



POSITIVE DISPLACEMENT BLOWERS & VACUUM PUMPS

CycloBlower[®] Industrial Series



It's all about...

The CycloBlower®

INDUSTRIAL PROCESSING

Recovery Air of Gas

Combustion Air

Air Drying

Air Flotation & Sliding

Blow-off Systems/Drying/Can Drying

Carbon Black

Coal Gasification

Coke Oven Gas

Gas Boosting

Vacuum Systems

Air Knife Stripping

WATER TREATMENT

Pond Aeration, Municipal or Industrial

Wastewater Treatment

Aeration

Air Scouring

Digester Gas Boosters

Filter Backwashing

PARTICULATE HANDLING

Clean Rooms

Clean-up

Pneumatic Conveying

Dry Bulk

Fly Ash

Source Capture

Experience Unmatched Durability & Efficiency

Reliability You Can Trust

With over 50 years of proven results, the CycloBlower Industrial Series legacy of durable design and efficient operation continues to offer significant advantages for Industrial Applications.

Designed with contoured ports and helical screw rotor profiling, the CycloBlower Industrial Blower delivers efficient, shock-free compression cycles with smooth, reliable, airflow.

The CycloBlower Offers

- Pressure to 20 psig
- Dry Vacuum up to 17 inHg
- Wet Vacuum up to 24 inHg
- Airflow to 6700 cfm
- Warranty:
 - 18 months from date of install or
 - 24 months from date of shipment (whichever occurs first)



7CDL14R

Coverage from
Coast to Coast

Our regional distributor network ensures that we're here when you need us. With over 30 domestic locations, we're there when you require expert service.



It's all about...

OPTIONS

- High Capacity
 - Can be operated at higher speeds for increased capacity
- Air and Gas service options with lip and mechanical seals available
- Installation Flexibility
 - Units can be powered by various types of drives

working for your

APPLICATION

Sustainable Performance for a Wide Range of Applications



Cement



Wastewater Treatment



Pneumatic Conveying

Robust Anti-friction Bearings for Extended Blower Life

- Angular Contact Bearings on discharge end accommodate combined radial and axial loads for improved capacity
- Cylindrical roller bearings and or single-row ball bearings on the gear end for increased load capacity

Dual Splash Lubrication

- Optimized oil distribution for reduced bearing temp

Helical Timing Gears

- Precision alloy steel gears for non-slip rotor timing
- Smooth, quiet operation at all speeds

One Piece Housing

- Increased strength and rigidity
- Resists deflection to retain accurate running tolerances between rotors

Advanced Sealing Technology

- Proprietary bearing isolator seals for extended blower life and reliable delivery of oil-free air
- Labyrinth shaft seals provide a minimum of controlled leakage of air or gas
- Purged labyrinth or mechanical seals available for gas operation where leakage cannot be tolerated



Power Generation



Plastics



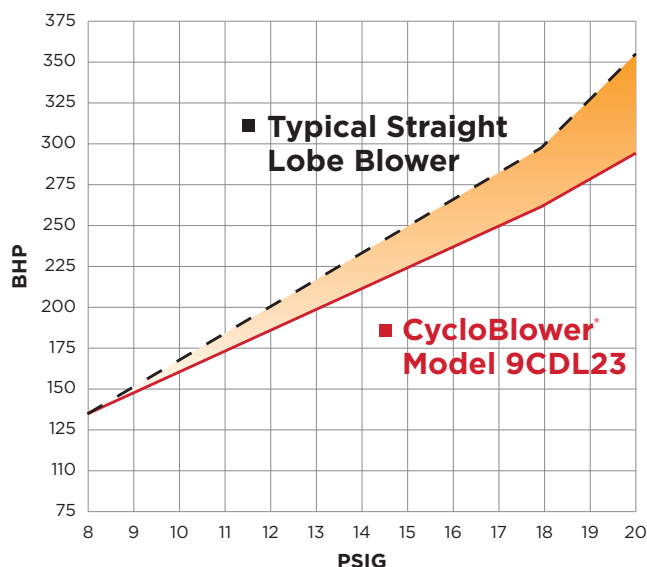
Chemical Processing

Unique Screw Design For Improved Energy Savings

In many comparable applications, the CycloBlower operates more efficiently than other straight-lobe blowers. By requiring less brake horsepower, BHP, energy operating costs can be realized and reduced.

Brake Horsepower Requirement Comparison

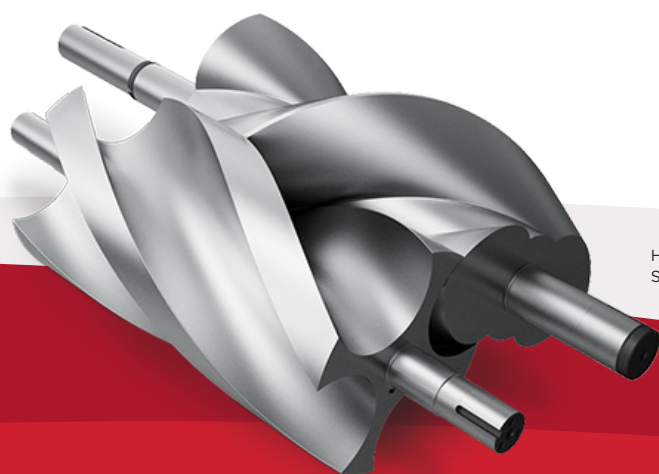
The graph below shows a comparison of the BHP for a typical straight-lobe blower versus a CycloBlower 9CDL23. The CycloBlower requires less BHP to produce 3,000 cfm at pressures from 8 to 20 PSIG.



Annual Energy Cost Savings

The table below shows annual energy cost savings from BHP reduction, based on supplying 3,000 cfm for 8,736 hours, approximately 1 year, of operation assuming motor/drive efficiency = .90, and energy cost per kilowatt-hour = \$0.14.

PSI	BHP REQUIREMENT FOR 3,000 CFM		ASSUMING COST/kWh = \$0.14	
	TYPICAL STRAIGHT LOBE	CYCLOBLOWER 9CDL23	PERCENT BHP REDUCTION	ANNUAL ESTIMATED SAVINGS
8	130	125	3.8%	\$5,066.44
9	145	140	3.4%	\$5,066.44
10	162	154	4.9%	\$8,107.56
11	180	167	7.2%	\$13,174.00
12	195	180	7.7%	\$15,200.89
13	212	195	8.0%	\$17,227.78
14	230	210	8.7%	\$20,267.33
15	245	222	9.4%	\$23,306.89
16	260	235	10.0%	\$25,333.78
17	276	249	10.5%	\$27,360.67
18	294	264	11.6%	\$30,401.78
19	340	278	18.0%	\$62,828.89
20	360	291	19.1%	\$69,922.22



Helical Screw Rotor

DIMENSIONAL DATA

MODEL	L	W	H	SIZE & TYPE PORTS	WT
3CDL5	19 ½	10 ½	11 ½	2.5" NPT, Both Ports	165
3CDL8	22 ½	10 ½	11 ½	3" NPT, Both Ports	185
A5CDL5	19 ¾	15	15 ¾	3" NPT, Both Ports	237
A5CDL9	23 ¾	15	15 ¾	5" Flange, 10" OD, Both Ports	310
A5CDL13	27 ¾	15	15 ¾	5" Flange, 10" OD, Both Ports	361
5CDL5	28 ¾	15	15 ¾	3" Flange, 7.5" OD, Both Ports	372
5CDL9	32 ¾	15	15 ¾	5" Flange, 10" OD, Both Ports	441
5CDL13	36 ¾	15	15 ¾	5" Flange, 10" OD, Both Ports	500
7CDL11	36 ½	20 ½	19 ¾	8" Flange, 13.5" OD, Both Ports	867
7CDL14	39 ½	20 ½	19 ¾	8" Flange, 13.5" OD, Both Ports	911
7CDL17	42 ½	20 ½	19 ¾	8" Flange, 13.5" OD, Both Ports	1016
9CDL18	44 ½	25 ¾	23	Inlet - 10" Flange, 16" OD Discharge - 8" Flange, 13.5" OD	1673
9CDL23	49 ½	25 ¾	23	Inlet - 10" Flange, 16" OD Discharge - 8" Flange, 13.5" OD	1843
11CDL23	53	33	29	Inlet - 14" Flange, 21" OD Discharge - 12" Flange, 19" OD	3150
11CDL27	57	33	29	Inlet - 14" Flange, 21" OD Discharge - 12" Flange, 19" OD	3340
11CDL31	61	33	29	Inlet - 14" Flange, 21" OD Discharge - 12" Flange, 19" OD	3530

Dimensions shown in inches. Weights are in pounds and approximate.

Genuine Gardner Denver Parts & Lubricants

- Maintain the Gardner Denver performance advantage and reliability with Genuine GD Replacement Parts available through authorized sales and service representatives
- Protect your Gardner Denver investment with AEON® PD, the only lubricant specially formulated for all blowers in any environment
- Available for standard, food grade and extreme duty applications



CycloBlower Performance Data

BLOWER MODEL	SPEED RPM	PRESSURE												VACUUM											
		5 PSIG		9 PSIG		12 PSIG		15 PSIG		18 PSIG		20 PSIG		8 INHG		12 INHG		16 INHG		17 INHG		CFM	BHP	CFM	BHP
		CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP				
3CDL5	1000	62	1.8	48	3.2	38	4.1	26	5.5					56	1.8										
	1500	108	3.4	94	5.6	84	7.0	74	9.0					105	2.9	92	3.8								
	2000	153	5.0	104	8.0	131	10.0	121	12.4	111	14.5			155	4.0	142	5.4	125	6.8						
	2500	198	6.7	186	10.4	178	13.0	168	15.8	159	18.5			206	5.1	192	7.0	175	8.9						
	3000	243	8.4	232	12.6	225	16.0	216	19.2	207	22.5			254	6.2	241	8.6	223	10.9						
	3500	289	10.0	278	15.0	272	18.9	264	22.6	256	26.5			304	7.3	292	10.2	273	13.0						
3CDL8	1000	85	2.6	61	4.9	53	6.5	42	8.7					80	2.4										
	1500	152	4.5	144	7.9	134	10.5	120	13.1					155	3.9	135	5.3								
	2000	220	6.5	200	11.0	188	14.2	175	17.5	160	20.8			228	5.4	208	7.4	188	9.4						
	2500	287	8.5	265	14.0	256	18.0	242	21.8	228	26.0			304	7.0	284	9.3	262	12.0						
	3000	355	10.5	332	17.0	322	22.0	311	26.3	296	31.4			378	8.5	358	11.2	338	14.4						
	3500	422	12.3	400	20.1	388	25.6	378	30.6	362	36.6			452	9.9	432	13.2	412	16.8						
A5CDL5	1500	97	3.5	78	6.0									108	3.0	90	4.1								
	2000	143	4.5	124	8.0	112	10.0							158	3.9	141	5.3								
	2500	190	6.5	171	10.5	159	13.5							210	4.9	193	6.6								
	3000	238	8.0	218	13.2	205	17.0							261	6.2	244	8.1								
	3500	283	10.1	265	16.0	252	20.2							312	7.6	296	10.0								
	4000	330	12.5	312	18.5	298	24.0							362	9.1	347	11.7								
A5CDL9	1500	180	6.5	150	12.0									163	4.6	125	6.6								
	2000	267	8.5	237	15.0	220	19.0							258	6.1	220	8.5								
	2500	355	10.5	325	17.5	307	23.0							355	7.7	315	11.1								
	3000	442	12.5	412	21.0	394	27.5							450	10.2	411	13.4								
	3500	530	15.0	500	25.0	482	32.0							545	10.8	506	15.6								
	4000	617	18.0	587	30.0	570	38.0							640	12.5	600	17.9								
A5CDL13	1500	250	8.0	219	14.0	194	19.0							230	6.0	180	9.0								
	2000	375	11.5	343	19.2	319	25.5							350	8.9	300	12.2								
	2500	500	15.0	468	24.5	444	32.0							470	11.5	422	15.8								
	3000	625	18.5	593	30.0	569	39.0							593	14.5	543	19.2								
	3500	750	22.2	718	36.0	694	46.5							712	17.3	665	22.6								
	4000	875	27.5	843	43.0	819	54.0							835	20.0	785	26.1								
5CDL5	1500	97	3.5	78	6.0									108	3.0	90	4.1								
	2000	143	4.5	124	8.0	112	10.0							158	3.9	141	5.3	124	7.2						
	2500	190	6.5	171	10.5	159	13.5	149	17.0					210	4.9	193	6.6	176	8.8	174	9.2				
	3000	238	8.0	218	13.2	205	17.0	195	20.8					261	6.2	244	8.1	228	10.4	225	11.0				
	3500	283	10.1	265	16.0	252	20.2	240	24.8	226	28.7			312	7.6	296	10.0	281	12.3	276	12.9				
	4000	330	12.5	312	18.5	298	24.0	285	29.0	267	33.4	263	37.1	362	9.1	347	11.7	333	14.3	327	14.8				
5CDL9	1500	180	6.0	150	12.0									165	4.7	130	6.6	82	9.4						
	2000	267	8.0	237	15.0	220	19.0							260	6.0	223	8.9	175	12.5						
	2500	355	10.2	325	17.5	307	23.0	290	28.5					355	7.5	315	11.1	272	15.5						
	3000	442	12.5	412	21.0	394	27.5	380	34.0	365	40.0	348	44.9	450	9.1	412	13.4	367	18.5	359	19.9				
	3500	530	15.0	500	25.0	482	32.0	465	40.0	450	45.0	436	52.4	545	10.6	504	15.6	462	21.5	454	23.1				
	4000	617	18.0	587	30.0	570	38.0	550	46.0	540	53.0	524	60.6	640	12.2	600	17.9	558	24.5	549	26.4				
5CDL13	1500	250	8.0	219	14.0	194	19.0							230	6.0	180	9.0	122	11.3						
	2000	375	11.5	343	19.2	319	25.5	300	32.0					350	8.9	300	12.2	245	15.4						
	2500	500	15.0	468	24.5	444	32.0	425	40.0					470	11.5	422	15.8	370	20.0						
	3000	625	18.5	593	30.0	569	39.0	550	48.0	525	58.0	510	62.5	593	14.5	543	19.2	495	24.0	482	25.2				
	3500	750	22.5	718	36.0	694	46.5	675	56.0	650	66.0	635	72.4	712	17.3	665	22.6	620	28.0	604	29.2				
	4000	875	27.5	843	43.0	819	54.0	800	64.0	775	74.0	760	82.2	835	20.0	760	26.1	745	32.0	726	33.4				
	4500	996	33.1	966	49.6	944	62.0	922	71.1	900	82.8	885	91.7	962	23.0	911	29.9	861	36.3	848	37.7				
	5000	1121	39.3	1091	56.4	1069	70.1	1047	78.2	1024	92.3	1009	101.3	1084	25.9	1033	33.5	982	40.4	970	42.0				

BLOWER MODEL	SPEED RPM	PRESSURE												VACUUM							
		5 PSIG		9 PSIG		12 PSIG		15 PSIG		18 PSIG		20 PSIG		8 INHG		12 INHG		16 INHG		17 INHG	
		CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
7CDL11	1100	330	10.0	275	18.0	240	25.0							335	8.0	275	12.0	215	16.0		
	1600	540	16.5	485	28.0	455	37.0							555	12.0	495	18.0	425	24.0		
	2100	760	22.5	705	38.0	670	49.0	640	59.0	620	72.0	584	78.5	780	17.5	720	24.0	645	32.0	633	33.4
	2600	980	28.0	920	48.0	890	61.0	855	75.0	835	91.0	801	97.8	1010	22.5	940	30.0	865	39.0	858	42.8
	3100	1200	35.0	1140	59.0	1110	75.0	1080	91.0	1050	110.0	1019	118.9	1230	26.0	1165	36.0	1085	47.0	1082	52.1
	3600	1410	42.0	1360	70.0	1325	89.0	1290	108.0	1260	130.0	1237	141.7	1455	30.0	1385	43.0	1310	56.0	1306	60.8
	4000	1591	48.5	1543	78.7	1507	100.0	1471	121.0	1435	144.9	1411	160.4	1633	35.1	1567	48.3	1501	63.8	1485	67.5
7CDL14	1100	430	16.0	380	24.0	350	30.0							440	10.0	385	14.0	320	18.0		
	1600	700	20.0	650	33.0	620	44.0	595	55.0					735	15.0	675	22.0	615	27.0	599	29.1
	2100	975	27.0	925	44.0	895	58.0	865	72.0	815	85.0	804	94.0	1030	22.0	970	29.0	910	37.0	893	39.2
	2600	1250	35.0	1200	57.0	1170	75.0	1140	91.0	1090	107.0	1078	119.8	1325	26.0	1265	37.5	1205	47.0	1187	49.1
	3100	1530	44.0	1470	70.0	1450	90.0	1420	110.0	1370	130.0	1353	144.2	1615	32.0	1560	44.0	1500	56.0	1481	58.9
	3600	1800	53.0	1750	84.0	1720	107.0	1695	130.0	1650	152.0	1627	167.2	1900	38.0	1850	52.5	1790	66.0	1775	68.8
	4000	2023	61.9	1976	96.3	1941	120.8	1905	141.5	1870	170.8	1847	185.9	2145	42.4	2085	58.4	2025	73.4	2010	76.7
7CDL17	1100	490	15.0	410	25.0	370	30.0							525	12.0	450	16.0	375	22.0		
	1600	810	22.0	740	39.0	695	48.0							870	18.0	800	24.0	720	32.0	722	34.4
	2100	1140	30.0	1070	53.0	1025	68.0	985	84.0	950	98.0	918	112.4	1225	24.0	1160	32.0	1075	42.0	1078	45.2
	2600	1460	40.0	1400	67.0	1355	86.0	1320	106.0	1285	124.0	1247	138.5	1590	31.0	1520	41.0	1430	52.0	1434	55.9
	3100	1795	51.0	1730	81.0	1690	105.0	1650	128.0	1625	150.0	1576	163.1	1930	40.0	1875	50.0	1820	63.0	1789	67.4
	3600	2125	64.0	2060	98.0	2025	124.0	1990	152.0	1960	176.0	1905	190.1	2290	48.0	2250	60.0	2165	75.0	2145	79.8
	4000	2391	75.3	2331	109.3	2287	136.5	2242	166.1	2197	194.7	2168	212.7	2572	57.5	2509	69.8	2446	85.0	2430	89.7
9CDL18	1200	1130	32.0	1020	52.0	960	70.0	920	85.0					1170	25.0	1100	36.0	1030	47.0	1027	52.2
	1500	1480	42.0	1385	69.0	1325	89.0	1280	106.0					1530	32.0	1460	44.0	1390	57.0	1389	61.3
	1800	1840	52.0	1750	85.0	1690	110.0	1640	130.0	1600	152.0	1557	175.3	1890	39.0	1830	53.0	1760	68.0	1750	72.3
	2100	2195	63.0	2110	101.0	2060	131.0	2010	155.0	1965	184.0	1916	208.4	2250	48.0	2190	63.0	2130	80.0	2112	85.1
	2400	2550	77.0	2465	120.0	2420	152.0	2370	182.0	2330	216.0	2275	241.7	2610	60.0	2550	76.0	2495	94.0	2473	99.9
	2700	2900	95.0	2820	140.0	2780	175.0	2740	216.0	2690	255.0	2634	277.2	2965	77.0	2910	95.0	2855	113.0	2835	117.1
	3000	3273	110.9	3199	160.5	3142	200.4	3086	249.9	3030	293.7	2993	317.6	3340	95.9	3276	114.9	3212	132.7	3196	136.9
9CDL23	1200	1370	42.0	1220	70.0	1150	85.0	1070	95.0					1380	32.0	1275	43.0	1150	54.0	1097	54.2
	1500	1810	56.0	1680	88.0	1620	107.0	1550	125.0	1460	150.0	1420	169.0	1850	42.0	1730	55.0	1600	69.0	1563	72.2
	1800	2270	70.0	2150	107.0	2090	133.0	2020	156.0	1930	185.0	1882	203.6	2320	51.0	2200	67.0	2060	86.0	2028	90.4
	2100	2720	85.0	2610	127.0	2560	159.0	2500	187.0	2410	222.0	2345	238.6	2780	61.0	2650	79.0	2510	102.0	2494	108.7
	2400	3180	97.0	3080	147.0	3040	185.0	2980	218.0	2890	257.0	2807	275.1	3250	70.0	3110	92.0	2970	118.0	2959	126.7
	2700	3630	110.0	3550	166.0	3500	210.0	3450	250.0	3360	295.0	3269	313.1	3720	80.0	3570	104.0	3410	134.0	3425	144.6
	3000	4110	124.6	4009	186.4	3933	232.9	3857	271.8	3782	323.5	3731	350.5	4173	89.5	4047	115.9	3922	152.1	3890	162.4
11CDL23	800	1600	50.0	1420	80.0	1380	100.0	1280	118.0	1220	140.0			1500	35.0	1325	50.0	1160	63.0		
	1100	2330	60.0	2160	105.0	2060	130.0	2000	160.0	1900	190.0	1803	213.6	2250	49.0	2070	68.0	1880	86.0	1816	87.0
	1400	3065	85.0	2900	140.0	2810	175.0	2700	215.0	2600	250.0	2523	279.6	2990	70.0	2800	92.0	2625	114.0	2562	114.0
	1700	3800	115.0	3630	175.0	3520	220.0	3400	265.0	3300	315.0	3243	348.8	3720	94.0	3540	120.0	3340	143.0	3309	144.8
	2000	4530	145.0	4360	215.0	4240	270.0	4120	320.0	4000	375.0	3963	416.2	4480	122.0	4280	148.0	4080	175.0	4055	178.1
	2200	4988	171.6	4843	240.6	4734	303.1	4625	362.5	4516	425.4	4443	461.2	4974	139.8	4787	169.3	4599	193.9	4552	200.9
11CDL27	800	1760	50.0	1580	85.0	1440	115.0	1320	140.0					1725	40.0	1515	57.0	1310	74.0		
	1100	2600	75.0	2400	120.0	2280	160.0	2160	190.0	2040	230.0	1951	249.6	2590	57.0	2390	78.0	2190	99.0	2121	106.3
	1400	3440	103.0	3240	155.0	3120	205.0	3000	250.0	2880	290.0	2791	322.7	3460	81.0	3260	106.0	3060	132.0	2989	137.0
	1700	4280	135.0	4080	200.0	3960	255.0	3840	310.0	3700	360.0	3630	402.2	4340	108.0	4130	137.0	3920	165.0	3856	170.1
	2000	5120	170.0	4920	250.0	4800	315.0	4680	380.0	4560	440.0	4469	484.2	5200	140.0	4990	168.0	4780	197.0	4724	203.9
	2200	5677	197.2	5504	285.5	5374	357.2	5245	420.6	5115	496.9	5029	539.3	5762	161.5	5558	187.9	5353	218.2	5302	226.2
11CDL31	800	2020	60.0	1825	95.0	1700	125.0	1575	155.0	1450	185.0			2100	45.0	1900	62.0	1700	80.0	1677	83.4
	1100	3000	80.0	2800	135.0	2690	170.0	2565	210.0	2440	250.0	2342	272.7	3040	65.0	2825	88.0	2610	108.0	2589	111.0
	1400	3990	110.0	3780	175.0	3680	225.0	3555	275.0	3430	325.0	3327	352.4	3920	89.0	3720	117.0	3550	140.0	3501	143.8
	1700	4975	140.0	4770	225.0	4670	285.0	4550	345.0	4420	405.0	4312	445.1	4820	115.0	4645	147.0	4450	174.0	4413	181.6
	2000	5950	180.0	5760	280.0	5660	355.0	5550	430.0	5420	500.0	5297	547.2	5720	145.0	5550	180.0	5360	213.0	5324	223.5
	2200	6611	201.8	6436	320.6	6304	403.2	6173	484.5	6042	559.3	5954	619.4	6333	169.1	6155	208.7	5977	244.1	5932	253.2

Performance based on inlet air at standard temperature of 68° F, an ambient pressure of 14.7 psia and 36% relative humidity.
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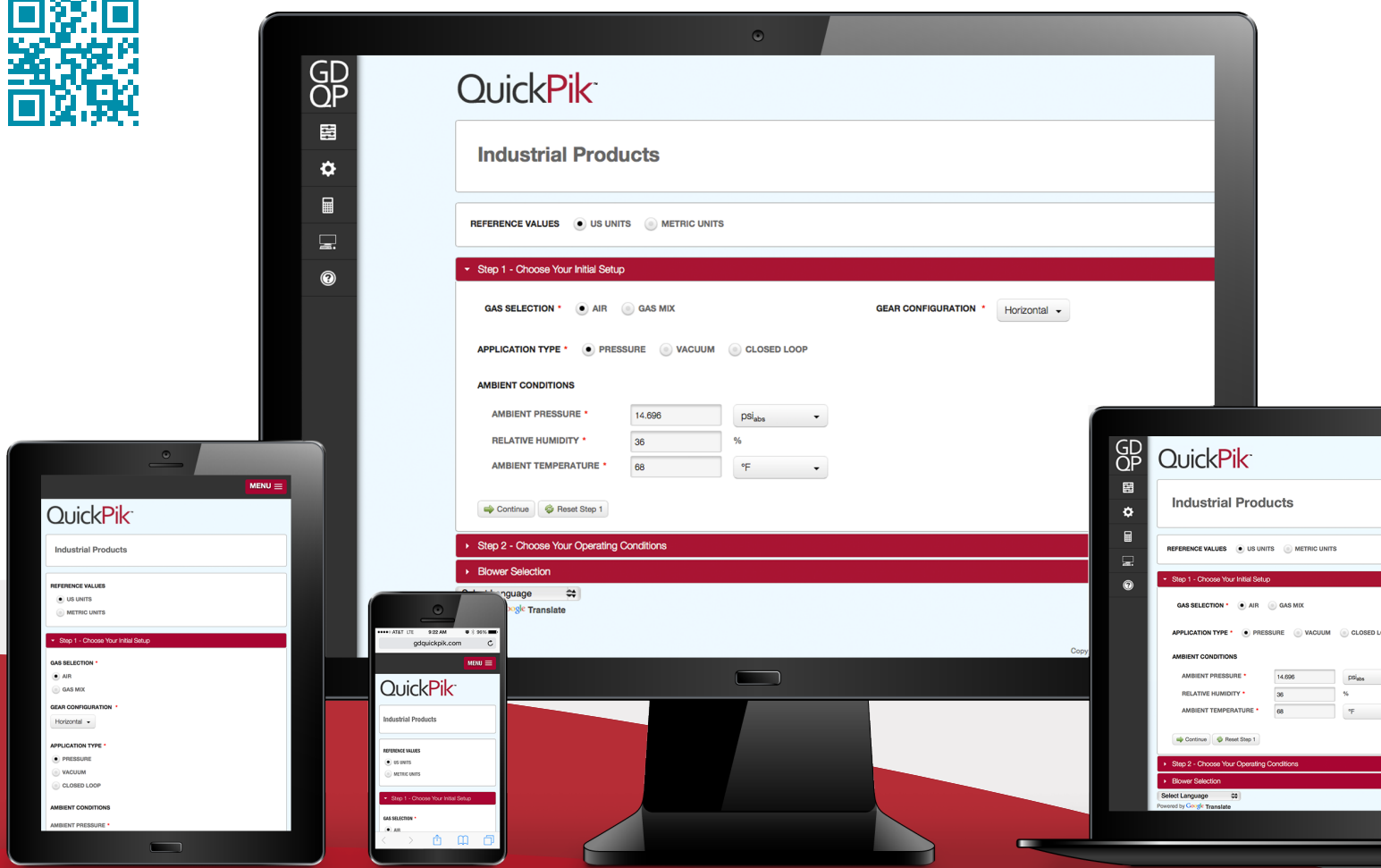
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CycloBlower - 5CDL9

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Product Information

ORIGINAL UNITS

CONFIGURATIONS	FLOW ICFM	SPEED RPM	RPM % OF MAX	POWER HP	TEMP F	NOISE DBA	TEMP % OF MAX
Original	500	3536	71	30.0	194	87	55
Current	500	3536	71	30.0	194	87	55

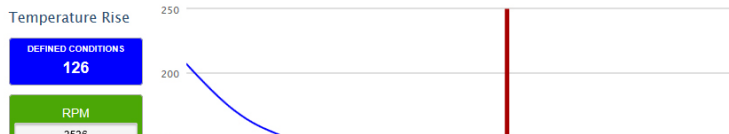
ENGLISH UNITS

CONFIGURATIONS	FLOW ICFM	SPEED RPM	RPM % OF MAX	POWER HP	TEMP F	NOISE DBA	TEMP % OF MAX
Original	500	3536	71	30.0	194	87	55
Current	500	3536	71	30.0	194	87	55

METRIC UNITS

CONFIGURATIONS	FLOW M³/H	SPEED RPM	RPM % OF MAX	POWER KW	TEMP C	NOISE DBA	TEMP % OF MAX
Original	850	3536	71	22.4	90	87	55
Current	850	3536	71	22.4	90	87	55

Performance Curves



Comparison



PRODUCT	CycloBlower - 5CDL9	Sutorbilt Legend - 7H	HellFlow - 412
FLOW ICFM	500	500	500
SPEED RPM	3536	1689	2541
RPM % OF MAX	71	82	56
POWER HP	30	31	32
DISCHARGE TEMP °F	194	201	214
NOISE DBA	87	92	82
DISCHARGE TEMP % OF MAX	55	59	61
PRESSURE % OF MAX	52	70	70

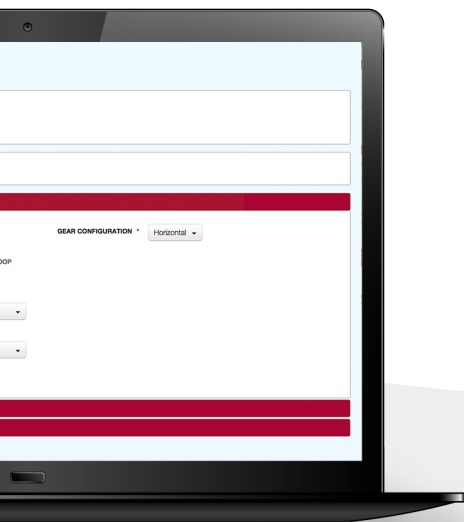
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Printed in U.S.A.
PD-CB-IND 3rd Ed. 12/25



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