

FKD 18 EC Mixed Flow Fan

Item Number: 44957
Variant: 460V 3~ 60Hz

Application

These fans are known for their economical use of energy and excellent ease of control. They can be varied in speed to match the airflow demand, and operate at high efficiency levels. 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.

Design

The casing is manufactured from galvanized sheet metal. The FKD EC series have external rotor EC motors with a mixed flow impeller, which reduces the external dimensions of the fans. These fans have a high air flow capacity in relation to their compact design. Brackets are supplied with the fans to make installation easier.

Speed control

The FKD EC fan motor's speed is controlled via a 0-10Vdc signal. The motor provides a +10V reference that can be used by a remotely-mounted potentiometer (such as MTP 10). The motor can also be controlled by an externally-provided 0-10Vdc signal that can come from any device or a Building Management System (BMS). The fan's motor also provides operational speed (tachometer pulse) output that can be used to verify fan operation. These control features allow the FKD EC to be integrated into and play an active role in smart HVAC systems in buildings.

Motor protection

Motor protection is integrated in the electronics of the motor.

Technical parameters



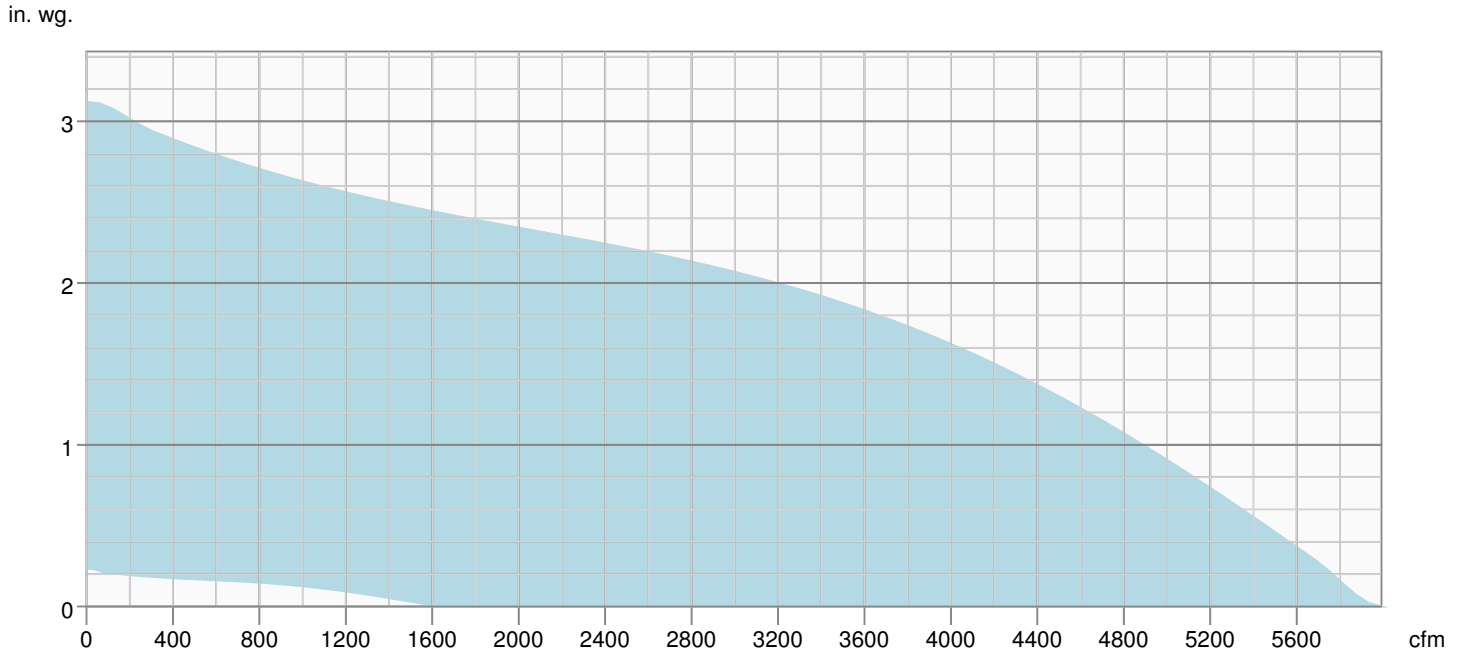
Norminal data		
Voltage (nominal)	460	V
Frequency	60	Hz
Phase(s)	3~	
Input power	1 979	W
Input current	3.2	A
Impeller speed	1 612	r.p.m.
Air flow	max 2 828	L/s
Temperature of transported air	max 40	°C
Max temperature of transported air, when speed controlled	40	°C

Protection/Classification		
Enclosure class, motor	IP54	
Insulation class	F	
Certificate	cULus, AMCA Sound & Air	

Dimensions and weights		
Duct dimension; Circular, inlet	18	in.
Duct dimension; Circular, inlet	450	mm
Duct dimension; Circular, outlet	18	in.
Duct dimension; Circular, outlet	450	mm
Weight	98	lb

Optional		
Duct connection type	Circular	
Motor type	EC	

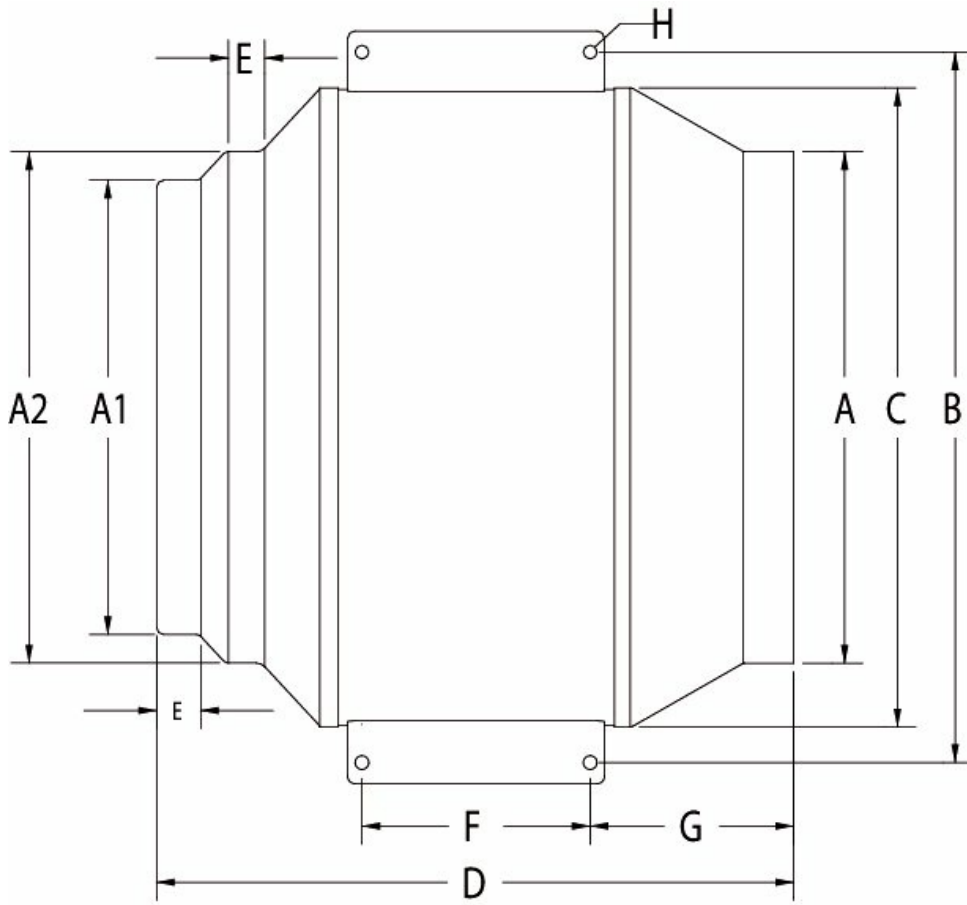
Performance curve



Hydraulic data

Required air flow	-
Required static pressure	-
Working air flow	-
Working static pressure	-
Air density	0.075 lb/ft ³
Power	-
Fan control - RPM	-
Current	-
SFP	-
Control voltage	-
Supply voltage	-

Dimensions

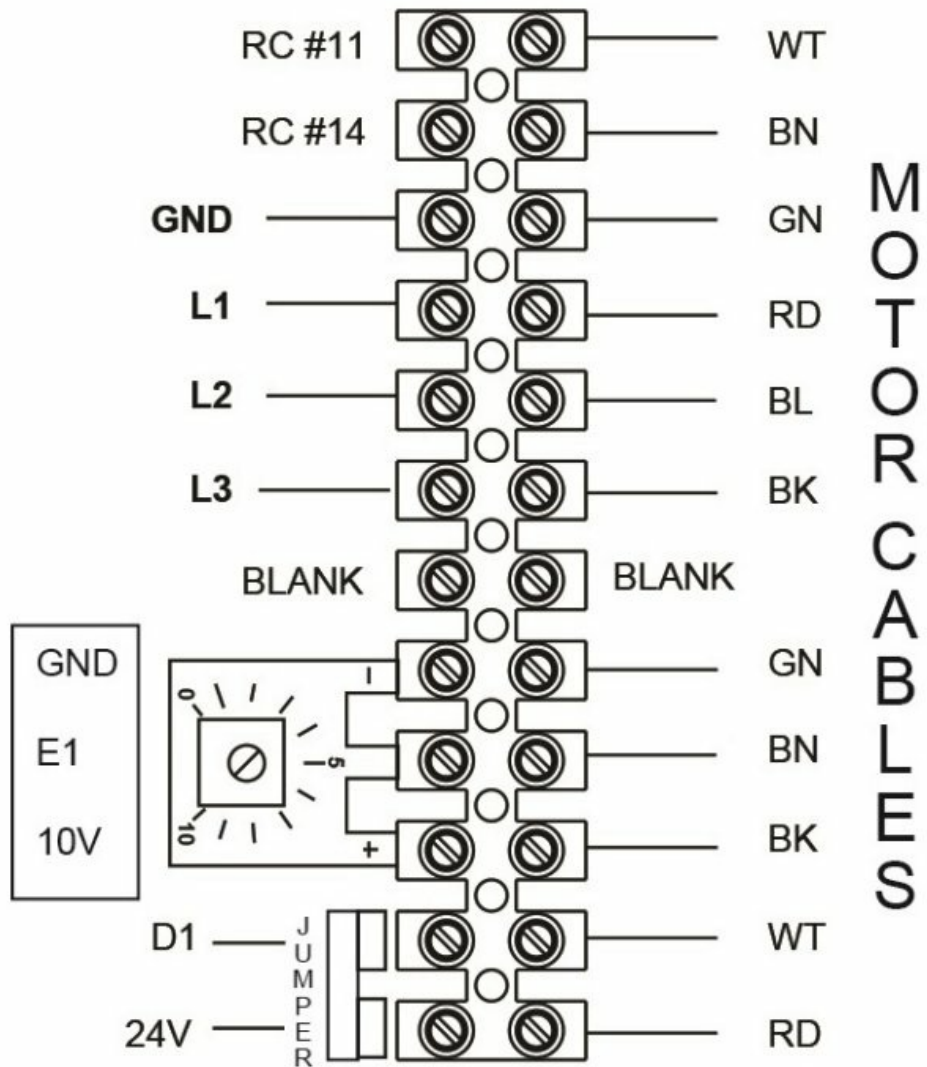


A	A1	A2	B	C	D	E	F	G	H
12	12	14	20 1/4	17 7/8	18 7/8	7/8	4	8 3/4	3/8

Dimensions are in inches.

Wiring

KD-EC:3 PHASE / 460V



Accessories

- MTP 10, 10K, Speed control (32731)

Documents

- FKD EC Submittal Sheet EN.pdf
- 483804 FKD..EC OIPM EN FR ES.PDF
- E1666 FKD EC Series EN.pdf