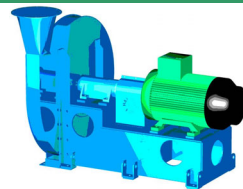
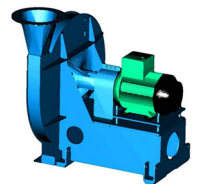
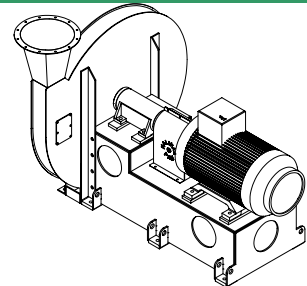
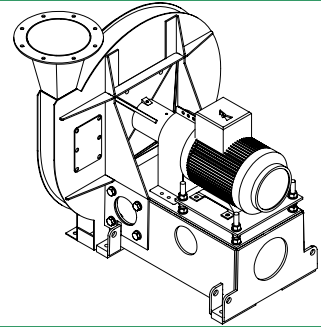
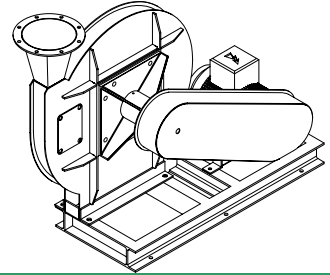
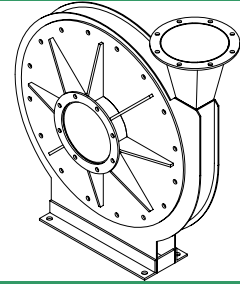


CNZ + Open Radial blower & exhauster fan RANGE

Includes single & two stage

Typical driving arrangements
and dimensions

CATALOGUE REF :- CNZ002-603



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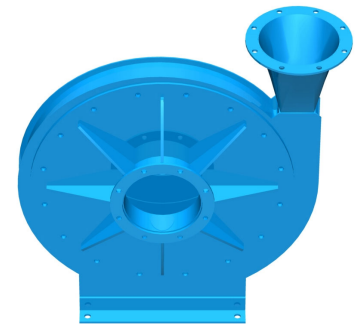
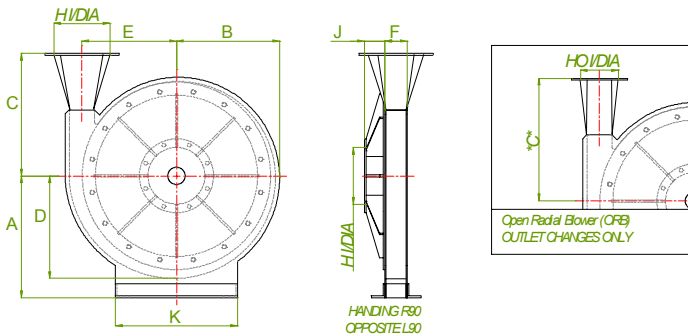
FM 00701



THE HALIFAX CNZ/OPEN RADIAL BLOWER & EXHAUSTER

Fan casing dimensions

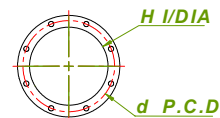
FAN SIZE	A	A	A	A	A	A	B	C	*C*	D	E	F	H	HO	J	K
	R90	R135	R180	R225	R0	R45			(O.R.B)					(O.R.B)		
15	318	318	318	318	350	318	247	310	235	257	225	54	140	64	50	332
16	324	324	324	324	380	324	264	317	250	274	240	57	146	68	50	332
17	340	340	340	340	380	340	274	333	265	286	254	60	156	74	50	354
18	355	355	355	355	385	355	300	357	280	311	274	64	165	78	50	354
19	368	368	368	368	430	368	313	378	295	325	286	67	175	80	50	364
20	394	394	394	394	460	394	326	397	315	359	300	71	184	86	50	364
21	406	406	406	406	500	406	346	415	330	358	314	76	191	92	50	408
22	432	432	432	432	485	432	360	440	345	374	330	78	205	95	50	418
23	445	445	445	445	520	445	374	456	360	390	346	83	210	99	50	432
24	464	464	464	464	550	464	387	469	375	403	362	86	219	104	50	444
25	480	480	480	480	555	480	406	492	390	422	376	89	229	108	50	458
26	502	502	502	502	565	502	424	516	405	440	390	92	239	112	50	472
27	521	521	521	521	600	521	438	536	420	454	402	95	248	116	50	494
28	533	533	533	533	600	533	451	534	440	471	419	102	254	122	76	504
29	550	550	550	550	625	550	469	577	455	489	437	105	267	125	76	532
30	580	580	580	580	660	580	486	596	470	505	450	107	276	128	76	548
31	600	600	600	600	660	600	500	613	485	521	464	110	283	133	76	552
32	610	610	610	610	695	610	513	631	500	535	480	114	293	137	76	590
33	620	620	620	620	700	620	531	650	515	553	495	117	300	141	80	600
34	620	620	620	620	730	620	551	670	530	573	510	121	310	147	80	620
35	630	630	630	630	760	630	568	684	545	590	528	125	319	152	80	640
36	670	670	670	670	760	670	580	714	560	604	540	130	330	170	80	670
37	690	690	690	690	790	690	604	734	580	627	563	131	339	176	80	730
38	700	700	700	700	800	700	620	754	595	643	578	135	348	182	80	750
39	720	720	720	720	830	720	636	774	610	660	593	139	358	188	80	770
40	740	740	740	740	850	740	657	793	625	676	609	142	367	194	80	790
41	760	760	760	760	870	760	668	813	640	693	624	146	376	200	80	810
42	780	780	780	780	890	780	684	833	655	710	640	149	385	206	80	830



NOTE: - For Open Radial Blower fans only the outlet is different, use the ORB outlet details chart for dimensions, inlet remains the same as CNZ fans

CNZ inlet and outlet flange dimensions

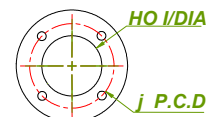
FAN SIZE	a	b	c	d	FAN SIZE	a	b	c	d
15	25	8	10	168	29	40	8	10	311
16	25	8	10	175	30	40	8	10	321
17	25	8	10	184	31	40	8	10	329
18	25	8	10	193	32	40	8	10	339
19	40	8	10	219	33	40	8	10	346
20	40	8	10	230	34	40	8	10	356
21	40	8	10	237	35	40	8	10	362
22	40	8	10	251	36	40	12	10	376
23	40	8	10	254	37	40	12	10	385
24	40	8	10	264	38	40	12	10	394
25	40	8	10	275	39	40	12	10	404
26	40	8	10	285	40	40	12	10	413
27	40	8	10	292	41	40	12	10	422
28	40	8	10	298	42	40	12	10	431



a - SIZE OF FLANGE
b - No. OF HOLES (OFF CENTRES)
c - SIZE OF HOLES
d - P.C.D OF HOLES

O.R.B outlet flange dimensions (Inlet as CNZ)

FAN SIZE	e	f	g	h	FAN SIZE	e	f	g	h
15	25	4	10	92	29	25	8	10	155
16	25	4	10	98	30	25	4	10	158
17	25	4	10	104	31	40	8	10	179
18	25	4	10	108	32	40	8	10	183
19	25	4	10	110	33	40	8	10	187
20	25	4	10	116	34	40	8	10	196
21	25	8	10	122	35	40	8	10	210
22	25	8	10	125	36	40	8	10	216
23	25	8	10	127	37	40	8	10	222
24	25	8	10	134	38	40	8	10	228
25	25	4	10	138	39	40	8	10	234
26	40	4	10	158	40	40	8	10	240
27	40	8	10	162	41	40	8	10	246
28	30	8	10	158	42	40	8	10	252



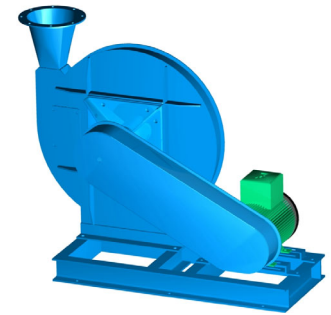
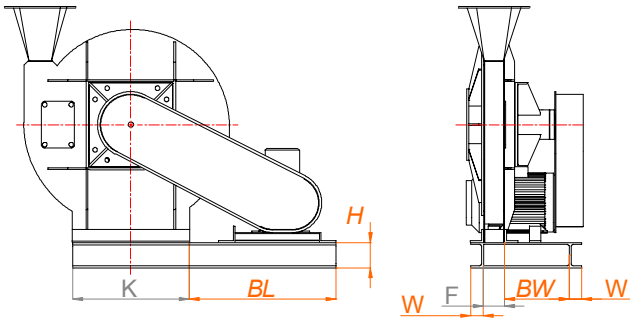
e - SIZE OF FLANGE
f - No. OF HOLES (OFF CENTRES)
g - SIZE OF HOLES
j - P.C.D OF HOLES

Use these dimensions combined with the Casing dimensions to give overall fan sizes for your chosen driving arrangement

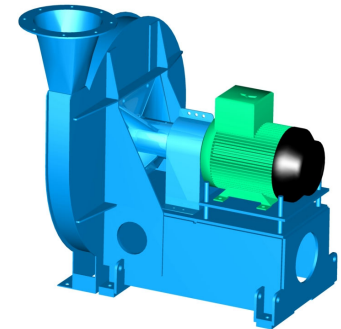
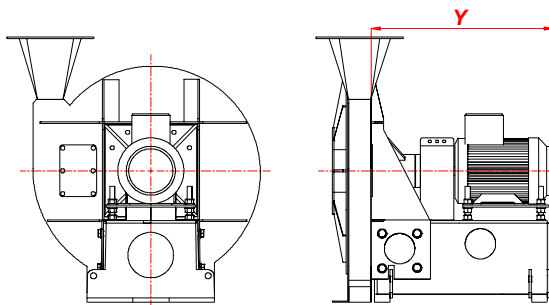
Typical dimensions for driving arrangements 1,2a,1/3 and 2a/3

SPECIFICATION				ARRANGEMENT No.1 AND 2A SPECIFIC DIMENSIONS				ARRANGEMENT 1/3 SPECIFIC	ARRANGEMENT 2A/3 SPECIFIC	HIGH TEMP. EXTRAS	
FAN SIZE	BEARING UNIT		TYPICAL MOTOR SIZE	TYPICAL BASEFRAME SIZES				(Y)	(Z)	FOR EXTRAS ADD TO BW, Y OR Z	
	ARR. No.1	ARR. No.2A		CHANNEL HEIGHT (H)	CHANNEL WIDTH (W)	BL	BW	DIMENSION OVER BEARING UNIT AND MOTOR	DIMENSION OVER BEARING UNIT AND MOTOR	COOLING DISC	COOLING DISC & PLUG UNIT
15-17	V1		D80	76	38	440	150	450		ADD 40	ADD 75
18-20	V2		D90			440	165	505		ADD 40	ADD 75
21-22	V3		D100	100	50	610	200	600		ADD 40	ADD 75
23	V3		D132			615	210	670		ADD 50	ADD 75
24-26	V4		D132			615	240	720		ADD 50	ADD 75
27	V4		D160			750	265	870		ADD 50	ADD 75
28-31	V5		D160			750	275	905		ADD 50	ADD 75
		M6	D160			750	420		1060	ADD 50	ADD 100
32-34	V6		D180	125	65	775	290	970		ADD 50	ADD 75
		M6	D200			1040	450		1275	ADD 50	ADD 100
35-36	V6		D200	150	75	1040	290	1110		ADD 50	ADD 75
		M6	D200			1040	435		1275	ADD 50	ADD 100
37		M6	D225			1040	440		1370	ADD 50	ADD 100
38-40		M7	D225			1040	490		1430	ADD 70	ADD 100
41-42		M8	D250			1200	540		1620	ADD 70	ADD 100

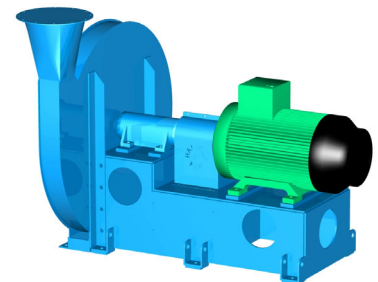
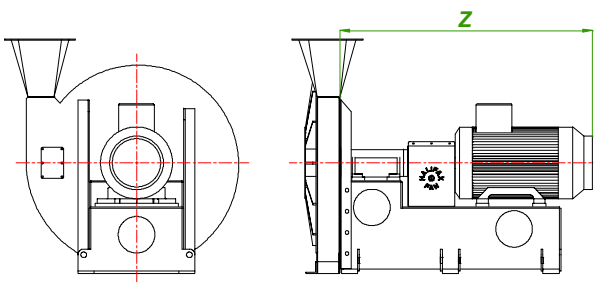
Driving arrangement No.1 and No.2a



Driving arrangement No.1/3



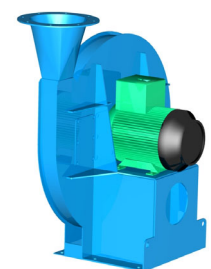
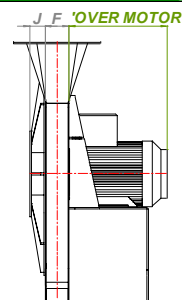
Driving arrangement No.2a/3



Typical dimensions only, contact Halifax Fan for full arrangement drawing.

CNZ arrangement No.3 specific typical dimensions

FAN SIZE	TYPICAL MOTOR SIZE	SIZE OVER MOTOR	COOLING DISC (ADD TO 'OVER MOTOR' IF REQ'D)
15 - 17	D80	275	ADD 50
18 - 20	D90	295	ADD 50
20 - 21	D100	330	ADD 50
22 - 23	D112	345	ADD 50
24 - 26	D132	465	ADD 70
27 - 31	D160	525	ADD 70
32 - 33	D180	580	ADD 70
34 - 36	D200	720	ADD 100
37 - 40	D225	775	ADD 100
41 - 42	D250	845	ADD 100

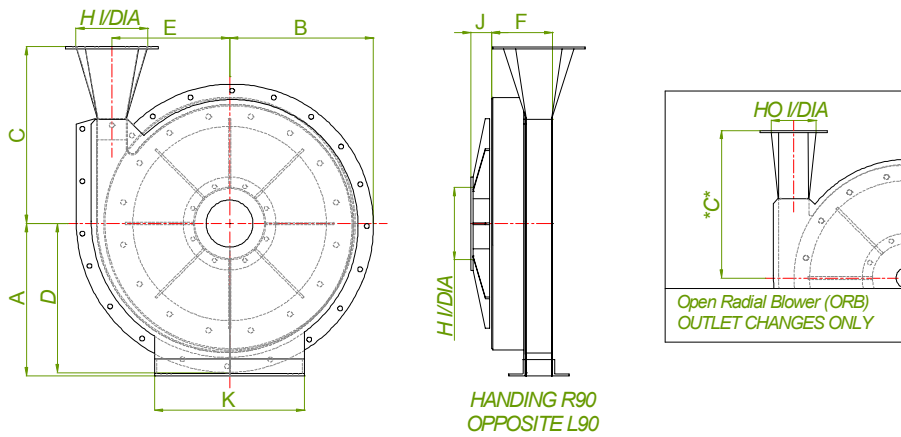




THE HALIFAX TWO STAGE OPEN RADIAL BLOWER & EXHAUSTER

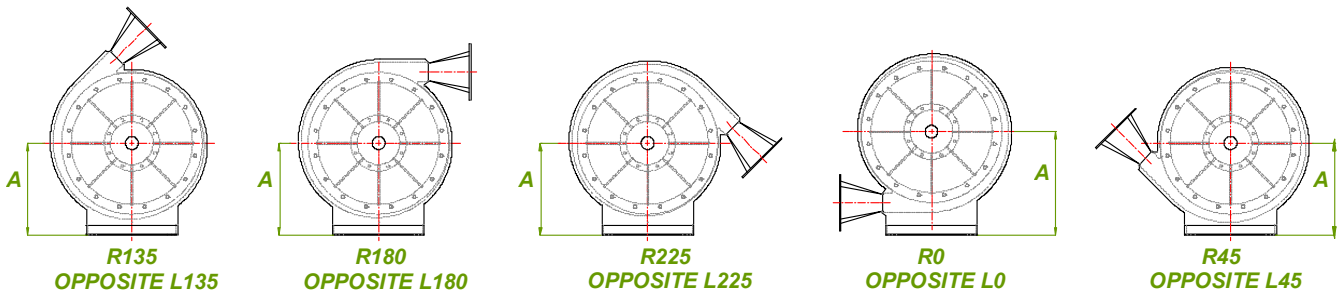
Fan casing dimensions

FAN SIZE	A	A	A	A	A	A	B	C	*C*	D	E	F	H	HO	J	K
	R90	R135	R180	R225	R0	R45			(O.R.B)					(O.R.B)		
15	318	318	318	318	350	318	284	310	235	294	225	113	140	64	50	332
16	324	324	324	324	360	324	304	317	250	314	240	119	146	68	50	332
17	340	340	340	340	370	340	277	333	265	289	254	138	156	74	50	354
18	355	355	355	355	385	355	337	357	280	349	274	141	165	78	50	354
19	368	368	368	368	395	368	350	378	295	362	286	148	175	80	50	364
20	425	425	425	425	450	425	365	397	315	378	300	157	184	86	50	364
21	406	406	406	406	480	406	383	415	330	395	314	166	191	92	50	408
22	432	432	432	432	500	432	397	440	345	411	330	172	205	95	50	418
23	445	445	445	445	520	445	418	456	360	433	346	182	210	99	50	432
24	464	464	464	464	540	464	386	469	375	460	362	191	219	104	50	444
25	480	480	480	480	555	480	454	492	390	470	376	196	229	108	50	458
26	502	502	502	502	570	502	471	516	405	487	390	203	239	112	50	472
27	521	521	521	521	600	521	485	536	420	501	402	211	248	116	50	494
28	533	533	533	533	600	533	506	534	440	526	419	222	254	122	76	504
29	550	550	550	550	630	550	523	577	455	542	437	230	267	125	76	532
30	580	580	580	580	660	580	533	596	470	552	450	236	276	128	76	548
31	600	600	600	600	660	600	548	613	485	568	464	242	283	133	76	552
32	610	610	610	610	700	610	587	631	500	603	480	250	293	137	76	590
33	620	620	620	620	710	620	590	650	515	610	495	258	300	141	80	600
34	680	680	680	680	730	680	606	670	530	628	510	267	310	147	80	620
35	660	660	660	660	760	660	625	684	545	647	528	277	319	152	80	640
36	670	670	670	670	780	670	579	714	560	603	540	285	330	170	80	670



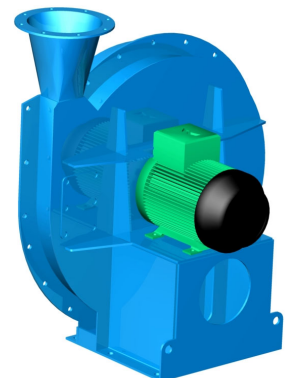
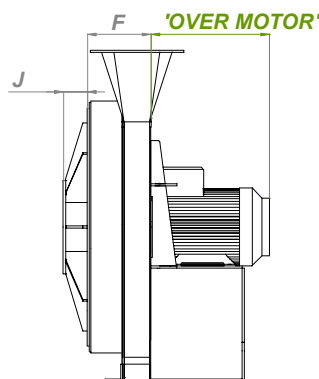
Note: - see single stage for inlet and outlet details

Single & two stage CNZ / ORB fan handings shown from drive side



CNZ arrangement No.3 specific typical dimensions

FAN SIZE	TYPICAL MOTOR SIZE	SIZE OVER MOTOR	COOLING DISC (ADD TO 'OVER MOTOR' IF REQ'D)
15 - 18	D90	295	ADD 50
19 - 20	D100	330	ADD 50
21 - 23	D112	345	ADD 50
24 - 25	D132	465	ADD 70
26 - 29	D160	525	ADD 70
30 - 31	D180	580	ADD 70
32 - 34	D200	720	ADD 100
35	D225	775	ADD 100
36	D250	845	ADD 100



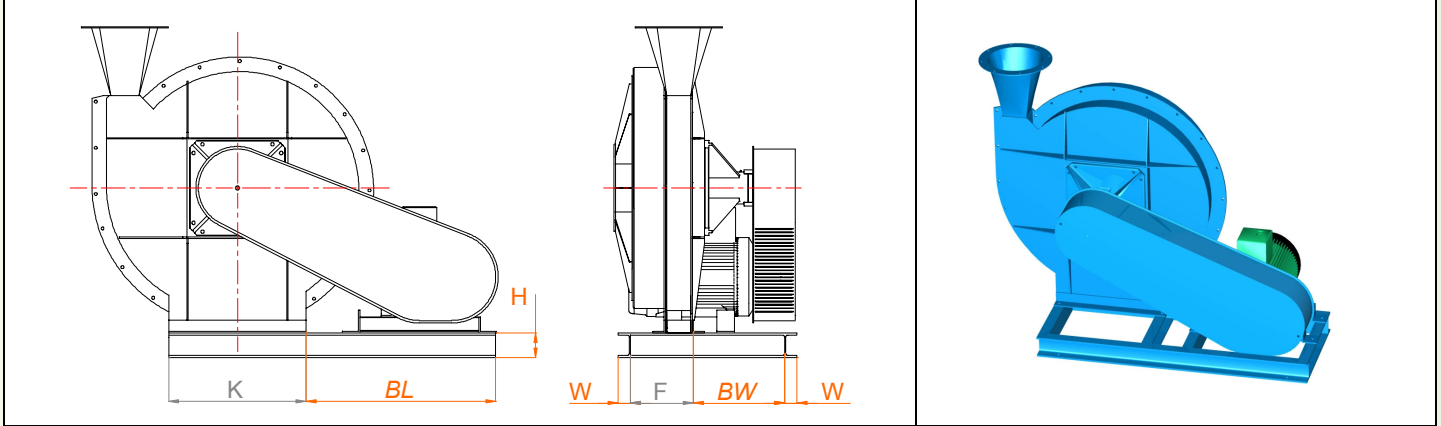
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Use these dimensions combined with the Casing dimensions to give overall fan sizes for your chosen driving arrangement

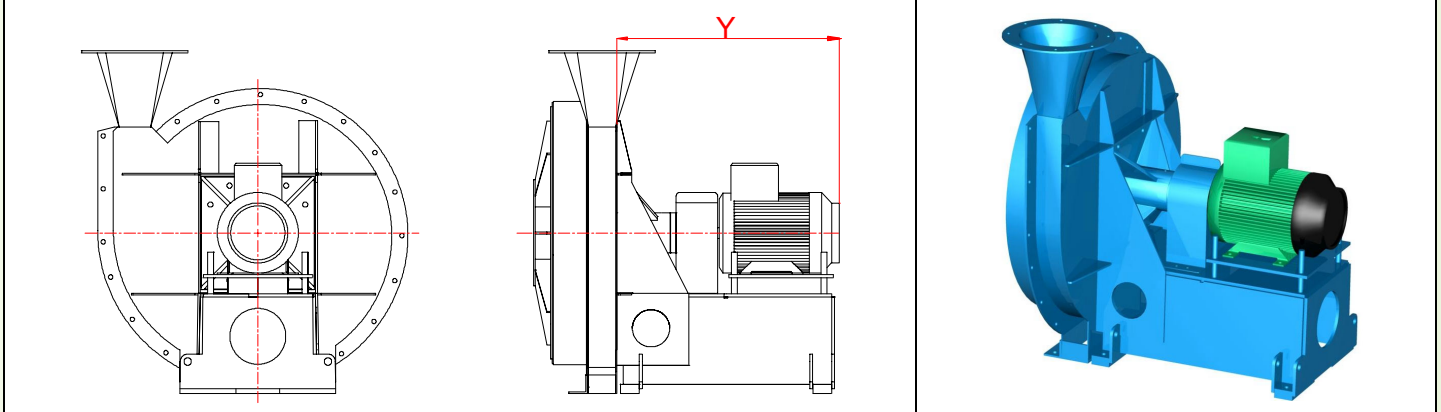
Typical dimensions for two stage CNZ driving arrangements 1,2a,1/3 and 2a/3

SPECIFICATION			ARRANGEMENT No.1 AND 2A SPECIFIC DIMENSIONS				ARRANGEMENT 1/3 SPECIFIC		ARRANGEMENT 2A/3 SPECIFIC	HIGH TEMP. EXTRAS	
FAN SIZE	BEARING UNIT		TYPICAL MOTOR SIZE	TYPICAL BASEFRAME SIZES				(Y)	(Z)	FOR EXTRAS ADD TO BW, Y OR Z	
	ARR. No.1	ARR. No.2A		CHANNEL HEIGHT (H)	CHANNEL WIDTH (W)	BL	BW	DIMENSION OVER BEARING UNIT AND MOTOR	DIMENSION OVER BEARING UNIT AND MOTOR	COOLING DISC	COOLING DISC & PLUG UNIT
15 – 18	V2		D90	100	38	440	205	545		ADD 40	ADD 75
19 – 21	V3		D100			610	240	640		ADD 50	ADD 75
22 – 23	V4		D132			615	250	710		ADD 50	ADD 75
24	V4		D132			615	290	770		ADD 50	ADD 75
25	V4		D160			750	315	920		ADD 50	ADD 75
		M6	D132			750	420		850	ADD 50	ADD 100
26 – 27	V4		D160			750	315	920		ADD 50	ADD 75
		M6	D160			750	420		1060	ADD 50	ADD 100
28	V4		D160			750	315	920		ADD 50	ADD 75
		M6	D200			125	65	1040	450	1275	ADD 50
29 – 30	V5		D160	100	50	750	325	955	ADD 50	ADD 75	
		M6	D200	125	65	1040	450	1275	ADD 50	ADD 100	
31 – 33		M6	D200			1040	435	1275	ADD 50	ADD 100	
34		M7	D225	150	75	1040	490	1430	ADD 70	ADD 100	
35		M7	D225			1040	490	1430	ADD 70	ADD 100	
36		M7	D250			1200	540		1620	ADD 70	ADD 100

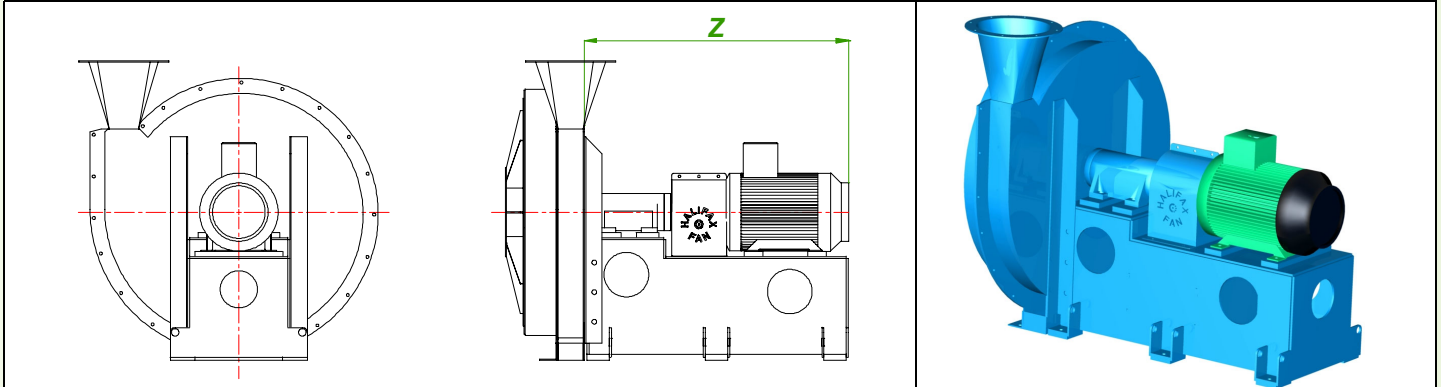
Driving arrangement No.1



Driving arrangement No.1/3



















Driving arrangement No.2a/3





Typical dimensions only, contact Halifax Fan for full arrangement drawing.

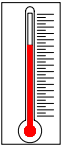
The CNZ and open radial blower / exhauster fan range

		<p>The Halifax CNZ Radial Bladed Fans were originally designed to meet the specified requirements in the paper industries. They are essentially a low volume, high pressure or suction fan and are available in a full range of sizes.</p> <p>For higher pressures the Halifax Two Stage CNZ fan is available comprising of two casings and impellers, which are mounted on a single shaft.</p> <p>The Open Radial Impeller is available for lower volume, high pressure applications, also available as "Easy clean" specification, which is crack and crevice free preventing the build up of product mainly used in the food industry.</p> <p>Due to the radial bladed Self-cleaning design of both the CNZ and Open Radial impellers, the fans can be used in contaminated airstreams where product carry over might be present.</p>	<ul style="list-style-type: none"> ➤ Excellent for low volume high pressure or suction applications. ➤ Good operating efficiency. ➤ Open Radial Blower fans suitable for light conveying duties ➤ Two Stage versions available to give higher pressures. ➤ "Easy Clean" specification available for the food industry.
			
			
			
			
			
			
			


Performance rating

  <p>FM 00701</p>	<p>All Halifax Fan performance ratings are a result of performance tests to BS848 Part 1: 1980 type D ducted inlet and outlet tests. They are also regularly audit tested in accordance with our quality assurance system, which conforms to ISO 9001.</p>
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Temperature range

	<p>Standard Halifax CNZ Fans normally serve applications at temperatures up to 70°C. Higher temperature requirements are effectively catered for by the incorporation of carefully designed modifications to protect the fan bearings. Fans operating between 70°C and 230°C are supplied with a cooling disc fitted to the fan shaft between the fan case and the bearing unit.</p> <p>For operating temperatures between 230°C and 315°C a cooling disc is fitted in addition to fibreglass filled plug unit located between the fan side plate and bearing unit. The fabrication techniques used in the construction of these impellers are modified to ensure operational stability in the high temperature environment.</p>	<ul style="list-style-type: none"> ➤ Standard Fan operating temperatures up to 70°C. ➤ Fans operating between 70°C and 230°C require a cooling disc. ➤ Fans operating between 230°C and 315°C require a plug unit and cooling disc. ➤ For fans operating above 315°C contact Halifax Fan Ltd.
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Construction details

	<p>Casing</p> <p>The fan casings are of an all welded construction and substantially braced for extra rigidity. Casings up to and including size 39 are made in one piece. The impellers can be removed from the inlet side after taking off the front plate. Standard sizes 42 and larger are made in two pieces and these pieces are flanged, drilled and bolted together (known as a split case). Above a size 60, the casings are in three parts with the top section being divided.</p>
	<p>Impeller</p> <p>The impellers are dynamically and statically balanced in accordance with BS. 6861: Part 1: 1987 and ISO 1940/1:1986. They are precision built components made up of twelve blades welded between a substantial back plate and conical shroud. The precision laser cut back plate with blade slots ensures utmost accuracy in the angle and position of blades. Impellers are fitted with a cast-iron centre boss, precision bored with a British standard keyway to suit.</p>

Finish

	<p>Great care is taken with the protective finish of Halifax fans and their appearance. Fans selected for normal temperature conditions are powder coated RAL5015 (certain other colours available at no extra cost). Powder coating offers significant advantages over liquid paint finishes, as the process provides a harder, more durable high quality finish, giving added protection. Special finishes are also supplied to suit unusual operating conditions or customer requirements.</p>
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HALIFAX FAN
Leaders in fan technology

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FAX: +44 (0) 1484 475122

E-mail: sales@halifax-fan.co.uk

www.halifax-fan.co.uk

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