

EFX Series Explosion-Proof Exhaust Fan

The EFX Explosion-Proof Exhaust Fan is designed for hazardous and general purpose industrial applications. The EFX is constructed with epoxy-coated steel panels and spark resistant aluminum fan blades for ventilation of combustible materials, vapors and hazardous fumes. The EFX is fully assembled for easy installation, has explosion-proof motors that are CSA approved and/or UL listed with fan guards conforming to OSHA specifications.



Model Coding

EFX	-	12	-	A	-	1A
Model Series				Cabinet Material		
				A - Epoxy powder coated carbon steel		
				B - Heresite® phenolic coated carbon steel		
				C - Stainless steel		
		Fan Size		Motor Enclosure		
		12 - 12"	24 - 24"	1 - Totally enclosed		
		16 - 16"	30 - 30"	2 - Explosion-proof, Groups C, D, E, F, & G		
		20 - 20"		3 - Washdown		
				4 - Washdown stainless steel		
				5 - Special motor		

Motor Electrical Specifications

	V	Phase	Hz
A	115	1	60
B	208	1	60
C	208	3	60
D	230	1	60
E	230	3	60
① ② F	460	1	60
G	460	3	60
H	575	3	60
I	220	1	50
② J	380	3	50
② K	440	3	50

- ① Only available for Class I Group D, Class II Group F & G.
- ② Consult factory for motor availability.

Physical Dimensions

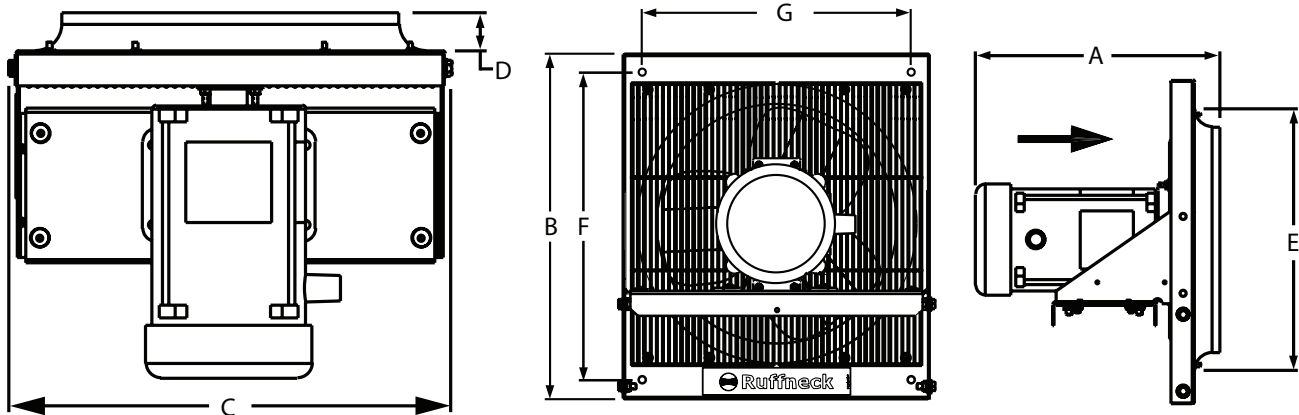


Figure 48

Table 72 – EFX Physical Dimensions

Dim.		EFX-12	EFX-16	EFX-20	EFX-24	EFX-30
A	mm	392.1	377.8	409.6	393.7	396.9
	in	15.4	14.9	16.1	15.5	15.6
B	mm	461.9	588	687.9	787.9	942.3
	in	18.2	23.2	27.1	31.0	37.1
C	mm	410.0	512.5	614.5	714.5	862.5
	in	16.1	20.2	24.2	28.1	34.0
D	mm	79.4	57.2	91.7	76.2	88.9
	in	3.1	2.2	3.6	3.0	3.5
E*	mm	373.3	475.6	577.3	677.3	835.3
	in	14.7	18.7	22.7	24.7	32.9
F	mm	411.1	537.2	637.1	737.1	891.5
	in	16.2	21.12	25.1	29.0	35.1
G	mm	359.2	461.7	563.7	663.7	811.7
	in	14.1	18.2	22.2	26.1	32.0

*This dimension is the minimum square opening size.

Air Flow Rating

Table 73 – Air Flow Rating

Model		Air Delivery at Static Pressure (Inches-Water Gage)									
		0.00	0.05	0.10	0.15	0.20	0.25	0.288	0.35	0.40	0.50
EFX12	CFM	1199	1155	1110	1057	990	849	779	710	677	618
	m³/hr	2037	1962	1886	1796	1682	1442	1324	1206	1150	1050
EFX16	CFM	2173	2103	2031	1949	1825	1690	1567	1469	1384	1263
	m³/hr	3692	3573	3451	3311	3101	2871	2662	2496	2351	2146
EFX20	CFM	3303	3238	3172	3115	3032	2944	2830	2696	2560	2280
	m³/hr	5612	5501	5389	5292	5151	5002	4808	4581	4349	3874
EFX24	CFM	3947	3858	3775	3691	3518	3475	3357	3232	3102	2821
	m³/hr	6706	6555	6413	6271	5977	5904	5704	5491	5270	4793
EFX30	CFM	6600	6416	6213	6037	5822	5551	5311	4993	4654	4070
	m³/hr	11213	10901	10556	10257	9892	9431	9023	8483	7907	6915

Table 74 – Performance Data for 60 Hz EFX

Class 1 Div. 1 & 2, Groups C, D, Class II, Div. 1 & 2, Groups E, F, G

Model	Fan Size	Voltage	Phase	Approx. Shipping Weight	
				lbs	kg
EFX-12A-2A	12	115	1	56	26
EFX-12A-2B		208	1	56	26
EFX-12A-2C		208	3	56	26
EFX-12A-2D		240	1	56	26
EFX-12A-2E		230	3	56	26
EFX-12A-2G		460	3	56	26
EFX-12A-2H		575	3	56	26
EFX-16A-2A	16	115	1	61	29
EFX-16A-2B		208	1	61	29
EFX-16A-2C		208	3	61	29
EFX-16A-2D		230	1	61	29
EFX-16A-2E		230	3	61	29
EFX-16A-2G		460	3	61	29
EFX-16A-2H		575	3	61	29
EFX-20A-2A	20	115	1	67	31
EFX-20A-2B		208	1	67	31
EFX-20A-2C		208	3	67	31
EFX-20A-2D		230	1	67	31
EFX-20A-2E		230	3	67	31
EFX-20A-2G		460	3	67	31
EFX-20A-2H		575	3	67	31
EFX-24A-2A	24	115	1	96	44
EFX-24A-2B		208	1	96	44
EFX-24A-2C		208	3	96	44
EFX-24A-2D		230	1	96	44
EFX-24A-2E		230	3	96	44
EFX-24A-2G		460	3	96	44
EFX-24A-2H		575	3	96	44
EFX-30A-2A	30	115	1	114	52
EFX-30A-2B		208	1	114	52
EFX-30A-2C		208	3	114	52
EFX-30A-2D		230	1	114	52
EFX-30A-2E		230	3	114	52
EFX-30A-2G		460	3	114	52
EFX-30A-2H		575	3	114	52

Table 75 – Performance Data for 50 Hz EFX

Class I, Div. 1 & 2, Groups C,D, Class II, Div. 1 & 2, Groups E,F,G

Model	Fan Size	Voltage	Phase	Approx. Shipping Weight	
				lbs	kg
EFX-12A-2I	12	220	1	56	26
EFX-12A-2J		380	3	56	26
EFX-12A-2K		440	3	56	26
EFX-16A-2I	16	220	1	61	29
EFX-16A-2J		380	3	61	29
EFX-16A-2K		440	3	61	29
EFX-20A-2I	20	220	1	67	31
EFX-20A-2J		380	3	67	31
EFX-20A-2K		440	3	67	31
EFX-24A-2I	24	220	1	96	44
EFX-24A-2J		380	3	96	44
EFX-24A-2K		440	3	96	44
EFX-30A-2I	30	220	1	114	52
EFX-30A-2J		380	3	114	52
EFX-30A-2K		440	3	114	52

Table 76 – Specifications

		EFX-12	EFX-16	EFX-20	EFX-24	EFX-30
Fan Diameter	in	12	16	20	24	30
	mm	305	406	508	610	762
Motor*	1/2 HP, 60 Hz					
	1/2 HP, 0.373 kW					
Air Flow Rating @70°F (21°C)	CFM	850	1825	3760	4180	4759
	m ³ /hr	1444	3101	6388	7102	8086
Motor Speed	RPM	1725				1140
Net Weight	lbs	48.0	52.0	56.0	61.0	67.0
	kg	21.8	23.6	25.4	27.7	30.4
Shipping Weight	lbs	56.0	62.0	68.0	81.0	87.0
	kg	25.4	28.1	30.8	36.7	39.5
Dimensions	Width	in	16.1	20.2	24.2	28.1
		mm	410	513	615	715
	Height	in	18.2	23.1	27.1	31.0
		mm	462	588	688	788
	Depth	in	15.4	14.9	16.1	15.5
		mm	392	378	410	394

Note: 50 Hz units also available.

General Specifications

- Hazardous Location Classification**
 Class I, Div 1 & 2, Groups C, D
 Class II, Div 1 & 2, Groups E, F, G.
 Temperature Code: T3B 165°C (329°F)
 EAC, Ex d IIB T3 Gb X
- Ambient Temperature**
 -20°C (4°F) to 40°C (104°F)
- Approvals**
 Motors are CSA approved and/or UL listed.
- Fan**
 Aluminum blade. Steel spider and hub with 5/8" (15.875 mm) bore. Optional Heresite® coating for corrosive atmospheres.
- Fan Guard**
 Split design with close wire spacing, meets OSHA requirements.
- Motors**
 CSA approved and/or UL listed permanently lubricated ball bearing type with rigid base. Explosion-proof or totally enclosed construction. All standard voltages for 60 and 50 hertz are available.
- Frame Material**
 16 ga. (0.060" or 1.52 mm) epoxy-coated steel. Optional stainless steel or Heresite® coating for corrosive atmospheres.
- Mounting**
 Four 3/8" (9.5 mm) diameter holes. Must be mounted to a rigid structure.

Accessories

Stormhood

Table 77 – Dimensions and Part numbers

Model Size	in (mm)					Part No.
	Opening		C	D	E	
	A	B				
12	16 5/8 (422.3)	18 5/8 (473.1)	19 1/8 (485.8)	21 1/8 (536.6)	19 1/8 (486.1)	10210
16	20 5/8 (523.9)	23 5/8 (600.1)	23 1/6 (587.4)	26 1/8 (663.6)	24 1/4 (616.5)	10211
20	24 5/8 (625.5)	27 1/2 (698.5)	689 (27 1/8)	30 (762)	28 1/4 (717.7)	10212
24	28 5/8 (727.1)	31 1/2 (800.1)	790.6 (31 1/8)	34 (863.6)	32 3/8 (822)	10213
30	34 5/8 (876.3)	37 1/2 (952.5)	37 (939.8)	40 (1016)	38 1/2 (978.7)	10214

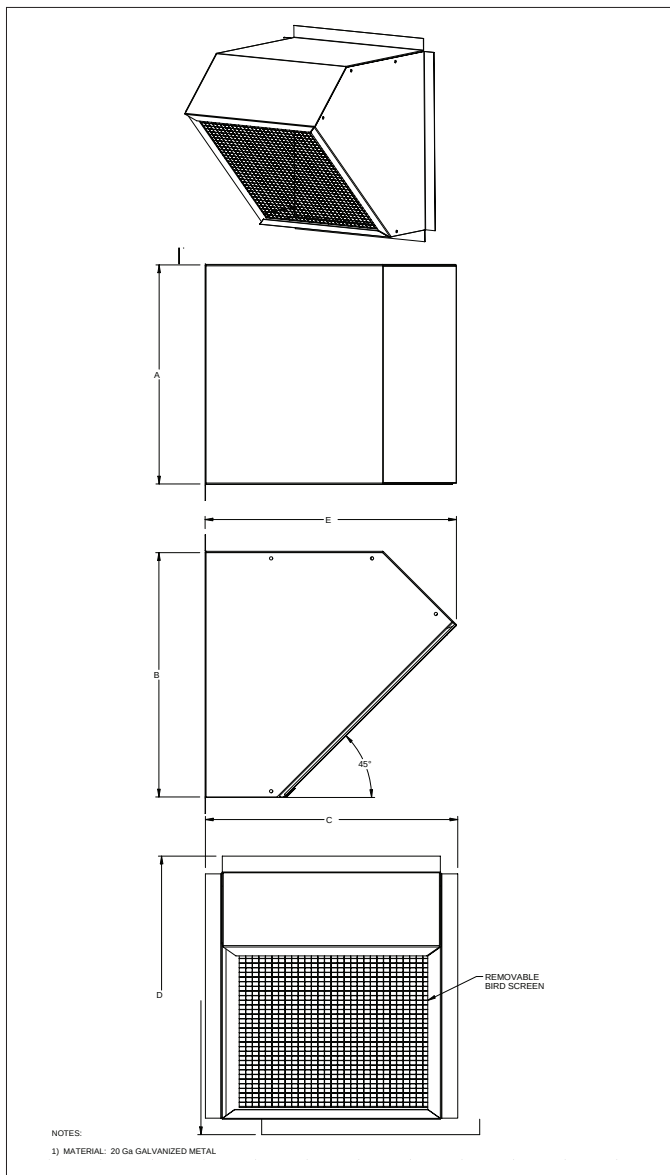


Figure 49 – Stormhood Dimensions

Backdraft Damper

Table 78 – Dimensions and Part Numbers

Model Size	in (mm)					Part No.
	Opening		C	D	E	
	A	B				
12	20 1/4 (514.4)	19 1/4 (489.0)	18 1/4 (463.6)	16 1/8 (409.6)	2 (50.8)	10205
16	26 1/4 (666.8)	23 1/4 (590.6)	22 9/16 (573.6)	20 1/8 511.2(		10206
20	30 1/8 (765.2)	27 1/4 (692.2)	27 1/8 (689.0)	24 1/4 (616.0)		10207
24	34 1/8 (866.8)	31 1/4 (793.8)	31 (787.4)	28 1/4 (717.6)		10208
30	40 1/8 (1019.2)	37 (939.8)	37 (939.8)	34 (863.6)		10209

Note:

Material: Aluminum extrusions

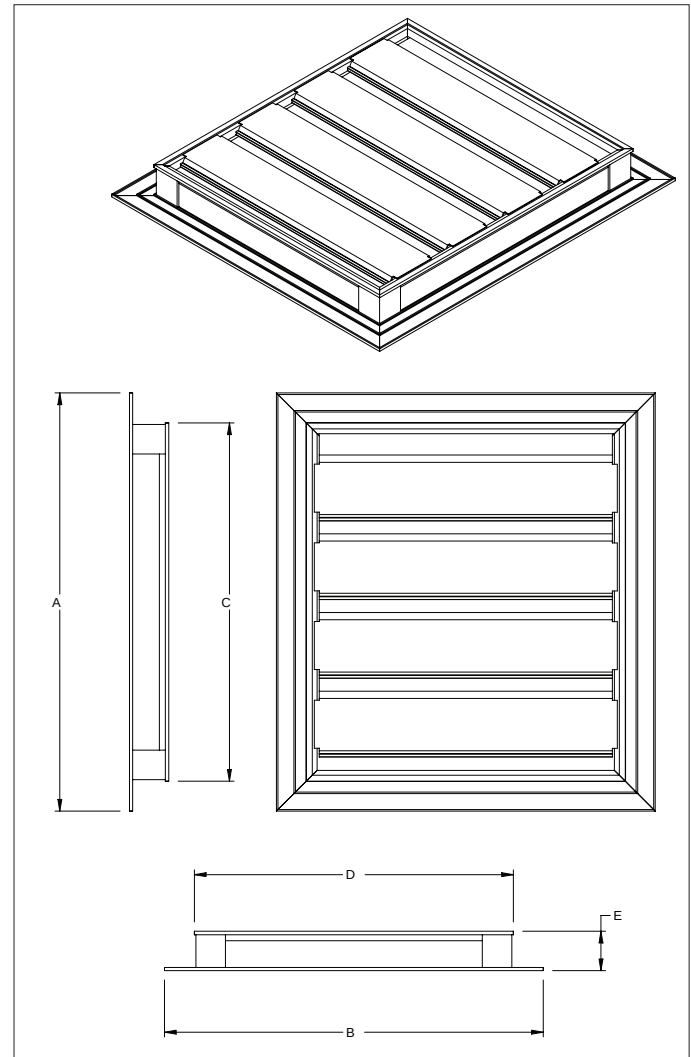


Figure 50 – Backdraft Damper Dimensions