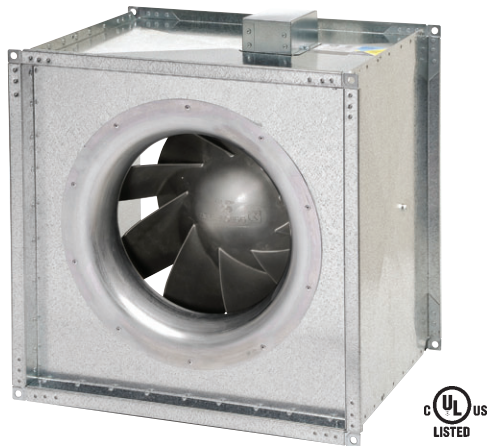




## KDRE-KDRD Series

Square Inline Mixed Flow  
Centrifugal Fans



Systemair KDRE mixed flow centrifugal type exhaust/supply fans for moderate size ventilation applications were specifically designed to provide the high flow of axial designs plus the higher pressure, non-overloading characteristics of backward curved impellers. Fan motors are capable of operating in air stream temperatures up to 140°F. Motor bearings are a permanently sealed, self lubricating ball type.

The square design provides a larger discharge area than tubular centrifugal or vane axial fans, so outlet velocities are reduced for quieter operation. 100% speed controllable through voltage reduction allowing for on-demand ventilation or precision balancing of systems.

### External Rotor Motors

All KDRE 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 motor and impellers are designed as one integral unit, allowing for excellent motor heat dissipation even at a low RPM.



Systemair external rotor motor

### Hard Working. Long Lasting. Here's Why:

- Lightweight square design provides a larger discharge area and quieter operation
- Galvanized steel housing
- Permanently lubricated sealed ball bearings
- 100% speed controllable
- Airflow up to 6993 CFM
- 18" to 26" square dimensions
- External rotor motor
- Automatic reset thermal overload protection
- Excellent heat dissipation, ensuring long motor life
- Terminal box with pre-wired electrical strip
- Mixed flow impeller design incorporates high flow with higher pressure, non-overloading characteristics and automatic reset thermal overload protection
- Suitable for airstream temperatures up to 140°F
- Three-year warranty
- UL Listed

### Controls

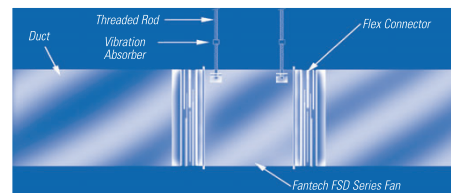
Each motor shall be controlled independently by an electromechanical device.

### Installation

Straight-through airflow design allows easy installation; no installation extras required.

### Mounting

Can be mounted at any angle, anywhere along ductwork.



### Warranty:

The inline fan is backed by a 3-year limited warranty from the purchase date. The limited warranty covers defects in material, workmanship and parts.



All fan sizes have been thoroughly tested and are UL and cUL listed for electrical safety.

## Specifications

Specifications	RPM	Voltage	Rated Watts	Max. Amps.	Max. Ps	Duct Dim.*	Sones †
KDRE 45-EF	1700	115	517	4.80 <sup>2</sup>	1.57"	18"	12.4
KDRE 50-EF	1600	115	753	6.36 <sup>2</sup>	1.92"	20"	14.1
KDRE 55-EF	1600	115	1554	15.00 <sup>3</sup>	2.62"	22"	21.0
KDRD 65-DF	1700	460/3	2328	3.82 <sup>2</sup>	2.94"	26"	27.0 ‡

## Performance (For sound performance data refer to: )

Models Airflow in cfm and (l/s)	External Static Pressure - Inches of wg and (pa)										
	0.0" (0)	0.125" (25)	0.25" (50)	0.375" (100)	0.5" (125)	0.75" (200)	1.0" (250)	1.25" (300)	1.5" (375)	2.0" (500)	2.5" (625)
KDRE 45-EF	2463 (1162)	2349 (1109)	2237 (1056)	2126 (1003)	1987 (938)	1644 (776)	1180 (557)	658 (311)	- (-)	- (-)	- (-)
KDRE 50-EF	3225 (1522)	3073 (1450)	2921 (1379)	2766 (1305)	2605 (1229)	2241 (1058)	1829 (863)	1341 (633)	815 (385)	- (-)	- (-)
KDRE 55-EF	5223 (2465)	5070 (2393)	4918 (2321)	4766 (2249)	4605 (2173)	4282 (2021)	3865 (1824)	3337 (1575)	2716 (1282)	1308 (617)	235 (111)
KDRD 65-DF	6993 (3300)	6818 (3218)	6644 (3136)	6473 (3055)	6317 (2981)	5981 (2823)	5608 (2647)	5177 (2443)	4681 (2209)	3469 (1637)	1937 (914)

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

\* KDRE and KDRD Fans are square and duct dimensions are the same for width and height.

† 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 A: free inlet hemispherical fan sone levels. All sone values are calculated at 0.5" (static pressure in inches W.G.).

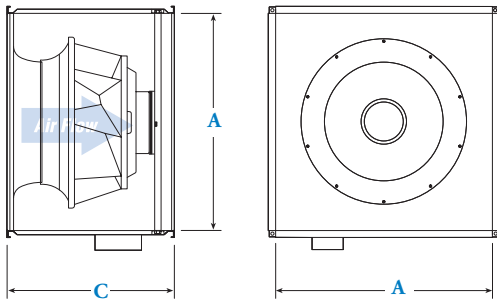
‡ Sone Value at 0.75" (static pressure in inches W.G.).

Note: 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.

<sup>2</sup> Recommended speed control rating 10A.

<sup>3</sup> Recommended speed control rating 15A.

## Dimensions



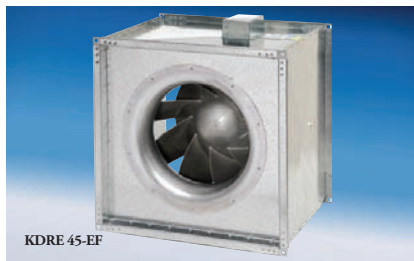
Model	Dimensions in Inches / (mm)	
	A	C
KDRE 45-EF	17 <sup>7</sup> / <sub>8</sub> " (448)	15 <sup>3</sup> / <sub>4</sub> " (400)
KDRE 50-EF	19 <sup>3</sup> / <sub>4</sub> " (502)	17 <sup>3</sup> / <sub>4</sub> " (451)
KDRE 55-EF	21 <sup>1</sup> / <sub>2</sub> " (546)	19" (483)
KDRD 65-DF	26" (660)	20" (508)

All dimensions in inches.

Note: Flanges extend 7/8" beyond the A dimension



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For more information, contact:

Systemair • Art no. 405106 May 2010

