



COMPACT Axial Fan Series

Wall and Duct Axial



Extremely Compact Design





PROFESSIONAL WALL & DUCT AXIAL FANS

COMPACT WALL & DUCT AXIAL FANS (HCGB & TCGB)



The S&P COMPACT WALL and DUCT AXIAL FANS feature, as the name suggests, an extremely compact design created by the combination of an external rotor motor matched with a direct drive wrap around an impeller hub. This very low profile design optimizes airflow performance while minimizing noise generation. Both wall and duct mounted versions require an absolute minimum depth for any given wall, ceiling, panel or in-line duct mounted installation.



The S&P COMPACT WALL AXIAL FANS are designed to be installed directly into side walls, ceilings and panels in order to exhaust or supply air to the surrounding environments.

All COMPACT WALL AXIAL FANS include a one piece bell mouth inlet and mounting plate manufactured from high grade galvanized steel. The motor and fan impeller assembly are firmly supported within this mounting plate by a strong steel support frame that includes an integrated finger guard on the inlet side. All units are supplied with motors prewired to a wiring junction box located on the back of the motor hub for easy wiring access. This terminal box protects all wiring connections against the ingress of dust and moisture. The entire assembly is protected by a two stage primer and a tough corrosion and UV resistant polyester paint finish.

The S&P COMPACT DUCT AXIAL FANS are designed to be installed in-line within ducted or partially ducted ventilation systems for exhaust or supply air applications.

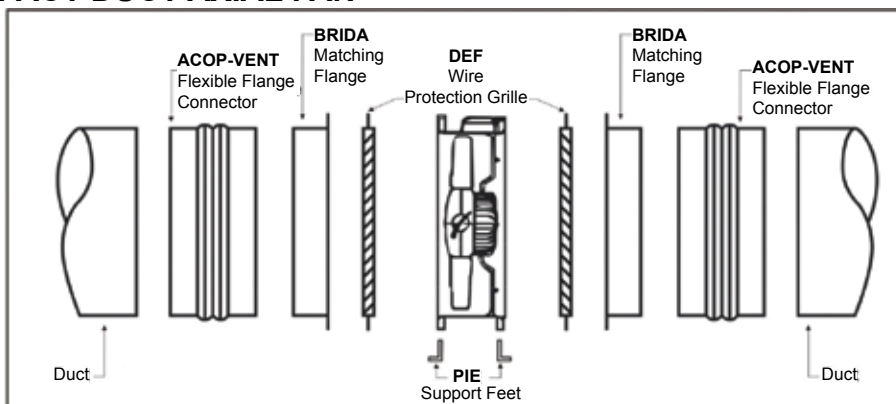
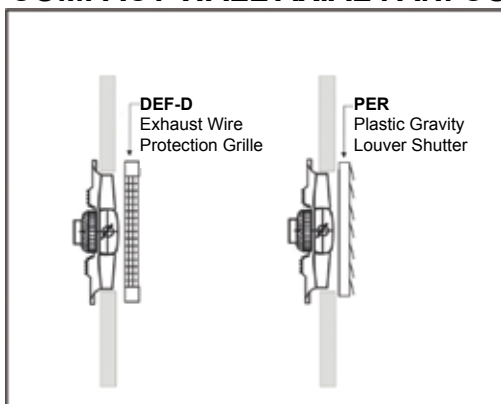
All S&P COMPACT DUCT AXIAL FANS feature cylindrical flanged casings manufactured from a high grade rolled galvanized steel plate. The motor and impeller assembly are firmly supported within the casing by a strong steel support frame. All models are supplied with a prewired junction box located on the outside of the fan casing for easy wiring access. This terminal box protects all wiring connections against the ingress of dust and moisture. The entire assembly is protected by a two stage primer and a tough corrosion and UV resistant polyester paint finish.

APPLICATIONS

The COMPACT WALL AXIAL FANS and COMPACT DUCT AXIAL FANS from S&P are designed for use in a wide range of residential, commercial and industrial ventilation applications. The COMPACT WALL AXIAL FANS are designed to be installed directly into sidewalls, ceilings or panels. The COMPACT DUCT AXIAL FANS are designed for installation within ducted systems where the fan is supported on both sides. A list of typical applications include the following:

- RESIDENTIAL - Garage, Loft, Workshop, Basement and Crawl Space ventilation
- COMMERCIAL: Offices, Bars, Cafes, Cafeterias and Restaurant ventilation; or Make-Up Air
- INDUSTRIAL: General ventilation of factory spaces; Warehouse ventilation, Equipment and Machinery cooling; Air transfer applications
- AGRICULTURAL and GREENHOUSE: Poultry shed ventilation; Greenhouse ventilation and any other applications where the exhaust of moisture laden air is required.
- OEM: In addition to many traditional HVAC ventilation applications the COMPACT AXIAL FANS series can also be incorporated into the design of OEM machinery and equipment to provide ventilation or cooling in applications such as Air Conditioning Condensers, Roof Extract Fans; Portable Cooling Appliances... and many more. Special versions of the COMPACT AXIAL FANS are available depending upon the application – Please contact your local sales representative.

COMPACT WALL AXIAL FAN. COMPACT DUCT AXIAL FAN





PROFESSIONAL WALL & DUCT AXIAL FANS

TECHNICAL SPECIFICATIONS

Motor

- All models include asynchronous induction capacitor run and start motors.
- Constructed from die cast aluminum and finished in a black polyester paint coating.
- 100% Speed controllable.
- Totally enclosed IP/65 protection.
- Class F insulation.
- Suitable working temperatures -40°C (-40°F) up to 60°C (140°F).
- All models include a Safety Auto Reset Thermal Overload Protection.

Impellers

- Manufactured from glass filled UV resistant polyamide.
- Corrosion and weatherproof resistant.
- Special Order: Die cast aluminum. Please inquire.

Terminal Box

- Manufactured from high impact grade aluminum.
- IP65 protected.

Product Reference: Example

HCGB/ 4-16/ G-A
 ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓
 1 2 3 4 5 6 7

- 1 -HC: COMPACT WALL AXIAL FAN reference.
-TC: COMPACT DUCT AXIAL FAN reference.
- 2 -G: Plastic adjustable impeller (supplied as standard).
-B: Aluminum adjustable impeller (please inquire).
- 3 -B: Single Phase Motor. 120 V 60 Hz.
-T: Three Phase Motor. 220/460 V 60 Hz (please inquire).
- 4 -4: Speed. Number of poles.
- 5 -16: Nominal blade diameter in inches.
- 6 -A: Blade angle (G for 60 Hz).
- 7 -A: Air direction.
Form A = air over motor-impeller.
Form B = air over impeller-motor.



AIR & SOUND PERFORMANCE

Compact Wall Axial Fans

LICENSED PERFORMANCE. CFM @ inches WG. (4 Pole Single Phase Motors)

Model	Input Watts	Peak BHP	RPM	CFM v Static Pressure (SP) Ins. WG										Sones
				0	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4	0.5	
HCGB/4-12/G-A	132	-	1500	1260	1200	1130	1040	900	-	-	-	-	-	9.9
HCGB/4-16/G-A	310	0.26	1500	2430	2350	2260	2160	2050	1840	1500	-	-	-	18.9
HCGB/4-18/G-A	550	0.50	1465	3690	3600	3510	3410	3330	3240	3140	3020	2900	2500	19.7
HCGB/4-20/G-A	750	0.65	1500	4520	4440	4340	4220	4100	3990	3870	3740	3600	3160	28

Performance is shown for Soler & Palau COMPACT WALL AXIAL FANS. Speed (rpm) shown is nominal. Performance is based on actual speed of the test. Performance ratings include the effects of finger guards in the airstream.

Compact Duct Axial Fans

LICENSED PERFORMANCE. CFM @ inches WG. (4 Pole Single Phase Motors)

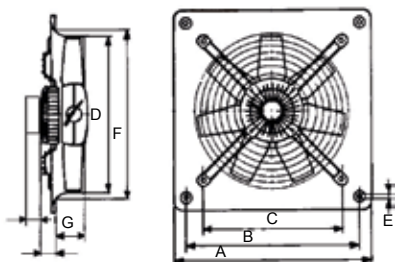
Model	Input Watts	Peak BHP	RPM	CFM v Static Pressure (SP) Ins. WG										Sones
				0	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4	0.5	
TCGB/4-12/G-B	132	-	1500	1216	1130	940	570	-	-	-	-	-	-	11.6
TCGB/4-16/G-B	320	0.28	1500	2540	2440	2330	2200	2030	1760	-	-	-	-	17.6
TCGB/4-18/G-B	540	0.48	1465	3620	3510	3370	3260	3140	3000	2800	-	-	-	24
TCGB/4-20/G-B	770	0.67	1500	4750	4630	4500	4380	4240	3090	3930	3660	-	-	32

Performance is shown for Soler & Palau COMPACT DUCT AXIAL FANS. Speed (rpm) shown is nominal. Performance is based on actual speed of the test.

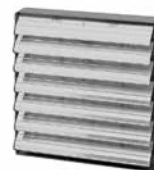
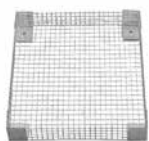


DIMENSIONS & ACCESSORIES

Compact Wall Axial Fans

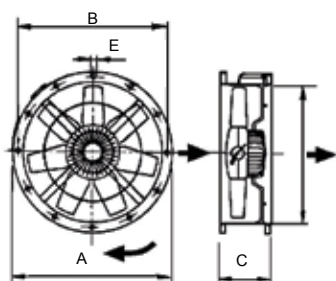


Model	A	B	C	D	E	F	G	H	J	Weight lbs(kgs)
HCGB/4-12/G-A	15 ^{3/4} 400	12 ^{15/16} 330	11 280	12 ^{7/16} 315	3/8 10	12 ^{15/16} 329	2 ^{7/8} 73	1 ^{5/8} 41	2 ^{1/2} 64	15 7
HCGB/4-16/G-A	19 ^{11/16} 500	16 ^{5/8} 420	13 ^{15/16} 355	15 ^{3/4} 400	3/8 10	16 ^{5/8} 422	3 ^{1/16} 78	1 ^{5/8} 41	2 ^{1/2} 64	20 9
HCGB/4-18/G-A	22 ^{1/16} 560	18 ^{3/4} 480	15 ^{3/4} 400	17 ^{3/4} 450	3/8 10	18 ^{3/4} 476	3 ^{3/4} 95	1 ^{5/8} 41	2 ^{1/2} 64	29 13
HCGB/4-20/G-A	24 ^{13/16} 630	21 ^{1/8} 537	17 ^{3/4} 450	19 ^{11/16} 500	3/8 10	21 ^{1/8} 536	3 ^{7/8} 98	1 ^{3/4} 44	2 ^{1/2} 64	34 15



Compact Wall Axial Fan	Exhaust Side Protection Grill	Plastic Gravity Louvre Shutter	Aluminum Gravity Louvre Shutter	Electronic Speed Controller
Stock Ref.	Stock Ref.	Stock Ref.	Stock Ref.	Stock Ref.
HCGB/4-12/G-A	DEF-325D	PER-355W	PER-355CN	SP-REG6
HCGB/4-16/G-A	DEF-375D	PER-400W	PER-400CN	SP-REG6
HCGB/4-18/G-A	DEF-450D	PER-450W	PER-450CN	SP-REG10
HCGB/4-20/G-A	DEF-525D	PER-500W	PER-500CN	SP-REG10

Compact Duct Axial Fans



Model	A	B	C	D	E	Weight (lbs)
TCGB/4-12/G-B	15 ^{3/16} 386	14 356	6 ^{11/16} 170	12 ^{7/16} 316	3/8 10	22 10
TCGB/4-16/G-B	19 ^{3/16} 487	17 ^{3/4} 451	6 ^{11/16} 170	15 ^{3/4} 400	1/2 13	31 14
TCGB/4-18/G-B	21 ^{1/8} 537	19 ^{11/16} 500	7 ^{1/8} 181	17 ^{3/4} 451	1/2 13	40 18
TCGB/4-20/G-B	23 ^{7/16} 595	22 ^{1/16} 560	7 ^{1/8} 181	19 ^{1/16} 500	1/2 13	49 22



Compact Duct Axial Fan	Matching Flange	Flexible Flange Connector	Support Feet	Wire Protection Grill	Electronic Speed Controller
Stock Ref.	Stock Ref.	Stock Ref.	Stock Ref.	Stock Ref.	Stock Ref.
TCGB/4-12/G-B	BRIDA-315	ACOP-315	PIE-315	DEF-315T	SP-REG6
TCGB/4-16/G-B	BRIDA-400	ACOP-400	PIE-400	DEF-400T	SP-REG6
TCGB/4-18/G-B	BRIDA-450	ACOP-450	PIE-450	DEF-450T	SP-REG10
TCGB/4-20/G-B	BRIDA-500	ACOP-500	PIE-500	DEF-500T	SP-REG10



S&P USA Ventilation Systems, LLC

OEM Products Division
150 River Road
Suite I-4A

Montville, NJ 07045

Tel: 973.257.8900

Fax: 973.257.8999

email: oemsales.jax@solerpalau.com

www.soler-palauinc.com

Soler&Palau
Ventilation Group