

# Quiet Pack Twin Fan (QPTW)

- Air volumes up to 1.35m<sup>3</sup>/s
- Suitable for external pressures up to 450Pa
- Designed to suit duct diameters from 100 to 500mm
- Operating temperatures up to 40°C
- Speed controllable
- Quality assurance to BS EN ISO 9001:1994
- Performance tested to BS848 Part 1 1980



The Quiet Pack Twin in-line fans are as supplied from Roof Units, designed around a high performance centrifugal impeller, offering a highly efficient, quiet and compact twin in-line acoustic fan.

The Quiet Pack Twin fan range is manufactured from prime quality galvanised sheet steel, ensuring a robust twin in-line fan for those tough site conditions.

Casings are suitable for internal mounting only and internally treated with an 'O' class rated acoustic foam, which offers the benefits of excellent low level duct bound and breakout sound levels, in addition self extinguishing properties, zero burn rate, resistant to ignition, and no toxic fumes.

Quiet Pack Twin fans are suitable for circular ducting ranging in sizes 100, 125, 150, 160, 250, 315, 400 and 500mm, with air volumes up to 1.35m<sup>3</sup>/s and pressure development of up to 450Pa.

They are specially designed to allow the unit to be mounted via drop rods or anti vibration mounts, ensuring a quick and easy solution to installation with all units fitted with backdraught shutters to prevent air flow returning back through the system during shutdown periods.

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## Impellers

The motor and backward curved impeller is factory matched, statically and dynamically balanced on precision machines, to ISO 1940 Grade 6.3., to give quiet, vibration free running.

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## Motors

Motor insulation Class B, suitable for operating temperatures from -15°C up to +40°C and atmospheres up to 95% RH.

All sizes are suitable for speed control by electronic or voltage reduction. Vent-Axia would recommend that a voltage reduction Auto Transformer speed controller is used with all units to ensure minimum noise levels during speed control and to eliminate any possibility of harmonic noise levels which may occur when using electronic speed controllers at lower speeds.

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## Performance

The fan performance is in accordance with tests to BS848 Part 1 1980, with the fan sound levels measured in a reverberant chamber in accordance with BS848 Part 2 1985.

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## Quality Assurance

Design and manufacture is in accordance with the standard for quality management systems BS EN ISO 9001:1994.

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## Accessories

A full range of accessories are available to compliment the range of fans such as:

- Manual/Auto Changeover Twin Fan Controllers
  - Auto Transformer Speed Controllers
  - Electronic Speed Controllers
  - D.O.L. Starters
  - Standard, Acoustic & Thermal Flexible Ducting
  - In-Line Attenuators
  - Wall & Roof Terminals
  - Fast Clamps
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## ACOB1A Twin Fan Controller



IP rating: IP40.

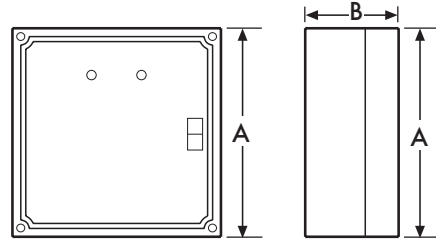
Fuse Size: T rated 15 amp glass fuse (5x20mm).

### Models

Stock Ref

**ACOB1A**

### Dimensions (mm)



Size	A	B	kg
ACOB1A	125	56	0.28

- Manual or auto changeover facilities
- 2 to 24 hour adjustable duty sharing
- Diagnostic program facility on start up
- Suitable for 1 phase twin fan units up to 8 amps
- Can be wired in conjunction with speed controllers
- Volt free contacts fitted as standard
- Neon failure indicators

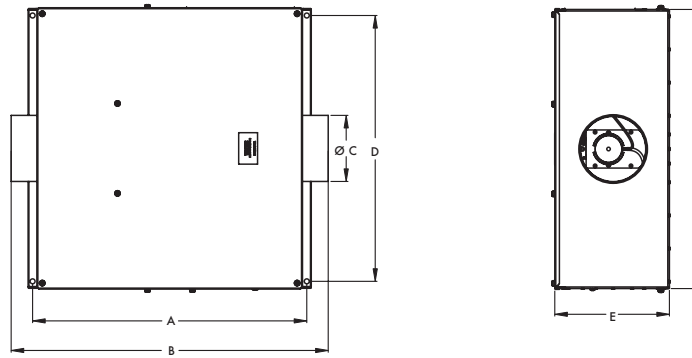
### Specification

Supply Voltage: 230 to 240V/1ph/50Hz.

Maximum Current Capacity: 0.1 to 8.0 amps.

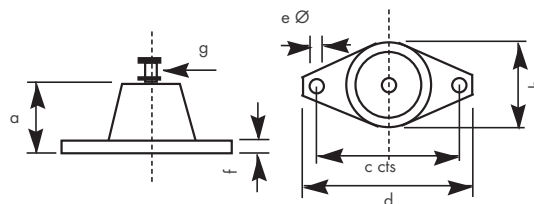
Operating temperature: 0°C to +40°C.

### Dimensions (mm)



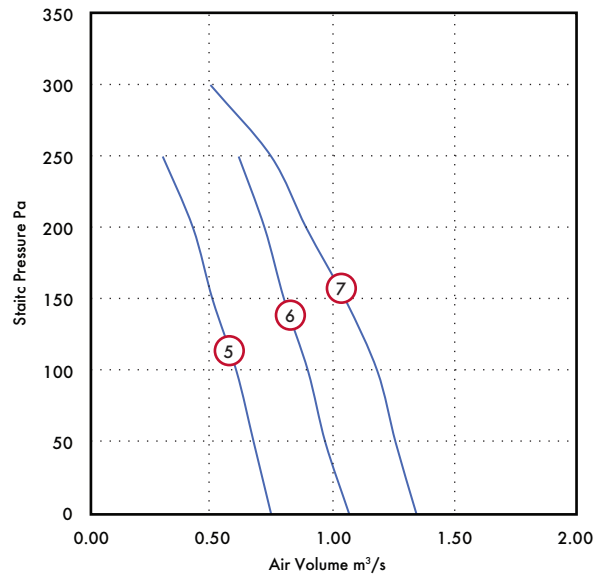
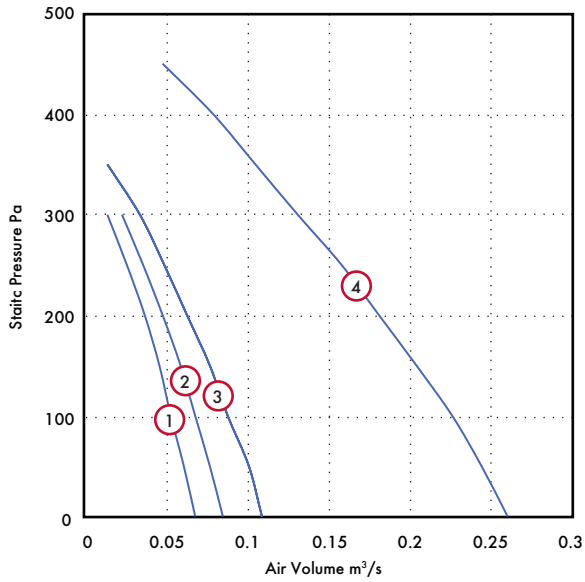
Stock Ref	Duct Diameter mm				Weight		
	A	B	ØC	D	E	F	kg
QPTW100C	610	705	100	591	256	622	26
QPTW125C	610	705	125	591	256	622	26
QPTW150C	610	705	150	591	256	622	26
QPTW250C	925	1020	250	798	354	829	48
QPTW315C	1255	1353	315	1145	536	1176	88
QPTW400C	1255	1353	400	1145	536	1176	90
QPTW500C	1492	1590	500	1533	675	1564	190

### Anti Vibration Mountings



Stock ref	a	b	c	d	eØ	f	g
68MP033G	27	37	54	67	7	3	M8

## Performance Guide



Stock Ref	rpm	Phase	Curve Ref	Duty m³/s @ Pa										Motor kW	S.C. Amps	F.L.C Amps	dB(A) @ 3m	
				0	50	100	150	200	250	300	350	400	450					
QPTW100C	2450	1	1	0.068	0.061	0.053	0.046	0.037	0.026	0.014					0.05	0.37	0.23	32
QPTW125C	2450	1	2	0.085	0.077	0.068	0.059	0.048	0.036	0.023					0.05	0.37	0.23	33
QPTW150C	2450	1	3	0.109	0.101	0.088	0.077	0.063	0.049	0.034	0.014				0.05	0.37	0.23	33
QPTW160C	2700	1	3	0.109	0.101	0.088	0.077	0.063	0.049	0.034	0.014				0.05	0.37	0.23	33
QPTW250C	2550	1	4	0.260	0.244	0.226	0.204	0.181	0.158	0.131	0.105	0.079	0.048		0.16	1.25	0.68	36
QPTW315C	1330	1	5	0.747	0.675	0.603	0.504	0.423	0.297						0.27	2.2	1.18	38
QPTW400C	1340	1	6	1.071	0.972	0.9	0.801	0.72	0.612						0.47	5.9	2.33	39
QPTW500C	1330	1	7	1.35	1.263	1.187	1.054	0.890	0.747	0.495					0.73	6.27	3.21	47

FLC = Full Load Current SC = Starting Current

## Sound Power Level Spectra dB (ref 10<sup>-12</sup> Watts)

Dia.	Motor Phase	Stock Ref	Spectrum	63	125	250	500	1k	2k	4k	8k	dB(A) @ 3m
100	1	QPTW100C	Inlet	53	59	68	58	50	45	34	33	41
100	1	QPTW100C	Outlet	54	57	63	59	60	54	49	42	43
100	1	QPTW100C	Breakout	48	52	59	49	41	39	31	32	32
125	1	QPTW125C	Inlet	51	65	73	62	51	46	36	36	45
125	1	QPTW125C	Outlet	52	62	67	64	62	55	52	45	46
125	1	QPTW125C	Breakout	51	53	60	49	41	40	33	33	33
150	1	QPTW150C	Inlet	54	60	70	59	52	46	38	36	42
150	1	QPTW150C	Outlet	56	58	63	58	59	56	49	43	43
150	1	QPTW150C	Breakout	50	55	60	50	43	38	31	32	33
160	1	QPTW160C	Inlet	54	60	70	59	52	46	38	36	42
160	1	QPTW160C	Outlet	56	58	63	58	59	56	49	43	43
160	1	QPTW160C	Breakout	50	55	60	50	43	38	31	32	33
250	1	QPTW250C	Inlet	64	74	72	67	57	55	56	53	48
250	1	QPTW250C	Outlet	64	74	75	69	70	71	65	64	56
250	1	QPTW250C	Breakout	52	57	68	52	44	40	36	38	39
315	1	QPTW315C	Inlet	66	78	68	60	52	49	42	40	45
315	1	QPTW315C	Outlet	67	75	77	71	69	62	56	49	53
315	1	QPTW315C	Breakout	54	70	63	53	47	41	35	34	38
400	1	QPTW400C	Inlet	73	82	79	68	62	55	50	49	52
400	1	QPTW400C	Outlet	72	78	78	75	74	66	58	53	57
400	1	QPTW400C	Breakout	57	71	63	56	51	46	39	35	39
500	1	QPTW500C	Inlet	77	85	78	71	64	62	54	52	54
500	1	QPTW500C	Outlet	74	83	82	78	77	72	64	58	61
500	1	QPTW500C	Breakout	68	81	72	63	56	49	42	41	48

## Models & Accessories

### Speed Controller

Fan Stock Ref	Auto Changeover Controller Stock Ref	Electronic Stock Ref	Auto Transformer Stock Ref
QPTW100C	ACOB1A	SP5001	SPM5020
QPTW125C	ACOB1A	SP5001	SPM5020
QPTW150C	ACOB1A	SP5001	SPM5020
QPTW160C	ACOB1A	SP5001	SPM5020
QPTW250C	ACOB1A	SP5025	SPM5035
QPTW315C	ACOB1A	SP5050	SPM5060
QPTW400C	ACOB1A	SP5050	SPM5060
QPTW500C	ACOB1A	SP5050	SPM5060

### In-line Attenuators

Fan Stock Ref	300mm Stock Ref	600mm Stock Ref	900mm Stock Ref	1200mm Stock Ref
QPTW100C	83010030	83010060	83010090	-
QPTW125C	83012030	83012060	83012090	-
QPTW150C	83015030	83015060	83015090	-
QPTW160C	-	83016060	83016090	-
QPTW250C	-	83025060	83025090	83025120
QPTW315C	-	83031060	83031090	83031120
QPTW400C	-	-	83040090	83040120
QPTW500C	-	-	83050090	83050120

Fan Stock Ref	Anti Vibration Mounts Stock Ref	Intumescent Fire Dampers Stock Ref	Wall Terminal Stock Ref	Roof Terminal Stock Ref
QPTW100C	68MP033G	CVT100	SA100/280	WRC100
QPTW125C	68MP033G	CVT130	SA125/280	WB160
QPTW150C	68MP033G	CVT150	SA150/280	WB160
QPTW160C	68MP033G	-	SA150/280	WB200
QPTW250C	68MP033G	CVT250	SA250/280	WB200
QPTW315C	68MP033G	CVT300	SA315/280	RCZ300
QPTW400C	68MP033G	-	QSA400/280	RCZ400
QPTW500C	68MP133G	-	-	RCZ500