

Application

The Regenerative Side Channel Vacuum Blower is part of Coperion K-Tron's wide range of blower packages used for pneumatically conveying pellets, powders, and granular materials. Regenerative blower packages range from a 50 mm (2 in) to a 102 mm (4 in) conveying line. They are compact with integrated accessories and designed to operate on a sequencing or continuous basis. The Coperion K-Tron Regenerative Vacuum Blower is designed for low pressure applications where material is being conveyed short distances.

Selecting the right blower to operate at the correct speed is critical for maximum efficiency of any pneumatic conveying system. Before selecting a blower package, Coperion K-Tron system designers carefully calculate the required performance of the blower and how it will respond to a specific application.

Design

These compact regenerative side channel blowers offer high performance in a quiet contact-free environment. Perfected impeller design with curved blades generates low-pulsation suction air and guarantees optimal efficiency. The blower is dynamically balanced, and isolation pads are positioned between the blower and the base to reduce vibration and noise. Depending on the application, regenerative vacuum blower motors are matched to the requirement of the application. The complete blower package is supported by a heavy-duty base that allows easy access for service and cleaning.

Noise level without sound enclosure ranges from 74 to 79 dB(A) depending on the actual configuration and installation of the regenerative vacuum blower. Sound enclosures are available as an option.

Technical Data

Standard Mechanical Specifications

- Complete mounted and prewired
- Heavy-duty blower base
- Compact design
- Quiet and cool operation
- Vibration mounting pads
- TEFC motor
- Integrated relief valve
- Discharge silencer
- Direct drive motor (no belts or gears)
- Low maintenance
- Operates on a continuous basis
- OSHA and CE compliant
- Oil-less dry operation
- Air-actuated breaker valve

Hazardous Location Options:

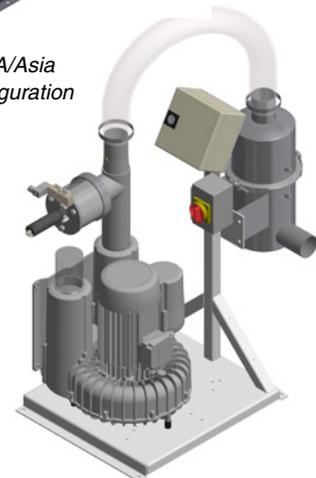
- NEC Class I, Div. 1, Groups G & D
Class II, Div. 2, Groups E, F & G
- ATEX versions available upon request

Standard Electrical Specifications

- EMEA/Asia: 3 phase IEC motor - IE3 level efficiency, with IP55 protection
- Americas: 3 phase NEMA motor - high efficiency, TEFC with IP55 protection, cURus and CE compliant



*EMEA/Asia
Configuration*



*Regenerative
Side Channel Vacuum Blower
shown with optional in-line static filter*

Options

Mechanical

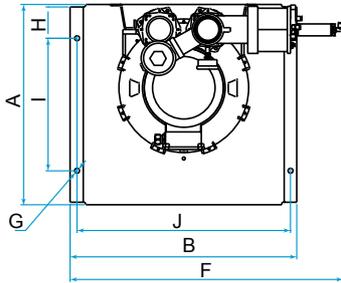
- Motors for explosion-proof applications or special voltage requirements
- Blower enclosures
- Application specific filters
- Special options available to custom tailor our blower packages to your specific application

Electrical

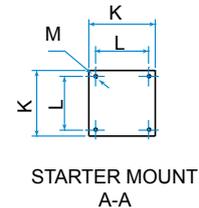
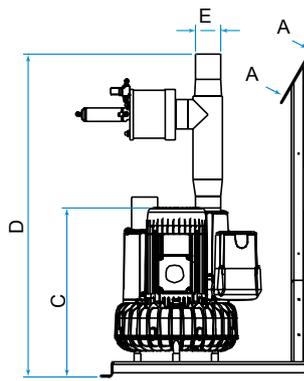
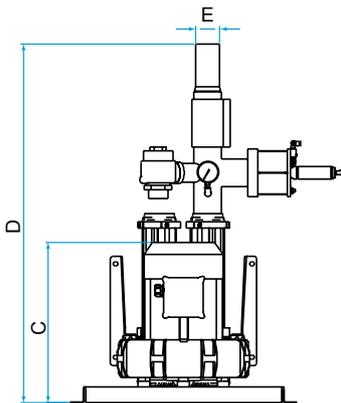
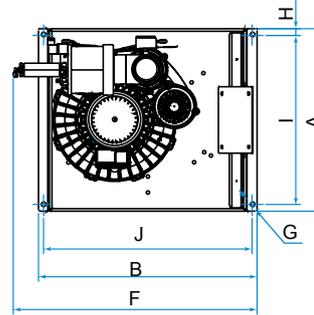
- For CSA or UL certified solenoid contact factory

Dimensions mm [in]

Americas Configuration



EMEA/Asia Configuration



Americas voltage: 230/460 V ±10% @ 60 Hz

Part No. 'General'	kW [HP] @ 60 Hz	A	B	C	D	E	F	G	H	I	J	Weight kg [lb]
5158-304	2.2 [3]	416 [16.39]	523 [20.63]	403 [15.88]	773 [30.43]	51 [2]	539 [21.23]	16 [0.63]	102 [4]	197 [7.75]	482 [18.98]	40 [88]
5158-305	3 [4]	416 [16.39]	523 [20.63]	433 [17.06]	962 [37.86]	52 [2]	696 [27.39]	16 [0.63]	102 [4]	197 [7.75]	482 [18.98]	52 [114]
5158-306	4.1 [5.5]	416 [16.39]	523 [20.63]	446 [17.56]	975 [38.4]	51 [2]	697 [27.42]	16 [0.63]	102 [4]	197 [7.75]	482 [18.98]	55 [121]
5158-307	5.6 [7.5]	645 [25.39]	727 [28.63]	515 [20.29]	1152 [45.35]	76 [3]	859 [33.83]	16 [0.63]	102 [4]	426 [16.75]	685 [26.98]	102 [224]
5158-308	7.5 [10]	645 [25.39]	727 [28.63]	553 [21.79]	1152 [45.35]	76 [3]	859 [33.83]	16 [0.63]	102 [4]	426 [16.75]	685 [26.98]	110 [242]
5158-309	11.2 [15]	647 [25.39]	727 [28.63]	565 [22.24]	1318 [51.89]	102 [4]	727 [28.63]	16 [0.63]	102 [4]	426 [16.75]	685 [26.98]	128 [282]

EMEA/Asia voltage: 230/400 V ±10% @ 50 Hz

Part No. 'Metric'	kW [HP] @ 50 Hz	A	B	C	D	E	F	G	H	I	J	K	L	M	Weight kg [lb]
5158-300CE	3 [4]	547 [21.54]	656 [25.83]	506 [19.93]	967 [38.08]	76 [3]	730 [28.75]	14 [0.56]	19 [0.75]	509 [20.04]	626 [24.65]	196 [7.72]	160 [6.3]	9 [0.36]	89 [169]
5158-301CE	4 [5.4]	547 [21.54]	656 [25.83]	542 [21.34]	943 [37.13]	76 [3]	722 [28.43]	14 [0.56]	19 [0.75]	509 [20.04]	626 [24.65]	196 [7.72]	160 [6.3]	9 [0.36]	127 [253]
5158-302CE	5.5 [7.4]	547 [21.54]	630 [24.81]	671 [26.42]	938 [36.93]	76 [3]	647 [25.48]	14 [0.56]	15 [0.6]	517 [20.36]	600 [23.63]	304 [11.97]	260 [10.24]	8 [0.32]	144 [290]
5158-303CE	7.5 [10]	547 [21.54]	630 [24.81]	711 [28]	1269 [49.97]	76 [3]	657 [25.87]	14 [0.56]	15 [0.6]	517 [20.36]	600 [23.63]	304 [11.97]	360 [14.18]	8 [0.32]	159 [323]

Caution: Measurements are for general reference only. Please consult dimensional drawing for exact measurements.