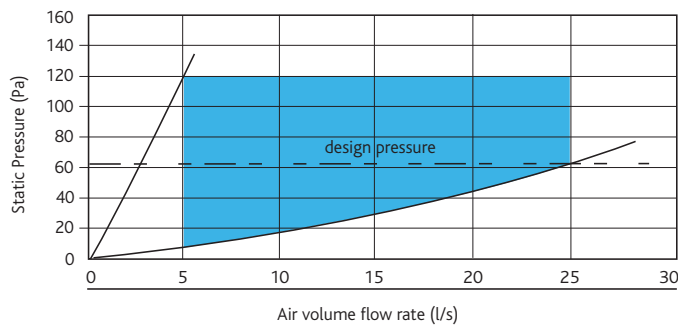
\*Recommended maximum operating pressure to ensure the damper would work within calibration limits.

Keep the duct velocity as low as possible to ensure the system produces the lowest energy usage, preferably below 5m/s.

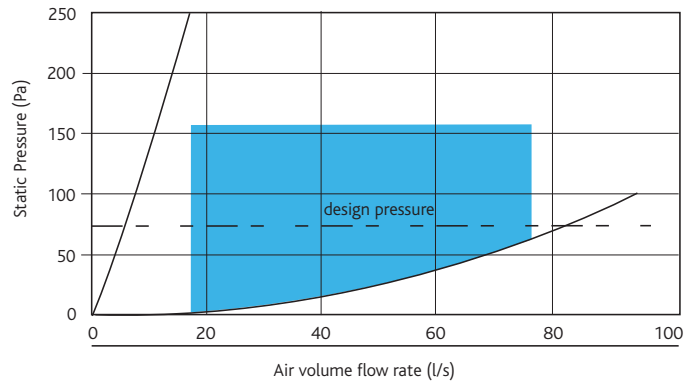
\*\*Allow 90Pa for duties below 100l/s and 150Pa for duties between 100l/s and 125l/s.

Please refer to our commissionary guide 671405 for more detail regarding constant pressure systems.

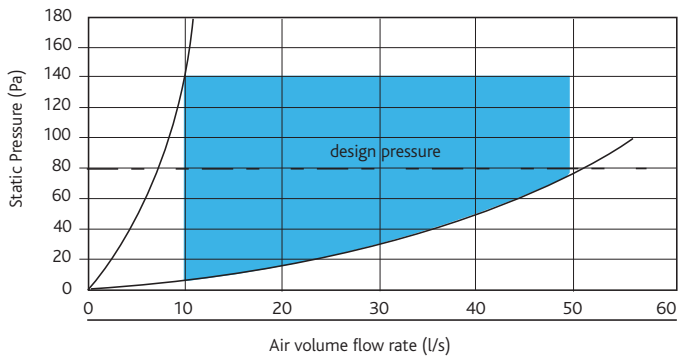
Performance envelope for CVD100



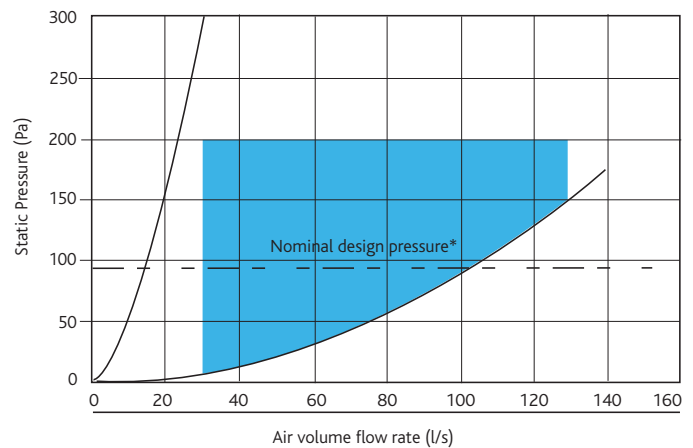
Performance envelope for CVD150



Performance envelope for CVD125

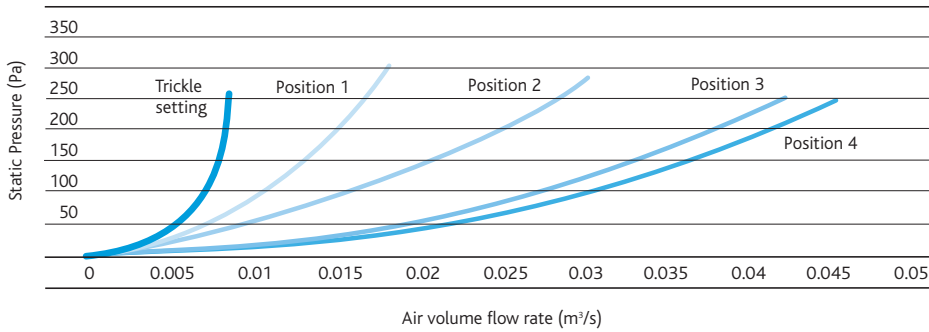


Performance envelope for CVD200

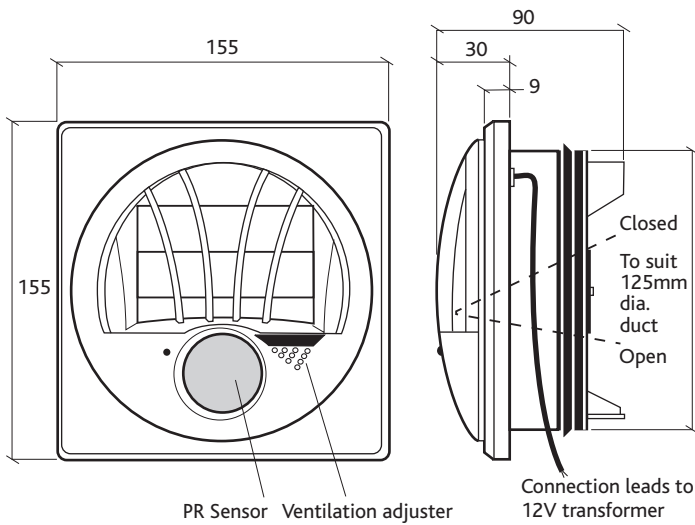


PERFORMANCE - NRG MOTORISED GRILLE/DAMPER

Motorised grille/damper type NRG Acoustic Information



DIMENSIONS NRG GRILLE DAMPER

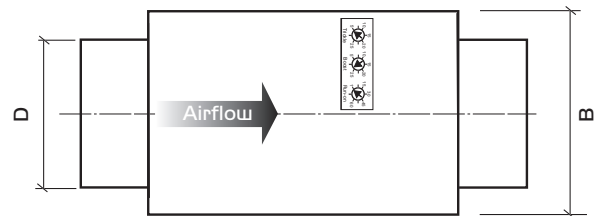


DIMENSIONS CVD DAMPERS

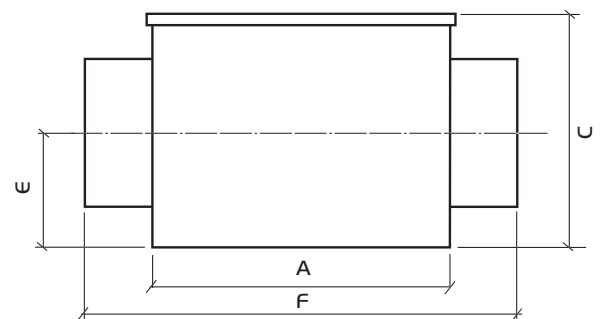
Dimensions in mm.

Code	A	B	C	D	E	F	Weight Kg
CVD100	221	128	165	100	69	295	2
CVD125	300	180	195	125	75	400	3.5
CVD150	300	200	220	150	90	400	3.7
CVD200	300	230	275	200	115	400	4

Plan view

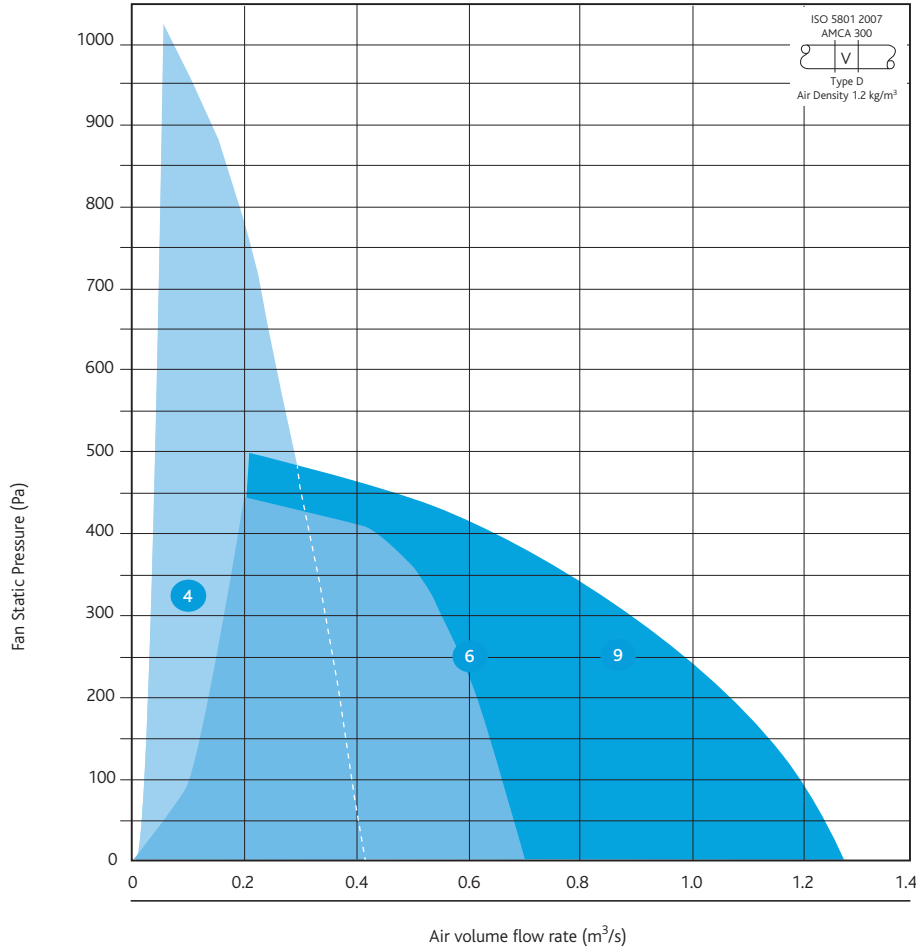


Side view

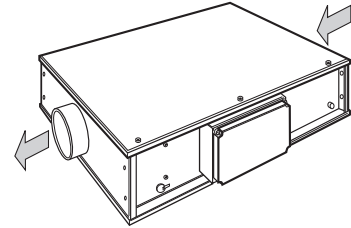


**PERFORMANCE - CONSTANT PRESSURE SINGLE FANS**

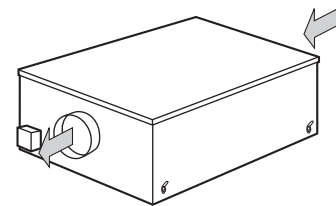
**ESXCP Single Fans 4-9**



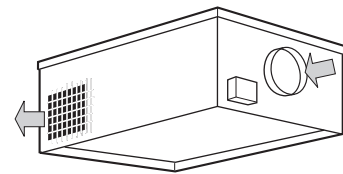
**Casing**



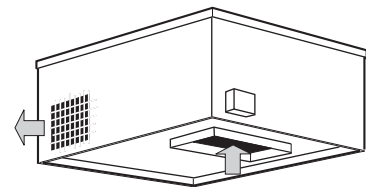
**ESXCP Internal In-line Single Fans**



**ESXCP-X External In-line Single Fans**



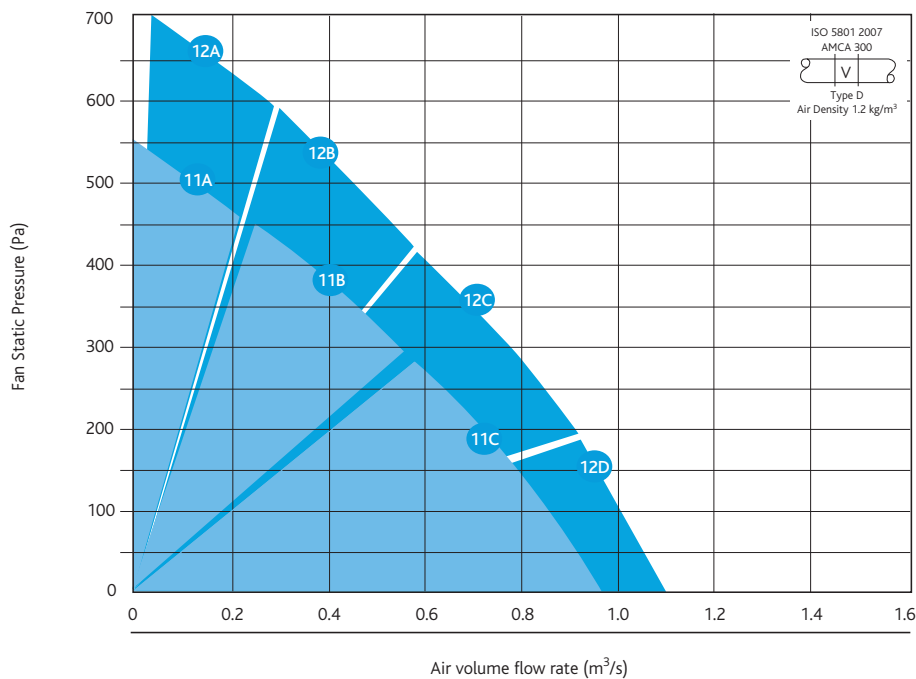
**ESXCP-R Roof Single Fans with end inlet and side discharge**



**ESXCP-B Roof Single Fans with bottom inlet and side discharge**

NB: Ecosmart Single fans sizes 11-19 inc must not be mounted more than 5° from the horizontal.

**ESXCP Single Fans 11A-12D**



**Code descriptions**

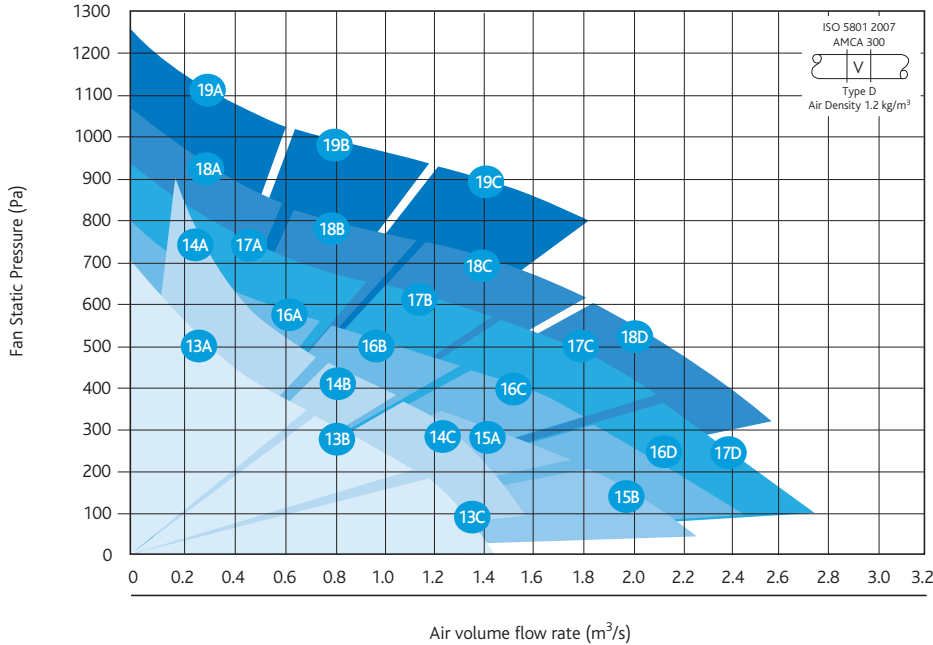
**ESXCP 11 B - B**



1. Ecosmart Constant Pressure Single range
2. Case size
3. A, B, C & D refer to motor & pulley combination
4. No suffix - internal in-line unit  
 X - External in-line unit  
 R - Back inlet, grille outlet external roof mounted unit  
 B - Bottom inlet

PERFORMANCE - CONSTANT PRESSURE SINGLE FANS CONT.

ESXCP Single Fans 13A-19C



CONSTANT PRESSURE INTERNAL SINGLE FANS ESXCP

ELECTRICAL, SOUND & WEIGHT

Code/ Curve	Phase	RPM	Motor power (kW)	FLC (amps)	SC (amps)	Induct inlet Sound Power levels dB re 1pW (+ correction for open outlet)						Breakout dB(A)@3m	Weight (Kg)	
						125	250	500	1K	2K	4K			8K
ESXCP4	1	3600	0.52	3.1	3.1	78(+8)	72(+6)	60(+20)	52(+24)	46(+29)	40(+30)	31(+30)	45	62
ESXCP6	1	1300	1.23	7.6	7.6	77(+4)	70(+9)	56(+15)	52(+18)	49(+19)	46(+19)	38(+23)	43	63
ESXCP9	1	1065	1.6	7.4	7.4	74(+8)	71(+9)	70(+13)	67(+19)	67(+20)	63(+22)	56(+22)	47	125
ESXCP11A	3	1225	0.37	1.3	1.3	73(+1)	67(+7)	62(+10)	63(+11)	55(+9)	49(+11)	45(+9)	46	77.5
ESXCP11B	3	1225	0.55	1.7	1.7	74(+2)	68(+7)	64(+9)	65(+10)	57(+8)	52(+9)	48(+7)	48	82.4
ESXCP11C	3	1225	0.75	2.1	2.1	75(+2)	70(+8)	65(+9)	66(+10)	58(+6)	53(+8)	50(+6)	49	84.4
ESXCP12A	3	1400	0.55	1.3	1.3	75(-1)	71(+4)	66(+7)	66(+9)	58(+7)	51(+8)	45(+5)	48	82.4
ESXCP12B	3	1400	0.75	2.1	2.1	74(+3)	70(+8)	65(+10)	66(+12)	58(+9)	51(+11)	44(+9)	50	84.4
ESXCP12C	3	1400	1.1	2.9	2.9	77(+2)	73(+7)	67(+10)	69(+10)	60(+8)	54(+10)	47(+11)	51	90.4
ESXCP12D	3	1400	1.5	3.7	3.7	79(0)	75(+5)	69(+8)	70(+9)	61(+7)	56(+8)	52(+6)	52	96.4
ESXCP13A	3	1085	0.75	2.1	2.1	70(+5)	67(+8)	67(+8)	63(+8)	56(+8)	57(+7)	51(+7)	48	116
ESXCP13B	3	1085	1.1	2.9	2.9	72(+5)	68(+8)	69(+8)	65(+8)	58(+8)	59(+7)	54(+7)	50	116
ESTCP13C	3	1085	1.5	3.7	3.7	73(+4)	69(+7)	70(+7)	64(+9)	59(+7)	61(+5)	55(+6)	50	125
ESXCP14A	3	1225	1.1	2.9	2.9	73(+5)	68(+7)	68(+7)	62(+10)	56(+8)	58(+6)	48(+7)	48	116

Fan size 11 to 19 inc. are belt drive and cannot be mounted at an angle no greater than 5°. Please contact your local Nuair Technical Sales Engineer or the Technical Department to discuss your application requirements. Breakout dB(A)@3m is hemispherical free field. The electrical and sound information in the table is nominal.

**CONSTANT PRESSURE INTERNAL SINGLE FANS ESXCP CONT.**

<b>ELECTRICAL, SOUND &amp; WEIGHT</b>														
Code/ Curve	Phase	RPM	Motor power (kW)	FLC (amps)	SC (amps)	Induct inlet Sound Power levels dB re lpW (+ correction for open outlet)							Breakout dBA@3m	Weight (Kg)
						125	250	500	1K	2K	4K	8K		
ESXCP14B	3	1225	1.5	3.7	3.7	74(+5)	68(+9)	68(+10)	63(+11)	57(+10)	59(+8)	49(+12)	50	125
ESXCP14C	3	1225	2.2	5.4	5.4	75(+5)	70(+9)	71(+9)	65(+11)	60(+9)	62(+7)	55(+9)	52	134
ESXCP14D	3	1225	3	6.9	6.9	76(+4)	72(+7)	73(+7)	67(+9)	62(+7)	64(+5)	58(+6)	53	140
ESXCP15A	3	925	2.2	5.4	5.4	80(+6)	79(+2)	78(+9)	76(+8)	73(+7)	70(+6)	64(+9)	60	168.7
ESXCP15B	3	925	3	6.9	6.9	83(+8)	81(+3)	79(+9)	78(+9)	76(+9)	74(+10)	68(+12)	62	174.6
ESXCP16A	3	1040	1.5	3.7	3.7	80(+5)	80(+1)	75(+8)	75(+7)	73(+6)	71(+6)	67(+8)	57	159.6
ESXCP16B	3	1040	2.2	5.4	5.4	81(+8)	81(+3)	76(+12)	76(+11)	74(+9)	71(+9)	68(+9)	61	168.7
ESXCP16C	3	1040	3	6.9	6.9	81(+7)	82(+2)	77(+11)	77(+10)	74(+8)	71(+9)	68(+8)	61	174.6
ESXCP16D	3	1040	4	10	10	84(+7)	82(+1)	80(+10)	79(+9)	77(+8)	75(+9)	70(+8)	63	193.6
ESXCP17A	3	1160	2.2	5.4	5.4	83(+4)	81(0)	75(+7)	76(+7)	74(+5)	73(+5)	69(+6)	57	168.7
ESXCP17B	3	1160	3	6.9	6.9	84(+5)	82(+1)	76(+12)	77(+9)	75(+8)	73(+7)	70(+7)	61	174.6
ESXCP17C	3	1160	4	10	10	84(+4)	83(0)	77(+11)	78(+8)	75(+7)	73(+7)	70(+6)	61	193.6
ESXCP17D	3	1160	5.5	12	12	85(+4)	83(-1)	80(+10)	80(+7)	77(+7)	76(+7)	71(+6)	62	231.6
ESXCP18A	3	1260	2.2	5.4	5.4	83(+3)	84(-1)	78(+7)	80(+5)	76(+5)	75(+4)	69(+5)	60	168.7
ESXCP18B	3	1260	3	6.9	6.9	84(+4)	83(-2)	79(+9)	80(+5)	77(+6)	74(+5)	69(+7)	61	174.6
ESXCP18C	3	1260	4	10	10	84(+4)	83(-1)	79(+8)	80(+5)	77(+5)	74(+6)	69(+7)	61	193.6
ESXCP18D	3	1260	5.5	12	12	85(+4)	83(-1)	81(+8)	81(+5)	78(+5)	76(+6)	71(+7)	62	231.6
ESXCP19A	3	1440	3	6.9	6.9	90(+2)	83(-2)	82(+5)	80(+4)	79(+5)	78(+3)	73(+4)	61	174.6
ESXCP19B	3	1440	4	10	10	87(-2)	82(-1)	81(+5)	79(+5)	79(+3)	77(+2)	73(+3)	60	193.6
ESXCP19C	3	1440	5.5	12	12	86(+1)	84(0)	82(+6)	81(+6)	79(+3)	77(+3)	73(+3)	62	231.6

Fan size 11 to 19 inc. are belt drive and cannot be mounted at an angle of no greater than 5°.  
Please contact your local Nuair Technical Sales Engineer or the Technical Department to discuss your application requirements.  
Breakout dBA@3m is hemispherical free field. The electrical and sound information in the table is nominal.

CONSTANT PRESSURE EXTERNAL SINGLE FANS ESXCP-X

ELECTRICAL, SOUND & WEIGHT

Code/ Curve	Phase	RPM	Motor power (kW)	FLC (amps)	SC (amps)	Induct inlet Sound Power levels dB re 1pW (+ correction for open outlet)							Breakout dBA@3m	Weight (Kg)
						125	250	500	1K	2K	4K	8K		
ESXCP4-X	1	3600	0.52	3.1	3.1	77(+9)	73(+5)	66(+14)	64(+12)	60(+15)	55(+15)	50(+11)	45	77
ESXCP6-X	1	1300	1.23	7.6	7.6	71(+5)	63(+4)	55(+12)	58(+13)	58(+13)	55(+13)	48(+12)	47	70
ESXCP9-X	1	1065	1.6	7.3	7.3	72(+13)	66(+19)	61(+18)	60(+18)	60(+17)	57(+19)	51(+18)	50	133
ESXCP11A-X	3	1225	0.37	2.1	2.1	73(+1)	67(+7)	62(+10)	63(+11)	55(+9)	49(+11)	45(+9)	46	77.5
ESXCP11B-X	3	1225	0.55	1.7	1.7	74(+2)	68(+7)	64(+9)	65(+10)	57(+8)	52(+9)	48(+7)	48	82.4
ESXCP11C-X	3	1400	0.75	2.1	2.1	75(+2)	70(+8)	65(+9)	66(+10)	58(+6)	53(+8)	50(+6)	49	90.4
ESXCP11D-X	3	1225	1.1	2.9	2.9	77(+0)	73(+5)	66(+8)	67(+9)	58(+7)	53(+8)	50(+6)	49	90.4
ESXCP12A-X	3	1400	0.55	1.7	1.7	75(-1)	71(+4)	66(+7)	66(+9)	58(+7)	51(+8)	45(+5)	48	82.4
ESXCP12B-X	3	1400	0.75	2.1	2.1	74(+3)	70(+8)	65(+10)	66(+12)	58(+9)	51(+11)	44(+9)	50	84.4
ESXCP12C-X	3	1400	1.1	2.9	2.9	77(+2)	73(+7)	67(+10)	69(+10)	60(+8)	54(+10)	47(+11)	51	90.4
ESXCP12D-X	3	1400	1.5	3.7	3.7	79(0)	75(+5)	69(+8)	70(+9)	61(+7)	56(+8)	52(+6)	52	96.4
ESXCP13A-X	3	1085	0.75	2.1	2.1	70(+5)	67(+8)	67(+8)	63(+8)	56(+8)	57(+7)	51(+7)	48	116
ESXCP13B-X	3	1085	1.1	2.9	2.9	72(+5)	68(+8)	69(+8)	65(+8)	58(+8)	59(+7)	54(+7)	50	116
ESXCP13C-X	3	1085	1.5	3.7	3.7	73(+4)	69(+7)	70(+7)	64(+9)	59(+7)	61(+5)	55(+6)	50	125
ESXCP14A-X	3	1225	1.1	2.9	2.9	73(+5)	68(+7)	68(+7)	62(+10)	56(+8)	58(+6)	48(+7)	48	116
ESXCP14B-X	3	1225	1.5	3.7	3.7	74(+5)	68(+9)	68(+10)	63(+11)	57(+10)	59(+8)	49(+12)	50	125
ESXCP14C-X	3	1225	2.2	5.4	5.4	75(+5)	70(+9)	71(+9)	65(+11)	60(+9)	62(+7)	55(+9)	52	134
ESXCP14D-X	3	1225	3	6.9	6.9	76(+4)	72(+7)	73(+7)	67(+9)	62(+7)	64(+5)	58(+6)	53	140
ESXCP15A-X	3	925	2.2	5.4	5.4	80(+6)	79(+2)	78(+9)	76(+8)	73(+7)	70(+6)	64(+9)	60	168.7
ESXCP15B-X	3	925	3	6.9	6.9	83(+8)	81(+3)	79(+9)	78(+9)	76(+9)	74(+10)	68(+12)	62	174.6
ESXCP16A-X	3	1040	1.5	3.7	3.7	80(+5)	80(+1)	75(+8)	75(+7)	73(+6)	71(+6)	67(+8)	57	159.6
ESXCP16B-X	3	1040	2.2	5.4	5.4	81(+8)	81(+3)	76(+12)	76(+11)	74(+9)	71(+9)	68(+9)	61	168.7
ESXCP16C-X	3	1040	3	6.9	6.9	81(+7)	82(+2)	77(+11)	77(+10)	74(+8)	71(+9)	68(+8)	61	174.6
ESXCP16D-X	3	1040	4	10	10	84(+7)	82(+1)	80(+10)	79(+9)	77(+8)	75(+9)	70(+8)	63	193.6
ESXCP17A-X	3	1160	2.2	5.4	5.4	83(+4)	81(0)	75(+7)	76(+7)	74(+5)	73(+5)	69(+6)	57	168.7
ESXCP17B-X	3	1160	3	6.9	6.9	84(+5)	82(+1)	76(+12)	77(+9)	75(+8)	73(+7)	70(+7)	61	174.6
ESXCP17C-X	3	1160	4	10	10	84(+4)	83(0)	77(+11)	78(+8)	75(+7)	73(+7)	70(+6)	61	193.6
ESXCP17D-X	3	1160	5.5	12	12	85(+4)	83(-1)	80(+10)	80(+7)	77(+7)	76(+7)	71(+6)	62	231.6
ESXCP18A-X	3	1260	2.2	5.4	5.4	83(+3)	84(-1)	78(+7)	80(+5)	76(+5)	75(+4)	69(+5)	60	168.7
ESXCP18B-X	3	1260	3	6.9	6.9	84(+4)	83(-2)	79(+9)	80(+5)	77(+6)	74(+5)	69(+7)	61	174.6
ESXCP18C-X	3	1260	4	10	10	84(+4)	83(-1)	79(+8)	80(+5)	77(+5)	74(+6)	69(+7)	61	193.6
ESXCP18D-X	3	1260	5.5	12	12	85(+4)	83(-1)	81(+8)	81(+5)	78(+5)	76(+6)	71(+7)	62	231.6
ESXCP19A-X	3	1440	3	6.9	6.9	90(+2)	83(-2)	82(+5)	80(+4)	79(+5)	78(+3)	73(+4)	61	174.6
ESXCP19B-X	3	1440	4	10	10	87(-2)	82(-1)	81(+5)	79(+5)	79(+3)	77(+2)	73(+3)	60	193.6
ESXCP19C-X	3	1440	5.5	12	12	86(+1)	84(0)	82(+6)	81(+6)	79(+3)	77(+3)	73(+3)	62	231.6

Fan size 11 to 19 inc. are belt drive and cannot be mounted at an angle no greater than 5°.  
 Please contact your local Nuair Technical Sales Engineer or the Technical Department to discuss your application requirements.  
 Breakout dBA@3m is hemispherical free field. The electrical and sound information in the table is nominal.



**CONSTANT PRESSURE EXTERNAL SINGLE FANS ESXCP-R AND B**

<b>ELECTRICAL, SOUND &amp; WEIGHT</b>														
Code/ Curve	Phase	RPM	Motor power (kW)	FLC (amps)	SC (amps)	Induct inlet Sound Power levels dB re lpW (+ correction for open outlet)							Open inlet (Open outlet) dBA@3m	Weight (Kg)
						125	250	500	1K	2K	4K	8K		
ESXCP4	1	3600	0.52	3.1	3.1	77(0)	73(+4)	66(+17)	64(+20)	60(+24)	55(+25)	50(+24)	69	80
ESXCP6	1	1300	1.23	7.6	7.6	71(+5)	63(+4)	55(+12)	58(+13)	58(+13)	55(+13)	48(+12)	43	70
ESXCP9	1	960	1.6	9.44	9.44	72(+13)	66(+19)	61(+18)	60(+18)	60(+17)	57(+19)	51(+18)	59	133
ESXCP11A	3	1225	0.37	1.3	1.3	73(-3)	67(+3)	62(+9)	63(+11)	55(+9)	49(+11)	45(+9)	47(+11)	77.5
ESXCP11B	3	1225	0.55	1.7	1.7	74(-2)	68(+4)	64(+8)	65(+10)	57(+8)	52(+9)	48(+7)	49(+10)	82.4
ESXCP11C	3	1225	0.75	2.1	2.1	75(-2)	70(+4)	65(+8)	66(+10)	58(+6)	53(+8)	50(+6)	51(+9)	84.4
ESXCP11D	3	1225	1.1	2.9	2.9	77(-4)	73(+2)	66(+7)	67(+9)	58(+7)	53(+8)	50(+6)	52(+8)	90.4
ESXCP12A	3	1400	0.55	1.7	1.7	75(-5)	71(+1)	66(+6)	66(+9)	58(+7)	51(+8)	45(+5)	51(+8)	82.4
ESXCP12B	3	1400	0.75	2.1	2.1	74(-1)	70(+5)	65(+9)	66(+12)	58(+9)	51(+11)	44(+9)	50(+11)	84.4
ESXCP12C	3	1400	1.1	2.9	2.9	77(-2)	73(+4)	67(+9)	69(+10)	60(+8)	54(+10)	47(+11)	53(+10)	90.4
ESXCP12D	3	1400	1.5	3.7	3.7	79(-4)	75(+2)	69(+7)	70(+9)	61(+7)	56(+8)	52(+6)	54(+9)	96.4
ESXCP13A	3	1085	0.75	2.1	2.1	70(+5)	67(+8)	67(+8)	63(+8)	56(+8)	57(+7)	51(+7)	50(+6)	116
ESXCP13B	3	1085	1.1	2.9	2.9	72(-1)	68(+6)	69(+8)	65(+8)	58(+8)	59(+7)	54(+7)	52(+7)	116
ESXCP13C	3	1085	1.5	3.7	3.7	73(-2)	69(+5)	70(+7)	64(+9)	59(+7)	61(+5)	55(+6)	52(+7)	125
ESXCP14A	3	1225	1.1	2.9	2.9	73(-1)	68(+5)	68(+7)	62(+10)	56(+8)	58(+6)	48(+7)	50(+8)	116
ESXCP14B	3	1225	1.5	3.7	3.7	74(-1)	68(+7)	68(+10)	63(+11)	57(+10)	59(+8)	49(+12)	50(+10)	125
ESXCP14C	3	1225	2.2	5.4	5.4	75(-1)	70(+7)	71(+9)	65(+11)	60(+9)	62(+7)	55(+9)	53(+9)	134
ESXCP14D	3	1225	3	6.9	6.9	76(-2)	72(+5)	73(+7)	67(+9)	62(+7)	64(+5)	58(+6)	55(+7)	140
ESXCP15A	3	925	2.2	5.4	5.4	80(+1)	79(+1)	78(+8)	76(+8)	73(+7)	70(+6)	64(+9)	62(+8)	168.7
ESXCP15B	3	925	3	6.9	6.9	83(+3)	81(+2)	79(+8)	78(+9)	76(+9)	74(+10)	68(+12)	65(+9)	174.6
ESXCP16A	3	1040	1.5	3.7	3.7	80(0)	80(0)	75(+7)	75(+7)	73(+6)	71(+6)	67(+8)	62(+6)	159.6
ESXCP16B	3	1040	2.2	5.4	5.4	81(+3)	81(+1)	76(+11)	76(+11)	74(+9)	71(+9)	68(+9)	63(+10)	168.7
ESXCP16C	3	1040	3	6.9	6.9	81(+2)	82(0)	77(+10)	77(+10)	74(+8)	71(+9)	68(+8)	63(+9)	174.6
ESXCP16D	3	1040	4	10	10	84(+2)	82(-1)	80(+9)	79(+9)	77(+8)	75(+9)	70(+8)	66(+8)	193.6
ESXCP17A	3	1160	2.2	5.4	5.4	83(0)	81(-1)	75(+6)	76(+7)	74(+5)	73(+5)	69(+6)	63(+6)	168.7
ESXCP17B	3	1160	3	6.9	6.9	84(0)	82(0)	76(+11)	77(+9)	75(+8)	73(+7)	70(+7)	64(+9)	174.6
ESXCP17C	3	1160	4	10	10	84(-1)	83(-1)	77(+10)	78(+8)	75(+7)	73(+7)	70(+6)	64(+8)	193.6
ESXCP17D	3	1160	5.5	12	12	85(-1)	83(-2)	80(+9)	80(+7)	77(+7)	76(+7)	71(+6)	67(+7)	231.6
ESXCP18A	3	1260	2.2	5.4	5.4	83(-2)	84(-2)	78(+6)	80(+5)	76(+5)	75(+4)	69(+5)	66(+5)	168.7
ESXCP18B	3	1260	3	6.9	6.9	84(0)	83(-3)	79(+8)	80(+5)	77(+6)	74(+5)	69(+7)	66(+6)	174.6
ESXCP18C	3	1260	4	10	10	84(-1)	83(-2)	79(+7)	80(+5)	77(+5)	74(+6)	69(+7)	66(+6)	193.6
ESXCP18D	3	1260	5.5	12	12	85(-1)	83(-2)	81(+7)	81(+5)	78(+5)	76(+6)	71(+7)	67(+6)	231.6
ESXCP19A	3	1440	3	6.9	6.9	90(-1)	83(-2)	82(+5)	80(+4)	79(+5)	78(+3)	73(+4)	68(+4)	174.8
ESXCP19B	3	1440	4	10	10	87(-5)	82(-1)	81(+5)	79(+5)	79(+3)	77(+2)	73(+3)	67(+4)	193.6
ESXCP19C	3	1440	5.5	12	12	86(-2)	84(0)	82(+5)	81(+6)	79(+3)	77(+3)	73(+3)	68(+5)	231.6

Fan size 11 to 19 inc. are belt drive and cannot be mounted at an angle no greater than 5°.  
Please contact your local Nuair Technical Sales Engineer or the Technical Department to discuss your application requirements.  
**Please insert R or B into code for spigot position eg. ESTCP11B-B.**

Breakout dBA@3m is hemispherical free field. The electrical and sound information in the table is nominal.

SINGLE FAN UNITS

ESXCP INTERNAL FANS (CIRCULAR & RECTANGULAR SPIGOTS)



ESXCP4

ESXCP6

ESXCP9

ESXCP15 - ESXCP27

ESXCP-B (RECTANGULAR SPIGOTS) & ESXCP-R EXTERNAL FANS (CIRCULAR & RECTANGULAR SPIGOTS)



ESXCP4B

ESXCP6B

ESXCP9-10B

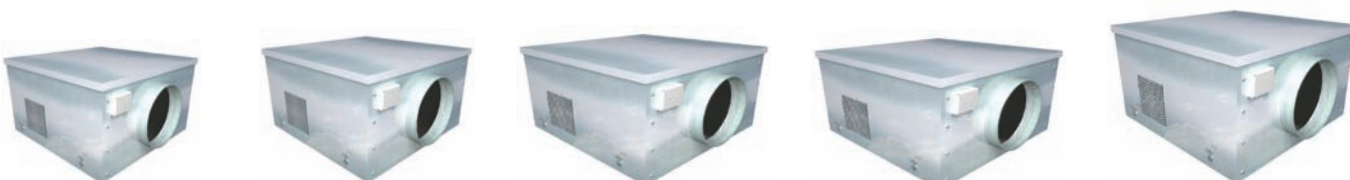
ESXCP11-12B

ESXCP13-14B



ESXCP15-19B

ESXCP20-26B



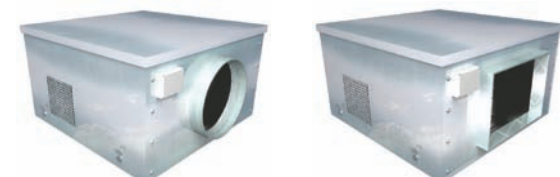
ESXCP4R

ESXCP6R

ESXCP9-10R

ESXCP11-12R

ESXCP13-14R



ESXCP15-19R

ESXCP20-26R

ESXCP-X EXTERNAL FANS (CIRCULAR & RECTANGULAR SPIGOTS)



ESXCP4X

ESXCP6X

ESXCP9-10X

ESXCP11-12X

ESXCP13-14X



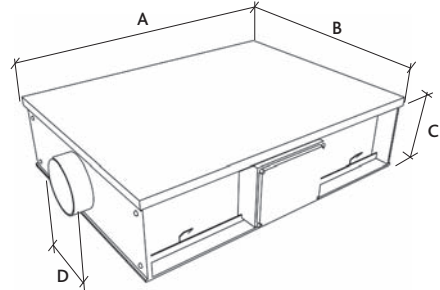
ESXCP15-19X

ESXCP20-26X

**DIMENSIONS**

**ESXCP INTERNAL FANS DIMENSIONS (mm)**

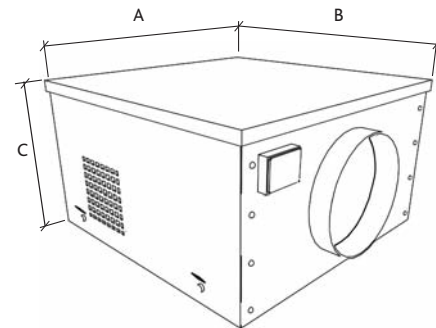
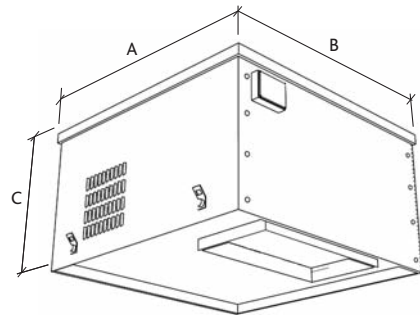
Fan Code	A	B	C	Circular Spigot		Rectangular Spigot		Weight Kg
				DØ	E	F		
ESXCP4	1063	1047	360	250	-	-		62
ESXCP6	1193	1047	423	400	-	-		63
ESXCP9	1195	1174	575	500	-	-		125
ESXCP15-19	1430	1190	780	630	-	-		162



**ESXCP-B/ESXCP-R EXTERNAL FANS DIMENSIONS (mm)**

Fan Code	A	B	C	Circular Spigot		Rectangular Spigot		Weight Kg
				DØ	E	F		
ESXCP4B/R	1165	980	575	250	305	152		*77
ESXCP6B/R	1165	980	575	400	305	152		*70
ESXCP9-10B/R	1495	1125	710	500	762	304		133
ESXCP11-12B/R	974	974	622	400	457	229		*82.4
ESXCP13-14B/R	1233	1233	701	500	762	304		134
ESXCP15-19B/R	1430	1635	796	630	889	381		*232

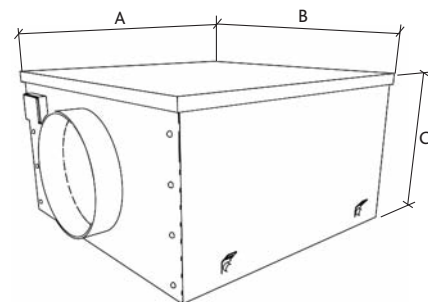
\* Approximate weight, contact Nuair for details.



**ESXCP-X EXTERNAL FANS DIMENSIONS (mm)**

Fan Code	A	B	C	Circular Spigot		Rectangular Spigot		Weight Kg
				DØ	E	F		
ESXCP4X	1165	980	575	250	-	-		*77
ESXCP6X	1165	980	575	400	-	-		*70
ESXCP9-10X	1495	1125	710	500	-	-		*133
ESXCP11-12X	974	974	622	400	-	-		*77.5
ESXCP13-14X	1233	1235	701	500	-	-		*116
ESXCP15-19X	1430	1190	780	630	-	-		*174.6

\* Approximate weight, contact Nuair for details.



## CONSULTANTS SPECIFICATION

### CONSTANT PRESSURE EXTRACT SYSTEM

The main extract fan shall be as indicated on the drawings and in accordance with the relevant fan schedule. The vitiated air shall be extracted from the space using an energy efficient constant pressure principle via a variable air volume motorised damper/grille installed in each area, as detailed in the schedule.

### OPERATION

The extract fan shall automatically vary its speed as the system pressure varies; the variation in pressure is caused by the opening and closing of the Nuair CVD extract damper. The damper is autonomous of the fan and requires no field wiring connecting it to the fan. The damper positions are open (boost) and closed (trickle). When the damper is closed, the grille will allow approx. 8 litres/sec flow rate, as background ventilation. The inline damper has an integrated airflow sensor which continuously monitors and controls the amount of air being moved. The air volume is adjusted via minimum and maximum potentiometers on the side of the CVD damper.

The duct mounted damper CVD requires a 230V connection/power supply. Signal from 230V switch live i.e. light switch, PIR, humidistat etc.

(If the NRG grille is installed it shall be connected to a 12V ac supply via the inclusive 230V transformer unit and has an integral PIR, two position damper and overrun timer).

Once commissioned and set to work, the fan will maintain the preset pressure by varying its speed as the ventilation requirement within each area varies i.e. as dampers open and close. If the requirement exceeds the maximum or minimum limit, the fan will remain at the design/ limiting speed.

### FAN SPECIFICATION

Each acoustically lined low noise Single fan shall be fitted with an integral Ecosmart control inclusive of pressure transducer and inverter drive. The fans shall have the following energy saving and operational functions integrally installed within the fan unit, all components will be pre-wired and fitted by the manufacturer: -

- Integral operating pressure adjustment (target pressure).
- BMS interface 0 - 10V.
- Volt free run & failure/status indication.
- 4no. low voltage sockets for interconnection of remote failure indicator.

Fan, integrated Ecosmart controls and associated sensors/controllers shall be manufactured by Nuair Ltd.

### CVD FEATURES

- Optional trickle/boost flow rate.
- Externally adjusted settings.
- CVD helps balance system.
- MEMS provide precise measurements and control of flow rate.

Ecosmart Xtractor shall have a 5 year warranty.

### INSTALLATION

Mechanical installation requires mounting of the extract unit in the designated position and connection to the associated duct work.

The installer shall allow for all necessary ductwork transformations to and from the fan unit and any associated components in accordance with the manufacturers recommendations, DW 144 and general good practice.

Electrical installation requires the provision and connection of single phase electrical supply sizes 6 & 9 or three phase sizes 11 to 19 inclusive.

A volt free run/fail status indication at the fan.

A single phase supply to the duct mounted damper version CVD/NRG.

A single phase supply to the transformer feeding the grille with integrated damper and PIR, the 12V output of which is connected to the grille.

### COMMISSIONING

By the appointed commissioning engineer.

The systems should be commissioned in the normal way and the operating or target pressure (inlet side of unit only) set via a potentiometer in the integral set-up box within the fan unit. This should be adjusted until the required air volume flow rate is achieved on the approved measuring device.

The manufacturer's recommendations must be observed at all times.

NOTE: NRG & CVD should not be mixed on the same system.