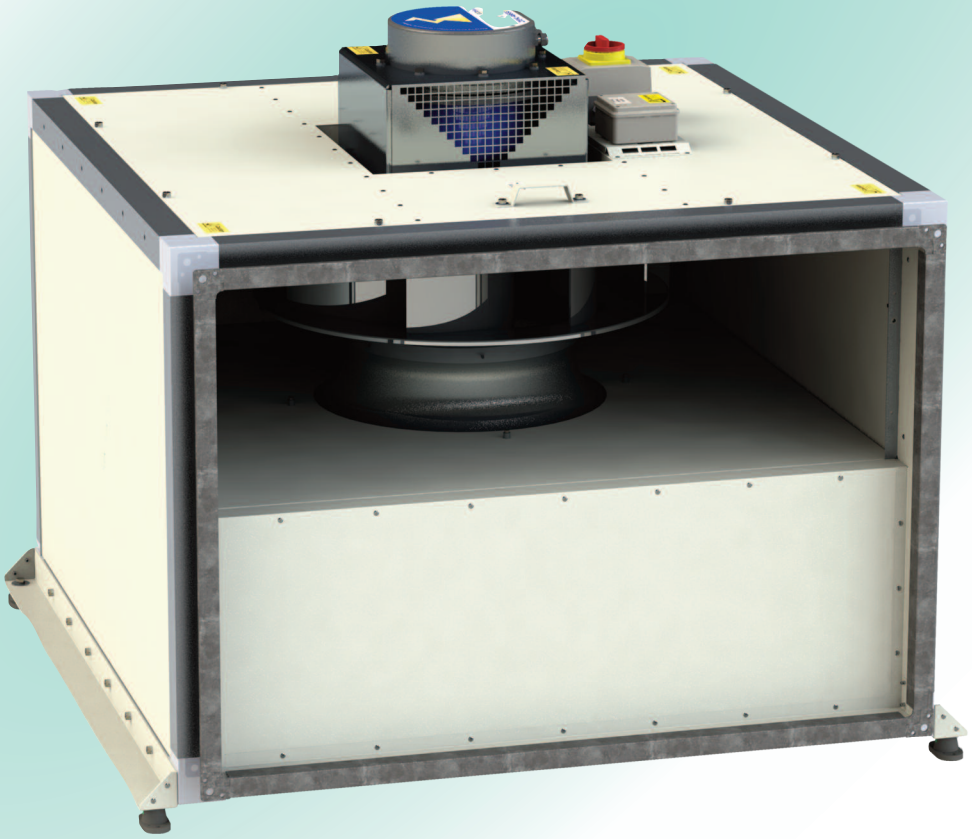
"QBK"

High Temperature Fan
with EC Motor
Operating Temperature up to 120°C
0.10m³/sec to 2.97m³/sec

vectaire
ventilation systems

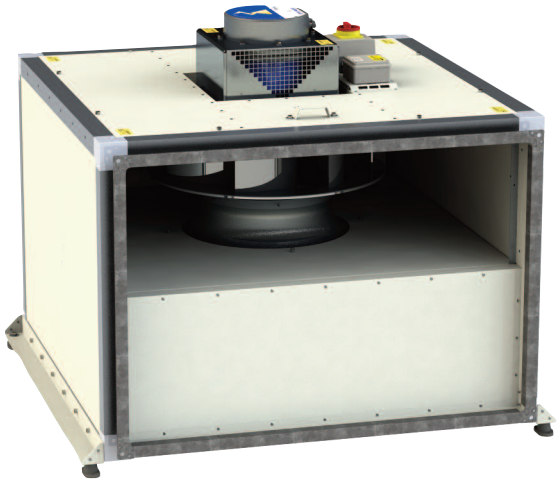


ErP Directive Compliant

"QBK" High Temperature Fan

Features and Benefits

- Centrifugal impeller
- ErP compliant 2009/125/EC
- High Efficiency EC motor
- Operating temperature up to 120°C
- Manufactured in UK to ISO9001



Low Energy EC Fans

Motor out of airstream for improved longevity

Energy efficient direct drive fans

Backward curved impellers

Particularly suited for installation into commercial kitchens

Flexible design to suit your application

Cases of robust 50mm x 50mm extruded aluminium frame

Finished in double skinned galvanised steel

Flush fitting panels

All models with plastisol coated finish

Flexible airflow arrangement - straight through or 90° (left access straight configuration is standard)

Acoustic lining to reduce noise breakout

45mm thick mineral wool slab insulation of 45kg/m^3 density

Energy Saving Controls

All units are fitted with pre-wired controls (available with no controls at special request)

Accessories

Attenuator (melinex lined)

Cowl

Flexible duct connectors

AV mounts

Weatherproof kit

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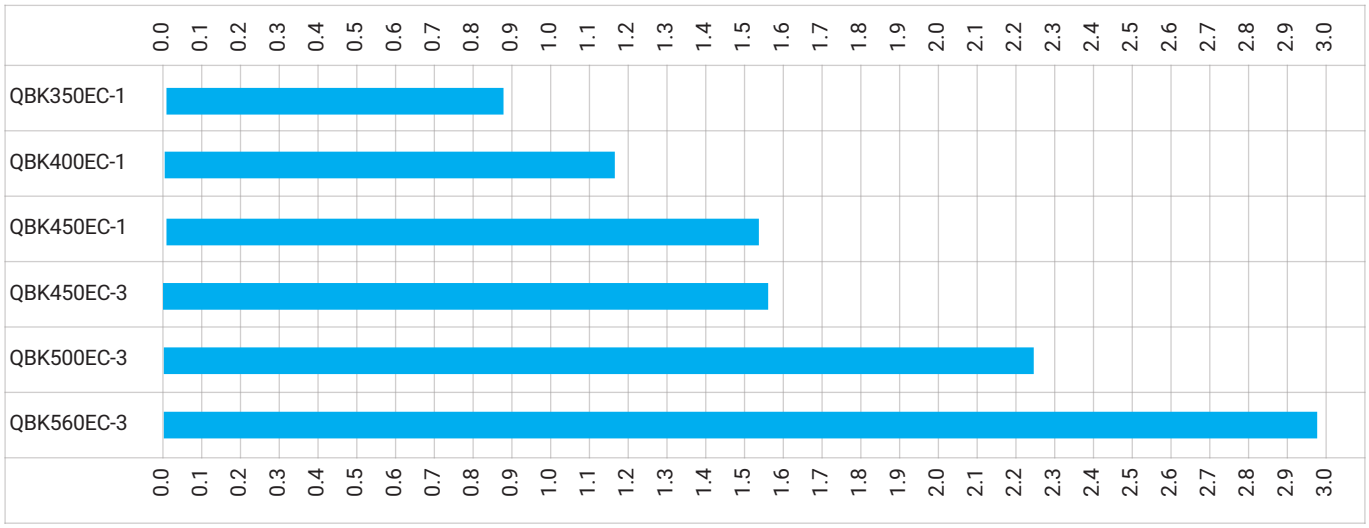
"QBK" High Temperature Fan

Features and Benefits

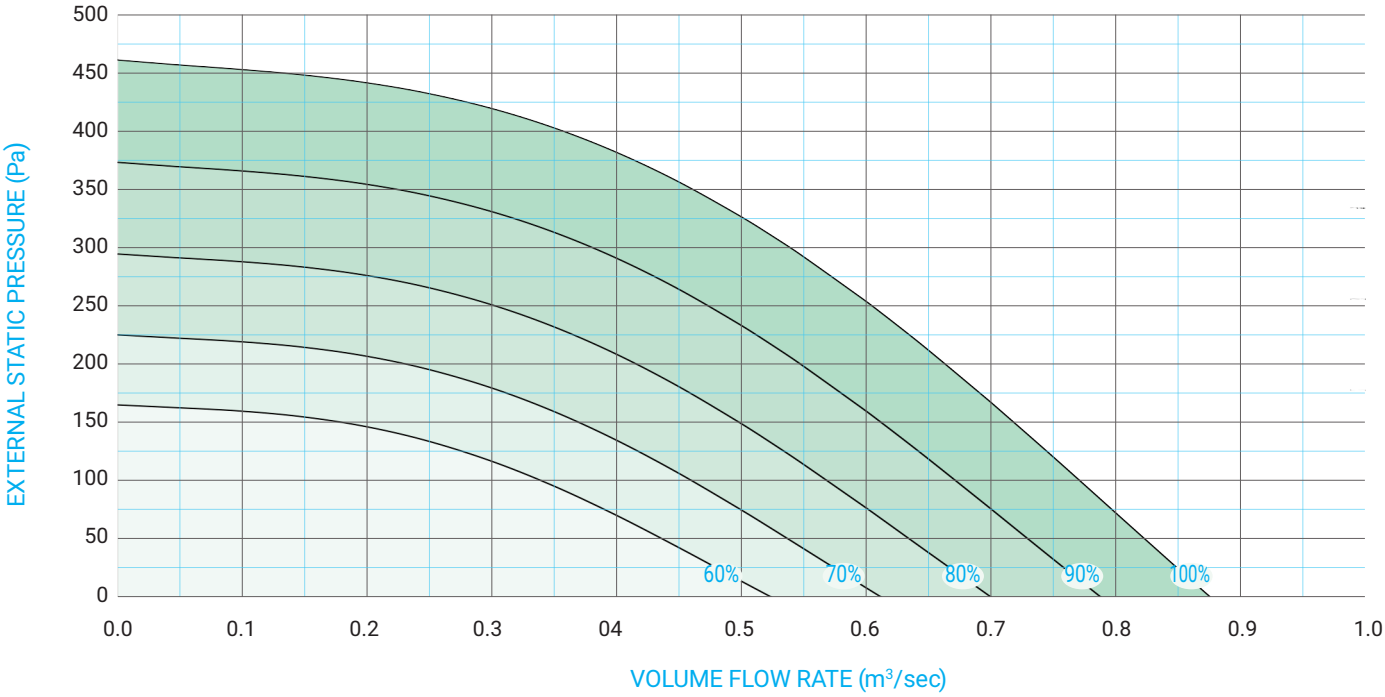
Maximum Air Volume (m^3/sec)



Unit shown is right access straight configuration with a roof, cowl and attenuator fitted

TECHNICAL DATA - QBK350EC-1

FAN SPEED



ELECTRICAL DATA	MODEL	FAN POWER (kW)	SUPPLY	FLC (Amps)
	QBK350EC-1	0.37	230V 1Ph	2.0

QBK350EC-1		Mid Octave Frequency band / Hz								Total in Duct Sound Power Level	Breakout Sound Pressure Level @ 1m	Breakout Sound Pressure Level @ 3m
		63	125	250	500	1k	2k	4k	8k	dB(A)	dB(A)	dB(A)
0.46 m³/sec 360 Ext Pa @ 100%	Inlet in duct dB	64	71	69	64	57	58	54	49	49	35.6	26.1
	Outlet in duct dB	**61**	70	68	66	66	62	58	52	52		
0.41 m³/sec 292 Ext Pa @ 90%	Inlet in duct dB	62	71	65	62	55	55	51	46	46	33.8	24.3
	Outlet in duct dB	59	70	65	63	63	59	55	49	49		
0.37 m³/sec 230 Ext Pa @ 80%	Inlet in duct dB	60	73	63	59	52	52	47	42	42	33.7	24.1
	Outlet in duct dB	56	71	63	60	59	56	51	45	45		
0.32 m³/sec 174 Ext Pa @ 70%	Inlet in duct dB	57	74	61	56	49	48	44	38	38	33.6	24.0
	Outlet in duct dB	54	71	61	57	56	52	47	41	41		
0.28 m³/sec 136 Ext Pa @ 60%	Inlet in duct dB	55	68	58	54	46	44	41	34	34	**27.5**	18.0
	Outlet in duct dB	52	63	57	55	52	49	44	38	38		

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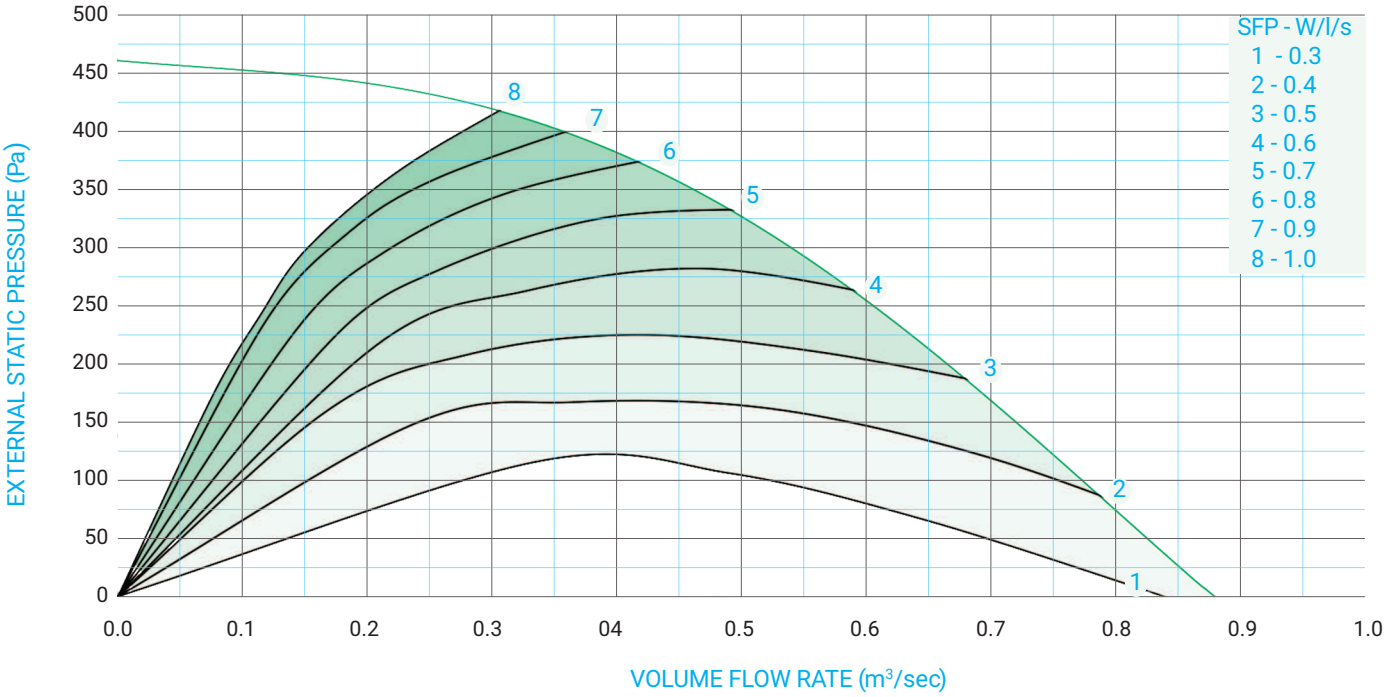
TECHNICAL DATA - QBK350EC-1

SPECIFIC FAN POWER - FOR EACH FAN



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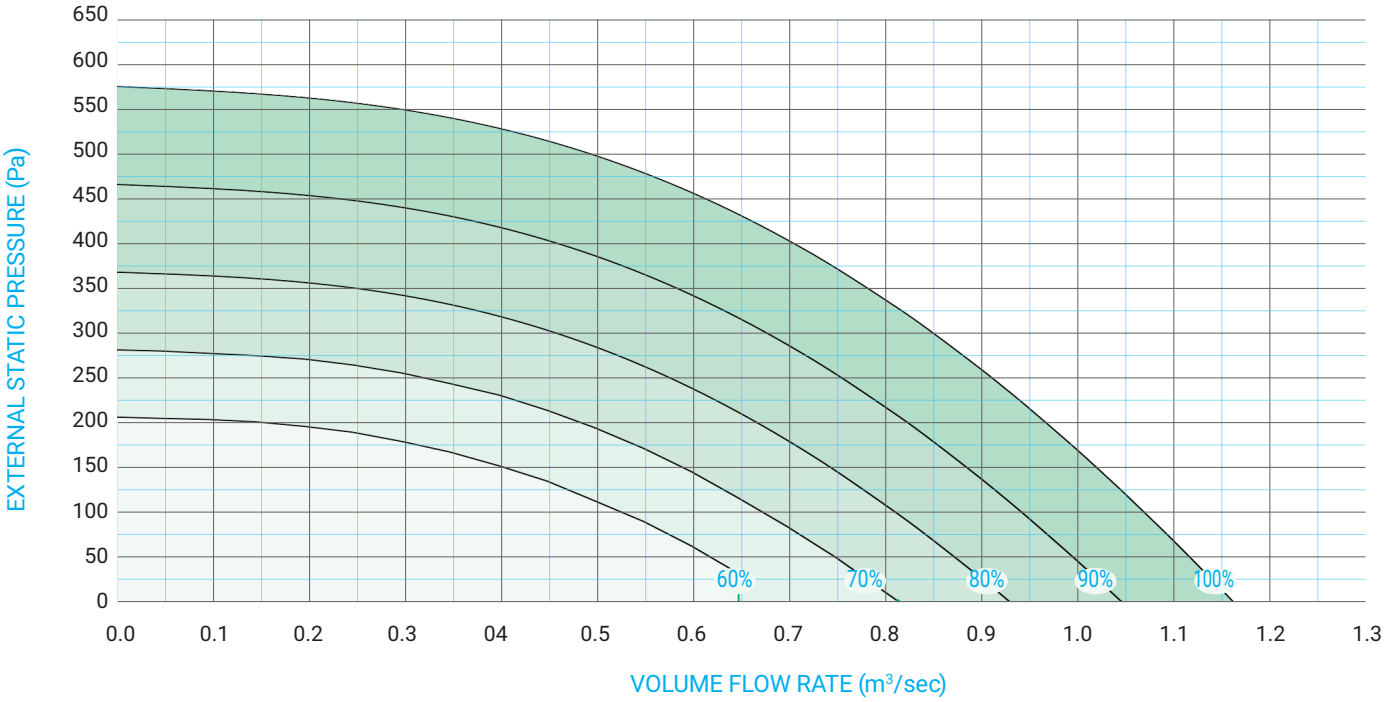
"QBK" High Temperature Fan

TECHNICAL DATA - QBK400EC-1

FAN SPEED



ELECTRICAL DATA	MODEL	FAN POWER (kW)	SUPPLY	FLC (Amps)
	QBK400EC-1	0.70	230V 1Ph	3.60

QBK400EC-1		Mid Octave Frequency band / Hz								Total in Duct Sound Power Level	Breakout Sound Pressure Level @ 1m	Breakout Sound Pressure Level @ 3m
		63	125	250	500	1k	2k	4k	8k	dB(A)	dB(A)	dB(A)
0.60 m³/sec 480 Ext Pa @ 100%	Inlet in duct dB	75	77	72	64	61	61	56	51	69.1	42.0	32.4
	Outlet in duct dB	71	78	77	71	70	65	60	55	74.6		
0.54 m³/sec 389 Ext Pa @ 90%	Inlet in duct dB	73	76	68	61	58	58	53	48	66.4	39.6	30.0
	Outlet in duct dB	69	78	73	68	67	62	57	52	71.8		
0.48 m³/sec 307 Ext Pa @ 80%	Inlet in duct dB	70	76	65	58	55	54	50	44	64.0	38.0	28.4
	Outlet in duct dB	66	76	71	65	63	58	53	49	68.8		
0.42 m³/sec 235 Ext Pa @ 70%	Inlet in duct dB	67	73	62	55	52	51	46	40	61.0	35.2	25.7
	Outlet in duct dB	63	74	67	62	60	54	50	45	65.4		
0.36 m³/sec 173 Ext Pa @ 60%	Inlet in duct dB	65	70	59	51	48	47	41	35	57.3	31.4	21.9
	Outlet in duct dB	61	70	63	58	56	50	45	41	61.5		

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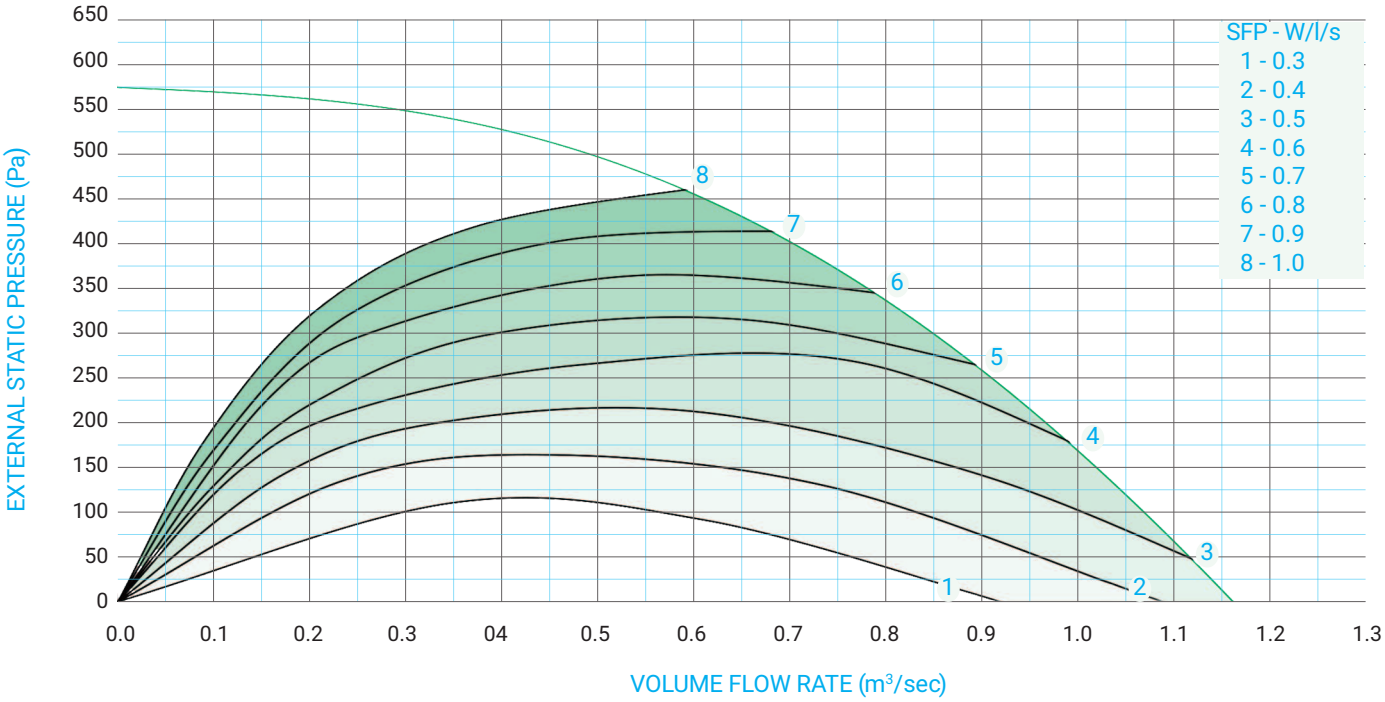
TECHNICAL DATA - QBK400EC-1

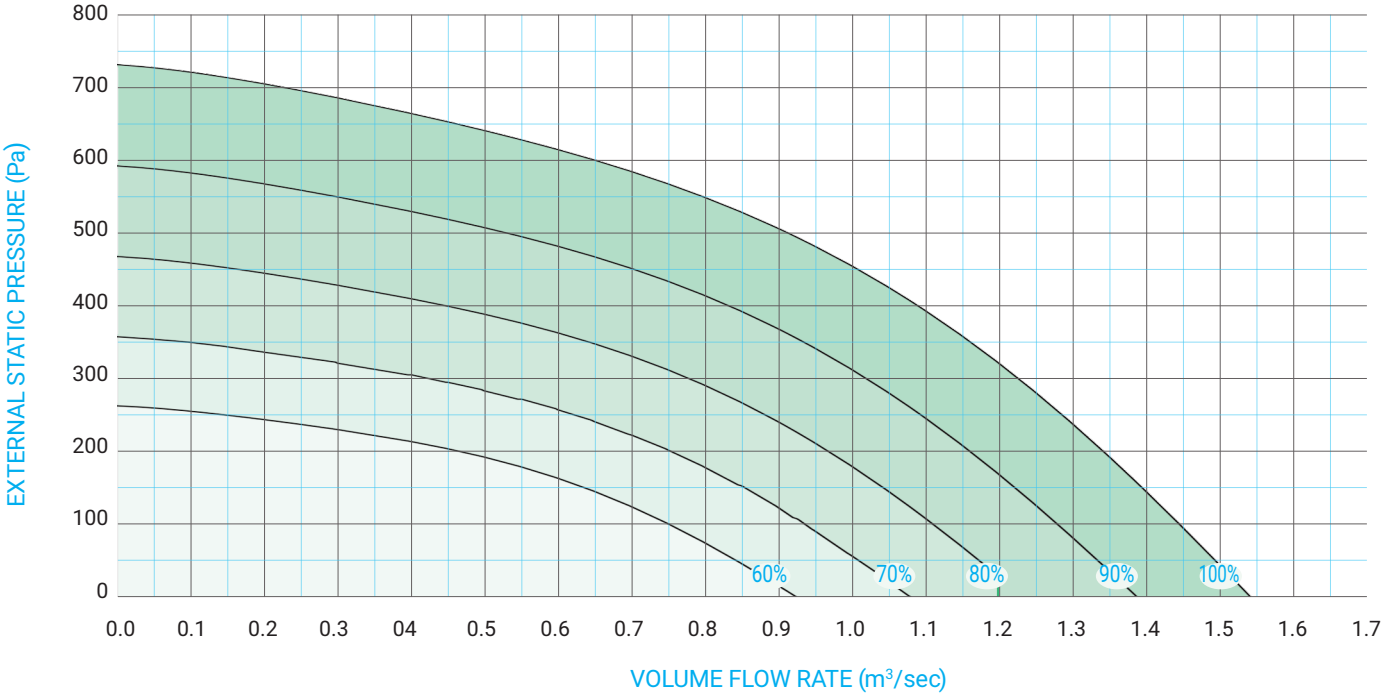
SPECIFIC FAN POWER - FOR EACH FAN



"QBK" High Temperature Fan

TECHNICAL DATA - QBK450EC-1

FAN SPEED

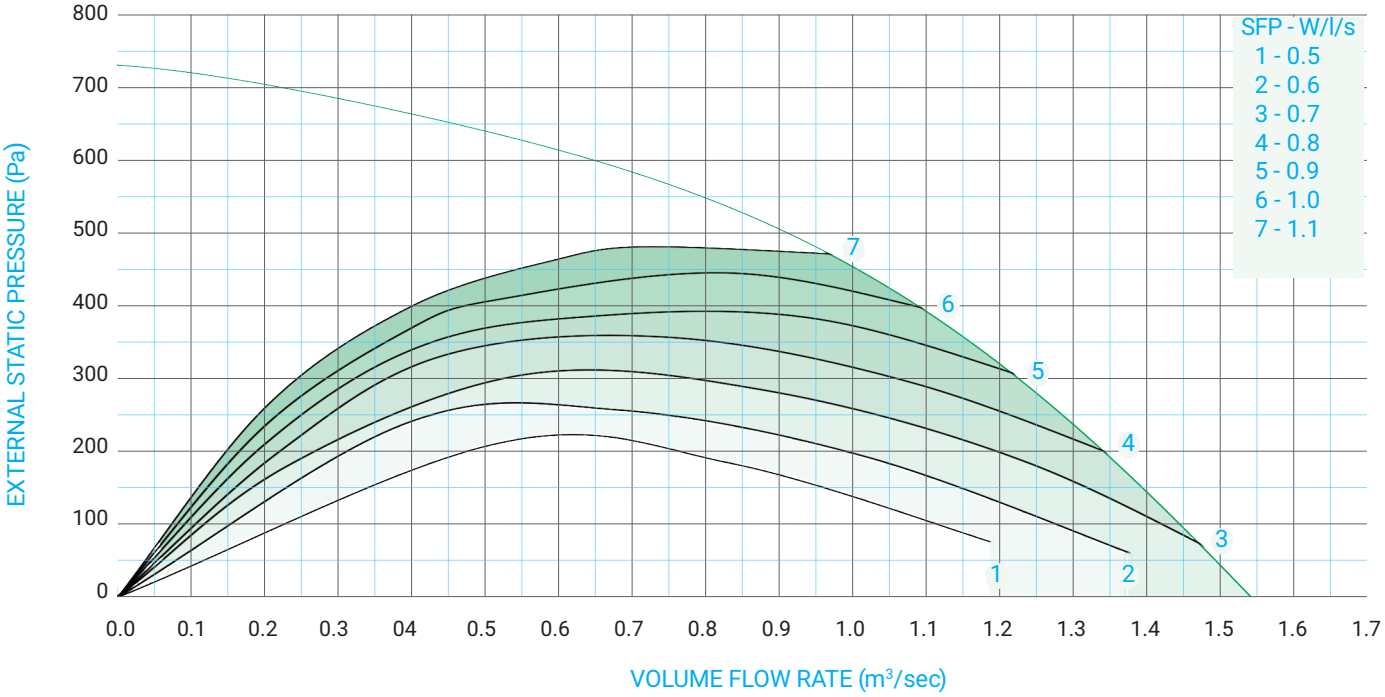


ELECTRICAL DATA	MODEL	FAN POWER (kW)	SUPPLY	FLC (Amps)
	QBK450EC-1	1.28	230V 1Ph	6.4

QBK450EC-1		Mid Octave Frequency band / Hz								Total in Duct Sound Power Level	Breakout Sound Pressure Level @ 1m	Breakout Sound Pressure Level @ 3m
		63	125	250	500	1k	2k	4k	8k	dB(A)	dB(A)	dB(A)
0.81 m³/sec 600 Ext Pa @ 100%	Inlet in duct dB	78	82	65	64	66	64	59	56	71.7	44.1	34.5
	Outlet in duct dB	74	83	80	76	73	69	64	59	78.4		
0.72 m³/sec 484 Ext Pa @ 90%	Inlet in duct dB	74	80	63	62	64	61	56	53	69.1	41.5	31.9
	Outlet in duct dB	72	81	76	73	71	66	61	56	75.7		
0.64 m³/sec 381 Ext Pa @ 80%	Inlet in duct dB	71	79	60	59	61	58	53	50	66.9	40.0	30.4
	Outlet in duct dB	69	79	72	70	68	63	58	52	72.6		
0.56 m³/sec 290 Ext Pa @ 70%	Inlet in duct dB	68	77	56	56	57	54	49	46	63.9	37.0	27.4
	Outlet in duct dB	65	76	69	66	65	59	54	48	69.1		
0.48 m³/sec 213 Ext Pa @ 60%	Inlet in duct dB	66	73	52	52	54	50	45	41	60.0	33.3	23.8
	Outlet in duct dB	63	73	65	63	61	54	49	44	65.4		

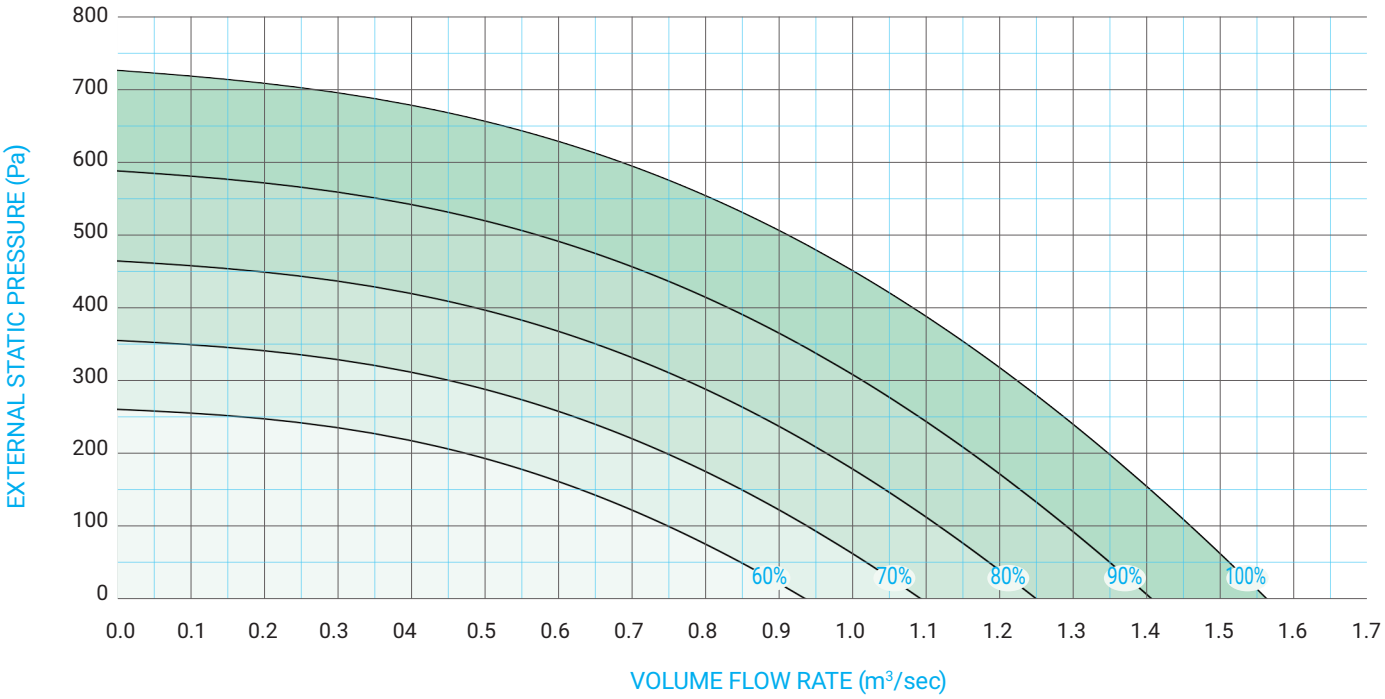
TECHNICAL DATA - QBK450EC-1

SPECIFIC FAN POWER - FOR EACH FAN



TECHNICAL DATA - QBK450EC-3

FAN SPEED

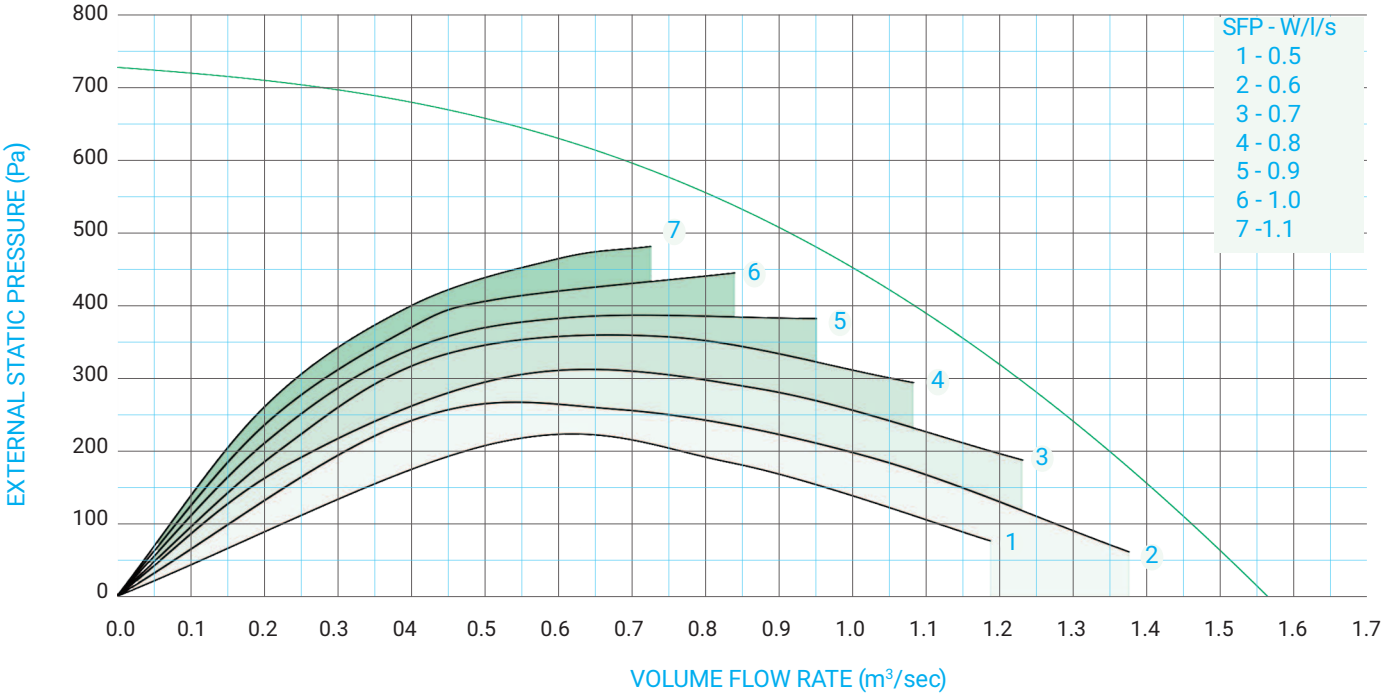


ELECTRICAL DATA	MODEL	FAN POWER (kW)	SUPPLY	FLC (Amps)
	QBK450EC-3	1.20	415V 3Ph	2.0

QBK450EC-3		Mid Octave Frequency band / Hz								Total in Duct Sound Power Level	Breakout Sound Pressure Level @ 1m	Breakout Sound Pressure Level @ 3m
		63	125	250	500	1k	2k	4k	8k	dB(A)	dB(A)	dB(A)
0.81 m³/sec 600 Ext Pa @ 100%	Inlet in duct dB	78	82	65	64	66	64	59	56	71.7	44.1	34.5
	Outlet in duct dB	74	83	80	76	73	69	64	59	78.4		
0.72 m³/sec 484 Ext Pa @ 90%	Inlet in duct dB	74	80	63	62	64	61	56	53	69.1	41.5	31.9
	Outlet in duct dB	72	81	76	73	71	66	61	56	75.7		
0.64 m³/sec 381 Ext Pa @ 80%	Inlet in duct dB	71	79	60	59	61	58	53	50	66.9	40.0	30.4
	Outlet in duct dB	69	79	72	70	68	63	58	52	72.6		
0.56 m³/sec 290 Ext Pa @ 70%	Inlet in duct dB	68	77	56	56	57	54	49	46	63.9	37.0	27.4
	Outlet in duct dB	65	76	69	66	65	59	54	48	69.1		
0.48 m³/sec 213 Ext Pa @ 60%	Inlet in duct dB	66	73	52	52	54	50	45	41	60.0	33.3	23.8
	Outlet in duct dB	63	73	65	63	61	54	49	44	65.4		

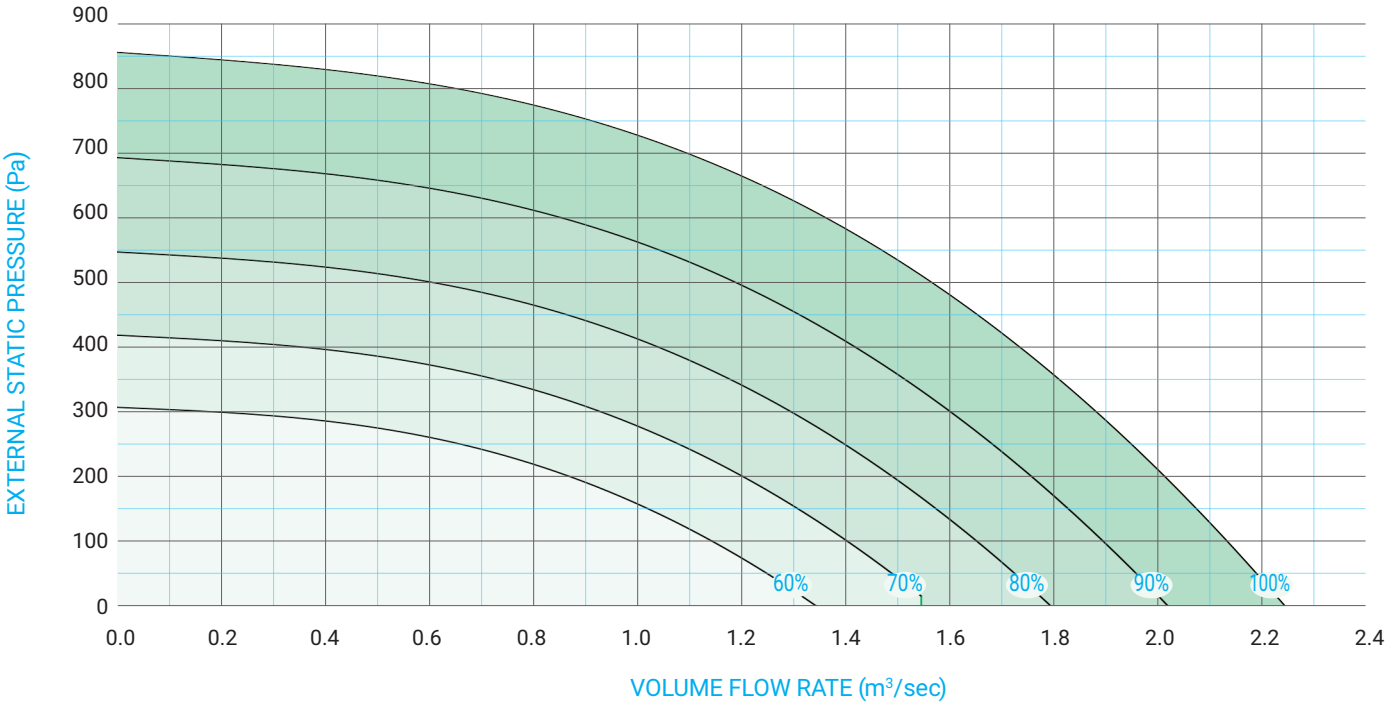
TECHNICAL DATA - QBK450EC-3

SPECIFIC FAN POWER - FOR EACH FAN



TECHNICAL DATA - QBK500EC-3

FAN SPEED



ELECTRICAL DATA (motor must be RPM limited to 1530 rpm max)	MODEL	FAN POWER (kW)	SUPPLY	FLC (Amps)
	QBK500EC-3	2.40	415V 3Ph	3.9

QBK500EC-3		Mid Octave Frequency band / Hz								Total in Duct Sound Power Level	Breakout Sound Pressure Level @ 1m	Breakout Sound Pressure Level @ 3m
		63	125	250	500	1k	2k	4k	8k	dB(A)	dB(A)	dB(A)
1.25 m³/sec 820 Ext Pa @ 100%	Inlet in duct dB	77	84	73	67	68	68	63	59	74.4	47.3	37.8
	Outlet in duct dB	75	85	85	77	75	73	68	64	81.4		
1.12 m³/sec 663 Ext Pa @ 90%	Inlet in duct dB	75	83	73	64	65	64	60	56	72.5	46.7	37.2
	Outlet in duct dB	73	85	83	75	73	69	65	61	79.4		
1.01 m³/sec 530 Ext Pa @ 80%	Inlet in duct dB	72	82	66	61	63	61	56	53	69.7	43.5	33.9
	Outlet in duct dB	70	83	77	71	70	66	62	57	75.4		
0.87 m³/sec 399 Ext Pa @ 70%	Inlet in duct dB	69	80	63	59	60	57	53	49	67.0	41.1	31.6
	Outlet in duct dB	66	80	75	68	67	62	58	53	72.4		
0.77 m³/sec 312 Ext Pa @ 60%	Inlet in duct dB	67	76	60	54	56	53	49	45	63.0	37.0	27.5
	Outlet in duct dB	63	76	72	64	63	58	54	50	68.6		

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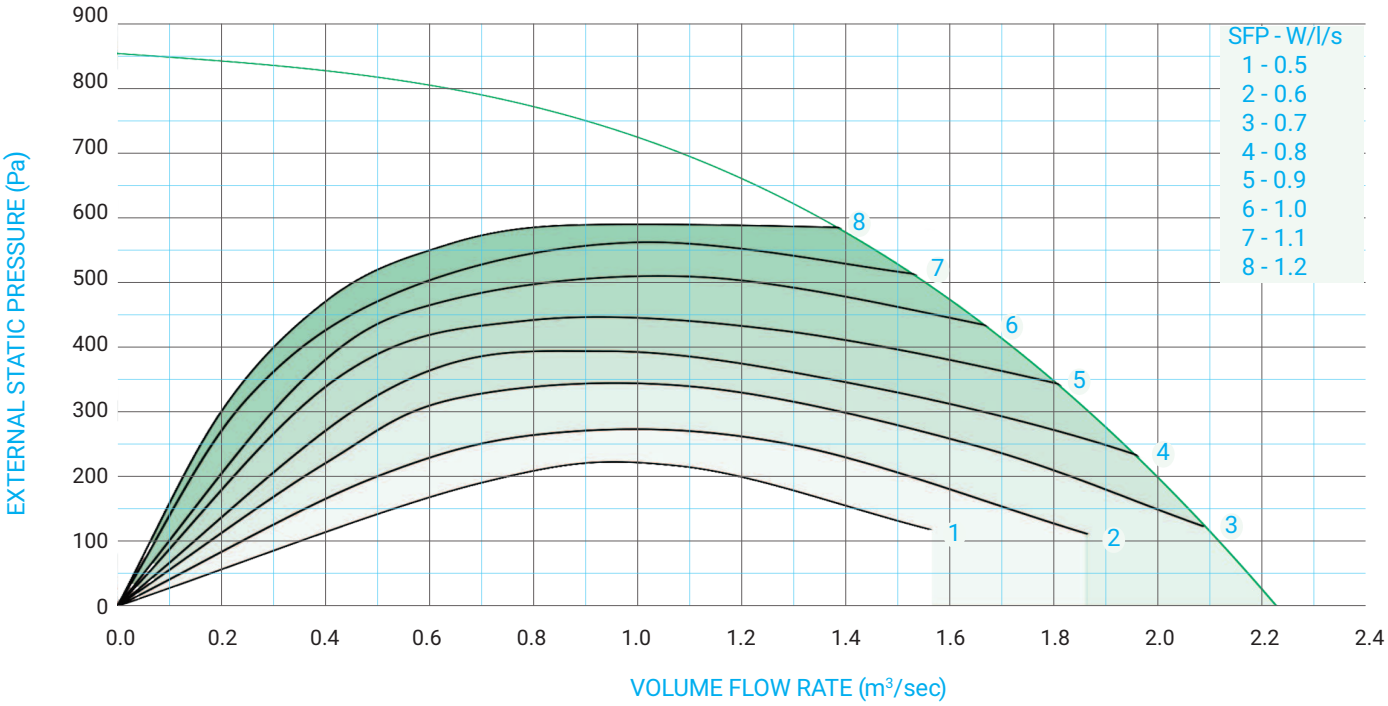
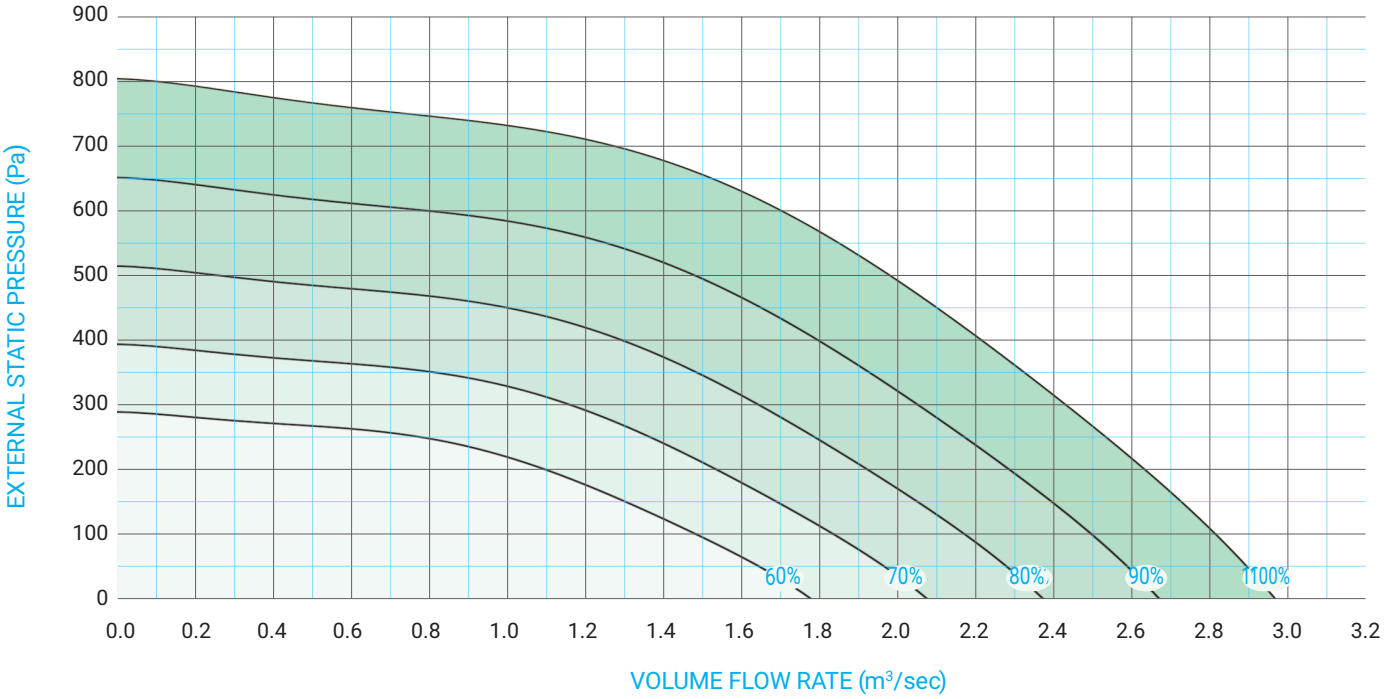
TECHNICAL DATA - QBK500EC-3

SPECIFIC FAN POWER - FOR EACH FAN



TECHNICAL DATA - QBK560EC-3

FAN SPEED

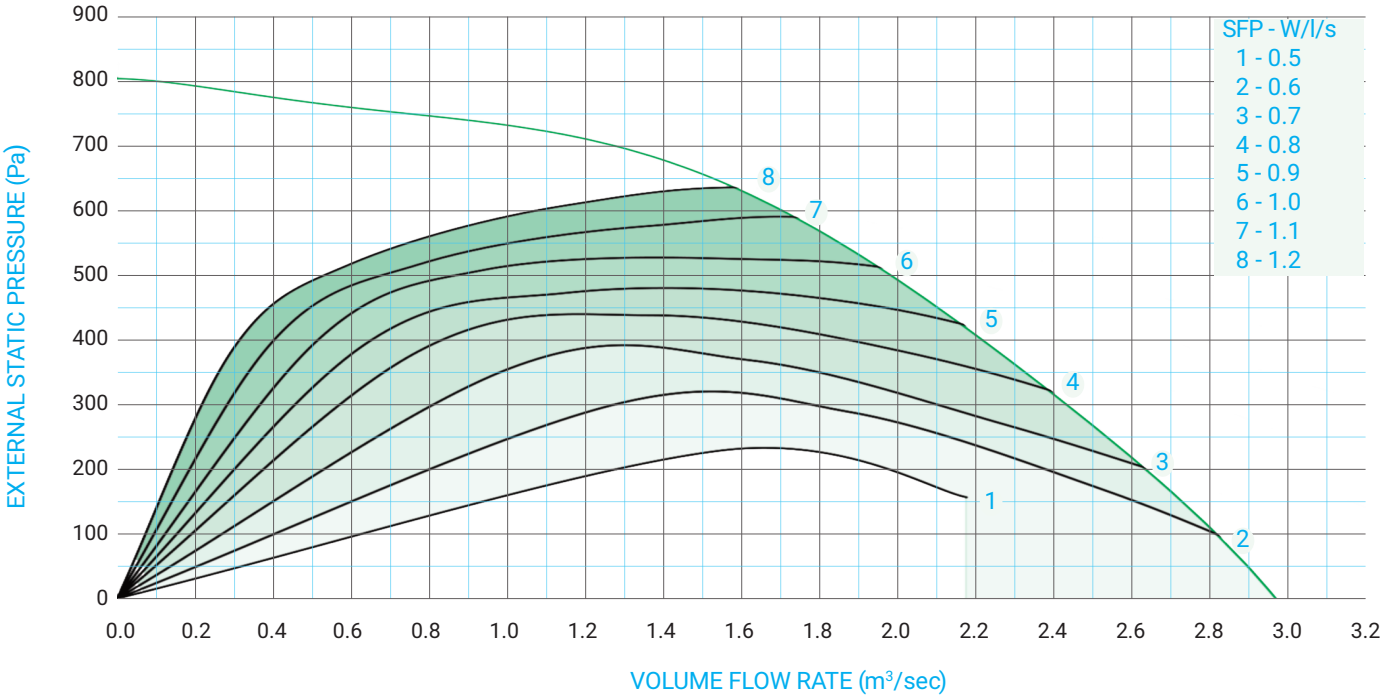


ELECTRICAL DATA (motor must be RPM limited to 1360 rpm max)	MODEL	FAN POWER (kW)	SUPPLY	FLC (Amps)
	QBK560EC-3	3.6	415V 3Ph	5.8

QBK560EC-3		Mid Octave Frequency band / Hz								Total in Duct Sound Power Level	Breakout Sound Pressure Level @ 1m	Breakout Sound Pressure Level @ 3m
		63	125	250	500	1k	2k	4k	8k	dB(A)	dB(A)	dB(A)
1.53 m³/sec 1000 Ext Pa @ 100%	Inlet in duct dB	82	89	80	73	72	70	66	63	78.8	50.8	41.3
	Outlet in duct dB	80	86	85	81	77	75	70	66	83.4		
1.38 m³/sec 818 Ext Pa @ 90%	Inlet in duct dB	81	87	77	71	70	68	64	61	76.9	48.5	38.9
	Outlet in duct dB	78	85	82	79	75	73	68	64	81.3		
1.23 m³/sec 643 Ext Pa @ 80%	Inlet in duct dB	79	88	74	67	67	65	60	57	75.2	48.1	38.5
	Outlet in duct dB	76	85	79	75	72	70	64	60	78.3		
1.07 m³/sec 494 Ext Pa @ 70%	Inlet in duct dB	75	88	70	64	64	60	56	52	73.5	47.2	37.6
	Outlet in duct dB	72	85	77	72	69	65	60	56	75.4		
0.93 m³/sec 369Ext Pa @ 60%	Inlet in duct dB	72	81	66	60	60	56	52	48	67.5	41.3	31.8
	Outlet in duct dB	69	80	72	68	64	61	56	51	71.0		

TECHNICAL DATA - QBK560EC-3

SPECIFIC FAN POWER - FOR EACH FAN



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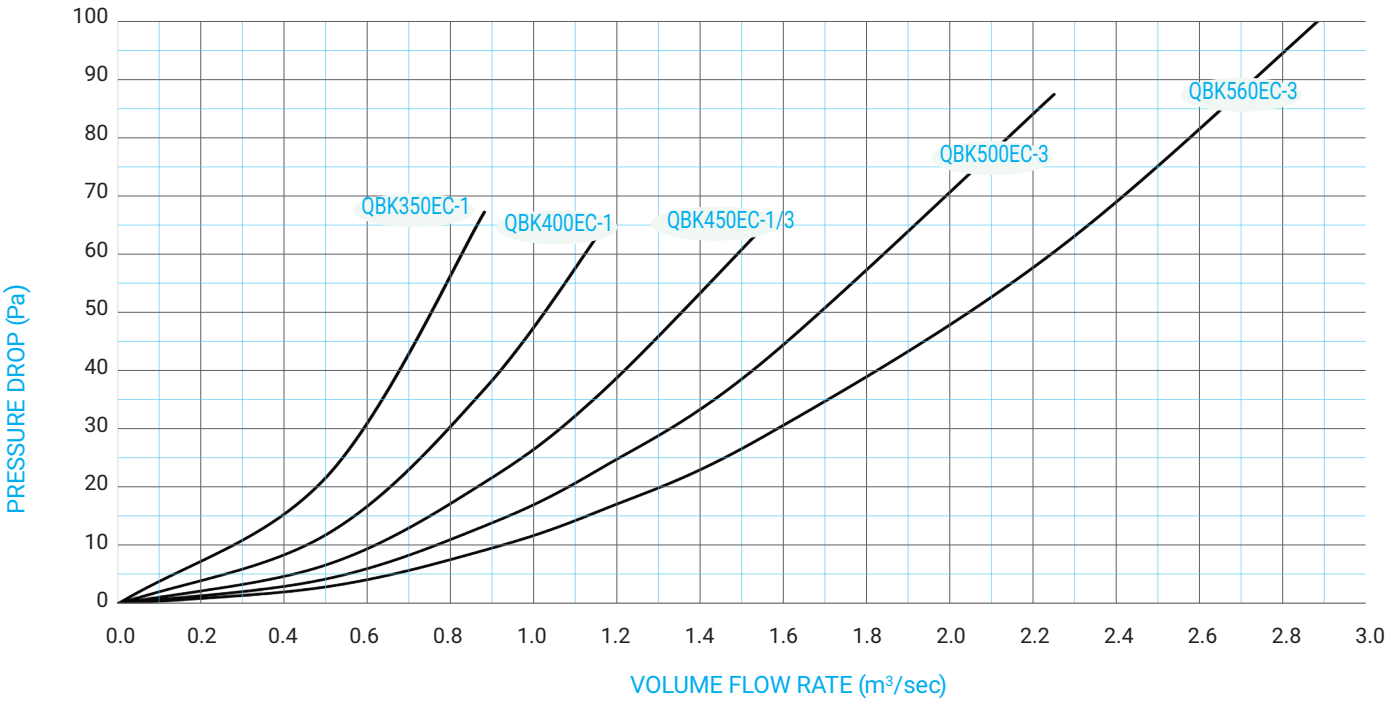
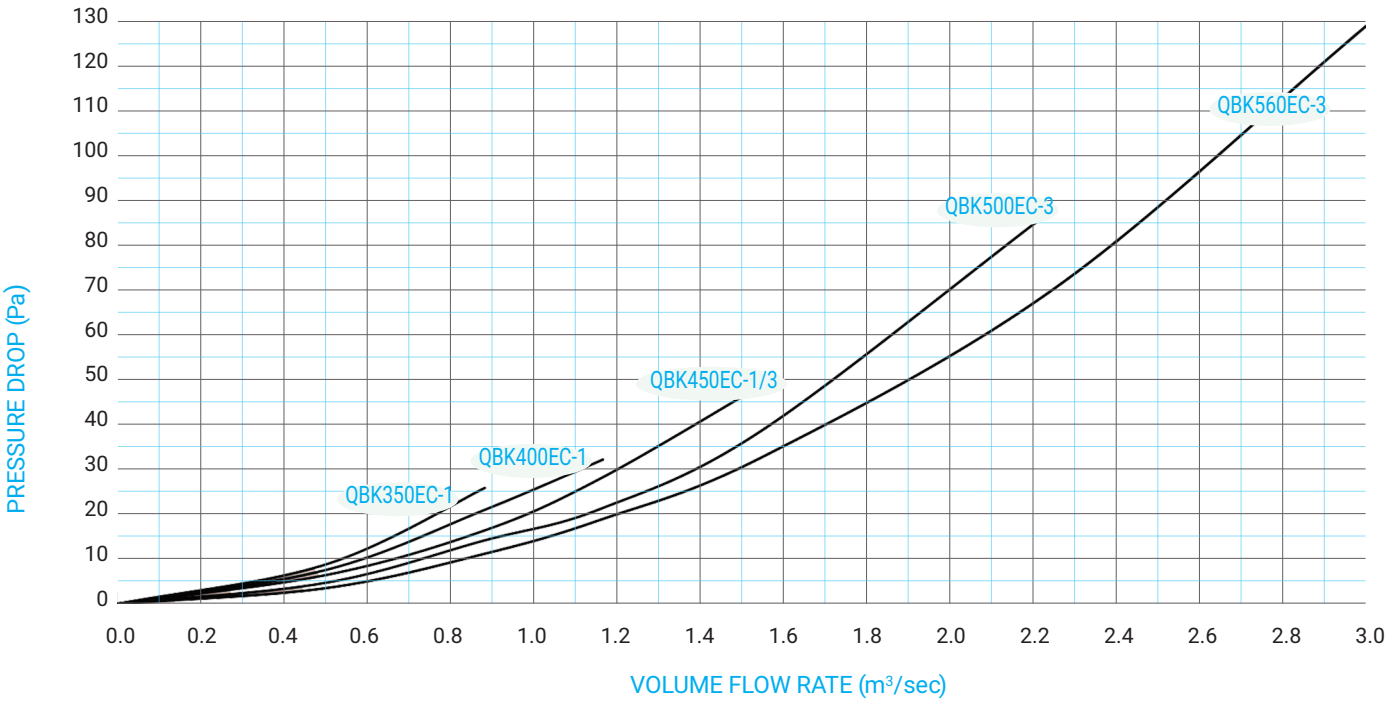
COWL PRESSURE DROP

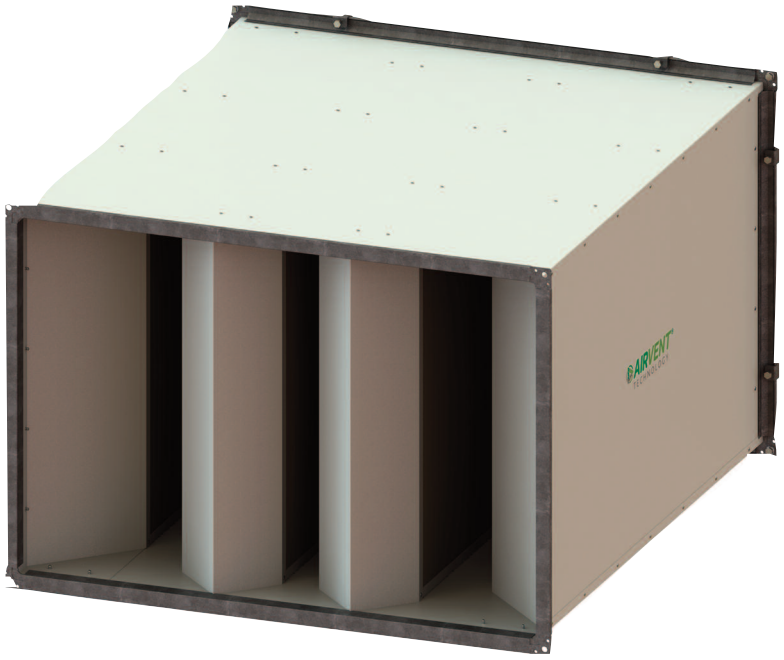


COWL

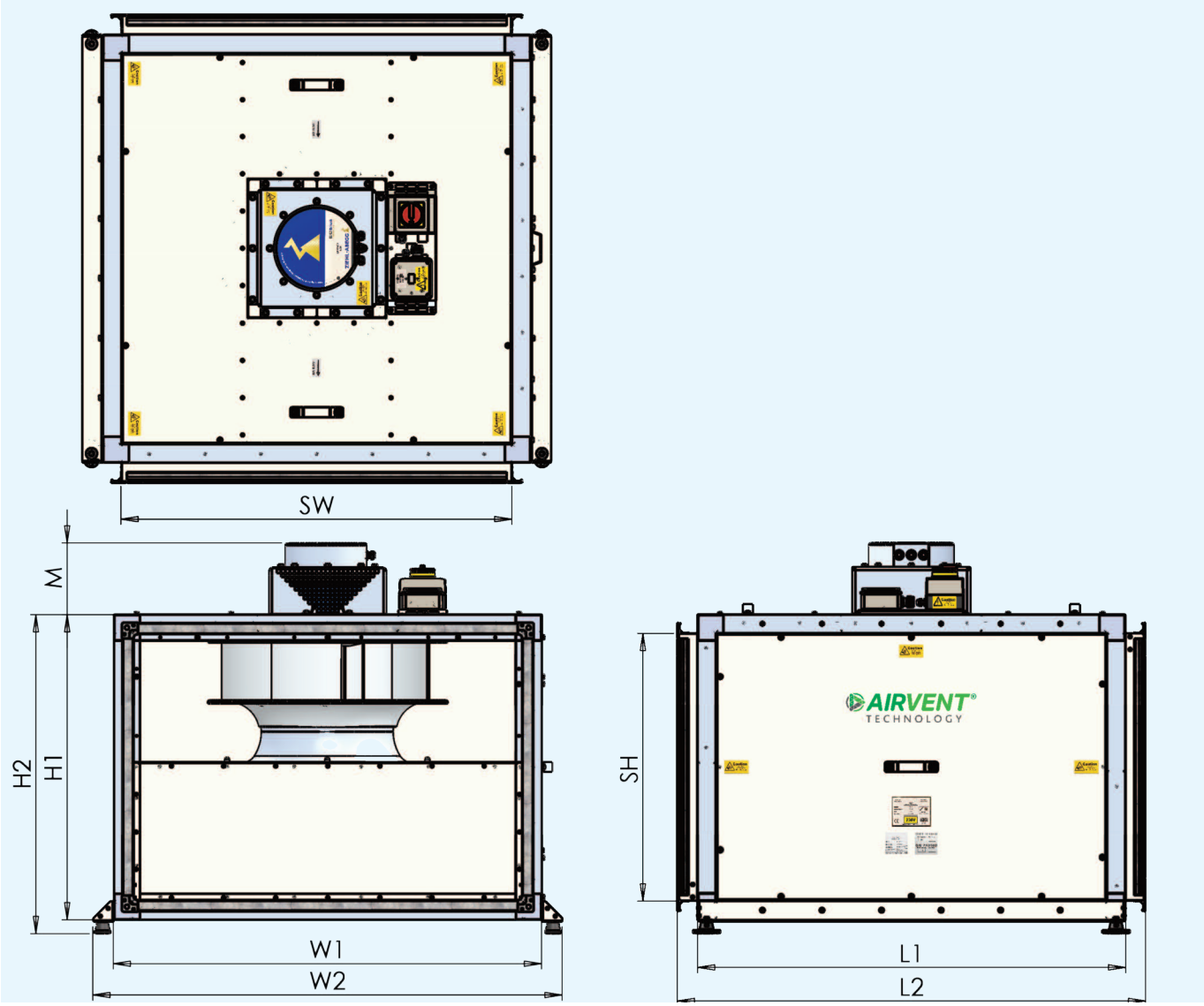
ATTENUATOR PRESSURE DROP



ATTENUATOR

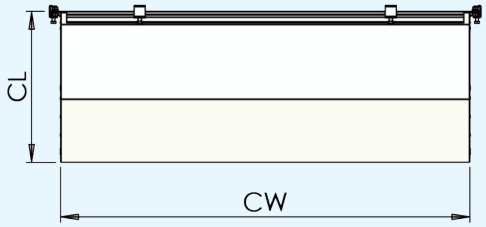


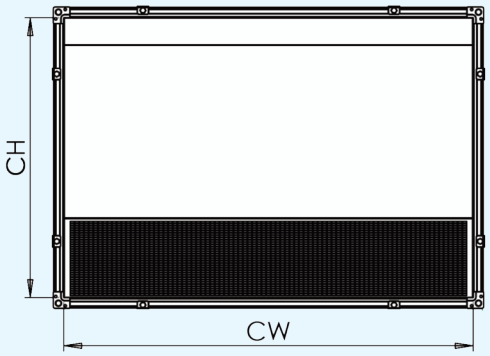
BASE UNIT DIMENSIONS

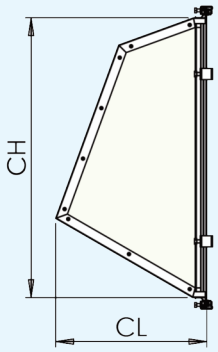


Model	H1	H2	L1	L2	M	SH	SW	W1	W2	Mass - kg
QBK350EC-1	577	614	750	858	134	477	650	750	860	78
QBK400EC-1	629	666	850	958	152	529	750	850	960	98
QBK450EC-1	686	723	950	1058	152	586	850	950	1060	117
QBK450EC-3	686	723	950	1058	152	586	850	950	1060	117
QBK500EC-3	754	791	1050	1158	192	654	950	1050	1160	149
QBK560EC-3	819	856	1150	1258	192	719	1050	1150	1260	167

ANCILLARY DIMENSIONS

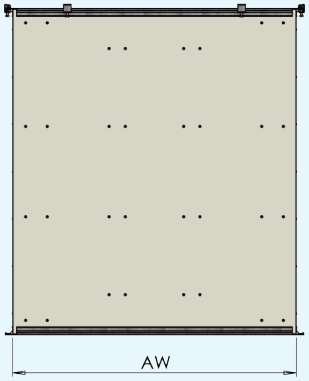


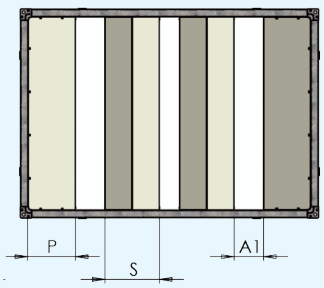


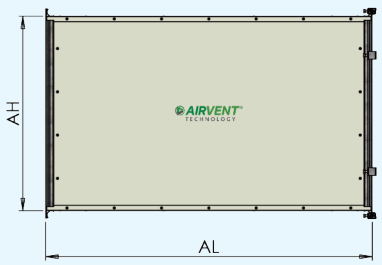


COWL DIMENSIONS

Unit	CH	CL	CW	Mass-kg
QBK350EC-1	477	269	650	7
QBK400EC-1	529	295	750	8
QBK450EC-1	586	323	850	10
QBK450EC-3	586	323	850	10
QBK500EC-3	654	357	950	11
QBK560EC-3	719	389	1050	13







ATTENUATOR DIMENSIONS

Unit	AH	AL	AW	P	S	A1	Mass-kg
QBK350EC-1	477	1208	650	75	100	75	52
QBK400EC-1	529	1208	750	125	100	100	61
QBK450EC-1	586	1208	850	125	150	75	75
QBK450EC-3	586	1208	850	125	150	75	75
QBK500EC-3	654	1208	950	175	150	100	84
QBK560EC-3	719	1208	1050	175	200	75	99

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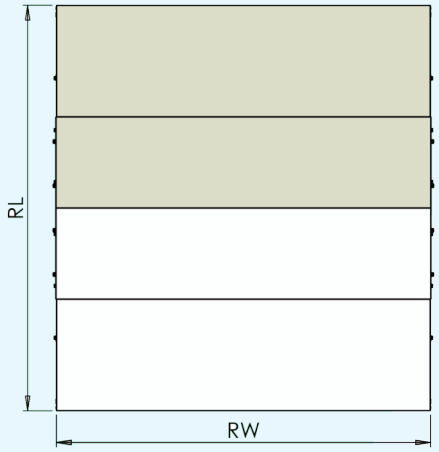
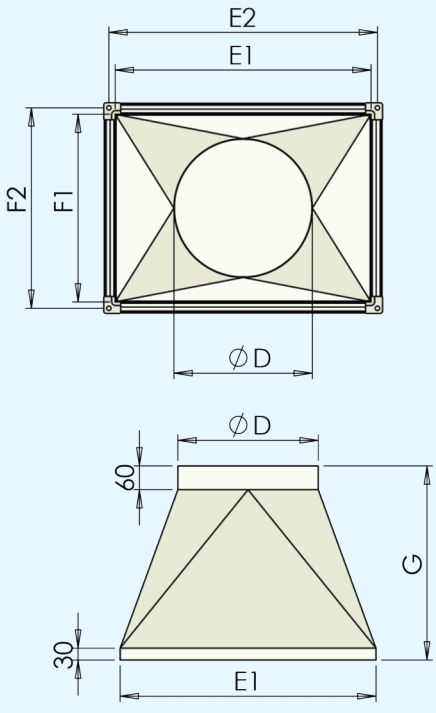
ANCILLARY DIMENSIONS



ROOF DIMENSIONS

Unit	RH	RL	RW	Mass-kg
QBK350EC-1	255	851	757	10
QBK400EC-1	273	951	857	13
QBK450EC-1	292	1051	957	15
QBK450EC-3	292	1051	957	15
QBK500EC-3	310	1151	1057	19
QBK560EC-3	328	1251	1157	22



SPIGOT ADAPTOR DIMENSIONS

Unit	øD	E1	E2	F1	F2	G	Mass-kg
QBK350EC-1	355	647	679	474	506	490	7.0
QBK400EC-1	400	747	779	526	558	515	8.5
QBK450EC-1	450	847	879	583	615	590	11.0
QBK450EC-3	450	847	879	583	615	590	11.0
QBK500EC-3	500	947	879	651	683	640	13.0
QBK560EC-3	560	1047	1079	716	748	690	16.0

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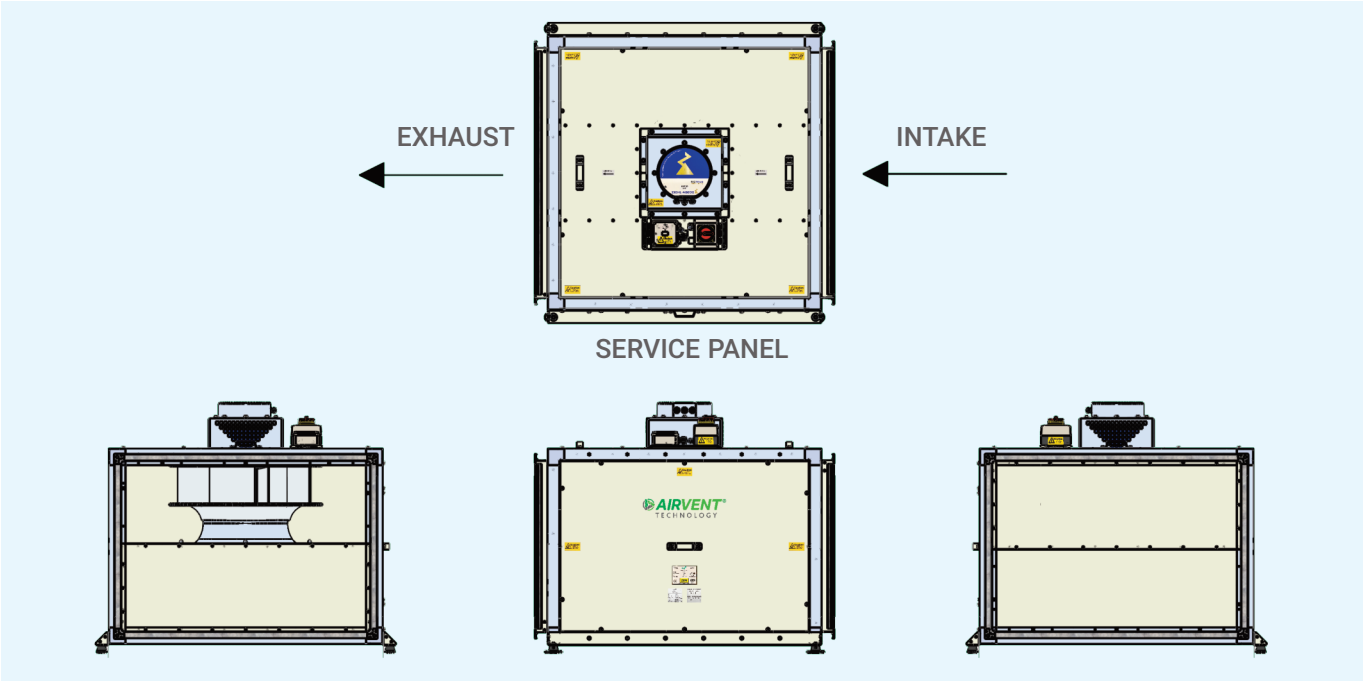
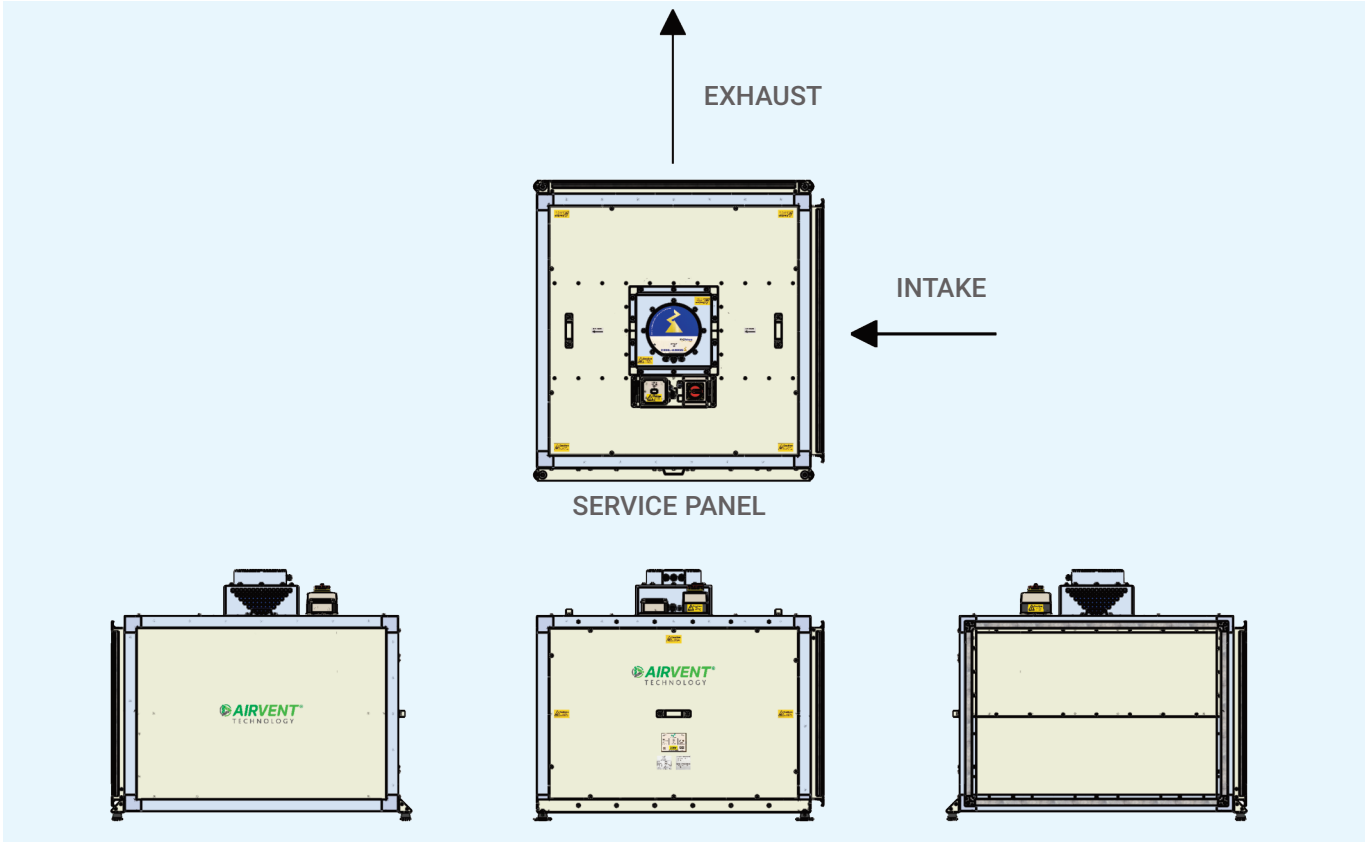
"QBK" High Temperature Fan

Handings

LEFT ACCESS STRAIGHT (standard configuration)



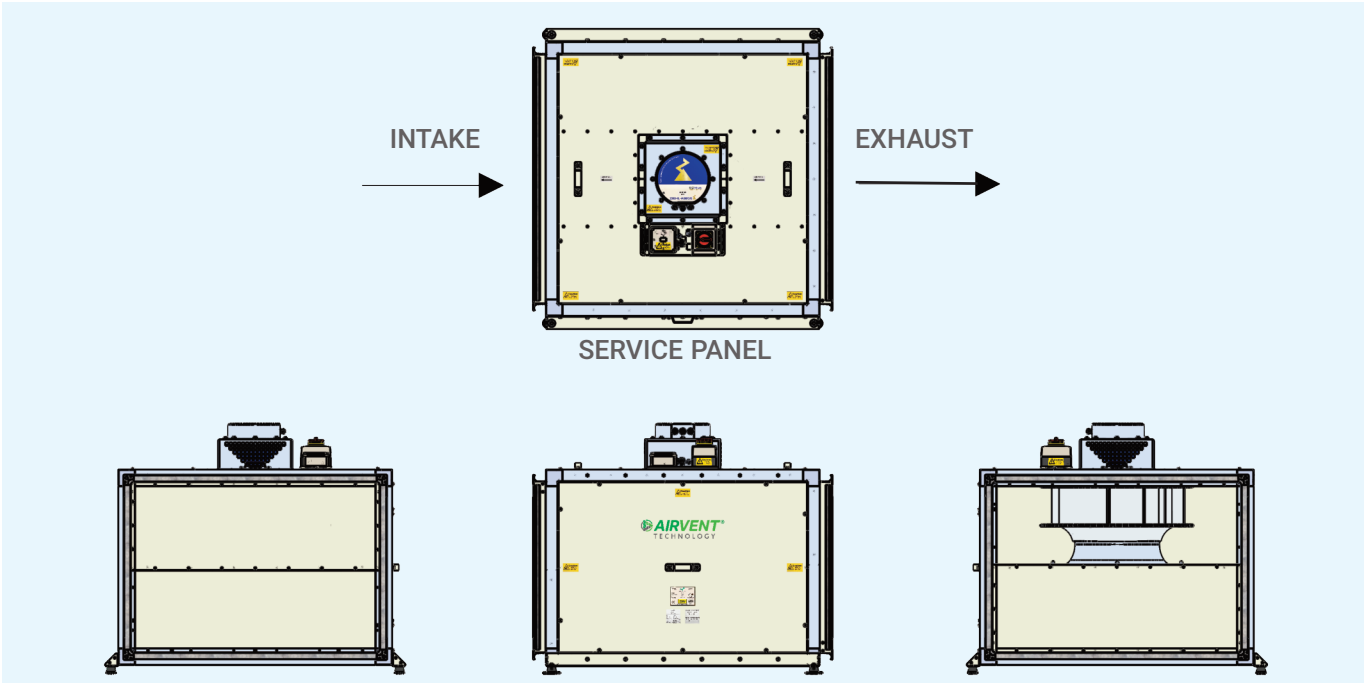
LEFT ACCESS 90 DEG



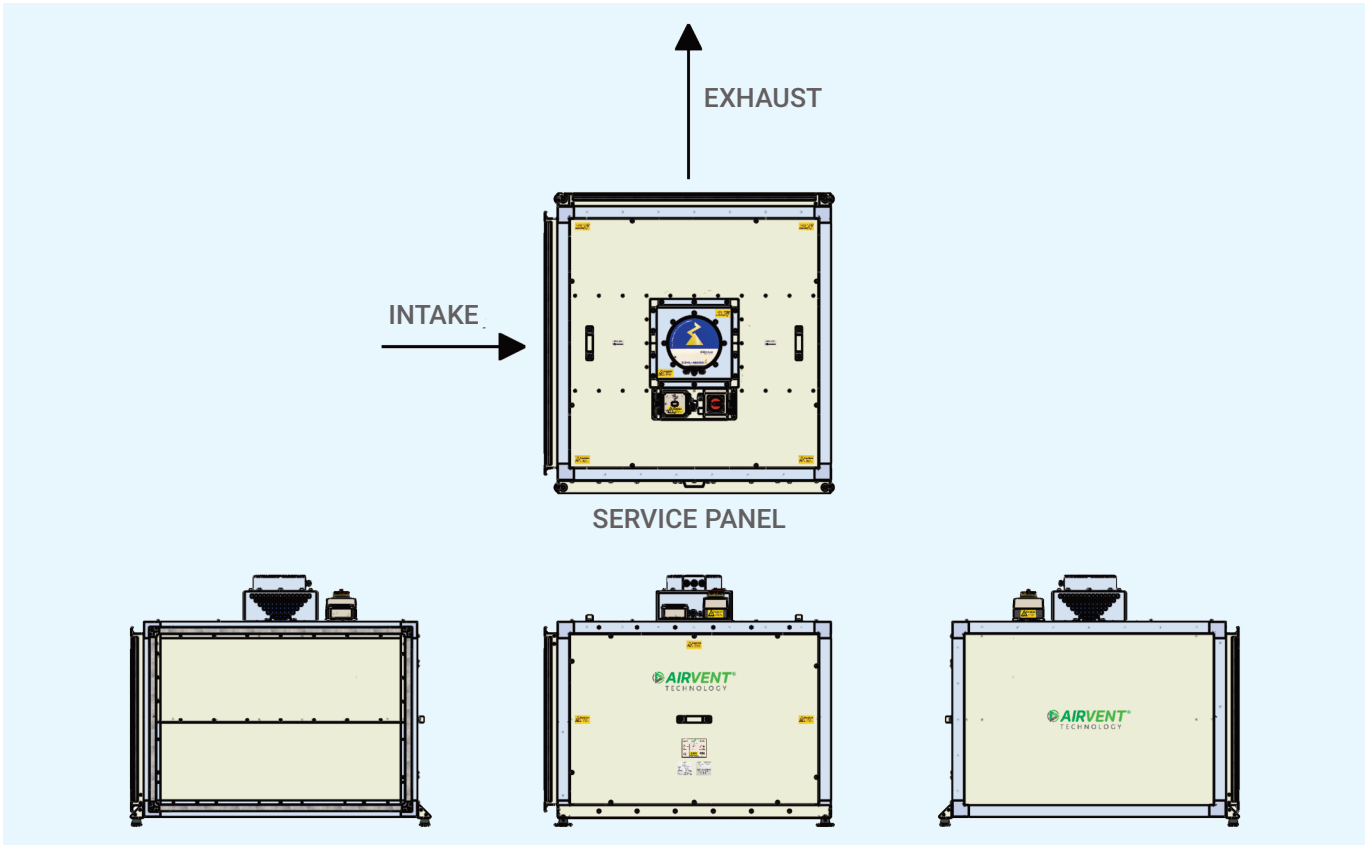
"QBK" High Temperature Fan

Handings

RIGHT ACCESS STRAIGHT



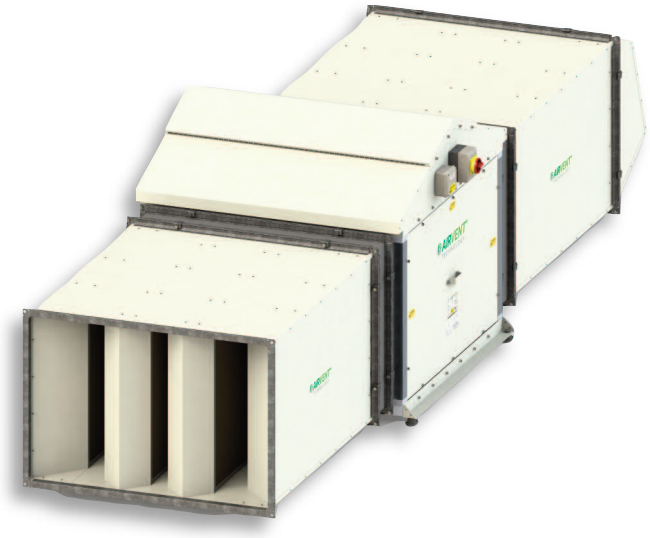
RIGHT ACCESS 90 DEG



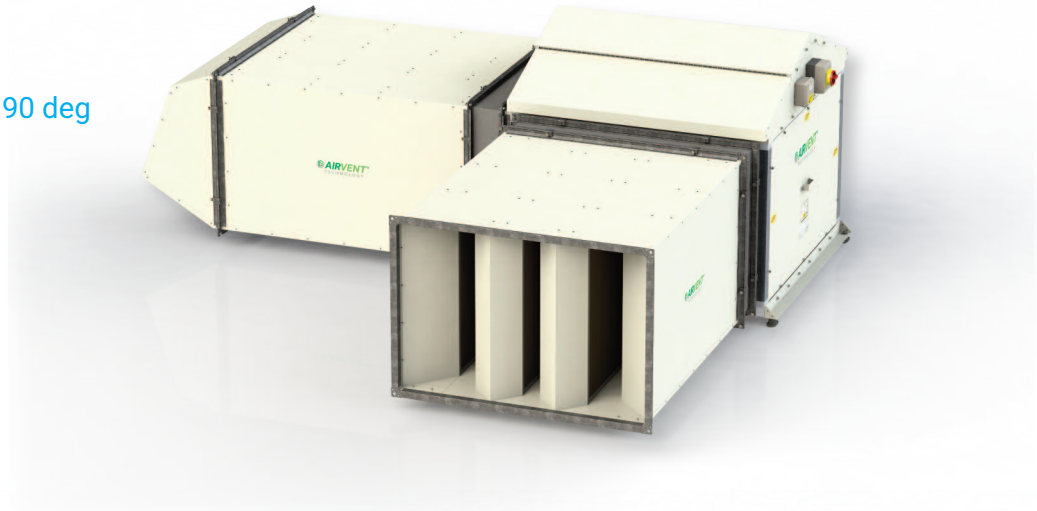
"QBK" High Temperature Fan

Configurations

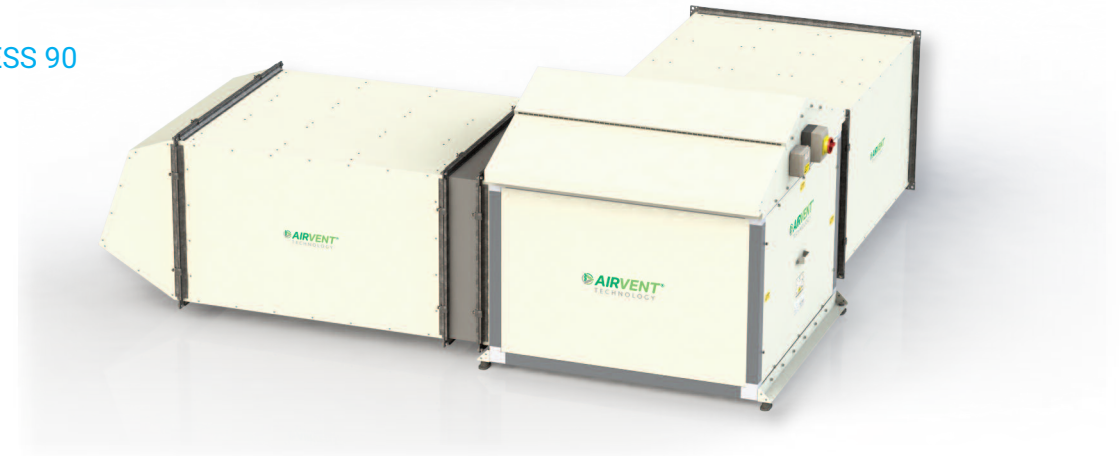
RIGHT ACCESS
STRAIGHT



RIGHT ACCESS 90 deg

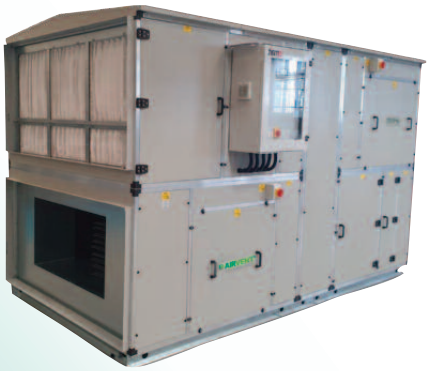


LEFT ACCESS 90
deg



Other Commercial/Industrial Products with EC Motors

STP/STR bespoke Air Handling Units



- Bespoke or modular, supply, extract or combined
- Plantroom or weatherproof, stacked, side x side and vertical models up to 20m³/s air volume
- Adhere to specialist sector specification
- Versatile fitted control options
- Sectionalised units and flat pack available

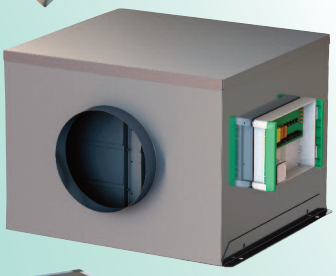
HRPSL/HRRSL - Heat Recovery Units

- Standard designs up to 4m³/s air volume
- Plantroom or weatherproof, stacked or side x side models
- High efficency Counterflow heat exchanger
- Versatile fitted control options

BAHU - Compact Supply Air Handling Units
AHU - Supply Air Handling Units

- Pre-designed units up to 1.2m³/s air volume
- Plantroom and weatherproof models
- Electric or water heating options
- Matched control panel options

DMTSQ/RMTS - Acoustic Twin Cabinet Fans
DMSQ/RMS - Acoustic Cabinet Fans



- Pre-designed units up to 2.5m³/s air volume
- Plantroom and weatherproof models
- Matched control panels. Twin fans with auto-changeover facility

HRPVX - Vertical Heat Recovery Unit

- 2 sizes - left or right configuration
- Up to 2.1m³/s air volume
- Fitted controls
- Optional internal heater (LPHW or Electric)

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