



QUBE SQU

Centrifugal Box Fan

QUBE SQU

Product Overview

- 4 physical sizes with 5 models from 315mm to 710mm
- Air volume flow rates up to 3.9 m³/s
- Static pressures up to 928 Pa
- Suitable for operating temperatures up to +50°C.
- Inverter speed controllable via 1Ph and 3Ph supply
- Interchangeable double skinned panels
- Available in **AC**

A multi-discharge, double skinned fan unit incorporating a high performance backward curved impeller. Supplied for straight through airflow with the outlet panel positioned directly opposite the inlet panel. The outlet panel can be easily exchanged on-site to provide 90° airflow if required.

Intelligent Design

Movable panels allow the outlet position to be altered on site to suit installation.

Low Noise

Unit is constructed from double insulated panels filled with 25mm fibreglass acoustic insulation.

Controllability

The Eltadrive range of inverters has been designed encompassing the latest technology and combine robustness with reliability. Using an inverter to control fans via sensors to reduce fan speed can provide significant cost savings through lower energy consumption.

Warranty

Each SQU has a 12 month warranty.

Construction

Constructed from self supporting corrosion-resistant extruded aluminium section. The inlet and outlet panels incorporate circular spigots. Assembled with shock resistant fibreglass reinforced Polyamide PA6 corners, and 25mm thick double skinned removable panel. Manufactured from pre-galvanised steel, in-filled with a non flammable mineral wool, 60kg/m³ which minimises breakout noise.



Motor

Three phase multi-voltage IP55 TEFC Foot / Flange mounted IEC frame motors, wound for either (Delta) 230V/3Ph/50Hz or (Star) at 400V/3Ph/50Hz connection. They are suitable for speed control when used with the Eltadrive VSD range of frequency inverter controls.

Impeller

A high efficiency centrifugal welded steel impeller with a non-overloading power characteristic. A backward curved impeller prevents the accumulation of dirt. Finished with a powder coating to RAL 5002 for greater surface protection and dynamically balanced to G2.5 / G6.3 according to ISO1940 part 1.

Typical Applications

- Kitchens
- Restaurants
- Schools
- Colleges
- Shops
- Sports Halls
- Shower Rooms
- Factories
- Industrial Units
- Warehousing

Contents

Page	Information
3	Performance Range Curves
4	Performance, SFP & Electrical Data
5	Sound Data
6	Dimensional Data
7	EcoDesign 1253/2014
8	Accessories

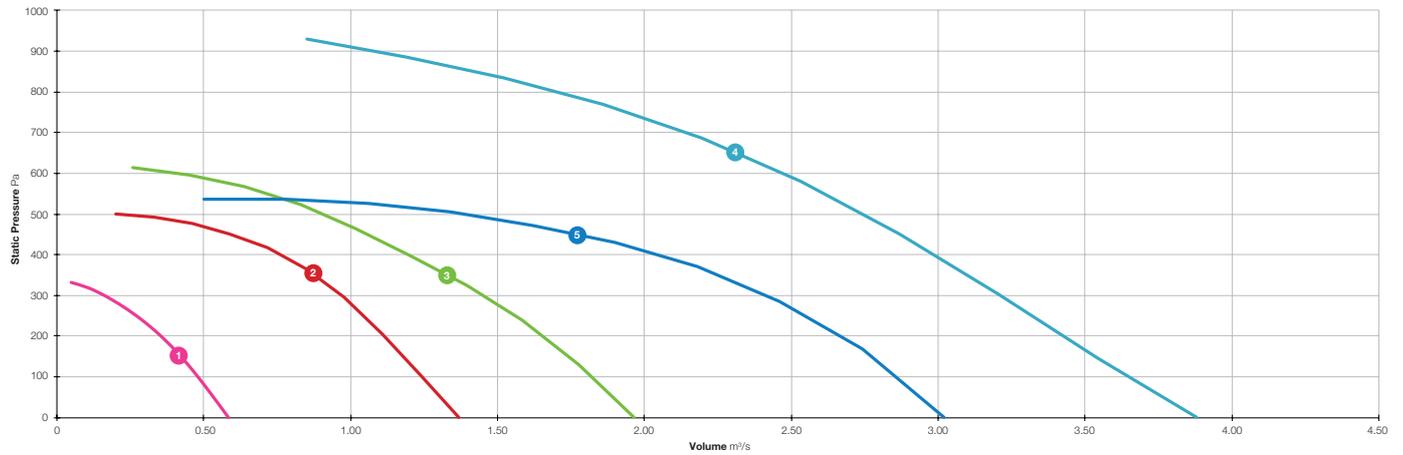
Product Coding

Code	Reference
SQU	Product Range
1	Diameter (1/2/3...)
/	
4	Number of Poles (2/4/6)
-	
3	Voltage Supply (Single Phase / Three Phase)
AC	Motor Type (AC/EC)
A - Z	Additional Coding (A - Z) Product Variants
e.g.	SQU1 / 4 - 3AC

QUBE SQU



Performance Range Curves



1 SQU1 / 4-3
2 SQU2 / 4-3

3 SQU3 / 4-3
4 SQU4 / 4-3

5 SQU4 / 6-3

Three Phase 380V to 415V / 50Hz

Product Code	Speed r/min	Airflow SFP	Airflow m³/s @ Static Pressure Pa												At Best Efficiency Point			Electrical Data		dBA @ 3m	
			0	100	200	250	300	350	400	500	600	700	800	900	Overall Eff %	Input kW	Peak Amps	FLC* Amps	FLC# Amps		
SQU1/4-3	1450	m³/s	0.581	0.481	0.353	0.264	0.163	-	-	-	-	-	-	-	35.5	0.250	0.81	2.30	1.02	Inlet	51
		W/(L/s)	0.32	0.45	0.74	1.00	1.31	-	-	-	-	-	-	-						Outlet	53
		Breakout	36																		
SQU2/4-3	1420	m³/s	1.366	1.243	1.115	1.045	0.967	0.877	0.764	0.185	-	-	-	-	55.6	0.550	1.42	5.30	2.05	Inlet	57
		W/(L/s)	0.31	0.42	0.53	0.59	0.66	0.74	0.84	-	-	-	-	Outlet						59	
		Breakout	44																		
SQU3/4-3	1469	m³/s	1.964	1.822	1.657	1.560	1.451	1.329	1.197	0.904	0.410	-	-	-	44.4	1.077	2.40	8.50	3.17	Inlet	60
		W/(L/s)	0.39	0.49	0.60	0.66	0.73	0.81	0.90	1.13	1.86	-	-	Outlet						62	
		Breakout	47																		
SQU4/4-3	1447	m³/s	3.878	3.640	3.424	3.317	3.210	3.102	2.989	2.749	2.476	2.143	1.707	1.089	52.2	3.000	6.50	-	6.20	Inlet	66
		W/(L/s)	0.49	0.61	0.71	0.77	0.82	0.87	0.93	1.04	1.18	1.25	1.34	1.45						Outlet	68
		Breakout	48																		
SQU4/6-3	910	m³/s	3.019	2.863	2.672	2.556	2.420	2.255	2.047	1.388	-	-	-	-	60.3	1.500	3.90	7.60	2.80	Inlet	59
		W/(L/s)	0.36	0.41	0.47	0.51	0.55	0.60	0.67	0.90	-	-	-	Outlet						61	
		Breakout	46																		

FLC* Amps at 230V / 1Ph / 50Hz input before a 1Ph to 3Ph Variable Speed Drive.

FLC# Amps at 400V / 3Ph / 50Hz input before a 3Ph to 3Ph Variable Speed Drive.

Data in accordance with ErP 1253/2014 of the European Parliament. Product category is NRVU. Measurement category used to determine energy efficiency: D.

A variable speed drive (Eltadrive) must be installed with this fan.

Data provided is at standard air density of 1.2 kg/m³.

Peak Amps @ 400V / 3PH / 50Hz.

The overall A-weighted sound pressure level is at a distance of 3m with spherical free-field propagation. It is expressed in dB re-20µPa and is presented for comparative purposes only.

Sound Data

Three Phase 380V to 415V / 50Hz

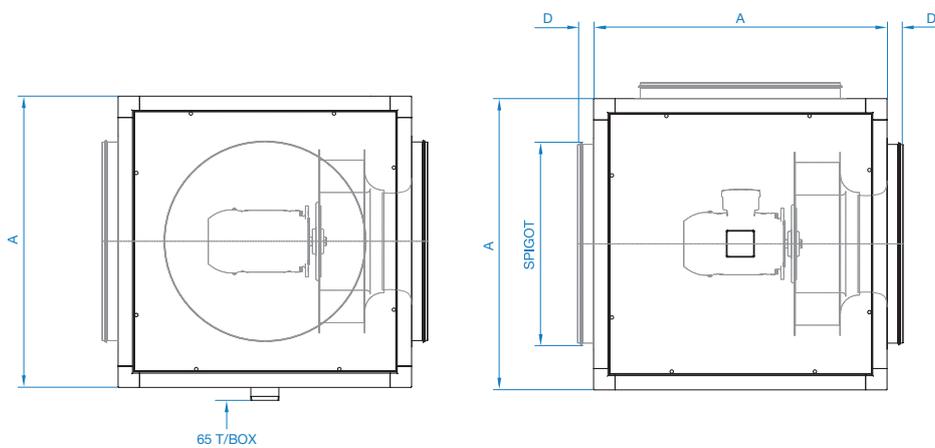
Product Code	Speed r/min		Sound Power Level dBW @ Octave Band Hz								Total dB
			63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	
SQU1/4-3	1450	Inlet	62	66	70	70	66	62	57	53	75
		Outlet	64	68	72	72	68	64	59	55	77
		Breakout	61	63	61	55	45	35	24	18	67
SQU2/4-3	1420	Inlet	68	72	76	76	72	68	63	59	81
		Outlet	70	74	78	78	74	70	65	61	83
		Breakout	69	71	69	63	54	44	36	33	75
SQU3/4-3	1469	Inlet	72	76	79	79	75	71	67	62	84
		Outlet	74	78	81	81	77	73	69	64	86
		Breakout	73	75	72	66	58	52	43	38	79
SQU4/4-3	1447	Inlet	78	82	86	85	81	77	73	68	91
		Outlet	80	84	88	87	83	79	75	70	93
		Breakout	77	76	73	68	59	52	41	33	81
SQU4/6-3	910	Inlet	73	76	79	78	74	70	65	61	84
		Outlet	75	78	81	80	76	72	67	63	86
		Breakout	74	75	72	65	56	49	42	31	79

Data provided at standard air density of 1.2 kg/m³.
 Tests and preparation of the sound data have been carried out in accordance with BS 848 Part 2:1985 at 50% peak pressure.
 The Sound Power Level Spectra are in dB re-1pW.

Dimensional Data

Three Phase

Product Code	A	D	SPIGOT Ø	Weight kg
SQU1/4-3	500	63	315	38
SQU2/4-3	670	80	500	66
SQU3/4-3	820	80	560	99
SQU4/4-3	1020	99	710	165
SQU4/6-3	1020	99	710	178



*Weight does not include mounting feet.
Dimensions are in mm.

Three Phase

Product Code	Circular Weather Hood	Eltadrive Variable Speed Drive 1PH-3PH IP66	Eltadrive Variable Speed Drive 1PH-3PH IP20	Eltadrive Variable Speed Drive 3PH-3PH IP66	Eltadrive Variable Speed Drive 3PH-3PH IP20
SQU1/4-3	064-SQU1-WHC	149-ODE3-12037-1KB1Y	149-ODE3-12037-1KB12	149-ODE3-14075-3KA1Y	149-ODE3-14075-3KA12
SQU2/4-3	064-SQU2-WHC	149-ODE3-12075-1KB1Y	149-ODE3-12075-1KB12	149-ODE3-14075-3KA1Y	149-ODE3-14075-3KA12
SQU3/4-3	064-SQU3-WHC	149-ODE3-12150-1KB1Y	149-ODE3-12150-1KB12	149-ODE3-14150-3KA1Y	149-ODE3-14150-3KA12
SQU4/4-3	064-SQU4-WHC	-	-	149-ODE3-24400-3KA4Y	149-ODE3-24400-3KA42
SQU4/6-3	064-SQU4-WHC	149-ODE3-22220-1KB4Y	149-ODE3-22220-1KB42	149-ODE3-24220-3KA4Y	149-ODE3-24220-3KA42

Product Code	Flanged Silencer 1D Unpodded	Flanged Silencer 2D Unpodded	Matching Flanges (each)	Standard Ambient Flexible Connectors (each)	Wiring Diagram
SQU1/4-3	068-0315-1DENP	068-0315-2DENP	061B-0315	063-0315-MAN150	152-611
SQU2/4-3	068-0500-1DENP	068-0500-2DENP	061B-0500	063-0500-MAN150	152-611
SQU3/4-3	068-0560-1DENP	068-0560-2DENP	061B-0560	063-0560-MAN150	152-611
SQU4/4-3	068-0710-1DENP	068-0710-2DENP	061B-0710	063-0710-MAN200	152-611
SQU4/6-3	068-0710-1DENP	068-0710-2DENP	061B-0710	063-0710-MAN200	152-611

Building Services

Tel **+44 (0) 1384 275800**
Fax **+44 (0) 1384 275810**
Email **info@eltafans.co.uk**

46 Third Avenue, Pensnett Trading Estate, Kingswinford,
West Midlands, DY6 7US United Kingdom

Applied Technology & Building Services Export

Tel **+44 (0) 1489 566500**
Fax **+44 (0) 1489 566555**
Email **at@eltafans.co.uk / export@eltafans.co.uk**

17 Barnes Wallis Road, Segensworth East Industrial Estate,
Fareham, Hampshire, PO15 5ST United Kingdom

eltafans.com

SQU-07-2022 Issue C



BS EN ISO 9001:2015 FM 556465

