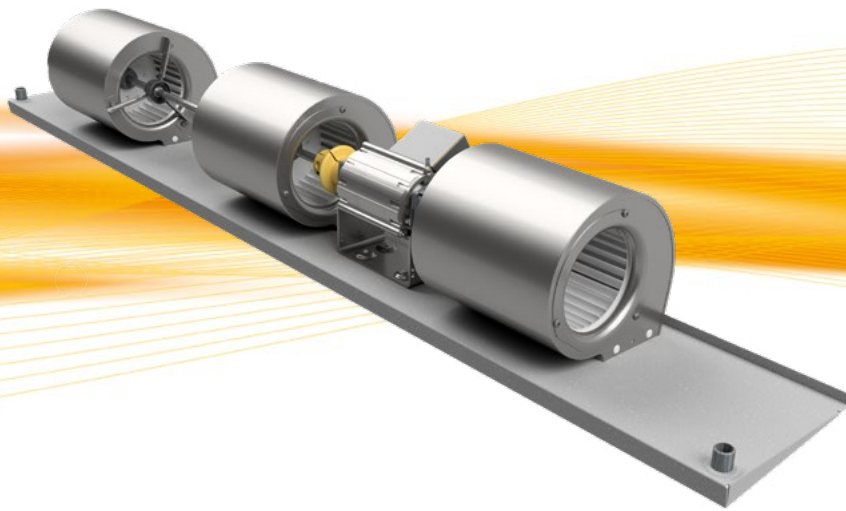
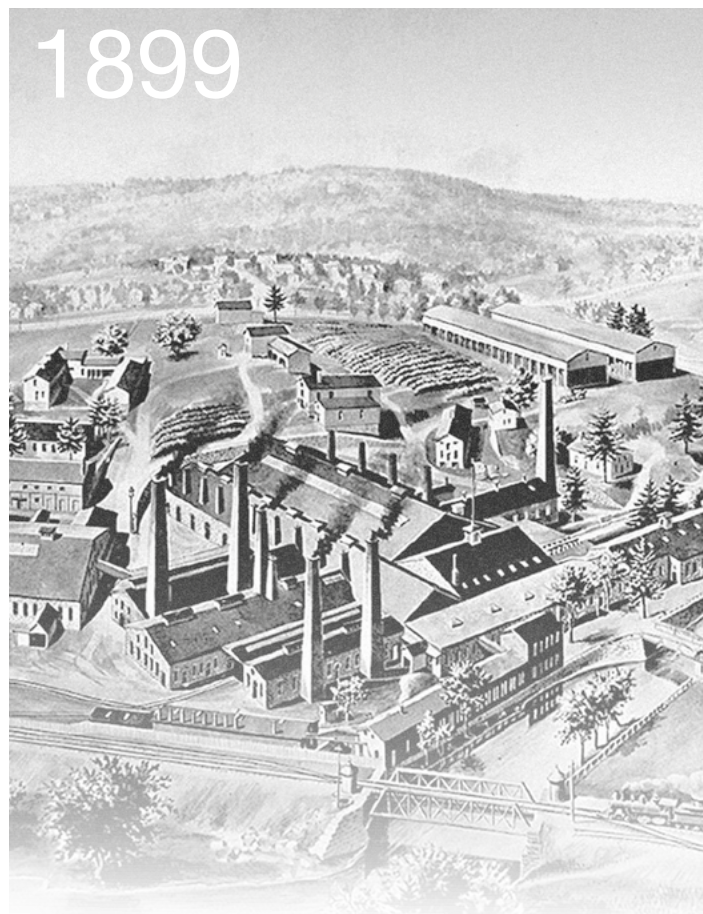


Revolution 360[®]



Fandecks
High Efficiency

torin-sifan
The Partner of Choice



For over a century...

History

Originally formed over 100 years ago as part of the USA based Torin Corporation, and then established as a UK subsidiary in 1964; Torin-Sifan have developed into an independent market leader in the supply of air-movement products, incorporating over 50 years of UK innovation.

Core Focus



Torin-Sifan is a technology expert in the design, development and manufacture of centrifugal impellers, traditional AC motors and highly efficient Electronically Commutated (EC) motors.

Torin-Sifan products exceed the requirements of European energy saving legislation; helping our customers to position themselves at the forefront of their markets.

torin-sifan

The Partner of Choice

About us

Torin-Sifan design and manufacture highly efficient AC and EC motors, motorised impellers and fans for the residential and commercial HVAC manufacturing markets worldwide.

With over 50 years experience developing and manufacturing products, we sell over 1 million units per year and manufacture from two production sites in the UK.

More than 50 years of Innovation

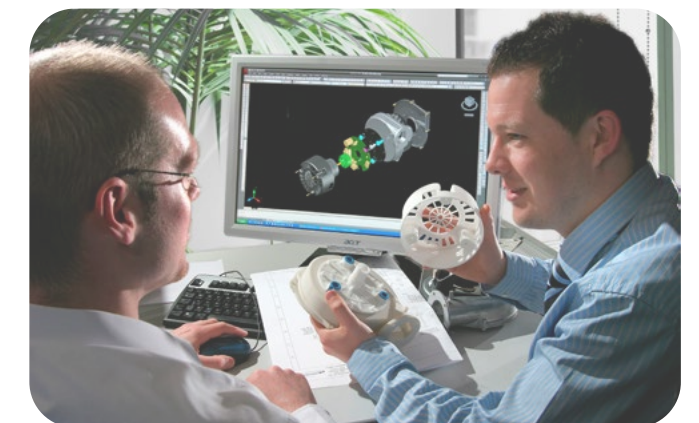
Since our humble beginnings on the banks of the Naugatuck river in Connecticut USA, we have come a long way changing names, continents, owners and innovating the most efficient electric motor technology. We continue to invest in our local community, British engineering and raising the profile of Torin-Sifan throughout the world.

International markets

We are a truly international business with our sales evenly split between our home market in the UK and numerous export customers, all serviced by our technically competent international sales team. Support is provided by experienced product development and applications engineers backed up by an excellent research and development facility.

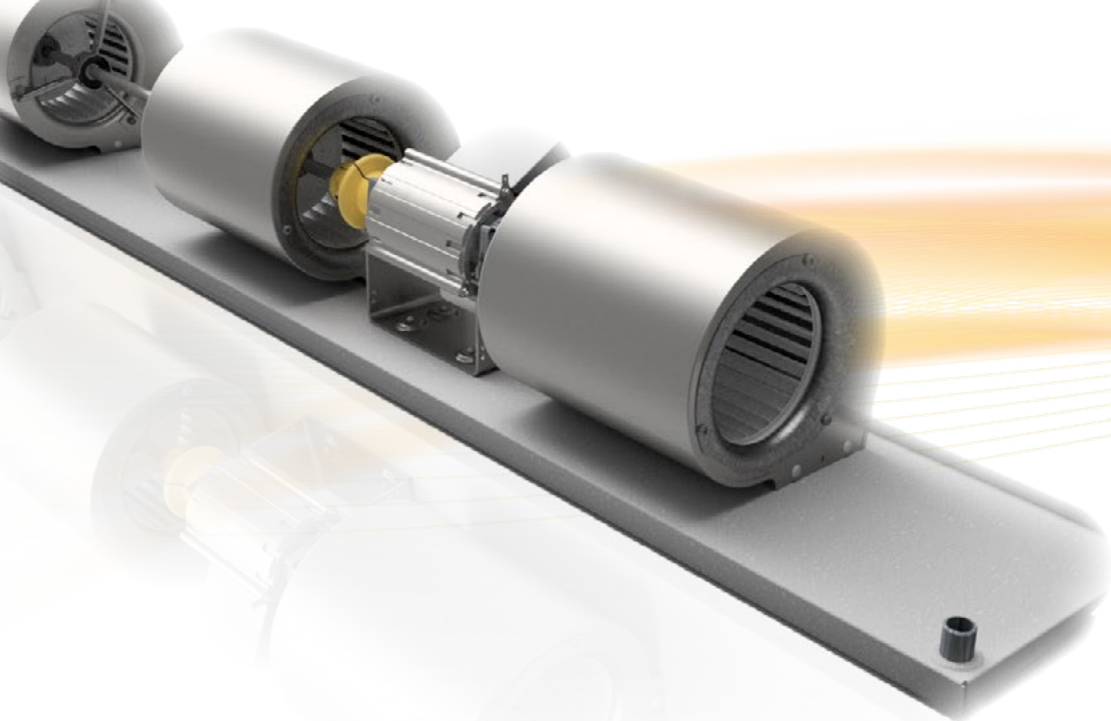
Customised Solutions

We understand the ever-changing market, therefore we offer customised product solutions to meet your exact needs. Whether you require a change to one of our standard products or by managing a truly joint development partnership to produce a product customised to meet your requirements.



Current examples include:

- Specific housing designs, including material thickness, mounting-hole locations and flange design.
- Lead lengths cut to size and your specified plug fitted.
- External or on-board electronics options
- Performance optimisation, including impeller and electronics design
- Licensing agreements for electronic circuitry
- Production and balancing of fans within your own product assemblies.



EC Fandeck

Torin-Sifan has established itself as a leading supplier in Europe for fandeck style air movement products having been a producer for the past 20 years. In addition, Torin-Sifan are the pioneers of low carbon, EC fandeck technology, with our high profile launch at ISH in Frankfurt.

Our commitment to developing low carbon, EC fandecks with best in class specific fan power and noise performance has led to Torin-Sifan becoming the preferred solution in applications where energy regulation is clear.

A good example would be in fancoil applications where Torin-Sifan continues to increase its European market share due to the increasing requirements for low power consuming product.

Our latest generation low carbon, EC range offers the ultimate in efficiency and controllability with full onboard electronics.

In addition to the EC Development, Torin-Sifan continue to offer a fully flexible approach to manufacturing fandecks. Deck plates are all unique to each customer specification, with flexibility on the size of housing and impellers specified and also their mounting positions.

Painted finish is also available as an option.

Features and Benefits

- Mains power input of 230V, 50 or 60Hz
- Single and double shafted solutions
- Single, double, triple and quad housing decks available.
- Soft start.
- speed control.
- 10Vdc output integrated into the motor, so speed can be controlled by a potentiometer without the need for an external signal.
- Tachno output signal
- Locked rotor protection
- Alarm output
- EMC filtering inbuild within onboard electronics
- CE/EMC certified
- Lowest specific fan power and noise in it's class.
- Painted finish
- Custom deck plate design
- Programmable for constant speed and protection features.
- Low noise
- 75% more efficient than a traditional AC motor

What is a fandeck?

A Fandeck in essence, is an assembly of centrifugal fans using a single motor to drive them through a common shaft, mounted on a base or 'deckplate'. Fandecks can also consist of multiple DIDW (Double Inlet, Double Width) an array of pod blowers or 'pod' fans as they are commonly termed attached to a deck plate, with each blower having its own drive motor (either AC or EC motor technology).

How does it work?

A Fandeck works in much the same way as a single centrifugal blower unit, but as there is typically more than one blower mounted in parallel, the flow rate delivered from these products is approximately multiplied by the amount of blowers attached to the deck plate. Moving a single motor to drive the blowers delivers market leading efficiency as well as offering a more cost effective solution for mounting individual blowers with independent motors. It also means that each blower provides a balanced airflow.

For EC Fandeck models, the motors operate in constant speed mode, maintaining a fixed speed based on the control voltage input. Variants of EC Fandecks include versions with two separate motors (for example driving four blower units in total), with this arrangement the control connections are linked together so that only one speed control input signal is required. EC Fandecks incorporating multiple pod blowers will typically have the control interfaces linked together in a daisy-chain arrangement so that only one control input signal is required. Pod based Fandecks configured in this way may also require an additional EMC filter to reduce conducted and radiated emissions – which can add further to the overall cost.

What applications can fandecks be used for?

Fandecks are typically used in applications requiring a high level of airflow output at a relatively low system pressure. The main applications include air-curtains and fancoils. Air-Curtains are typically used to create a barrier of air that prevents the loss of heat, for example when placed above doorways in retail outlets or in logistic warehouses. Fancoils are typically used for air conditioning as well as other heating and refrigeration applications.

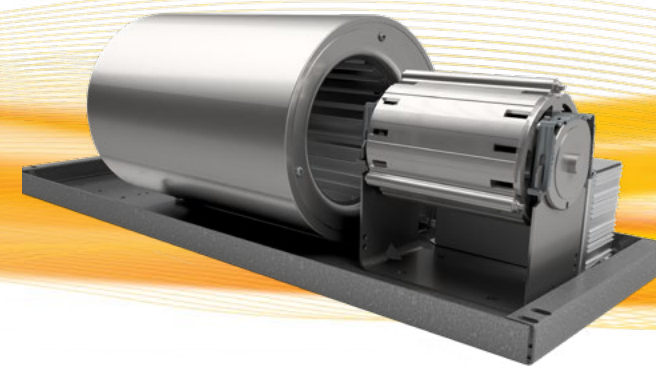
Low carbon fandecks

The Torin-Sifan low carbon, EC fandeck range is powered by intelligent, controllable and highly efficient EC motors that are supplied with full onboard drive electronics. This range are available in three sizes, 40W, 80W and 147W output powers. The motor is Class B insulated and is of sleeve bearing design.

All EC fandecks are dynamically balanced to ISO 1940 G4.0 as standard.

Customised solutions

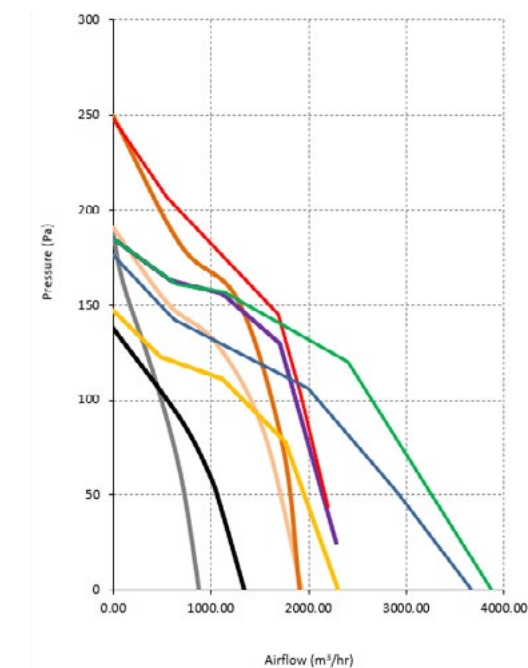
We understand not every product offers the most optimal solution for your application. We can work together to provide a customised solution for you.



Fandecks range summary



	Single 146 -236	Twin 133-222	Twin 146-222	Twin 160-222	Triple 133-178	Triple 146-222	Triple 160-222	Quad 133-222	Quad 146-222
Technical Data									
Supply Voltage (V/Ph/Hz)	230 /1/50	230 /1/50	230 /1/50	230 /1/50	230 /1/50	230 /1/50	230 /1/50	230 /1/50	230 /1/50
Max Airflow	878	1342	1934	1907	2304	2280	2198	3671	3870
Max Current	1.1	1.3	1.88	1.98	1.9	1.9	1.83	3.08	3.43
Max Input Power	141	190	260	260	255	256	254	428	473
Max Speed	1550	1560	1550	1550	1550	1550	1550	1550	1550
ErP Efficiency Rating (FMEG)	NA	NA	NA	45	45	44	45	44	44
Ip Rating	20	20	20	20	20	20	20	20	20
Motor Insulation Class	F	F	F	F	F	F	F	F	F
Temperature Range °C	-20 to +50	-20 to +50	-20 to +40	-20 to +50	-20 to +40	-20 to +50	-20 to +50	-20 to +50	-20 to +50



Consolidated Graph - Fandek range

- Single 146-236
- Twin 133-222
- Twin 146-222
- Twin 160-222
- Triple 133-178
- Triple 146-222
- Triple 160-222
- Quad 133-222
- Quad 146-222

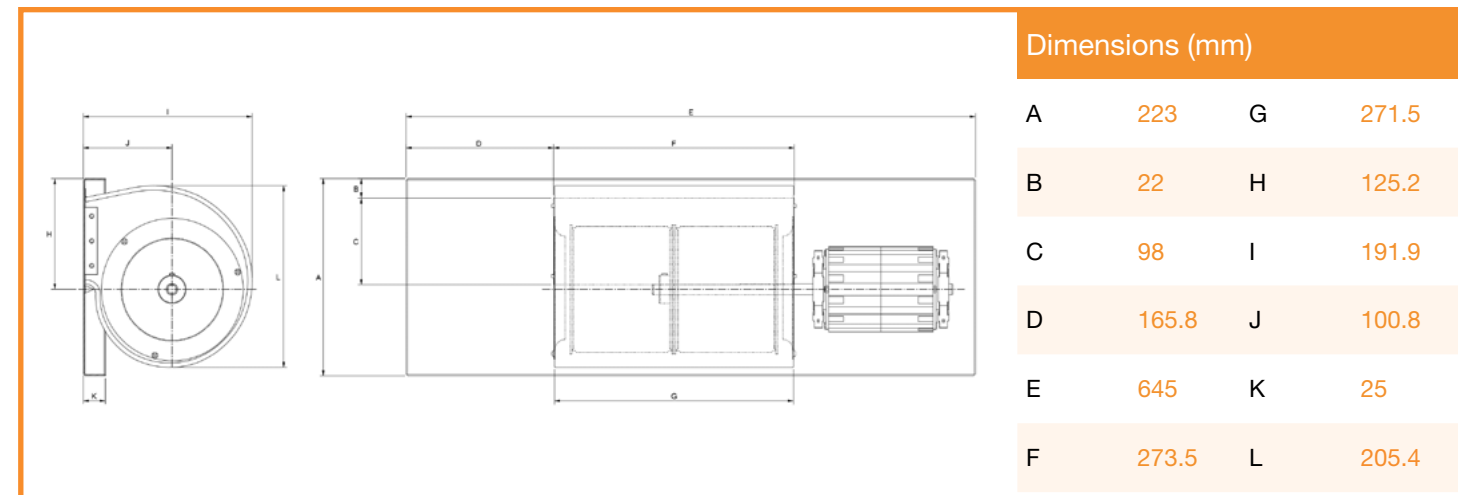
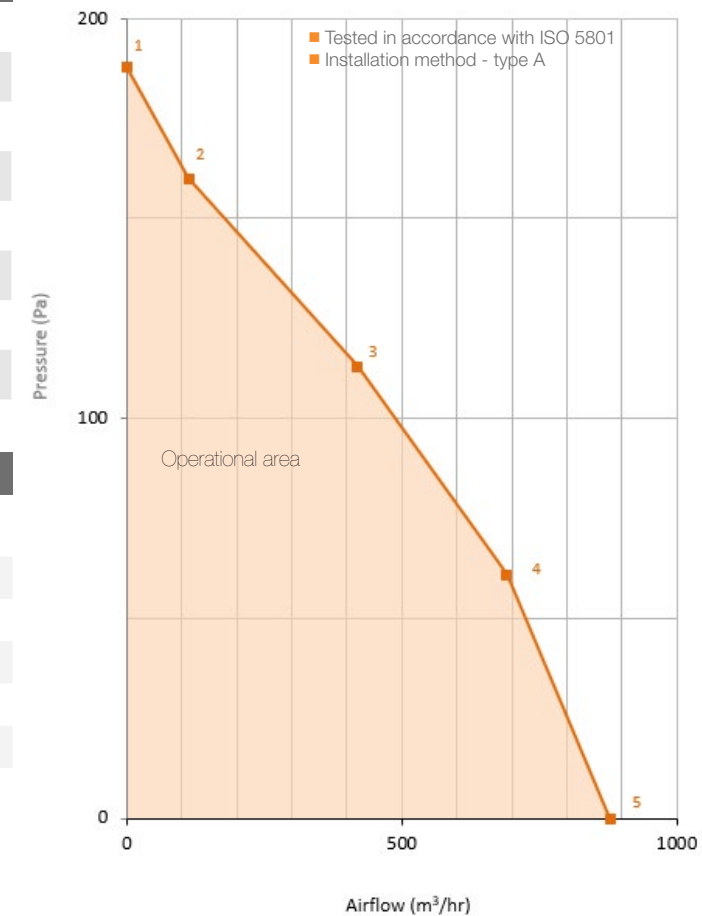
High Efficiency Fandecks Single - 146mm - 236mm

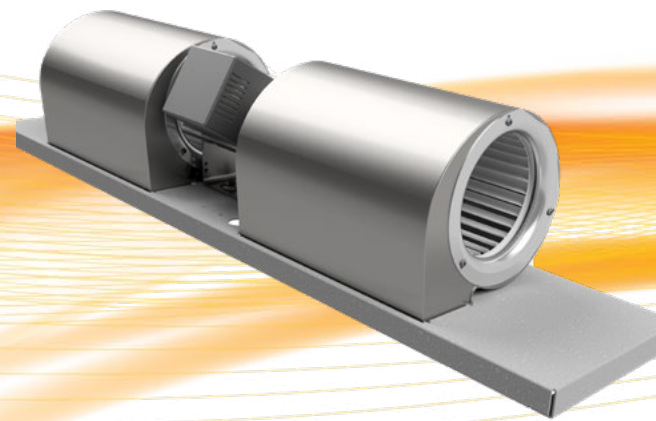
Technical Data

Supply Voltage (V/Ph/Hz)	230 /1/50
Max Airflow (m³/h)	878
Max Current (A)	1.1
Max Input Power (W)	141
Max Speed (rpm)	1550
ErP Efficiency Rating (FMEG)	NA
IP Rating	20
Motor Insulation Class	F
Temperature Range (°C)	-20 to +50

Performance Data

Data Point	Static Pressure (Pa)	Airflow (m³/h)	Current (A)	Speed (rpm)	Power (W)
1	188	0	0.38	1534	43
2	160	113	0.4	1537	46
3	113	419	0.6	1535	72
4	61	690	0.83	1536	104
5	0	878	1.09	1534	141





High Efficiency Fandecks

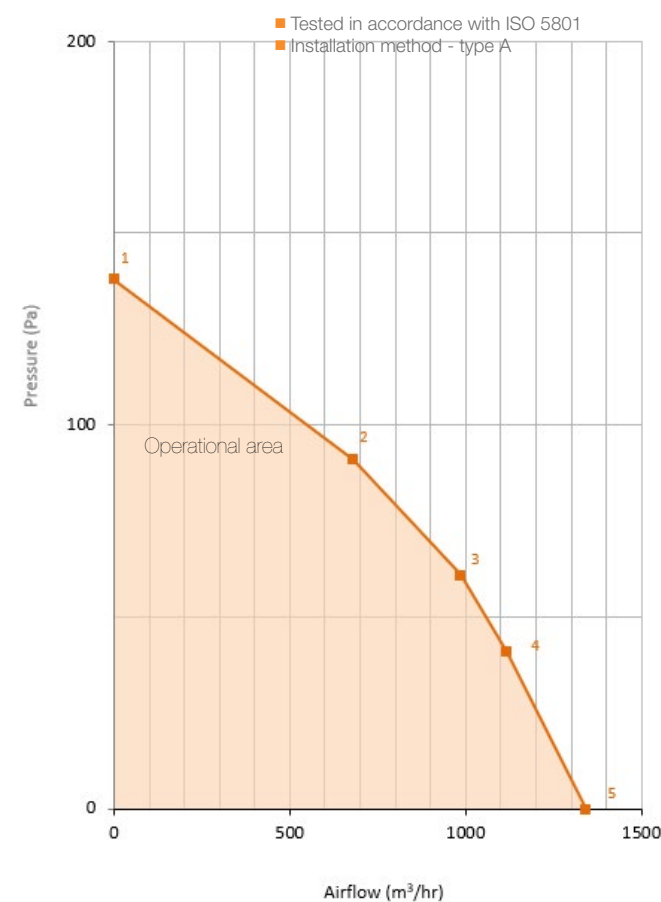
Twin - 133mm - 222mm

Technical Data

Supply Voltage (V/Ph/Hz)	230 /1/50
Max Airflow (m³/h)	1342
Max Current (A)	1.3
Max Input Power (W)	190
Max Speed (rpm)	1560
ErP Efficiency Rating (FMEG)	NA
IP Rating	20
Motor Insulation Class	F
Temperature Range (°C)	-20 to +50

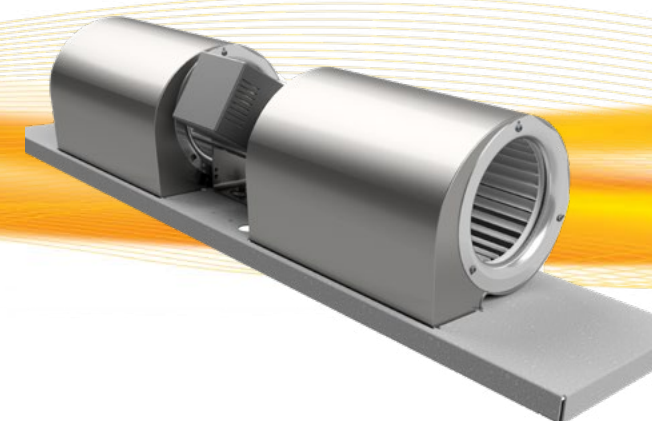
Performance Data

Data Point	Static Pressure (Pa)	Airflow (m³/h)	Current (A)	Speed (rpm)	Power (W)
1	138	0	0.38	1554	52
2	91	679	0.68	1561	97
3	61	985	0.92	1563	133
4	41	1116	1.07	1562	152
5	0	1342	1.32	1563	190



Dimensions (mm)

A	190.0	G	254
B	7.5	H	109
C	64.8	I	194.3
D	136.1	J	113.4
E	950	K	25
F	255.8	L	186.3



High Efficiency Fandecks

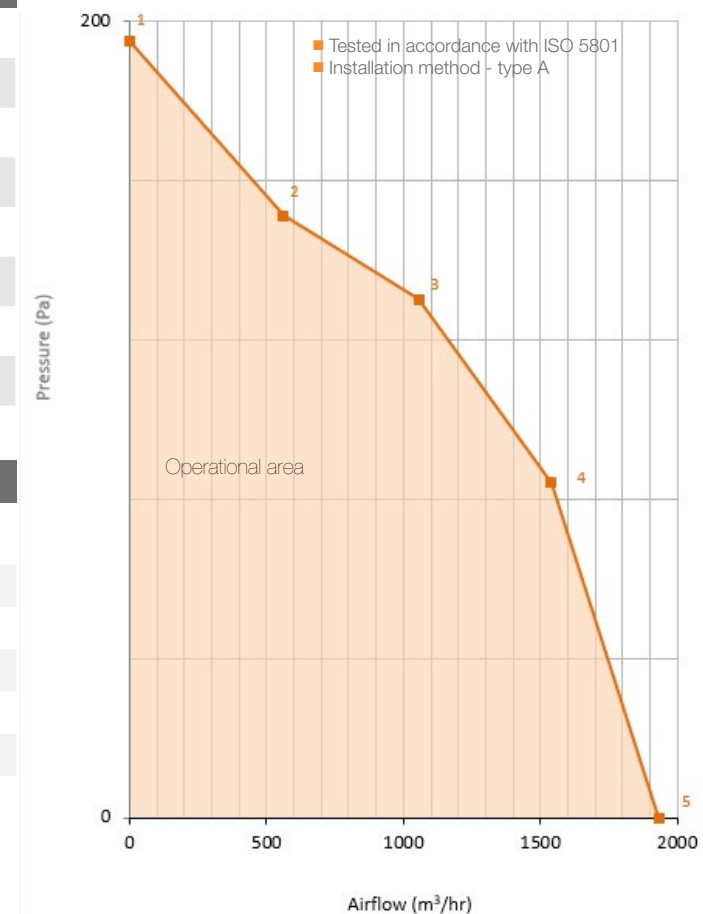
Twin - 146mm - 222mm

Technical Data

Supply Voltage (V/Ph/Hz)	230 /1/50
Max Airflow (m³/h)	1934
Max Current (A)	1.88
Max Input Power (W)	260
Max Speed (rpm)	1550
ErP Efficiency Rating (FMEG)	NA
IP Rating	20
Motor Insulation Class	F
Temperature Range (°C)	-20 to +40

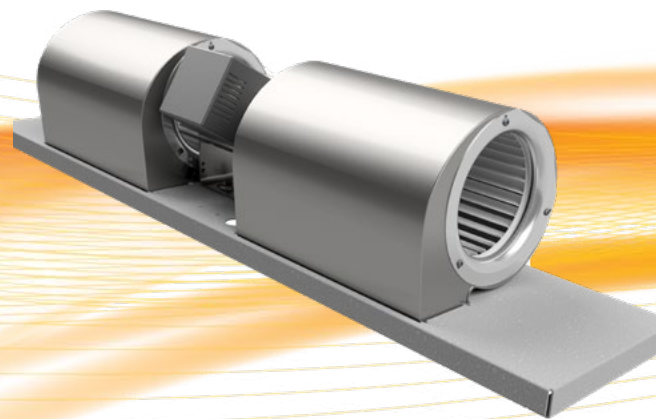
Performance Data

Data Point	Static Pressure (Pa)	Airflow (m³/h)	Current (A)	Speed (rpm)	Power (W)
1	195	0	0.51	1542	63
2	151	561	0.79	1545	100
3	130	1057	1.17	1541	154
4	84	1540	1.63	1525	219
5	0	1934	1.88	1448	260



Dimensions (mm)

A	255	G	254
B	14	H	152.8
C	137	I	222.9
D	141	J	110.6
E	1492	K	20
F	256.7	L	239.6



High Efficiency Fandecks

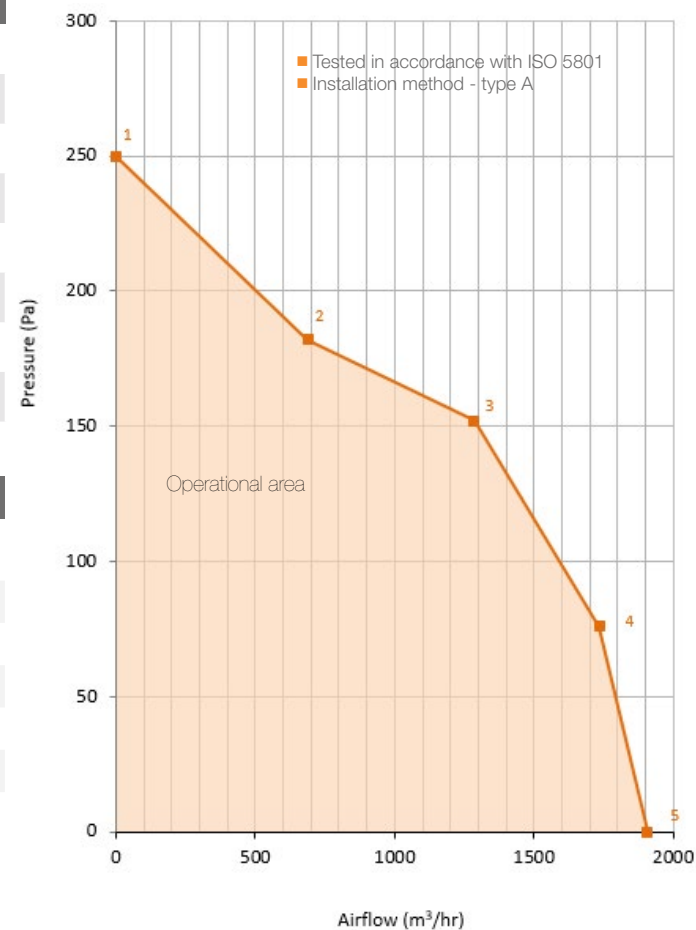
Twin - 160mm - 222mm

Technical Data

Supply Voltage (V/Ph/Hz)	230 /1/50
Max Airflow (m³/h)	1907
Max Current (A)	1.98
Max Input Power (W)	260
Max Speed (rpm)	1550
ErP Efficiency Rating (FMEG)	45
IP Rating	20
Motor Insulation Class	F
Temperature Range (°C)	-20 to +50

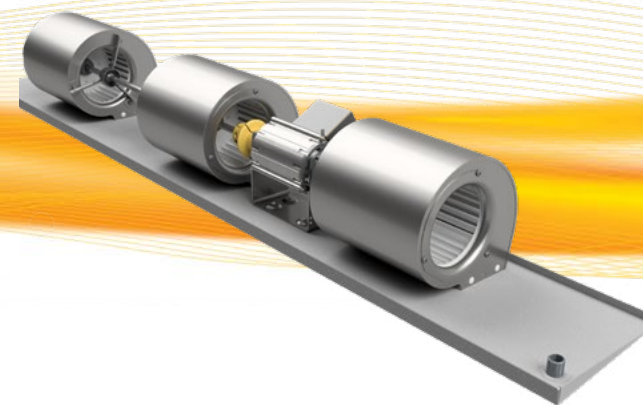
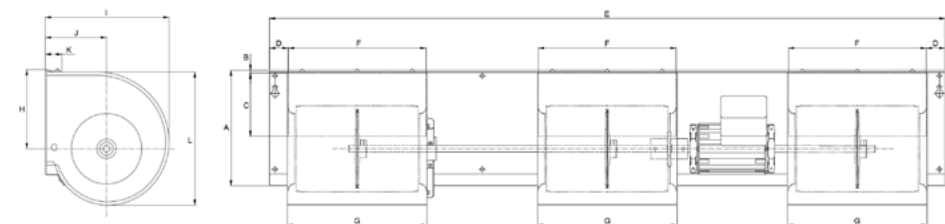
Performance Data

Data Point	Static Pressure (Pa)	Airflow (m³/h)	Current (A)	Speed (rpm)	Power (W)
1	250	0	0.52	1560	71
2	182	689	0.95	1560	119
3	152	1284	1.62	1562	208
4	76	1735	1.97	1460	260
5	0	1907	1.92	1325	254



Dimensions (mm)

A	210	G	254
B	5	H	142.8
C	115	I	223.5
D	34.1	J	110.6
E	1229	K	30
F	250.8	L	240.2



High Efficiency Fandecks

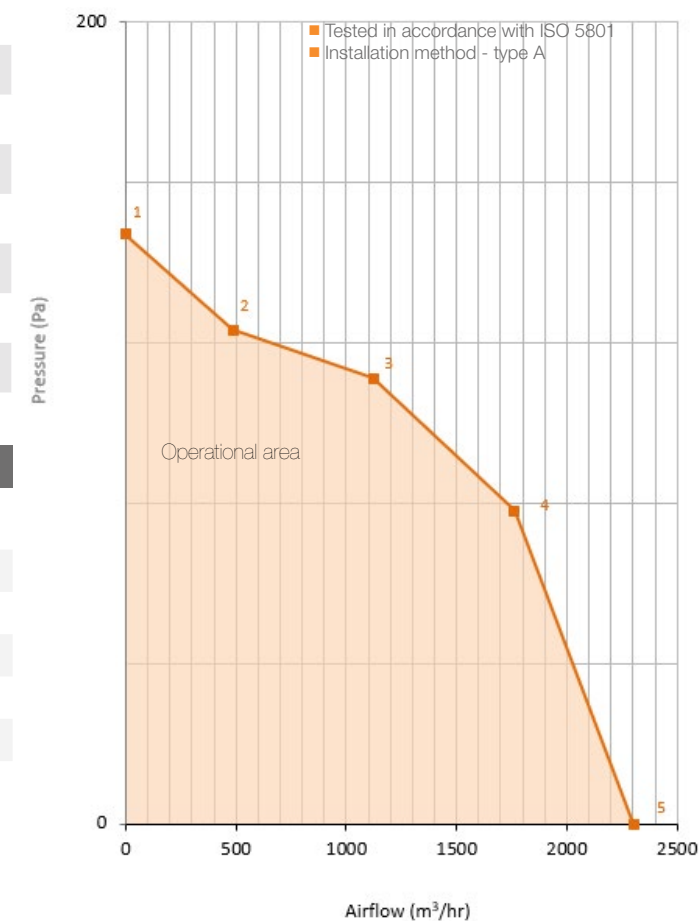
Triple - 133mm - 178mm

Technical Data

Supply Voltage (V/Ph/Hz)	230 /1/50
Max Airflow (m³/h)	2304
Max Current (A)	1.9
Max Input Power (W)	255
Max Speed (rpm)	1550
ErP Efficiency Rating (FMEG)	45
IP Rating	20
Motor Insulation Class	F
Temperature Range (°C)	-20 to +40

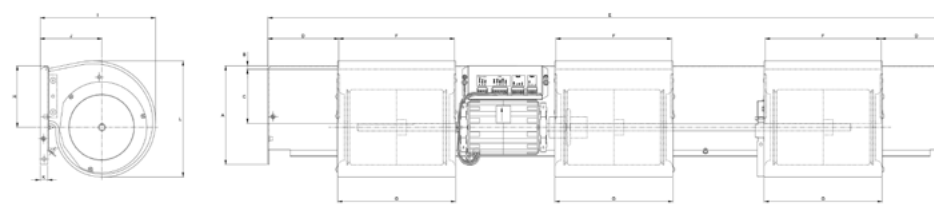
Performance Data

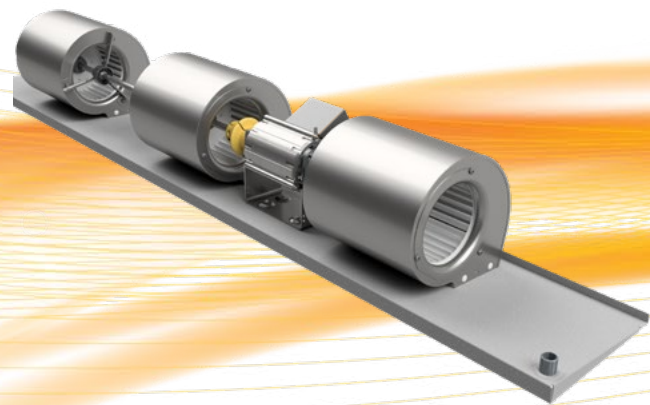
Data Point	Static Pressure (Pa)	Airflow (m³/h)	Current (A)	Speed (rpm)	Power (W)
1	147	0	0.44	1535	55
2	123	487	0.55	1535	69
3	111	1121	0.94	1535	122
4	78	1763	1.42	1536	194
5	0	2304	1.8	1412	244



Dimensions (mm)

A	175	G	210
B	6	H	109
C	96	I	205.3
D	126.5	J	110
E	1218	K	13.4
F	206	L	205.4





High Efficiency Fandecks

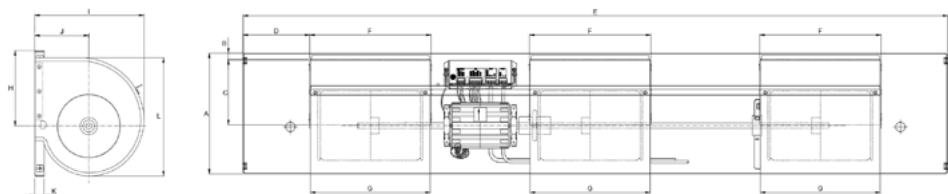
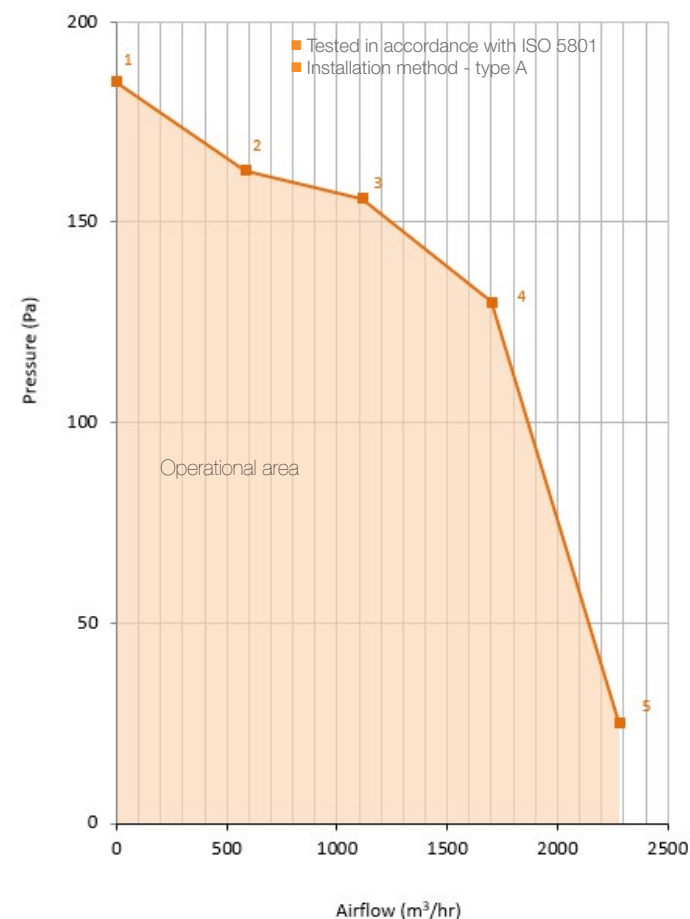
Triple - 146mm - 222mm

Technical Data

Supply Voltage (V/Ph/Hz)	230 /1/50
Max Airflow (m³/h)	2280
Max Current (A)	1.9
Max Input Power (W)	256
Max Speed (rpm)	1550
ErP Efficiency Rating (FMEG)	44
IP Rating	20
Motor Insulation Class	F
Temperature Range (°C)	-20 to +50

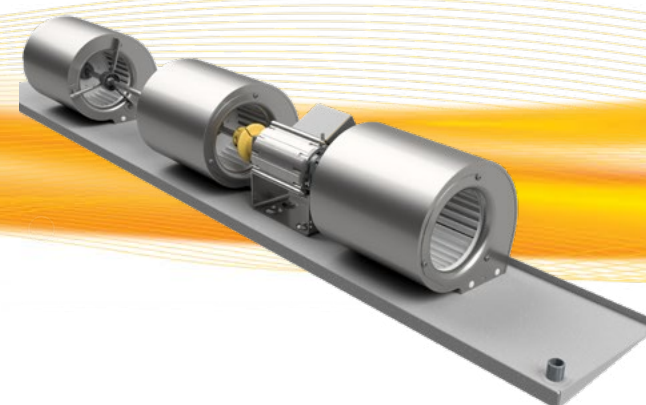
Performance Data

Data Point	Static Pressure (Pa)	Airflow (m³/h)	Current (A)	Speed (rpm)	Power (W)
1	185	0	0.73	1541	87
2	163	586	0.99	1538	122
3	156	1115	1.32	1540	170
4	130	1701	1.82	1491	246
5	25	2280	1.77	1201	229



Dimensions (mm)

A	225	G	254
B	14	H	152.8
C	137	I	222.9
D	141	J	110.6
E	1492	K	20
F	256.7	L	239.6



High Efficiency Fandecks

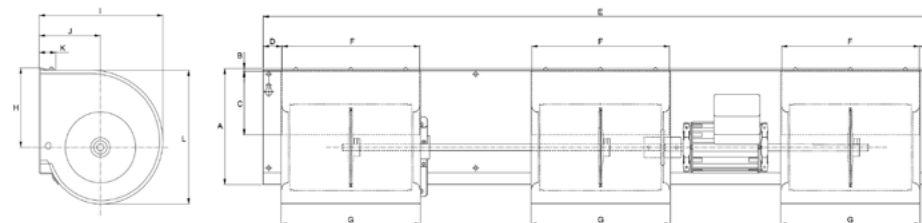
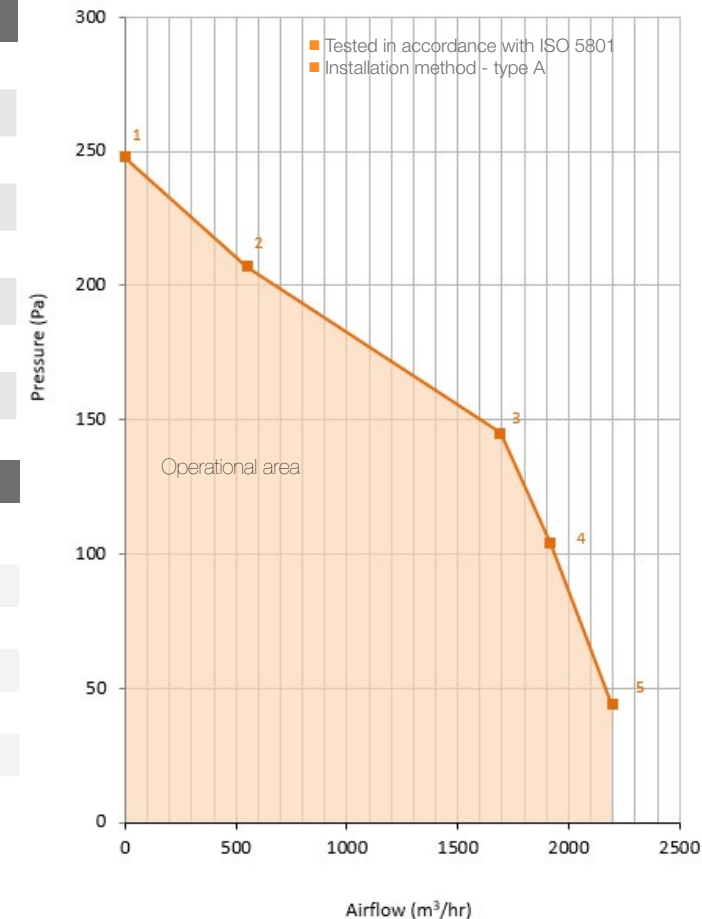
Triple - 160mm - 222mm

Technical Data

Supply Voltage (V/Ph/Hz)	230 /1/50
Max Airflow (m³/h)	2198
Max Current (A)	1.83
Max Input Power (W)	254
Max Speed (rpm)	1550
ErP Efficiency Rating (FMEG)	45
IP Rating	20
Motor Insulation Class	F
Temperature Range (°C)	-20 to +50

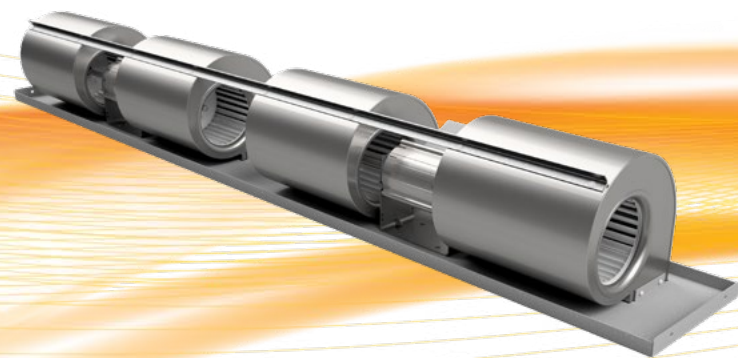
Performance Data

Data Point	Static Pressure (Pa)	Airflow (m³/h)	Current (A)	Speed (rpm)	Power (W)
1	248	0	0.73	1560	101
2	207	550	0.91	1559	124
3	145	1693	1.83	1475	254
4	104	1919	1.78	1342	251
5	44	2198	1.74	1217	245



Dimensions (mm)

A	210	G	254
B	5	H	142.8
C	115	I	223.5
D	34.1	J	110.6
E	1229	K	30
F	250.8	L	240.2



High Efficiency Fandecks

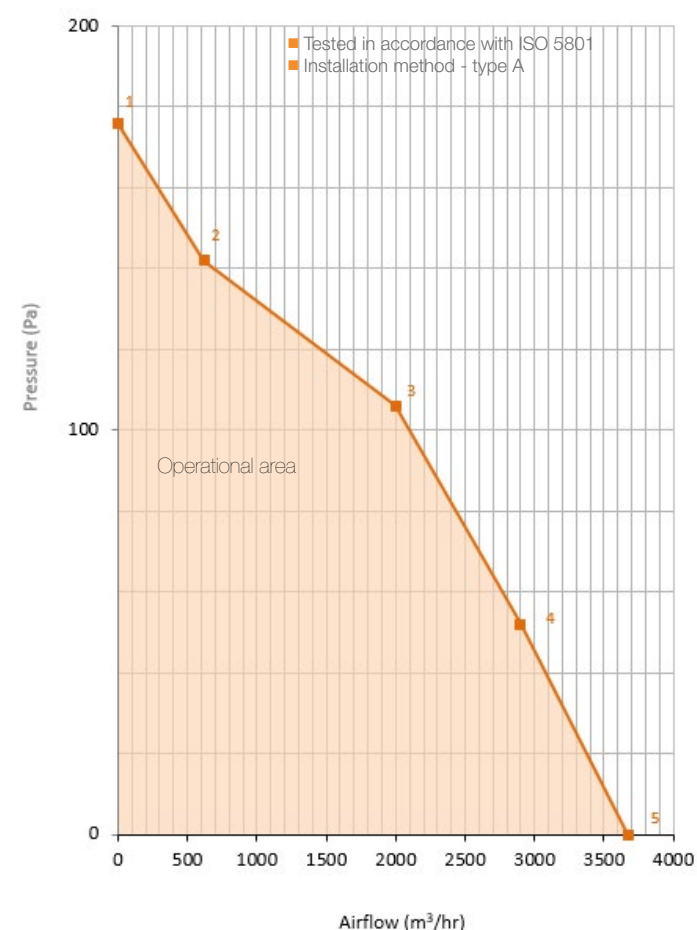
Quad - 133mm - 222mm

Technical Data

Supply Voltage (V/Ph/Hz)	230 /1/50
Max Airflow (m³/h)	3671
Max Current (A)	3.08
Max Input Power (W)	428
Max Speed (rpm)	1550
ErP Efficiency Rating (FMEG)	44
IP Rating	20
Motor Insulation Class	F
Temperature Range (°C)	-20 to +50

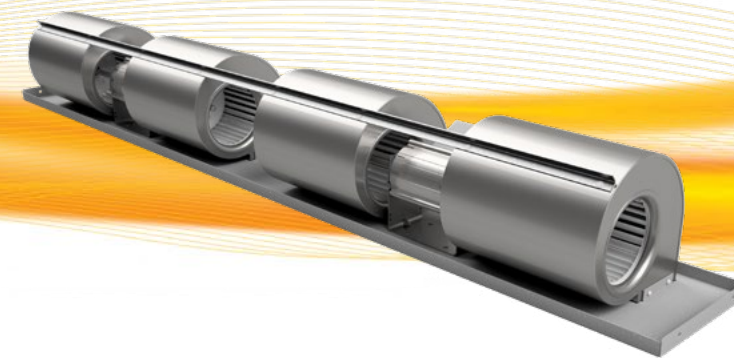
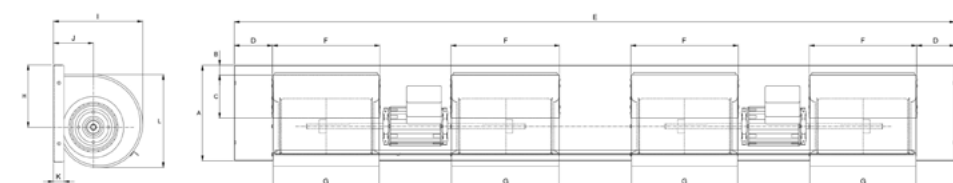
Performance Data

Data Point	Static Pressure (Pa)	Airflow (m³/h)	Current (A)	Speed (rpm)	Power (W)
1	176	0	0.75	1555	104
2	142	621	0.87	1552	121
3	106	1998	1.67	1552	203
4	52	2896	2.32	1554	323
5	0	3671	3.08	1552	428



Dimensions (mm)

A	226.5	G	254.0
B	23	H	145.1
C	102	I	209.1
D	91.3	J	93.8
E	1720	K	25
F	256.5	L	216.5



High Efficiency Fandecks

Quad - 146mm - 222mm

Technical Data

Supply Voltage (V/Ph/Hz)	230 /1/50
Max Airflow (m³/h)	3870
Max Current (A)	3.43
Max Input Power (W)	473
Max Speed (rpm)	1550
ErP Efficiency Rating (FMEG)	44
IP Rating	20
Motor Insulation Class	F
Temperature Range (°C)	-20 to +50

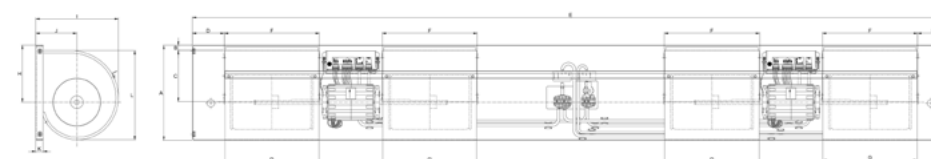
Performance Data

Data Point	Static Pressure (Pa)	Airflow (m³/h)	Current (A)	Speed (rpm)	Power (W)
1	185	0	1.01	1532	120
2	161	644	1.19	1533	144
3	157	1139	1.49	1534	184
4	120	2406	2.62	1533	347
5	0	3870	3.43	1366	473



Dimensions (mm)

A	255	G	254
B	14	H	152.8
C	137	I	222.9
D	86.2	J	110.6
E	2042	K	20
F	256.6	L	239.6



More than



years of
innovation
est. 1964

torin-sifan

The Partner of Choice

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