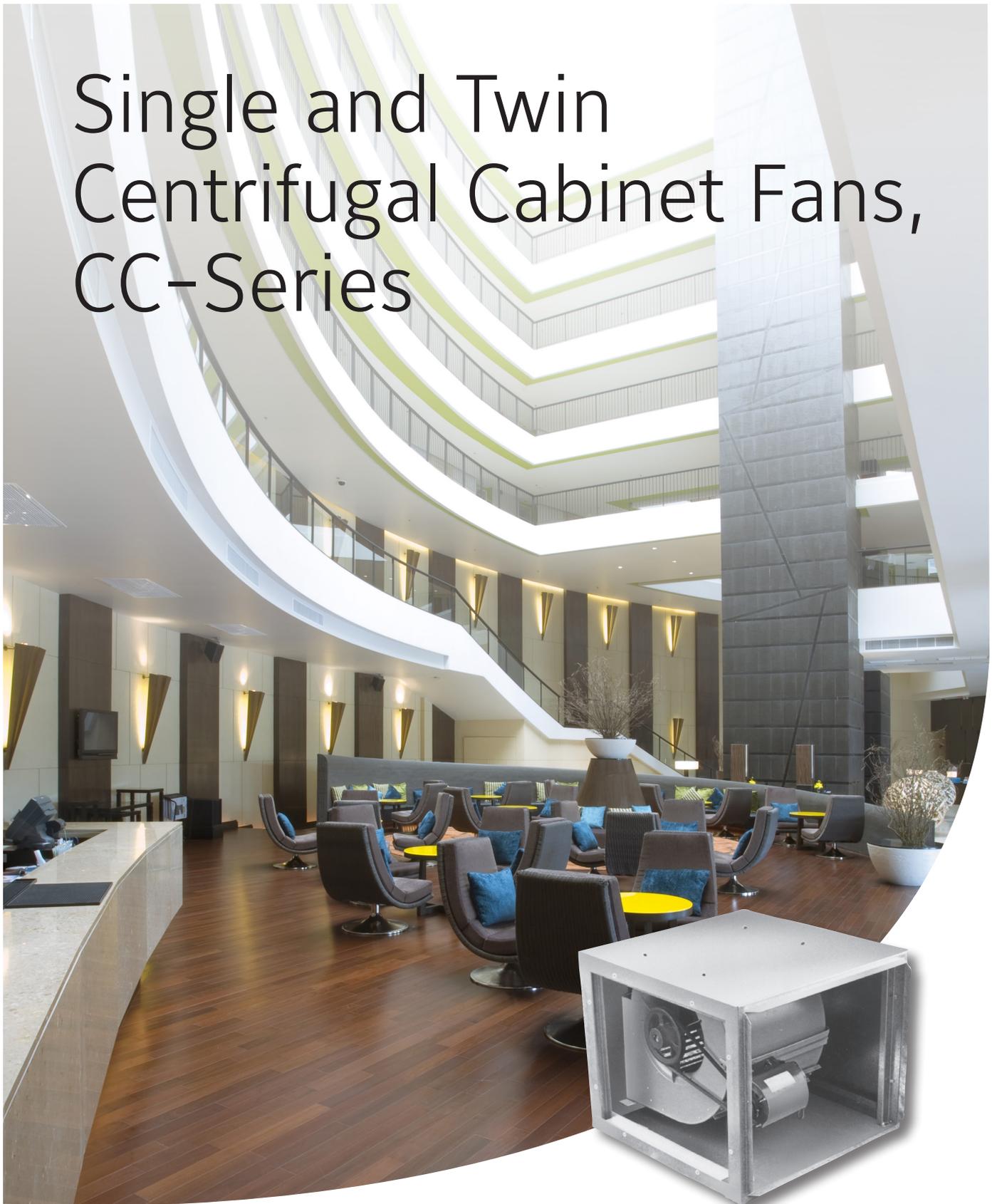


Single and Twin Centrifugal Cabinet Fans, CC-Series



 **YORK**[®]

BY JOHNSON CONTROLS

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BY JOHNSON CONTROLS

INTRODUCTION

Cabinet Fans

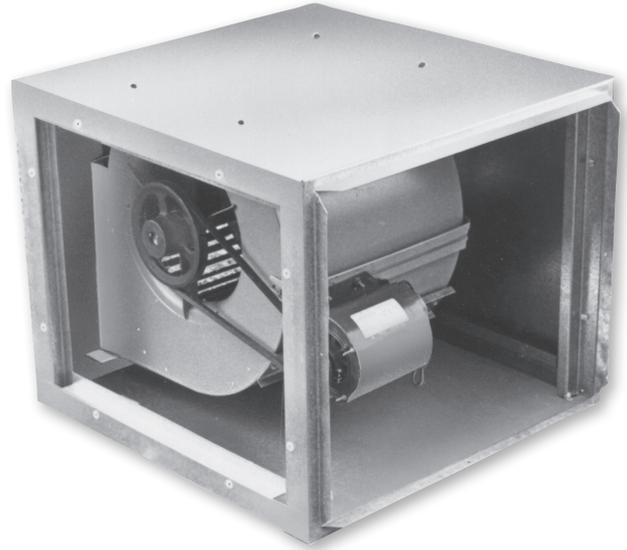
YORK® by Johnson Controls CC-Series (models CC and CCB) belt drive cabinet fans are general purpose duct blowers. These versatile, quiet operating air movers provide economical, convenient and effective ventilation in ducted systems. They are also used extensively in heating and cooling systems. Four sizes cover an air capacity range up to 6350 CFM. CC units are sized with space saving in mind and furnished with inlet and outlet connecting flanges and side access panels as standard. CCB units are dual units placed side-by-side to maximize airflow and minimize overall footprint. Optional accessories include a duct mounted filter assembly.

Model: CC

- Static pressure up to 1.5" wg.
- Belt Drive - Flow capacity up to 6,350 CFM

Model: CCB

- Static pressure up to 1.5" wg.
- Belt Drive - Flow capacity up to 12,700 CFM



CERTIFICATIONS & LISTINGS



AMCA Certification

YORK® by Johnson Controls certifies that the CC-Series models shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Standard 211 and comply with the requirements of the AMCA Certified Ratings Program.



UL and cUL Certification

CC-Series cabinet fans carry the UL label (ZACT/ZACT7), file #E28413.

FEATURES & BENEFITS

Internal Motor and Drive Assembly

The motor and drive assembly are located inside of the unit for safety. This design also cools the motor so the unit will run more efficiently.

Ball Bearing Motor

CC-Series cabinet fans utilize ball bearing motors for durability and long life.

Easy Access Side Panels

CC-Series cabinet fans come with dual side panels. These panels are easily removable which allows for installation flexibility.

Blower Shaft Ball Bearings

The blower shaft rides on ball bearings for quiet operation.

Application Versatility

CC-Series cabinet fans can be used for supply or exhaust.

Model CCB Twin Unit

The twin assembly doubles the capacity of a single unit for the same static pressure with identical RPM. Two similar motors are used which enables the flexibility of independent operation when desired.

OPTIONS & ACCESSORIES

Acoustically Insulated Housing

Optional insulation to line housing for acoustic sensitive applications.

Vibration Isolation

CC-Series cabinet fans can be supplied with vibration hangers. Vibration hangers allow the fan to be isolated from the building structure which prevents any building resonance from being transmitted to the fan housing.

Guards

CC-Series cabinet fans can be supplied with inlet and outlet guards for safety.

Internal Wiring

Standard wiring is NEMA 1 rated. NEMA 3R wiring is available as an optional upgrade.

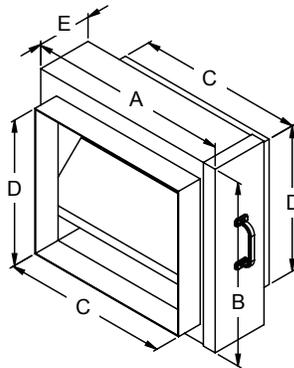
Safety Disconnect Switch

Safety disconnect switches are available to allow positive electrical shut-off and safety. Switches are factory mounted when factory wiring is requested. Wiring is only run from the motor to the junction box. (Factory wiring of explosion proof applications is not available.) A wide range of NEMA rated enclosures with disconnect switches are available for indoor, outdoor, and explosion proof installations. Disconnects are to be field wired by a licensed electrician.



Filters

ZF-Series filters are designed for compatibility with model CC cabinet fans. ZF filters can be close-coupled to CC unit inlets or installed remote in the system ductwork. The compact design and ease of maintenance also make ZF filters an ideal choice as a standard duct filter. The filter media can be easily cleaned and is washable with plain soap and water. The pull-out drawer action provides quick and easy access. One filter is required for model CC and two filters for model CCB.

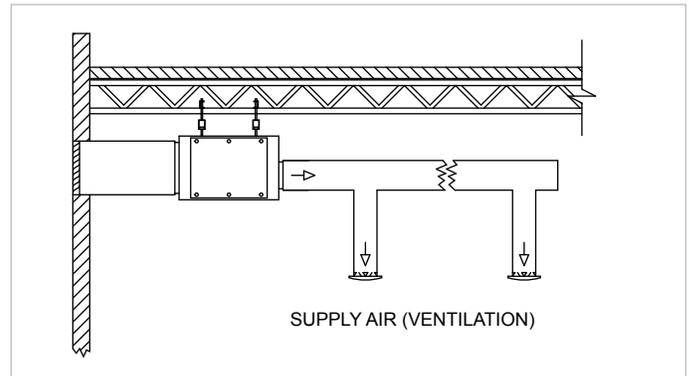
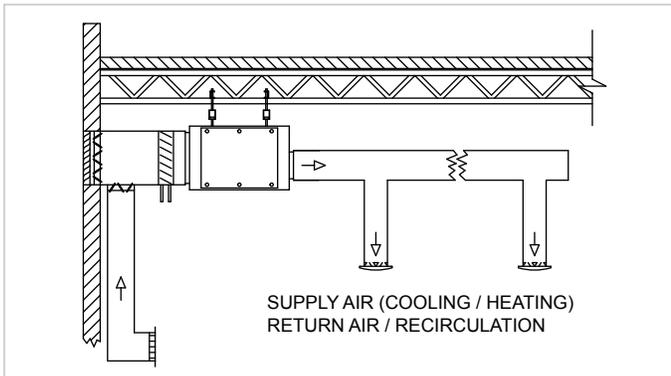
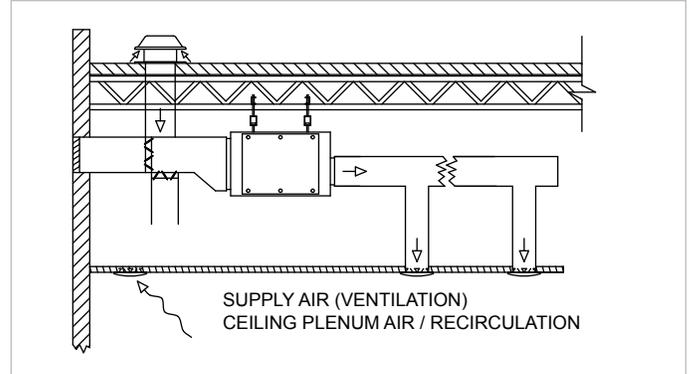
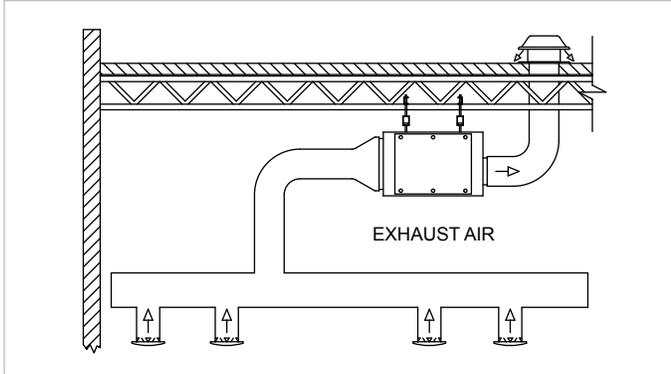


Size	A	B	C	D	E
ZF1	22 1/4	20	20 1/8	17 7/8	5 3/4
ZF2	27	23	24 7/8	20 7/8	5 3/4
ZF3	33 1/2	28	30 1/4	24 3/4	5 3/4
ZF4	42	34	38 5/8	30 5/8	5 3/4

All dimensions in inches.

TYPICAL APPLICATIONS

CC-Series (models CC and CCB) cabinet fan units are versatile in application. They may be used in ventilation, recirculation, and air conditioning systems as typified by the illustrations below. Dampers, inlet/outlet air diffusers/grilles, cooking appliances, air conditioning coils and ducting shown are typically furnished by others but in part may be available from YORK® by Johnson Controls.



BELT DRIVE PERFORMANCE DATA

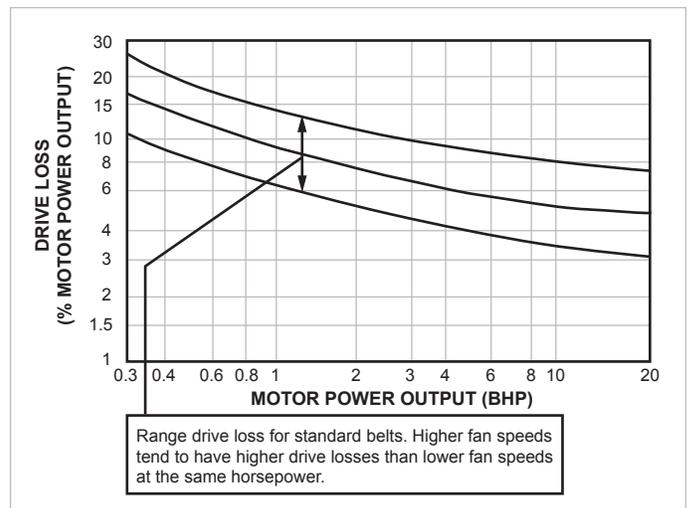
Belt Drive Losses

The AMCA Review Committee has developed the chart shown below for the purpose of estimating belt drive losses. To calculate total BHP (including drive losses): Find the BHP of your operating point on the x-axis on the graph below. Follow the vertical line to the curves indicating the range of drive losses. Look at the y-axis on the left and find the drive loss percentage. Calculate the total BHP by adding the drive loss to the operating point BHP. For BHP's below 0.3, use 30%.

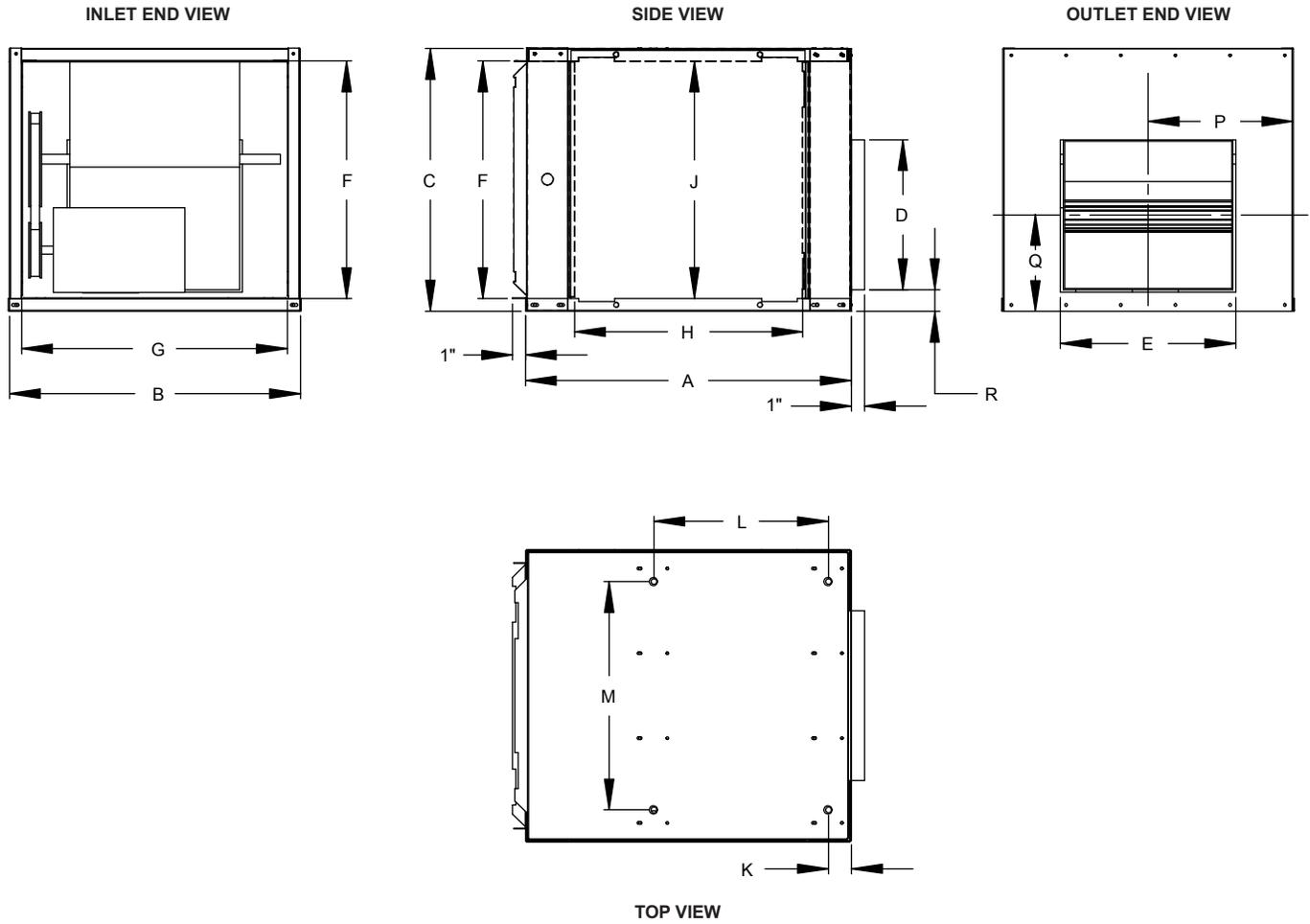
For totally enclosed, explosion proof, multi-speed and all 1.0 Service Factor motors, fan BHP plus drive losses should not exceed motor rated HP.

Graph reprinted from AMCA publication 203, with the express written permission from the Air Movement and Control Association, Inc., 30 West University Drive, Arlington Heights, IL 60004-1983.

Drive Loss Reference Chart



CC | BELT DRIVE, SINGLE UNIT

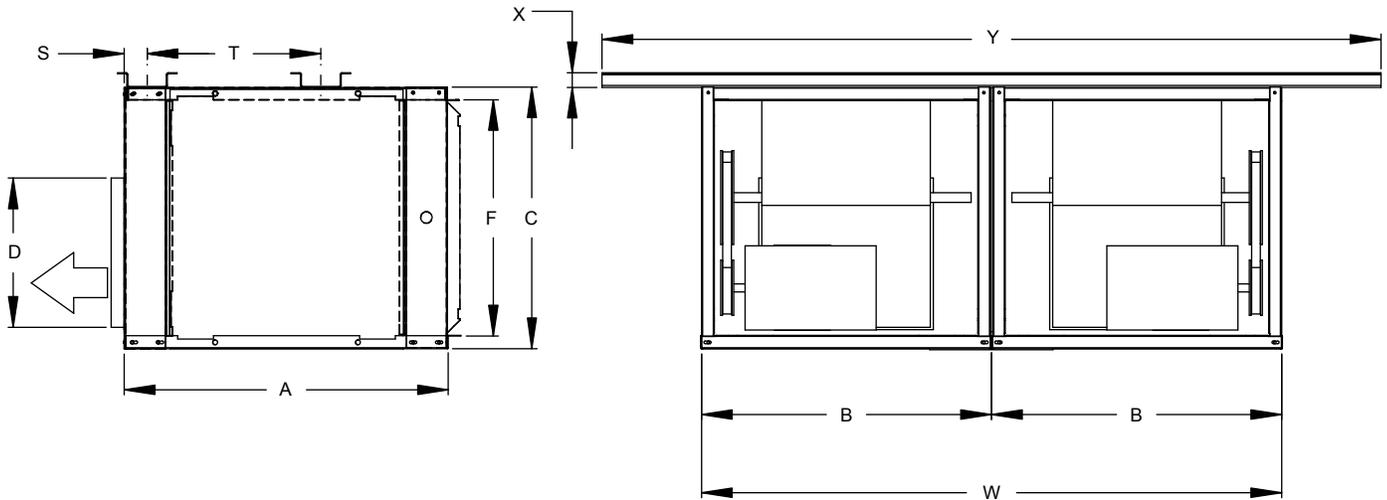


Model	A	B	C	Outlet		Inlet		Access Opening		K	L	M	P	Q	R
				D	E	F	G	H	J						
CC10	24 3/4	22 1/4	20	11 3/8	13 3/8	18 1/8	20 3/8	17 1/4	18	1 5/8	13 3/8	17 1/2	11 1/8	7 3/8	1 5/8
CC12	27 1/2	27	23	13 1/2	15 5/8	21 1/8	25 1/8	20	21	1 5/8	16 1/8	21	13 1/2	8 1/8	1 3/8
CC15	32	33 1/2	28	15 7/8	18 5/8	25	30 1/2	24 1/2	26	1 1/2	19 1/2	23	16 3/4	10 5/8	2 5/8
CC18	43	42	34	18 7/8	21 7/8	31	39	35 1/2	30	1 7/8	24	37	21	13	3 5/8

All dimensions in inches.

CCB | BELT DRIVE, DUAL UNIT

The twin assembly doubles the capacity of a single unit for the same static pressure with identical RPM. Two similar motors are used which enables the flexibility of independent operation when desired.



Model	A	B	C	W	Outlet		Z	Inlet		U	Y	V	S	T	X
					D	E		F	G						
CCB10	24 3/4	22 1/4	20	45	11 3/8	13 1/8	9 5/8	18 1/8	20 1/8	2 3/8	50 1/2	48 1/2	1 5/8	13 3/8	1
CCB12	27 1/2	27	23	54 1/2	13 1/2	15 5/8	11 7/8	21 1/8	25 1/8	2 3/8	60	58	1 5/8	16 1/8	1
CCB15	32	33 1/2	28	67 1/2	15 7/8	18 5/8	15 3/8	25	30 1/2	3 1/2	73	71	1 1/2	19 1/2	1
CCB18	43	42	34	84 1/2	18 7/8	21 7/8	20 5/8	31	39	3 1/2	90	88	1 7/8	24	1

All dimensions in inches.

CC | BELT DRIVE, SINGLE UNIT

CC10

Inlet Area (FT²)=2.56 | Outlet Area (FT²)=1.04 | Outlet Velocity (FPM)=CFM/1.04 | Tip Speed (FPM)=2.78xRPM | Wheel Dia.=10 5/8"

CFM	0.125" S.P.		0.250" S.P.		0.375" S.P.		0.500" S.P.		0.625" S.P.		0.750" S.P.		1.000" S.P.		1.250" S.P.		1.500" S.P.	
	RPM	BHP																
750	422	0.06	535	0.09	637	0.12	-	-	-	-	-	-	-	-	-	-	-	-
950	475	0.10	570	0.13	660	0.17	741	0.21	821	0.25	893	0.30	-	-	-	-	-	-
1150	535	0.15	618	0.19	696	0.23	770	0.28	840	0.33	907	0.38	1035	0.48	-	-	-	-
1350	599	0.23	674	0.28	743	0.32	808	0.37	872	0.42	934	0.48	1049	0.59	1161	0.72	1264	0.85
1550	664	0.33	733	0.38	797	0.44	856	0.49	913	0.55	966	0.60	1078	0.73	1177	0.86	1277	1.00
1750	731	0.46	796	0.52	854	0.58	909	0.64	961	0.70	1013	0.77	1109	0.89	1208	1.04	1297	1.18
1950	801	0.62	860	0.69	914	0.75	966	0.82	1014	0.89	1061	0.95	1153	1.10	1239	1.24	1328	1.41

CC12

Inlet Area (FT²)=3.69 | Outlet Area (FT²)=1.47 | Outlet Velocity (FPM)=CFM/1.47 | Tip Speed (FPM)=3.31xRPM | Wheel Dia.=12 5/8"

CFM	0.125" S.P.		0.250" S.P.		0.375" S.P.		0.500" S.P.		0.625" S.P.		0.750" S.P.		1.000" S.P.		1.250" S.P.		1.500" S.P.	
	RPM	BHP																
1150	339	0.08	443	0.13	529	0.19	-	-	-	-	-	-	-	-	-	-	-	-
1350	359	0.10	456	0.16	538	0.22	612	0.30	680	0.38	-	-	-	-	-	-	-	-
1550	381	0.13	472	0.20	552	0.27	621	0.34	685	0.42	747	0.52	-	-	-	-	-	-
1750	406	0.18	492	0.25	565	0.32	634	0.40	695	0.49	752	0.57	853	0.75	-	-	-	-
1950	432	0.23	511	0.30	583	0.38	648	0.47	709	0.56	764	0.65	866	0.86	954	1.01	-	-
2150	459	0.28	533	0.36	603	0.46	664	0.54	722	0.64	777	0.74	876	0.95	964	1.16	1045	1.38
2350	486	0.35	559	0.45	623	0.54	683	0.63	737	0.73	791	0.84	889	1.07	975	1.29	1056	1.52
2550	516	0.43	584	0.54	643	0.62	703	0.74	756	0.84	806	0.95	902	1.19	989	1.43	1067	1.67
2750	547	0.52	611	0.64	668	0.74	723	0.85	776	0.96	825	1.08	916	1.32	1002	1.58	1080	1.84

CC15

Inlet Area (FT²)=5.30 | Outlet Area (FT²)=2.05 | Outlet Velocity (FPM)=CFM/2.05 | Tip Speed (FPM)=3.93xRPM | Wheel Dia.=15"

CFM	0.125" S.P.		0.250" S.P.		0.375" S.P.		0.500" S.P.		0.625" S.P.		0.750" S.P.		1.000" S.P.		1.250" S.P.		1.500" S.P.	
	RPM	BHP																
1950	303	0.13	385	0.19	452	0.26	512	0.34	-	-	-	-	-	-	-	-	-	-
2350	331	0.19	406	0.27	470	0.35	526	0.43	575	0.51	622	0.59	-	-	-	-	-	-
2750	361	0.26	428	0.35	490	0.45	544	0.55	594	0.64	639	0.74	724	0.96	-	-	-	-
3150	393	0.37	455	0.47	512	0.57	565	0.69	612	0.79	657	0.91	736	1.12	810	1.36	-	-
3550	425	0.51	485	0.61	536	0.72	587	0.85	633	0.97	675	1.09	754	1.34	824	1.59	888	1.83
3950	465	0.68	515	0.77	565	0.91	610	1.04	655	1.18	697	1.31	773	1.59	843	1.87	906	2.14
4350	505	0.89	547	0.99	594	1.12	637	1.26	678	1.41	719	1.56	793	1.86	861	2.16	924	2.47
4750	547	1.14	580	1.25	625	1.37	666	1.52	704	1.68	742	1.84	815	2.17	881	2.50	943	2.83

CC18

Inlet Area (FT²)=8.40 | Outlet Area (FT²)=2.87 | Outlet Velocity (FPM)=CFM/2.87 | Tip Speed (FPM)=4.75xRPM | Wheel Dia.=18 1/8"

CFM	0.125" S.P.		0.250" S.P.		0.375" S.P.		0.500" S.P.		0.625" S.P.		0.750" S.P.		1.000" S.P.		1.250" S.P.		1.500" S.P.	
	RPM	BHP																
3150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3550	-	-	-	-	-	-	462	0.66	503	0.79	-	-	-	-	-	-	-	-
3950	-	-	-	-	436	0.65	478	0.78	516	0.92	552	1.05	-	-	-	-	-	-
4350	-	-	402	0.65	452	0.79	495	0.92	532	1.07	567	1.22	629	1.51	-	-	-	-
4750	369	0.63	420	0.79	468	0.94	511	1.09	549	1.24	583	1.40	643	1.71	700	2.05	-	-
5150	391	0.77	439	0.95	484	1.11	527	1.28	565	1.43	599	1.60	659	1.95	713	2.29	765	2.65
5550	415	0.94	458	1.12	502	1.30	543	1.49	581	1.66	616	1.83	675	2.19	729	2.57	778	2.94
5950	440	1.14	479	1.32	521	1.53	559	1.71	597	1.91	631	2.09	692	2.47	745	2.87	793	3.26
6350	466	1.37	501	1.55	540	1.77	577	1.97	613	2.18	647	2.38	708	2.75	761	3.19	809	3.61

Performance shown is for installation Type B: free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. Power rating (BHP) includes drive losses.

CCB | BELT DRIVE, DUAL UNIT

CCB10

Inlet Area (FT²)=5.12 | Outlet Area (FT²)=2.08 | Outlet Velocity (FPM)=CFM/2.08 | Tip Speed (FPM)=2.78xRPM | Wheel Dia.=10 5/8"

CFM	0.125" S.P.		0.250" S.P.		0.375" S.P.		0.500" S.P.		0.625" S.P.		0.750" S.P.		1.000" S.P.		1.250" S.P.		1.500" S.P.	
	RPM	BHP																
1500	396	0.11	523	0.17	627	0.24	-	-	-	-	-	-	-	-	-	-	-	-
1900	431	0.19	545	0.26	643	0.34	731	0.41	796	0.51	863	0.59	-	-	-	-	-	-
2300	473	0.30	573	0.38	665	0.47	747	0.56	824	0.65	882	0.75	1002	0.97	-	-	-	-
2700	519	0.46	611	0.55	694	0.64	772	0.74	841	0.85	905	0.96	1021	1.18	1126	1.44	1221	1.69
3100	568	0.66	652	0.76	728	0.87	800	0.98	868	1.09	931	1.20	1044	1.47	1146	1.71	1240	2.00
3500	620	0.91	697	1.04	768	1.16	833	1.28	897	1.40	959	1.53	1069	1.78	1176	2.08	1262	2.36
3900	677	1.23	743	1.37	810	1.50	873	1.64	930	1.77	987	1.91	1097	2.19	1195	2.48	1291	2.81

CCB12

Inlet Area (FT²)=7.38 | Outlet Area (FT²)=2.94 | Outlet Velocity (FPM)=CFM/2.94 | Tip Speed (FPM)=3.31xRPM | Wheel Dia.=12 5/8"

CFM	0.125" S.P.		0.250" S.P.		0.375" S.P.		0.500" S.P.		0.625" S.P.		0.750" S.P.		1.000" S.P.		1.250" S.P.		1.500" S.P.	
	RPM	BHP																
2300	339	0.15	443	0.26	529	0.38	-	-	-	-	-	-	-	-	-	-	-	-
2700	359	0.20	456	0.32	538	0.45	612	0.60	680	0.76	-	-	-	-	-	-	-	-
3100	381	0.27	472	0.40	552	0.54	621	0.69	685	0.85	747	1.04	-	-	-	-	-	-
3500	406	0.35	492	0.49	565	0.64	634	0.81	696	0.98	752	1.15	854	1.51	-	-	-	-
3900	432	0.45	512	0.60	584	0.77	648	0.94	709	1.12	764	1.31	866	1.71	954	2.10	-	-
4300	459	0.57	533	0.73	603	0.91	664	1.09	723	1.29	778	1.49	876	1.90	964	2.33	1046	2.78
4700	486	0.70	559	0.89	623	1.07	683	1.27	738	1.47	791	1.68	889	2.13	976	2.58	1056	3.05
5100	516	0.86	585	1.08	643	1.25	703	1.47	757	1.69	806	1.89	903	2.38	989	2.87	1067	3.35
5500	547	1.05	611	1.28	668	1.48	723	1.69	776	1.93	825	2.16	916	2.64	1002	3.17	1081	3.70

CCB15

Inlet Area (FT²)=10.60 | Outlet Area (FT²)=4.10 | Outlet Velocity (FPM)=CFM/4.10 | Tip Speed (FPM)=3.93xRPM | Wheel Dia.=15"

CFM	0.125" S.P.		0.250" S.P.		0.375" S.P.		0.500" S.P.		0.625" S.P.		0.750" S.P.		1.000" S.P.		1.250" S.P.		1.500" S.P.	
	RPM	BHP																
3900	303	0.44	385	0.39	452	0.52	512	0.68	562	0.81	-	-	-	-	-	-	-	-
4700	331	0.52	406	0.74	470	0.70	526	0.86	575	1.01	623	1.19	-	-	-	-	-	-
5500	361	0.54	429	1.26	490	1.13	544	1.09	594	1.29	639	1.48	724	1.91	795	2.27	-	-
6300	393	0.75	456	1.46	513	1.86	565	1.69	612	1.59	657	1.81	736	2.24	810	2.72	875	3.15
7100	425	1.01	485	1.49	536	2.64	587	2.64	633	2.44	675	2.18	754	2.69	824	3.17	888	3.65
7900	465	1.36	516	1.56	565	2.70	610	3.72	655	3.62	697	3.42	773	3.17	843	3.74	906	4.28
8700	505	1.77	547	1.98	594	2.74	637	4.12	678	4.96	719	4.85	793	4.32	861	4.33	924	4.94
9500	547	2.28	580	2.50	625	2.79	666	4.19	704	5.72	742	6.46	815	6.13	881	5.44	943	5.67

CCB18

Inlet Area (FT²)=16.80 | Outlet Area (FT²)=5.74 | Outlet Velocity (FPM)=CFM/5.74 | Tip Speed (FPM)=4.75xRPM | Wheel Dia.=18 1/8"

CFM	0.125" S.P.		0.250" S.P.		0.375" S.P.		0.500" S.P.		0.625" S.P.		0.750" S.P.		1.000" S.P.		1.250" S.P.		1.500" S.P.	
	RPM	BHP																
6300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7100	-	-	-	-	-	-	462	1.32	503	1.58	-	-	-	-	-	-	-	-
7900	-	-	-	-	436	1.30	479	1.58	516	1.83	552	2.11	-	-	-	-	-	-
8700	-	-	402	1.31	452	1.58	495	1.85	532	2.14	567	2.44	629	3.02	-	-	-	-
9550	370	1.28	421	1.60	469	1.91	512	2.20	550	2.51	584	2.83	644	3.45	701	4.12	-	-
10300	391	1.55	439	1.89	484	2.23	527	2.56	565	2.86	599	3.21	659	3.89	713	4.57	765	5.30
11100	415	1.88	458	2.24	502	2.62	543	2.98	581	3.33	616	3.65	675	4.39	729	5.14	778	5.87
11900	440	2.28	479	2.64	521	3.06	559	3.44	597	3.83	631	4.18	692	4.94	745	5.74	793	6.52
12700	466	2.74	501	3.11	540	3.54	577	3.95	613	4.37	647	4.77	709	5.53	761	6.39	809	7.23

Performance shown is for installation Type B: free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. Power rating (BHP) includes drive losses.

ENGINEERING SPECIFICATIONS

Model

CC = Single Unit
CCB = Dual Unit

Unit Size

10, 12, 15, 18

Motor Speed

1 = Single Speed
2 = 2S2W Single & Three Phase
3 = 2S1W Three Phase

Horse Power

See selection software.

Enclosure

O = Open Drip Proof
T = Totally Enclosed

Voltage

See selection software.

Phase

1 = Single
3 = Three

Cycle

5 = 50 Hz
6 = 60 Hz

Paint / Coating

0 = None
F = Epoxy Powder Coat*
G = Epoxy Powder Coat with UV*
H = Hi-Temp Powder Coat*
J = Non-stick Powder Coat*
K = Phenolic Powder Coat*
L = Phenolic Powder Coat with UV*
N = Polyester Powder Coat
X = Special

* Not available with choice of color.

Color

0 = None
50 = Chrome Green
55 = Pale Green
56 = Dove Gray
61 = White
63 = Oxford Beige
65 = Dover White
66 = Desert Tan
70 = Black
73 = Smoke Gray
77 = Brick Red
79 = Peppercorn
81 = Pale Brown
83 = Chocolate Brown
85 = Timeless Bronze
94 = Charcoal
X = Special

Damper

0 = None
D = Damper

Vibration Isolation

0 = None
RH = Rubber Hanger
SH = Spring Hanger
RF = Rubber Floor
SF = Spring Floor
SC = Support Channels with Rubber Floor

Insulation

0 = None
A = Insulation

Guard

0 = None
N = Inlet
U = Outlet
B = Both

Dust Filter

0 = None
F = Dust Filter

Filter Replacement Quantity

0 to 99

Disconnect Switch

0 = None
1 = NEMA 1 Disconnect Switch
3R = NEMA 3R Disconnect Switch
4 = NEMA 4 Disconnect Switch

Internal Wiring

0 = None
1 = NEMA 1 Internal Wiring
3R = NEMA 3R Internal Wiring

Thermal Overload Protection

0 = None
P = Thermal Protection

CC Units

Belt drive cabinet inline duct fan shall be model CC, manufactured by YORK® by Johnson Controls.

Fan housing shall be galvanized steel, shall enclose the motor/fan assembly, and include removable side panels to allow access to the motor/fan assembly. Fans shall have a forward curved centrifugal wheel. Fan motors shall be continuous duty, ball bearing design, permanently lubricated, positively cooled, and furnished at the specified voltage, phase, and enclosure.

Each fan shall bear the AMCA Licensed Ratings Seal for Air Performance and shall be cULus Listed.

CCB Units

Belt drive dual cabinet inline duct fan shall be model CCB, manufactured by YORK® by Johnson Controls.

Fan housing shall be galvanized steel, shall enclose two motor/fan assemblies, and include removable side panels to allow access to the motor/fan assemblies. Fans shall have a forward curved centrifugal wheels. Fan motors shall be continuous duty, ball bearing design, permanently lubricated, positively cooled, and furnished at the specified voltage, phase, and enclosure.

Each fan shall bear the AMCA Licensed Ratings Seal for Air Performance and shall be cULus Listed.

At Johnson Controls, we truly understand HVAC systems. In fact, we produce some of the most robust HVAC equipment, parts and controls on the market today. But we don't just sell products. We also offer the expertise, services and strategic insight to make them work within your current system, optimizing your building's performance and lowering your overall costs. If you're interested in revolutionizing your HVAC system, contact an expert today. Otherwise, browse our full-suite of HVAC products.

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