

We Care for Your Needs

CEILING & CABINET EXHAUST FANS

CF Series

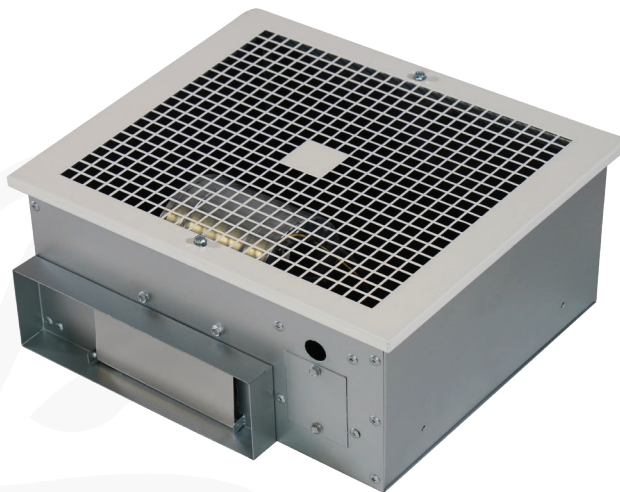
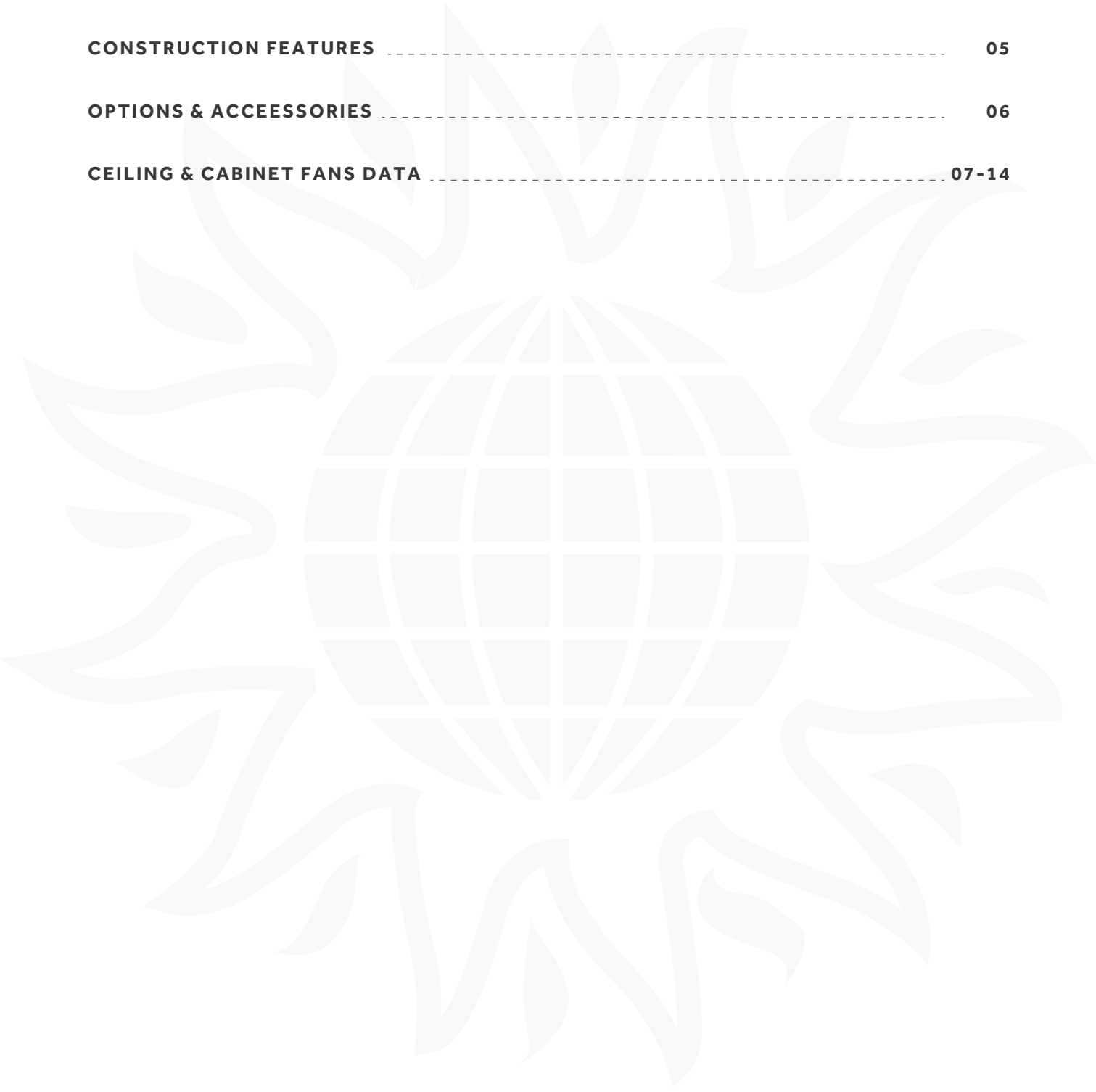


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CEILING & CABINET EXHAUST FANS

CF Series

OVERVIEW

Energy Twin City CF Ceiling and Inline cabinet Ventilators are designed for commercial applications requiring quiet, continuous, reliable operation. Exhausters are constructed with a low profile grille and are easy to duct horizontally, vertically or inline, with many models offering round duct connectors as standard.

TYPICAL APPLICATIONS INCLUDE

Suitable for indoor and outdoor applications, light commercial and industrial applications such as schools, shops, sports complexes, offices, restaurants, Bathroom Exhaust, HVAC, Home Ventilation

CONFIGURATIONS

Horizontal Ceiling or base Mount

Ceiling Units

Available in 05 sizes

- CF140L ➤ CF140M ➤ CF133DI
- CF140H ➤ CF160L

Cabinet Units

Available in 08 sizes

- CF140L-I ➤ CF133DI-I
- CF140M-I ➤ CF140DI-I
- CF140H-I ➤ CF175DI-I
- CF160L-I ➤ CF225DI-I

FAN PERFORMANCE

The high performance, low noise level motor, combined with a cabinet material makes CF units particularly suitable where low sound operating levels are critical.

FEATURES & BENEFITS

- High performance pressure developing Inline/Ceiling fan suitable for extract or input applications using circular ductwork
- Insulation class B & F
- Motors - Direct drive, Single and double inlet, forward curved centrifugal fan / scroll assembly
- Continuously rated capacitor start and run motor with sealed for life bearings and safety thermal overload protection
- Metal impeller balanced to ISO 1940- G 2.5
- IP54/55 terminal box
- Fans are easily disconnected from a mounting plate for cleaning
- Supply voltage: 230-240V 50/60Hz

CERTIFICATIONS

AMCA Sound & Air Performance, CE (IEC60335) EMC

& RoHS



Energy Industrial Company L.L.C. certifies that the Models CF140L, CF140M, CF140H, CF160L & CF133DI shown herein are 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.

Low Voltage Directive

IEC 60335-2-80:2015 in conjunction with IEC 60335-1:2010, COR1:2010, COR2:2011, AMD1:2013, AMD2:2016.



EMC Directive

EN 55014-1: 2017+A11: 2020; EN IEC 61000-3-2: 2019; EN 61000-3-3: 2013+A1:2019; EN 55014-2: 2015(IEC 61000-4-2; IEC 61000-4-4; IEC 61000-4-5; IEC 61000-4-6; IEC 61000-4-11).



RoHS Directive

Restriction of Hazardous substances in Electrical and Electronic Equipments.

GENERAL INFORMATION

CF – CEILING & CABINET FANS SERIES

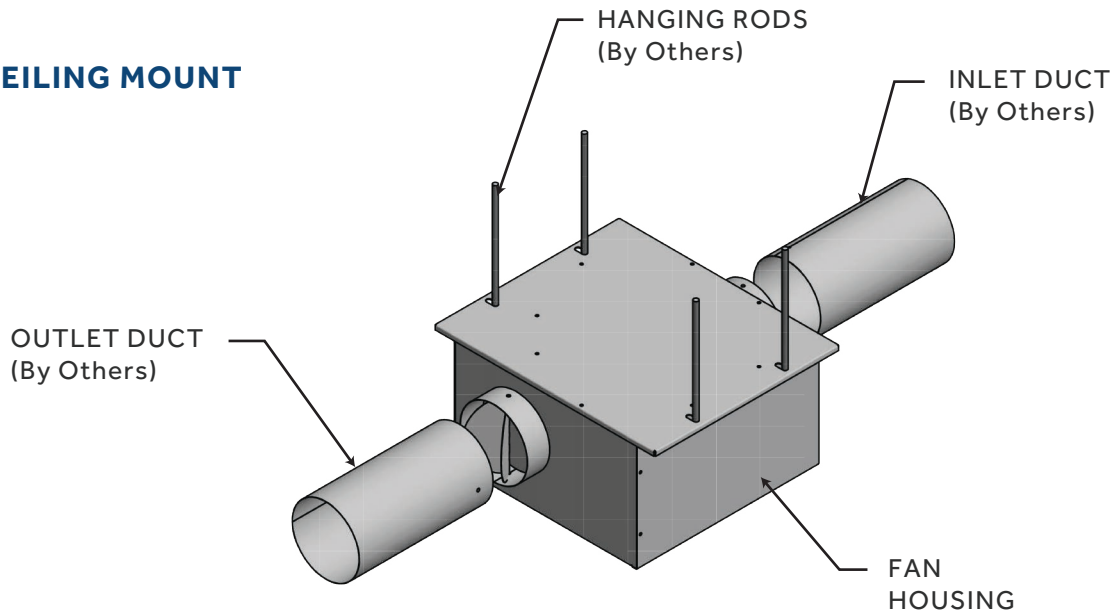
EASY INSTALLATION

The compact design of the range allows the fans to easily be accommodated above a suspended ceiling or floor void using the mounting points provided.

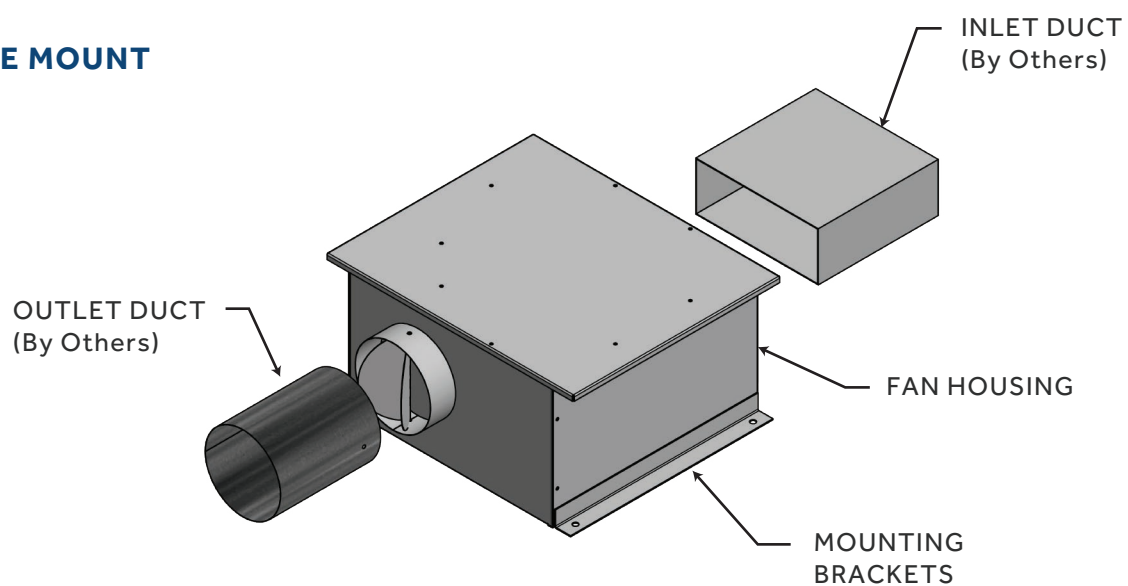
INTERNAL WIRING

TEAO motors are factory-wired between the motor and junction box. For either Ceiling or Cabinet models, an electric disconnect is available.

CEILING MOUNT



BASE MOUNT



CASING

A low profile for height-restricted areas, Unit casings is manufactured from best quality grade galvanized steel for weather proof IP65, with mounting brackets.

➤ Aluminum casing is optional.

SINGLE/DOUBLE-WIDTH FORWARD-CURVED

Single-inlet, single width, or double-inlet, double width, Centrifugal type with high efficiency, low noise, forwardcurved, galvanized sheet steel impellers housed within galvanized steel/plastic scrolls.

Motor/impeller assemblies are statically and dynamically balanced, in two planes, in accordance with ISO 1940 G2.5.

Fans are mounted individually on to fan decks to facilitate easy removal.

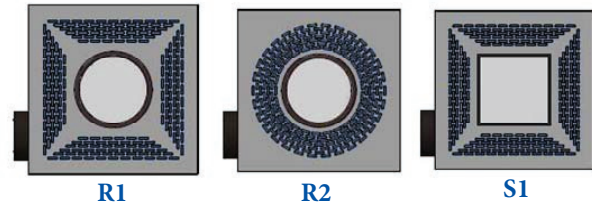


TERMINAL BOX

Electrical connections are wired via an external IP 55/65/66 terminal box, with removable cover.

GRILLE

Aluminum, Powder Coated, Concealed attachment screws securely fasten the grille to the housing for quiet operation.



➤ LED light is optional

MOTORS

Motors are totally enclosed, high-efficiency, external rotor type Max. ambient operating temp. at least 60°C. Bearings are sealed-for-life, maintenance-free, ball bearing type with a minimum life expectancy of 50,000 hours under design operating conditions. Thermal contactors are incorporated into the windings to ensure overload protection.

Insulation is Class F with IP44 enclosure.

INLET/OUTLET

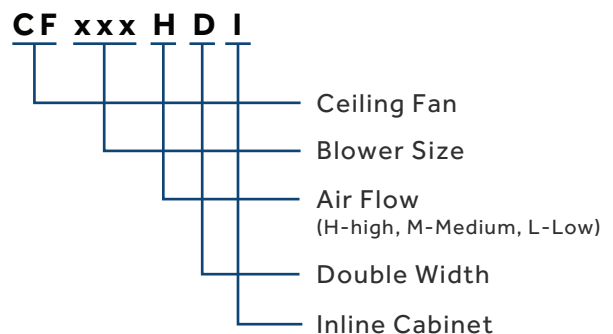
Round - For quick and easy connections

Rectangle - For quick and easy connections.

BACKDRAFT DAMPER

Built in Aluminum damper to reduce back drafts.

ORDER CODE



OPTIONS & ACCESSORIES

CF – CEILING & CABINET FANS SERIES



Variable Speed Control

Variable Speed Control is an optional accessory; allow the adjustment of airflow for system balancing. Variable speed controllers are solid-state design, Variable speed controls can be shipped separately.

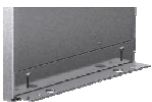
Discharge Wall Cap - Aluminum



Disconnect Switch

NEMA 1 type disconnect switch mounted in the motor compartment when ODP or TEFC motors used. When explosion proof motors are specified, a NEMA7/9 disconnect switch will be shipped loose for field mounting and wiring.

Spring Isolators – Hunger Type



Floor Mounting Brackets

Rubber Isolators – Hunger Type

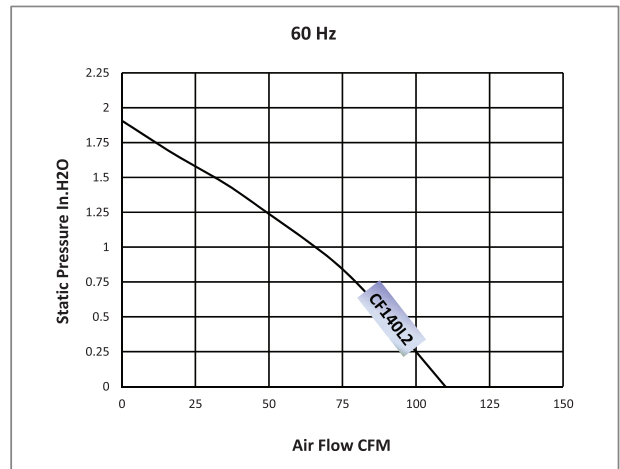
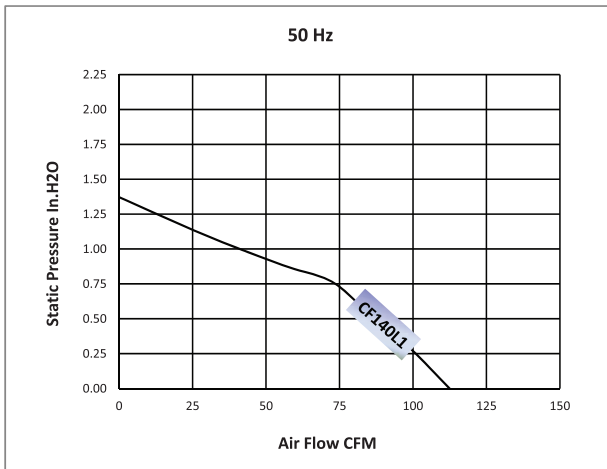


Discharge Louver - Aluminum

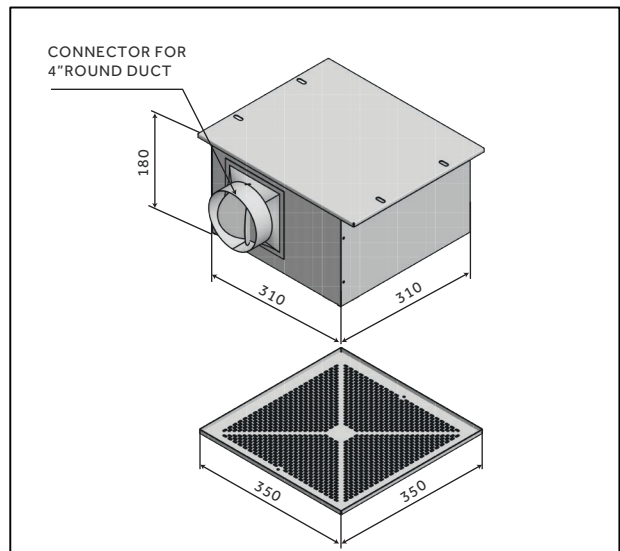
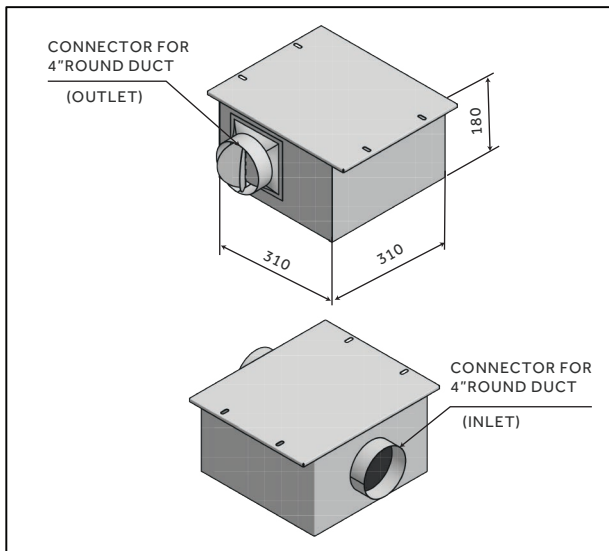
Decorative Grilles with LED Light



➤ CF140L / CF140L-I - 230V 1 ~ - 50/60Hz



| Model 50 Hz & 60 Hz | KW | A | RPM | 0.00" Pst | 0.125" Pst | 0.250" Pst | 0.375" Pst | 0.500" Pst | 0.625" Pst | 0.750" Pst | 1.000" Pst |
|---------------------------|-------|------|-----|-----------|------------|------------|------------|------------|------------|------------|------------|
| | | | | CFM | CFM | CFM | CFM | CFM | CFM | CFM | CFM |
| | | | | Sones | Sones | Sones | Sones | Sones | Sones | Sones | Sones |
| CF140L1 CF140L1-I | 0.039 | 0.17 | 820 | 112 | 107 | 101 | 94 | 87 | 80 | 74 | - |
| | | | | 9.4 | 9.4 | 8.9 | 8.9 | 9 | 9 | 9 | - |
| CF140L2 CF140L2-I | 0.041 | 0.18 | 780 | 110 | 105 | 100 | 95 | 90 | 85 | 79 | 66 |
| | | | | 9 | 9 | 8.9 | 8.9 | 9 | 9 | 9 | 9 |

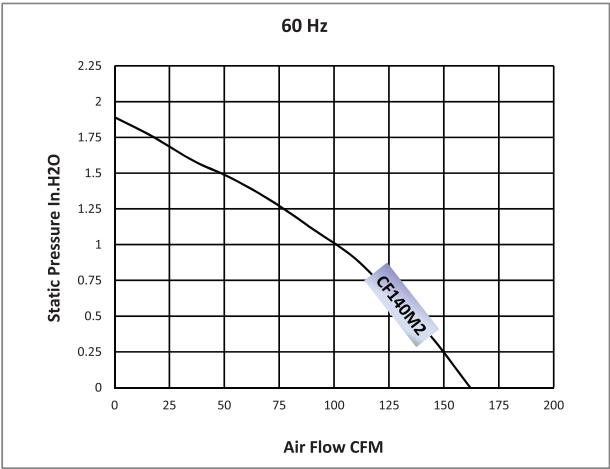
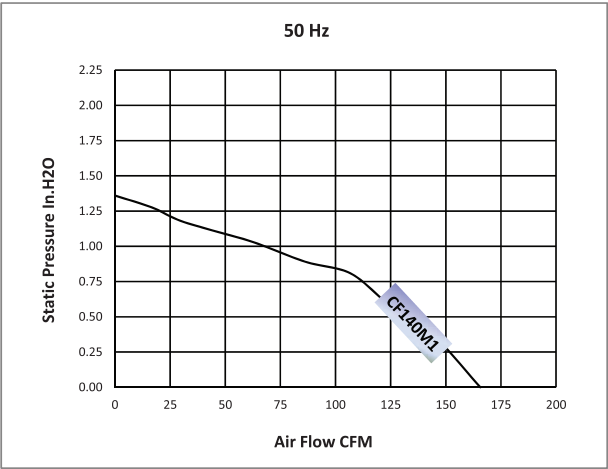


Performance shown is for installation type B: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. The sound ratings shown are loudness values in fan sones at a distance of 1.5m (5ft) in a hemispherical free field per AMCA International Standard 301. Values shown are for installation Type B: free inlet hemispherical sones levels. Performance ratings includes the effects of the aluminum grille and damper in the airstream.

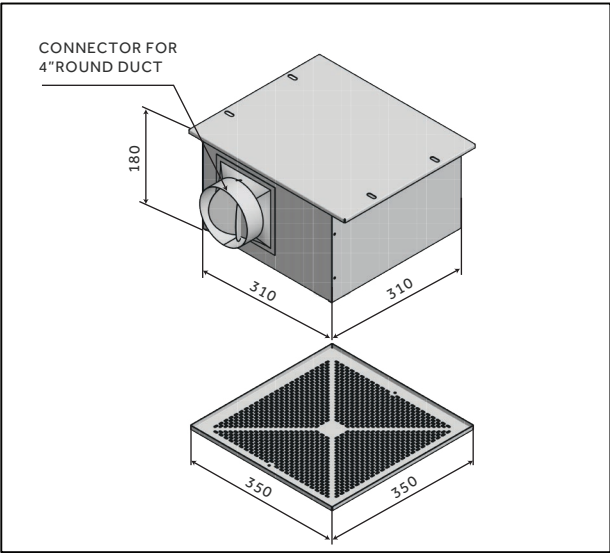
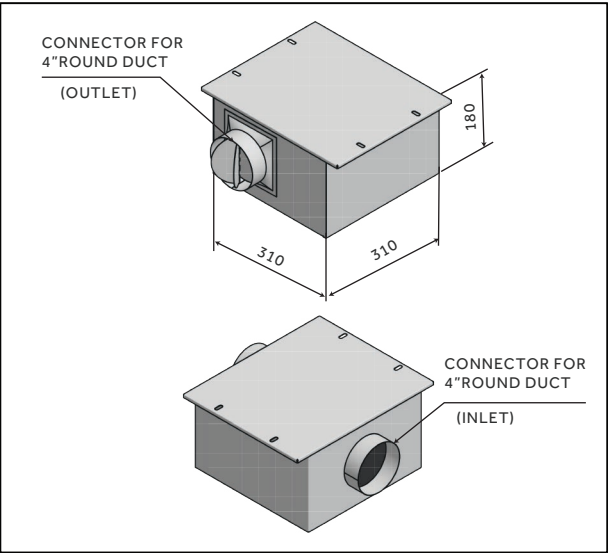
CEILING & CABINET FANS DATA

CF – CEILING & CABINET FANS SERIES

➤ CF140M / CF140M-I - 230V 1 ~ - 50/60Hz

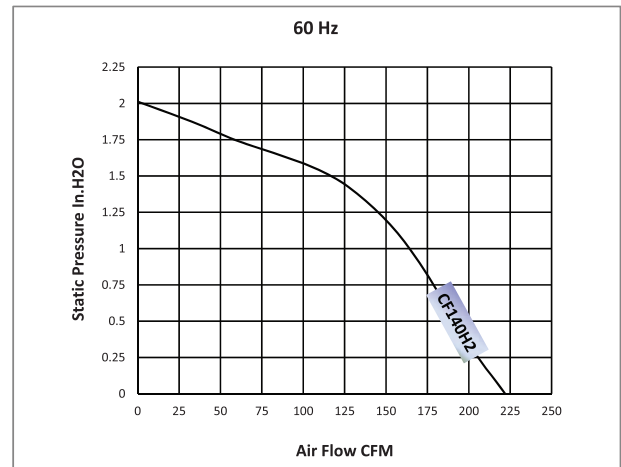
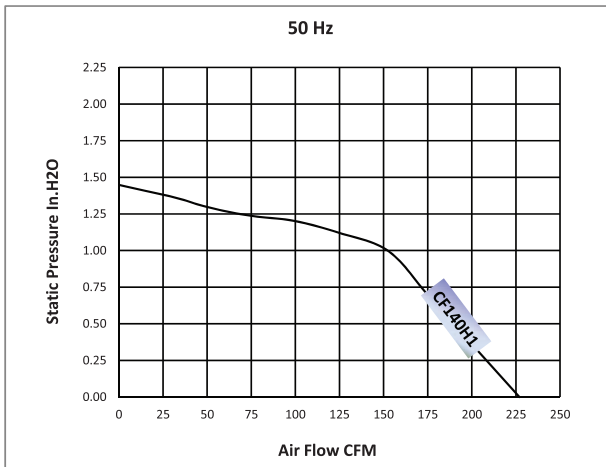


| Model 50 Hz & 60 Hz | KW | A | RPM | 0.00" Pst | 0.125" Pst | 0.250" Pst | 0.375" Pst | 0.500" Pst | 0.625" Pst | 0.750" Pst | 1.000" Pst |
|---------------------------|-------|------|------|-----------|------------|------------|------------|------------|------------|------------|------------|
| | | | | CFM | CFM | CFM | CFM | CFM | CFM | CFM | CFM |
| | | | | Sones | Sones | Sones | Sones | Sones | Sones | Sones | Sones |
| CF140M1 CF140M1-I | 0.063 | 0.3 | 1305 | 165 | 158 | 152 | 144 | 133 | 121 | 113 | - |
| | | | | 5.7 | 5.7 | 5.2 | 5.2 | 5.2 | 5.9 | 5.9 | - |
| CF140M2 CF140M2-I | 0.065 | 0.28 | 1480 | 162 | 156 | 150 | 143 | 136 | 127 | 120 | 101 |
| | | | | 5.4 | 5.2 | 5.2 | 5.2 | 5.2 | 5.9 | 5.9 | 5.9 |

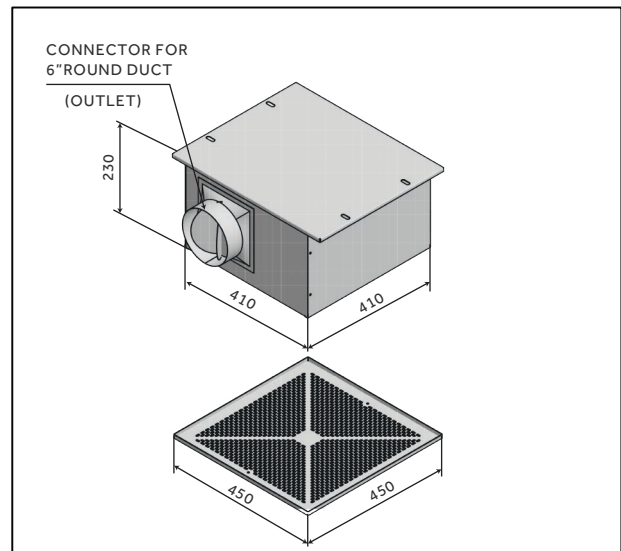
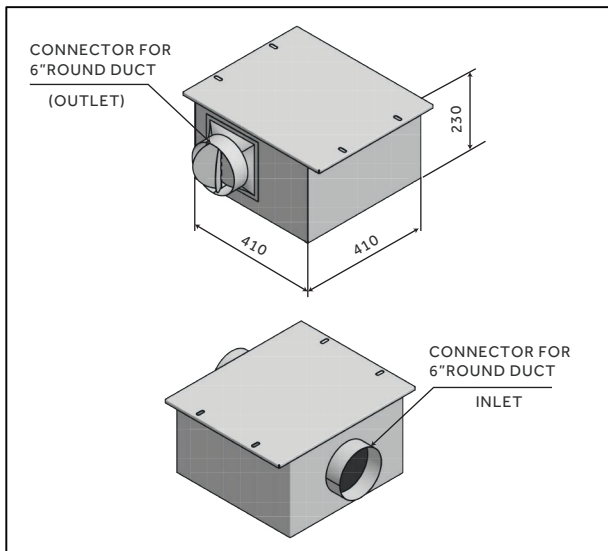


Performance shown is for installation type B: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. The sound ratings shown are loudness values in fan sones at a distance of 1.5m (5ft) in a hemispherical free field per AMCA International Standard 301. Values shown are for installation Type B: free inlet hemispherical sones levels. Performance ratings includes the effects of the aluminum grille and damper in the airstream.

➤ CF140H / CF140H-I - 230V 1 ~ - 50/60Hz



| Model 50 Hz & 60 Hz | KW | A | RPM | 0.00" Pst | 0.125" Pst | 0.250" Pst | 0.375" Pst | 0.500" Pst | 0.625" Pst | 0.750" Pst | 1.000" Pst |
|---------------------------|-------|------|------|-----------|------------|------------|------------|------------|------------|------------|------------|
| | | | | CFM | CFM | CFM | CFM | CFM | CFM | CFM | CFM |
| | | | | Sones | Sones | Sones | Sones | Sones | Sones | Sones | Sones |
| CF140H1 CF140H1-I | 0.112 | 0.50 | 1580 | 227 | 217 | 208 | 199 | 190 | 180 | 172 | 152 |
| | | | | 8 | 8 | 7.9 | 7.9 | 7.8 | 7.8 | 7.8 | 7.5 |
| CF140H2 CF140H2-I | 0.125 | 0.55 | 1550 | 222 | 214 | 205 | 197 | 192 | 185 | 179 | 164 |
| | | | | 7.6 | 7.6 | 7.7 | 7.7 | 7.8 | 7.8 | 7.8 | 7.7 |

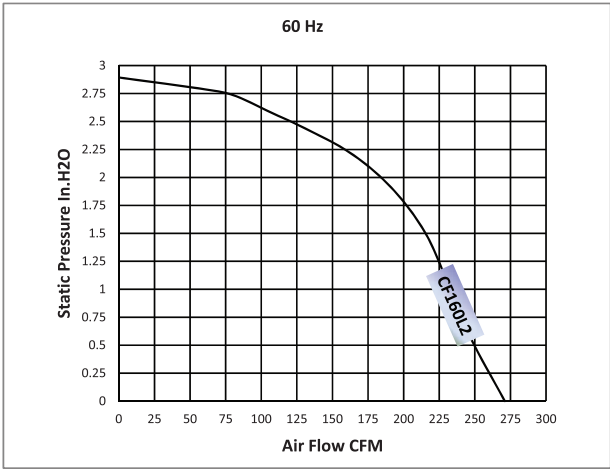
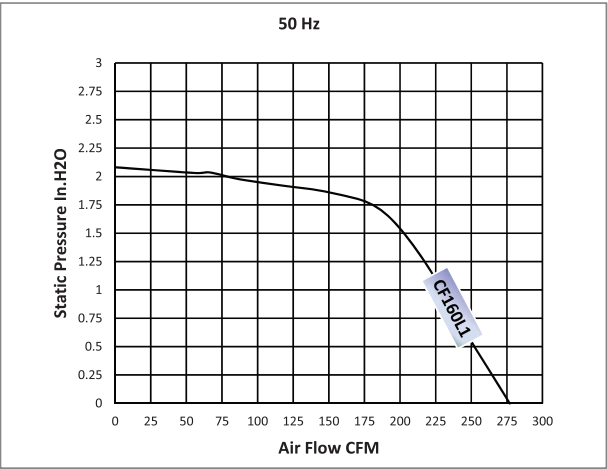


Performance shown is for installation type B: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. The sound ratings shown are loudness values in fan sones at a distance of 1.5m (5ft) in a hemispherical free field per AMCA International Standard 301. Values shown are for installation Type B: free inlet hemispherical sones levels. Performance ratings includes the effects of the aluminum grille and damper in the airstream.

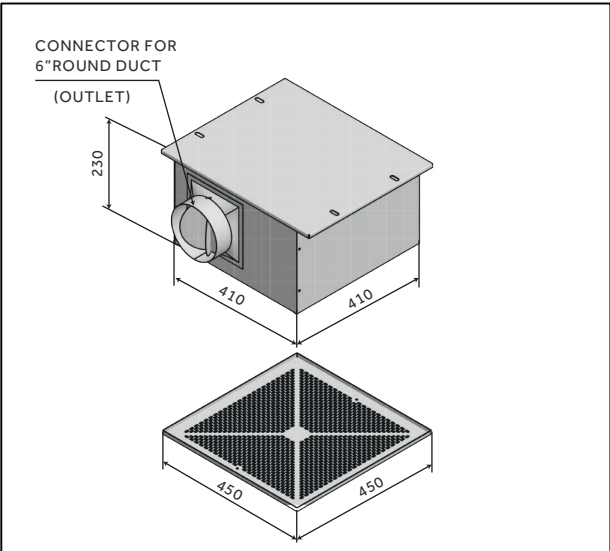
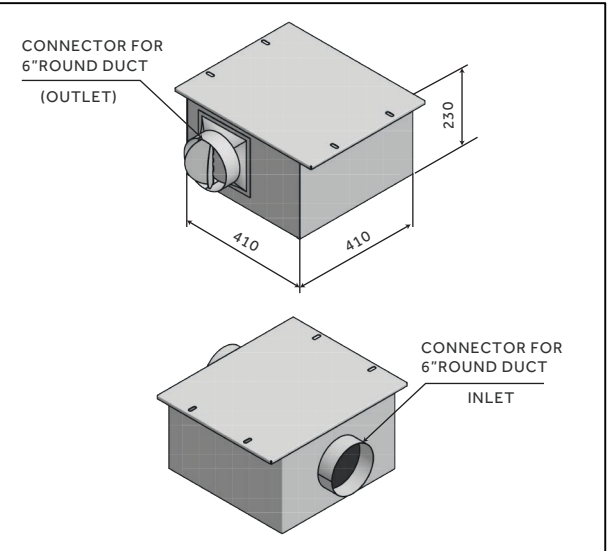
CEILING & CABINET FANS DATA

CF – CEILING & CABINET FANS SERIES

➤ CF160L / CF160L-I - 230V 1 ~ - 50/60Hz

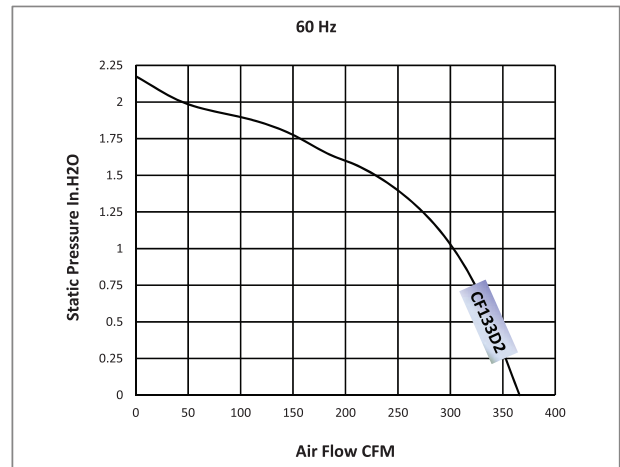
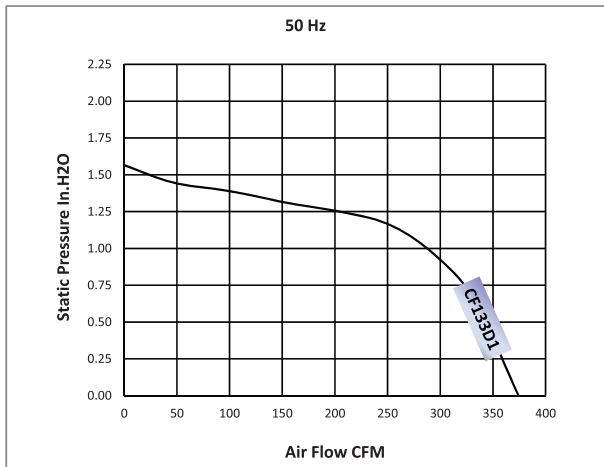


| Model 50 Hz & 60 Hz | KW | A | RPM | 0.00" Pst | 0.125" Pst | 0.250" Pst | 0.375" Pst | 0.500" Pst | 0.625" Pst | 0.750" Pst | 1.000" Pst |
|---------------------------|-------|------|------|-----------|------------|------------|------------|------------|------------|------------|------------|
| | | | | CFM | CFM | CFM | CFM | CFM | CFM | CFM | CFM |
| | | | | Sones | Sones | Sones | Sones | Sones | Sones | Sones | Sones |
| CF160L1 CF160L1-I | 0.219 | 0.95 | 2000 | 277 | 270 | 265 | 258 | 252 | 246 | 240 | 229 |
| | | | | 10 | 10 | 9.3 | 9.3 | 9.5 | 9.5 | 9.5 | 9.8 |
| CF160L2 CF160L2-I | 0.244 | 1.08 | 1820 | 271 | 266 | 260 | 255 | 250 | 246 | 240 | 232 |
| | | | | 9.5 | 9.5 | 9.3 | 9.3 | 9.5 | 9.5 | 9.5 | 9.8 |

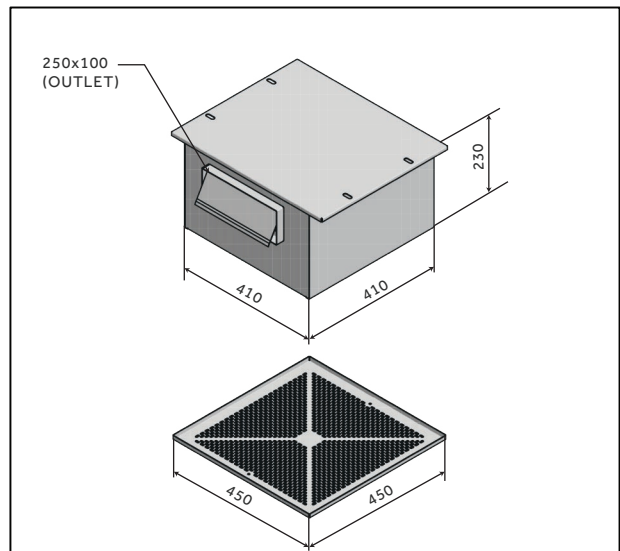
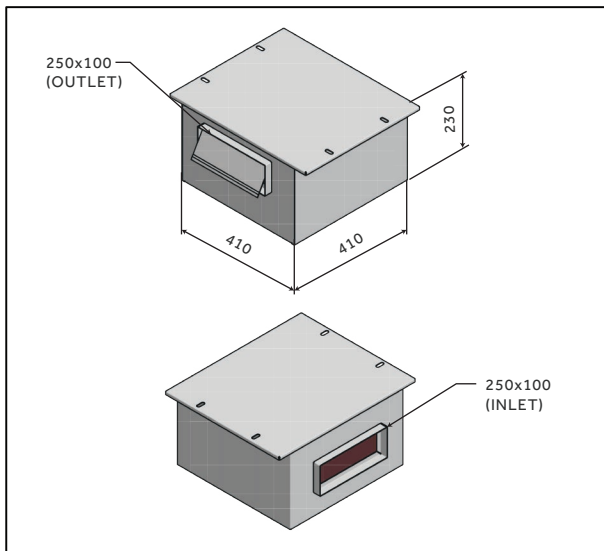


Performance shown is for installation type B: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. The sound ratings shown are loudness values in fan sones at a distance of 1.5m (5ft) in a hemispherical free field per AMCA International Standard 301. Values shown are for installation Type B: free inlet hemispherical sones levels. Performance ratings includes the effects of the aluminum grille and damper in the airstream.

➤ CF133D / CF133D-I - 230V 1 ~ - 50/60Hz



| Model 50 Hz & 60 Hz | KW | A | RPM | 0.00" Pst | 0.125" Pst | 0.250" Pst | 0.375" Pst | 0.500" Pst | 0.625" Pst | 0.750" Pst | 1.000" Pst |
|---------------------------|-------|------|------|-----------|------------|------------|------------|------------|------------|------------|------------|
| | | | | CFM | CFM | CFM | CFM | CFM | CFM | CFM | CFM |
| | | | | Sones | Sones | Sones | Sones | Sones | Sones | Sones | Sones |
| CF133D1 CF133D1-I | 0.197 | 0.84 | 1780 | 374 | 366 | 359 | 344 | 335 | 324 | 307 | 288 |
| | | | | 7.1 | 7.1 | 6.5 | 6.5 | 6.7 | 7.5 | 7.5 | 7.5 |
| CF133D2 CF133D2-I | 0.209 | 0.89 | 1590 | 366 | 360 | 353 | 346 | 332 | 324 | 315 | 303 |
| | | | | 7.1 | 7.1 | 6.5 | 6.5 | 6.7 | 7.5 | 7.5 | 7.5 |

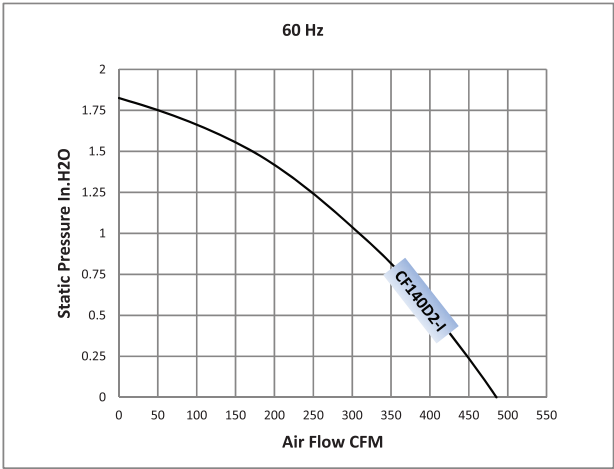
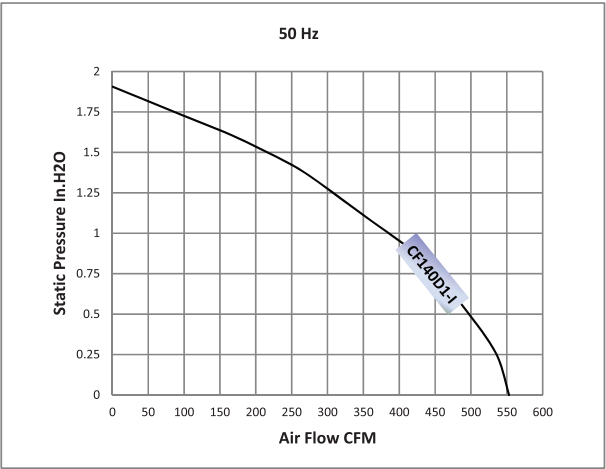


Performance shown is for installation type B: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. The sound ratings shown are loudness values in fan sones at a distance of 1.5m (5ft) in a hemispherical free field per AMCA International Standard 301. Values shown are for installation Type B: free inlet hemispherical sones levels. Performance ratings includes the effects of the aluminum grille and damper in the airstream.

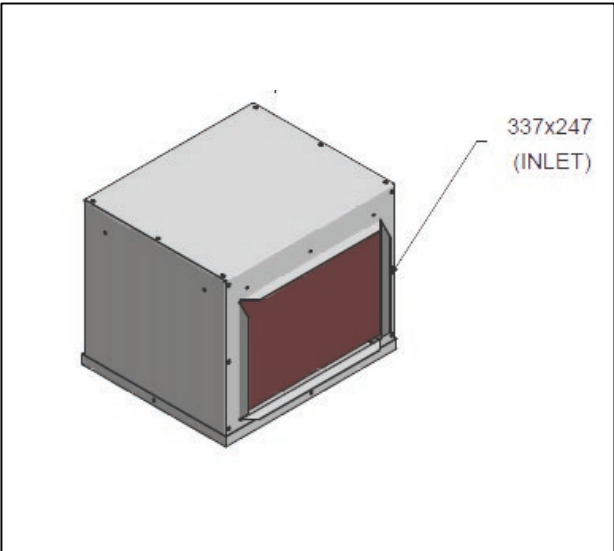
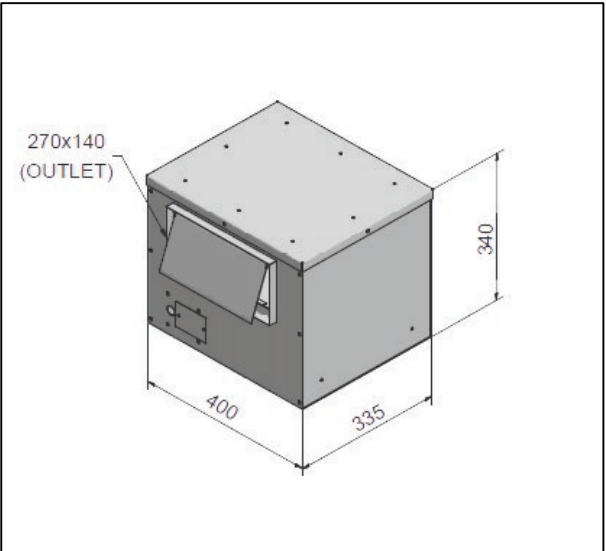
CEILING & CABINET FANS DATA

CF – CEILING & CABINET FANS SERIES

➤ CF140D-I - 230V 1 ~ - 50/60Hz

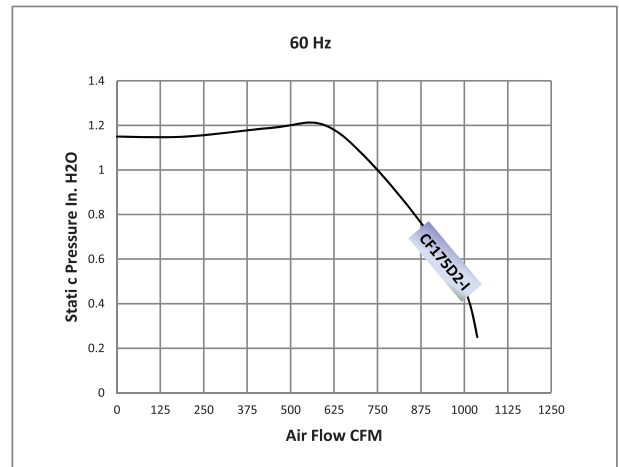
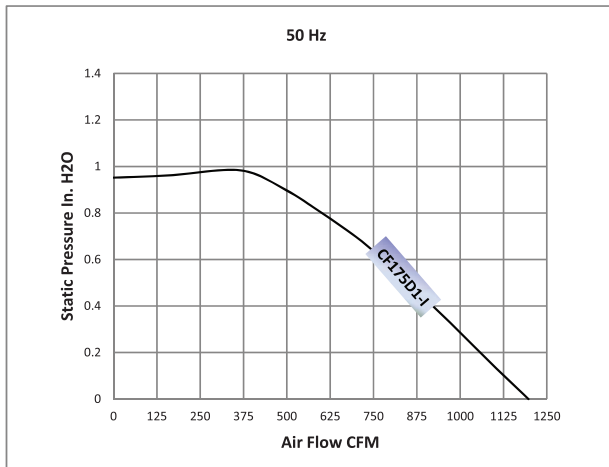


| Model 50 Hz & 60 Hz | KW | A | RPM | 0.00" Pst | 0.125"Pst | 0.250" Pst | 0.375" Pst | 0.500" Pst | 0.625" Pst | 0.750" Pst | 1.000" Pst |
|---------------------------|-------|-----|------|-----------|-----------|------------|------------|------------|------------|------------|------------|
| | | | | CFM | CFM | CFM | CFM | CFM | CFM | CFM | CFM |
| | | | | Sones | Sones | Sones | Sones | Sones | Sones | Sones | Sones |
| CF140D1-I | 0.304 | 1.3 | 1900 | 553 | 545 | 535 | 518 | 497 | 475 | 452 | 385 |
| | | | | 10 | 10 | 9.3 | 9.3 | 9.5 | 9.5 | 9.5 | 9.5 |
| CF140D2-I | 0.370 | 1.4 | 1730 | 485 | 467 | 447 | 427 | 406 | 386 | 364 | 315 |
| | | | | 9.5 | 9.5 | 9.3 | 9.3 | 9.2 | 9.2 | 9 | 9 |

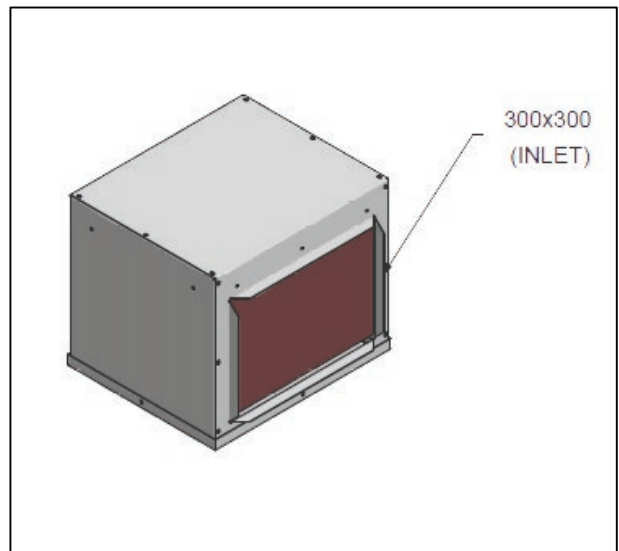
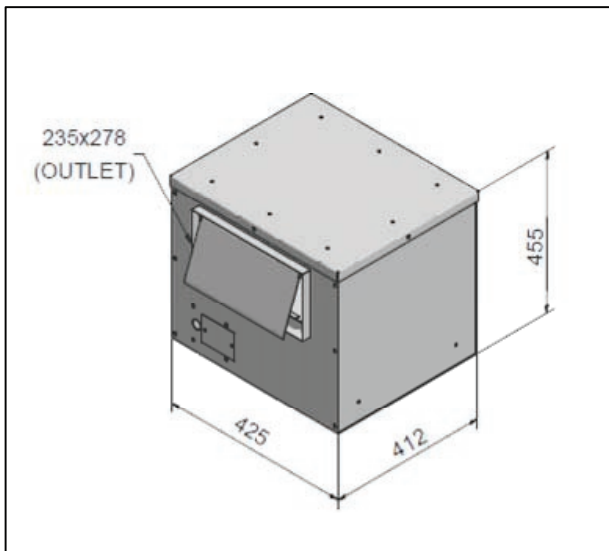


Performance shown is for installation type B: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. The sound ratings shown are loudness values in fan sones at a distance of 1.5m (5ft) in a hemispherical free field per AMCA International Standard 301. Values shown are for installation Type B: free inlet hemispherical sones levels. Performance ratings includes the effects of the aluminum grille and damper in the airstream.

➤ CF175D-I - 230V 1 ~ - 50/60Hz



| Model 50 Hz & 60 Hz | KW | A | RPM | 0.00" Pst | 0.125" Pst | 0.250" Pst | 0.375" Pst | 0.500" Pst | 0.625" Pst | 0.750" Pst | 1.000" Pst |
|---------------------------|-------|-----|------|-----------|------------|------------|------------|------------|------------|------------|------------|
| | | | | CFM | CFM | CFM | CFM | CFM | CFM | CFM | CFM |
| | | | | Sones | Sones | Sones | Sones | Sones | Sones | Sones | Sones |
| CF175D1-I | 0.300 | 2.4 | 1391 | 1197 | 1110 | 1023 | 939 | 846 | 757 | 650 | - |
| | | | | 9.4 | 9.4 | 8.9 | 8.9 | 9 | 9 | 9 | - |
| CF175D2-I | 0.300 | 2.8 | 1582 | - | - | 1037 | 1022 | 988 | 940 | 880 | 750 |
| | | | | - | - | 10.5 | 10.5 | 10.5 | 10 | 10 | 10 |

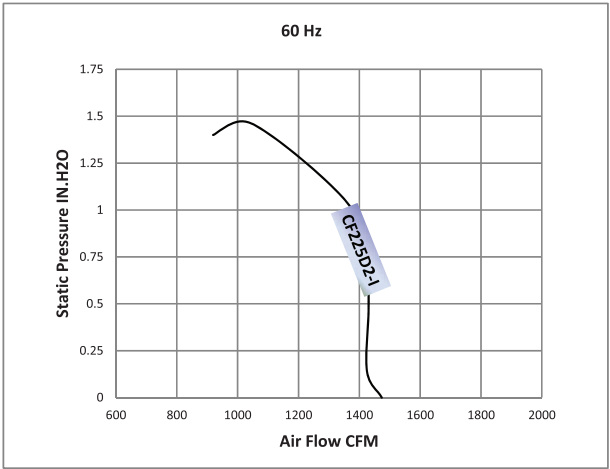
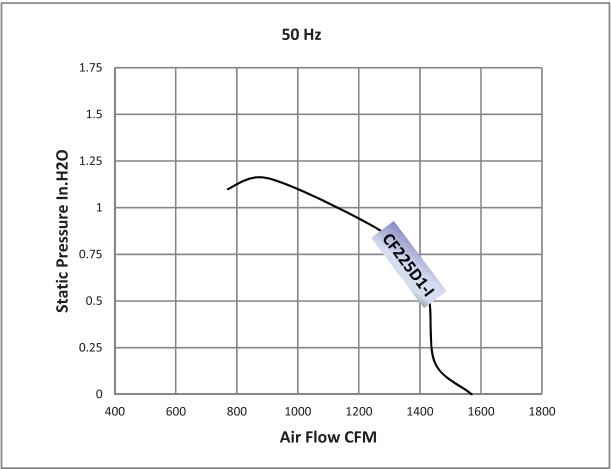


Performance shown is for installation type B: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. The sound ratings shown are loudness values in fan sones at a distance of 1.5m (5ft) in a hemispherical free field per AMCA International Standard 301. Values shown are for installation Type B: free inlet hemispherical sones levels. Performance ratings includes the effects of the aluminum grille and damper in the airstream.

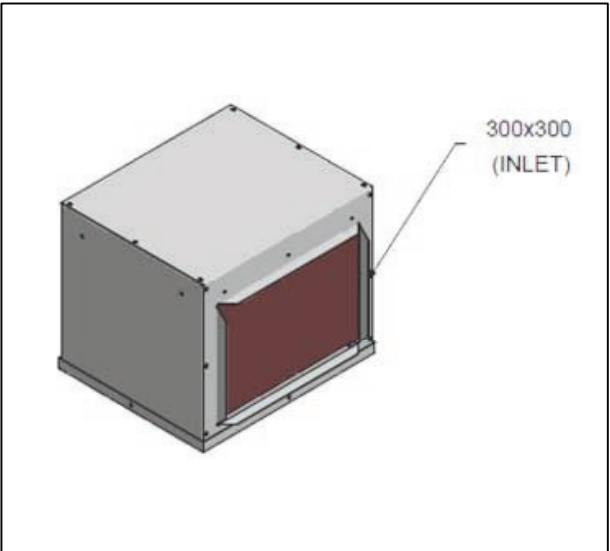
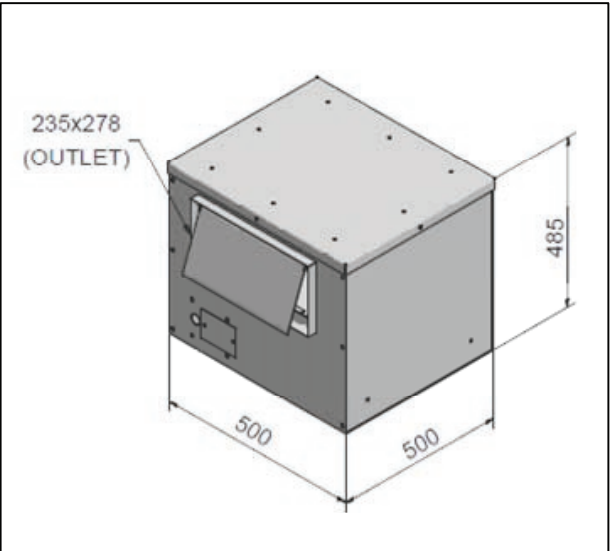
CEILING & CABINET FANS DATA

CF – CEILING & CABINET FANS SERIES

➤ CF225D-I - 230V 1 ~ - 50/60Hz



| Model 50 Hz & 60 Hz | KW | A | RPM | 0.00" Pst | 0.125" Pst | 0.250" Pst | 0.500" Pst | 0.750" Pst | 1.000" Pst | 1.250" Pst | 1.375" Pst |
|---------------------------|-------|------|------|-----------|------------|------------|------------|------------|------------|------------|------------|
| | | | | CFM | CFM | CFM | CFM | CFM | CFM | CFM | CFM |
| | | | | Sones | Sones | Sones | Sones | Sones | Sones | Sones | Sones |
| CF225D1-I | 0.550 | 4.23 | 1321 | 1567 | 1465 | 1439 | 1430 | 1357 | 1130 | - | - |
| | | | | 11 | 10.8 | 10.8 | 10.2 | 9.5 | 9.5 | 9.2 | 9.2 |
| CF225D2-I | 0.550 | 4.77 | 1445 | 1472 | 1426 | 1423 | 1430 | 1420 | 1372 | 1225 | 1130 |
| | | | | 12.2 | 11.5 | 11.5 | 11.5 | 11.5 | 10.8 | 10.8 | 10.5 |



Performance shown is for installation type B: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. The sound ratings shown are loudness values in fan sones at a distance of 1.5m (5ft) in a hemispherical free field per AMCA International Standard 301. Values shown are for installation Type B: free inlet hemispherical sones levels. Performance ratings includes the effects of the aluminum grille and damper in the airstream.

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