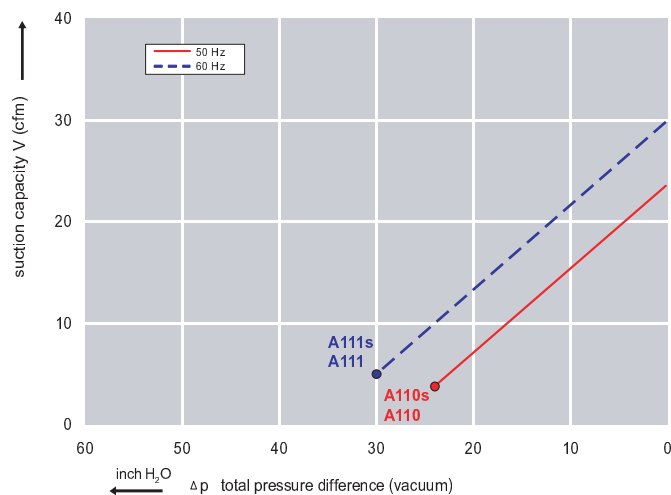




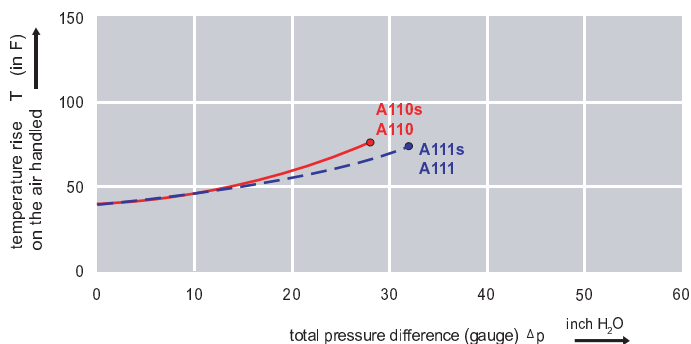
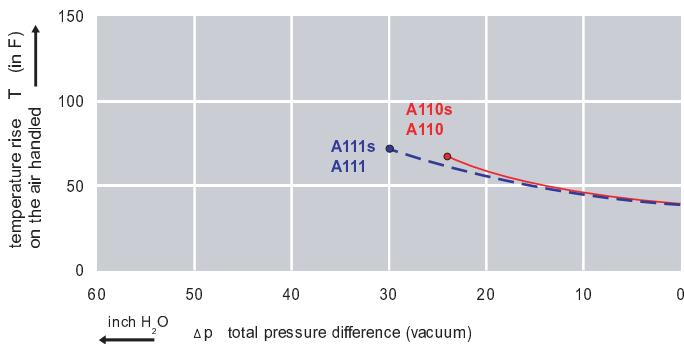
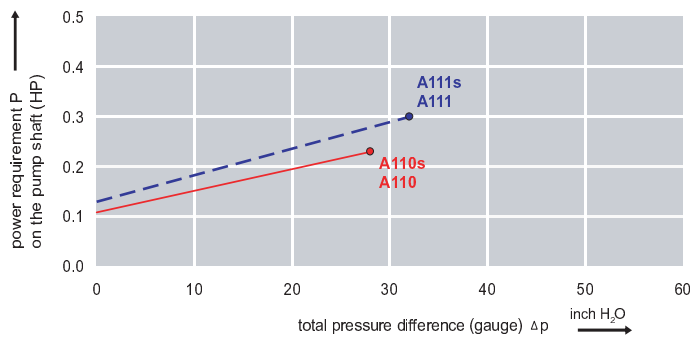
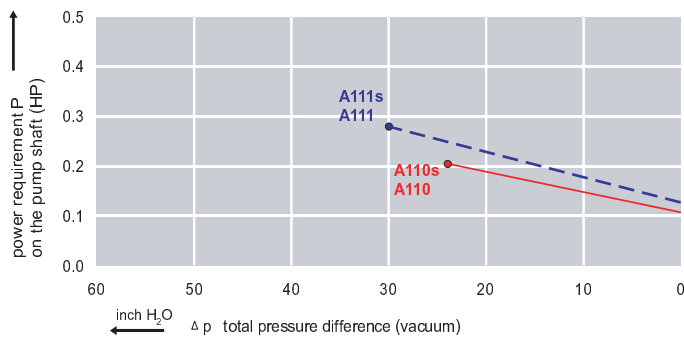
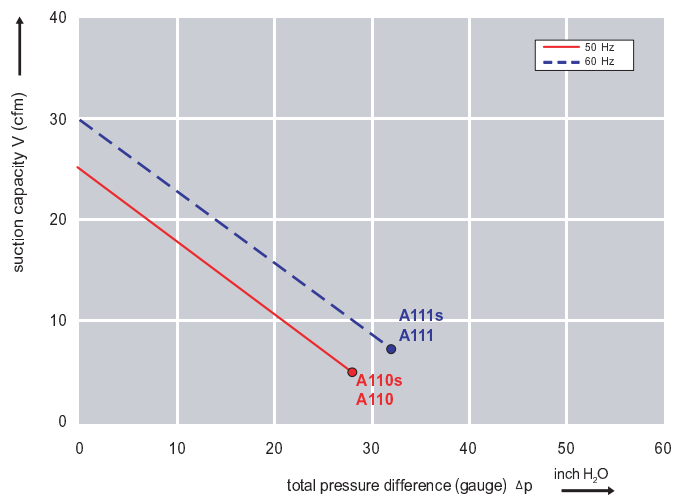
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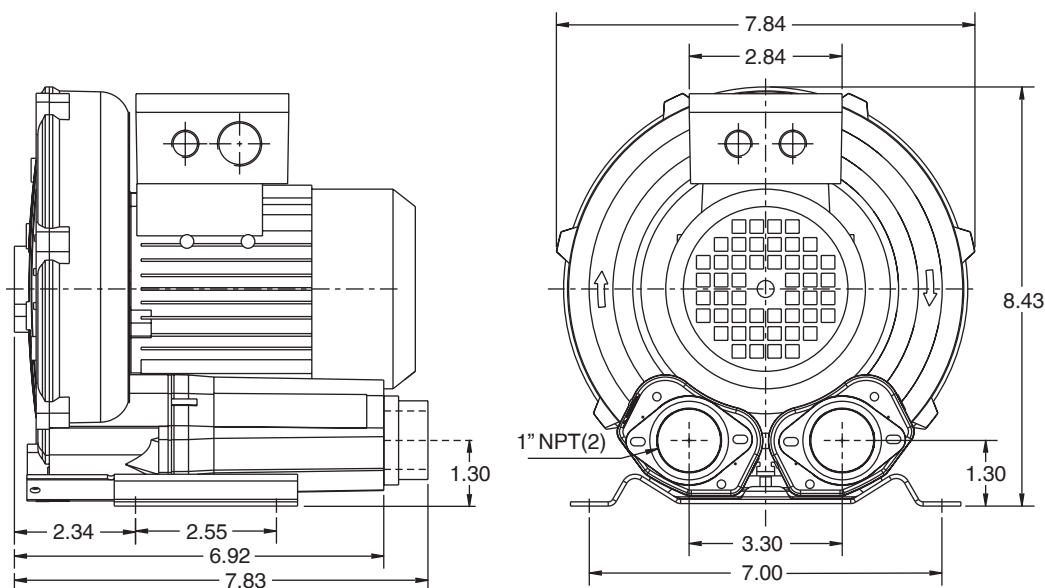
- Cooler running, outboard bearing provides maintenance-free operation
- Environmentally friendly oil-free technology
- Extremely quiet operation
- All motors are standard TEFC with Class F insulation, UL recognized, CE Compliant
Explosion-Proof motors available
- Custom construction blowers are available
- Rugged die cast aluminum construction

Performance curve for Vacuum pump



Performance curve for Compressor



Dimensions: (inches)

Relief valve:

VC51Z (Vacuum)

PC51Z (Pressure)

Filter:

ATF-125-1337
(Vacuum)

AFS-20-125-10
(Pressure)

Specifications subject to change without notice. Please contact factory for specification updates.

Selection & Ordering Data - Type 3BA1100

Curve No.	Order No.	Fre- quency	Rated power	Input voltage		Input current		Permissible total differential pressure ²⁾		Sound pressure level ³⁾	Weight ca.
		Hz	HP	V		A		Vacuum inch H2O	Compressor inch H2O	dB(A)	lbs
3~ 50/60 Hz IP55 insulation material class F											
A 110	3BA1100-7AT06	50	0.27	200D ... 240D	345Y ... 415Y	1.0D	0.6 Y	-24	28	50	13
A 111	3BA1100-7AT06	60	0.31	220D ... 250D	415Y ... 460Y	1.0D	0.6 Y	-30	32	53	13
1~ 50/60 Hz IP55 with attached capacitor for continuous operation											
A 110s	3BA1100-7AS05	50	0.27	115	230	3.0D	1.5 Y	-24	28	50	13
A 111s	3BA1100-7AS05	60	0.31	115	230	2.6D	1.3 Y	-30	32	53	13

Suitable for 208 Volt Operation

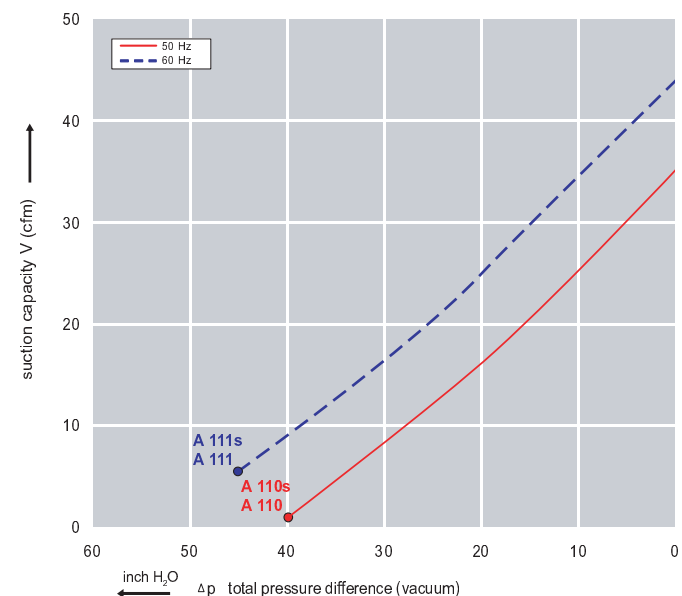
All curves are rated at 14.7 psia and 68°F ambient conditions and are reported in SCFM referenced to 68°F and 14.696 psia sea level conditions. Curve values are nominal, actual performance may vary by up to 10% of the values indicated. For inlet temperatures above approximately 80° F or for handling gases other than air, please contact your Airtech sales representative for assistance.



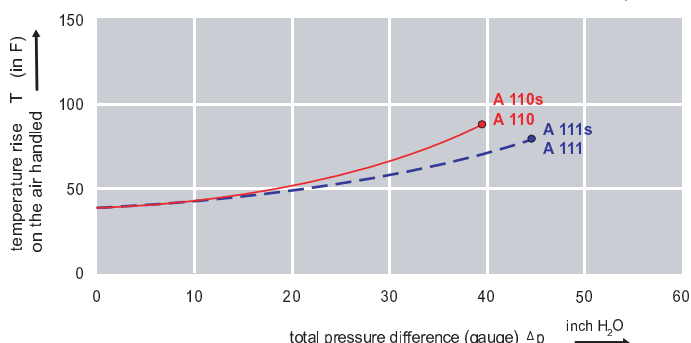
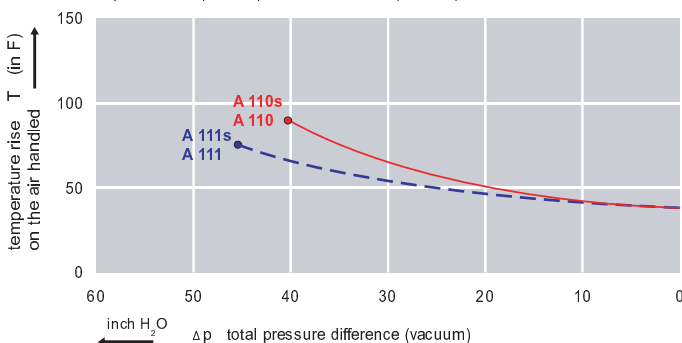
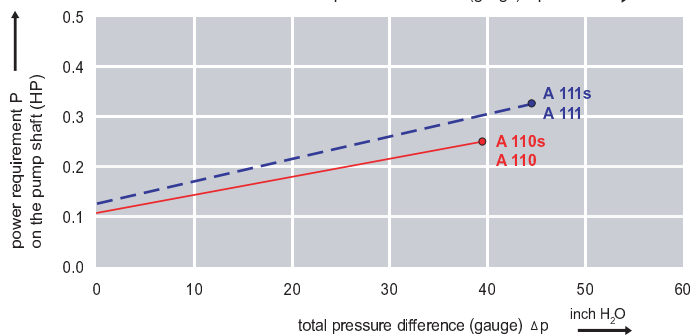
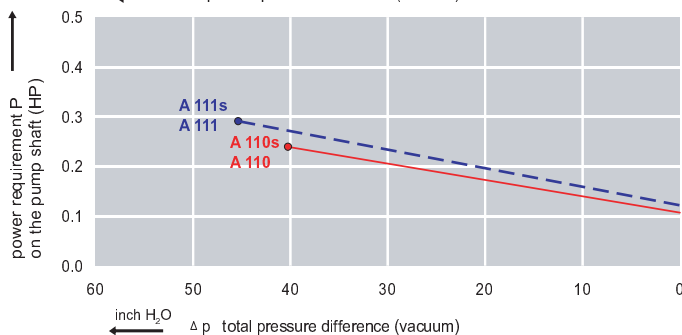
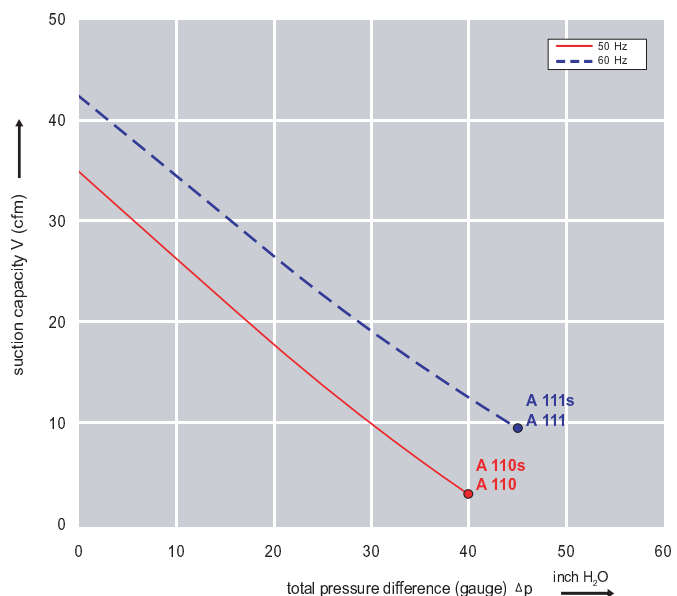
Features:

- Cooler running, outboard bearing provides maintenance-free operation
- Environmentally friendly oil-free technology
- Extremely quiet operation
- All motors are standard TEFC with Class F insulation, UL recognized, CE Compliant
Explosion-Proof motors available
- Custom construction blowers are available
- Rugged die cast aluminum construction

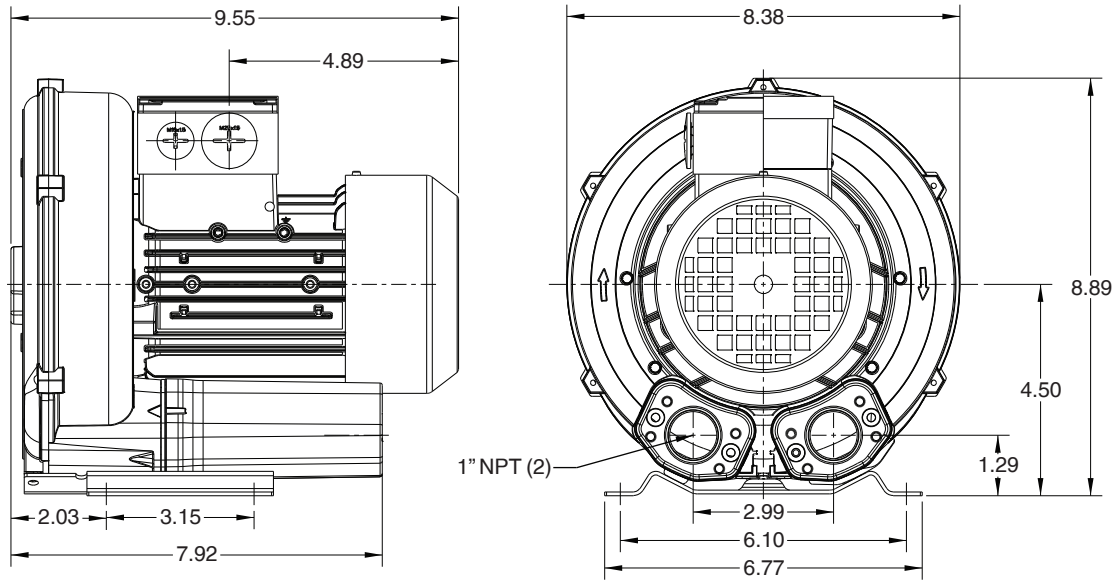
Performance curve for Vacuum pump



Performance curve for Compressor



Dimensions: (inches)



Relief valve:

VC51Z (Vacuum)
PC51Z (Pressure)

Filter:

ATF-125-1337
(Vacuum)
AFS-20-125-10
(Pressure)

Specifications subject to change without notice. Please contact factory for specification updates.

Selection & Ordering Data - Type 3BA1200

Curve No.	Order No.	Fre- quency	Rated power	Input voltage		Input current		Permissible total differential pressure ²⁾		Sound pressure level ³⁾	Weight ca.
		Hz	HP	V		A		Vacuum inch H2O	Compressor inch H2O	dB(A)	lbs
3~ 50/60 Hz IP55 insulation material class F											
A 110	3BA1200-7AT06	50	0.33	200D ... 240D	345Y ... 415Y	1.6D	0.7 Y	-40	40	50	15
A 111	3BA1200-7AT06	60	0.38	220D ... 250D	415Y ... 460Y	1.3D	0.9 Y	-45	45	53	15
1~ 50/60 Hz IP55 with attached capacitor for continuous operation											
A 110s	3BA1200-7AS05	50	0.33	115	230	3.5D	1.7 Y	-40	40	50	15
A 111s	3BA1200-7AS05	60	0.38	115	230	5.0D	2.8 Y	-45	45	53	15

Suitable for 208 Volt Operation

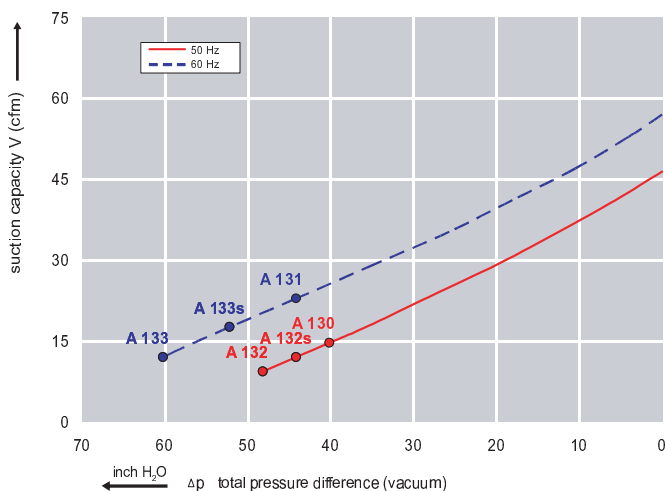
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Features:

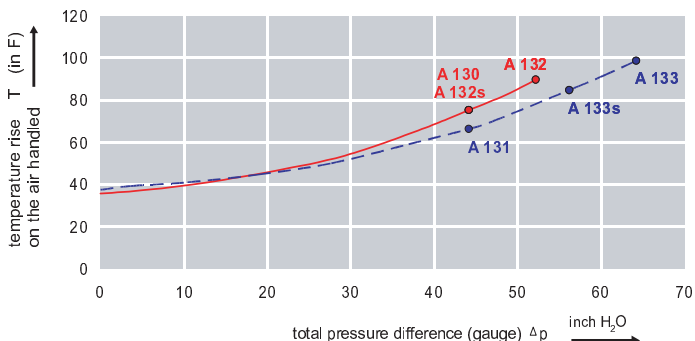
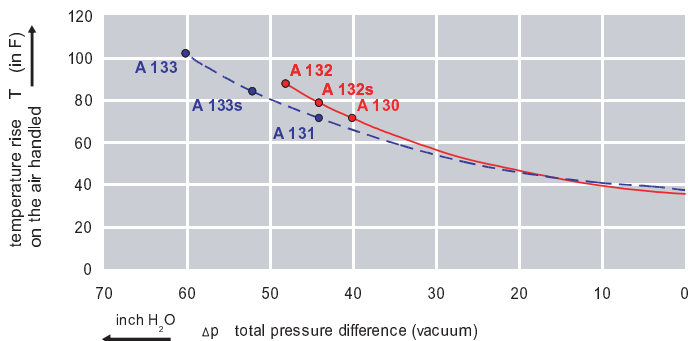
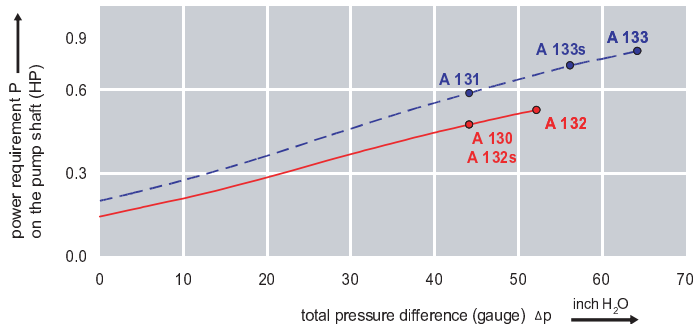
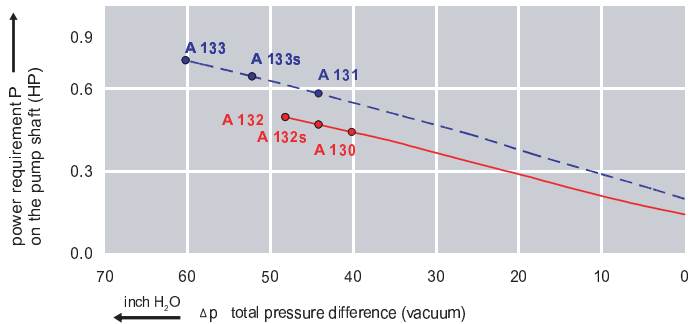
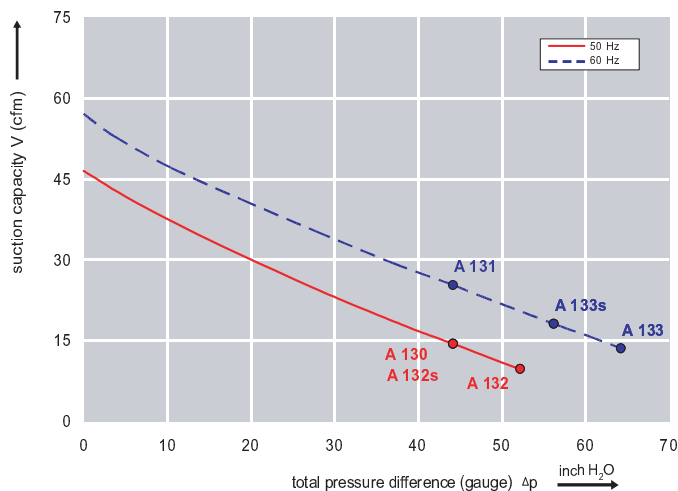


- Cooler running, outboard bearing provides maintenance-free operation
- Environmentally friendly oil-free technology
- Extremely quiet operation
- All motors are standard TEFC with Class F insulation, UL recognized, CE Compliant
Explosion-Proof motors available
- Custom construction blowers are available
- Rugged die cast aluminum construction

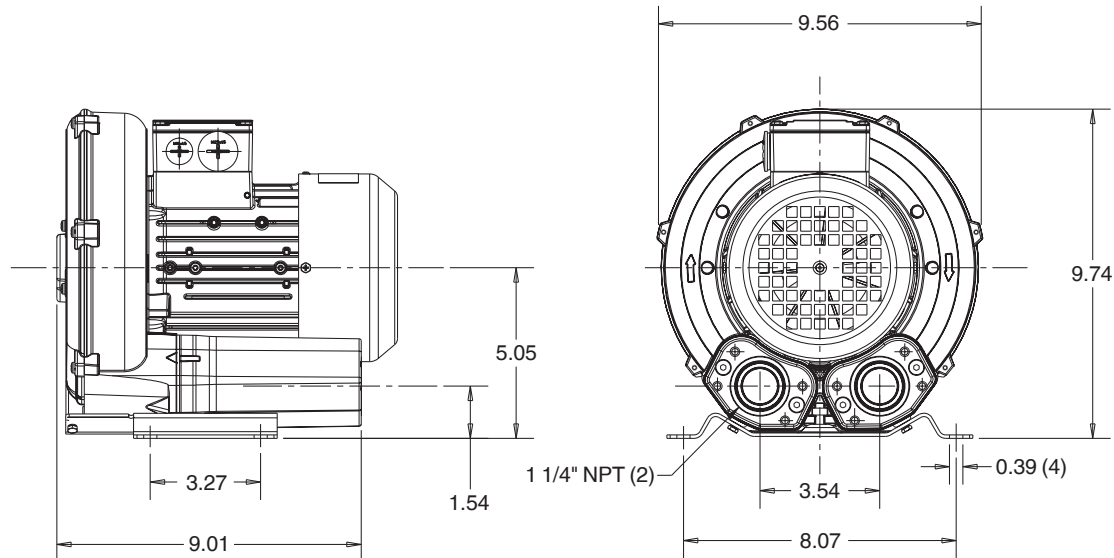
Performance curve for Vacuum pump



Performance curve for Compressor



Dimensions: (inches)



Recommended Accessories:

Relief valve:

VC51Z (Vacuum)
PC51Z (Pressure)

Filter:

ATF-125-1337 (Vacuum)
AFS-20-125-10 (Pressure)

Specifications subject to change without notice. Please contact factory for specification updates.

Selection & Ordering Data - Type 3BA1300

Curve No.	Order No.	Fre- quency	Rated power	Input voltage		Input current		Permissible total differential pressure		Sound pressure level	Weight
		Hz	HP	V		A	Vacuum inch H2O	Compressor inch H2O	dB(A)	lbs	
3~ 50/60 Hz IP55 insulation material class F											
A 130	3BA1300-7AT06	50	0.34	200D ... 240D	345Y ... 415Y	2.1D	1.2 Y	-40	44	53	18
A 131	3BA1300-7AT06	60	0.39	220D ... 250D	415Y ... 460Y	1.74D	1.0 Y	-44	44	56	18
A 132	3BA1300-7AT16	50	0.54	200D ... 240D	345Y ... 415Y	2.6D	1.5 Y	-48	52	53	22
A 133	3BA1300-7AT16	60	0.67	220D ... 250D	415Y ... 460Y	2.6D	1.5 Y	-60	64	56	22
1~ 50/60 Hz IP55 with attached capacitor for continuous operation											
A 132s	3BA1300-7AS15	50	0.50	115	230	5.4	2.7	-44	44	53	22
A 133s	3BA1300-7AS15	60	0.60	115	230	6.0	3.0	-52	56	56	22

Suitable for 208 Volt Operation

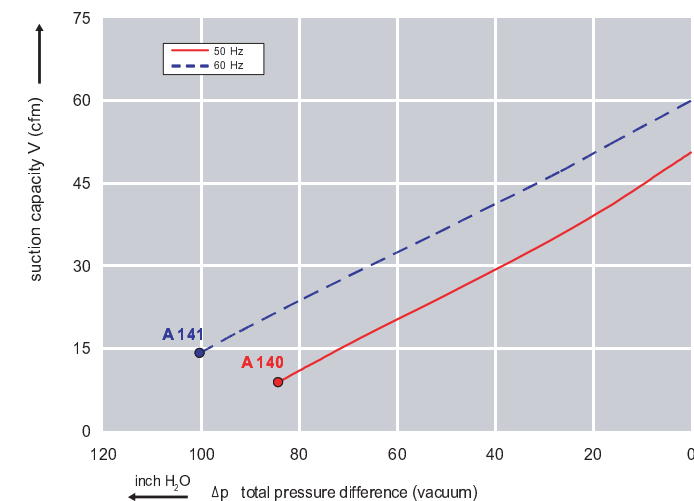
All curves are rated at 14.7 psia and 68°F ambient conditions and are reported in SCFM referenced to 68°F and 14.696 psia sea level conditions. Curve values are nominal, actual performance may vary by up to 10% of the values indicated. For inlet temperatures above approximately 80 °F or for handling gases other than air, please contact your Airtech sales representative for assistance.



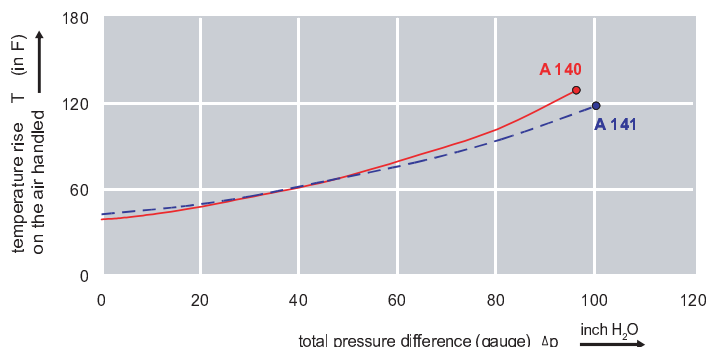
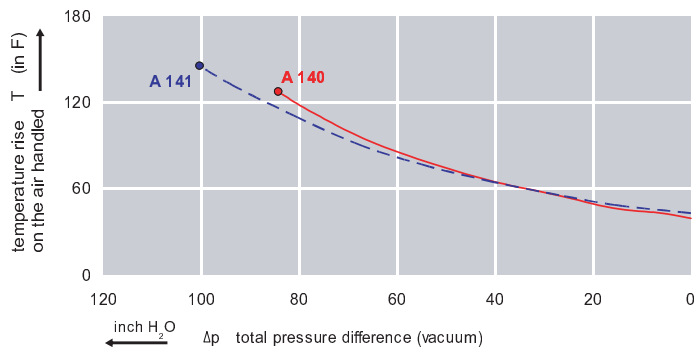
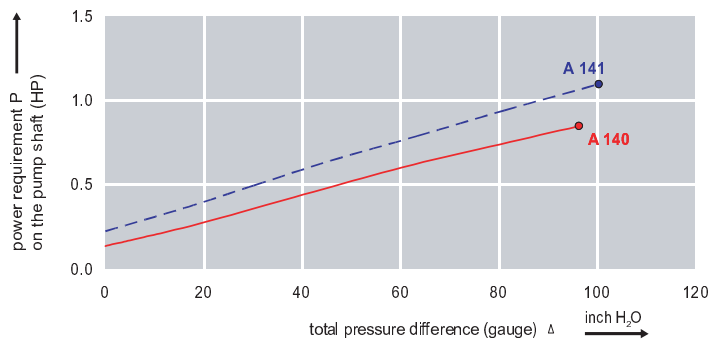
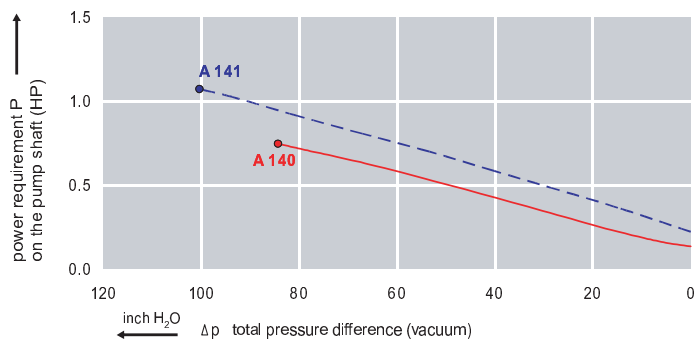
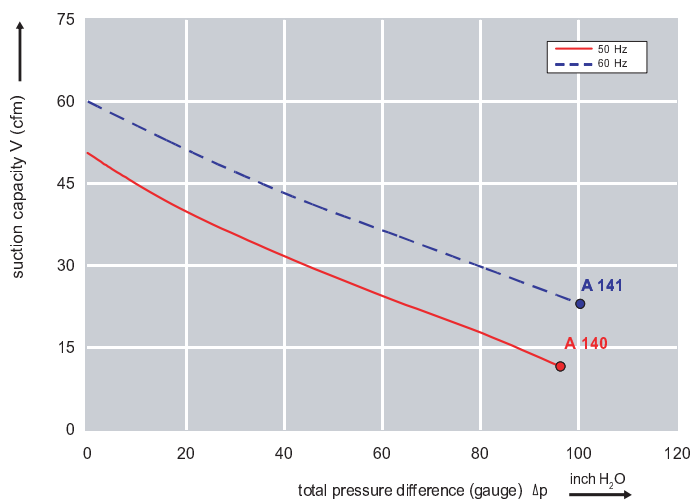
Features:

- Cooler running, outboard bearing provides maintenance-free operation
- Environmentally friendly oil-free technology
- Extremely quiet operation
- All motors are standard TEFC with Class F insulation, UL recognized, CE Compliant
Explosion-Proof motors available
- Custom construction blowers are available
- Rugged die cast aluminum construction

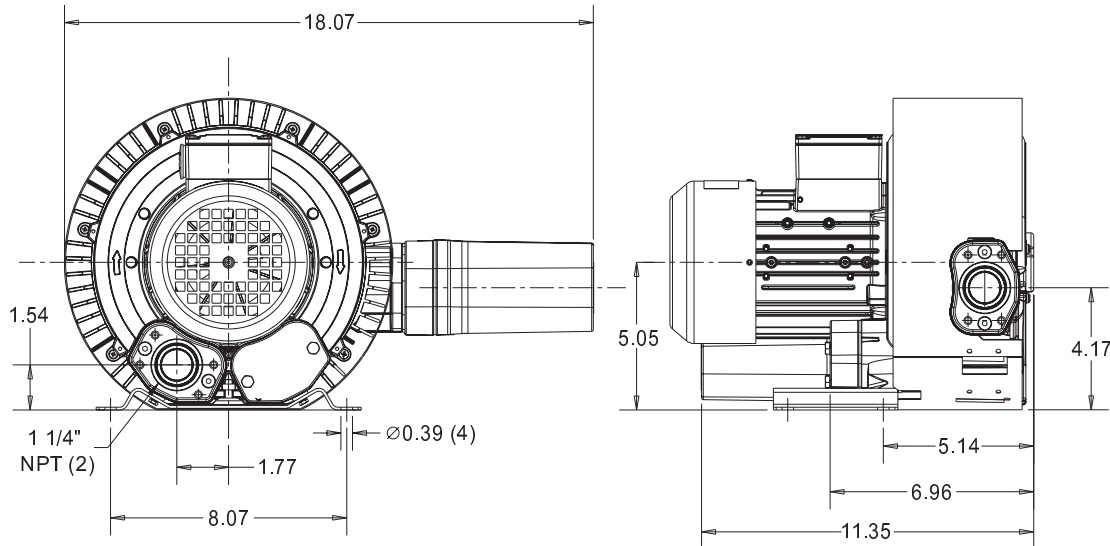
Performance curve for Vacuum pump



Performance curve for Compressor



Dimensions: (inches)



Recommended Accessories:

Relief valve:

VC51Z (Vacuum)
PC51Z (Pressure)

Filter:

ATF-125-1337
(Vacuum)
AFS-20-125-10
(Pressure)

Specifications subject to change without notice. Please contact factory for specification updates.

Selection & Ordering Data - Type 3BA1310

Curve No.	Order No.	Fre- quency	Rated power	Input voltage		Input current		Permissible total differential pressure		Sound pressure level	Weight
		Hz	HP	V		A		Vacuum inch H2O	Compressor inch H2O	dB(A)	lbs
3~ 50/60 Hz IP55 insulation material class F											
A 140	3BA1310-7AT26	50	0.94	200D ... 240D	345Y ... 415Y	3.8 D	2.2 Y	-84	96	55	31
A 141	3BA1310-7AT26	60	1.11	220D ... 250D	415Y ... 460Y	3.75D	2.15Y	-100	100	61	31

Suitable for 208 Volt Operation

All curves are rated at 14.7 psia and 68°F ambient conditions and are reported in SCFM referenced to 68°F and 14.696 psia sea level conditions. Curve values are nominal, actual performance may vary by up to 10% of the values indicated. For inlet temperatures above approximately 80 °F or for handling gases other than air, please contact your Airtech sales representative for assistance.

Features:



- Cooler running, outboard bearing provides maintenance-free operation

- Environmentally friendly oil-free technology

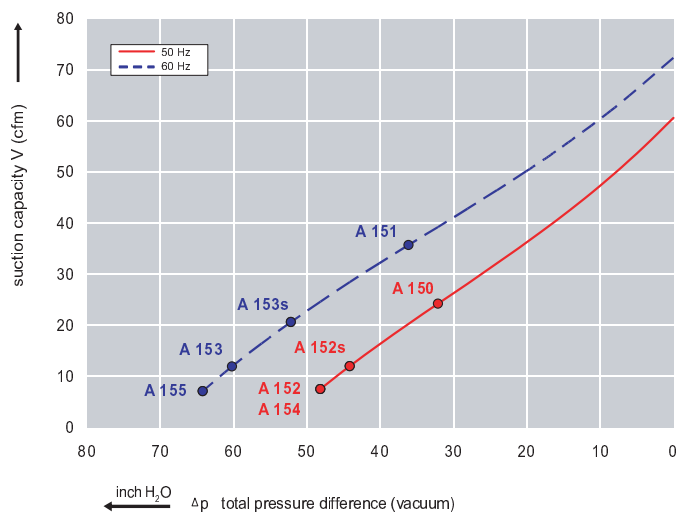
- Extremely quiet operation

- All motors are standard TEFC with Class F insulation, UL recognized, CE Compliant
Explosion-Proof motors available

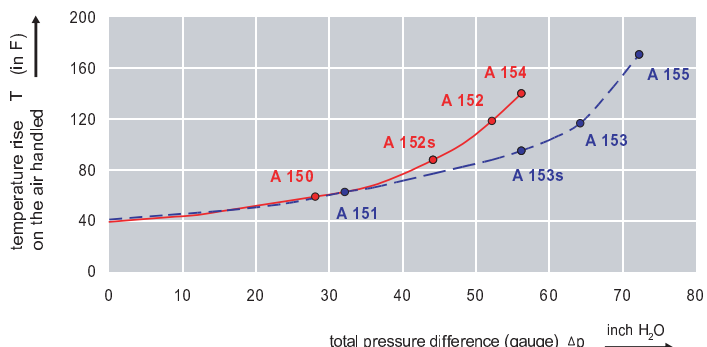
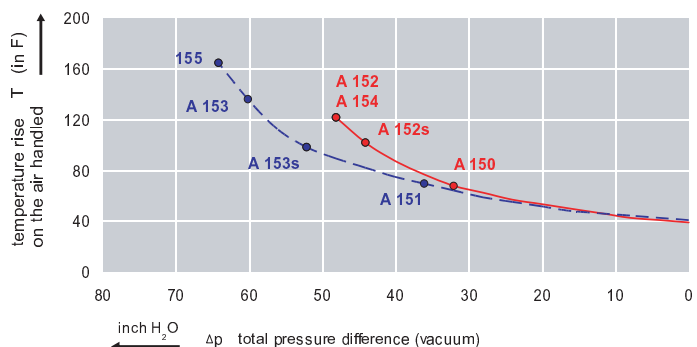
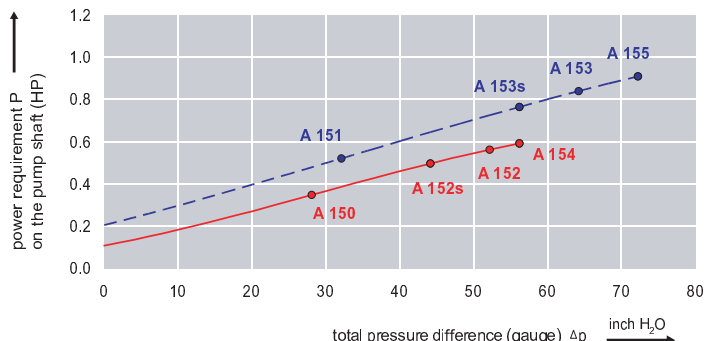
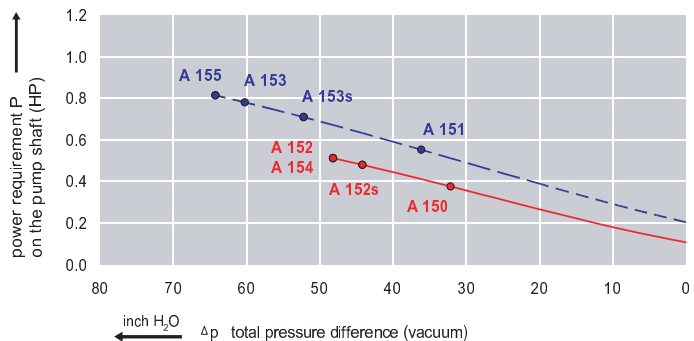
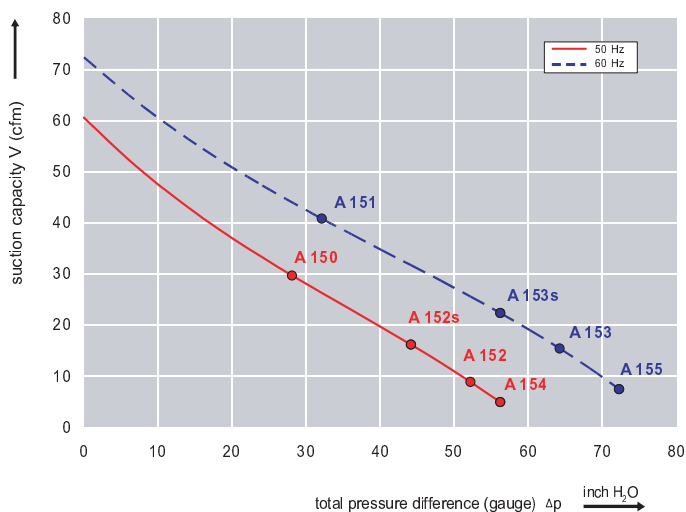
- Custom construction blowers are available

- Rugged die cast aluminum construction

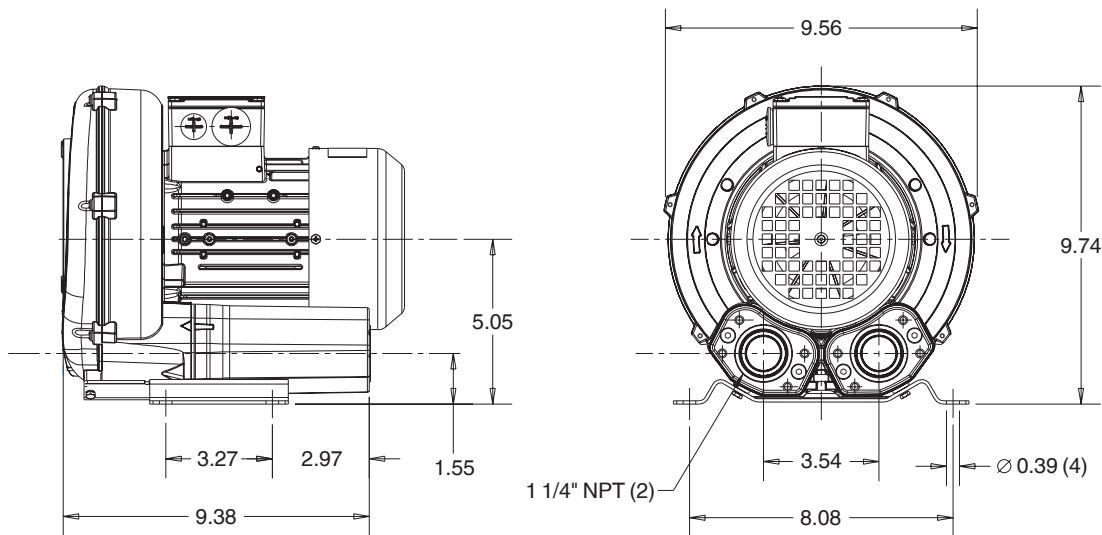
Performance curve for Vacuum pump



Performance curve for Compressor



Dimensions: (inches)



Recommended Accessories:

Relief valve:

VC51Z (Vacuum)
PC51Z (Pressure)

Filter:

ATF-125-1337
(Vacuum)
AFS-20-125-10
(Pressure)

Specifications subject to change without notice. Please contact factory for specification updates.

Selection & Ordering Data - Type 3BA1330

Curve No.	Order No.	Fre- quency	Rated power	Input voltage		Input current		Permissible total differential pressure ²⁾		Sound pressure level ³⁾	Weight ca.
		Hz	HP	V		A		Vacuum inch H2O	Compressor inch H2O	dB(A)	lbs
3~ 50/60 Hz IP55 isulation material class F											
A 150	3BA1330-7AT06	50	0.34	200D ... 240D	345Y ... 415Y	2.1 D	1.2 Y	-32	28	54	23
A 151	3BA1330-7AT06	60	0.39	220D ... 250D	415Y ... 460Y	1.74D	1.0 Y	-36	32	57	19
A 152	3BA1330-7AT16	50	0.54	200D ... 240D	345Y ... 415Y	2.6 D	1.5 Y	-48	52	54	23
A 153	3BA1330-7AT16	60	0.67	220D ... 250D	415Y ... 460Y	2.6 D	1.5 Y	-60	64	57	23
A 154	3BA1330-7AT26	50	0.94	200D ... 240D	345Y ... 415Y	3.8 D	2.2 Y	-48	56	54	25
A 155	3BA1330-7AT26	60	1.11	220D ... 250D	415Y ... 460Y	3.75D	2.15Y	-64	72	57	25
3~ 50/60 Hz IP55 isulation material class F											
A 150	3BA1330-7AT05	50	0.34	500D		0.72D		-32	28	54	23
A 151	3BA1330-7AT05	60	0.39	575D		0.76D		-36	32	57	19
A 152	3BA1330-7AT15	50	0.54	500D		1.0 D		-48	52	54	23
A 153	3BA1330-7AT15	60	0.67	575D		1.1 D		-60	64	57	23
A 154	3BA1330-7AT25	50	0.94	500D		1.88D		-48	56	54	25
A 155	3BA1330-7AT25	60	1.11	575D		1.76D		-64	72	57	25
1~ 50/60 Hz IP55 with attached capacitor for continuous operation											
A 152s	3BA1330-7AS15	50	0.50	115	230	5.4	2.7	-44	44	54	23
A 153s	3BA1330-7AS15	60	0.60	115	230	6.0	3.0	-52	56	57	23

Suitable for 208 Volt Operation

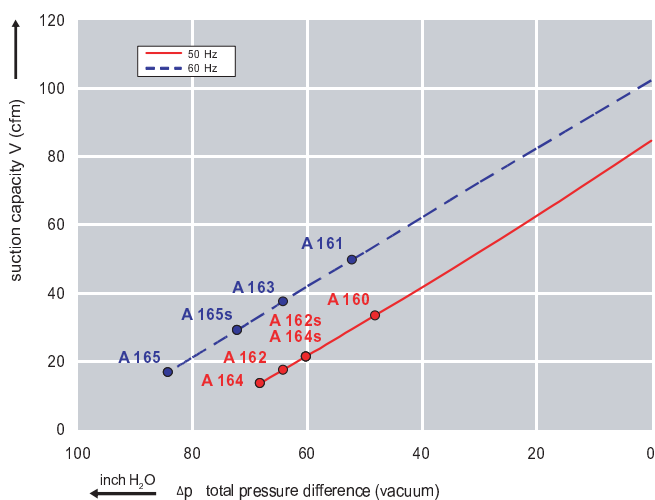
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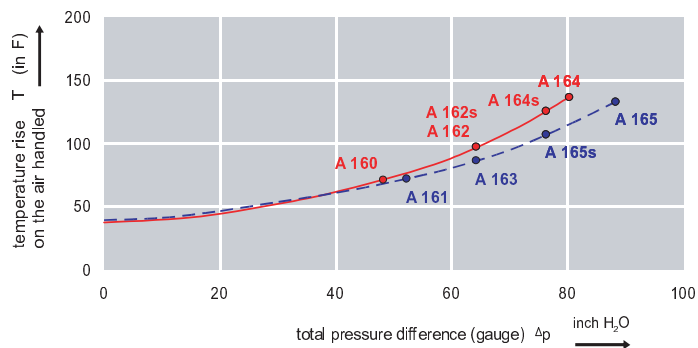
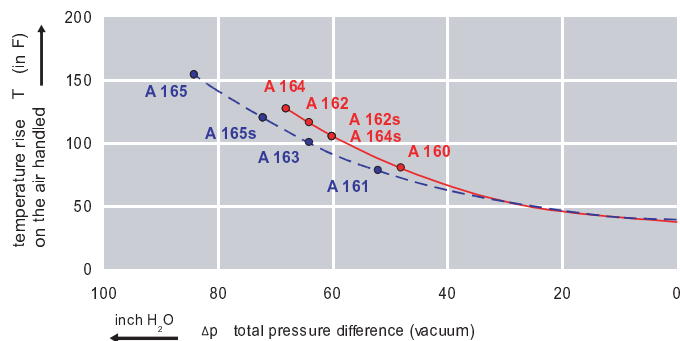
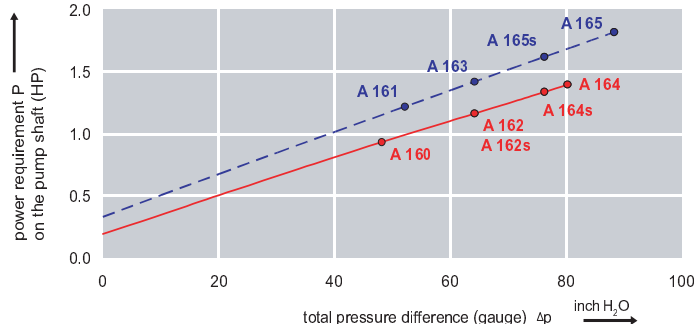
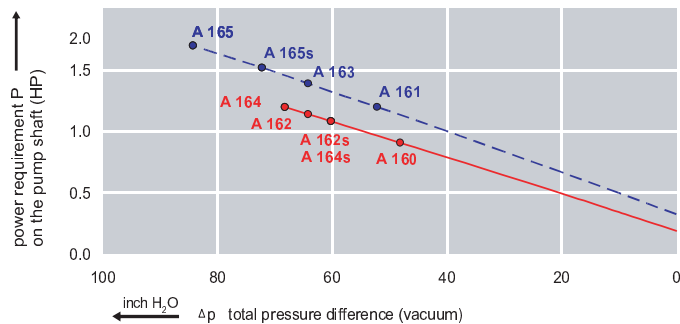
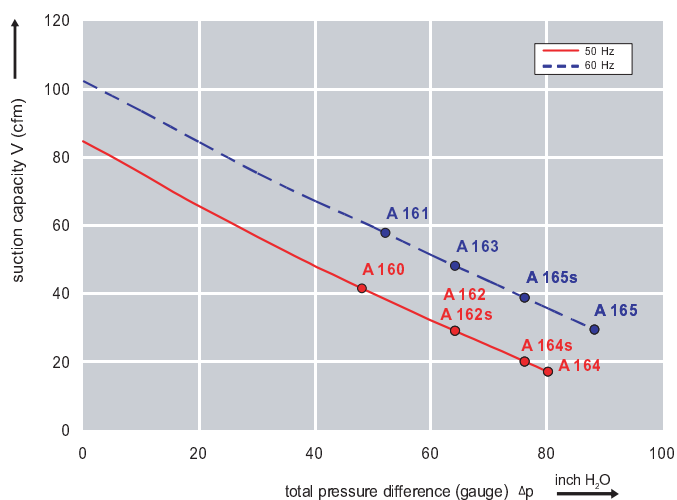
Features:

- Cooler running, outboard bearing provides maintenance-free operation
- Environmentally friendly oil-free technology
- Extremely quiet operation
- All motors are standard TEFC with Class F insulation, UL recognized, CE Compliant
Explosion-Proof motors available
- Custom construction blowers are available
- Rugged die cast aluminum construction

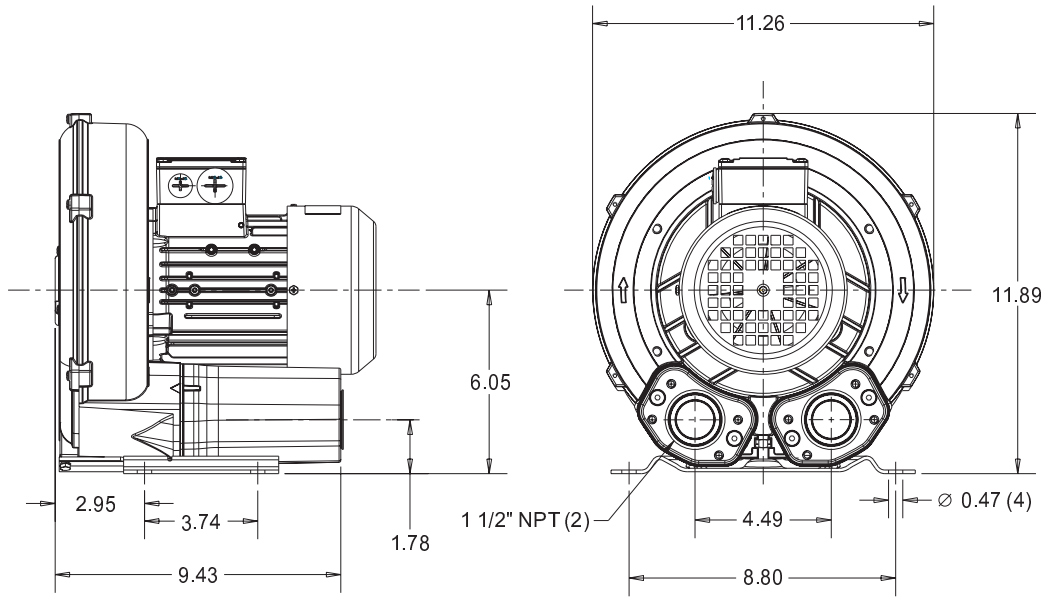
Performance curve for Vacuum pump



Performance curve for Compressor



Dimensions: (inches)



Recommended Accessories:

Relief valve:

VC51Z (Vacuum)
PC51Z (Pressure)

Filter:

ATF-150-1337 (Vacuum)
AFS-20-150-10 (Pressure)

Specifications subject to change without notice. Please contact factory for specification updates.

Selection & Ordering Data - Type 3BA1400

Curve No.	Order No.	Fre- quency	Rated power	Input voltage		Input current		Permissible total differential pressure		Sound pressure level dB(A)	Weight lbs
		Hz	HP	V		A		Vacuum inch H2O	Compressor inch H2O		
3~ 50/60 Hz IP55 insulation material class F											
A 160	3BA1400-7AT06	50	0.94	200D ... 240D	345Y ... 415Y	3.8 D	2.2 Y	-48	48	63	29
A 161	3BA1400-7AT06	60	1.11	220D ... 250D	415Y ... 460Y	3.75D	2.15Y	-52	52	64	29
A 162	3BA1400-7AT16	50	1.14	200D ... 240D	345Y ... 415Y	4.2 D	2.4 Y	-64	64	63	33
A 163	3BA1400-7AT16	60	1.27	220D ... 250D	415Y ... 460Y	4.0 D	2.3 Y	-64	64	64	33
A 164	3BA1400-7AT26	50	1.74	200D ... 240D	345Y ... 415Y	5.7 D	3.3 Y	-68	80	63	35
A 165	3BA1400-7AT26	60	2.01	220D ... 250D	415Y ... 460Y	5.5 D	3.2 Y	-84	88	64	35
1~ 50/60 Hz IP55 with capacitor for continuous operation											
A 164s	3BA1400-7AS25	50	1.47	115	230	13	6.5	-60	76	63	35
A 165s	3BA1400-7AS25	60	1.74	115	230	14	7.0	-72	76	64	35

Suitable for 208 Volt Operation

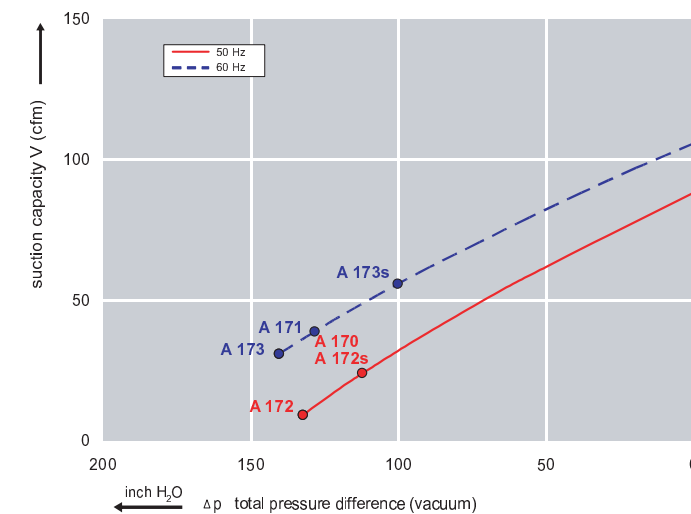
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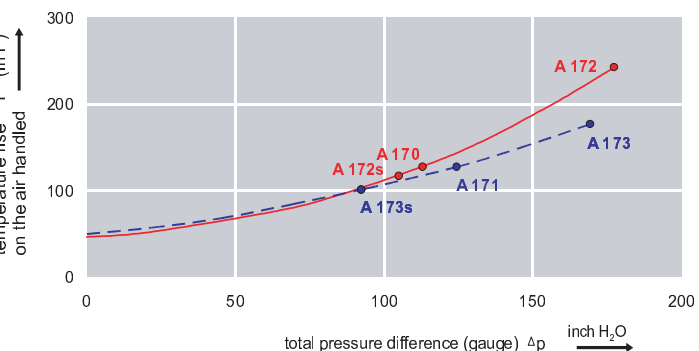
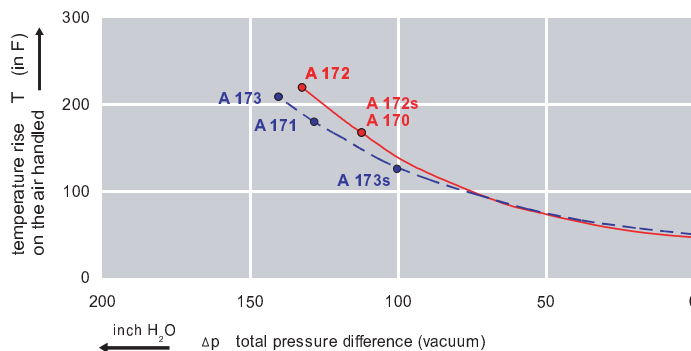
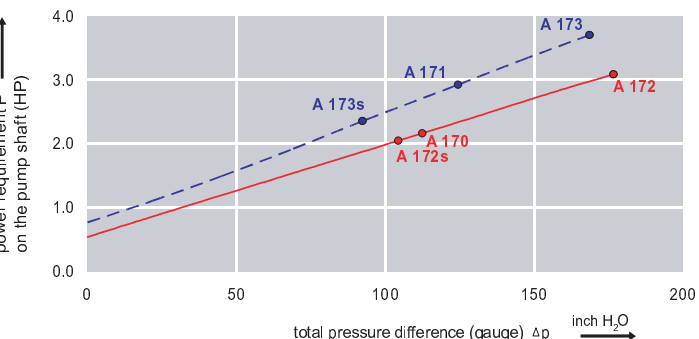
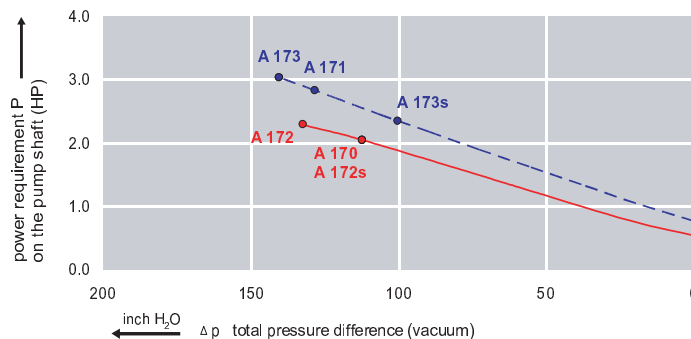
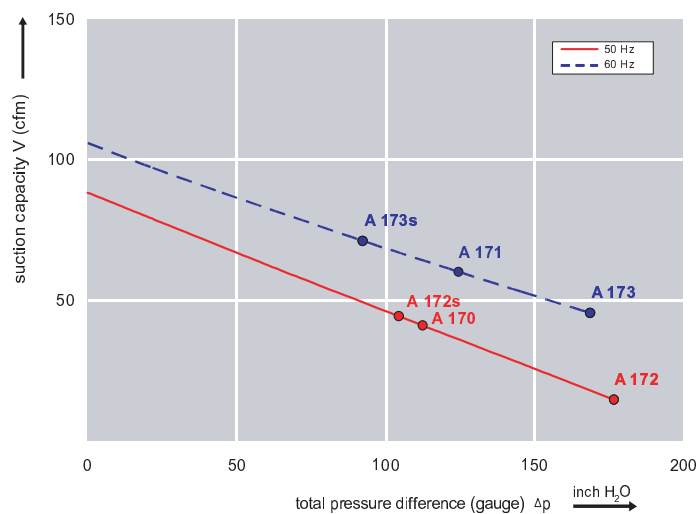
Features:

- Cooler running, outboard bearing provides maintenance-free operation
- Environmentally friendly oil-free technology
- Extremely quiet operation
- All motors are standard TEFC with Class F insulation, UL recognized, CE Compliant
Explosion-Proof motors available
- Custom construction blowers are available
- Rugged die cast aluminum construction

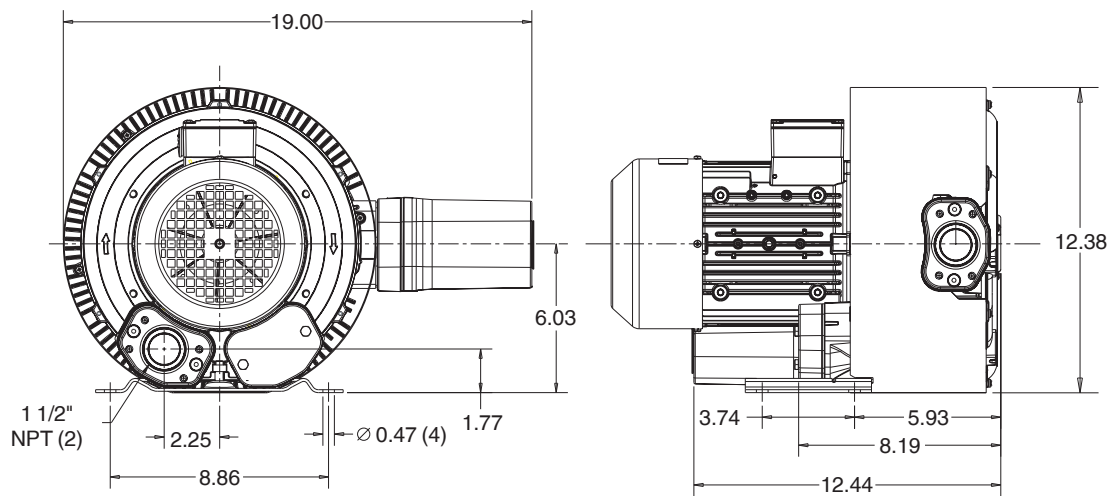
Performance curve for Vacuum pump



Performance curve for Compressor



Dimensions: (inches)



Recommended Accessories:

Relief valve:

VC51Z (Vacuum)
PC51Z (Pressure)

Filter:

ATF-150-1337 (Vacuum)
AFS-20-150-10 (Pressure)

Specifications subject to change without notice. Please contact factory for specification updates.

Selection & Ordering Data - Type 3BA1410

Curve No.	Order No.	Fre- quency	Rated power	Input voltage		Input current		Permissible total differential pressure		Sound pressure	Weight
		Hz	HP								
				V		A		Vacuum inch H2O	Compressor inch H2O	dB(A)	lbs
3~ 50/60 Hz IP55 insulation material class F											
A 170	3BA1410-7AT36	50	2.1	200D ... 240D	345Y ... 415Y	7.5D	4.3Y	-112	112	66	53
A 171	3BA1410-7AT36	60	2.75	220D ... 250D	415Y ... 460Y	7.5D	4.4Y	-128	124	69	53
A 172	3BA1410-7AT46	50	2.95	200D ... 240D	345Y ... 415Y	9.7D	5.6Y	-132	177	66	59
A 173	3BA1410-7AT46	60	3.42	220D ... 250D	415Y ... 460Y	9.0D	5.3Y	-141	169	69	59
1~ 50/60 Hz IP55 with attached capacitor for continuous operation											
A 172s	3BA1410-7AS45	50	2.0	115	230	22	11	-112	104	66	59
A 173s	3BA1410-7AS45	60	2.35	115	230	24	12	-100	92	69	59

Suitable for 208 Volt Operation

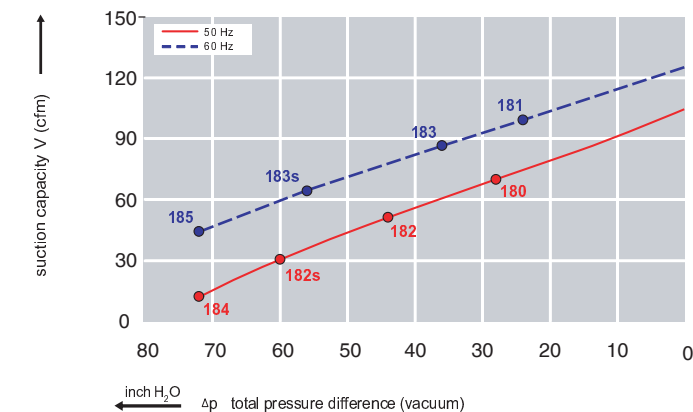
All curves are rated at 14.7 psia and 68° F ambient conditions and are reported in SCFM referenced to 68° F and 14.696 psia sea level conditions. Curve values are nominal, actual performance may vary by up to 10% of the values indicated. For inlet temperatures above approximately 80 °F or for handling gases other than air, please contact your Airtech sales representative for assistance.



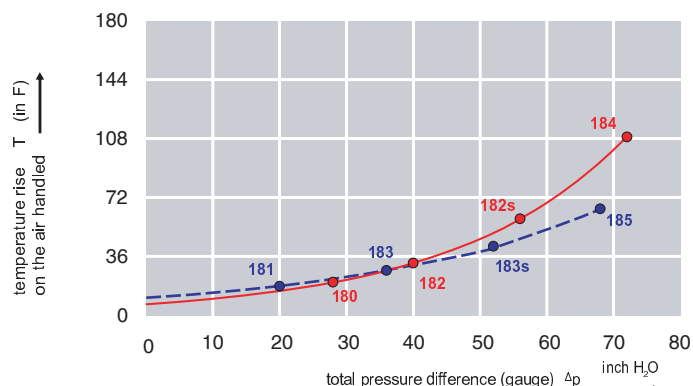
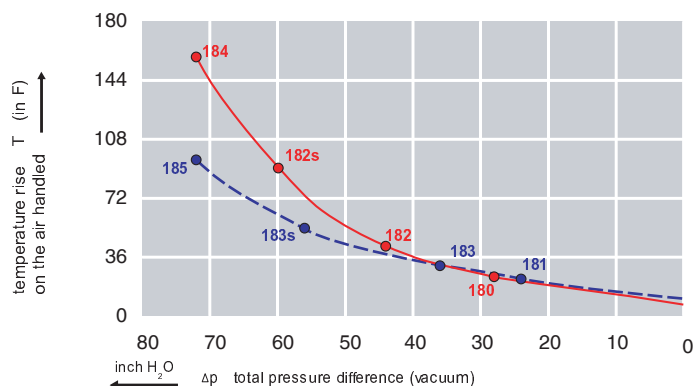
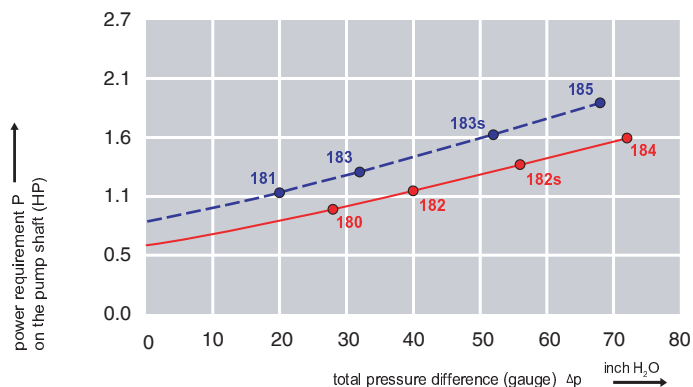
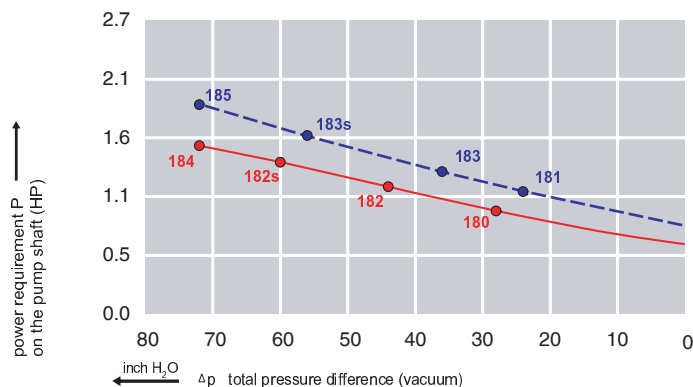
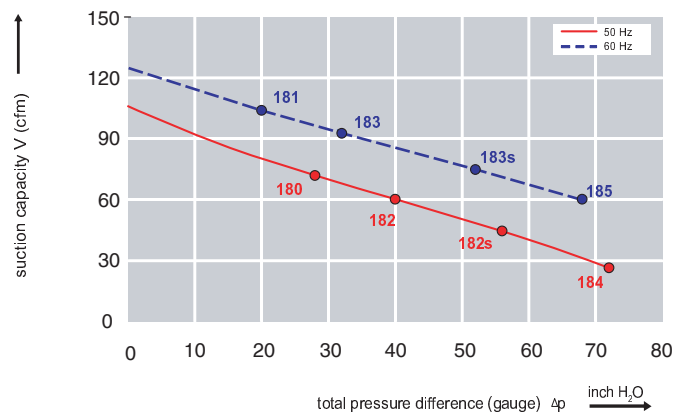
Features:

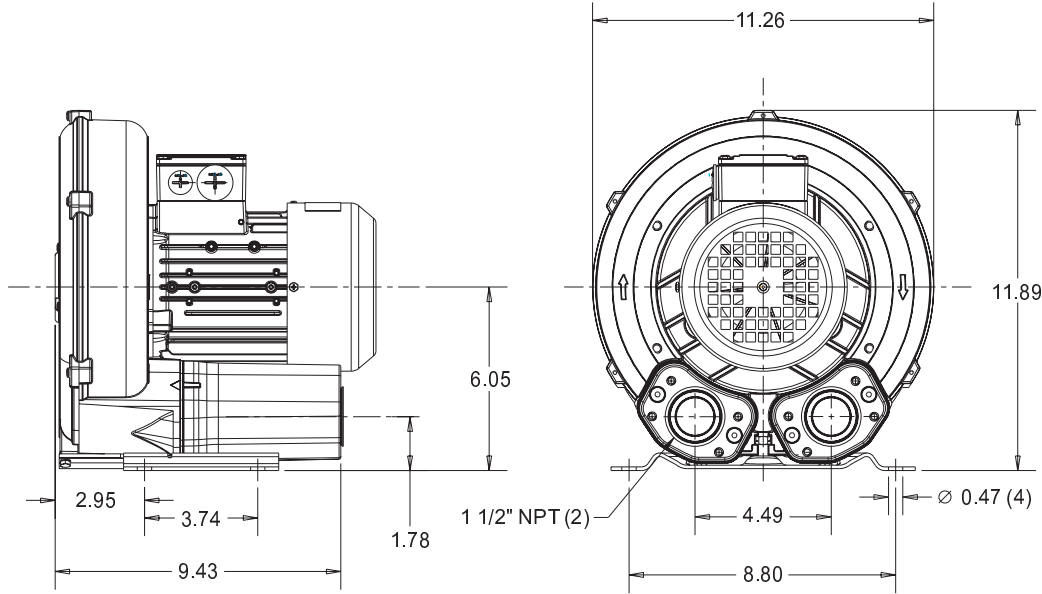
- Cooler running, outboard bearing provides maintenance-free operation
- Environmentally friendly oil-free technology
- Extremely quiet operation
- All motors are standard TEFC with Class F insulation, UL recognized, CE Compliant
Explosion-Proof motors available
- Custom construction blowers are available
- Rugged die cast aluminum construction

Performance curve for Vacuum pump



Performance curve for Compressor



Dimensions: (inches)

**Recommended
Accessories:**
Relief valve:

VC51Z (Vacuum)

PC51Z (Pressure)

Filter:

 ATF-150-1337
(Vacuum)

 AFS-20-150-10
(Pressure)

Specifications subject to change without notice. Please contact factory for specification updates.

Selection & Ordering Data - Type 3BA1430

Curve No.	Order No.	Fre- quency	Rated power	Input voltage		Input current		Permissible total differential pressure		Sound pressure level	Weight
		Hz	HP	V		A		Vacuum inch H2O	Compressor inch H2O	dB(A)	lbs
3~ 50/60 Hz IP55 insulation material class F											
A 180	3BA1430-7AT06	50	0.93	200D ... 240D	345Y ... 415Y	3.8 D	2.2 Y	-28	28	64	30
A 181	3BA1430-7AT06	60	1.11	220D ... 275D	380Y ... 480Y	3.75D	2.15Y	-24	20	65	30
A 182	3BA1430-7AT16	50	1.13	200D ... 240D	345Y ... 415Y	4.2 D	2.4 Y	-44	40	64	35
A 183	3BA1430-7AT16	60	1.27	220D ... 275D	380Y ... 480Y	4.0 D	2.3 Y	-36	32	65	35
A 184	3BA1430-7AT26	50	1.74	200D ... 240D	345Y ... 415Y	5.7 D	3.3 Y	-72	72	64	37
A 185	3BA1430-7AT26	60	2.01	220D ... 275D	380Y ... 480Y	5.7 D	3.3 Y	-72	68	65	37
1~ 50/60 Hz IP55 with capacitor for continuous operation											
A 182s	3BA1430-7AS24	50	1.47	100/200		16.8	8.4	-60	56	63	35
A 183s	3BA1430-7AS24	60	1.74	100/200		17.2	8.6	-56	52	64	35
A 182s	3BA1430-7AS25	50	1.47	115/230		13.0	6.5	-60	56	63	37
A 183s	3BA1430-7AS25	60	1.74	115/230		14.0	7.0	-56	52	64	37

Suitable for 208 Volt Operation

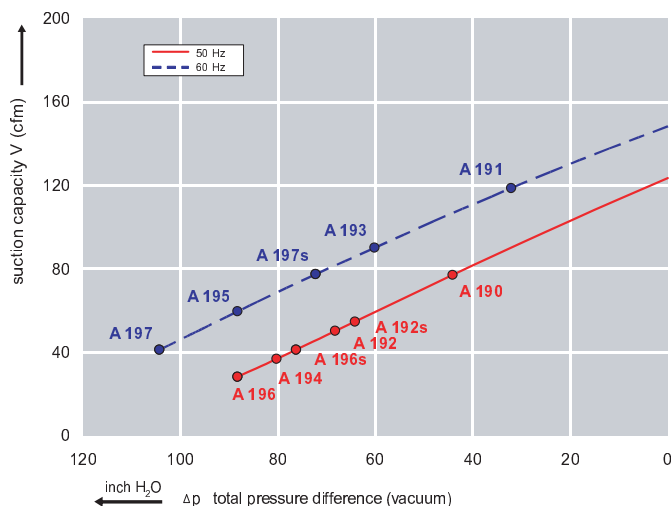
All curves are rated at 14.7 psia and 68°F ambient conditions and are reported in SCFM referenced to 68°F and 14.696 psia sea level conditions. Curve values are nominal, actual performance may vary by up to 10% of the values indicated. For inlet temperatures above approximately 80 °F or for handling gases other than air, please contact your Airtech sales representative for assistance.



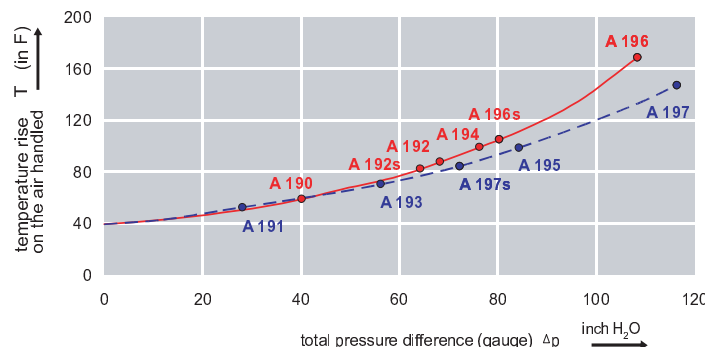
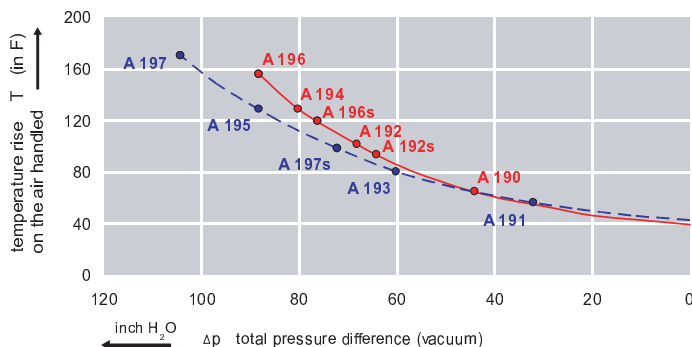
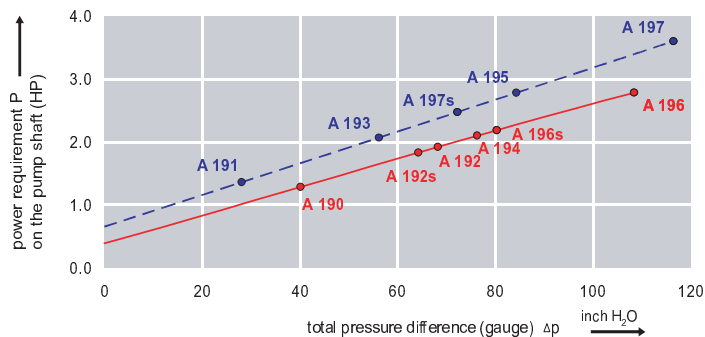
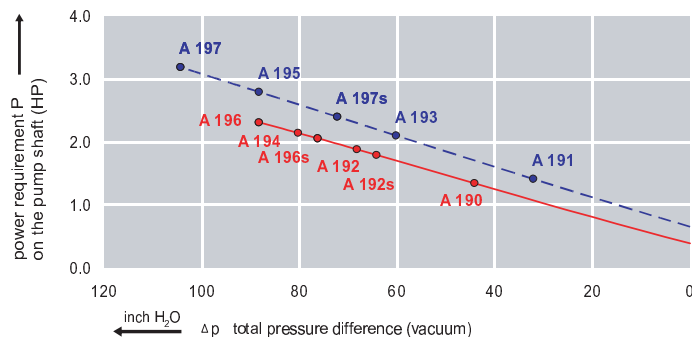
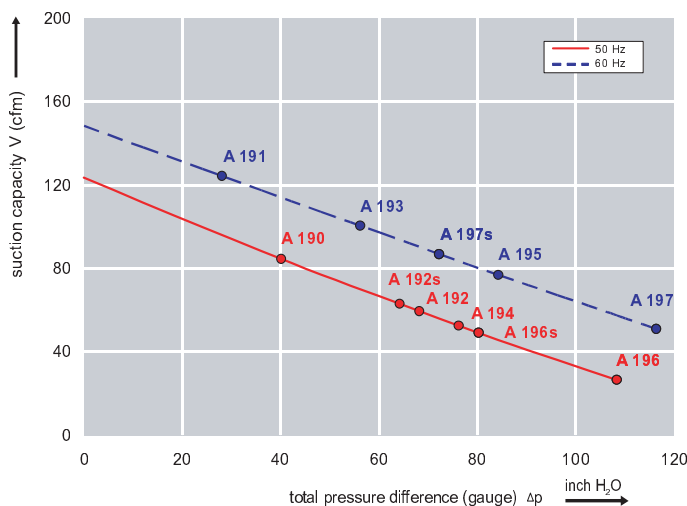
Features:

- Cooler running, outboard bearing provides maintenance-free operation
- Environmentally friendly oil-free technology
- Extremely quiet operation
- All motors are standard TEFC with Class F insulation, UL recognized, CE Compliant
Explosion-Proof motors available
- Custom construction blowers are available
- Rugged die cast aluminum construction

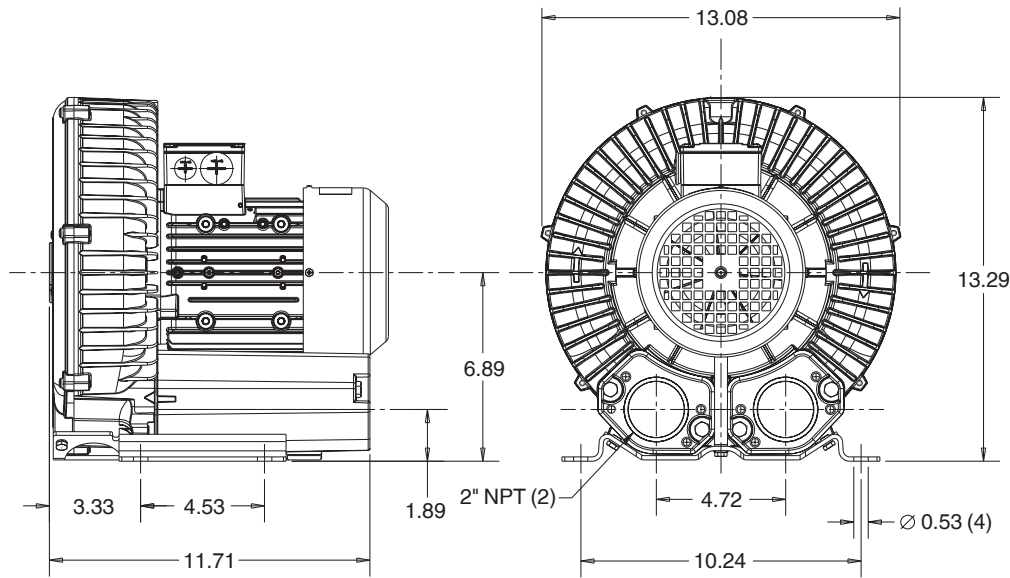
Performance curve for Vacuum pump



Performance curve for Compressor



Dimensions: (inches)



Recommended Accessories:

Relief valve:

VC61Z (Vacuum)
PC61Z (Pressure)

Filter:

ATF-200-15124/1
(Vacuum)
AFS-30-200-10
(Pressure)

Specifications subject to change without notice. Please contact factory for specification updates.

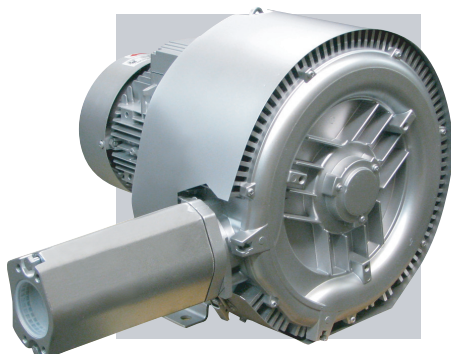
Selection & Ordering Data - Type 3BA1500

Curve No.	Order No.	Fre- quency	Rated power	Input voltage		Input current		Permissible total differential pressure		Sound pressure level dB(A)	Weight lbs
		Hz	HP	V		A		Vacuum inch H2O	Compressor inch H2O		
3~ 50/60 Hz IP55 insulation material class F											
A 190	3BA1500-7AT06	50	1.14	200D ... 240D	345Y ... 415Y	4.2D	2.4Y	-44	40	64	40
A 191	3BA1500-7AT06	60	1.27	220D ... 250D	415Y ... 460Y	4.35D	2.5Y	-32	28	70	40
A 192	3BA1500-7AT16	50	1.74	200D ... 240D	345Y ... 415Y	5.7D	3.3Y	-68	68	64	44
A 193	3BA1500-7AT16	60	2.0	220D ... 250D	415Y ... 460Y	5.5D	3.2Y	-60	56	70	44
A 194	3BA1500-7AT26	50	2.14	200D ... 240D	345Y ... 415Y	7.5D	4.3Y	-80	76	64	46
A 195	3BA1500-7AT26	60	2.75	220D ... 250D	415Y ... 460Y	7.5D	4.4Y	-88	84	70	46
A 196	3BA1500-7AT36	50	2.95	200D ... 240D	345Y ... 415Y	9.7D	5.6Y	-88	108	64	55
A 197	3BA1500-7AT36	60	3.42	220D ... 250D	415Y ... 460Y	9.0D	5.3Y	-104	116	70	55
1~ 50/60 Hz IP55 with attached capacitor for continuous operation											
A 196s	3BA1500-7AS35	50	2.0	115	230	22.0	11.0	-76	80	64	48
A 197s	3BA1500-7AS35	60	2.35	115	230	24.0	12.0	-72	72	70	48

Suitable for 208 Volt Operation

All curves are rated at 14.7 psia and 68°F ambient conditions and are reported in SCFM referenced to 68°F and 14.696 psia sea level conditions. Curve values are nominal, actual performance may vary by up to 10% of the values indicated. For inlet temperatures above approximately 80 °F or for handling gases other than air, please contact your Airtech sales representative for assistance.

Features:



- Cooler running, outboard bearing provides maintenance-free operation

- Environmentally friendly oil-free technology

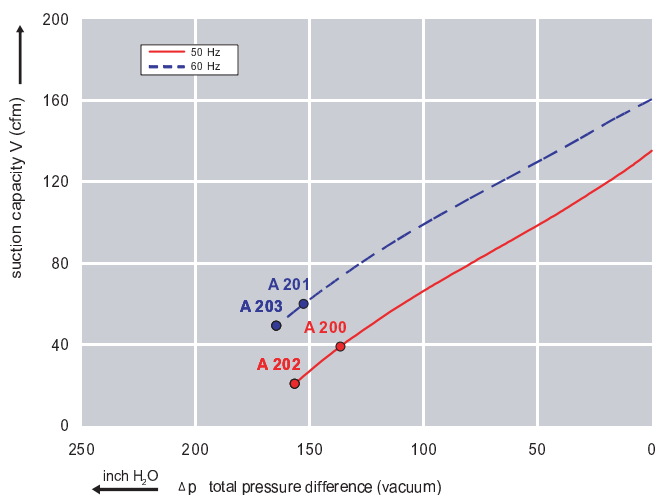
- Extremely quiet operation

- All motors are standard TEFC with Class F insulation, UL recognized, CE Compliant
Explosion-Proof motors available

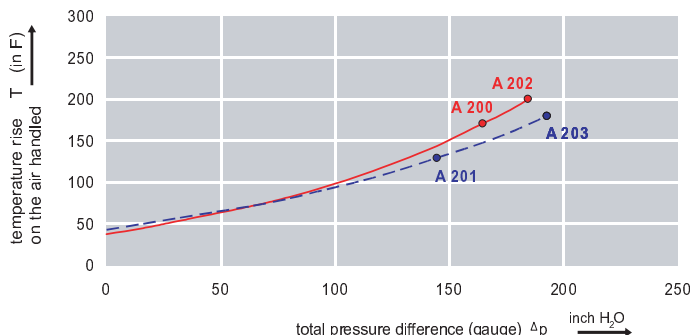
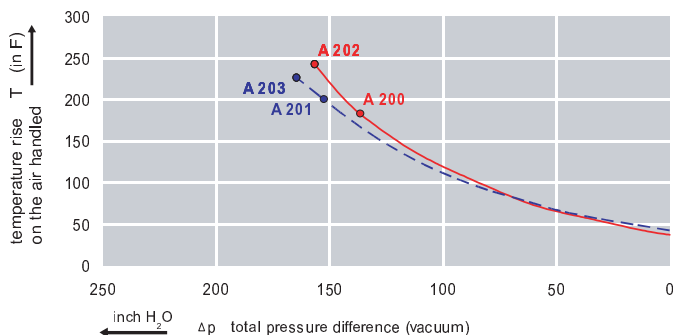
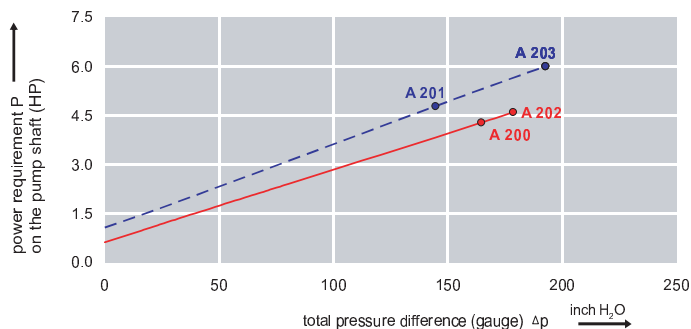
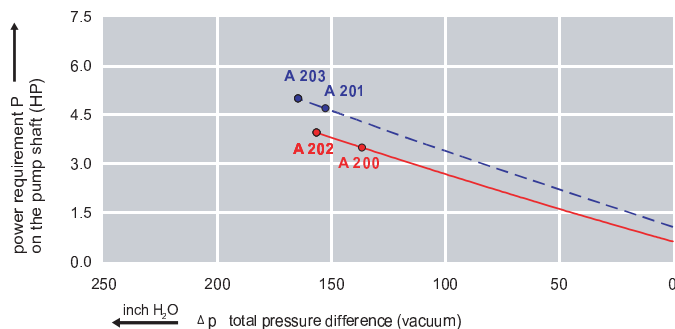
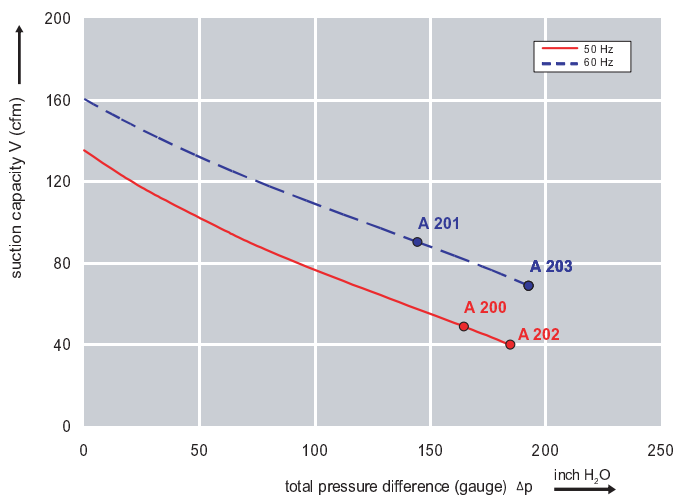
- Custom construction blowers are available

- Rugged die cast aluminum construction

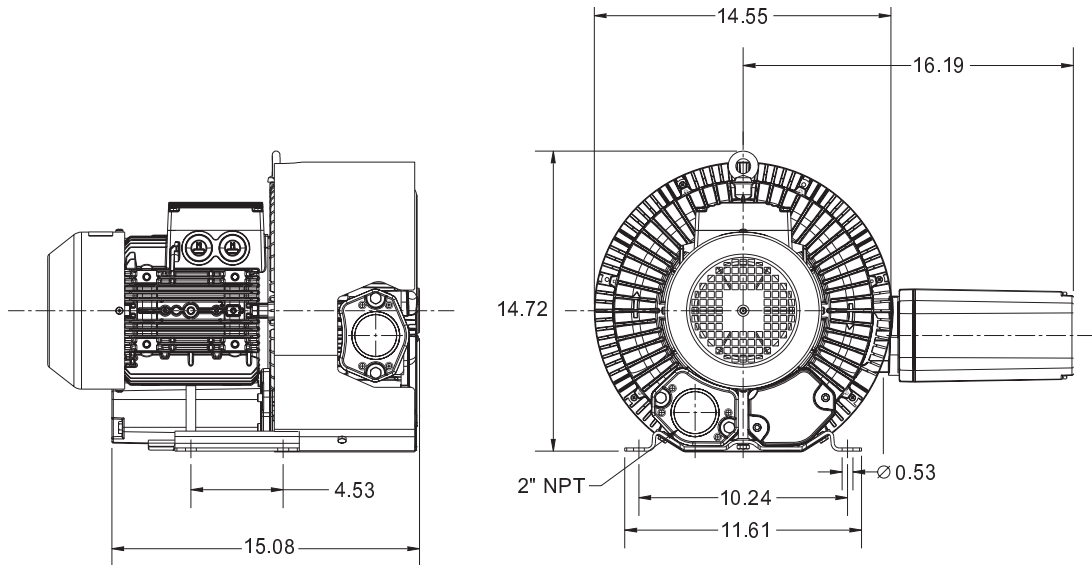
Performance curve for Vacuum pump



Performance curve for Compressor



Dimensions: (inches)



Recommended Accessories:

Relief valve:

VC61Z (Vacuum)
PC61Z (Pressure)

Filter:

ATF-200-15124/1
(Vacuum)
AFS-30-200-10
(Pressure)

Specifications subject to change without notice. Please contact factory for specification updates.

Selection & Ordering Data - Type 3BA1510

Curve No.	Order No.	Fre- quency	Rated power	Input voltage		Input current		Permissible total differential pressure		Sound pressure level	Weight
		Hz	HP	V		A		Vacuum inch H2O	Compressor inch H2O	dB(A)	lbs
3~ 50/60 Hz IP55 insulation material class F											
A 200	3BA1510-7AT46	50	4.02	200D ... 240D	345Y ... 415Y	12.5D	7.2Y	-136	165	72	86
A 201	3BA1510-7AT46	60	4.62	220D ... 250D	415Y ... 460Y	12.0D	6.5Y	-153	145	74	86
A 202	3BA1510-7AT56	50	5.36	200D ... 240D	345Y ... 415Y	17.4D	10.0Y	-157	197	72	95
A 203	3BA1510-7AT56	60	6.16	220D ... 250D	415Y ... 460Y	15.2D	8.5Y	-165	193	74	95

Suitable for 208 Volt Operation

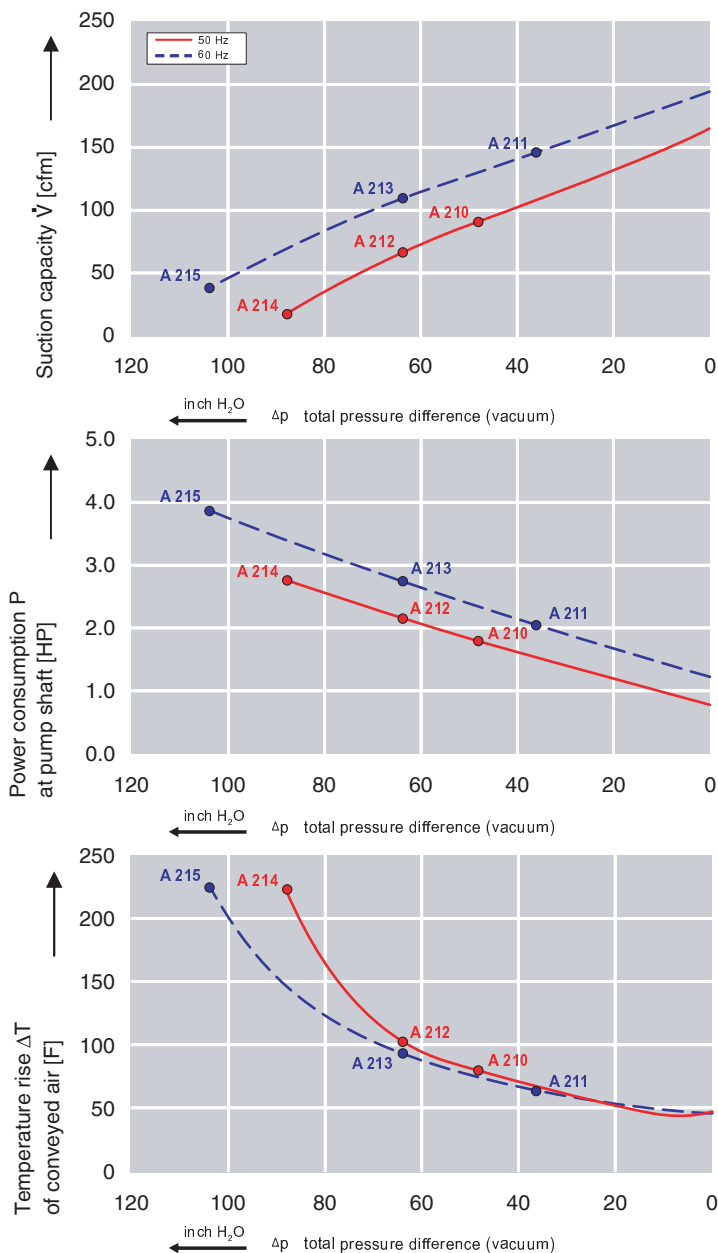
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Features:

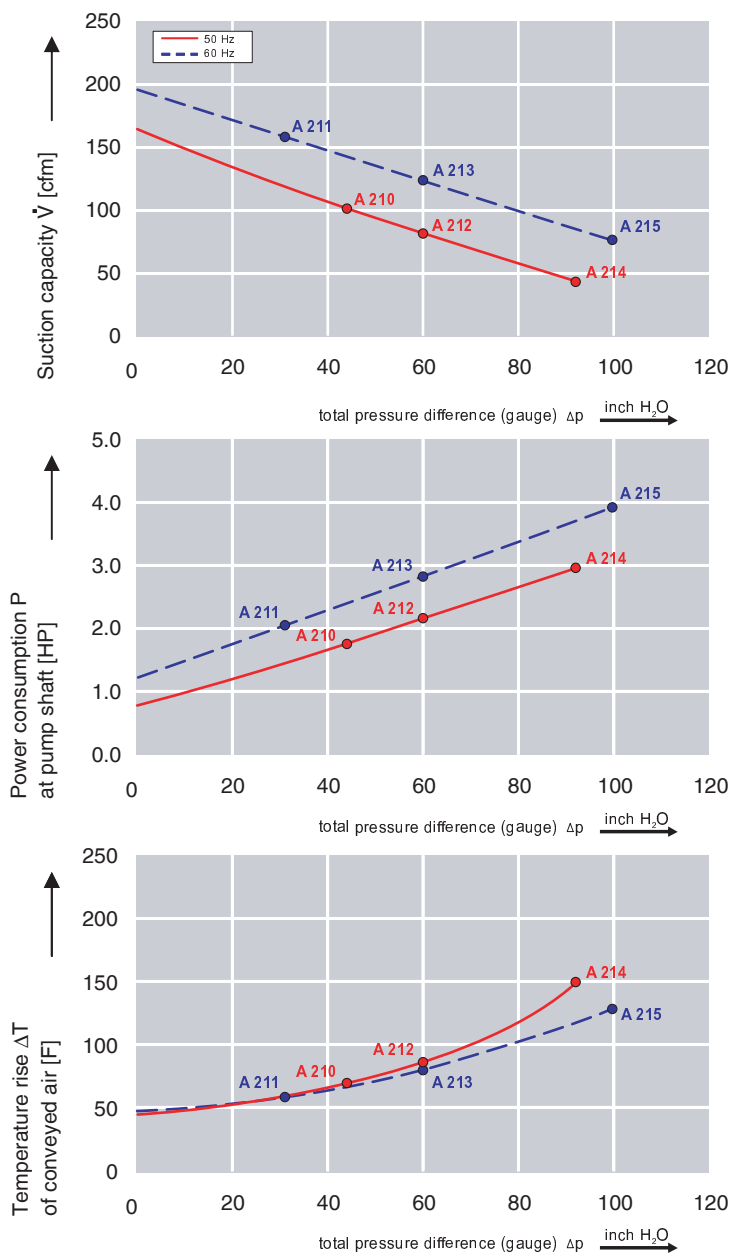


- Cooler running, outboard bearing provides maintenance-free operation
- Environmentally friendly oil-free technology
- Extremely quiet operation
- All motors are standard TEFC with Class F insulation, UL recognized, CE Compliant
Explosion-Proof motors available
- Custom construction blowers are available
- Rugged die cast aluminum construction

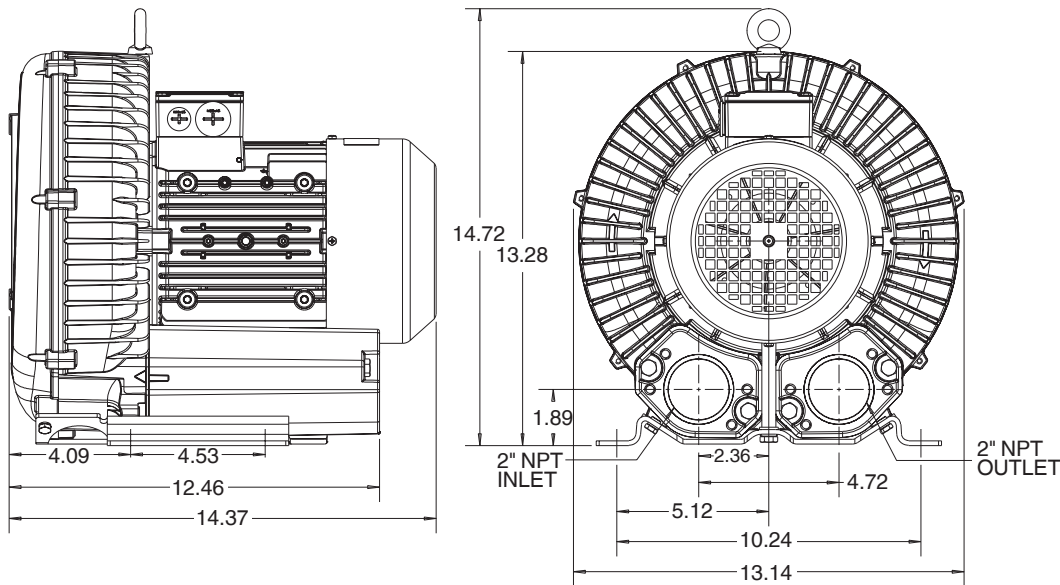
Performance curve for Vacuum pump



Performance curve for Compressor



Dimensions: (inches)



Recommended Accessories:

Relief valve:

VC61Z (Vacuum)
PC61Z (Pressure)

Filter:

ATF-200-15124/1
(Vacuum)
AFS-30-200-10
(Pressure)

Specifications subject to change without notice. Please contact factory for specification updates.

Selection & Ordering Data - Type 3BA1530

Curve No.	Order No.	Fre- quency	Rated power	Input voltage		Input current		Permissible total differential pressure		Sound pressure level	Weight
		Hz	HP	V		A		Vacuum inch H2O	Compressor inch H2O	dB(A)	lbs
3~ 50/60 Hz IP55 insulation material class F											
A 210	3BA1530-7AT16	50	1.74	200D ... 240D	345Y ... 415Y	5.7D	3.3Y	- 48	44	65	46
A 211	3BA1530-7AT16	60	2.01	220D ... 250D	415Y ... 460Y	5.7D	3.3Y	- 36	32	71	46
A 212	3BA1530-7AT26	50	2.15	200D ... 240D	345Y ... 415Y	7.5D	4.3Y	- 64	60	65	49
A 213	3BA1530-7AT26	60	2.75	220D ... 250D	415Y ... 460Y	7.6D	4.4Y	- 64	60	71	49
A 214	3BA1530-7AT36	50	2.95	200D ... 240D	345Y ... 415Y	9.7D	5.6Y	- 88	92	65	57
A 215	3BA1530-7AT36	60	3.42	220D ... 250D	415Y ... 460Y	10.3D	6.0Y	-104	100	71	57

Suitable for 208 Volt Operation

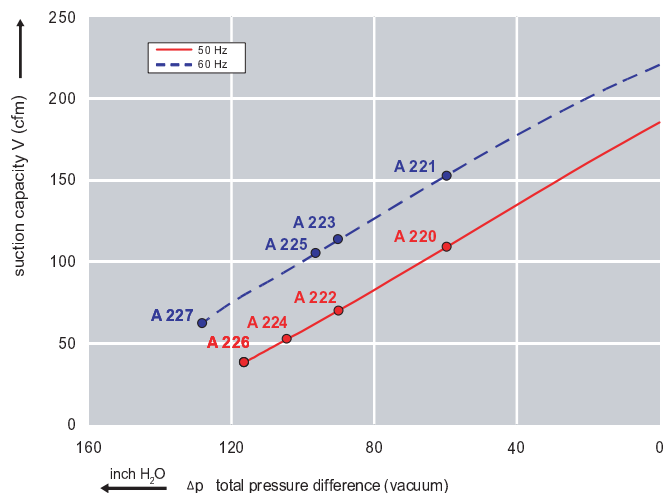
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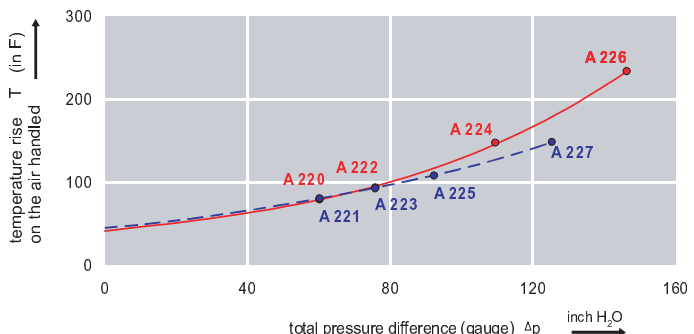
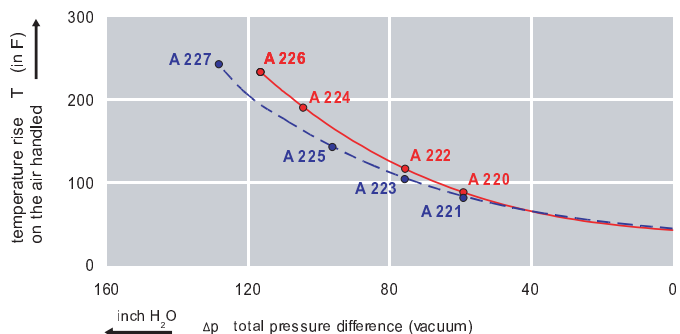
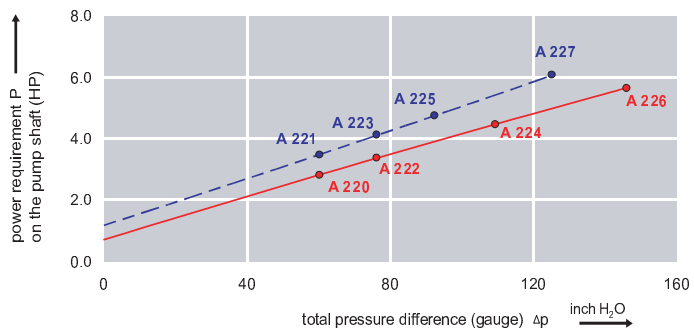
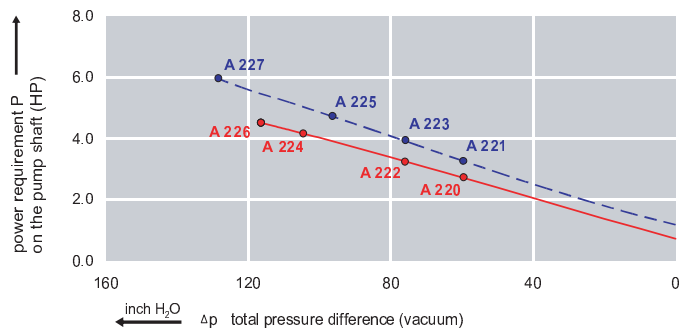
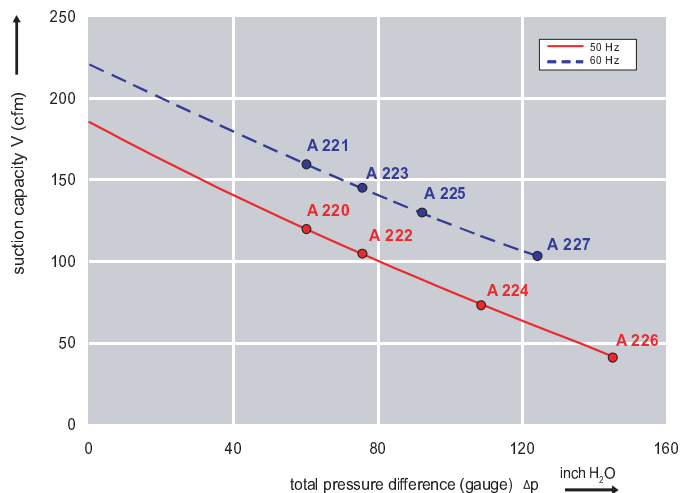
Features:

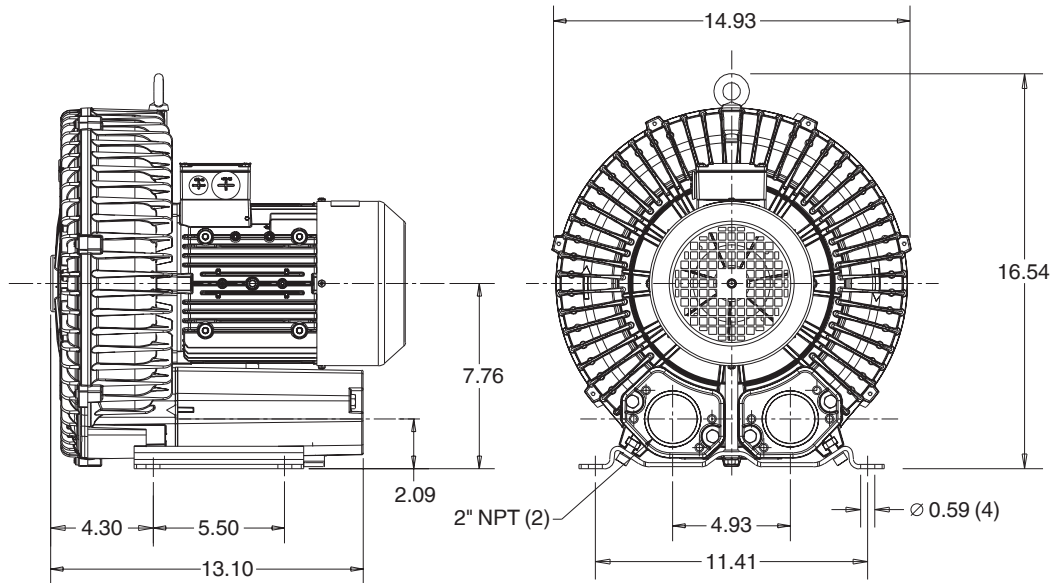
- Cooler running, outboard bearing provides maintenance-free operation
- Environmentally friendly oil-free technology
- Extremely quiet operation
- All motors are standard TEFC with Class F insulation, UL recognized, CE Compliant
Explosion-Proof motors available
- Custom construction blowers are available
- Rugged die cast aluminum construction

Performance curve for Vacuum pump



Performance curve for Compressor



Dimensions: (inches)

**Recommended
Accessories:**
Relief valve:

VC61Z (Vacuum)
PC61Z (Pressure)

Filter:

ATF-200-15124/1
(Vacuum)
AFS-30-200-10
(Pressure)

Specifications subject to change without notice. Please contact factory for specification updates.

Selection & Ordering Data - Type 3BA1600

Curve No.	Order No.	Fre- quency	Rated power	Input voltage		Input current		Permissible total differential pressure		Sound pressure level	Weight
		Hz	HP	V		A		Vacuum inch H2O	Compressor inch H2O	dB(A)	lbs
3~ 50/60 Hz IP55 insulation material class F											
A 220	3BA1600-7AT06	50	2.15	200D ... 240D	345Y ... 415Y	8.5D	4.9Y	-64	60	69	57
A 221	3BA1600-7AT06	60	2.7	220D ... 250D	415Y ... 460Y	7.5D	4.4Y	-64	60	72	57
A 222	3BA1600-7AT16	50	2.95	200D ... 240D	345Y ... 415Y	9.7D	5.6Y	-85	70	70	64
A 223	3BA1600-7AT16	60	3.42	220D ... 250D	415Y ... 460Y	10.3D	6.0Y	-85	76	73	64
A 224	3BA1600-7AT26	50	4.02	200D ... 240D	345Y ... 415Y	12.5D	7.2Y	-104	108	70	75
A 225	3BA1600-7AT26	60	4.62	220D ... 250D	415Y ... 460Y	12.6D	7.3Y	-96	92	73	75
A 225	3BA1600-7AT25	60	4.60		575		5.8Y	-96	92	73	75
A 226	3BA1600-7AT36	50	5.36	200D ... 240D	345Y ... 415Y	17.3D	10.0Y	-116	145	70	93
A 227	3BA1600-7AT36	60	6.16	220D ... 250D	415Y ... 460Y	18.0D	10.4Y	-128	124	73	93

Suitable for 208 Volt Operation

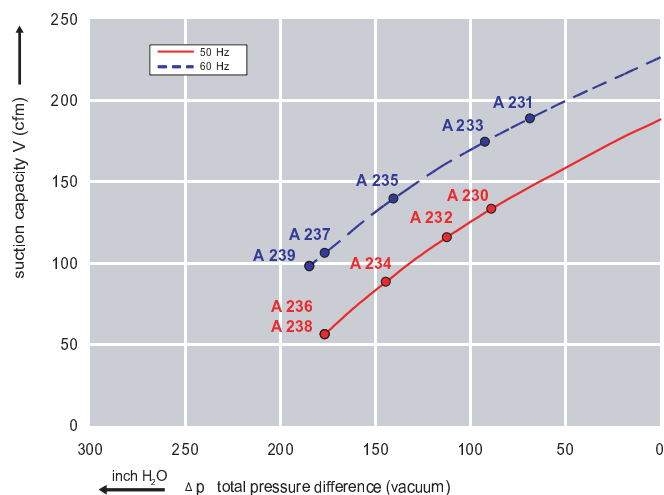
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Features:

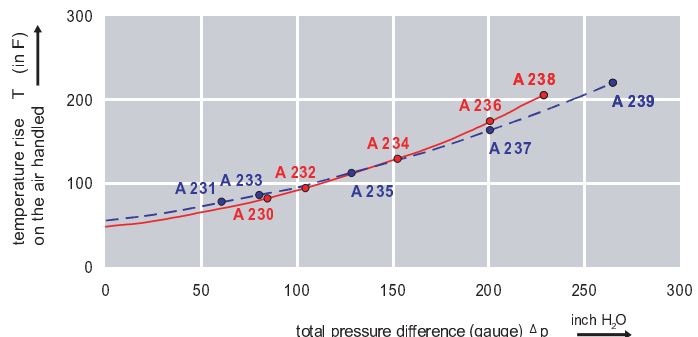
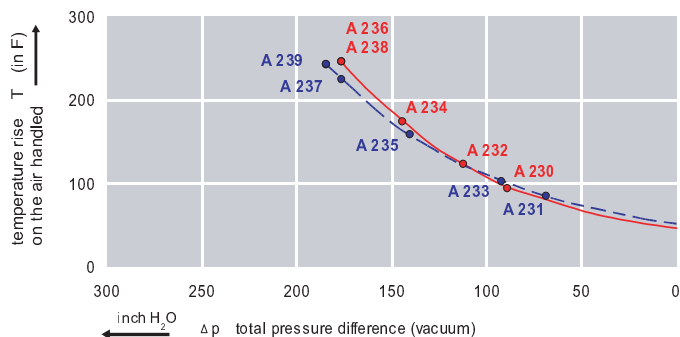
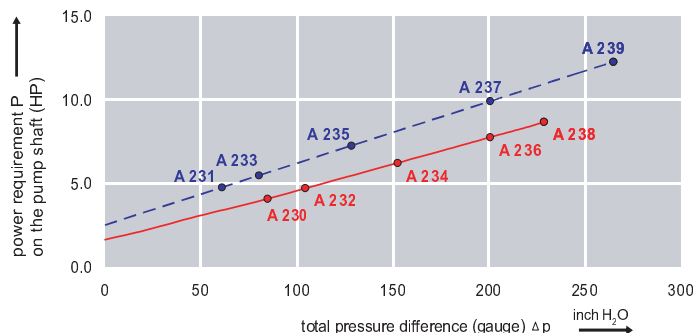
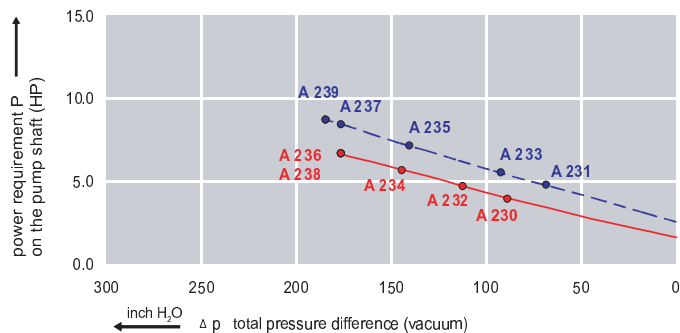
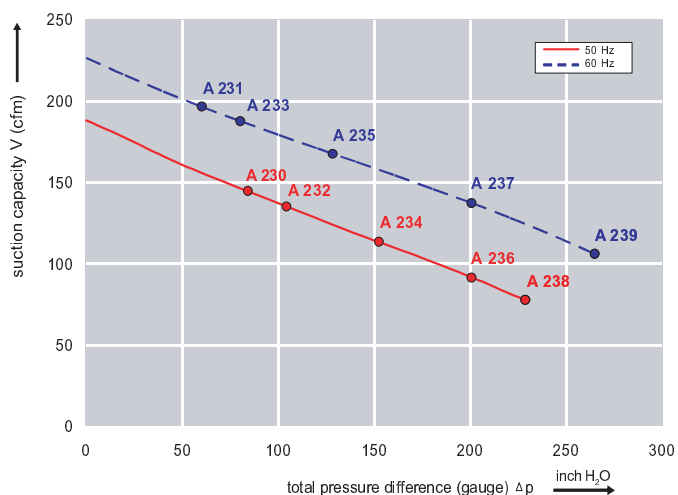


- Cooler running, outboard bearing provides maintenance-free operation
- Environmentally friendly oil-free technology
- Extremely quiet operation
- All motors are standard TEFC with Class F insulation, UL recognized, CE Compliant
Explosion-Proof motors available
- Custom construction blowers are available
- Rugged die cast aluminum construction

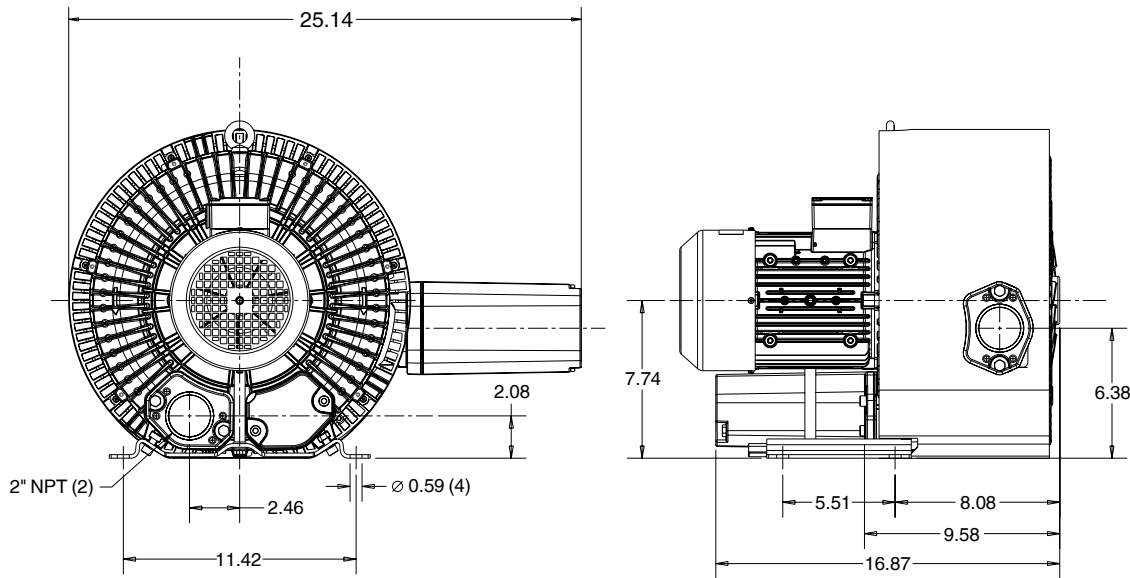
Performance curve for Vacuum pump



Performance curve for Compressor



Dimensions: (inches)



Recommended Accessories:

Relief valve:

VC61Z (Vacuum)

PC61Z (Pressure)

Filter:

ATF-200-15124/1
(Vacuum)

AFS-30-200-10
(Pressure)

Specifications subject to change without notice. Please contact factory for specification updates.

Selection & Ordering Data - Type 3BA1610

Curve No.	Order No.	Fre- quency	Rated power	Input voltage		Input current		Permissible total differential pressure		Sound pressure level dB(A)	Weight lbs
		Hz	HP	V		A	Vacuum inch H2O	Compressor inch H2O			
3~ 50/60 Hz IP55 insulation material class F											
A 230	3BA1610-7AT16	50	2.95	200D ... 240D	345Y ... 415Y	9.7D	5.6Y	-88	84	73	93
A 231	3BA1610-7AT16	60	3.42	220D ... 250D	415Y ... 460Y	9.0D	5.3Y	-68	60	76	93
A 232	3BA1610-7AT26	50	4.02	200D ... 240D	345Y ... 415Y	12.5D	7.2Y	-112	104	73	104
A 233	3BA1610-7AT26	60	4.62	220D ... 250D	415Y ... 460Y	12.0D	6.5Y	-92	80	76	104
A 234	3BA1610-7AT36	50	5.36	200D ... 240D	345Y ... 415Y	13.0D	7.5Y	-145	153	73	117
A 235	3BA1610-7AT36	60	6.43	220D ... 250D	415Y ... 460Y	16.5D	9.8Y	-141	128	76	117
A 236	3BA1610-7AT46	50	7.37	200D ... 240D	345Y ... 415Y	23.0D	13.3Y	-177	201	73	154
A 237	3BA1610-7AT46	60	8.44	220D ... 250D	415Y ... 460Y	20.0D	11.2Y	-177	201	76	154
A 238	3BA1610-7AT56	50	10.05	200D ... 240D	345Y ... 415Y	29.0D	16.7Y	-177	229	73	170
A 239	3BA1610-7AT56	60	11.52	220D ... 250D	415Y ... 460Y	27.5D	15.0Y	-185	265	76	170

Suitable for 208 Volt Operation

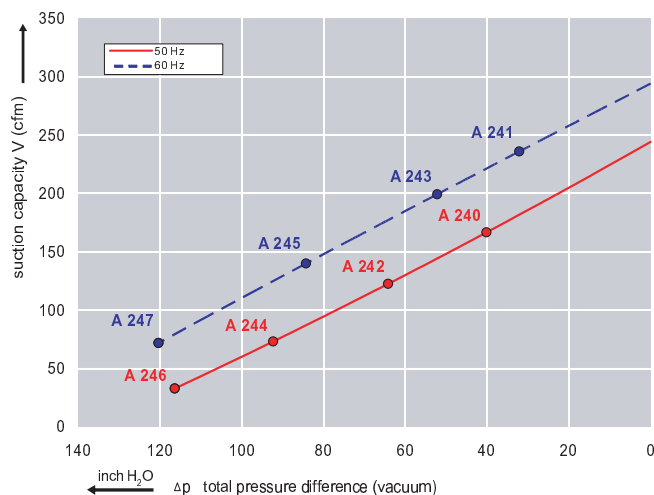
All curves are rated at 14.7 psia and 68°F ambient conditions and are reported in SCFM referenced to 68°F and 14.696 psia sea level conditions. Curve values are nominal, actual performance may vary by up to 10% of the values indicated. For inlet temperatures above approximately 80 °F or for handling gases other than air, please contact your Airtech sales representative for assistance.

Features:

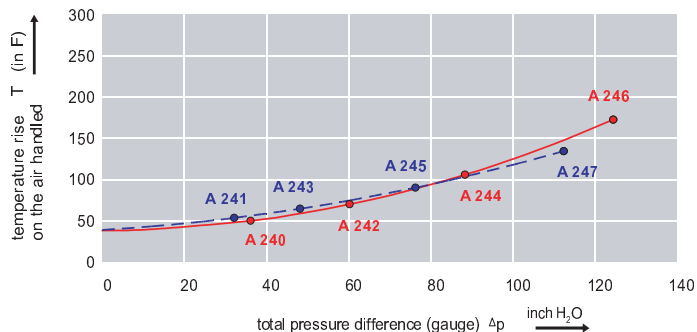
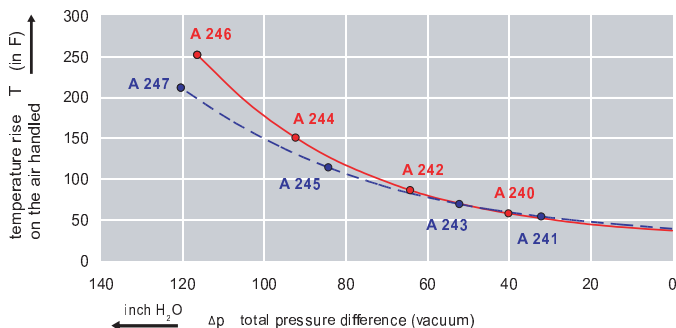
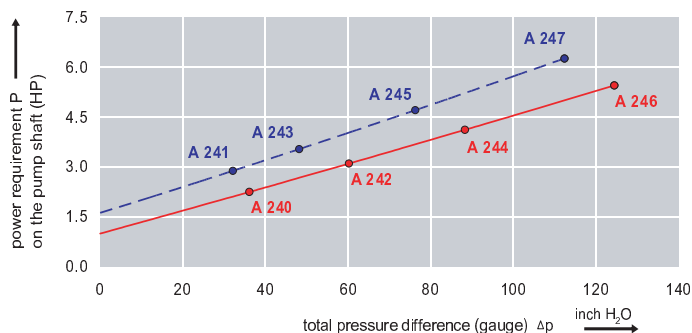
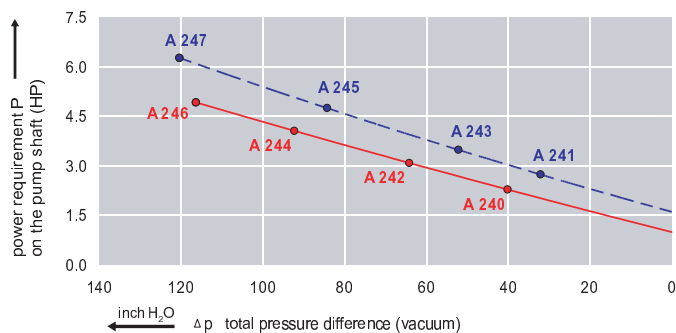
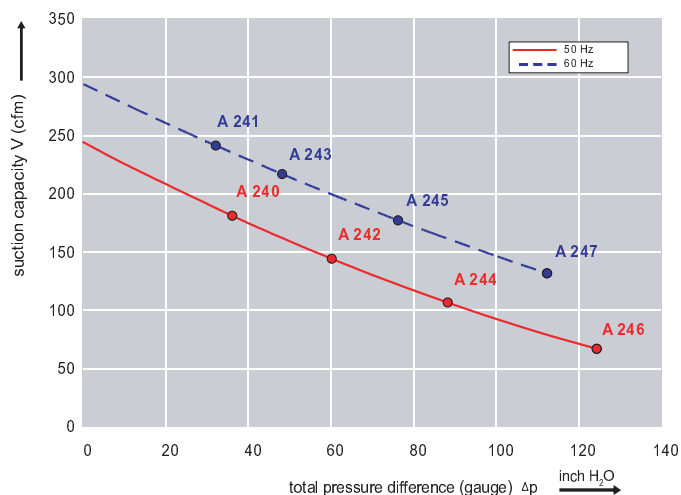


- Cooler running, outboard bearing provides maintenance-free operation
- Environmentally friendly oil-free technology
- Extremely quiet operation
- All motors are standard TEFC with Class F insulation, UL recognized, CE Compliant
Explosion-Proof motors available
- Custom construction blowers are available
- Rugged die cast aluminum construction

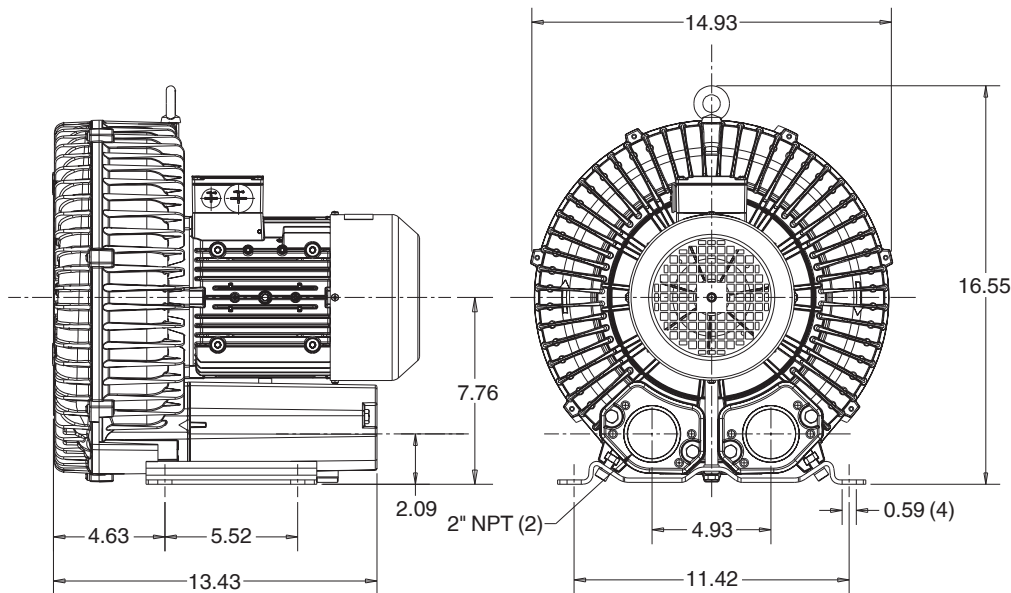
Performance curve for Vacuum pump



Performance curve for Compressor



Dimensions: (inches)



Recommended Accessories:

Relief valve:

VC61Z (Vacuum)
PC61Z (Pressure)

Filter:

ATF-200-15124/1
(Vacuum)
AFS-30-200-10
(Pressure)

Specifications subject to change without notice. Please contact factory for specification updates.

Selection & Ordering Data - Type 3BA1630

Curve No.	Order No.	Fre- quency	Rated power	Input voltage		Input current		Permissible total differential pressure		Sound pressure level	Weight
		Hz	HP	V		A		Vacuum inch H2O	Compressor inch H2O	dB(A)	lbs
3~ 50/60 Hz IP55 insulation material class F											
A 240	3BA1630-7AT06	50	2.14	200D ... 240D	345Y ... 415Y	8.5D	4.9Y	-40	36	70	59
A 241	3BA1630-7AT06	60	2.75	220D ... 250D	415Y ... 460Y	7.5D	4.4Y	-32	32	73	59
A 242	3BA1630-7AT16	50	2.95	200D ... 240D	345Y ... 415Y	9.7D	5.6Y	-64	60	70	66
A 243	3BA1630-7AT16	60	3.42	220D ... 250D	415Y ... 460Y	9.0D	5.3Y	-52	48	73	66
A 244	3BA1630-7AT26	50	4.02	200D ... 240D	345Y ... 415Y	12.5D	7.2Y	-92	88	70	77
A 245	3BA1630-7AT26	60	4.62	220D ... 250D	415Y ... 460Y	12.6D	7.3Y	-84	76	73	77
A 245	3BA1630-7AT25	60	4.60		575		5.8Y	-84	76	73	77
A 246	3BA1630-7AT36	50	5.36	200D ... 240D	345Y ... 415Y	15.6D	9.0Y	-116	124	70	95
A 247	3BA1630-7AT36	60	6.17	220D ... 250D	415Y ... 460Y	16.5D	9.8Y	-120	112	73	95

Suitable for 208 Volt Operation

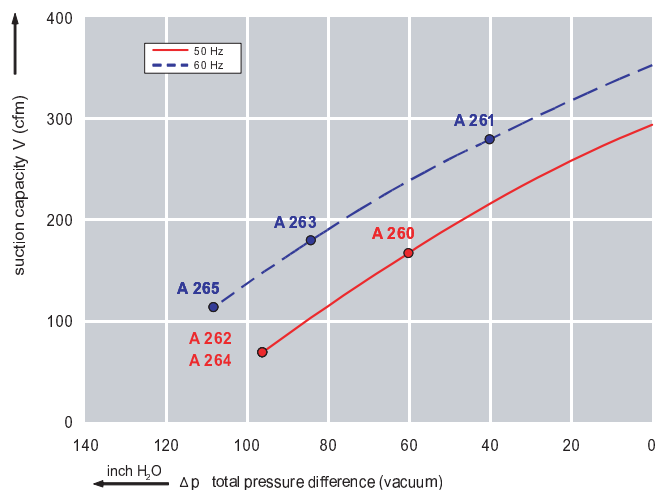
All curves are rated at 14.7 psia and 68°F ambient conditions and are reported in SCFM referenced to 68°F and 14.696 psia sea level conditions. Curve values are nominal, actual performance may vary by up to 10% of the values indicated. For inlet temperatures above approximately 80 °F or for handling gases other than air, please contact your Airtech sales representative for assistance.

Features:

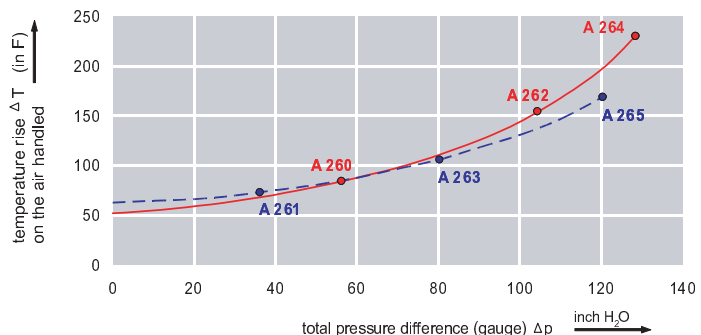
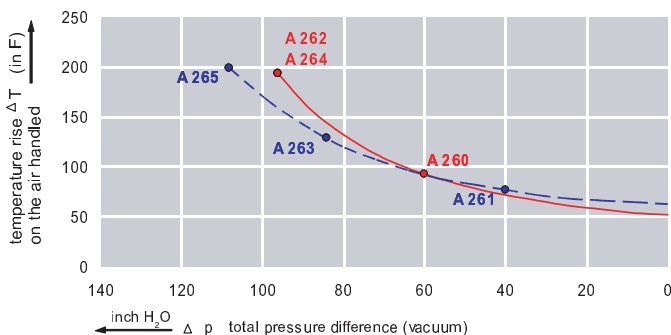
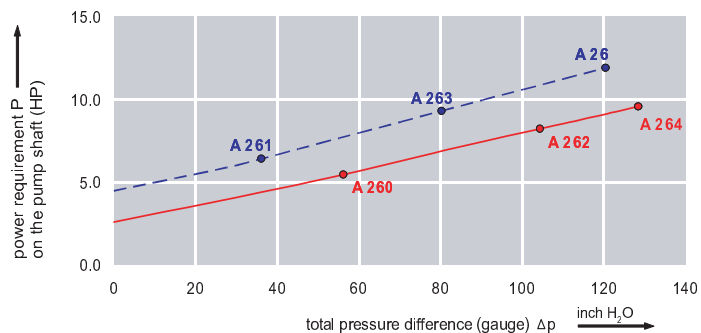
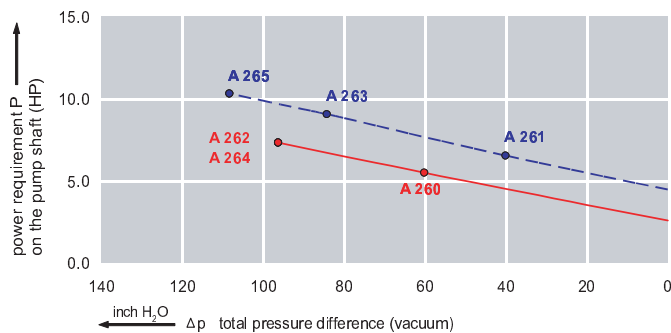
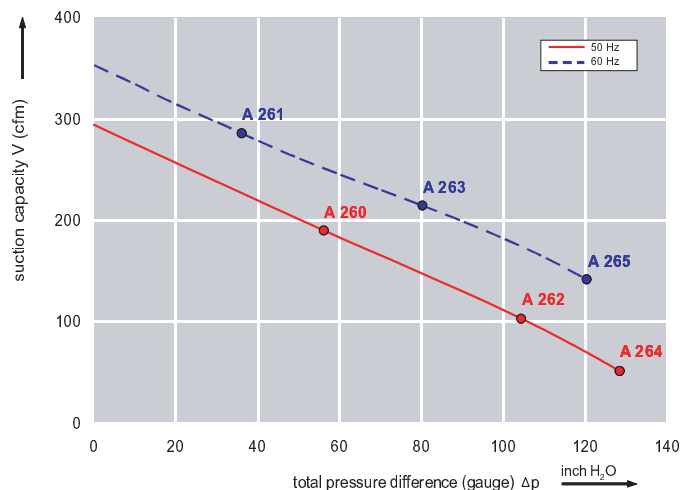


- Cooler running, outboard bearing provides maintenance-free operation
- Environmentally friendly oil-free technology
- Extremely quiet operation
- All motors are standard TEFC with Class F insulation, UL recognized, CE Compliant
Explosion-Proof motors available
- Custom construction blowers are available
- Rugged die cast aluminum construction

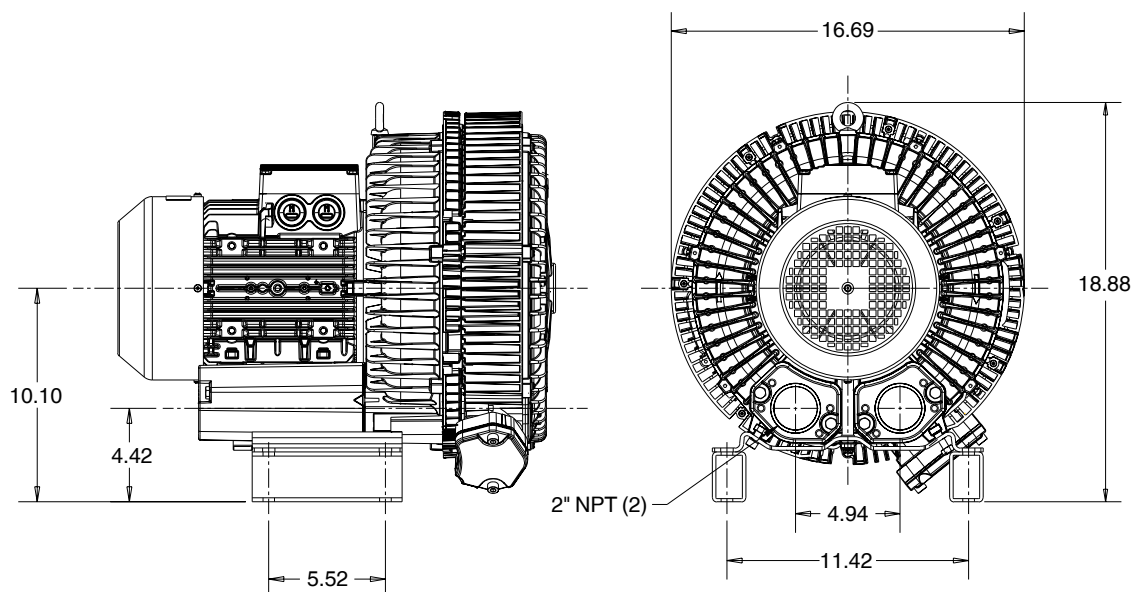
Performance curve for Vacuum pump



Performance curve for Compressor



Dimensions: (inches)



Recommended Accessories:

Relief valve:

VC61Z (Vacuum)

PC61Z (Pressure)

Filter:

ATF-200-15124/1
(Vacuum)

AFS-30-200-10
(Pressure)

Specifications subject to change without notice. Please contact factory for specification updates.

Selection & Ordering Data - Type 3BA1640

Curve No.	Order No.	Fre- quency	Rated power	Input voltage		Input current		Permissible total differential pressure		Sound pressure level	Weight
		Hz	HP	V		A		Vacuum inch H2O	Compressor inch H2O	dB(A)	lbs
3~ 50/60 Hz IP55 insulation material class F											
A 260	3BA1640-7AT36	50	5.36	200D ... 240D	345Y ... 415Y	13.0D	7.5Y	-60	56	74	117
A 261	3BA1640-7AT36	60	6.16	220D ... 250D	415Y ... 460Y	15.2D	8.5Y	-40	36	78	117
A 262	3BA1640-7AT46	50	7.37	200D ... 240D	345Y ... 415Y	23.0D	13.3Y	-96	104	74	161
A 263	3BA1640-7AT46	60	8.44	220D ... 250D	415Y ... 460Y	20.0D	11.2Y	-84	80	78	161
A 264	3BA1640-7AT56	50	10.05	200D ... 240D	345Y ... 415Y	29.0D	16.7Y	-96	128	74	189
A 265	3BA1640-7AT56	60	11.52	220D ... 250D	415Y ... 460Y	27.5D	15.0Y	-108	120	78	189

Suitable for 208 Volt Operation

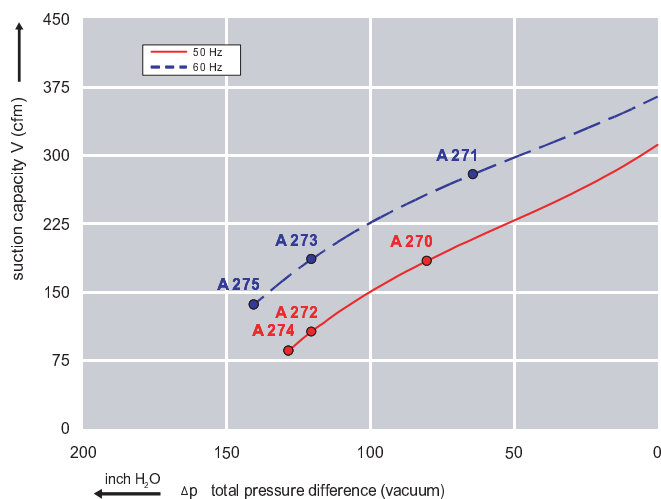
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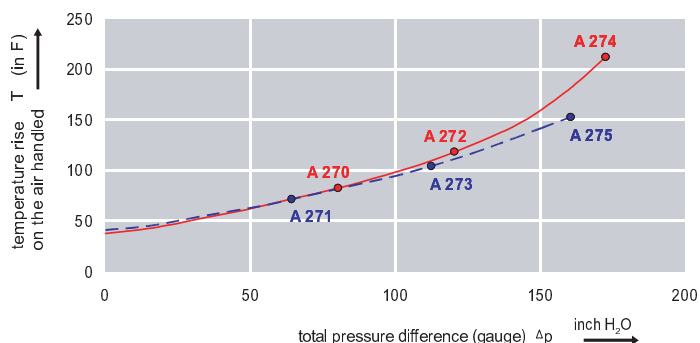
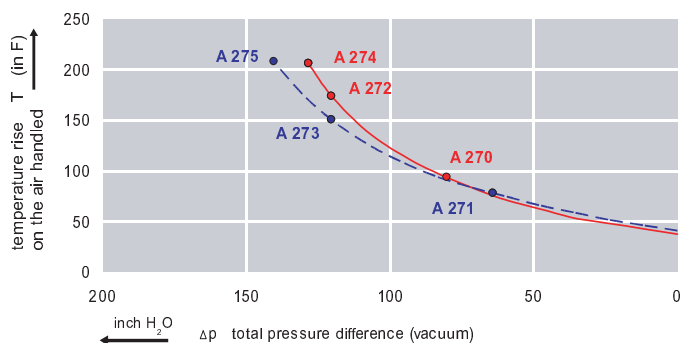
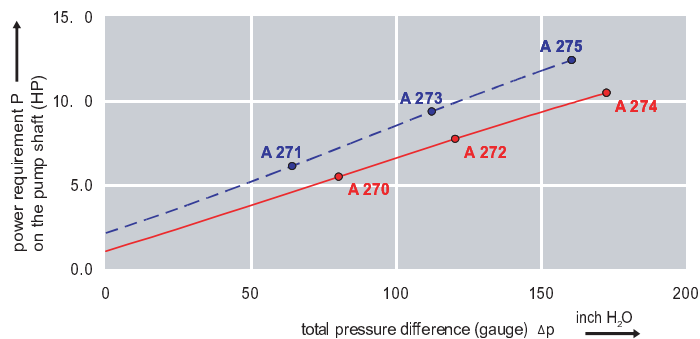
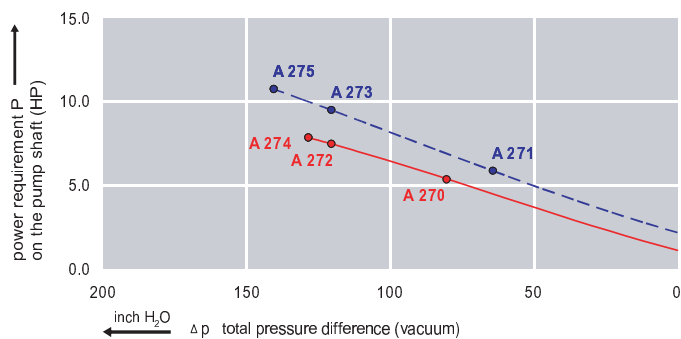
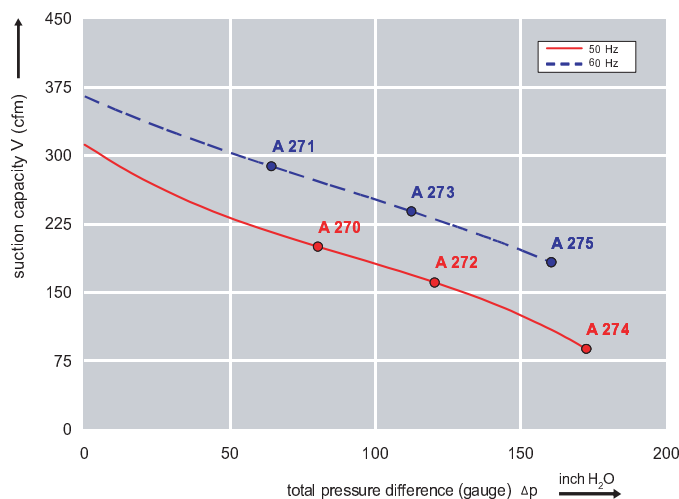
Features:

- Cooler running, outboard bearing provides maintenance-free operation
- Environmentally friendly oil-free technology
- Extremely quiet operation
- All motors are standard TEFC with Class F insulation, UL recognized, CE Compliant
Explosion-Proof motors available
- Custom construction blowers are available
- Rugged die cast aluminum construction

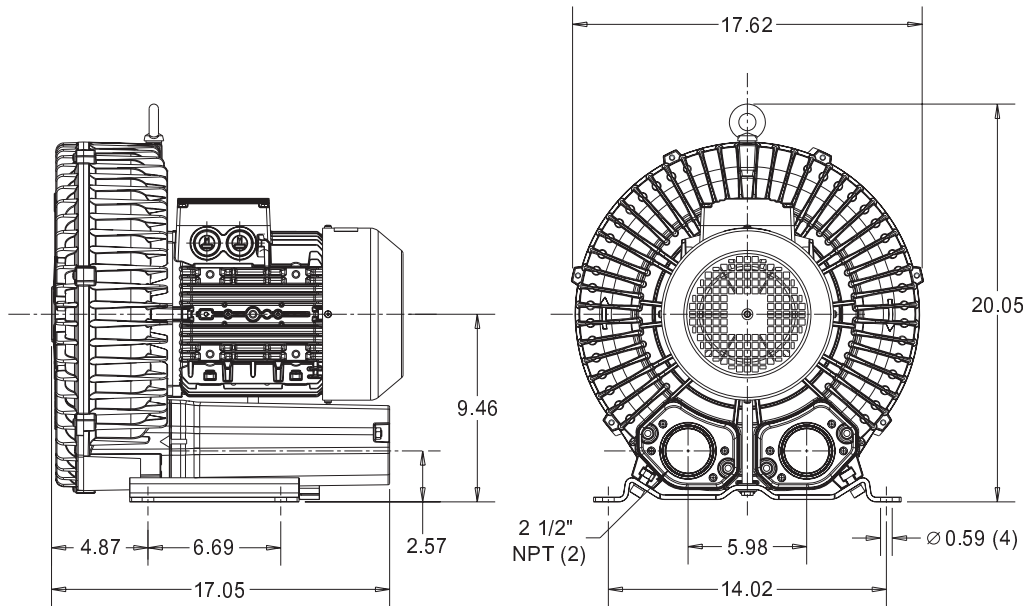
Performance curve for Vacuum pump



Performance curve for Compressor



Dimensions: (inches)



Recommended Accessories:

Relief valve:

VC81Z (Vacuum)
PC81Z (Pressure)

Filter:

ATF-250-15124/1
(Vacuum)
AFS-230-250-10
(Pressure)

Specifications subject to change without notice. Please contact factory for specification updates.

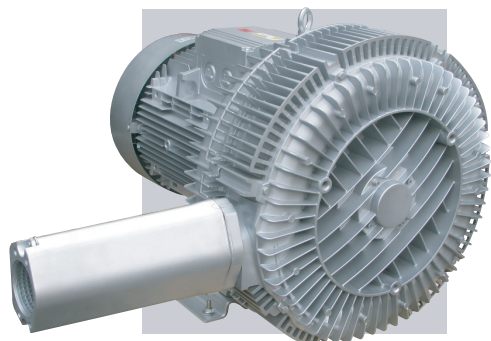
Selection & Ordering Data - Type 3BA1800

Curve No.	Order No.	Fre- quency	Rated power	Input Voltage		Input Current		Permissible total differential pressure		Sound pressure level	
		Hz	HP	V		A		Vacuum inch H2O	Compressor inch H2O		
3~ 50/60 Hz IP55 insulation material class F											
A 270	3BA1800-7AT06	50	5.36	200D ... 240D	345Y ... 415Y	15.6D	9.0Y	-80	80	70	128
A 271	3BA1800-7AT06	60	6.16	220D ... 250D	415Y ... 460Y	15.2D	8.5Y	-64	64	74	128
A 272	3BA1800-7AT16	50	7.37	200D ... 240D	345Y ... 415Y	23.0D	13.3Y	-120	120	70	143
A 273	3BA1800-7AT16	60	8.44	220D ... 250D	415Y ... 460Y	23.0D	13.3Y	-120	112	74	143
A 274	3BA1800-7AT26	50	10.05	200D ... 240D	345Y ... 415Y	29.0D	16.7Y	-128	173	70	150
A 275	3BA1800-7AT26	60	11.52	220D ... 250D	415Y ... 460Y	27.5D	15.0Y	-141	161	74	150

Suitable for 208 Volt Operation

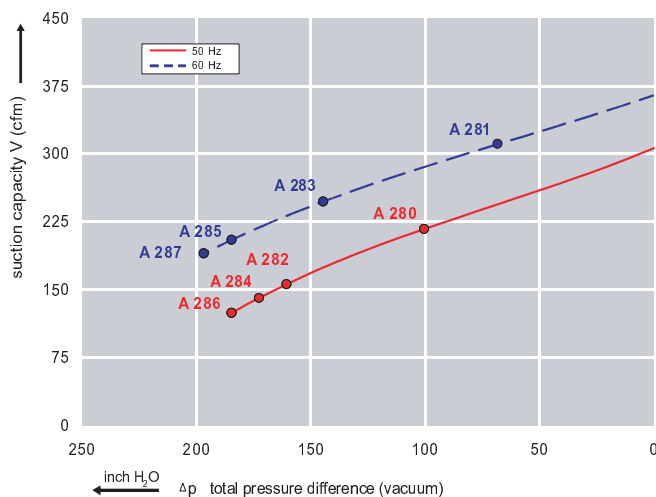
All curves are rated at 14.7 psia and 68°F ambient conditions and are reported in SCFM referenced to 68°F and 14.696 psia sea level conditions. Curve values are nominal, actual performance may vary by up to 10% of the values indicated. For inlet temperatures above approximately 80 °F or for handling gases other than air, please contact your Airtech sales representative for assistance.

Features:

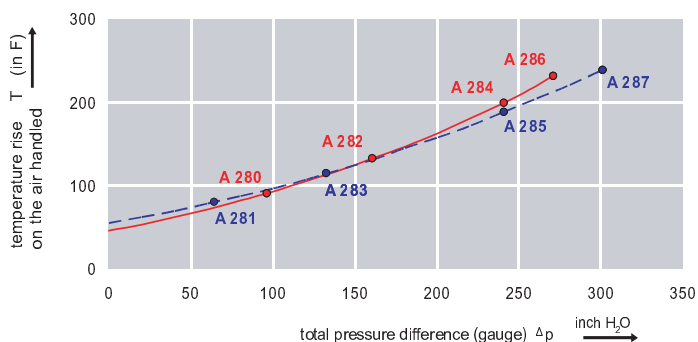
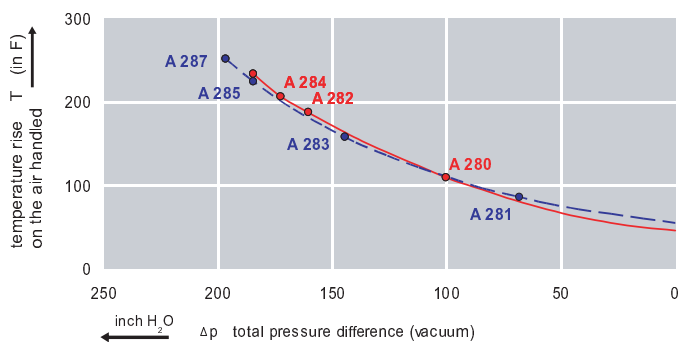
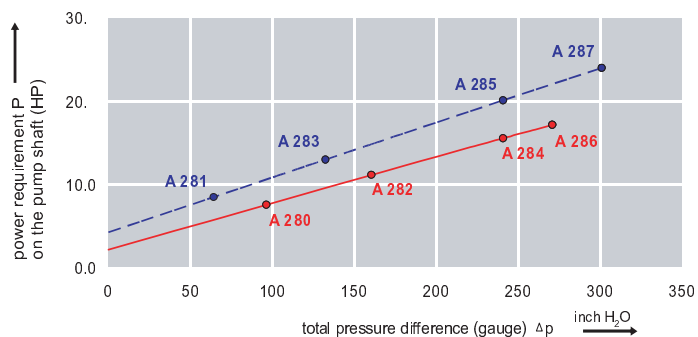
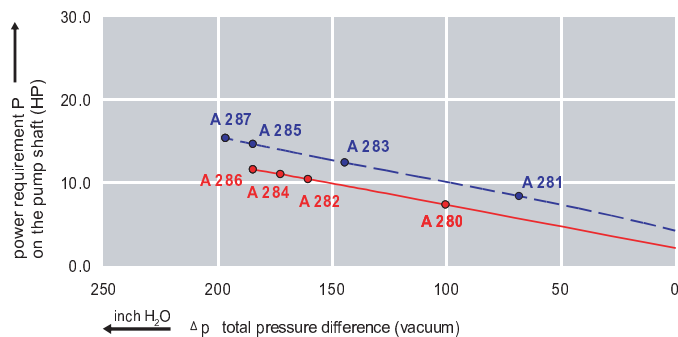
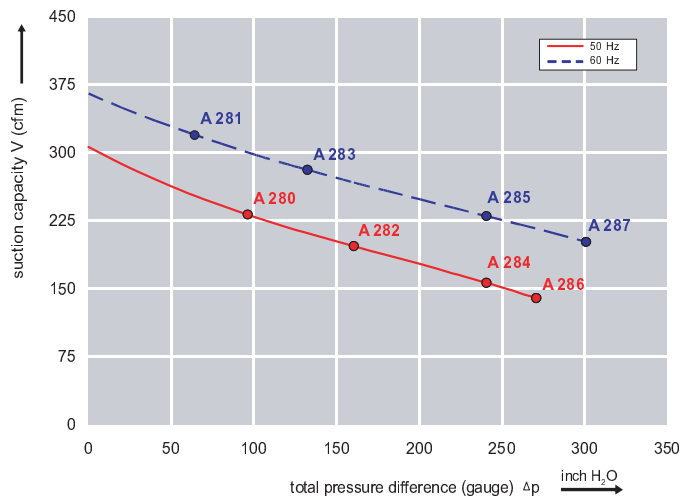


- Cooler running, outboard bearing provides maintenance-free operation
- Environmentally friendly oil-free technology
- Extremely quiet operation
- All motors are standard TEFC with Class F insulation, UL recognized, CE Compliant
Explosion-Proof motors available
- Custom construction blowers are available
- Rugged die cast aluminum construction

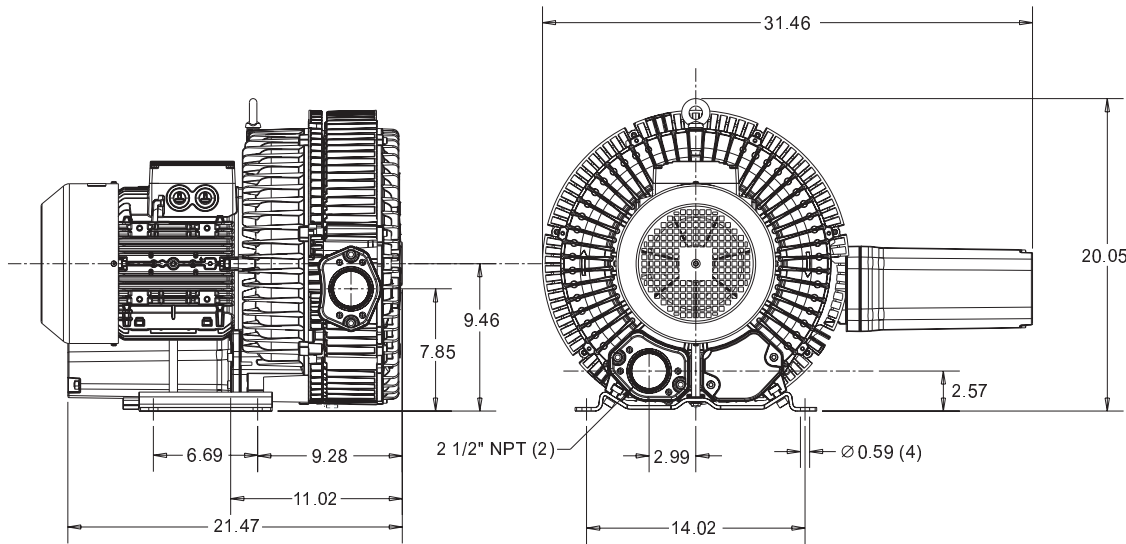
Performance curve for Vacuum pump



Performance curve for Compressor



Dimensions: (inches)



Recommended Accessories:

Relief valve:

VC81Z (Vacuum)
PC81Z (Pressure)

Filter:

ATF-250-15124/1
(Vacuum)
AFS-230-250-10
(Pressure)

Specifications subject to change without notice. Please contact factory for specification updates.

Selection & Ordering Data - Type 3BA1810

Curve No.	Order No.	Fre- quency	Rated power	Input voltage		Input current		Permissible total differential pressure		Sound pressure level dB(A)	Weight lbs
		Hz	HP	V		A		Vacuum inch H2O	Compressor inch H2O		
3~ 50/60 Hz IP55 insulation material class F1)											
A 280	3BA1810-7AT16	50	7.37	200D ... 240D	345Y ... 415Y	23.0D	13.3Y	-100	96	74	250
A 281	3BA1810-7AT16	60	8.44	220D ... 250D	415Y ... 460Y	20.0D	11.2Y	-68	64	78	250
A 282	3BA1810-7AT26	50	10.05	200D ... 240D	345Y ... 415Y	29.0D	16.7Y	-161	161	74	260
A 283	3BA1810-7AT26	60	11.52	220D ... 250D	415Y ... 460Y	27.5D	15.0Y	-145	132	78	260
A 284	3BA1810-7AT36	50	14.74	200D ... 240D	345Y ... 415Y	48.5D	28.0Y	-173	241	74	316
A 285	3BA1810-7AT36	60	16.88	220D ... 250D	415Y ... 460Y	50.2D	29.0Y	-185	241	78	316
A 286	3BA1810-7AT46	50	20.11	200D ... 240D	345Y ... 415Y	56.5D	32.5Y	-185	271	74	341
A 287	3BA1810-7AT46	60	23.18	220D ... 250D	415Y ... 460Y	60.0D	34.5Y	-197	301	78	341

Suitable for 208 Volt Operation

All curves are rated at 14.7 psia and 68°F ambient conditions and are reported in SCFM referenced to 68°F and 14.696 psia sea level conditions. Curve values are nominal, actual performance may vary by up to 10% of the values indicated. For inlet temperatures above approximately 80 °F or for handling gases other than air, please contact your Airtech sales representative for assistance.

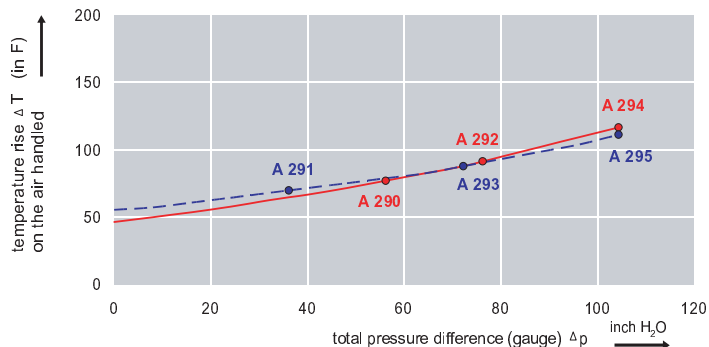
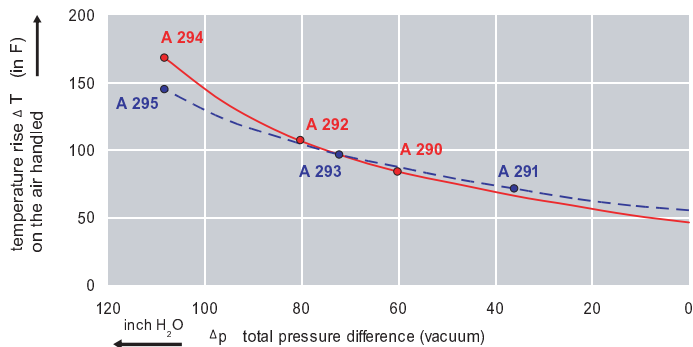
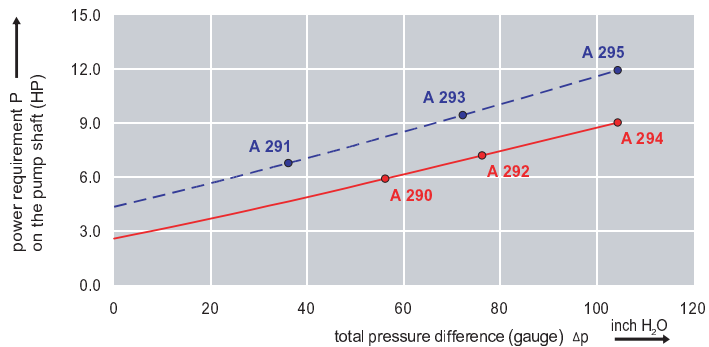
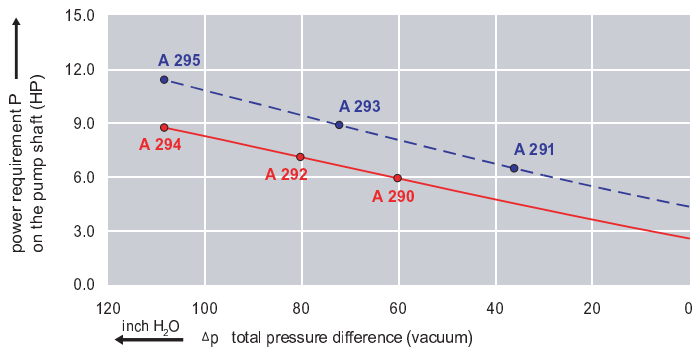
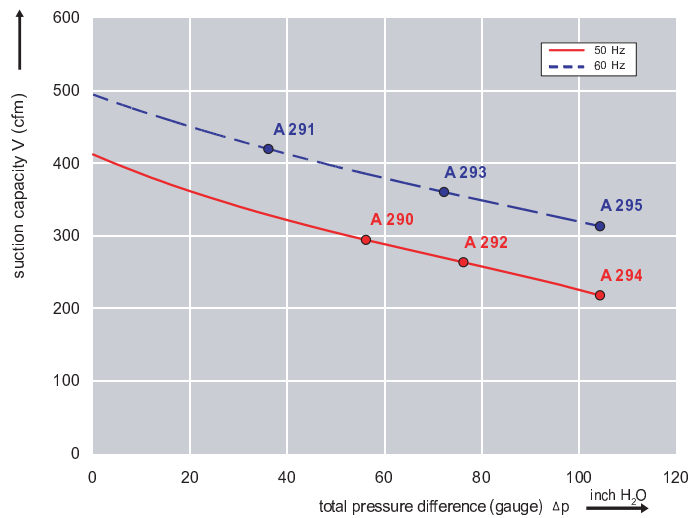
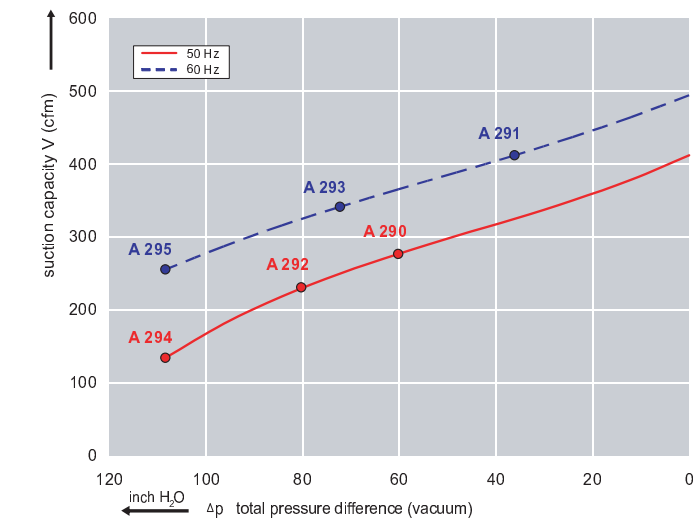


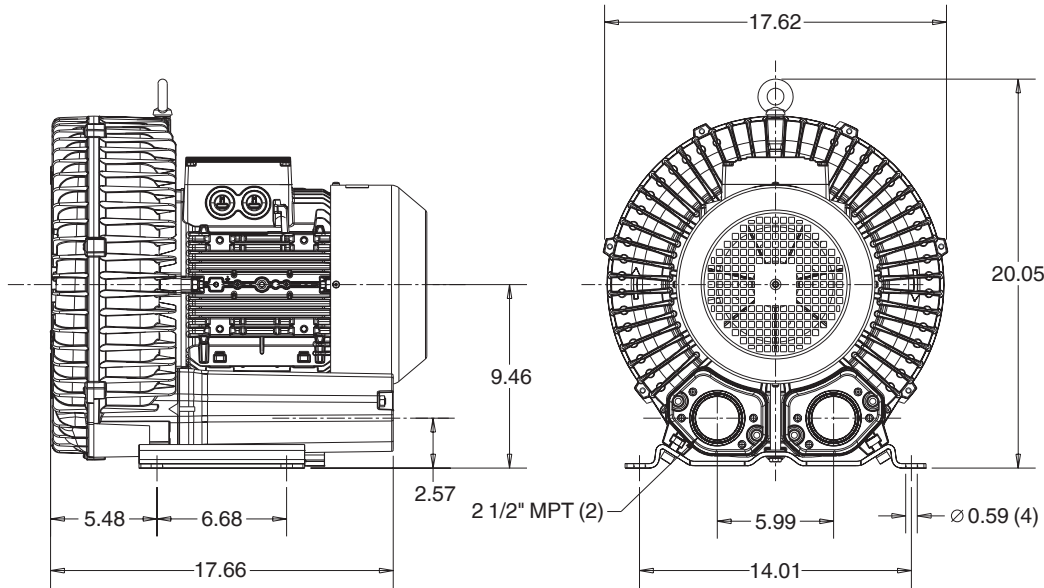
Features:

- Cooler running, outboard bearing provides maintenance-free operation
- Environmentally friendly oil-free technology
- Extremely quiet operation
- All motors are standard TEFC with Class F insulation, UL recognized, CE Compliant
Explosion-Proof motors available
- Custom construction blowers are available
- Rugged die cast aluminum construction

Performance curve for Vacuum pump

Performance curve for Compressor



Dimensions: (inches)

**Recommended
Accessories:**
Relief valve:

VC91Z
(Vacuum)

PC91Z
(Pressure)

Filter:

ATF-300-21138
(Vacuum)

AFS-230-300-10
(Pressure)

Specifications subject to change without notice. Please contact factory for specification updates.

Selection & Ordering Data - Type 3BA1830

Curve No.	Order No.	Fre- quency	Rated power	Input voltage		Input current		Permissible total differential pressure		Sound pressure level	Weight
		Hz	HP	V		A		Vacuum inch H2O	Compressor inch H2O	dB(A)	lbs
3~ 50/60 Hz IP55 insulation material class F											
A 290	3BA1830-7AT06	50	5.36	200D ... 240D	345Y ... 415Y	15.6D	9.0Y	-60	56	70	139
A 291	3BA1830-7AT06	60	6.16	220D ... 250D	415Y ... 460Y	15.2D	8.5Y	-36	36	74	139
A 292	3BA1830-7AT16	50	7.37	200D ... 240D	345Y ... 415Y	23.0D	13.3Y	-80	76	70	154
A 293	3BA1830-7AT16	60	8.44	220D ... 250D	415Y ... 460Y	23.0D	13.3Y	-72	72	74	154
A 294	3BA1830-7AT26	50	10.05	200D ... 240D	345Y ... 415Y	29.0D	16.7Y	-108	104	70	160
A 295	3BA1830-7AT26	60	11.52	220D ... 250D	415Y ... 460Y	27.5D	15.0Y	-108	104	74	160
3~ 50/60 Hz IP55 insulation material class F											
A 290	3BA1830-7AT05	50	5.36	500D		7.5D		-60	56	70	139
A 291	3BA1830-7AT05	60	6.17	575D		7.6D		-36	36	74	139
A 292	3BA1830-7AT15	50	7.37	500D		10.5D		-80	76	70	154
A 293	3BA1830-7AT15	60	8.45	575D		10.4D		-72	72	74	154
A 294	3BA1830-7AT25	50	10.05	500D		13.0D		-108	104	70	160
A 295	3BA1830-7AT25	60	11.53	575D		13.6D		-108	104	74	160

Suitable for 208 Volt Operation

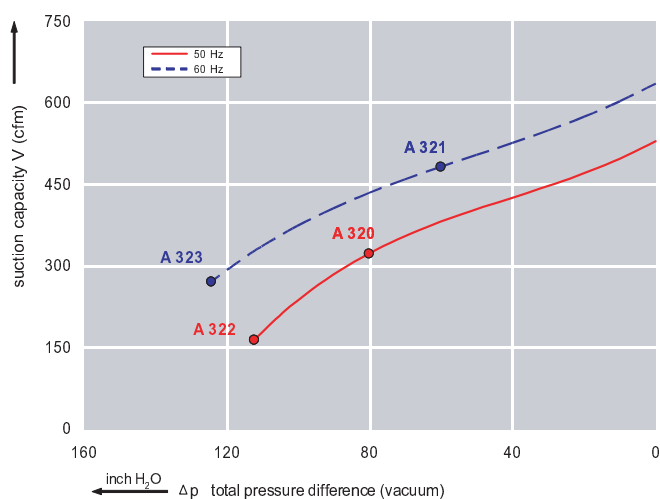
All curves are rated at 14.7 psia and 68°F ambient conditions and are reported in SCFM referenced to 68°F and 14.696 psia sea level conditions. Curve values are nominal, actual performance may vary by up to 10% of the values indicated. For inlet temperatures above approximately 80 °F or for handling gases other than air, please contact your Airtech sales representative for assistance.

Features:

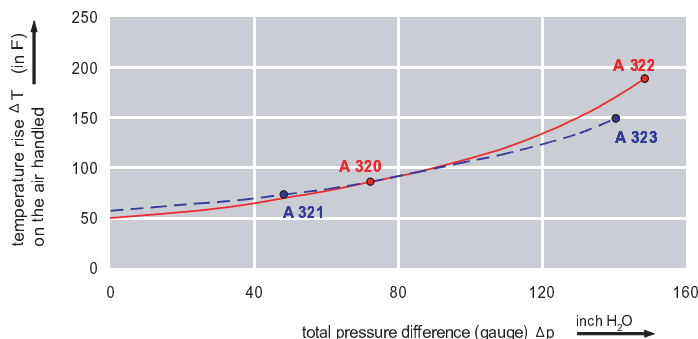
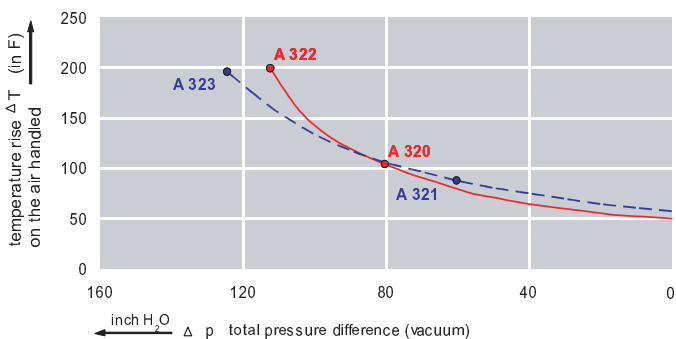
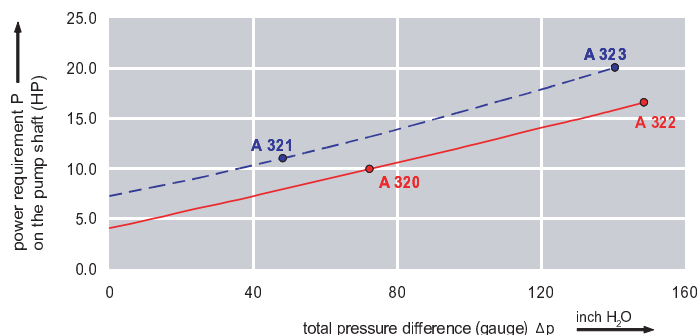
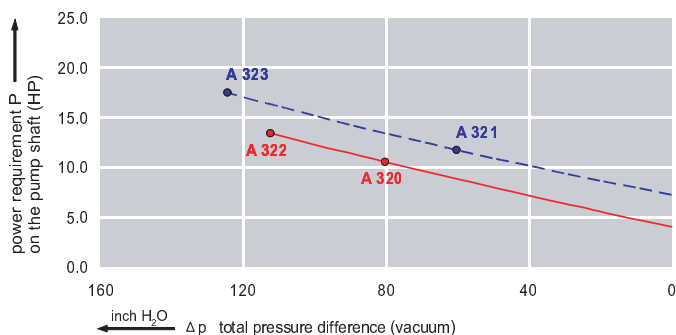
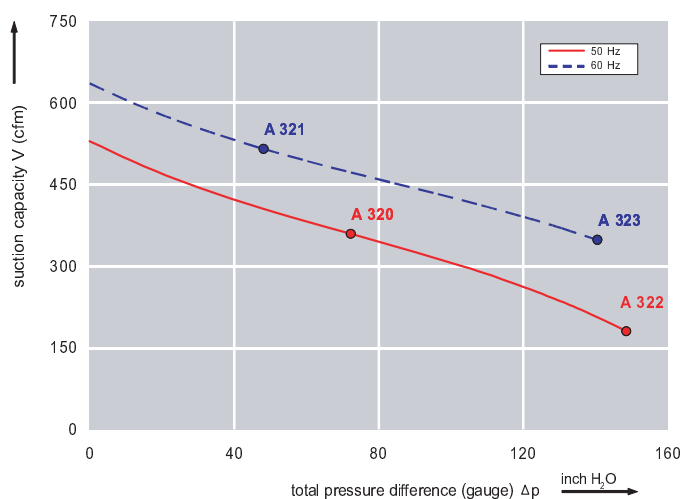


- Cooler running, outboard bearing provides maintenance-free operation
- Environmentally friendly oil-free technology
- Extremely quiet operation
- All motors are standard TEFC with Class F insulation, UL recognized, CE Compliant
Explosion-Proof motors available
- Custom construction blowers are available
- Rugged die cast aluminum construction

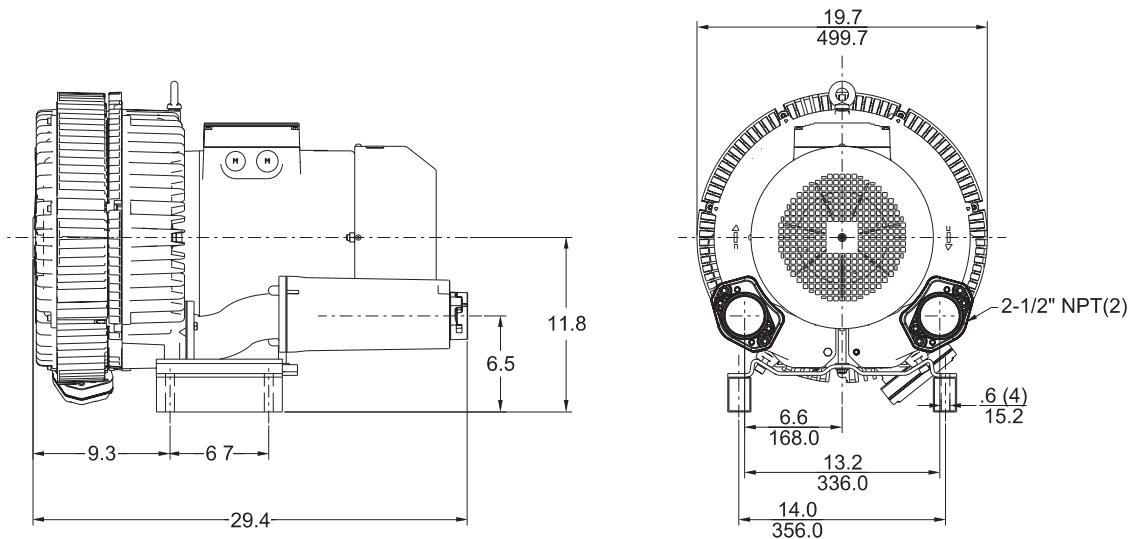
Performance curve for Vacuum pump



Performance curve for Compressor



Dimensions: (inches)



Recommended Accessories:

Relief valve:

VC91Z (Vacuum)
PC91Z (Pressure)

Filter:

ATF-300-21138
(Vacuum)
AFS-230-300-10
(Pressure)

Specifications subject to change without notice. Please contact factory for specification updates.

Selection & Ordering Data - Type 3BA1840

Curve No.	Order No.	Fre- quency	Rated power	Input voltage		Input current		Permissible total differential pressure ²⁾		Sound pressure level ³⁾	Weight ca.
		Hz	HP	V		A		Vacuum inch H2O	Compressor inch H2O	dB(A)	lbs
3~ 50/60 Hz IP55 insulation material class F											
A 320	3BA1840-7AT26	50	10.05	200D ... 240D	345Y ... 415Y	29.0D	16.7Y	-80	72	74	352
A 321	3BA1840-7AT26	60	11.52	220D ... 250D	415Y ... 460Y	27.5D	15.0Y	-60	48	78	352
A 322	3BA1840-7AT36	50	14.74	200D ... 240D	345Y ... 415Y	48.5D	28.0Y	-112	149	74	441
A 323	3BA1840-7AT36	60	16.98	220D ... 250D	415Y ... 460Y	50.2D	29.0Y	-124	141	78	441

Suitable for 208 Volt Operation

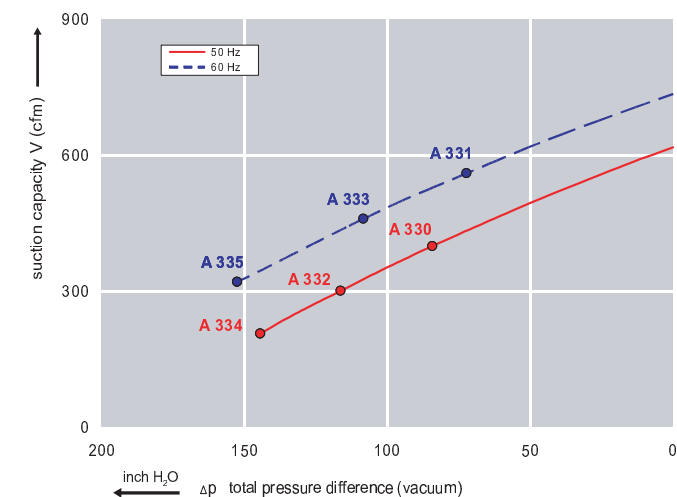
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Features:

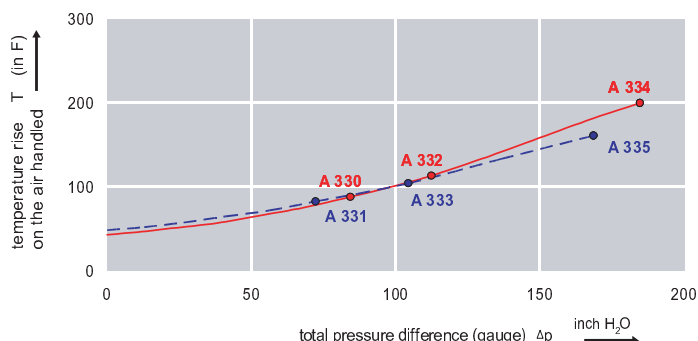
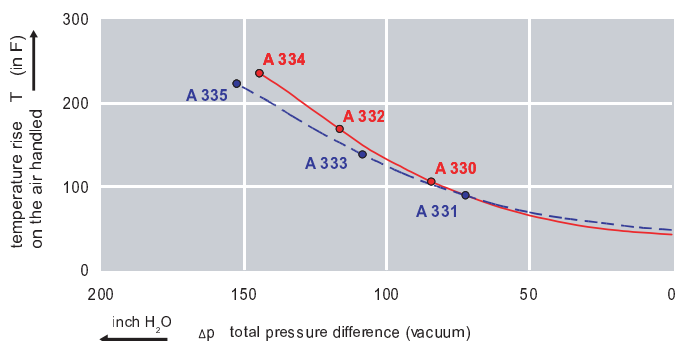
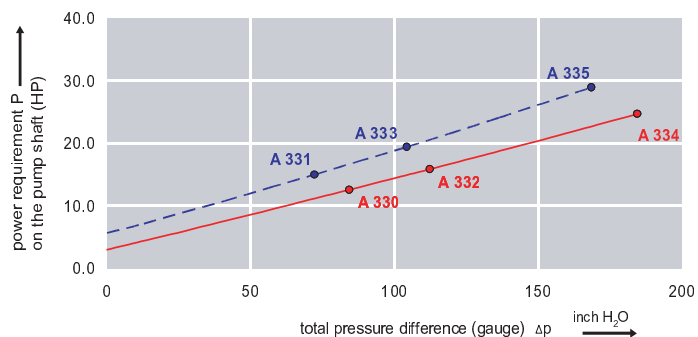
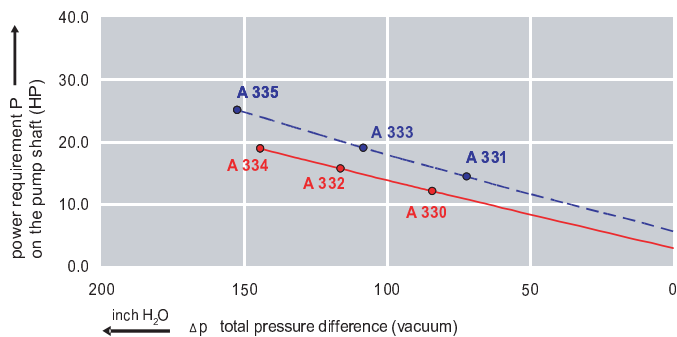
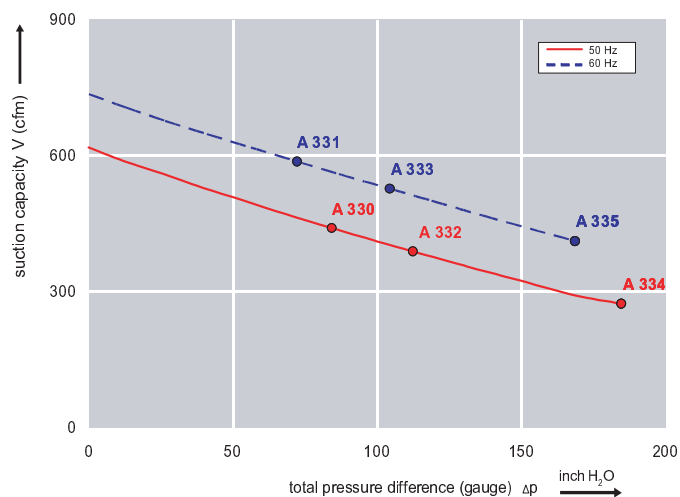


- Cooler running, outboard bearing provides maintenance-free operation
- Environmentally friendly oil-free technology
- Extremely quiet operation
- All motors are standard TEFC with Class F insulation, UL recognized, CE Compliant
Explosion-Proof motors available
- Custom construction blowers are available
- Rugged die cast aluminum construction

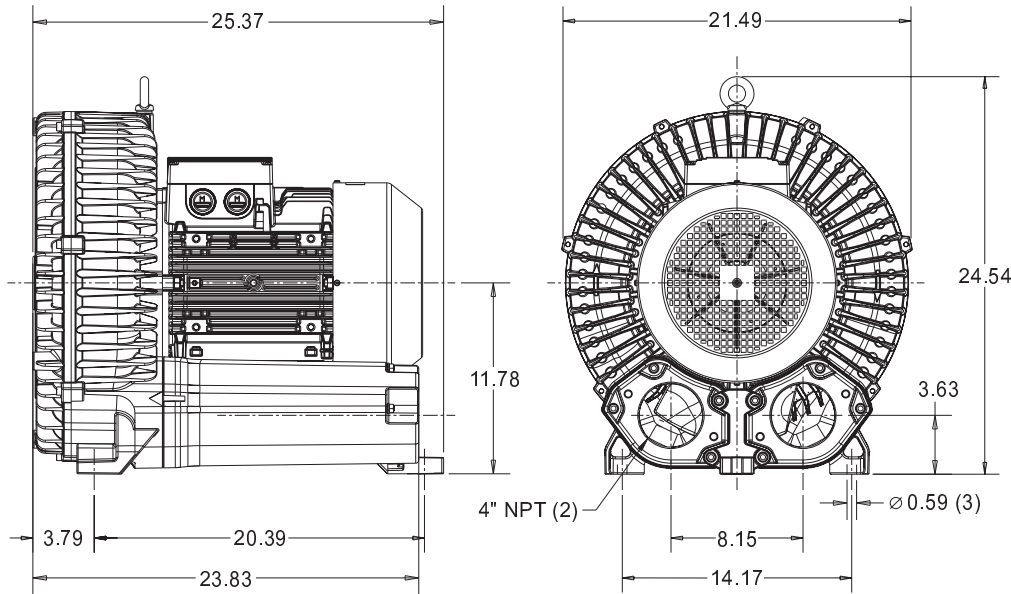
Performance curve for Vacuum pump



Performance curve for Compressor



Dimensions: (inches)



Recommended Accessories:

Relief valve:

VC100Z
(Vacuum)

PC100Z
(Pressure)

Filter:

ATF-400-21138
(Vacuum)

AFS-234-400-10
(Pressure)

Specifications subject to change without notice. Please contact factory for specification updates.

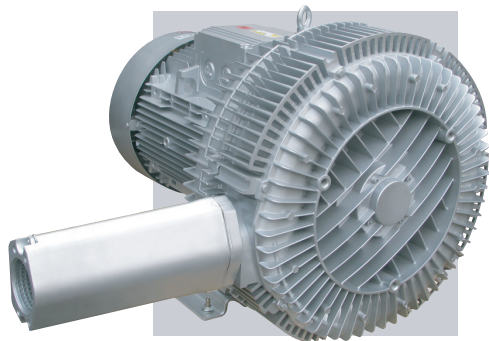
Selection & Ordering Data - Type 3BA1900

Curve No.	Order No.	Fre- quency	Rated power	Input voltage		Input current		Permissible total differential pressure		Sound pressure level	Weight
		Hz	HP	V		A		Vacuum inch H2O	Compressor inch H2O	dB(A)	lbs
3~ 50/60 Hz IP55 insulation material class F											
A 330	3BA1900-7AT06	50	10.72	200D ... 240D	345Y ... 415Y	31.5D	18.2Y	-76	76	74	265
A 331	3BA1900-7AT06	60	12.06	220D ... 250D	415Y ... 460Y	31.5D	18.2Y	-60	56	79	265
A 332	3BA1900-7AT16	50	16.76	200D ... 240D	345Y ... 415Y	48.5D	28.0Y	-116	112	74	295
A 333	3BA1900-7AT16	60	19.44	220D ... 250D	415Y ... 460Y	50.0D	29.0Y	-108	104	79	295
A 334	3BA1900-7AT36	50	24.80	200D ... 240D	345Y ... 415Y	64.5D	37.0Y	-145	185	74	314
A 335	3BA1900-7AT36	60	28.55	220D ... 250D	415Y ... 460Y	68.0D	39.0Y	-153	169	79	314

Suitable for 208 Volt Operation

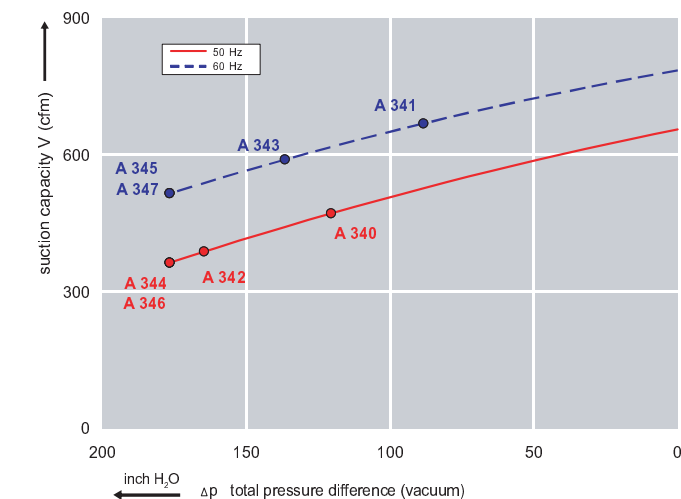
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Features:

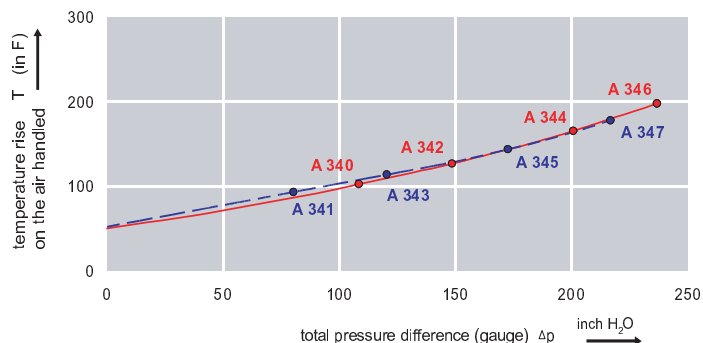
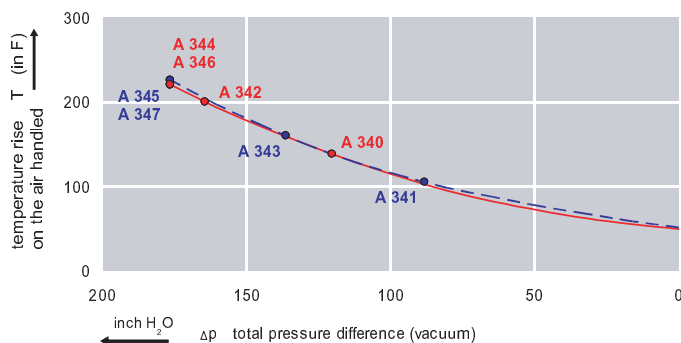
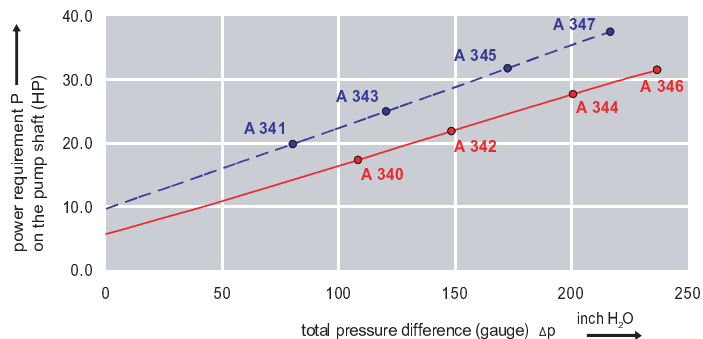
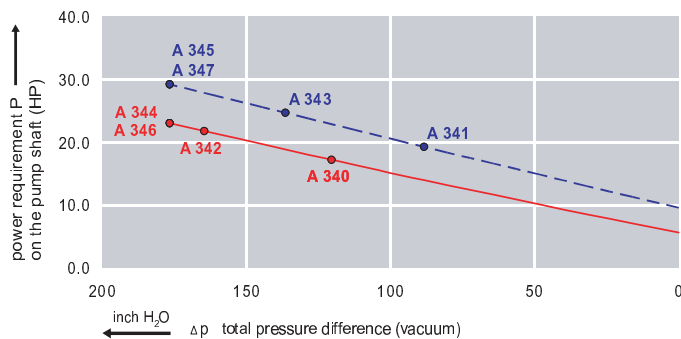
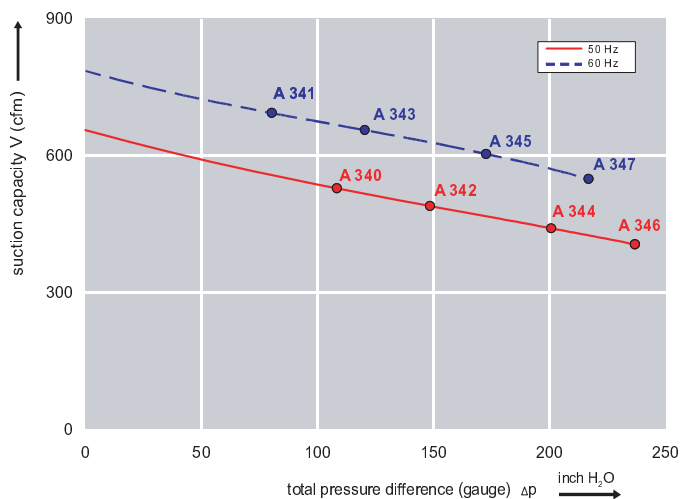


- Cooler running, outboard bearing provides maintenance-free operation
- Environmentally friendly oil-free technology
- Extremely quiet operation
- All motors are standard TEFC with Class F insulation, UL recognized, CE Compliant
Explosion-Proof motors available
- Custom construction blowers are available
- Rugged die cast aluminum construction

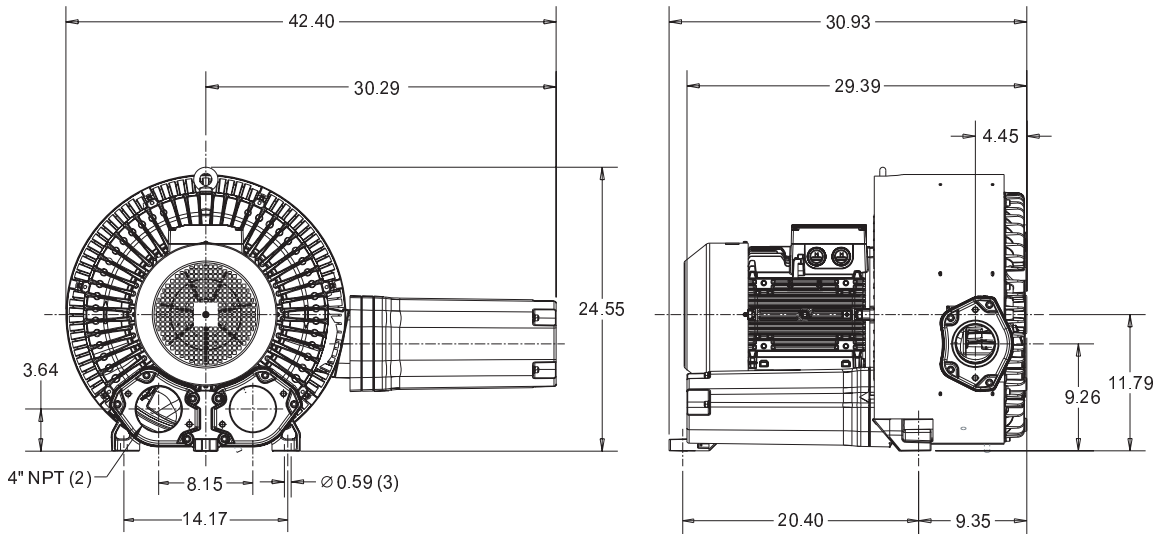
Performance curve for Vacuum pump



Performance curve for Compressor



Dimensions: (inches)



Recommended Accessories:

Relief valve:

VC100Z
(Vacuum)

PC100Z
(Pressure)

Filter:

ATF-400-21138
(Vacuum)

AFS-234-400-10
(Pressure)

Specifications subject to change without notice. Please contact factory for specification updates.

Selection & Ordering Data - Type 3BA1910

Curve No.	Order No.	Fre- quency	Rated power	Input voltage		Input current		Permissible total differential pressure		Sound pressure level	Weight
		Hz	HP	V		A		Vacuum inch H2O	Compressor inch H2O	dB(A)	lbs
3~ 50/60 Hz IP55 insulation material class F											
A 340	3BA1910-7AT16	50	16.75	200D ... 240D	345Y ... 415Y	48.5D	28.0Y	-120	108	74	409
A 341	3BA1910-7AT16	60	19.43	220D ... 250D	415Y ... 460Y	50.0D	29.0Y	-88	80	84	409
A 342	3BA1910-7AT26	50	22.12	200D ... 240D	345Y ... 415Y	60.0D	35.0Y	-165	149	74	428
A 343	3BA1910-7AT26	60	25.47	220D ... 250D	415Y ... 460Y	63.0D	36.5Y	-136	120	84	428
A 344	3BA1910-7AT36	50	26.81	200D ... 240D	345Y ... 415Y	69.0D	40.0Y	-177	201	74	455
A 345	3BA1910-7AT36	60	30.82	220D ... 250D	415Y ... 460Y	72.0D	42.0Y	-177	173	84	455
A 346	3BA1910-7AT46	50	33.51	200D ... 240D	345Y ... 415Y	90.0D	52.0Y	-177	237	74	500
A 347	3BA1910-7AT46	60	38.87	220D ... 250D	415Y ... 460Y	90.0D	52.0Y	-177	217	84	500

Suitable for 208 Volt Operation

All curves are rated at 14.7 psia and 68°F ambient conditions and are reported in SCFM referenced to 68°F and 14.696 psia sea level conditions. Curve values are nominal, actual performance may vary by up to 10% of the values indicated. For inlet temperatures above approximately 80°F or for handling gases other than air, please contact your Airtech sales representative for assistance.

Features:



- Cooler running, outboard bearing provides maintenance-free operation

- Environmentally friendly oil-free technology

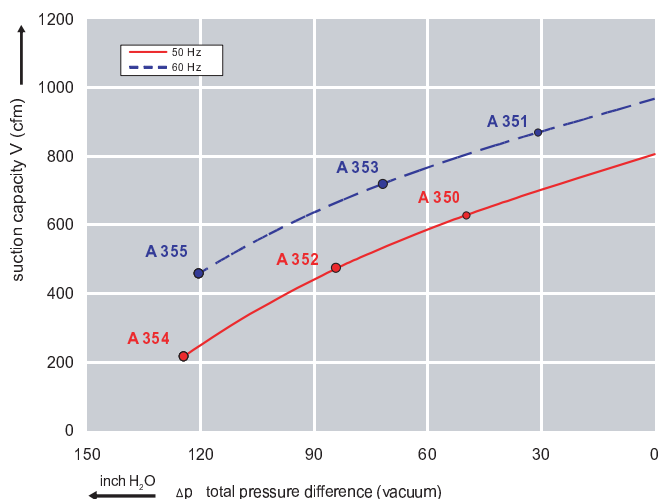
- Extremely quiet operation

- All motors are standard TEFC with Class F insulation, UL recognized, CE Compliant
Explosion-Proof motors available

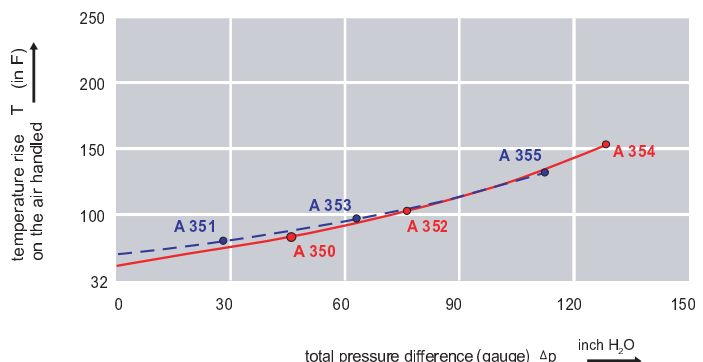
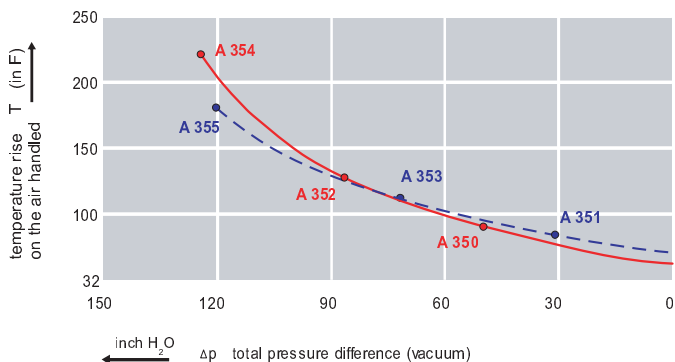
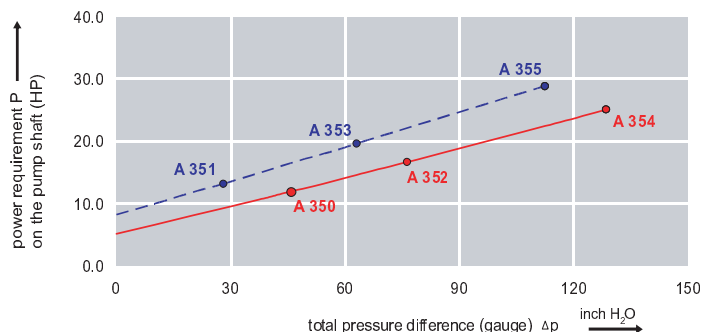
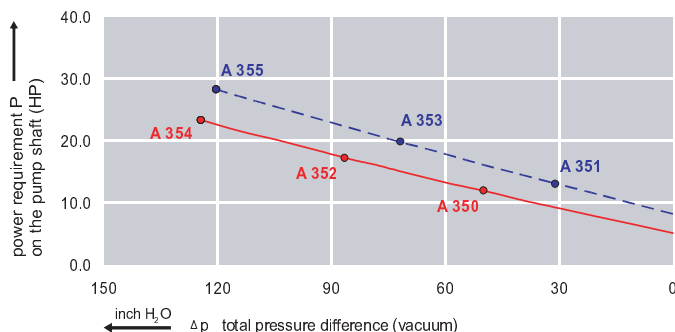
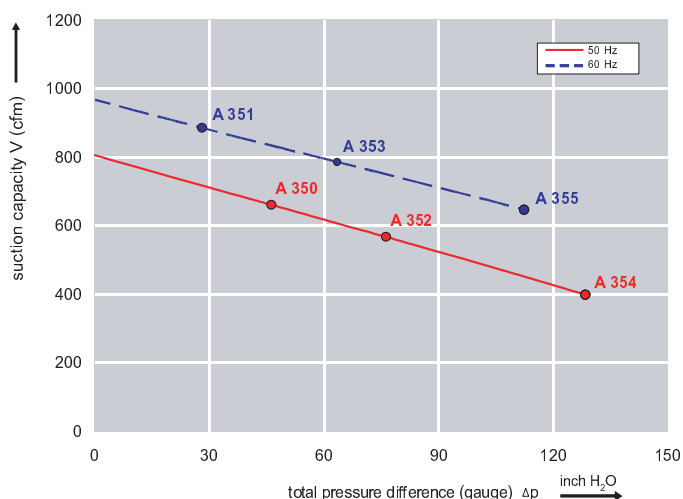
- Custom construction blowers are available

- Rugged die cast aluminum construction

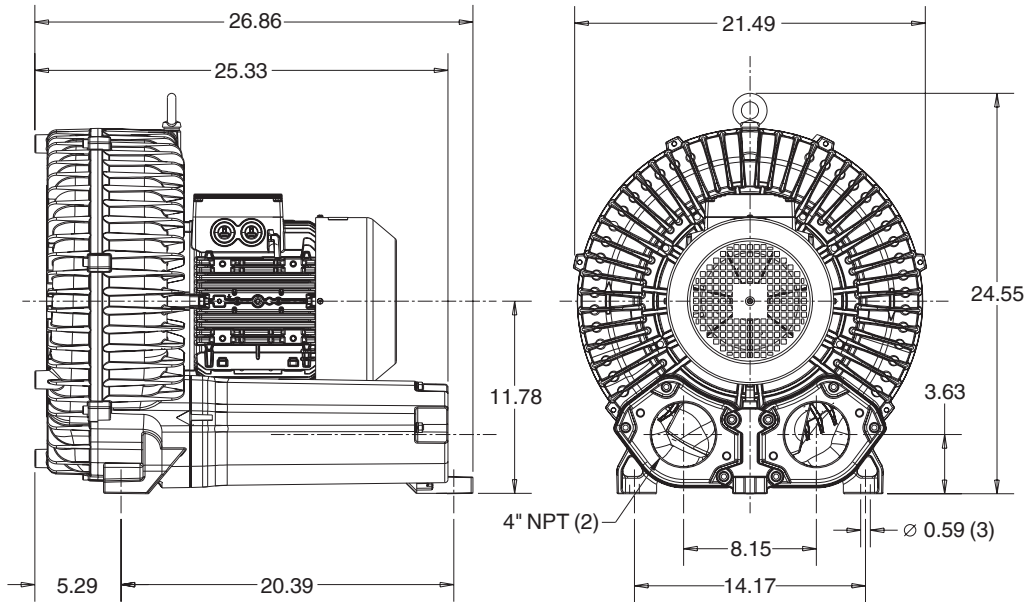
Performance curve for Vacuum pump



Performance curve for Compressor



Dimensions: (inches)



Recommended Accessories:

Relief valve:

VC100Z
(Vacuum)

PC100Z
(Pressure)

Filter:

ATF-400-21138
(Vacuum)

AFS-234-400-10
(Pressure)

Specifications subject to change without notice. Please contact factory for specification updates.

Selection & Ordering Data - Type 3BA1930

Curve No.	Order No.	Fre- quency	Rated power	Input voltage		Input current		Permissible total differential pressure		Sound pressure level	Weight
		Hz	HP	V		A		Vacuum inch H2O	Compressor inch H2O	dB(A)	lbs
3~ 50/60 Hz IP55 insulation material class F											
A 350	3BA1930-7AT06	50	11.39	200D ... 240D	345Y ... 415Y	33.0D	19.1Y	-48	44	75	268
A 351	3BA1930-7AT06	60	13.14	220D ... 250D	415Y ... 460Y	33.0D	19.1Y	-32	28	80	268
A 352	3BA1930-7AT16	50	16.75	200D ... 240D	345Y ... 415Y	48.5D	28.0Y	-84	76	75	298
A 353	3BA1930-7AT16	60	19.43	220D ... 250D	415Y ... 460Y	50.0D	29.0Y	-72	64	80	298
A 354	3BA1930-7AT36	50	24.80	200D ... 240D	345Y ... 415Y	64.5D	37.0Y	-124	128	75	318
A 355	3BA1930-7AT36	60	28.54	220D ... 250D	415Y ... 460Y	68.0D	39.0Y	-120	112	80	318

Suitable for 208 Volt Operation

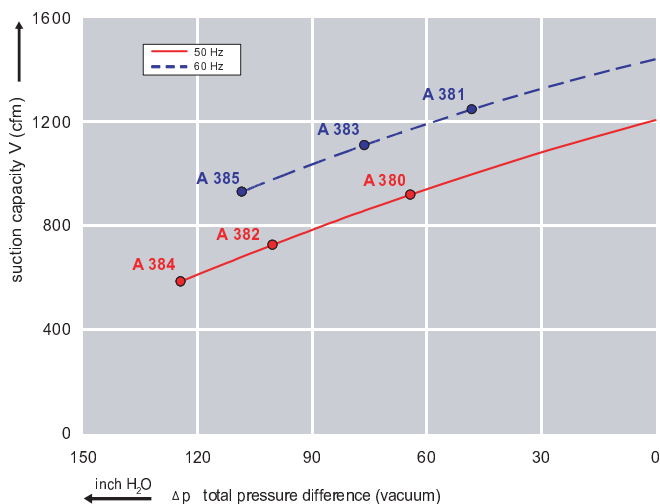
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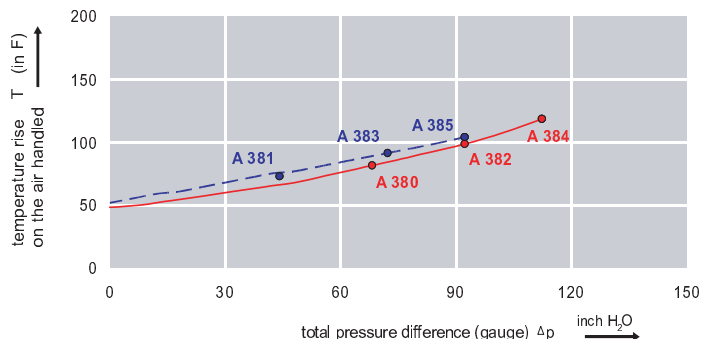
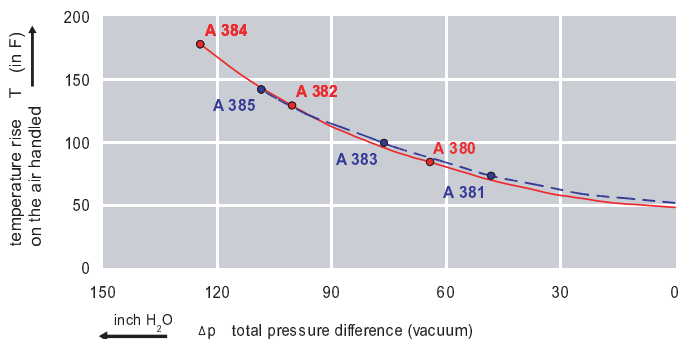
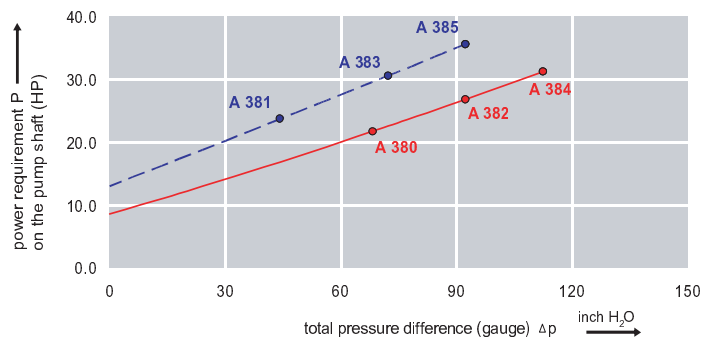
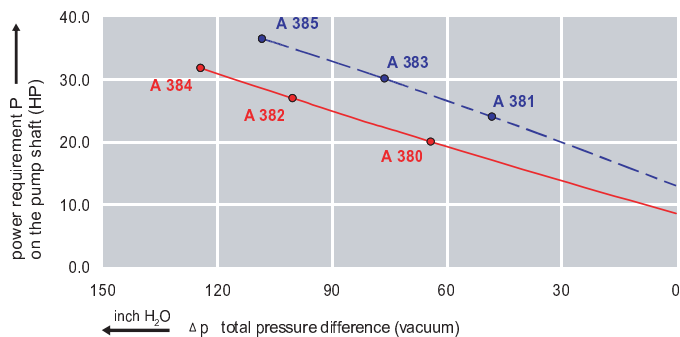
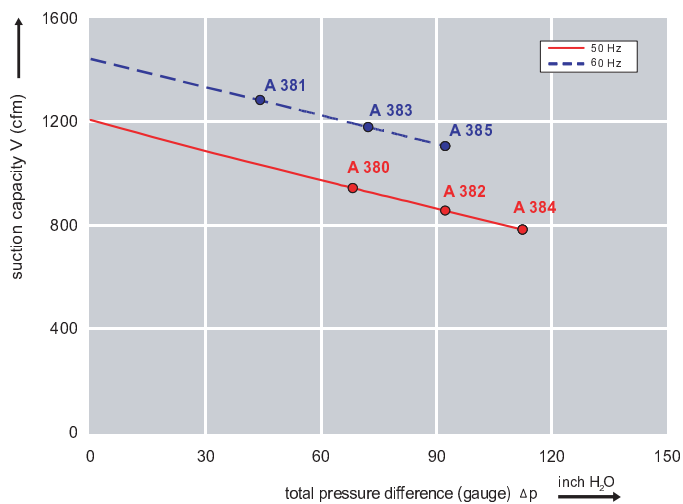
Features:

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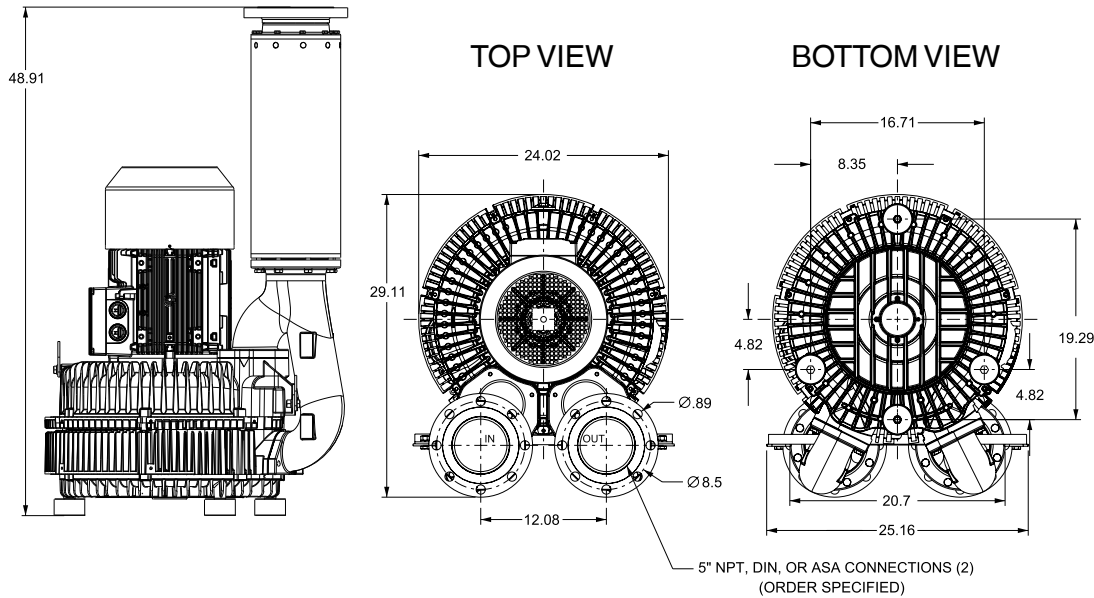
Performance curve for Vacuum pump



Performance curve for Compressor



Dimensions: (inches)



Recommended Accessories:

Relief valve:

VC110Z
(Vacuum)

PC110Z
(Pressure)

Filter:

ATF-500-344P
(Vacuum)

AFS-244-500-10
(Pressure)

Specifications subject to change without notice. Please contact factory for specification updates.

Selection & Ordering Data - Type 3BA1943

Curve No.	Order No.	Fre- quency	Rated power	Input voltage		Input current		Permissible total differential pressure		Sound pressure level dB(A)	Weight lbs
		Hz	HP	V		A		Vacuum inch H2O	Compressor inch H2O		
3~ 50/60 Hz IP55 insulation material class F											
A 380	3BA1943-7AT26	50	20.1	200D ... 240D	345Y ... 415Y	59.0D	34.0Y	-64	68	75	417
A 381	3BA1943-7AT26	60	23.4	220D ... 250D	415Y ... 460Y	63.0D	36.5Y	-48	44	84	417
A 382	3BA1943-7AT36	50	26.8	200D ... 240D	345Y ... 415Y	69.0D	40.0Y	-100	92	75	463
A 383	3BA1943-7AT36	60	30.8	220D ... 250D	415Y ... 460Y	72.0D	42.0Y	-76	72	84	463
A 384	3BA1943-7AT46	50	33.5	200D ... 240D	345Y ... 415Y	90.0D	52.0Y	-124	112	75	509
A 385	3BA1943-7AT46	60	38.8	220D ... 250D	415Y ... 460Y	90.0D	52.0Y	-108	92	84	509

Suitable for 208 Volt Operation

All curves are rated at 14.7 psia and 68° F ambient conditions and are reported in SCFM referenced to 68° F and 14.696 psia sea level conditions. Curve values are nominal, actual performance may vary by up to 10% of the values indicated. For inlet temperatures above approximately 80 °F or for handling gases other than air, please contact your Airtech sales representative for assistance.



Operating and Maintenance Instructions
3BA Regenerative Blowers



INSTALLATION & OPERATING MANUAL

3BA REGENERATIVE BLOWERS

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1. Safety

1.1 General Safety Precautions

WARNING: Improper operation of 3BA units can result in serious or even fatal injuries. Please make sure all personnel have read and understood this manual before operating the unit.

All personnel should familiarize themselves with the units' specifications and be careful not to exceed the unit's capacity.

Transport, installation, operation, shut-down, maintenance and disposal of 3BA units should be carried out by qualified professionals.

Do not attempt to start or run the unit unless it has been completely assembled. Particular attention should be paid to: the vacuum pump/compressor cover, the muffler on the inlet and discharge connections, and the fan guard.

The standard 3BA unit must never come into contact with flammable substances.

1.2 Clothing and Protective Gear

It is recommended that all personnel wear proper protective gear while operating the unit. This may include eye protection, gloves and helmets.

Please be aware that it is possible for hair and clothing to be pulled into the unit. Avoid wearing loose-fitting clothing near the unit while it is operating and wear a hairnet if necessary.

1.3 Electrical Safety

Electrical installation should only be done by qualified electricians. Before doing any electrical work on a 3BA unit, please ensure that **power to the unit has been disconnected**. Do not attempt to open the unit's terminal box until you have made certain that the unit is not connected to a power source.

The terminal box must be kept free of dirt and moisture at all times. Make sure the terminal box cover and cable entries are tightly sealed so they remain dustproof and waterproof. Check the terminal box regularly to make sure it is sealed and free of debris and moisture.

1.4 Vacuum and Gauge Pressure Safety

In order to avoid dangerous situations associated with vacuum and gauge pressure, please utilize secure mounting elements, connections, lines, fittings, and containers. Pipes/hoses must be securely connected to the inlet and discharge connections. The inlet and discharge connections and the pipes/hoses connected to them must not be closed, clogged, or soiled. Check regularly to ensure that these connections and mountings are not becoming unseated. If necessary, support pipes and hoses to ensure that there is no tension on the connections. **Failure to observe these precautions can lead to sudden evacuation of hazardous fluids or dangerous suction that can pull hair or clothing into the unit.**

1.5 Installation/Start-up

The unit and any lines connected to it must be securely installed. In particular, the feed pipes must be securely routed, e.g. in cable ducts, in the floor, etc.

If a separate control panel or other such interface will be used to start and stop the unit, it should be installed in an area with an unobstructed view of the unit to ensure that it is not switched on while being serviced.

Excess vibration can cause damage to the unit and/or unsafe conditions. Install the unit on a solid foundation or a solid mounting surface. Check screw glands/unions for strength and firm seating.

Cables and pipes should be installed in a recess in the floor or duct so they do not present a tripping hazard.

To ensure sufficient cooling of the unit, ventilation screens and openings must remain clear. Ensure that discharge air from other units cannot be pulled into the unit.

Make sure that the inlet and pressure lines are clearly marked to avoid confusion. **Interchanged inlet and pressure lines can lead to damage to the unit and/or serious injury.**

Install a filter in the inlet pipe and replace it regularly. If particulates or debris enter the unit, the blades of the impellers can be damaged and blades could potentially break off, potentially creating a hazardous situation.

If re-starting the unit after it has been idle for a long period of time, measure the insulation resistance of the motor. If values are less than 1 k Ω per volt of nominal voltage, the winding may be too dry.

If the unit is installed or stored in an environment with a temperature of over 104°F (40°C) be aware that the winding may be damaged and the grease might need to be changed more often.

1.6 Maintenance Procedures

Before beginning work on the pump-motor unit, please take the following precautions:

- Make sure power has been completely disconnected
- Wait for the unit to come to a complete stop.
- Allow the unit time to cool.
- Shut off lines and release pressure
- Make certain that no vacuum or gauge pressure is present in the lines/tanks to be opened.
- Make sure that no fluids can escape

Please note that the rotating impeller is accessible when the inlet and discharge connections are open. Do not reach into the unit through open connections or insert objects into the unit through any openings. Serious injury could occur. If the unit is running without piping or tubing, provide the inlet and discharge of the unit with either additional mufflers or piping of a sufficient length to prevent access to the impeller.

Check regularly to ensure the terminal box is free of any dirt or foreign substances and there is no moisture or humidity present. Make certain the terminal box cover and cable entries are tightly closed.

1.7 Hot Surfaces

During operation, the surface of the unit can reach temperatures of 320° F (160° C). It is advisable to cover the unit with suitable touch protection (e.g. a perforated plate or wire cover). Do not touch the unit during operation, and allow time to cool after shut-down. Temperature-sensitive parts such as lines or electronic components should not come into contact with the surface of the unit.

1.8 Hearing Protection

Make certain any missing or defective silencers are replaced. Noise emitted by the unit can cause serious hearing damage. Conduct a noise measurement test while the unit is running. If the unit operates over 90 dB(A), please place a warning sign in the area where the unit has been installed and make certain that

any personnel working in the vicinity wear ear protection at all times while the unit is running.

1.9 Safety Guidelines for Transport of the unit:

Prior to transport and handling, please make sure that all components are properly assembled and secure. Any machinery used to transport these units must have the proper lifting capacity. Please consult the table on page 27 to find the weight of the unit being handled. Do not stand or walk under suspended loads.

If a 3BA unit has come in contact with any dangerous substances, it must be decontaminated before being sent to Airtech for repair evaluation.

2 Technical Data

These operating instructions cover the Airtech 3BA side channel vacuum pumps and compressors supplied with standard TEFC motors. Other configurations are available including V-belt driven units, units with explosion proof motors, mechanical seals, magnetic drives, coatings and modifications for high pressure service. Airtech can provide any combination of modifications to meet your application requirements. Such blowers, however, are outside the scope of this manual.

Description

All regenerative blowers are dynamic compression devices and utilize a non-contacting impeller to accelerate the gas and a specially designed housing to compress the gas. Cooling is accomplished by using the motor fan to blow air over the housing. In larger models, the housing is specially designed with cooling fins to allow a wider range of operation. Both the inlet and outlet ports have built-in silencers and mesh screens. Both the inlet and outlet have an inside connection thread corresponding to DIN ISO 228. On larger units, multiple suction and discharge connection configurations may be available.

The wetted parts are constructed of Aluminum on all models. The blower shares a bearing with the motor. The seal between the bearing and the motor is not gas tight in most models, therefore these blowers are not recommended for handling of toxic or explosive gases. (Contact Airtech Vacuum, Inc. for additional options if explosive or toxic gases will be handled.)

A full range of accessory items are available, including vacuum or pressure relief valves, check valves, suction filters, motor starters, vacuum/pressure cross-over valves, and in-line filters.

Application/Installation Environment

CAUTION! These blowers are designed for use in general industry. Suitable personnel protection according to OSHA requirements is provided, but the equipment should not be operated in residential settings.

Airtech blowers can be operated as either vacuum pumps or compressors. They are suitable for use with air having a relative humidity up to 90 percent, but not generally suitable for handling corrosive or erosive gases. Special versions for toxic or aggressive gases may be available. Use of the standard blower in aggressive environments may cause damage to the blower or exposure to gases being handled in the local environment.

CAUTION! Dangerous (flammable or explosive) or aggressive (corrosive) gases should not be handled by the standard blower.

Handling of flammable or aggressive gases and vapors may be possible by using a specially configured or modified blower. Contact factory for additional information. The standard blower is not suitable for operation in explosive environments as defined by NFPA 70. Contact factory for assistance.

CAUTION! The ambient and suction temperatures should be between 40 and 105 F. For temperatures outside this region, please contact the factory.

The maximum permissible pressure difference for vacuum or pressure is dependent on the motor rating (See Tables 1 to 4 for detailed information by model number.) and power supply frequency. The figures in Tables 1 to 4 are computed assuming an ambient temperature of 77 F (25 C) and a local barometric pressure of 1013 mbar (sea level). Operation at an ambient temperature of 104 F (40C) is the maximum permissible, and will result in a reduction of 10 percent on maximum vacuum or pressure attainable by the unit. For temperatures between 77 F and 104 F, reduce the maximum pressure reduction is a linear function of temperature.

Table 1. Three-phase, Single Stage, 50 Hertz

Model	Rated Power HP/kW	Voltage	Motor Current (Amps)	Open Flow Capacity CFM/m3/hr	Maximum Pressure (mbar)	Sound Pressure Level (dBA)
3BA1300-7AT06	.33/.25	200-240/345-415	2.1/1.2	48/82	-100/100	53
2BA1300-7AT16	.54/.4	200-240/345-415	2.6/1.5	48/82	-120/130	53
3BA1400-7AT06	.94/.7	200-240/345-415	3.8/2.2	84/142	-120/120	63
2BA1400-7AT16	1.15/.85	200-240/345-415	4.2/2.4	84/142	-160/160	63
3BA1400-7AT26	1.75/1.3	200-240/345-415	5.7/3.3	84/142	-170/200	63
3BA1500-7AT06	1.15/.85	200-240/345-415	4.2/2.4	120/204	-100/100	64
3BA1500-7AT16	1.75/1.3	200-240/345-415	5.7/3.3	120/204	-170/170	64
3BA1500-7AT26	2.15/1.6	220-250/415-460	7.5/4.3	120/204	-200/190	64
3BA1500-7AT36	2.96/2.2	200-240/345-415	9.7/5.6	120/204	-220/270	64
3BA1530-7AT16	1.75/1.3	200-240/345-415	5.7/3.3	165/280	-120/110	65
3BA1530-7AT26	2.15/1.6	200-240/345-415	7.5/4.3	165/280	-160/150	65
3BA1530-7AT36	2.96/2.2	200-240/345-415	9.7/5.6	165/280	-220/230	65
3BA1600-7AT06	2.15/1.6	200-240/345-415	8.5/4.9	188/320	-160/150	69
3BA1600-7AT16	2.96/2.2	200-240/345-415	9.7/5.6	188/320	-190/190	69
3BA1600-7AT26	4.04/3.0	200-240/345-415	12.5/7.2	188/320	-260/270	69
3BA1600-7AT36	5.4/4.0	200-240/345-415	13.0/7.5	188/320	-290/360	69
3BA1630-7AT06	2.15/1.6	200-240/345-415	8.5/4.9	240/408	-160/150	69
3BA1630-7AT16	2.96/2.2	200-240/345-415	9.7/5.6	240/408	-190/190	69
3BA1630-7AT26	4.04/3.0	200-240/345-415	12.5/7.2	240/408	-260/270	69
3BA1630-7AT36	5.4/4.0	200-240/345-415	15.6/9.0	240/408	-260/290	69
3BA1800-7AT06	5.4/4.0	200-240/345-415	15.6/9.0	280/476	-200/200	70
3BA1800-7AT16	7.4/5.5	200-240/345-415	23/13.3	280/476	-300/300	70
3BA1800-7AT26	10/7.5	200-240/345-415	29/16.7	280/476	-320/430	70
3BA1830-7AT06	5.4/4	200-240/345-415	15.6/9	400/680	-150/140	76
3BA1830-7AT16	7.4/5.5	200-240/345-415	23/13.3	400/680	-200/190	76
3BA1830-7AT26	10/7.5	200-240/345-415	29/16.7	400/680	-270/260	76
3BA1900-7AT06	10.8/8	200-240/345-415	31.5/18.2	568/965	-190/190	74
3BA1900-7AT16	16.8/12.5	200-240/345-415	48.5/28	568/965	-290/280	74
3BA1900-7AT36	25/18.5	200-240/345-415	64.5/37	568/965	-362/462	74
3BA1930-7AT16	16.8/12.5	200-240/345-415	48.5/28	744/1264	-290/280	71
3BA1930-7AT36	25/18.5	200-240/345-415	64.5/37	744/1264	-310/310	71
3BA1930-7AT36	25/18.5	200-240/345-415	64.5/37	744/1264	-310/310	71
3BA7310-0AT167	.75/.55	200-240/345-415	2.8/1.6	40/68	-250/250	57
3BA7410-0AT167	1.5/1.1	200-240/345-415	5.4/3.1	50/84	-300/380	58
3BA7510-0AT168	2/1.5	200-240/345-415	7.5/4.3	70/120	-370/650	64
3BA7510-0AT268	3/2.2	200-240/345-415	9.7/5.6	70/120	-310/430	64
3BA7610-0AT168	3/2.2	200-240/345-415	9.7/5.6	96/163	-310/430	65
3BA7610-0AT368	4.4/3.3	200-240/345-415	13/7.5	96/163	-500/750	65

Table 2. Three-phase, Single-stage, 60 Hz

Model	Rated Power HP/kW	Voltage	Motor Current (Amps)	Open Flow Capacity CFM/m3/hr	Maximum Pressure (mbar)	Sound Pressure Level (dBA)
3BA1300-7AT06	.39/.29	220-250/415-460	1.74/1.0	60/102	-100/100	56
2BA1300-7AT16	.67/.5	220-250/415-460	2.6/1.5	60/102	-150/160	56
3BA1400-7AT06	1.12/.83	220-250/415-460	3.75/2.15	105/179	-130/130	64
3BA1400-7AT16	1.28/.95	220-250/415-460	4.35/2.5	105/179	-160/160	64
3BA1400-7AT26	2/1.5	220-250/415-460	5.5/3.2	105/179	-210/200	64
3BA1500-7AT06	1.28/.95	220-250/415-460	4.35/2.5	150/255	-80/70	70
3BA1500-7AT16	2/1.5	220-250/415-460	5.5/3.2	150/255	-150/140	70
3BA1500-7AT26	2.7/2.05	220-250/415-460	7.5/4.4	150/255	-220/210	70
3BA1500-7AT36	3.4/2.55	220-250/415-460	9.0/5.3	150/255	-260/290	70
3BA1530-7AT16	2/1.5	220-250/415-460	5.7/3.3	200/340	-90/80	71
3BA1530-7AT26	2.7/2.05	220-250/415-460	7.6/4.4	200/340	-260/270	70
3BA1530-7AT36	3.4/2.55	220-250/415-460	10.3/6.0	200/340	-260/250	70
3BA1600-7AT06	2.7/2.05	220-250/415-460	7.5/4.4	235/400	-160/150	72
3BA1600-7AT16	3.4/2.55	220-250/415-460	9.0/5.3	235/400	-190/190	72
3BA1600-7AT26	4.6/3.45	220-250/415-460	12.0/6.5	235/400	-240/230	72
3BA1600-7AT36	6.1/4.6	220-250/415-460	15.2/8.5	235/400	-320/310	72
3BA1630-7AT06	2.7/2.05	220-250/415-460	7.5/4.4	300/510	-160/150	72
3BA1630-7AT16	3.4/2.55	220-250/415-460	9.0/5.3	300/510	-190/190	72
3BA1630-7AT26	4.6/3.45	220-250/415-460	12.0/6.5	300/510	-240/230	72
3BA1630-7AT36	6.1/4.6	220-250/415-460	15.2/8.5	300/510	-260/260	72
3BA1800-7AT06	6.1/4.6	220-250/415-460	15.2/8.5	350/595	-160/160	74
3BA1800-7AT16	8.4/6.3	220-250/415-460	20/11.2	350/595	-300/280	74
3BA1800-7AT26	11.5/8.6	220-250/415-460	27.5/15	350/595	-350/400	74
3BA1830-7AT06	6.2/4.6	220-250/415-460	15.2/8.5	500/850	-90/90	79
3BA1830-7AT16	8.4/6.3	220-250/415-460	20/11.2	500/850	-180/180	79
3BA1830-7AT26	11.5/8.6	220-250/415-460	27.5/15	500/850	-270/260	79
3BA1900-7AT06	12.1/9	220-250/415-460	31.5/18.2	710/1207	-150/140	79
3BA1900-7AT16	19.5/14.5	220-250/415-460	50/29	710/1207	-270/260	79
3BA1900-7AT36	28.7/21.3	220-250/415-460	68/39	710/1207	-382/422	79
3BA1930-7AT16	19.5/14.5	220-250/415-460	50/29	930/1581	-270/260	75
3BA1930-7AT36	28.7/21.3	220-250/415-460	68/39	930/1581	-300/280	75
3BA7210-0AT167	1.1/.83	220-250/415-460	3.75/2.15	35/60	-270/320	62
3BA7310-0AT167	1.1/.83	220-250/415-460	3.75/2.15	48/82	-260/250	62
3BA7410-0AT167	2/1.5	220-250/415-460	5.5/3.2	60/102	-340/370	62

When operating at altitudes above 3280 feet (1000 m) above mean sea level, contact Airtech Inc.

CAUTION! Operation of the unit outside the recommended range of pressures and ambient conditions will result in shorted operating life.

Table 3. 3 Phase, Two/Three Stage, 50 Hertz

Model	Rated Power HP/kW	Voltage	Motor Current (Amps)	Open Flow Capacity CFM/m3/hr	Maximum Pressure (mbar)	Sound Pressure Level (dBA)
3BA1310-7AT26	.94/.7	200-240/345-415	3.8/2.2	48/81.6	-120/120	55
3BA1410-7AT36	2.15/1.6	200-240/345-415	7.5/4.3	84/142.8	-200/190	66
3BA1410-7AT46	2.96/2.2	200-240/345-415	9.7/5.6	84/142.8	-320/420	66
3BA1510-7AT46	4.04/3.0	200-240/345-415	12.5/7.2	121.6/206.7	-340/410	72
3BA1510-7AT56	5.39/4.0	200-240/345-415	17.4/10	121.6/206.7	-390/440	72
3BA1610-7AT36	2.9/2.2	200-240/345-415	9.7/5.6	188/319.6	-190/190	73
3BA1610-7AT26	4.04/3.0	200-240/345-415	12.5/7.2	188/319.6	-260/270	73
3BA1610-7AT36	5.39/4.0	200-240/345-415	13.0/7.5	188/319.6	-290/360	73
3BA1610-7AT46	7.41/5.5	200-240/345-415	23/13.3	188/319.6	-420/500	73
3BA1610-7AT56	10.1/7.5	200-240/345-415	29/16.7	188/319.6	-420/610	73
3BA1640-7AT36	5.39/4.0	200-240/345-415	13.0/7.5	280/476	-290/360	74
3BA1640-7AT46	7.41/5.5	200-240/345-415	23/13.3	280/476	-420/500	74
3BA1640-7AT56	10.1/7.5	200-240/345-415	29/16.7	280/476	-420/610	74
3BA1810-7AT16	7.4/5.5	200-240/345-415	23/13.3	280/476	-420/500	74
3BA1810-7AT26	10.1/7.5	200-240/345-415	29/16.7	280/476	-320/430	74
3BA1810-7AT36	14.8/11	200-240/345-415	29/16.7	280/476	-430/600	74
3BA1810-7AT46	20.2/15	200-240/345-415	56.5/32.5	280/476	-460/670	74
3BA1840-7AT26	10.1/7.5	200-240/345-415	29.0/16.7	280/476	-320/430	74
3BA1840-7AT36	14.8/11.0	200-240/345-415	48.5/28.0	280/476	-430/600	74
3BA1910-7AT16	16.8/12.5	200-240/345-415	48.5/28	624/1061	-290/280	74
3BA1910-7AT36	26.95/20.0	200-240/345-415	69/40	624/1061	-443/502	74
3BA1910-7AT46	33.51/24.98	200-240/345-415	90/52	624/1061	-443/592	84
3BA19437AT26	20.1/15	200-240/345-415	59/34	1200/2040	-160/170	75
3BA19437AT36	26.8/20	200-240/345-415	69/40	1200/2040	-250/230	75
3BA19437AT46	33.5/25	200-240/345-415	90/52	1200/2040	-310/280	75
3BA7220-0AT567	2/1.5	200-240/345-415	7.5/4.3	28/48	-370/650	58
3BA7320-0AT467	1.5/1.1	200-240/345-415	5.4/3.1	40/68	-300/380	58
3BA7320-0AT567	2/1.5	200-240/345-415	7.5/4.3	40/68	-480/450	59
3BA7420-0AT267	2/1.5	200-240/345-415	7.5/4.3	50/84	-480/450	61
3BA7420-0AT567	4.4/3.3	200-240/345-415	13/7.5	50/84	-500/750	61
3BA7520-0AT268	3/2.2	200-240/345-415	9.7/5.6	70/120	-470/460	64
3BA7620-0AT368	4.4/3.3	200-240/345-415	13/7.5	96/163	-500/750	68
3BA7620-0AT468	5.4/4	200-240/345-415	14/8.1	96/163	-370/650	67
3BA7620-0AT568	7.5/5.5	200-240/345-415	19.9/11.5	96/163	-520/750	68
3BA7630-0AT668	10.1/7.5	200-240/345-415	29/16.7	96/163	-420/610	77

Table 4. 3 Phase, Two/Three Stage, 60 Hertz

Model	Rated Power HP/kW	Voltage	Motor Current (Amps)	Open Flow Capacity CFM/m3/hr	Maximum Pressure (mbar)	Sound Pressure Level (dBA)
3BA1310-7AT26	1.11/.83	220-250/415-460	3.75/2.15	60/102	-130/130	61
3BA1410-7AT36	2.7/2.05	220-250/415-460	7.5/4.4	105/179	-220/210	69
3BA1410-7AT46	3.4/2.55	220-250/415-460	9.0/5.3	105/179	-350/440	69
3BA1510-7AT46	4.6/3.45	220-250/415-460	12.0/6.5	152/258	-380/360	74
3BA1510-7AT56	6.1/4.6	220-250/415-460	15.2/8.5	152/258	-410/480	74
3BA1610-7AT36	3.4/2.55	220-250/415-460	9.0/5.3	235/400	-190/190	76
3BA1610-7AT26	4.6/3.45	220-250/415-460	12.0/6.5	235/400	-240/230	76
3BA1610-7AT36	6.4/4.8	220-250/415-460	16.5/9.8	235/400	-320/310	76
3BA1610-7AT46	8.4/6.3	220-250/415-460	20/11.2	235/400	-440/440	76
3BA1610-7AT56	11.5/8.6	220-250/415-460	27.5/15.0	235/400	-440/670	76
3BA1640-7AT36	6.1/4.6	220-250/415-460	15.2/8.5	350/595	-320/310	78
3BA1640-7AT46	8.4/6.3	220-250/415-460	20.0/11.2	350/595	-440/440	78
3BA1640-7AT56	11.5/8.6	220-250/415-460	27.5/15.0	350/595	-440/670	78
3BA1810-7AT16	8.4/6.3	220-250/415-460	20.0/11.2	350/595	-440/440	78
3BA1810-7AT26	11.5/8.6	220-250/415-460	27.5/15.0	350/595	-350/400	78
3BA1810-7AT36	17/12.6	220-250/415-460	50.2/29.0	350/595	-460/600	78
3BA1810-7AT46	23.3/17.3	220-250/415-460	60.0/34.5	350/595	-490/750	78
3BA1840-7AT26	11.5/8.6	220-250/415-460	27.5/15.0	350/595	-350/400	78
3BA1840-7AT36	17/12.6	220-250/415-460	50.2/29.0	350/595	-460/600	78
3BA1910-7AT16	19.5/14.5	220-250/415-460	50.0/29.0	780/1326	-270/260	84
3BA1910-7AT36	31/23	220-250/415-460	72 /42	780/1326	-443/433	84
3BA1910-7AT46	38.9/28.9	220-250/415-460	90/52	780/1326	-443/542	84
3BA19437AT26	23.4/17.5	220-250/415-460	63/36.5	1440/2447	-120/110	84
3BA19437AT36	30.8/23	220-250/415-460	72/42	1440/2447	-190/180	84
3BA19437AT46	38.8/28.9	220-250/415-460	90/52	1440/2447	-265/230	84
3BA7220-0AT567	2.7/2.05	220-250/415-460	7.5/4.4	35/60	-500/740	62
3BA7320-0AT467	2/1.5	220-250/415-460	5.5/3.2	48/82	-340/370	63
3BA7320-0AT567	2.7/2.05	220-250/415-460	7.5/4.4	48/82	-430/410	63
3BA7420-0AT267	2.7/2.05	220-250/415-460	7.5/4.4	60/102	-430/410	66
3BA7420-0AT567	5.1/3.8	220-250/415-460	13.5/7.8	60/102	-510/850	66
3BA7520-0AT268	3.4/2.55	220-250/415-460	9/5.3	84/143	-500/450	70
3BA7620-0AT368	5.1/3.8	220-250/415-460	13.5/7.8	115/196	-510/850	71
3BA7620-0AT468	6.1/4.6	220-250/415-460	15.2/8.5	115/196	-480/500	71
3BA7620-0AT568	8.4/6.6	220-250/415-460	22.5/12.6	115/196	-520/820	72
3BA7630-0AT668	11.5/8.6	220-250/415-460	27.5/15	115/196	-440/670	80

3BA7530-7AT76	6.2/4.6	220-250/415-460	16.3/9.5	82/139	-639/729	73
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Table 5. Single Phase, 50 Hertz

Model	Rated Power HP/kW	Voltage	Motor Current (Amps)	Open Flow Capacity CFM/m3/hr	Maximum Pressure (mbar)	Sound Pressure Level (dBA)
3BA1100-7AS05	0.27/0.2	230	1.45	24/40	-60/70	50
3BA1200-7AS05	0.33/0.25	115/230	3.5/1.7	35/60	-100/100	50
3BA1300-7AS15	0.5/0.37	115/230	5.4/2.7	48/82	-110/110	53
3BA1330-7AS15	0.5/0.37	115/230	5.4/2.7	60/102	-110/110	54
3BA1400-7AS25	1.47/1.09	115/230	13/6.5	84/142	-149/189	64
3BA1410-7AS25	2/1.49	115/230	22/11	84/142.8	-279/259	66
3BA1500-7AS35	2/1.49	115/230	22/11	120/204	-189/199	64
3BA7210-0AS75	0.74/0.55	115/230	13/6.5	28/48	-229/289	57
3BA7220-0AS75	2/1.49	115/230	19.4/9.7	29/49	-371/600	57
3BA7310-0AS75	1.26/0.93	115/230	15.2/7.6	40/68	-249/351	58
3BA7320-0AS75	2/1.49	115/230	19.4/9.7	40/68	-401/550	59
3BA7410-0AS45	1.47/1.09	115/230	13/6.5	50/84	-299/381	59

Table 6. Single Phase, 60 Hertz

Model	Rated Power HP/kW	Voltage	Motor Current (Amps)	Open Flow Capacity CFM/m3/hr	Maximum Pressure (mbar)	Sound Pressure Level (dBA)
3BA1100-7AS05	0.31/0.23	230	1.3	30/51	-75/80	53
3BA1200-7AS05	0.38/0.28	115/230	5/2.8	48/82	-112/112	53
3BA1300-7AS15	0.6/0.44	115/230	6.0/3.0	60/102	-130/139	56
3BA1330-7AS15	0.6/0.44	115/230	6.0/3.0	74/126	-130/139	57
3BA1400-7AS25	1.74/1.29	115/230	14.0/7.0	105/179	-179/189	64
3BA1410-7AS25	2.35/1.75	115/230	24.0/12.0	105/179	-249/229	69
3BA1500-7AS35	2.35/1.75	115/230	24.0/12.0	150/255	-179/179	70
3BA7210-0AS75	0.84/0.63	115/230	14.2/7.1	35/60	-259/309	62
3BA7220-0AS75	2.35/1.75	115/230	20.6/10.3	35/60	-421/660	62
3BA7310-0AS75	1.47/1.09	115/230	18.0/9.0	48/82	-279/391	62
3BA7320-0AS75	2.35/1.75	115/230	20.6/10.3	48/82	-391/541	63
3BA7410-0AS45	1.74/1.29	115/230	14.0/7.0	60/102	-338/391	62

Operation of any blower is possible at 87 Hertz without modification in most cases. When using a VFD to operate the blower at this frequency, refer to the nameplate for limits on vacuum and pressure, current draw and motor performance.

If your specific model number is not listed above, please consult the nameplate on the unit for electrical data. If the model you are installing is listed above, please confirm the data on the nameplate. Data in Tables 1 through 4 is subject to change and is approximate. Be sure to confirm necessary operating data what that on the nameplate before commissioning the unit.

CAUTION! Do not operate any 3BA blower above 87 Hz without consultation with the factory. Failure of the blower motor is possible when operating out of range. Consult with the factory for assistance.

Expected temperature rise of the handled gas at maximum allowable pressure differential and when operating at sea level is indicated below:

Table 7: Single Stage – Approximate Temperature Rise

Blower Model	Maximum Rise at 50 Hz speed		Maximum Rise at 60 Hz speed	
	Degrees F	Degrees C	Degrees F	Degrees C
3BA1100-7..0.	115	64	136	76
3BA1200-7..0.	65	36	101	56
3BA1300-7..0.	90	50	77	43
3BA1300-7..1.	90	50	140	78
3BA1300-7..2.	90	50	158	88
3BA1400-7..0.	99	55	86	48
3BA1400-7..1.	129	72	122	68
3BA1400-7..2.	149	83	167	93
3BA1500-7..0.	86	48	72	40
3BA1500-7..1.	115	64	97	54
3BA1500-7..2.	138	77	122	68
3BA1500-7..3.	203	113	180	100
3BA1500-7..6.	248	138	248	138
3BA1600-7..0.	81	45	68	38
3BA1600-7..1.	145	81	104	58
3BA1600-7..2.	171	95	176	98
3BA1600-7..3.	225	125	185	103
3BA1600-7..6.	248	138	194	108
3BA1600-7..7.	248	138	248	138
3BA1800-7..0.	104	58	104	58
3BA1800-7..1.	153	85	185	103
3BA1800-7..2.	248	138	221	123
3BA1900-7..0.	97	54	95	53
3BA1900-7..1.	182	101	155	86
3BA1900-7..3.	230	128	212	118
3BA1943-7..2.	85	47	75	42
3BA1943-7..3.	130	72	100	56
3BA1943-7..4.	180	100	140	78
3BA7210-0..1..	126	70	142	79
3BA7310-0..1..	142	79	142	79
3BA7310-0..2..	178	99	187	104
3BA7410-0..1..	194	108	214	119
3BA7510-0..1..	199	111	232	129
3BA7510-0..2..	248	138	234	130
3BA7610-0..1..	244	136	255	142
3BA7610-0..3..	244	136	255	142

Table 8: Two/Three Stage – Approximate Temperature Rise

Blower Model	Maximum Rise at 50 Hz speed		Maximum Rise at 60 Hz speed	
	Degrees F	Degrees C	Degrees F	Degrees C
3BA1310-7..2.	127	71	165	92
3BA1410-7..3.	154	86	149	83
3BA1410-7..4.	181	101	180	100
3BA1510-7..4.	190	106	176	98
3BA1510-7..5.	194	108	201	112
3BA1610-7..1.	92	51	86	48
3BA1610-7..2.	129	72	118	66
3BA1610-7..3.	176	98	167	93
3BA1610-7..4.	221	123	190	106
3BA1610-7..5.	246	137	266	148
3BA1610-7..7.	176	98	167	93
3BA1610-7..8.	176	98	248	138
3BA1810-7..1.	113	63	80	45
3BA1810-7..2.	185	103	140	78
3BA1810-7..3.	248	138	248	138
3BA1910-7..1.	119	66	115	64
3BA1910-7..2.	203	113	169	94
3BA1910-7..3.	248	138	274	152
3BA1910-7..4.	248	138	274	152
3BA7220-0..2..	131	73	171	95
3BA7220-0..5..	165	92	230	128
3BA7320-0..5..	178	99	255	142
3BA7420-0..2..	192	107	176	98
3BA7420-0..5..	250	139	243	135
3BA7520-0..2..	192	107	216	120
3BA7520-0..7..	257	143	262	128
3BA7530-0..7..	250	121	250	121
3BA7620-0..3..	255	142	259	144
3BA7620-0..5..	255	142	262	146
3BA7630-0..6..	248	138	248	138

Table 9: Tightening Torque Specifications

For non-electrical connections

Thread	Ft-lbs maximum torque	Nm maximum torque
M4	2.43	3.3
M5	3.25	4.4
M6	6.49	8.8
M8	19.47	26.4
M10	34.10	46.2
M12	56.76	77

For electrical connections

Thread	Ft-lbs torque	Nm torque
M4	0.6 to 0.9	0.8 to 1.2
M5	1.3 to 1.8	1.3 to 1.8

For metal threaded glands/unions

Thread	Ft-lbs maximum torque	Nm maximum torque
M12x1.5	3 to 4.5	4 to 6
M16x1.5	3.7 to 5.5	5 to 7.5
M20x1.5	4.4 to 6.6	6 to 9
M32x1.5	5.9 to 8.9	8 to 12
M40x1.5	5.9 to 8.9	8 to 12

For plastic threaded glands/unions

Thread	Ft-lbs maximum torque	Nm maximum torque
M12x1.5	1.5 to 2.6	2 to 3.5
M16x1.5	2.2 to 3	3 to 4
M20x1.5	3 to 3.7	4 to 5
M32x1.5	3.7 to 5.2	5 to 7
M40x1.5	3.7 to 5.2	5 to 7

Operating above the indicated maximum pressure or vacuum would overload the motor and/or overheat the unit. In addition to the maximum allowable pressure difference, careful consideration should be given to matching the motor protection devices (provided by others) to the expected current draw. In no case should the blower be operated with inadequate motor overload protection.

Since regenerative blowers are dynamic compression devices, the performance limits shown in Tables 1 to 4 are applicable only for a gas with the same specific gravity, dynamic viscosity and chemical characteristics as air. For gases with different physical properties than air, the limits will be different from those shown in the tables. Please contact Airtech for assistance in determining the proper blower size and configuration if handling gases other than air.

A vacuum relief valve or pressure relief valve should always be installed at the suction or discharge of the regenerative blower. This will prevent operation outside the applicable ranges shown in Tables 1 to 4. If the relief valves were not specified in the ordering process, please contact Airtech for details, price and availability of the needed valves before commissioning the unit. Failure to use the proper relief valve may result in failure of the blower due to operation outside the applicable limits; any such failure is outside the scope of Airtech's standard warranty.

WARNING! Be sure to install the necessary personnel protection devices if unexpected shut-down of the unit presents danger of death or injury.

3. Installation

As illustrated in Figure 1, the Airtech 3BA blower can be installed in any physical configuration.

CAUTION! Regenerative blowers can have surface temperatures in excess of 320° F. To avoid burns or other physical injury, take care to avoid contact with the surfaces of the blower during and immediately after operation.

To ensure adequate cooling of the blower during operation, install the blower with the minimum clearance as indicated in the table below.

Minimum installation clearances, 3BA blowers

Range	Distance from fan guard to closest obstruction. (inches/mm)	Distance from cover (opposite of fan) to closest obstruction. (inches/mm)
3BA11 through 3BA14	1.4/34	0.79/20
3BA15 through 3BA19	2.1/53	1.57/40
3BA72 and 3BA73	1.3/34	1.18/30
3BA74 through 3BA76	2.1/54	1.18/30

Please note that it may be desirable, where possible, to allow for larger clearances to allow access for maintenance or repair personnel. The noted clearances are to ensure adequate air flow for cooling only and are a minimum requirement.

Failure to allow for the noted clearances may result in premature failure of the blower due to lack of cooling, even if all other precautions are taken as recommended. For specific advice about installations requiring closer clearances, please contact Airtech, Inc. for recommendations.

Airtech regenerative blowers can be mounted in any configuration, either horizontally or vertically mounted. It is not usually necessary to bolt the smaller blowers to a rigid surface during operation, though this may be desirable to reduce pipe vibration, movement and noise. Larger models should be bolted in place, especially when installed vertically, to prevent possible rotation, damage or injury due to start-up torque.

CAUTION! For installations at altitudes greater than 3250 Feet above sea level there will be a loss in capacity. Please contact your factory representative for assistance in determining the extent of the loss of capacity likely at your specific location.

WARNING! Be sure to follow all local codes and regulations with respect to installation and operation of the blower. The blower motor should be wired to a branch circuit disconnect and all other safety devices recommended by the relevant sections of NFPA 70, National Electrical Code, and in accordance with all applicable state and local regulations and requirements.

3.1 Installation Procedure

Perform the installation exactly in accordance with the following steps:

1. For vacuum operation, connect the suction pipe to connection A, and for pressure operation connect the pressure pipe to connection B (See Figure 1). Install startup screens before startup to protect pump from debris.

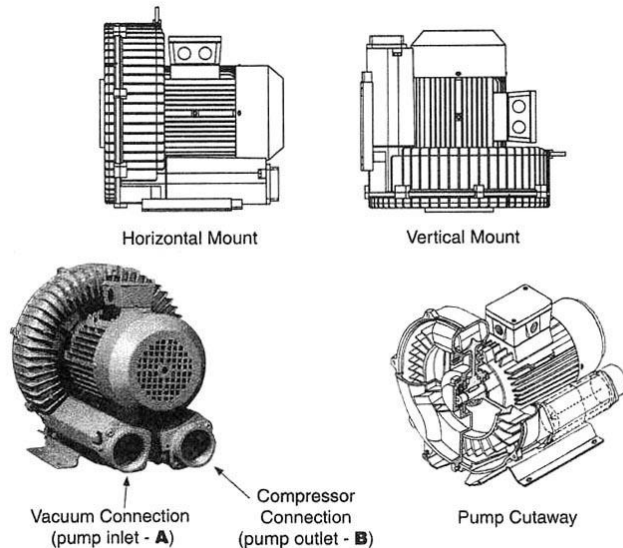


Figure 1

CAUTION! Design your piping system to avoid unnecessary pressure loss, which may significantly affect the operation of any regenerative blower. Contact your Airtech representative for assistance in designing and configuring an appropriate piping system for your application.

For alternation between vacuum and pressure in any application, changeover valves are available. Use of the changeover valve allows the same connection to be used for both vacuum and pressure.

2. The electrical data shown in Tables 1 to 4 (pages 10-14) should be confirmed by examination of the motor data plate on your 3BA blower. The standard motor features Class F insulation as a standard and are UL recognized for applications in both Canada and the United States (CUL). Motors are IEC design IP55, equal to a NEMA TEFC motor design. The connection diagram for the motors can be found in the inside of the terminal box cover. Be sure to confirm that your electrical supply has sufficient capacity to operate the blower according to the nameplate requirements.

3. A magnetic motor starter should always be used to connect the motor to the power supply. It is advisable to use thermal overload motor starters to provide maximum protection for the motor and wiring. All cabling used on starters should be secured with good quality cable clamps.

We recommend that the motor starters used feature a time delay trip on high amperage to avoid nuisance trips on start-up. When the unit is started cold, over amperage may be experienced for a short time due to the higher resistance of the windings at lower temperatures.

If using a change over or solenoid valve, ensure that the voltage connected to the valve matches that shown on the valve instructions or nameplate. Most valves are rated for 110 Volts 60Hz or 220 Volts 50 Hz. Connection of these valves to higher voltages may result in immediate valve failure.

WARNING! The electrical installation should be made by a qualified electrician and in complete compliance with all NFPA 70 (National Electrical Code) requirements along with all state and local code requirements. The main disconnect and motors starters are assumed to be provided by others.

4. Install the necessary relief valves and confirm their proper operation.

4. Start-up

CAUTION! Do not start the blower motor more than 10 times in one hour. If multiple and frequent start-ups are required by your application, install a minimum run timer in the motor control circuit to avoid decreased motor life and possible fire due to over-starting of the motor.

1.1 Start-up Procedure

1. Before operation, confirm the correct direction of rotation by jogging (switching rapidly on and off) the motor and observing the motor fan rotation in the same direction as the arrow. If the direction of rotation is incorrect, lock out the power and switch two leads (three phase) or rewire (single phase) to effect the opposite rotation direction. Recheck the direction of rotation before proceeding.

2. Do not operate the blower at pressure or vacuum ranges that exceed those shown in Tables one through four for the model being installed. This can be achieved by use of the recommended relief valve shown in Table 5.

Note: Relief valves that have been factory pre-set have a label indicating the set pressure and an arrow indicating the direction of flow. The arrow will point into the pipe when installed in vacuum applications and out of the pipe when installed in pressure applications. Do not re-set the relief valve if it has been pre-set from the factory.

In the event the relief valve setting needs to be reset, adjust the set screw to increase or decrease the tension on the spring. Place the blower in operation and note the current draw of the motor. When the current draw of the motor is near the maximum noted on the motor nameplate, tighten the locking nut on the valve and proceed.

3. When checking the current draw of the motor with an ammeter, be sure to confirm the voltage at the motor junction box. Low voltage conditions may result in difficulty starting or in unexpected motor failure or motor starter trips.

1.2 Potential Risks For Operators

Noise emission: Free field noise limits are indicated in Tables 1-4 (pages 10-14). Hearing protection is not normally required at the expected noise generation levels in the table; however, local conditions may result in higher ambient noise. If this is the case and local noise exceeds OSHA recommended levels for expected exposure time (typically 85 dBA for eight hours), hearing protection should be used.

5. Maintenance and Servicing

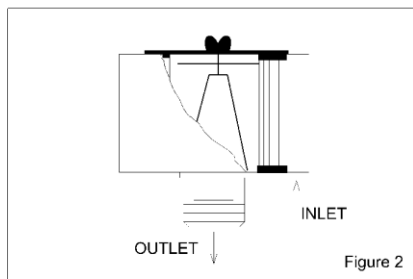
WARNING! Be sure the power supply is disconnected and locked out before attempting to do any maintenance on the unit. It is critical that the unit be locked out from starting during maintenance as severe injury or death could result from exposure to high voltage or rotating parts.

CAUTION! Allow the blower to cool to a surface temperature of less than 100 F before attempting maintenance. Prolonged exposure to temperatures above 120F can cause severe burns.

Clean the blower surfaces periodically to avoid build up of dust or other debris. Build up of debris can cause overheating and premature failure of the blower.

If an inlet filter is being use, ensure that it remains clean during operation by examining the filter cartridge for debris build up. Replace dirty or clogged filter cartridges.

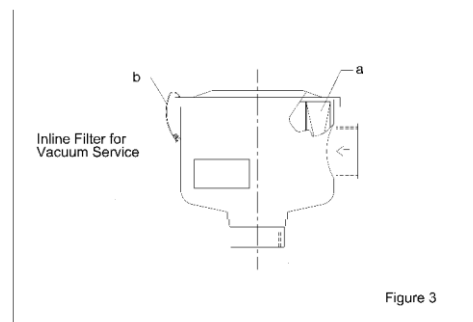
On pressure units, periodically clean the inlet mesh screen to avoid loss of capacity. If an external inlet filter is used, the filter element should be cleaned monthly or as frequently as required by local conditions. Excessive pressure drop will develop from use of clogged or dirty filters. This pressure drop will degrade blower performance and increase operating temperatures, leading possibly to premature pump failure.



To replace the filter, remove the wing nut and cover. Remove the element and either clean with compressed air or replace. Reassemble in reverse order.

For vacuum applications, the optional in-line vacuum filter must be cleaned regularly, depending on local conditions. Cleaning can be achieved by blowing out with compressed air. If cleaning is not possible, replace the cartridge. Access the cartridge by unhooking the relevant clips and removing the cover.

CAUTION! Do not attempt to check the filter cartridge during operation of the blower. Only check the cartridge after disconnecting the power from the blower and locking out the power to prevent an unexpected start.



Bearings are grease-packed for life.

5.1 Troubleshooting Chart

Fault	Cause	Remedy	Responsible Party
Motor does not start, no noise.	Two or more power legs interrupted	Check fuses, terminals, etc.. for source of interruption and correct.	Electrician
Motor does not start, humming noise.	One power supply lead interrupted	Check fuses, terminals, etc.. for source of interruption and correct.	Electrician
	Impeller is jammed.	Open blower cover, remove debris, clean.	Service Technician
		Check impeller clearance and reset if necessary.	
	Defective Impeller	Replace impeller.	Service Technician
	Defective Bearing	Replace defective bearing.	Service Technician
Trip of motor starter at start-up	Incorrect starter setting	Ensure starter setting is correct (check current on nameplate)	Electrician
	Winding short-circuit	Megger motor	Electrician
	Motor overloaded due to operation of pump at excessive differential pressures.	Inspect filters, mufflers and connection pipes and clean as required. Check relief valve operation. Reset or replace as necessary.	Operator
	Impeller Jammed	See above fault Motor does not start, humming noise, cause jammed impeller.	Operator
Excessive Power Consumption	Lime or other deposits	Decalcify or clean unit as required (see Maintenance Chart)	Operator
No Vacuum or Pressure.	Severe leak in system	Close off pump and run deadheaded to confirm pump is operating properly. If so, find and fix leak in the system.	Operator
	Wrong direction of rotation	Check air flow direction and change direction of rotation if necessary.	Operator Electrician

Fault	Cause	Remedy	Responsible Party
Insufficient Vacuum	System too small	Use larger system	Operator
	Inlet piping too long or too small.	Increase pipe diameter to reduce pressure loss in inlet piping. Contact Airtech for assistance in determining correct pipe size.	Operator
	Leak at connection to vacuum system.	Check for leaks and repair if necessary.	Operator
	Density of gas handles different from air.	Consider increased limits on operation due to density differences. Consult Airtech, Inc. for assistance.	Airtech Engineering
	Change in impeller geometry due to erosion	Clean impeller and examine for wear. Replace if necessary.	Service Technician
	Inlet filter clogged.	Change filter element; remove clog.	Operator
	Vacuum relief valve incorrectly set.	Reset or replace vacuum relief valve. Contact Airtech for assistance.	Operator
	Seal defective.	Replace seal.	Service Technician
Abnormal flow noises.	Flow speed too high.	Clean pipes or use larger pipes to connect unit to process.	Operator
	Muffler soiled.	Clean muffler inserts, replace if necessary.	Operator
Abnormal running noise	Ball bearing defective or insufficient lubrication on bearing.	Replace bearing if required.	Service Technician
Compressor leaky	Seals on muffler defective.	Tighten muffler connection. Replace gasket if necessary.	Operator
	Seals in motor area defective	Replace as necessary.	Service Technician

WARNING! Before attempting an on-site repair, ensure that a qualified electrician has disconnected the motor from the power supply so that accidental starting of the motor is impossible.

After repairing the unit, be sure to follow the instructions noted in this manual in the **Installation** section (page 20).

5.2 Lifting

For smaller units (less than 65 lbs/ 30 kgs), it may be possible to lift the units manually. When doing so, be sure to understand the weight of the unit being lifted and to follow good lifting safety procedures.

Model	Weight Lbs/kgs	Model	Weight Lbs/kgs
3BA1300-7AT06	20/9	3BA1310-7AT26	33/15
2BA1300-7AT16	22/10	3BA1410-7AT36	55/25
3BA1400-7AT06	29/13	3BA1410-7AT46	59.5/29
3BA1400-7AT26	37.5/17	3BA1510-7AT46	86/39
3BA1500-7AT06	40/18	3BA1510-7AT56	97/44
3BA1500-7AT16	46.5/21	3BA1610-7AT26	104/47
3BA1500-7AT26	51/23	3BA1610-7AT36	119/54
3BA1500-7AT36	55/25	3BA1610-7AT46	163/74
3BA1600-7AT06	57.5/26	3BA1610-7AT56	172/78
3BA1600-7AT16	64/29	3BA1640-7AT36	128/58
3BA1600-7AT26	75/34	3BA1640-7AT46	172/78
3BA1600-7AT36	90.5/41	3BA1640-7AT56	181/82
3BA1800-7AT06	128/58	3BA1810-7AT16	250/113
3BA1800-7AT16	143/65	3BA1810-7AT26	260/118
3BA1800-7AT26	150/68	3BA1810-7AT36	316/143
3BA1900-7AT06	265/120	3BA1810-7AT46	341/155
3BA1900-7AT16	314/142	3BA1840-7AT26	260/118
3BA19437AT26	417/190	3BA1840-7AT36	316/143
3BA19437AT36	463/210	3BA1910-7AT16	409/186
3BA19437AT46	509/231	3BA1910-7AT36	455/206
3BA7210-0AT167	35.3/16	3BA1910-7AT46	500/226
3BA7310-0AT167	35.3/16	3BA7220-0AT567	61.7/28
3BA7410-0AT167	50.7/23	3BA7320-0AT567	66.1/30
3BA7510-0AT168	57.3/26	3BA7420-0AT267	72.7/33
3BA7510-0AT268	63.9/29	3BA7420-0AT567	86/39
3BA7610-0AT168	70.5/32	3BA7520-0AT268	88.2/40
3BA7610-0AT368	77.2/35	3BA7620-0AT368	106/48
3BA7530-0AT768	200/91	3BA7620-0AT568	143/65
		3BA7630-0AT668	207/94

When lifting 3BA15 through 3BA19 (but not 3BA1943 units) or the 3BA75 through the 3BA76, use the eye bolt provided (eye bolts are not included on smaller units). One attachment point should be sufficient. Ensure that the crane is rated for the weight being lifted.

For the 3BA1943, use the eye bolt and the holes in the feet of the blower to lift and maintain a balanced load.

5.3 Storage

The 3BA units should be stored in a clean, dry environment. If stored in an area with a humidity of greater than 80 percent, store in a closed container with desiccant drying agents to avoid damage.

5.4 Disposal

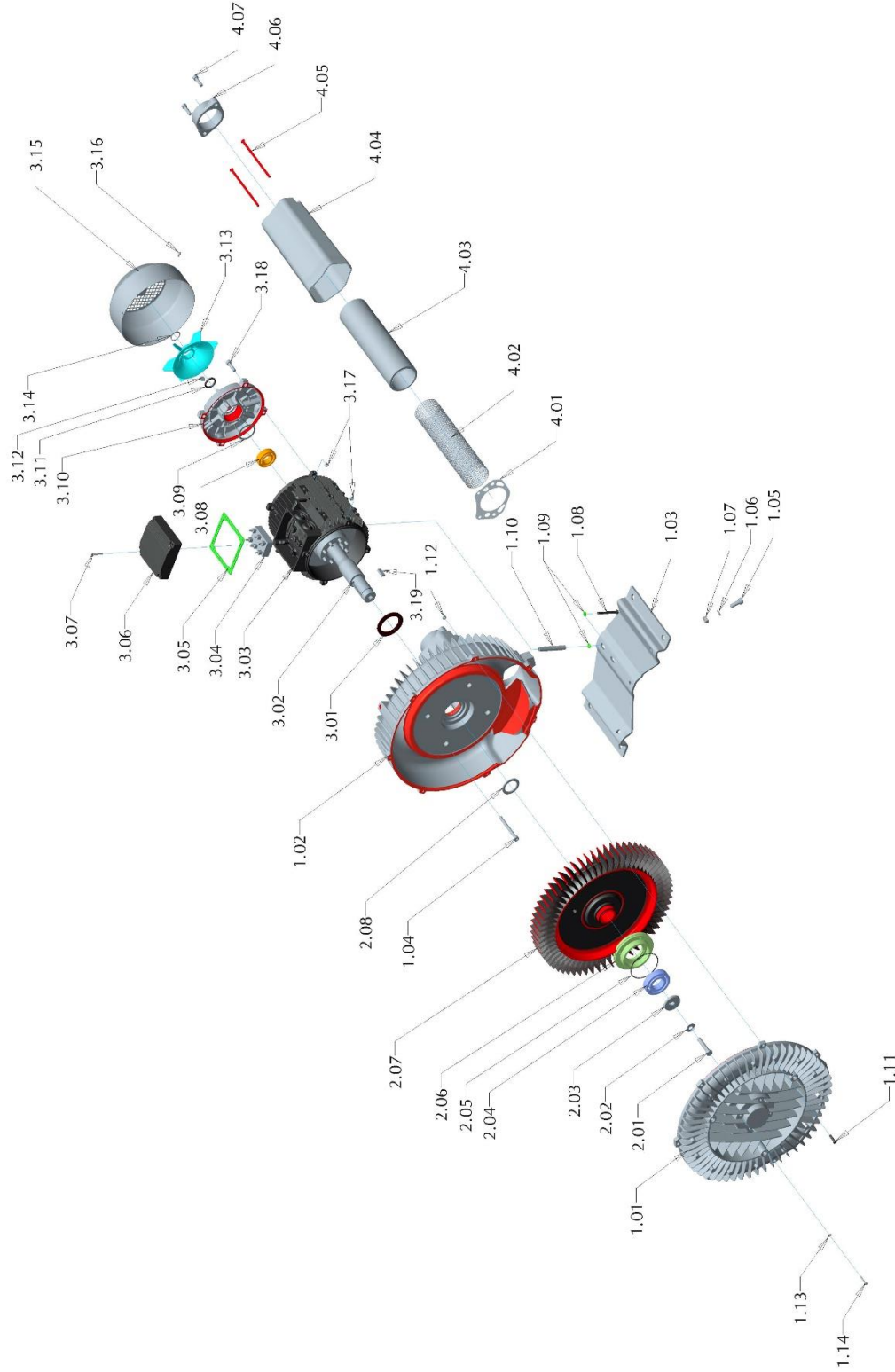
Dispose in accordance with all local health and safety regulations.

Spare parts list are available from your local Airtech service center. Please contact your local Airtech representative for assistance.

For additional assistance, please contact:

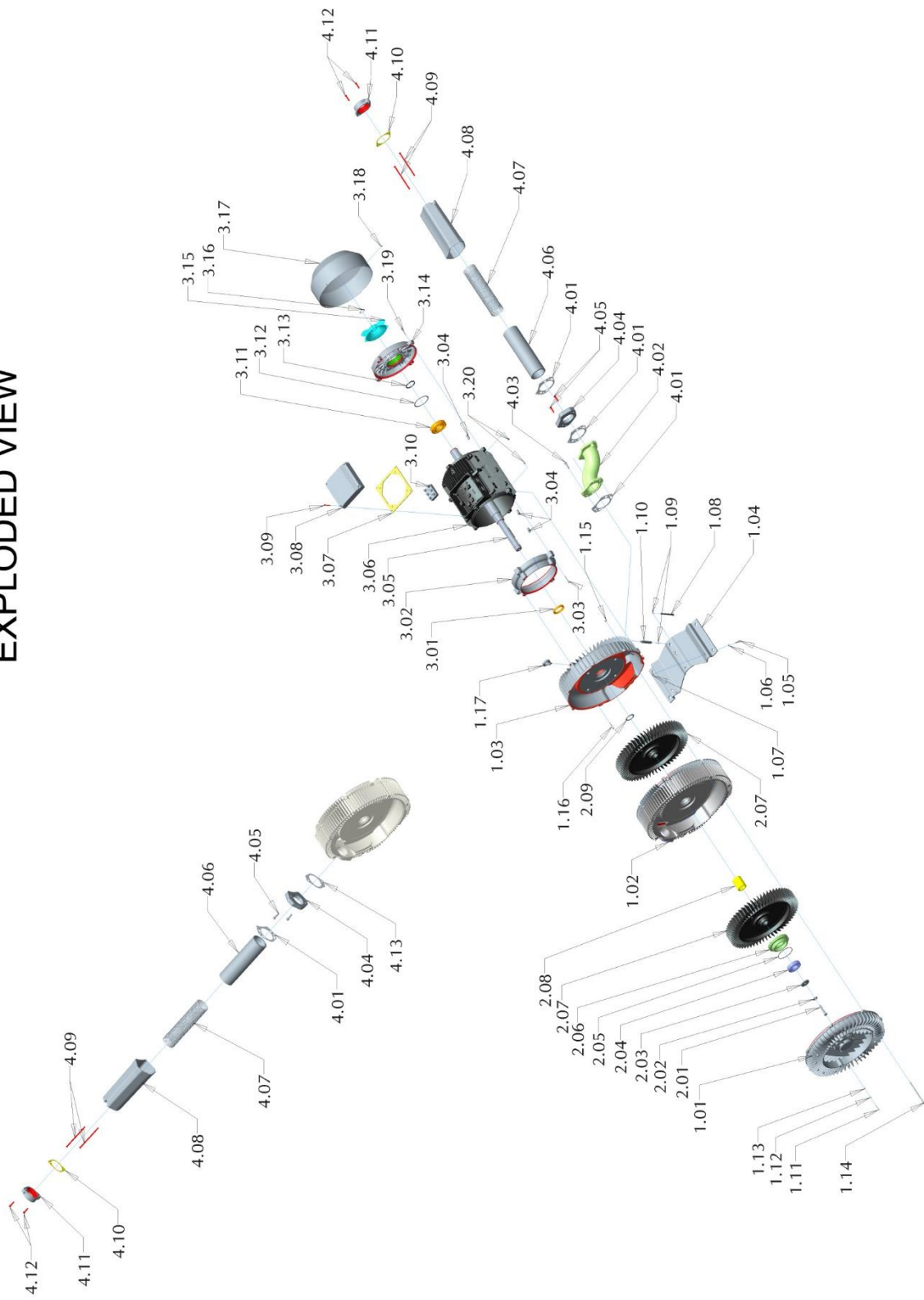
Airtech, Inc.,
301 Veterans Boulevard
Rutherford, NJ, 07070
Phone: 1-201-569-1173
Fax: 201-569-1696.

3BA1 SINGLE STAGE EXPLODED VIEW



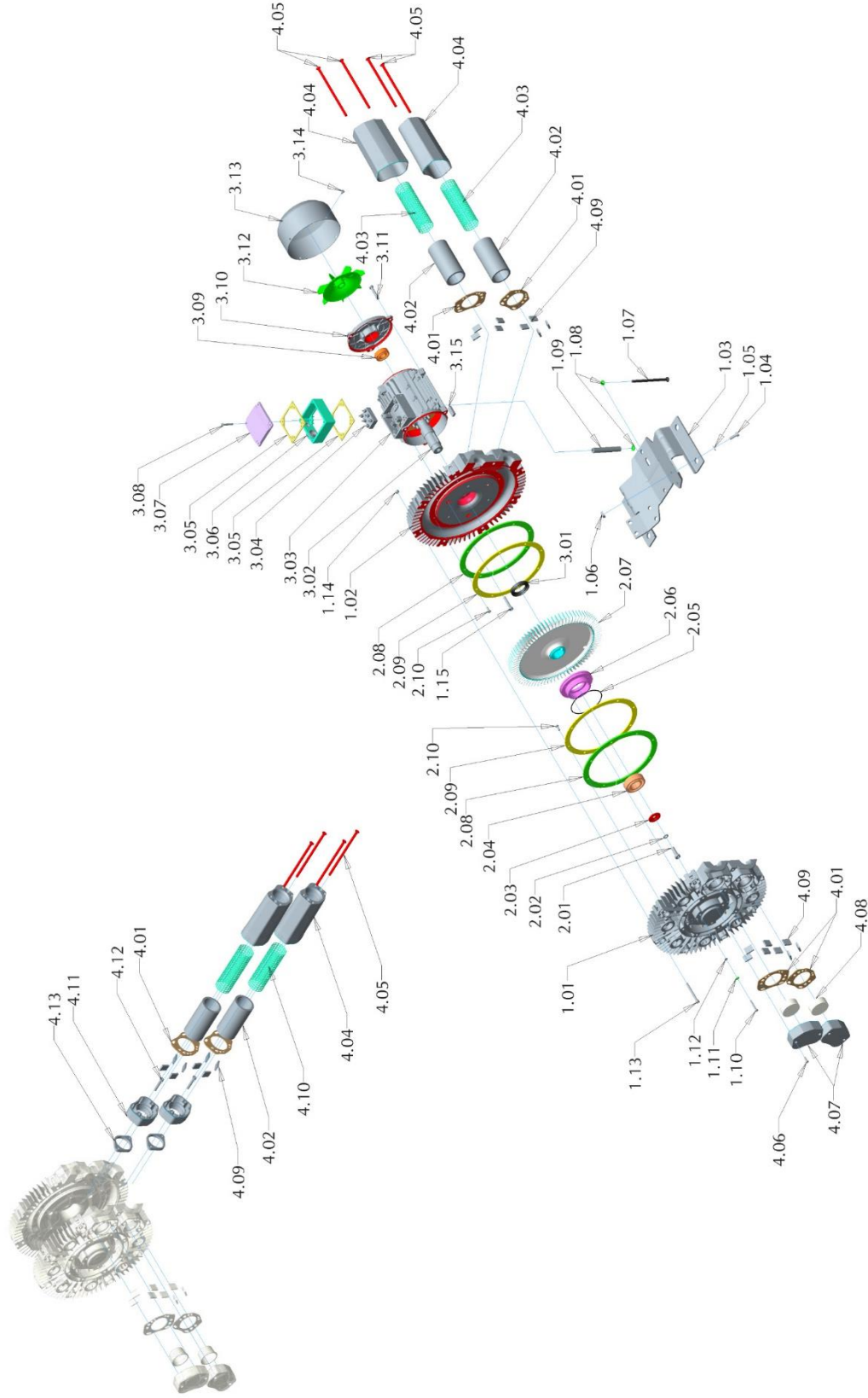
No.	Qty.	Description
1.01	1	Cover
1.02	1	Housing
1.03	1	Mounting Plate
1.04	4	Motor Mounting Screw
1.05	2	Mounting Plate Washer
1.06	2	Mounting Plate Nut
1.07	2	Mounting Plate Nut
1.08	1	Stator Support Screw
1.09	2	Stator Support Washer
1.10	1	Stator Support Sleeve
1.11	8	Cover Mounting Screw
1.12	8	Cover Mounting Nut
1.13	4	Bearing Cover Washer
1.14	4	Bearing Cover Screw
2.01	1	Shaft Screw
2.02	1	Shaft Lock Washer
2.03	1	Disc
2.04	1	Bearing
2.05	1	Bearing Cover O-Ring
2.06	1	Bearing Cover
2.07	1	Impeller
2.08	1	Disc
3.01	1	Seal
3.02	1	Motor Rotor
3.03	1	Stator Block
3.04	1	Terminal Block
3.05	1	Motor Terminal Box Gasket
3.06	1	Motor Terminal Box
3.07	4	Cover For Terminal Box
3.08	1	Terminal Box Cover Screw
3.09	1	Terminal Box
3.10	1	Terminal Box
3.11	1	Bearing Preloading Ring
3.12	1	End Shield
3.13	1	Tolerance Ring
3.14	1	Shaft Key
3.15	1	External Fan
3.16	1	Retaining Ring
3.17	1	Fan Cowl
3.18	4	Fan Cowl Screw
3.19	8	Stator Nut
4.01	2	End Shield Screw
4.02	2	Parallel Key
4.03	2	Silencer Gasket
4.04	2	Silencer Insert
4.05	2	Silencer Insert Filler
4.06	4	Silencer Casing
4.07	2	Flange
4.08	4	Flange Screw

3BA1 TWO STAGE
EXPLODED VIEW



No.	Qty.	Description
1.01	1	Cover
1.02	1	Center Section
1.03	1	Blower Housing
1.04	1	Mounting Plate
1.05	2	Plate Mounting Screw
1.06	2	Mounting Plate Washer
1.07	2	Mounting Plate Nut
1.08	1	Stator Support Screw
1.09	2	Stator Support Washer
1.10	1	Stator Support Sleeve
1.11	4	Bearing Cover Screw
1.12	4	Bearing Screw Washer
1.13	4	Bearing Ring Seal
1.14	8	Cover Mounting Screw
1.15	8	Cover Mounting Nut
1.16	4	Motor Mounting Screw
1.17	4	Lifting Ring
2.01	1	Shaft Screw
2.02	1	Shaft Lock Washer
2.03	1	Disc
2.04	1	Bearing Cover O-Ring
2.05	1	Bearing Cover
2.06	1	Impeller
2.07	2	Sleeve
2.08	1	Disk
2.09	1	Disk
3.01	1	Shaft Seal Ring
3.02	1	Motor Attachment
3.03	4	Motor Attachment Screw
3.04	3	Parallel Key
3.05	1	Motor Rotor
3.06	1	Stator
3.07	1	Motor Terminal Box Gasket
3.08	1	Cover For Terminal Box
3.09	4	Terminal Box Cover Screw
3.10	1	Terminal Block
3.11	1	Rear Bearing
3.12	1	End Shield Seal
3.13	1	Rotary Shaft Lip Seal
3.14	1	End Shield
3.15	1	External Fan
3.16	1	Retaining Ring
3.17	1	Fan Cowl
3.18	4	Fan Cowl Screw
3.19	4	End Shield Screw
3.20	8	Stator Nut
4.01	4	Silencer Gasket
4.02	1	Silencer Attachment
4.03	2	Silencer Attachment Screw
4.04	2	Silencer Flange
4.05	4	Silencer Flange Screw
4.06	2	Silencer Insert Filler
4.07	2	Silencer Insert
4.08	2	Silencer Casing
4.09	4	Silencer Screw
4.10	2	Flange Gasket
4.11	2	Flange
4.12	4	Flange Screw
4.13	1	Side Silencer Gasket

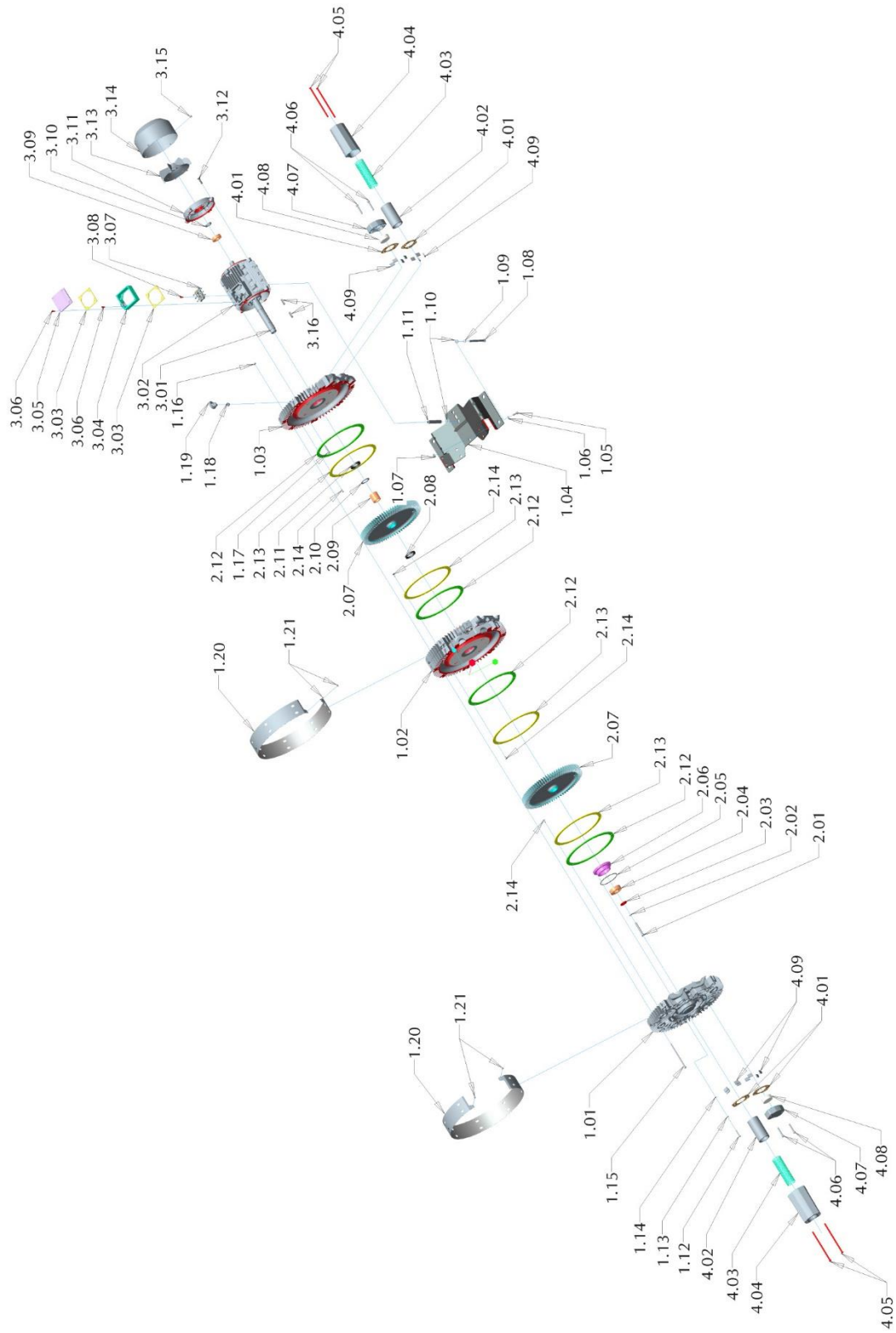
3BA7 SINGLE STAGE EXPLODED VIEW



No	Qty	Description
1.01	1	Cover
1.02	1	Housing
1.03	1	Mounting Plate
1.04	4	Plate Mounting Screw
1.05	4	Mounting Plate Washer
1.06	4	Mounting Plate Nut
1.07	1	Stator Support Sleeve
1.08	2	Stator Support Washer
1.09	1	Bearing Cover Screw
1.10	3	Bearing Cover Washer
1.11	3	Bearing Ring Seal
1.12	3	Cover Mounting Screw
1.13	8	Cover Mounting Nut
1.14	8	Motor Mounting Screw
1.15	3	Motor Mounting Nut
2.01	1	Shaft Screw
2.02	1	Disc
2.03	1	Bearing
2.04	1	Bearing Cover O-Ring
2.05	1	Bearing Cover
2.06	1	Impeller Seal
2.07	1	Retaining Ring
2.08	2	Inner Seal Ring
2.09	2	Motor Rotor
2.10	16	Terminal Block
2.11	1	Terminal Box
2.12	1	Terminal Box Cover Screw
2.13	1	End Shield
2.14	1	External Fan
2.15	1	Fan Cowl
2.16	1	Fan Cowl Screw
2.17	1	Parallel Key
2.18	1	Stator Gasket
2.19	1	Stator Insert Filler
2.20	1	Stator Insert
2.21	1	Stator Casing
2.22	1	Stator Screw
2.23	1	Flange Cap
2.24	1	Flange Filler
2.25	1	Flange
2.26	1	Flange Gasket
2.27	1	Flange Screw
2.28	1	Flange Nut
2.29	1	Flange Washer
2.30	1	Flange Seal
2.31	1	Flange Gasket
2.32	1	Flange Screw
2.33	1	Flange Nut
2.34	1	Flange Washer
2.35	1	Flange Seal
2.36	1	Flange Gasket
2.37	1	Flange Screw
2.38	1	Flange Nut
2.39	1	Flange Washer
2.40	1	Flange Seal
2.41	1	Flange Gasket
2.42	1	Flange Screw
2.43	1	Flange Nut
2.44	1	Flange Washer
2.45	1	Flange Seal
2.46	1	Flange Gasket
2.47	1	Flange Screw
2.48	1	Flange Nut
2.49	1	Flange Washer
2.50	1	Flange Seal
2.51	1	Flange Gasket
2.52	1	Flange Screw
2.53	1	Flange Nut
2.54	1	Flange Washer
2.55	1	Flange Seal
2.56	1	Flange Gasket
2.57	1	Flange Screw
2.58	1	Flange Nut
2.59	1	Flange Washer
2.60	1	Flange Seal
2.61	1	Flange Gasket
2.62	1	Flange Screw
2.63	1	Flange Nut
2.64	1	Flange Washer
2.65	1	Flange Seal
2.66	1	Flange Gasket
2.67	1	Flange Screw
2.68	1	Flange Nut
2.69	1	Flange Washer
2.70	1	Flange Seal
2.71	1	Flange Gasket
2.72	1	Flange Screw
2.73	1	Flange Nut
2.74	1	Flange Washer
2.75	1	Flange Seal
2.76	1	Flange Gasket
2.77	1	Flange Screw
2.78	1	Flange Nut
2.79	1	Flange Washer
2.80	1	Flange Seal
2.81	1	Flange Gasket
2.82	1	Flange Screw
2.83	1	Flange Nut
2.84	1	Flange Washer
2.85	1	Flange Seal
2.86	1	Flange Gasket
2.87	1	Flange Screw
2.88	1	Flange Nut
2.89	1	Flange Washer
2.90	1	Flange Seal
2.91	1	Flange Gasket
2.92	1	Flange Screw
2.93	1	Flange Nut
2.94	1	Flange Washer
2.95	1	Flange Seal
2.96	1	Flange Gasket
2.97	1	Flange Screw
2.98	1	Flange Nut
2.99	1	Flange Washer
2.100	1	Flange Seal

*Does not apply for 3BA76XX Blowers

No	Qty	Description
1.01	1	Cover
1.02	1	Center Section
1.03	1	Housing
1.04	1	Mounting Plate
1.05	4	Plate Mounting Screw
1.06	4	Mouting Plate Washer
1.07	4	Mounting Plate Nut
1.08	1	Stator Support Screw
1.09	1	Stator Support Lock Washer
1.10	1	Stator Support Washer
1.11	1	Stator Support Sleeve
1.12	3	Bearing Cover Screw
1.13	3	Bearing Screw Washer
1.14	3	Bearing Ring Seal
1.15	8	Cover Mounting Screw
1.16	8	Cover Mounting Nut
1.17	4	Motor Mounting Screw
1.18	1	Lifting Ring Nut
1.19	1	Lifting Ring
1.20	2	Blower Cowl
1.21	4	Blower Cowl Screw
2.01	1	Shaft Screw
2.02	1	Shaft Lock Washer
2.03	1	Disc
2.04	1	Bearing
2.05	1	Bearing Cover O-Ring
2.06	1	Bearing Cover
2.07	2	Impeller
2.08	1	Rotary Shaft Seal
2.09	1	Sleeve
2.10	1	Disk
2.11	1	Shaft Seal Ring
2.12	4	Teflon Seal*
2.13	4	Retaining Ring
2.14	32	Inner Seal Screw
3.01	1	Motor Rotor
3.02	1	Stator
3.03	2	Motor Terminal Box Gasket
3.04	1	Terminal Box
3.05	1	Cover For Terminal Box
3.06	8	Terminal Box Screw
3.07	1	Terminal Block
3.08	1	Terminal Block Screw
3.09	1	Rear Bearing
3.10	1	End Shield Disk
3.11	1	End Shield
3.12	4	End Shield Screw
3.13	1	External Fan
3.14	1	Fan Cowl
3.15	4	Fan Cowl Screw
3.16	2	Parallel Key
4.01	4	Silencer Gasket
4.02	2	Silencer Insert Filler
4.03	2	Silencer Insert
4.04	2	Silencer Casing
4.05	4	Silencer Screw
4.06	4	Flange Screw
4.07	2	Flange Cap
4.08	2	Flange Filler
4.09	16	Filler



*Does not apply for 3BA76XX Blowers

Airtech, Inc. ("Company") Warranty Statement

Company warrants that on the date of shipment to Purchaser the goods will be of the kind and quality described herein, merchantable, and free of all defects in workmanship and materials.

If within one year from the date of initial operation, but not more than eighteen months from date of shipment by the Company, of any item of the goods, Purchaser discovers that such item was not as warranted above and promptly notifies Company in writing thereof, Company shall remedy such defect by, at the Company's option, adjustment, repair or replacement of the item and any affected part of the good. Purchaser shall assume all responsibility and expense for removal, reinstallation and freight in connection with the foregoing remedy. The same obligations and conditions shall extend to replacement items furnished by the Company hereunder. Company shall have the right of disposal of items replaced by it. Purchaser shall grant Company access to the goods at all reasonable times in order for Company to determine any defect in the goods. In the event that adjustment, repair or replacement does not remedy the defect, the Company and Purchaser shall negotiate in good faith an equitable adjustment in the contract price.

The Company's responsibility does not extend to any item of the goods which has not been manufactured and sold by the Company. Such item shall be covered only by the express warranty, if any, by the manufacturer thereof. The Company and its suppliers shall also have no responsibility if the goods have been improperly stored, handled or installed, or if the goods have not been operated or maintained according to their ratings or according to the instructions in Company or supplier furnished manuals, or if unauthorized repairs or modifications have been made to the goods.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES (EXCEPT TITLE) INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, AND CONSTITUTES THE ONLY WARRANTY OF COMPANY WITH RESPECT TO THE GOODS.

The foregoing states Purchaser's exclusive remedy against Company and its suppliers for any defect in the good or for failure of the goods to be as warranted, whether Purchaser's remedy is based on contract, warranty, failure of such remedy to achieve its essential purpose, tort (including negligence), strict liability, indemnity, or any other legal theory, and whether arising out of warranties, representations, instructions, installations, or defects from any cause.

Neither Company nor its suppliers shall be liable, whether in contract, warranty, failure of a remedy to meet its essential purpose, tort (including negligence), strict liability, indemnity or any other legal theory, for loss of use, revenue or profit or for cost of capital or of substitute use or performance or for indirect, liquidated, incidental or consequential damages or for any other loss or cost of a similar type, or for claims by Purchaser for damages of Purchaser's customers.

AIRTECH[®]
VACUUM

301 Veterans Boulevard
Rutherford, NJ 07070
Tel: 1 888 222 9940
Fax: 201 569 1696
airtech@airtechusa.com

AIRTECH[®] SOUTH
VACUUM

2121 Newmarket Pkwy. Suite 110
Marietta, GA 30067
Tel: 770 690 0700
Fax: 770 690 0709
airtechsouth@airtechusa.com

AIRTECH[®] WEST
VACUUM

42 Digital Drive #9
Novato, CA 94949
Tel: 415 382 9000
Fax: 415 382 9700
airtechwest@airtechusa.com

AIRTECH[®] CHINA
VACUUM

2nd Building,
Jiangbian Second Industrial Park
Songgang Town, Bao'an District
Shenzhen, China
Tel: +86 755 81730991(Ext. 8018)
Fax: +86 755 81730986
www.airtechchina.com

AIRTECH[®]
EUROPE

Pfaffenpfad 5
D-97440 Werneck
Germany
Tel: +49 9722 943 96 0
Fax: +49 9722 943 96 29
www.airtecheu.com

AIRTECH[®]
EUROPE

Carrer dels Amics
d'Argenton 40
08310 Barcelona
Spain
Tel: +34 93 797 17 66
Fax: +34 93 797 17 54
www.airtecheu.com

www.airtechusa.com