

# **FKD SERIES**

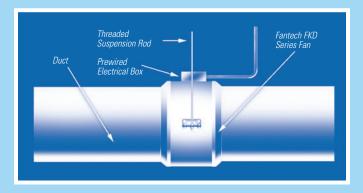
## ROUND INLINE MIXED FLOW CENTRIFUGAL FANS

Fantech FKD direct drive, mixed flow centrifugal fans blend the high flow of axial fans with the higher pressure, non-overloading characteristics of backward curved impellers. An excellent choice for exhaust or supply applications where quieter performance and easy installation are important. Perfect for commercial and institutional structures such as offices, hospitals, beauty salons, veterinary clinics as well as residential applications such as kitchen range hood exhaust.

FKD straight-through inline design fans are available in a wide range of sizes for easy installation in duct sizes from 8" to 20". Fans can be mounted at any angle at any point along the duct work. Motors are capable of operating in airstream temperatures up to 140° F. Motor bearings are permanently sealed, self lubricating ball type.

## 100% Speed Controllable

All FKD fans are 100% speed controllable through voltage reduction allowing for on-demand ventilation or precision balancing of systems.









### EXTERNAL ROTOR MOTORS

allowing for excellent motor heat dissipation, even at a low RPM.

All FKD Series fans utilize our unique external rotor motors. The motor's enclosed design allows the fan to operate in high moisture, lint and dust laden air. The motors are a permanent split capacitor type, with automatic reset thermal overload protection and sealed ball bearings. These features ensure long life and maintenance free operation. All motors and impellers are designed as one integral unit,

## HARD WORKING. LONG LASTING. HERE'S WHY:

- · Galvanized steel housing
- · External rotor motor with built-in thermal overload protection and automatic reset
- Mixed flow impeller
- · Permanently lubricated sealed ball bearings
- Excellent heat dissipation to ensure long motor life
- Suitable for airstream temperatures up to 140° F
- 100% speed controllable
- Terminal box with prewired electrical strip
- Three-year warranty



**FKD 10** 

## 12 MODELS TO CHOOSE FROM:

- 8" to 20" duct diameters
- 836 to 6291 CFM
- 100% speed controllable
- Rated for airstream temperatures up to 140° F
- Three-year factory warranty

## **FKD SERIES**

## INLINE MIXED FLOW DUCT FANS





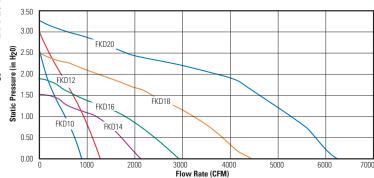
#### **DIMENSIONAL DATA** Ē F D n Model **A1** A2 FKD 8xL 8 121/2 151/2 FKD 10 10 121/2 121/2 FKD 10xL 10 14 15 8 FKD 12 14 12 121/2 8 FKD 12xL 12 12 14 171/8 18% 15/8 7/8 FKD 14 14 12 14 171/8 171/4 1% FKD 14xL 201/4 14 14 16 193/4 11/2 11/2 FKD 16 19¾ 16 14 16 183/4 11/2 15/8 FKD 16xL 16 16 18 221/8 231/4 11/4 1% 21¾ FKD 18 18 16 18 221/8 11/4 15/8 FKD 18xL 18 20 221/4 291/4 13/4 18 FKD 20 20 18 20 221/4 271/4 13/4



Fantech, Inc. and Fantech Limited certify that the KNO 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 311 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.



#### AIR PERFORMANCE GRAPHS 3.50 3.00 Static Lress rate (in HZ0) 2.50 1.50 1.50 FKD18 FKD14xL FKD16xL FKD12x 0.50 FKD10x 0.00 1000 3000 5000 6000 7000 Flow Rate (CFM)



## PERFORMANCE DATA (For sound performance data refer to publication FKD0808.)

| Fan      | RPM   | Voltage | Rated<br>Watts | Max.<br>Amps       | Static Pressure in Inches W.G. |      |      |      |      |      |      |       |      |      | Max Ps. | Duct | Sones <sup>†</sup> |
|----------|-------|---------|----------------|--------------------|--------------------------------|------|------|------|------|------|------|-------|------|------|---------|------|--------------------|
| Model    | nrivi |         |                |                    | 0"                             | 0.1" | 0.2" | 0.4" | 0.6" | 0.8" | 1.0" | 1.25" | 1.5" | 2.0" | 2.50"   | Dia. |                    |
| FKD 8xL  | 2700  | 115     | 327            | 2.99 <sup>1</sup>  | 836                            | 799  | 761  | 720  | 680  | 595  | 499  | 393   | 286  | _    | 2.59"   | 8"   | 14.1               |
| FKD 10   | 2700  | 115     | 329            | 3.011              | 910                            | 873  | 836  | 795  | 752  | 653  | 547  | 432   | 342  | _    | 2.60"   | 10"  | 15.3               |
| FKD 10xL | 2850  | 115     | 529            | 4.842              | 1266                           | 1226 | 1187 | 1147 | 1100 | 1006 | 911  | 810   | 696  | 460  | 3.08"   | 10"  | 21.0               |
| FKD 12   | 2900  | 115     | 531            | 4.86 <sup>2</sup>  | 1305                           | 1266 | 1228 | 1189 | 1145 | 1054 | 948  | 833   | 712  | 479  | 3.08"   | 12"  | 23.0               |
| FKD 12xL | 1700  | 115     | 500            | 4.802              | 2016                           | 1920 | 1832 | 1746 | 1649 | 1423 | 1066 | 606   | _    | _    | 1.52"   | 12"  | 18.7               |
| FKD 14   | 1700  | 115     | 495            | 4.76 <sup>2</sup>  | 2156                           | 2061 | 1965 | 1868 | 1764 | 1520 | 1193 | 623   | _    | _    | 1.52"   | 14"  | 18.4               |
| FKD 14xL | 1550  | 115     | 738            | 7.122              | 2619                           | 2517 | 2416 | 2303 | 2180 | 1936 | 1662 | 1294  | 843  | _    | 1.94"   | 14"  | 19.0               |
| FKD 16   | 1600  | 115     | 742            | $6.39^{2}$         | 2952                           | 2831 | 2707 | 2580 | 2445 | 2144 | 1804 | 1306  | 774  | _    | 1.90"   | 16"  | 18.5               |
| FKD 16xL | 1600  | 115     | 1421           | 12.40 <sup>3</sup> | 4274                           | 4144 | 4014 | 3880 | 3743 | 3452 | 3137 | 2794  | 2379 | 1242 | 2.42"   | 16"  | 25.0               |
| FKD 18   | 1600  | 115     | 1411           | 12.04 <sup>3</sup> | 4448                           | 4992 | 4130 | 3991 | 3871 | 3583 | 3239 | 2843  | 2380 | 1231 | 2.51"   | 18"  | 24.0               |
| FKD 18xL | 1700  | 460/3   | 2208           | 3.75               | 6236                           | 6115 | 5995 | 5874 | 5754 | 5500 | 5199 | 4909  | 4602 | 3703 | 3.24"   | 18"  | 32.0               |
| FKD 20   | 1750  | 460/3   | 2218           | 3.73               | 6291                           | 6174 | 6054 | 5933 | 5829 | 5617 | 5307 | 4987  | 4667 | 3757 | 3.27"   | 20"  | 33.0               |

Performance certified is for installation type D - Ducted inlet, Ducted outlet. Speed (RPM) shown is nominal. Performance is based on actual speed of test. Performance ratings do not include the effects of appurtenances (accessories).

The sound ratings shown are loudness values in fan sones at 5ft. (1.5m) in hemispherical free field calculated per AMCA Standard 301. Values shown are for installation Type D: ducted inlet hemispherical fran sone levels. Ratings do not include the effect of duct end correction. All sone values shown are accellated at 0.5" (static pressure in incluse the 61, blots: Three phase motors are wound for 230/460 volt. Motors are prewired for 460 volts but may be delivered as 230 volt or may be rewired in the field. Becommended speed control rating 5A. Recommended speed control rating 15A.



All dimensions in inches.