



## CRC/CRE Series Single Inlet Single Width Forward Curved Centrifugal Fans

CATA-AMCA-CRC January, 2014

<http://www.wington.com>





# CRC Series Single Inlet Single Width Forward Curved Centrifugal Fans



Wing Ton Fan Industry Limited certifies that the CRC/CRE Series Forward Curved Centrifugal Fans shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

## General Description:

- The CRC is a single inlet forward curved centrifugal fan. It offers a wide range of airflow and low static pressure development performances. The range comprises of six nominal product sizes with a selection of motor powers between 0.75 to 11.0kW.
- Air performance ranges from 600 m<sup>3</sup>/h up to 9,000 m<sup>3</sup>/h with the static pressure developments up to 1000 Pa. Direct-driven centrifugal fans are standard model.
- It is suitable for many OEM exhaust air applications and is particularly suited for incorporation into other third party heavy machinery. Typical applications

### include:

- Industrial machines ventilation
- Motor Cooling
- Electronic cooling
- Ventilation system for Commercial and Industrial Kitchens



CRC Series

## Construction:

- **Casing:**  
The casings are made from electro-welded sheet steel and protected with a tough epoxy-polyester paint coating.
- **Fan/Impeller:**  
All models incorporate a single inlet forward curved centrifugal impeller. They are manufactured from galvanized sheet steel. The impeller is factory fitted to the motor and dynamically balanced to ISO standard.
- **Motor:**  
All models incorporate three phase induction motors with a squirrel cage rotor in die cast aluminum. All motors are IP55 Protection.



CRE Series

# HOW TO CHOOSE A RIGHT FAN

## Fan Selection:

Please select fans within the curve. Do not select above curve end, fan will work in stall and will be damaged. For a non-overloading selecting you can select motor on the peak-kW from each pitch angle which marks and cover maximum on absorbed

## Example:

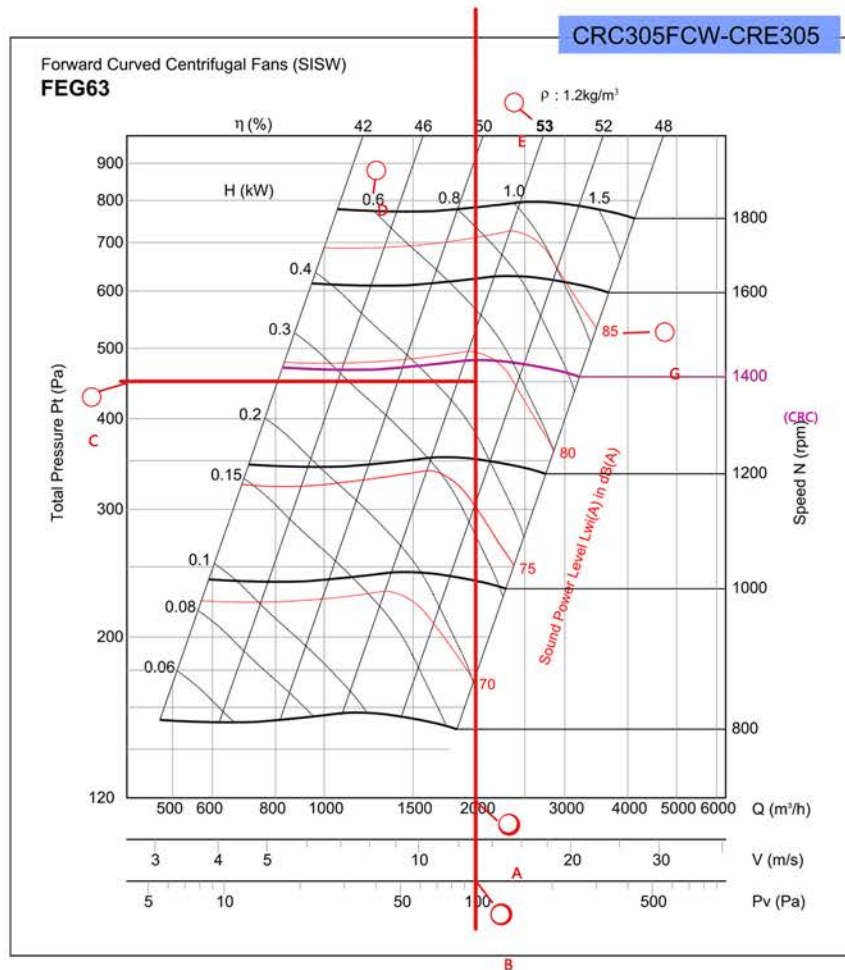
Repaired duty point by customer

- Airflow: 2500 m<sup>3</sup>/h (A)
- Static Pressure: 350 Pa (For total pressure 450 Pa (C), please add dynamic pressure 100 Pa (B) to static pressure 350 Pa)
- Fan Speed: 1440 RPM

After choosing right fan performance curve, please draw volume flow and pressure. In the cross you will find the following fan data:

- Motor Speed: 1440RPM
  - Fan Efficiency: 53%(E)
  - Sound Power Level: 83 dB (G)
  - The Motor Power: 1.1Kw (F)
- and the peak absorbed power is 1.736Kw (D)

## CRC Series Single Inlet Single Width Forward Curved Centrifugal Fans



Performance Chart

Speed (rpm)	Operation Point	Air Flow (m³/h)	S.P. (Pa)	T.P. (Pa)	M.Power (kW)	Max. dB(A)
800	1	1907	57	148	0.37	68
	2	1357	110	152		
	3	1087	128	156		
	4	729	139	157		
	5	460	149	153		
1000	1	2383	89	231	0.55	74
	2	1697	172	238		
	3	1358	199	244		
	4	911	218	245		
	5	575	232	239		
1200	1	2860	128	332	0.75	79
	2	2036	247	343		
	3	1630	287	351		
	4	1093	314	353		
	5	690	334	344		

Speed (rpm)	Operation Point	Air Flow (m³/h)	S.P. (Pa)	T.P. (Pa)	M.Power (kW)	Max. dB(A)
1400	1	3336	174	452	1.1	83
	2	2376	337	466		
	3	1902	391	478		
	4	1275	427	481		
	5	805	455	468		
1600	1	3813	228	591	2.2	87
	2	2715	440	609		
	3	2174	510	624		
	4	1457	558	628		
	5	920	594	611		
1800	1	4290	288	748	3.0	90
	2	3054	557	771		
	3	2445	646	790		
	4	1640	706	795		
	5	1035	752	773		

- Performance certified is for installation type B - Free inlet, Ducted outlet. Power rating kW does not include transmission losses. Performance ratings do not include the effects of accessories (accessories).  
- The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet LwA sound power levels for installation Type B: free inlet, ducted outlet.





# CRC Series Single Inlet Single Width Forward Curved Centrifugal Fans

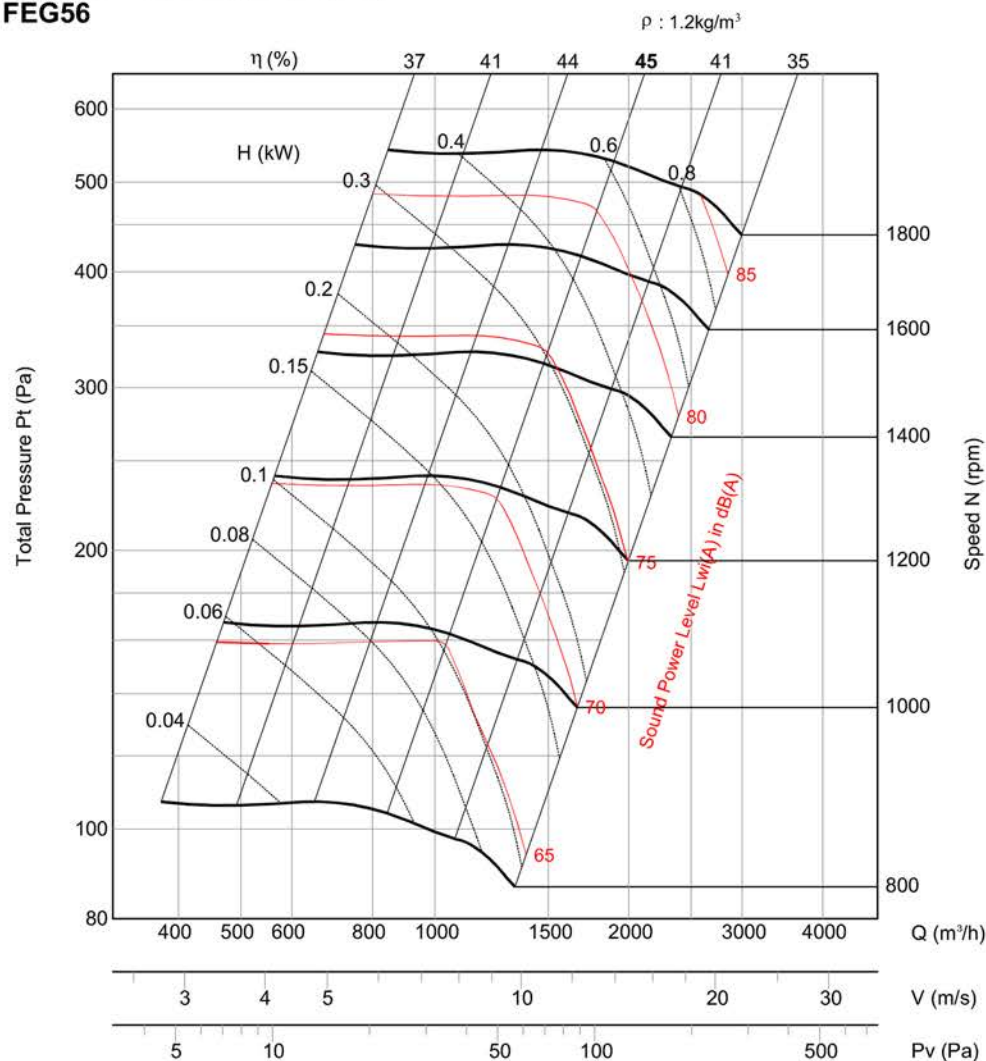


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CRC265FCW-CRE265

Forward Curved Centrifugal Fans (SISW)

FEG56



Performance Chart

Speed (rpm)	Operation Point	Air Flow (m³/h)	S.P. (Pa)	T.P. (Pa)	M.Power (kW)	Max. dB(A)
800	1	1285	36	89	0.18	64
	2	997	68	99		
	3	843	81	104		
	4	626	95	107		
	5	327	102	107		
1000	1	1606	57	139	0.37	70
	2	1246	106	155		
	3	1054	127	163		
	4	782	148	167		
	5	472	160	167		
1200	1	1927	82	200	0.55	75
	2	1496	152	224		
	3	1265	183	234		
	4	938	213	241		
	5	566	231	241		

Speed (rpm)	Operation Point	Air Flow (m³/h)	S.P. (Pa)	T.P. (Pa)	M.Power (kW)	Max. dB(A)
1400	1	2248	111	273	0.75	79
	2	1745	207	304		
	3	1476	249	319		
	4	1095	289	328		
	5	661	314	328		
1600	1	2570	145	356	1.1	83
	2	1994	271	397		
	3	1686	325	416		
	4	1251	378	428		
	5	755	410	428		
1800	1	2891	184	451	1.5	88
	2	2244	342	503		
	3	1897	412	527		
	4	1408	479	542		
	5	849	519	542		

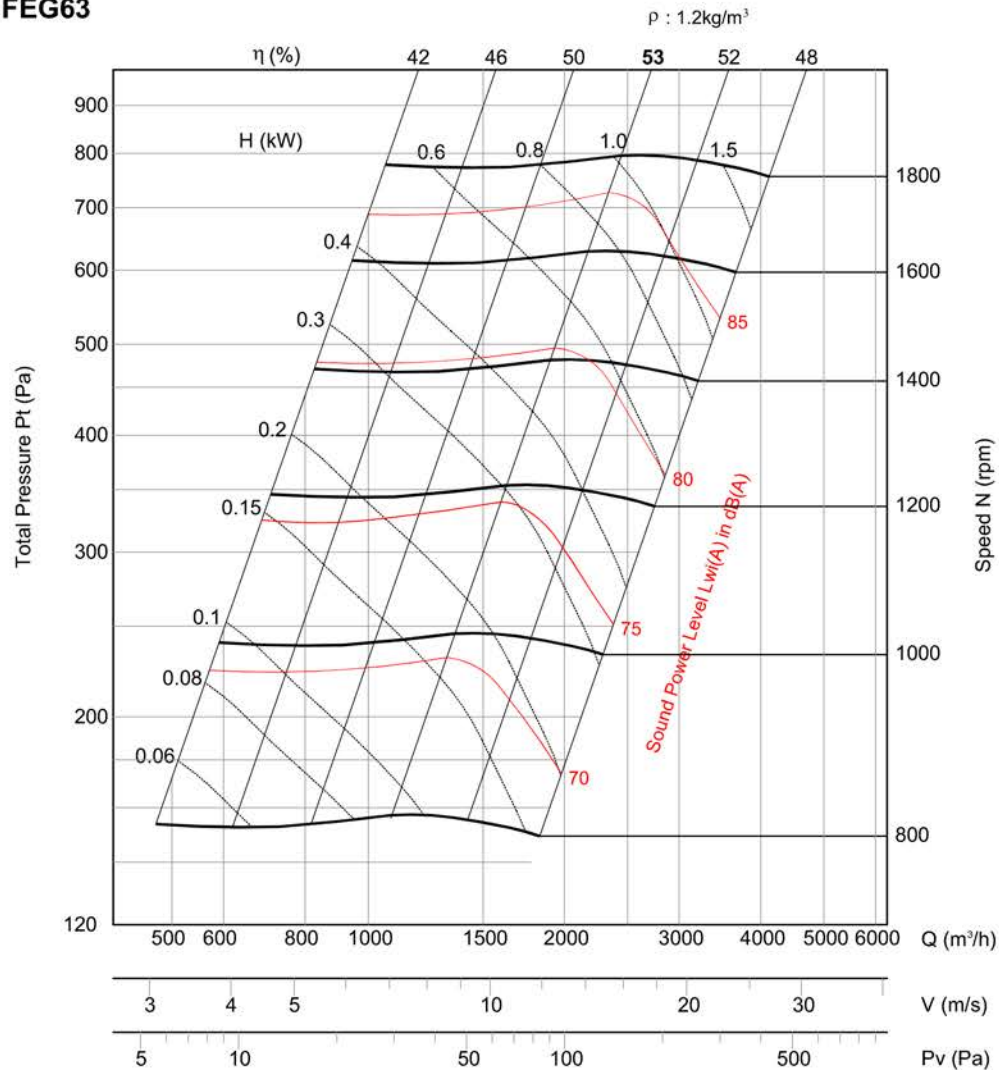
- Performance certified for installation type B - Free inlet, Ducted outlet. Power rating kW does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).  
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# CRC Series Single Inlet Single Width Forward Curved Centrifugal Fans

CRC305FCW-CRE305

Forward Curved Centrifugal Fans (SISW)  
**FEG63**



Performance Chart

Speed (rpm)	Operation Point	Air Flow (m³/h)	S.P. (Pa)	T.P. (Pa)	M.Power (kW)	Max. dB(A)
800	1	1907	57	148	0.37	68
	2	1357	110	156		
	3	1087	128	157		
	4	729	139	153		
	5	460	149	154		
1000	1	2383	89	231	0.55	74
	2	1697	172	244		
	3	1358	199	245		
	4	911	218	239		
	5	575	232	240		
1200	1	2860	128	332	0.75	79
	2	2036	247	351		
	3	1630	287	353		
	4	1093	314	344		
	5	690	334	346		

Speed (rpm)	Operation Point	Air Flow (m³/h)	S.P. (Pa)	T.P. (Pa)	M.Power (kW)	Max. dB(A)
1400	1	3336	174	452	1.1	83
	2	2376	337	478		
	3	1902	391	481		
	4	1275	427	468		
	5	805	455	471		
1600	1	3813	228	591	2.2	87
	2	2715	440	624		
	3	2174	510	628		
	4	1457	558	611		
	5	920	594	616		
1800	1	4290	288	748	3.0	90
	2	3054	557	790		
	3	2445	646	795		
	4	1640	706	773		
	5	1035	752	779		

- Performance certified is for installation type B - Free inlet, Ducted outlet. Power rating kW does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories)  
- The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet Lw(A) sound power levels for installation Type B: free inlet, ducted outlet.



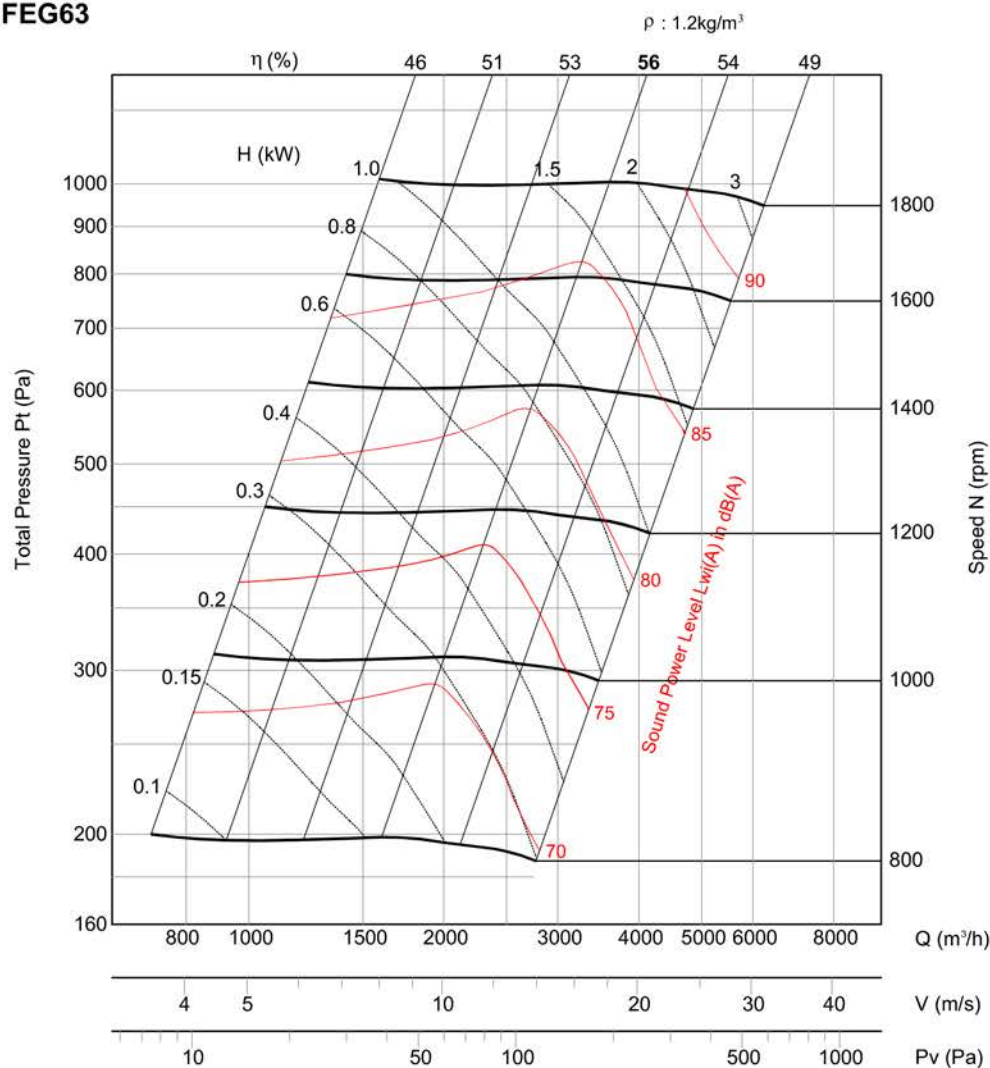
# CRC Series Single Inlet Single Width Forward Curved Centrifugal Fans



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CRC343FCW-CRE343

Forward Curved Centrifugal Fans (SISW)  
FEG63



Performance Chart

Speed (rpm)	Operation Point	Air Flow ( $\text{m}^3/\text{h}$ )	S.P. (Pa)	T.P. (Pa)	M.Power (kW)	Max. dB(A)
800	1	2752	74	188	0.37	70
	2	1986	137	196		
	3	1602	160	199		
	4	1165	177	197		
	5	716	192	200		
1000	1	3440	116	293	0.75	76
	2	2483	214	306		
	3	2003	250	310		
	4	1456	276	308		
	5	895	300	312		
1200	1	4128	167	422	1.5	82
	2	2979	308	441		
	3	2403	360	447		
	4	1747	398	443		
	5	1074	432	449		

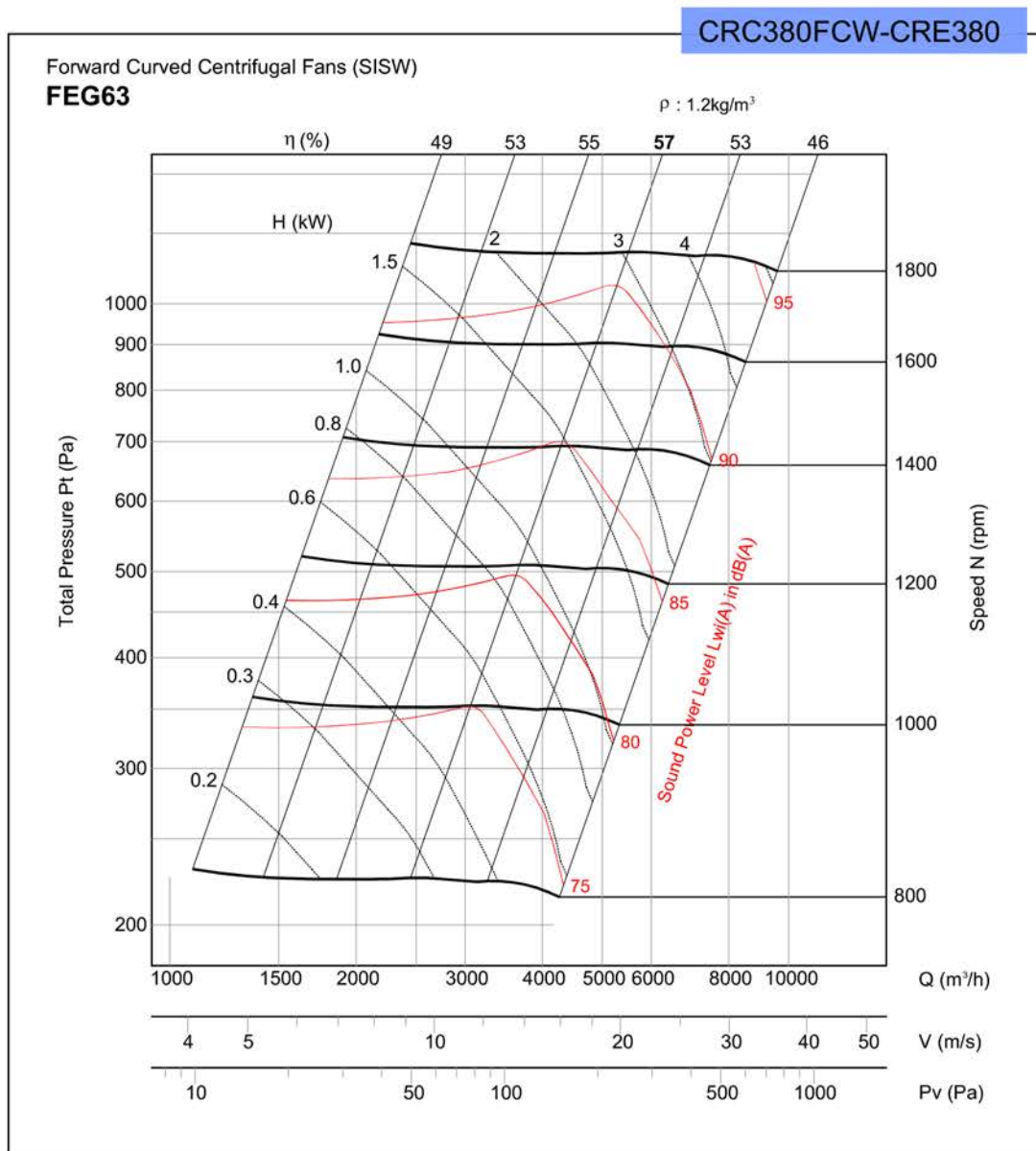
Speed (rpm)	Operation Point	Air Flow ( $\text{m}^3/\text{h}$ )	S.P. (Pa)	T.P. (Pa)	M.Power (kW)	Max. dB(A)
1400	1	4817	227	574	2.2	86
	2	3476	419	600		
	3	2804	490	608		
	4	2038	541	604		
	5	1253	588	612		
1600	1	5505	296	750	3.0	89
	2	3973	548	784		
	3	3204	640	794		
	4	2330	707	788		
	5	1432	768	799		
1800	1	6193	375	950	4.0	93
	2	4469	693	993		
	3	3605	810	1005		
	4	2621	895	998		
	5	1611	972	1022		

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# CRC Series Single Inlet Single Width Forward Curved Centrifugal Fans



Performance Chart

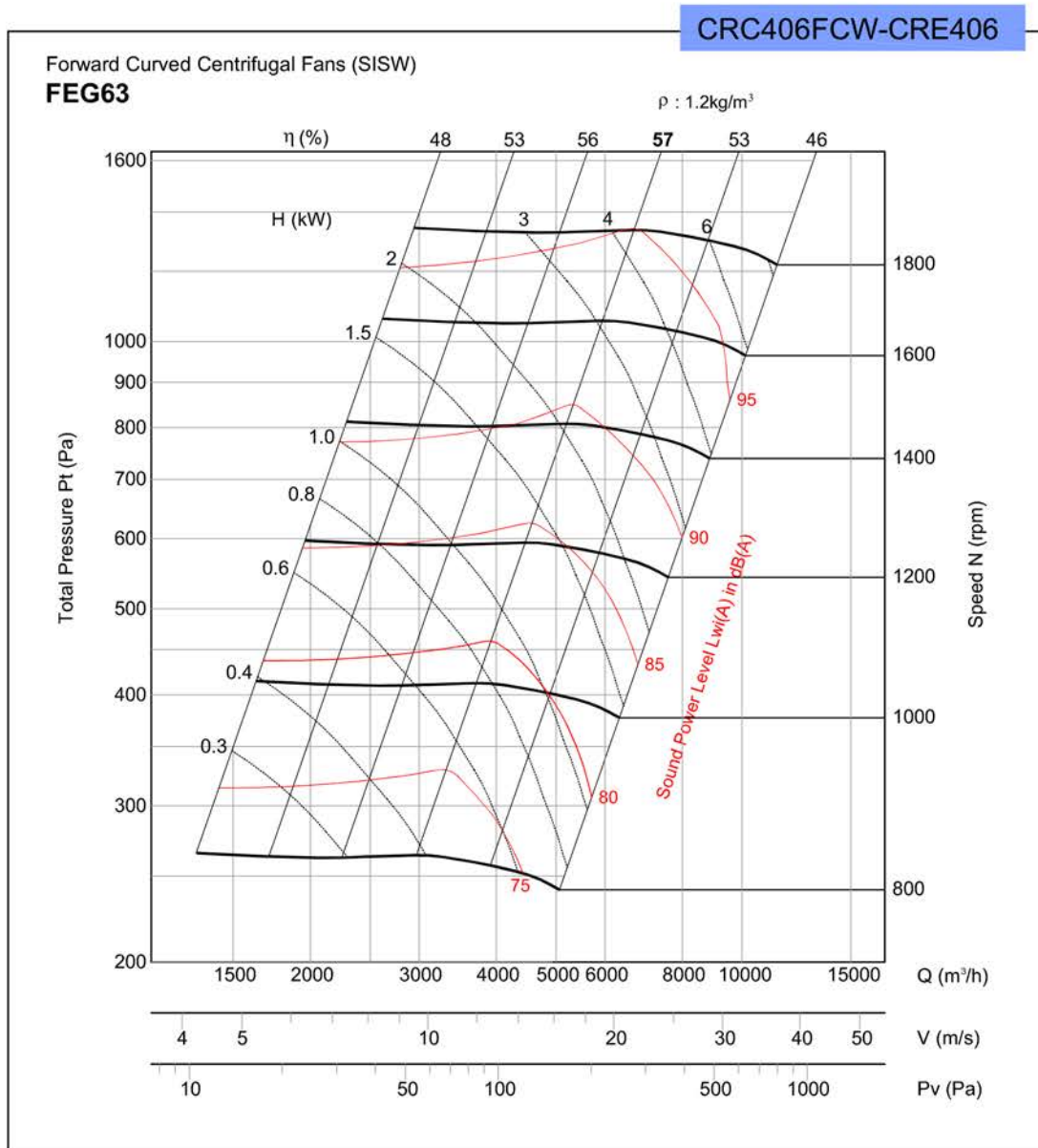
Speed (rpm)	Operation Point	Air Flow (m³/h)	S.P. (Pa)	T.P. (Pa)	M.Power (kW)	Max. dB(A)
800	1	4107	78	218	0.75	75
	2	3132	142	224		
	3	2449	176	226		
	4	1677	202	225		
	5	1165	218	229		
1000	1	5134	122	340	1.5	81
	2	3915	223	349		
	3	3061	275	353		
	4	2097	316	352		
	5	1456	341	359		
1200	1	6161	175	489	2.2	86
	2	4698	320	503		
	3	3674	397	508		
	4	2516	454	507		
	5	1747	491	516		

Speed (rpm)	Operation Point	Air Flow (m³/h)	S.P. (Pa)	T.P. (Pa)	M.Power (kW)	Max. dB(A)
1400	1	7188	238	666	4.0	90
	2	5481	436	685		
	3	4286	540	692		
	4	2935	619	690		
	5	2038	668	703		
1600	1	8215	311	870	5.5	93
	2	6264	570	895		
	3	4898	705	904		
	4	3355	808	901		
	5	2329	873	918		
1800	1	9242	394	1101	7.5	96
	2	7047	721	1132		
	3	5510	893	1144		
	4	3774	1023	1140		
	5	2620	1105	1162		

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# CRC Series Single Inlet Single Width Forward Curved Centrifugal Fans



Performance Chart

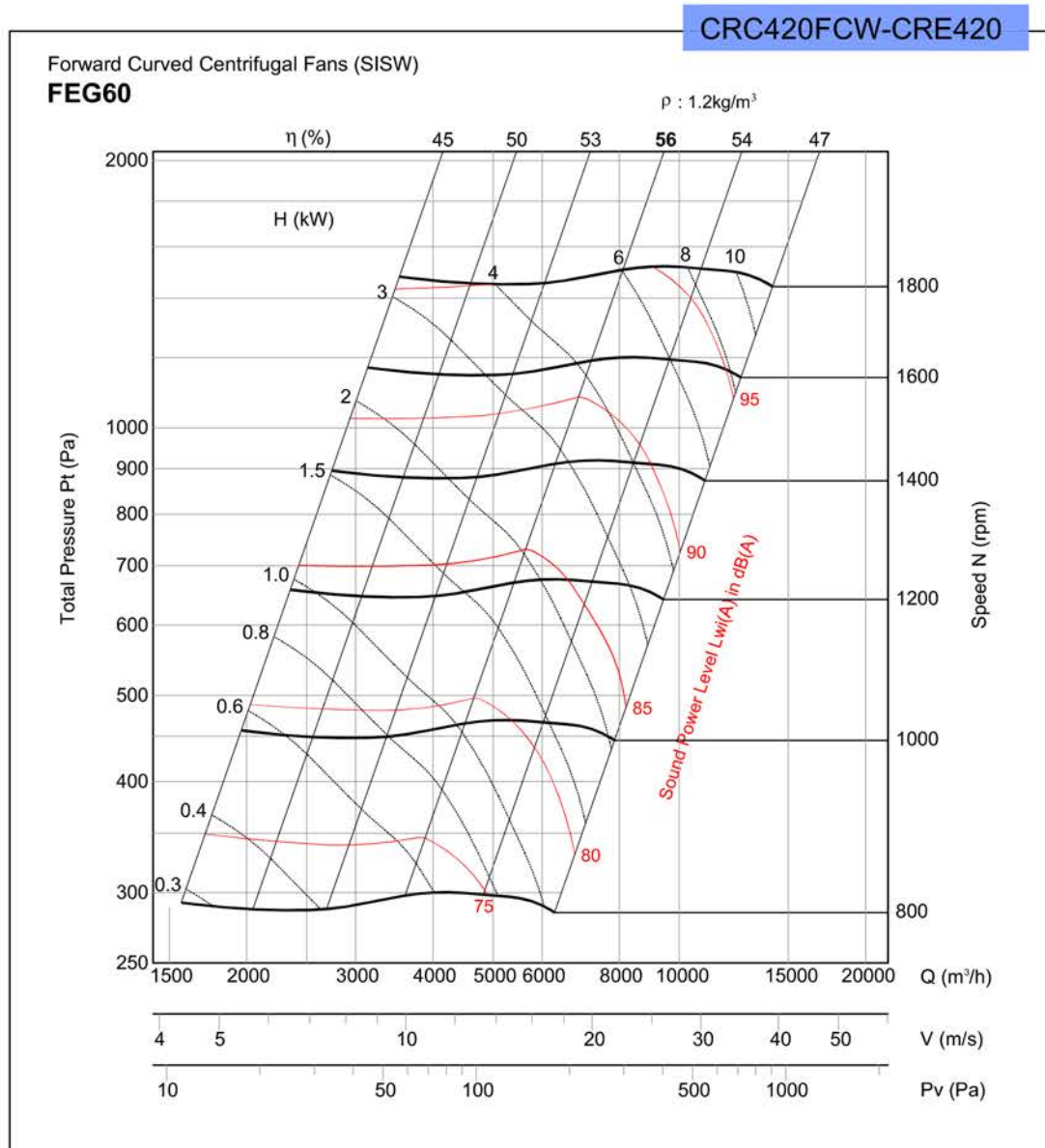
Speed (rpm)	Operation Point	Air Flow (m³/h)	S.P. (Pa)	T.P. (Pa)	M.Power (kW)	Max. dB(A)
800	1	4921	95	244	1.1	77
	2	3705	174	259		
	3	2970	210	264		
	4	2050	236	262		
	5	1260	256	266		
1000	1	6151	148	381	2.2	83
	2	4631	273	405		
	3	3712	327	412		
	4	2563	369	410		
	5	1575	400	415		
1200	1	7382	213	549	3.0	88
	2	5558	393	583		
	3	4455	472	594		
	4	3075	532	590		
	5	1890	576	598		

Speed (rpm)	Operation Point	Air Flow (m³/h)	S.P. (Pa)	T.P. (Pa)	M.Power (kW)	Max. dB(A)
1400	1	8612	291	747	5.5	93
	2	6484	534	793		
	3	5197	642	808		
	4	3588	724	803		
	5	2205	784	814		
1600	1	9842	380	976	7.5	96
	2	7410	698	1036		
	3	5940	838	1056		
	4	4100	945	1049		
	5	2520	1024	1063		
1800	1	11072	480	1235	11	100
	2	8337	883	1311		
	3	6682	1061	1336		
	4	4613	1196	1327		
	5	2835	1296	1345		

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# CRC Series Single Inlet Single Width Forward Curved Centrifugal Fans



Performance Chart

Speed (rpm)	Operation Point	Air Flow (m³/h)	S.P. (Pa)	T.P. (Pa)	M.Power (kW)	Max. dB(A)
800	1	6212	112	286	1.5	78
	2	4499	208	300		
	3	3603	239	298		
	4	2518	258	287		
	5	1622	280	291		
1000	1	7765	174	448	3.0	84
	2	5623	325	468		
	3	4504	373	465		
	4	3147	403	448		
	5	2027	437	455		
1200	1	9318	251	644	5.5	88
	2	6748	468	674		
	3	5405	537	670		
	4	3777	581	645		
	5	2433	629	656		

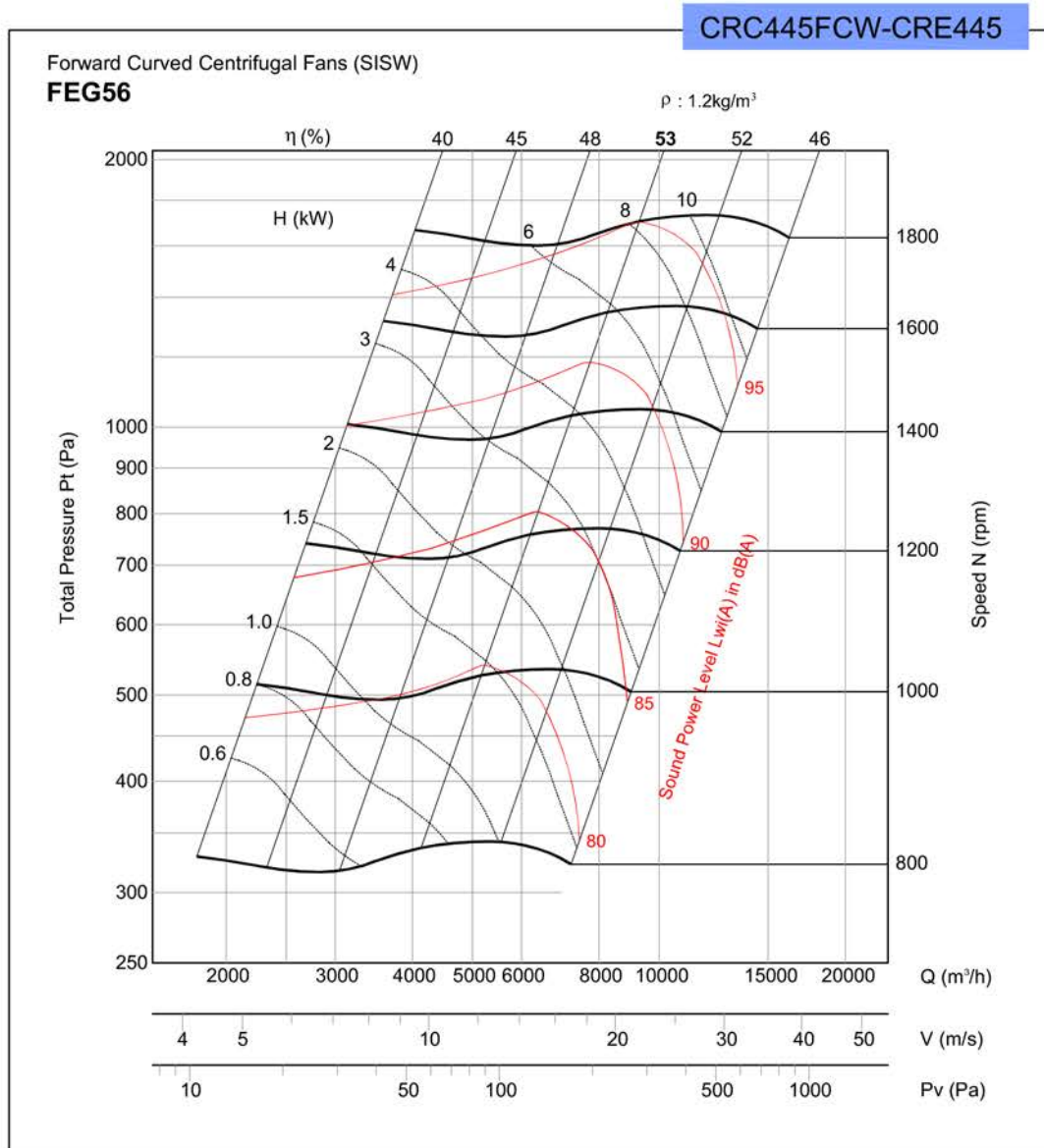
Speed (rpm)	Operation Point	Air Flow (m³/h)	S.P. (Pa)	T.P. (Pa)	M.Power (kW)	Max. dB(A)
1400	1	10872	342	877	7.5	92
	2	7873	637	918		
	3	6306	731	912		
	4	4406	790	878		
	5	2838	856	893		
1600	1	12425	446	1146	11	96
	2	8997	832	1199		
	3	7206	955	1191		
	4	5036	1032	1147		
	5	3244	1118	1166		
1800	1	13978	565	1450	15	100
	2	10122	1053	1517		
	3	8107	1209	1507		
	4	5665	1306	1452		
	5	3649	1415	1476		

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# CRC Series Single Inlet Single Width Forward Curved Centrifugal Fans



Performance Chart

Speed (rpm)	Operation Point	Air Flow (m³/h)	S.P. (Pa)	T.P. (Pa)	M.Power (kW)	Max. dB(A)
800	1	7397	140	319	2.2	79
	2	5365	248	342		
	3	4129	281	337		
	4	2823	290	316		
	5	1850	317	328		
1000	1	9246	218	498	4.0	85
	2	6707	387	535		
	3	5161	439	526		
	4	3529	453	494		
	5	2313	496	513		
1200	1	11096	314	718	7.5	90
	2	8048	558	770		
	3	6194	632	758		
	4	4235	653	712		
	5	2775	714	739		

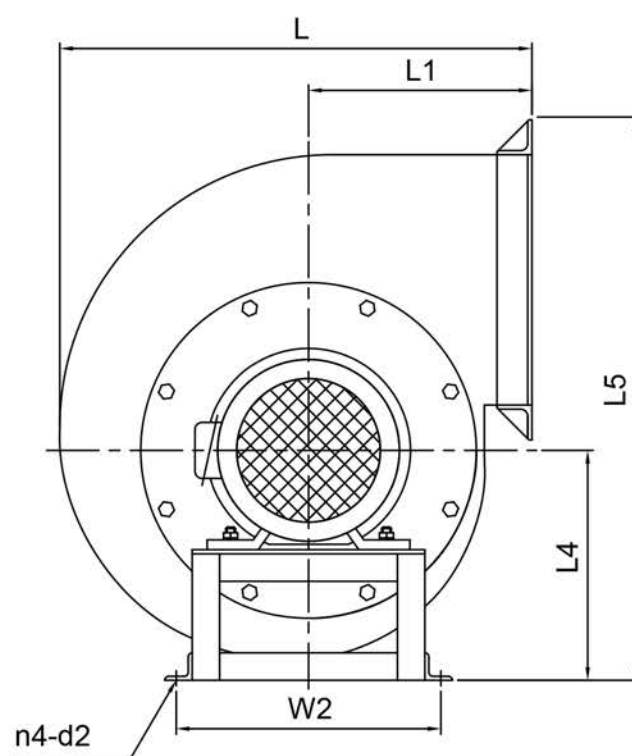
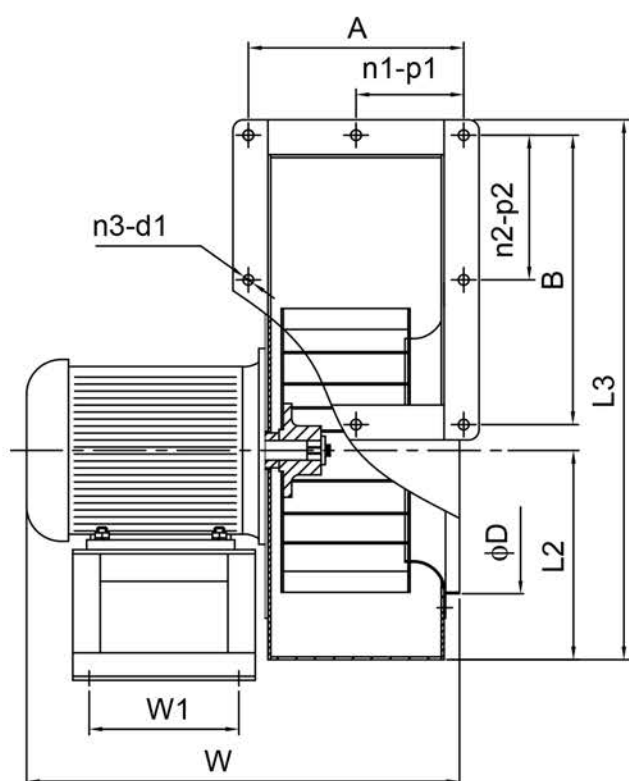
Speed (rpm)	Operation Point	Air Flow (m³/h)	S.P. (Pa)	T.P. (Pa)	M.Power (kW)	Max. dB(A)
1400	1	12945	427	977	11	94
	2	9289	759	1048		
	3	7226	860	1031		
	4	4941	888	969		
	5	3238	971	1006		
1600	1	14794	558	1276	15	97
	2	10730	991	1369		
	3	8258	1123	1347		
	4	5647	1160	1265		
	5	3700	1269	1314		
1800	1	16644	706	1615	18.5	100
	2	12072	1255	1732		
	3	9291	1422	1705		
	4	6353	1469	1601		
	5	4163	1606	1663		

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# CRC Series Single Inlet Single Width Forward Curved Centrifugal Fans



Model	φD	W	W1	W2	A	B	L	L1	L2	L3	L4	L5	n1-p1	n2-p2	n3-d1	n4-d2
265mm	268	460	120	214	225	250	465	204	210	564	235	589	2-112.5	2-125	8-Ø7.5	4-Ø13
305mm	308	515	140	234	235	273	524	230	238	632	265	659	2-117.5	3-91	10-Ø7.5	4-Ø13
343mm	347	579	190	274	273	285	577	256	264	685	290	711	2-136.5	3-95	10-Ø7.5	4-Ø13
380mm	384	645	200	305	319	309	626	275	288	745	317	774	2-159.5	3-103	10-Ø7.5	4-Ø13
406mm	411	705	210	345	325	381	708	305	323	865	351	894	2-162.5	3-127	10-Ø7.5	4-Ø15
420mm	426	756	250	345	331	420	756	320	344	936	372	964	2-165.5	3-140	10-Ø7.5	4-Ø15
445mm	452	841	300	414	351	450	808	347	363	988	388	1013	2-175.5	3-150	10-Ø7.5	4-Ø15

For the dimension of CRE series, please contact us and provide us the forms of running and the duty of the motors.  
Wing Ton will provide the most updated drawings to you.





# WING TON FAN INDUSTRY LIMITED



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