

FKD 12 XL Mixed Flow Fan

12" inline duct fan w/metal housing, 120V, 1~

Item #: 498327

Variant: 115V 1~ 60Hz



This mixed-flow series inline duct fan combines the high airflow of axial fans with the high static pressure characteristics of backward curved impellers. This inline fan is an excellent choice for exhaust or supply applications where high static pressures need to be overcome.

- Mixed-flow impeller enabling high static pressure
- Simplified lever-action, quick wiring terminals
- Built-in thermal overload protection with automatic reset
- Galvanized steel housing
- Operable in air stream temperatures up to 140°F
- UL, CSA, HVI, and AMCA Air & Sound certified
- Comes with fan brackets for quick & easy installation
- Limited five-year warranty

The housing is manufactured from galvanized steel for corrosion resistance. The fan uses external rotor motors with a mixed flow impeller that reduces the external dimensions of the fans. General application examples include offices & commercial bathrooms, hospitals, beauty salons, veterinary clinics, and residential applications such as kitchen range hood exhausts.



Technical parameters

Nominal data		
Voltage (nominal)	115	V
Frequency	60	Hz
Phase(s)	1~	
Input power	487	W
Input current	4.14	A
Impeller speed	1,641	rpm

Protection/Classification

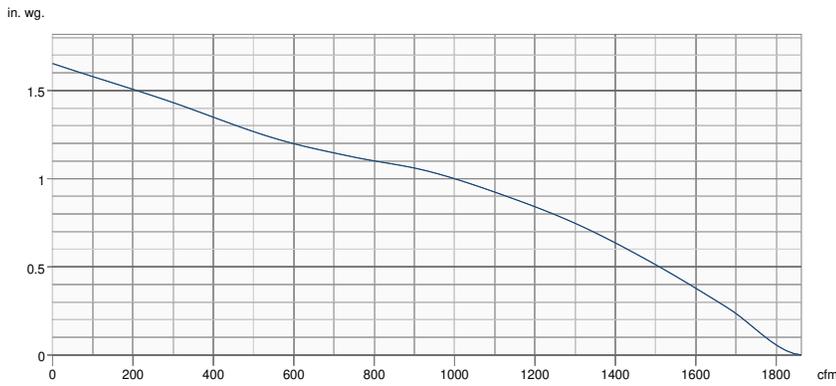
Enclosure class, motor	IP54
Insulation class	F

Optional

Duct connection type	Circular
Motor type	AC

Performance

Performance curve



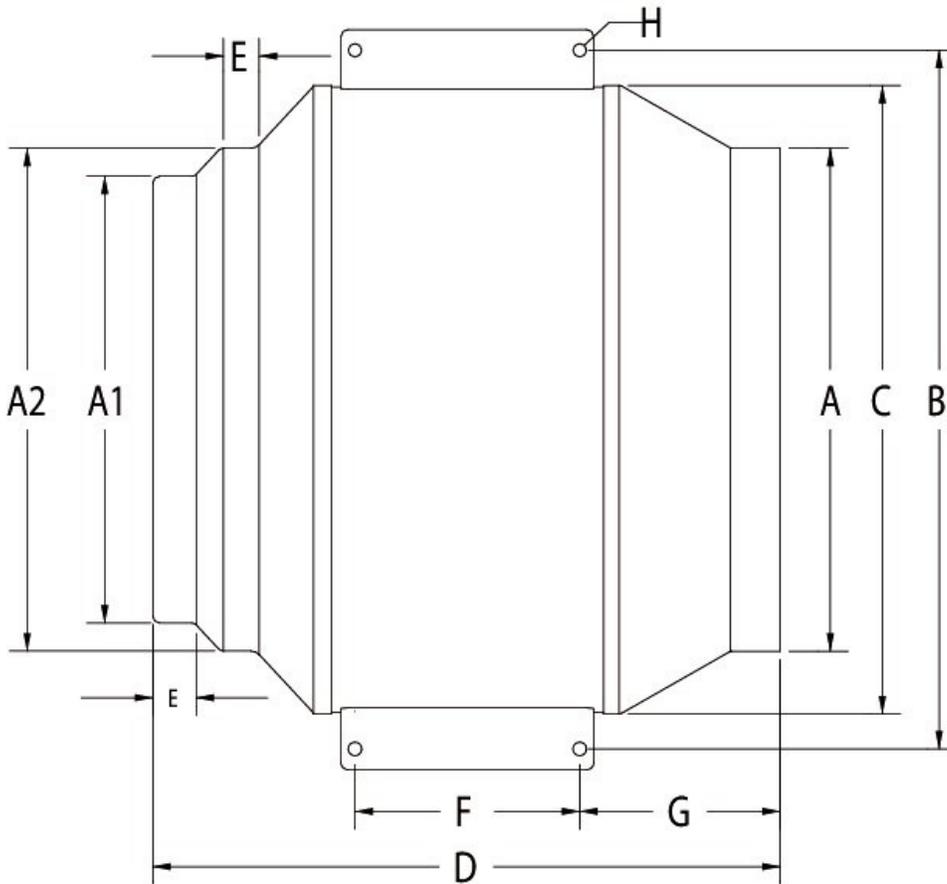
Hydraulic data	
Required air flow	-
Required static pressure	-
Working air flow	-
Working static pressure	-
Air density	0.075 lb/ft ³
Power	-
Fan control - RPM	-
Current	-
Airflow efficiency	-
Control voltage	-
Supply voltage	-

Performances

CFM Table

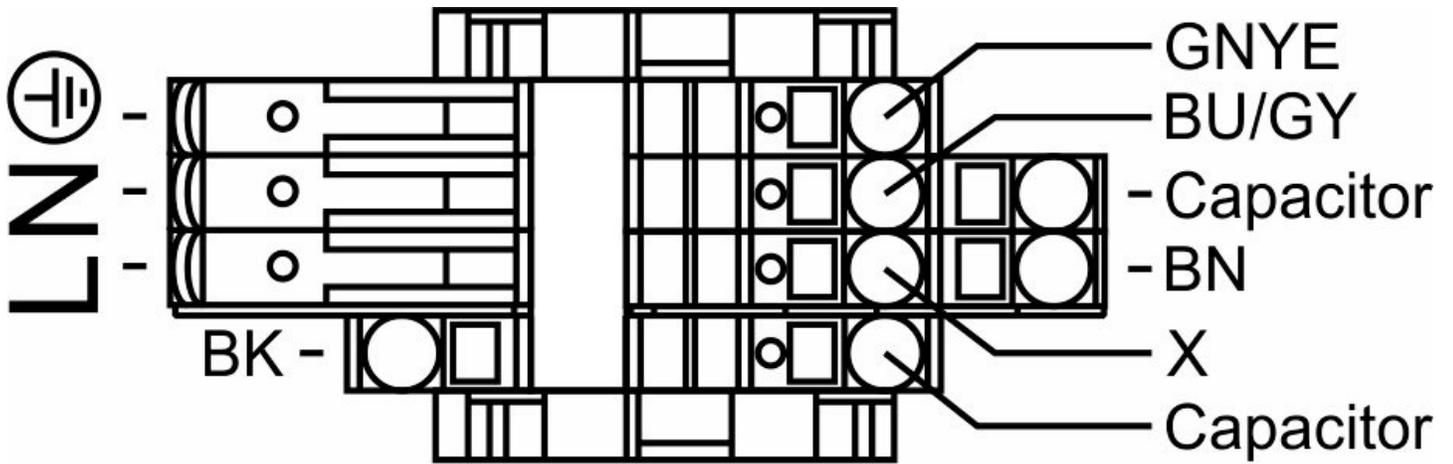
Model	0.0" Ps	0.5" Ps	0.75" Ps	1.0" Ps	1.5" Ps	2.0" Ps
FKD 8XL / KD 8XL	819	665	583	477	277	200
FKD 10 / KD 10	910	752	653	547	342	142
FKD 10XL / KD 10XL	1266	1100	1006	911	696	460
FKD 12 / KD 12	1305	1145	1054	948	712	479
FKD 12XL / KD 12XL	1863	1524	1325	1052	300	-
FKD 14 / KD 14	1979	1615	1390	1126	332	-
FKD 14XL / KD 14XL	2406	1947	1706	1439	652	34
FKD 16 / KD 16	2438	1958	1691	1401	712	56
FKD 16XL / KD 16XL	3740	3182	2857	2544	1801	1120
FKD 18 / KD 18	3951	3382	3087	2752	2120	1256
FKD 18XL / KD 18XL	5463	5034	4806	4569	4061	3400
FKD 20 / KD 20	5588	5151	4920	4673	4128	3492

Dimensions



Model	A	A1	A2	B	C	D	E	F	G	H
FKD 12XL / KD 12XL	12 (305)	12 (305)	14 (356)	20 3/8 (518)	17 7/8 (454)	18 7/8 (479)	1 3/8 (35)	4 (102)	8 1/2 (216)	3/8 (10)
FKD 14 / KD 24	14 (356)	12 (305)	14 (356)	20 3/8 (518)	17 1/4 (438)	17 1/4 (438)	1 1/4 (32)	4 (102)	6 3/4 (171)	3/8 (10)
FKD 14XL / KD 14XL	14 (356)	14 (356)	15 5/8 (397)	22 3/8 (568)	19 3/4 (502)	20 1/4 (514)	1 1/2 (38)	4 (102)	8 3/4 (222)	3/8 (10)
FKD 16 / KD 16	15 5/8 (397)	14 (356)	15 5/8 (397)	22 3/8 (568)	19 3/4 (502)	18 3/4 (476)	1 1/2 (38)	4 (102)	7 1/8 (181)	3/8 (10)
FKD 16XL / KD 16XL	15 5/8 (397)	15 5/8 (397)	17 5/8 (448)	24 1/2 (622)	22 1/8 (562)	23 3/4 (603)	1 1/4 (32)	7 7/8 (200)	8 1/2 (216)	1/2 (13)
FKD 18 / KD 18	17 5/8 (448)	15 5/8 (397)	17 5/8 (448)	24 1/2 (622)	22 1/8 (562)	21 3/4 (552)	1 1/4 (32)	7 7/8 (200)	7 (178)	1/2 (13)
FKD 18XL / KD 18XL	17 5/8 (448)	17 5/8 (448)	19 5/8 (498)	28 1/2 (724)	26 (660)	27 1/4 (692)	1 3/4 (44)	7 7/8 (200)	10 1/2 (267)	1/2 (13)
FKD 20 / KD 20	19 5/8 (498)	17 5/8 (448)	19 5/8 (498)	28 1/2 (724)	26 (660)	27 1/4 (692)	1 3/4 (44)	7 7/8 (200)	10 1/2 (267)	1/2 (13)

Wiring



BU/GY - Blue or Grey BN - Brown
GNYE - Green-Yellow BK - Black

Accessories

- FML 12 Metal Hood Supply Air (45150)
- ADC 12 Shut-off Damper w Motor (44692)
- FGR 12 Filter Cassette (44686)
- LD 12 Silencer (411287)
- RSK 12 Backdraft Damper (411117)
- FC 12 Mounting Clamps (2 pcs) (411123)
- IR 12 Iris Damper (411239)
- RC12P Roof Cap (79960)

Documents

- 498379 FKD-KD IOM EN FR ES.pdf

CSI Specification

GUIDE SPECIFICATION

Specifier Notes: This guide specification is written in Construction Specifications Institute (CSI) 3-Part Format in accordance with the CSI Construction Specifications Practice Guide, MasterFormat, SectionFormat, and PageFormat.

Specifier Notes: This Section must be carefully reviewed and edited by the Architect or Engineer to meet the requirements of the Project and local building code. Coordinate this Section with Division 01, other specification sections, and the Drawings. Delete all Specifier Notes after editing this Section.

Section numbers and titles are based on MasterFormat 2014 Update.

SECTION 23 34 16

CENTRIFUGAL HVAC FANS

Specifier Notes: This Section covers Fantech FKD/KD Series circular inline duct fans with alternating current (AC) motors. Consult Fantech for assistance in editing this Section as required for the Project.

PART 1. GENERAL

1.1 SECTION INCLUDES

A. Circular inline duct fans with alternating current (AC) motors

1.2 RELATED REQUIREMENTS

Specifier Notes: Edit the following list of related sections as required for the Project. Limit the list to sections with specific information that the reader might expect to find in this Section but is specified elsewhere.

A. Section 23 31 00 – HVAC Ducts and Casings.

B. Section 26 05 00 – Common Work Results for Electrical.

1.3 REFERENCE STANDARDS

Specifier Notes: List reference standards used elsewhere in this Section, complete with designations and titles. Delete reference standards from the following list not used in the edited Section.

A. Air Movement and Control Association International (AMCA) (www.amca.org):

1. AMCA 211 – Certified Ratings Program - Product Rating Manual for Fan Air Performance.

2. AMCA 311 – Certified Sound Ratings Program for Air Moving Devices.

B. Underwriting Laboratory (UL) (<https://productiq.ulprospector.com/en>):

1. UL 507— Electric Fans

2. CSA 22.2 No 113 — Fans and Ventilators

1.4 PREINSTALLATION MEETINGS

Specifier Notes: Edit the Preinstallation Meetings article as required for the Project. Delete article if not required.

A. Convene preinstallation meeting [1 week] [2 weeks] before start of Work of this Section.

B. Require attendance of parties directly affecting Work of this Section, including Contractor, Architect, installer, and manufacturer's representative.

C. Review the Following:

1. Materials

2. Installation

3. Adjusting

4. Protection

5. Coordination with other Work

1.5 SUBMITTALS

Specifier Notes: Edit the Submittals article as required for the Project. Delete submittals not required.

A. Comply with Division 01.

B. Product Data: Submit manufacturer's product data, including installation instructions.

- C. Shop Drawings: Submit manufacturer's shop drawings, including plans, elevations, sections, and details.
- 1. Wiring Diagrams: Indicate wiring for each item of equipment and interconnections between items of equipment.
- 2. Include manufacturer's names, model numbers, ratings, power requirements, equipment layout, device arrangement, complete wiring point-to-point diagrams, and conduit layouts.
- D. Manufacturer's Certification: Submit manufacturer's certification that materials comply with specified requirements and are suitable for intended application.
- E. Operation and Maintenance Data:
 - 1. Submit manufacturer's operation and maintenance manual; including the following:
 - a. Operation, maintenance, adjustment, and cleaning instructions.
 - b. Troubleshooting guide
 - c. Parts list
 - d. Electrical wiring diagrams if required.
 - 2. Provide detailed information required for Owner to properly operate and maintain equipment.
- F. Warranty Documentation: Submit manufacturer's standard warranty.

1.6 QUALITY ASSURANCE

- A. Manufacturer's Qualifications: Manufacturer regularly engaged in the manufacturing of circular inline duct fans to that specified for a minimum of 10 years.
- B. Installer's Qualifications:
 - 1. Installer regularly engaged in installation of circular inline duct fans of similar type to that specified for a minimum of 5 years.
 - 2. Use persons trained for installation of circular inline duct fans.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Delivery Requirements: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
- B. Storage and Handling Requirements:
 - 1. Store and handle materials in accordance with manufacturer's instructions.
 - 2. Keep materials in manufacturer's original, unopened containers and packaging until installation.
 - 3. Store materials in clean, dry area indoors.
 - 4. Keep materials from freezing.
 - 5. Protect materials during storage, handling, and installation to prevent damage.

1.8 LIMITED FACTORY WARRANTY

Warranty Period: 5 years

PART 2. PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturer: Systemair MFG Inc., 10048 Industrial Blvd., Lenexa, Kansas 66215. Phone 800-747-6217. www.fantech.net. ussupport@fantech.net.
- Specifier Notes: Specify if substitutions will be permitted.*
- B. Substitutions: [Not permitted] [Comply with Division 01].
- C. Single Source: Provide materials from single manufacturer.

2.2 CENTRIFUGAL HVAC FANS

- A. Supply, exhaust, or return air inline fans shall be of the centrifugal direct-driven type: FKD/KD Series
 - 1. Fan airflow rating in accordance with ANSI/AMCA 210
 - 2. Fan sound rating in accordance with ANSI/AMCA 300
 - 3. AMCA Air & Sound Seal
 - 4. UL Listed 507 Electric Fans
 - 5. CSA 22.2 No 113 — Fans and Ventilators
- B. Housing
 - 1. Fan housing shall be constructed of heavy gauge galvanized sheet metal
 - 2. Fan shall be supplied with externally mounted electrical terminal box with pre-wired terminal strip connections
- C. Motor
 - 1. Single phase motors (FKD 12XL–FKD 18 /KD 12XL–KD 18) shall be 120 or 230V permanent split capacitor type
 - 2. Three phase motors (FKD 18XL/KD 18XL, FKD 20/KD 20) shall be dual wound for 230V or 440/460V
 - 3. All motors shall be a permanently sealed self lubricating ball bearing type
 - 4. Single phase motors shall be equipped with automatic reset thermal overload protection
 - 5. Three phase motors shall be equipped with internal automatic reset thermal overload switch for interlock with contactor
 - 6. Motors shall be acceptable for continuous duty
 - 7. Sufficient service factor shall be provided to ensure long maintenance free operation over maximum load conditions
- D. Wheel
 - 1. Fan wheel shall be of the mixed flow centrifugal type with a well designed inlet venturi for maximum performance
 - 2. Motorized impeller shall be both statically and dynamically balanced as one integral unit to provide for vibration free performance
 - 3. The material for the motor impellers of the FKD 12XL–FKD 18 and the KD 12XL–KD 18 shall be constructed of composite material
 - 4. The material for the motor impellers of the FKD 18XL and the FKD 20 shall be constructed of aluminum

Specifier Notes: Specify circular inline duct fan models as required for the Project; delete models not required.

E. Model: "FKD 12XL/KD 12XL"

1. Inlet Diameter: 12 inches (305mm)
2. Outlet Diameter: 12 inches (305mm)
3. Casing Diameter: 17-7/8 inches (454 mm)
4. Inlet and Outlet Connection Collars: 1-3/8 inches (35mm)
5. Casing Material: Galvanized Sheet Metal
6. Motor: Alternating current external-rotor motor
7. Speed Control: By altering supply voltage via an external stepless controller
8. Motor Protection: Thermal overload protection
9. Blades: Backward curved
10. Voltage: 120 V
11. Frequency: 60 Hz
12. Nominal Voltage Range: 100 to 130 V
13. Phase: 1
14. Maximum Airflow: 1,863 cfm
15. Impeller Speed: 1,675 rpm
16. Power Rating, Motor: 487 W
17. Input Current: 4.14 A
18. Operational Temperature: 32 to 104 degrees F (0 to 40 degrees C)

19. Weight: 47 lbs (21.32kg)

20. Motor Insulation Class: F

21. Motor Enclosure Class: IP54

F. Model: "FKD 14/KD 14"

1. Inlet Diameter: 12 inches (305mm)
2. Outlet Diameter: 14 inches (356mm)
3. Casing Diameter: 17-7/8 inches (454mm)
4. Inlet and Outlet Connection Collars: 1-1/4 inch (32mm)
5. Casing Material: Galvanized Sheet Metal
6. Motor: Alternating current external-rotor motor
7. Speed Control: By altering supply voltage via an external stepless controller
8. Motor Protection: Thermal overload protection
9. Blades: Backward curved
10. Voltage: 120 V
11. Frequency: 60 Hz
12. Nominal Voltage Range: 100 to 130 V
13. Phase: 1
14. Maximum Airflow: 1,972 cfm
15. Impeller Speed: 1,675 rpm
16. Power Rating, Motor: 491 W
17. Input Current: 4.14 A
18. Operational Temperature: 32 to 104 degrees F (0 to 40 degrees C)

19. Weight: 47 lbs (21.32kg)

20. Motor Insulation Class: F

21. Motor Enclosure Class: IP54

G. Model: "FKD 14/KD 14 230 V"

1. Inlet Diameter: 12 inches (305mm)
2. Outlet Diameter: 14 inches (356mm)
3. Casing Diameter: 17-7/8 inches (454mm)
4. Inlet and Outlet Connection Collars: 1-1/4 inch (32mm)
5. Casing Material: Galvanized Sheet Metal
6. Motor: Alternating current external-rotor motor
7. Speed Control: By altering supply voltage via an external stepless controller
8. Motor Protection: Thermal overload protection
9. Blades: Backward curved
10. Voltage: 230 V
11. Frequency: 60 Hz

- 12. Nominal Voltage Range: 208 to 240 V
- 13. Phase: 1
- 14. Maximum Airflow: 1,972 cfm
- 15. Impeller Speed: 1,675 rpm
- 16. Power Rating, Motor: 491 W
- 17. Input Current: 2.03 A
- 18. Operational Temperature: 32 to 104 degrees F (0 to 40 degrees C)
- 19. Weight: 42 lbs (19.1kg)
- 20. Motor Insulation Class: F
- 21. Motor Enclosure Class: IP54
- H. Model: "FKD 14XL/KD 14XL"
- 1. Inlet Diameter: 14 inches (356mm)
- 2. Outlet Diameter: 14 inches (356mm)
- 3. Casing Diameter: 19-3/4 inches (502mm)
- 4. Inlet and Outlet Connection Collars: 1-1/2 inches (38mm)
- 5. Casing Material: Galvanized Sheet Metal
- 6. Motor: Alternating current external-rotor motor
- 7. Speed Control: By altering supply voltage via an external stepless controller
- 8. Motor Protection: Thermal overload protection
- 9. Blades: Backward curved
- 10. Voltage: 120 V
- 11. Frequency: 60 Hz
- 12. Nominal Voltage Range: 100 to 130 V
- 13. Phase: 1
- 14. Maximum Airflow: 2,387 cfm
- 15. Impeller Speed: 1,525 rpm
- 16. Power Rating, Motors: 727 W
- 17. Input Current: 6.07 A
- 18. Operational Temperature: 32 to 104 degrees F (0 to 40 degrees C)
- 19. Weight: 51 lbs (23.13kg)
- 20. Motor Insulation Class: F
- 21. Motor Enclosure Class: IP54
- I. Model: "FKD 14XL/KD 14XL 230 V"
- 1. Inlet Diameter: 14 inches (356mm)
- 2. Outlet Diameter: 14 inches (356mm)
- 3. Casing Diameter: 19-3/4 inches (502mm)
- 4. Inlet and Outlet Connection Collars: 1-1/2 inches (38mm)
- 5. Casing Material: Galvanized Sheet Metal
- 6. Motor: Alternating current external-rotor motor
- 7. Speed Control: By altering supply voltage via an external stepless controller
- 8. Motor Protection: Thermal overload protection
- 9. Blades: Backward curved
- 10. Voltage: 230 V
- 11. Frequency: 60 Hz
- 12. Nominal Voltage Range: 208 to 240V
- 13. Phase: 1
- 14. Maximum Airflow: 2,387 cfm
- 15. Impeller Speed: 1,525 rpm
- 16. Power Rating, Motors: 727 W
- 17. Input Current: 2.92 A
- 18. Operational Temperature: 32 to 104 degrees F (0 to 40 degrees C)
- 19. Weight: 50 lbs (22.68kg)
- 20. Motor Insulation Class: F
- 21. Motor Enclosure Class: IP54
- J. Model: "FKD 16/KD 16"
- 1. Inlet Diameter: 14 inches (356mm)
- 2. Outlet Diameter: 15-5/8 inches (397mm)

3. Casing Diameter: 19-3/4 (502mm)
 4. Inlet and Outlet Connection Collars: 1-1/2 inch (38mm)
 5. Casing Material: Galvanized Sheet Metal
 6. Motor: Alternating current external-rotor motor
 7. Speed Control: By altering supply voltage via an external stepless controller
 8. Motor Protection: Thermal overload protection
 9. Blades: Backward curved
 10. Voltage: 120 V
 11. Frequency: 60 Hz
 12. Nominal Voltage Range: 100 to 130 V
 13. Phase: 1
 14. Maximum Airflow: 2,438 cfm
 15. Impeller Speed: 1,525 rpm
 16. Power Rating, Motor: 727 W
 17. Input Current: 6.07 A
 18. Operational Temperature: 32 to 104 degrees F (0 to 40 degrees C)
 19. Weight: 50 lbs (22.68kg)
 20. Motor Insulation Class: F
 21. Motor Enclosure Class: IP54
- K. Model: "FKD 16/KD 16 230 V"

1. Inlet Diameter: 14 inches (356mm)
 2. Outlet Diameter: 15-5/8 inches (397mm)
 3. Casing Diameter: 19-3/4 (502mm)
 4. Inlet and Outlet Connection Collars: 1-1/2 inch (38mm)
 5. Casing Material: Galvanized Sheet Metal
 6. Motor: Alternating current external-rotor motor
 7. Speed Control: By altering supply voltage via an external stepless controller
 8. Motor Protection: Thermal overload protection
 9. Blades: Backward curved
 10. Voltage: 230 V
 11. Frequency: 60 Hz
 12. Nominal Voltage Range: 208 to 240 V
 13. Phase: 1
 14. Maximum Airflow: 2,438 cfm
 15. Impeller Speed: 1,525 rpm
 16. Power Rating, Motor: 727 W
 17. Input Current: 6.07 A
 18. Operational Temperature: 32 to 104 degrees F (0 to 40 degrees C)
 19. Weight: 50 lbs (22.68kg)
 20. Motor Insulation Class: F
 21. Motor Enclosure Class: IP54
- L. Model: "FKD 16XL/KD 16XL"

1. Inlet Diameter: 15-5/8 inches (397mm)
2. Outlet Diameter: 15-5/8 inches (397mm)
3. Casing Diameter: 22-1/8 inches (562mm)
4. Inlet and Outlet Connection Collars: 1-1/4 inches (32mm)
5. Casing Material: Galvanized Sheet Metal
6. Motor: Alternating current external-rotor motor
7. Speed Control: By altering supply voltage via an external stepless controller
8. Motor Protection: Thermal overload protection
9. Blades: Backward curved
10. Voltage: 120 V
11. Frequency: 60 Hz
12. Nominal Voltage Range: 100 to 130 V
13. Phase: 1
14. Maximum Airflow: 3,740 cfm
15. Impeller Speed: 1,650 rpm

- 16. Power Rating, Motor: 1,609 W
 - 17. Input Current: 13.59 A
 - 18. Operational Temperature: 32 to 104 degrees F (0 to 40 degrees C)
 - 19. Weight: 134 lbs (60.8kg)
 - 20. Motor Insulation Class: F
 - 21. Motor Enclosure Class: IP54
- M. Model: "FKD 18/KD 18"
- 1. Inlet Diameter: 15-5/8 inches (397mm)
 - 2. Outlet Diameter: 17-5/8 inches (448mm)
 - 3. Casing Diameter: 22-1/8 inches (562mm)
 - 4. Inlet and Outlet Connection Collars: 1-1/4 inches (32mm)
 - 5. Casing Material: Galvanized Sheet Metal
 - 6. Motor: Alternating current external-rotor motor
 - 7. Speed Control: By altering supply voltage via an external stepless controller
 - 8. Motor Protection: Thermal overload protection
 - 9. Blades: Backward curved
 - 10. Voltage: 120 V
 - 11. Frequency: 60 Hz
 - 12. Nominal Voltage Range: 100 to 130 V
 - 13. Phase: 1
 - 14. Maximum Airflow: 3,951 cfm
 - 15. Impeller Speed: 1,650 rpm
 - 16. Power Rating, Motor: 1,637 W
 - 17. Input Current: 13.59 A
 - 18. Operational Temperature: 32 to 104 degrees F (0 to 40 degrees C)
 - 19. Weight: 132 lbs (59.9kg)
 - 20. Motor Insulation Class: F
 - 21. Motor Enclosure Class: IP54
- N. Model: "FKD 18XL/KD 18XL 230 V"
- 1. Inlet Diameter: 17-5/8 inches (448mm)
 - 2. Outlet Diameter: 17-5/8 inches (448mm)
 - 3. Casing Diameter: 26 inches (660mm)
 - 4. Inlet and Outlet Connection Collars: 1-3/4 inches (44mm)
 - 5. Casing Material: Galvanized Sheet Metal
 - 6. Motor: Alternating current external-rotor motor
 - 7. Speed Control: By altering supply voltage via an external stepless controller
 - 8. Motor Protection: Thermal overload switch
 - 9. Blades: Backward curved
 - 10. Voltage: 230 V
 - 11. Frequency: 60 Hz
 - 12. Nominal Voltage Range: 208 to 240 V
 - 13. Phase: 3
 - 14. Maximum Airflow: 5,463 cfm
 - 15. Impeller Speed: 1,700 rpm
 - 16. Power Rating, Motor: 2,298 W
 - 17. Input Current: 3.34 A
 - 18. Operational Temperature: 32 to 104 degrees F (0 to 40 degrees C)
 - 19. Weight: 149 lbs (67.6kg)
 - 20. Motor Insulation Class: F
 - 21. Motor Enclosure Class: IP54
- O. Model: "FKD 18XL/KD 18XL 460 V"
- 1. Inlet Diameter: 17-5/8 inches (448mm)
 - 2. Outlet Diameter: 17-5/8 inches (448mm)
 - 3. Casing Diameter: 26 inches (660mm)
 - 4. Inlet and Outlet Connection Collars: 1-3/4 inches (44mm)
 - 5. Casing Material: Galvanized Sheet Metal
 - 6. Motor: Alternating current external-rotor motor

7. Speed Control: By altering supply voltage via an external stepless controller
 8. Motor Protection: Thermal overload switch
 9. Blades: Backward curved
 10. Voltage: 460 V
 11. Frequency: 60 Hz
 12. Nominal Voltage Range: 440 to 480 V
 13. Phase: 3
 14. Maximum Airflow: 5,463 cfm
 15. Impeller Speed: 1,700 rpm
 16. Power Rating, Motor: 2,298 W
 17. Input Current: 6.68 A
 18. Operational Temperature: 32 to 104 degrees F (0 to 40 degrees C)
 19. Weight: 149 lbs (67.6kg)
 20. Motor Insulation Class: F
 21. Motor Enclosure Class: IP54
- P. Model: "FKD 20/KD 20 230 V"
1. Inlet Diameter: 17-5/8 (448mm)
 2. Outlet Diameter: 19-5/8 inches (498mm)
 3. Casing Diameter: 26 inches (660mm)
 4. Inlet and Outlet Connection Collars: 1-3/4 inches (44mm)
 5. Casing Material: Galvanized Sheet Metal
 6. Motor: Alternating current external-rotor motor
 7. Speed Control: By altering supply voltage via an external stepless controller
 8. Motor Protection: Thermal overload switch
 9. Blades: Backward curved
 10. Voltage: 230 V
 11. Frequency: 60 Hz
 12. Nominal Voltage Range: 208 to 240 V
 13. Phase: 3
 14. Maximum Airflow: 5,588 cfm
 15. Impeller Speed: 1,700 rpm
 16. Power Rating, Motors: 2,326 W
 17. Input Current: 3.34 A
 18. Operational Temperature: 32 to 104 degrees F (0 to 40 degrees C)
 19. Weight: 153 lbs (69.4kg)
 20. Motor Insulation Class: F
 21. Motor Enclosure Class: IP54
- Q. Model: "FKD 20/KD 20 460 V"
1. Inlet Diameter: 17-5/8 (448mm)
 2. Outlet Diameter: 19-5/8 inches (498mm)
 3. Casing Diameter: 26 inches (660mm)
 4. Inlet and Outlet Connection Collars: 1-3/4 inches (44mm)
 5. Casing Material: Galvanized Sheet Metal
 6. Motor: Alternating current external-rotor motor
 7. Speed Control: By altering supply voltage via an external stepless controller
 8. Motor Protection: Thermal overload switch
 9. Blades: Backward curved
 10. Voltage: 460 V
 11. Frequency: 60 Hz
 12. Nominal Voltage Range: 440 to 480 V
 13. Phase: 3
 14. Maximum Airflow: 5,588 cfm
 15. Impeller Speed: 1,700 rpm
 16. Power Rating, Motors: 2,326 W
 17. Input Current: 6.68 A
 18. Operational Temperature: 32 to 104 degrees F (0 to 40 degrees C)
 19. Weight: 153 lbs (69.4kg)

- 20. Motor Insulation Class: F
- 21. Motor Enclosure Class: IP54

2.3 ACCESSORIES

A. Silencers for Circular Ducts

Specifier Notes: Delete accessories not required.

- 1. Model: ["LD 12"] ["LD 14"] ["LD 16"]
- 2. Insulation Thickness: 2 inches.

B. External Remotely Mounted Speed Controller

Specifier Notes: Delete if not required.

- 1. Model: RPE210
- 2. Remotely mounted manual-speed control for air flow adjustments and balancing.
- 3. Voltage: 230V
- 4. Amperage: 10A max
- 5. Enclosure class: IP54

C. Inlet Safety Guard

Specifier Notes: Delete if not required.

- 1. Model: ["IG 12"]
- 2. Wire ring inlet guard prevents foreign objects from entering inline duct fan Zinc chromate plated steel.

PART 3. EXECUTION

3.1 EXAMINATION

- A. Examine areas to receive circular inline duct fans.
- B. Notify Architect of conditions that would adversely affect installation or subsequent use.
- C. Do not begin installation until unacceptable conditions are corrected.

3.2 INSTALLATION

- A. Install circular inline duct fans in accordance with manufacturer's instructions at locations indicated on the Drawings.
- B. Attach duct work to inlet and outlet connection collars of circular inline duct fans in accordance with manufacturer's instructions.
- C. Electrical: Install electrical power to circular inline duct fans as specified in Section 26 05 00.

3.3 ADJUSTING

- A. Adjust circular inline duct fans for proper operation in accordance with manufacturer's instructions.

3.4 PROTECTION

- A. Protect installed circular inline duct fans from damage during construction.

END OF SECTION