



CABINET FAN CFC SERIES





Compact

Flexible



Low Noise



Why KRUGER ?

KRUGER has been a leading innovator and manufacturer of residential, commercial and industrial fan application solutions across Asia since 1985. Today with a direct presence in over 18 regions throughout Asia; world class R&D and manufacturing facilities; KRUGER are able to offer their customers unparalleled service and support at a local level. Our customers place their trust in KRUGER.



What is a KRUGER Cabinet Fan ?

The CFC Series is a compact cabinet centrifugal fan is designed for supply, exhaust and pressurization in general clean air, grease laden air and smokespill application. It is compact, easy to install and service, generates high static pressure and low noise.

Why use a KRUGER CFC Cabinet Fan ?

Compact size IDENTIFY Close to duct size IDENTIFY Close to duct size IDENTIFY Close to duct size is comparable to an axial fan but much smaller than a centrifugal fan.

Flexible Installation Suitable for any mounting orientation Free to install anywhere along duct Cabinet with flexible inlet/outlet direction that can be changed in the field to suit any installation.

Low noise IMP Optimised sound insulation cabinet IMP installation near occupant

KRUGER CFC Series offer one of the lowest noise /CMH in the industry allows for very flexible installation location even above occupants.

Versatile design Suitable for many ventilation applications Installation friendly Suitable for the extract (or supply) of clean, grease laden or high temperature (up to F400) airstreams.



CFC Inline Discharge (180)



CFC Side Discharge (90)





CFC Side Discharge (90)

CFC Top Discharge (90)



Summary of key standard CFC Series specifications:

A- Nominal fan diameter sized from 315-1000mm.

- B- Airflow and static pressure performance range up to 45,000CMH and 1,000Pa.
- C- Airstream operating temperatures

Clean air standard ventilation application -20°C to +55°C. Kitchen (grease laden air) application up to +80°C /176°F. High temperature smokespill application (CFC-D) up to 400°C/2Hrs certified.

D-Extended operating life.

Sealed bearings suitable for L10, >75,000 operating hours at maximum speed. Extended operating life construction of L10, >200,000 operating hours available upon request. Vibration balanced to G2.5 in accordance with ISO14694/AMCA 204 standards.

E- Certifications.



Kruger Ventilation Industries Asia Co.,Ltd certifies that the CFC Series shown herein is licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.



F

G



High temperature (up to 400°C/2Hrs) in accordance with EN12101-3 certification by TÜV SÜD a third-party globally renowned testing and certification organisation.

Class	Temperature (°C)	Minimum functioning period (minutes)
F _f 250	250	120
F300	300	60
F _r 300	300	120
F400	400	120

F- Cabinet

With high gloss surface finished manufactured from ZERO spange galvanized steel.

G- Kruger's 3rd generation plenum backward curved wheel

Specifically optimized for high efficiency in an inline configuration. Wheel manufactured in steel finished in zinc rich primer and polyester powder coating with salt spray rating up to 1000 hours (ASTM B117). All wheels are statically and dynamically balanced to G2.5 (ISO 21940).

H- High precision shaft

Belt drive shaft manufacture from C45 steel with g6 tolerance (ISO286-2), to minimize eccentricity of shaft leading to lower vibration and longer bearing life.

I- Service friendly

Motor and drive outside casing and for easier belt adjustment and replacement.

J- Built-in inlet and outlet flange for easy duct connection.

K-High Efficiency KRUGER Motors

All CFC Series fans are supplied with a wide variety of both 1PH and 3PH AC, PM and EC, standard and high temperature rated motors. Please ask local KRUGER Distributor.





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Options and Accessories

- L- "Double skin" cabinet with acoustic and thermal insulation.
- M-Inlet and outlet safety guard.
- N- Flexible duct for normal and high temperature up to 400°C.
- O- Vibration isolator for ceiling hung or floor mounted installations.
- P-Spark resistance construction per AMCA 99.
- Q-Safety electrical switch.
- R-Belt cover isolates drive sets from airstream and protection from rotating pulleys and belts.
- S Aluminium profile design, providing a high quality and great hardness.







Nomenclature



* Weight without motor and drive system.

CFC 800

CFC 900

CFC 1000

** Please consult KRUGER for details when motor frame size is beyond this range.

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Example of Selection

Air Volume	Q = 7710 m ³ /h
Outlet Velocity	V = 6.2 m/s
Dynamic Pressure	Pd = 23.0 Pa
Total Pressure	Pt = 730 Pa
Fan Speed	N = 1450 rpm
Absorbed Power	W = 2.5 kW
Total Efficiency	η = 62 %
Sound Power Level	Lw(A) = 83 dB(A)



















Lw (A) [dB(A)] .4 .5 .6 .8 Q [m3/s] Q [m3/h] V [m/s] ż Pd [Pa]

















CFC 900 (90)





CFC 1000 (90)





CFC 315 (180)





CFC 355 (180)





CFC 400 (180)





CFC 450 (180)





CFC 500 (180)





CFC 560 (180)





CFC 630 (180)





CFC 710 (180)





CFC 800 (180)





CFC 900 (180)





CFC 1000 (180)



Fan Energy Index

Example of FEI Selection

Air Volume	Q =	2.14 m ³ /s
Fan Speed	N =	1450 rpm
FEI	=	1.09



Direct Drive models









Performance certified is for installation type D - Ducted inlet, Ducted outlet. Power rating (kW) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). FEI_T values are calculated in accordance with ANSI/AMCA Standard 208 and are based on default motor efficiencies (Direct Driven type). FEI_T values for fans with specific motors will vary slightly from those shown. Fan speed shown in RPM.















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Belt Drive models















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Edition 3 Printed in April 2023



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CAT041.E0 March 2022

