

Stock#: EEI-1297

Status: In Stock, Tested

Dimensions: 7x16' Trailer (plus 4' tongue)

Description: Air Sparge and Soil Vapor Extraction Trailer

*****SVE EQUIPMENT****

- Gast R6P355R-50 Regenerative Blower with 6HP 3PH 208-230/460V XP Motor (STOCK#205)
 - o 85" WC Max Vacuum, 260 SCFM Max Flow
- Kunkle 215V 2" Vacuum Relief Valve
- Stoddard F75-3 Vacuum Air Filter (STOCK# 473), 3" NPT
- Solberg FS-31P-250 Dilution Air Filter Silencer with Brass Gate Valve
- AWS60-3 Air Water Separator Tank with LL, HL, HLA Float Switch
- Goulds NPE Series 1ST1C5F3 Transfer Pump with 1/2HP 3PH TEFC 208-230/460V 3450RPM Motor, 0-30 PSIG Pressure Gauge, Discharge Point Through Wall (STOCK#314)
- Dwyer LPG4-D7722N 0-100" WC Vacuum Gauges
- Dwyer 1950-20-2F Low Vacuum Alarm Switch
- 3" GAC Bypass Loop with ball valves for future addition of carbon tanks in vacuum line
- 3" Galvanized Steel Exhaust Line with Silencer, Temperature Gauge, Pressure Gauge, Dwyer DS-300-3 Flow Sensor with Magnehelic Gauge for Calculating Air Flow, Exhaust Rain Cap
- 3" SCH 80 PVC Manifold Header with 6x Zones
- 6x 2" SCH 80 PVC Manifold Zones each with:
 - o True Union Ball Valve
 - o Dwyer LPG4-D7722N 0-100" WC Vacuum Gauges
 - o Dwyer DS-300-2 Flow Sensor (For Calculating Air Flow)
 - Dwyer 2002 Magnehelic Gauge (For Calculating Air Flow)
- XP Light with XP On/Off Switch
- Dayton 12" XP Exhaust Fan with XP Thermostat

*****AIR SPARGE EQUIPMENT****

- Busch MM1104BP Rotary Claw Air Compressor with 5HP 3PH 230/460V TEFC Motor (STOCK#302)
 - o 44 CFM Max Flow, 30 PSIG Max Pressure
- Xchanger AA-250 Heat Exchanger with 1HP 3PH TEFC Motor (STOCK#310)
- 0-30 PSIG Gauges, 0-300F Temperature Gauges, Pressure Relief Valve
- 1" Blow Off Line with Brass Gate Valve and Muffler
- United Electric High Pressure and High Temperature Safety Switches
- 1.5" Galvanized Steel Manifold Header with 6 Zones
- 6x ½" Manifold Zones Each With:
 - o 0-30 PSIG Pressure Gauge
 - o ½" Asco Solenoid Valve
 - o ½" Brass Gate Valve
 - o Dwyer 3 30 SCFM Rotameter
- Vapor/Dust Tight Fluorescent Light Fixture with Light Switch
- 12" Exhaust Fan with Thermostat
- Service Outlet

*****CONTROL PANEL****

- Nema 4 Control Enclosure



- Air Sparge Motor, SVE Motor, Transfer Pump Motor and Heat Exchanger Motor Each Have:
 - o Hour Meter
 - o Illuminated Hand/Off/Auto Switch
 - o Contactor/Overload/Circuit Breaker
- Control Alarms with Red Alarm Lights for:
 - o Air Sparge High Temperature (Shuts down Air Sparge Compressor)
 - Air Sparge High Pressure (Shuts Down Air Sparge Compressor)
 - o SVE Low Vacuum (Interlock To Shut Down Air Sparge Compressor)
 - o AWS Tank High Level (Shuts down SVE Blower)
- Intrinsically Safe Relays for AWS Tank Level Floats to Operate Transfer Pump in Automatic Mode and High Level Alarm Float to Shut down SVE Blower
- Controls for Air Sparge Solenoid Valve Zone Operation Include:
 - Hand/Off/Auto Switch for Each Valve
 - Hand Position Opens Valve
 - Off Position Closes Valve
 - Auto Position lets timer decide if valve is open or shut
 - o 24 Hour Timer for Each Solenoid Valve
- Sensaphone Cell 682 Cellular Telemetry Unit for Remote Alarm Notifications

*****SYSTEM TRAILER****

- Homesteader "Challenger" Enclosed Cargo Trailer
 - o 7' wide x 16' long x 6'8" Height Interior Dimensions
 - o 4' Tongue, 2-5/16" Ball Hitch
 - o 3500lb tandem axles
 - o 3/4" Plywood Floor, 3/8" Plywood Walls
 - o 32" Side Access Door





Enviro-Equipment Inc. 10120 Industrial Drive Pineville NC 28134











GAST MANUFACTURING, INC. A Unit of IDEX Corporation Post Office Box 97 Benton Harbor, Michigan Ph: 269/926-6171 Fax: 269/925-8288

PART NUMBER:

LTD184

REV.

Product Specifications

MODEL NUMBER	MOTOR SPECIFICATIONS	RPM	MAX VAC		MAX I	PRESS	 HP	kW	NET	WT.
	MOTOR SPECIFICATIONS		"H ₂ 0	mbar	"H ₂ 0	mbar		ΚW	lbs.	kg
R6P355R-50	208-230/460-60-3	3450	85	212	100	249	6.0	4,47		405
	190-220/380-415-50-3	2850	65	162	80	199	4.5	3,35	233	105

81/75 dB(A) MAX. @ 60/50 Hz SOUND LEVEL

-29°C TO 40°C NORMAL AMBIENT

RELATIVE HUMIDITY <u>0% - 100% NON COND</u>ENSING

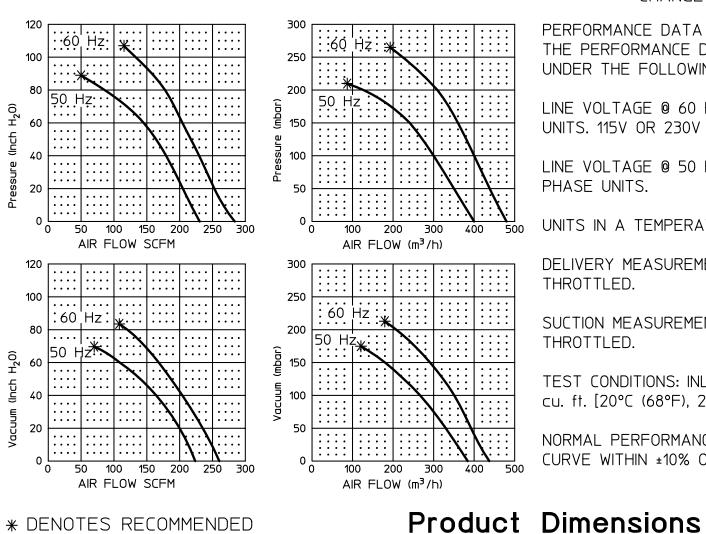
ENVIRONMENT _____CLEAN DUST_FREE

UL AND CSA APPROVED MOTOR FOR EXPLOSIVE GAS ATMOSPHERES CLASS 1, GROUP D.

THIS BLOWER IS DESIGNED FOR SOIL AND GROUND WATER REMEDIATION.

> TECHNICAL DATA SUBJECT TO CHANGE WITHOUT NOTICE.

Product Performance



PERFORMANCE DATA

THE PERFORMANCE DATA SHOWN WAS DETERMINED UNDER THE FOLLOWING CONDITIONS:

LINE VOLTAGE @ 60 Hz. 230V OR 460V FOR 3 PHASE UNITS. 115V OR 230V FOR 1 PHASE UNITS.

LINE VOLTAGE @ 50 Hz. 220V FOR 3 PHASE OR 1 PHASE UNITS.

UNITS IN A TEMPERATURE STABLE CONDITION.

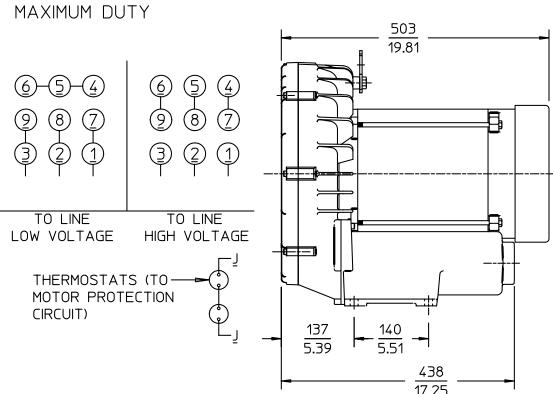
DELIVERY MEASUREMENTS MADE WITH OUTPUT PORT THROTTLED.

SUCTION MEASUREMENTS MADE WITH INPUT PORT THROTTLED.

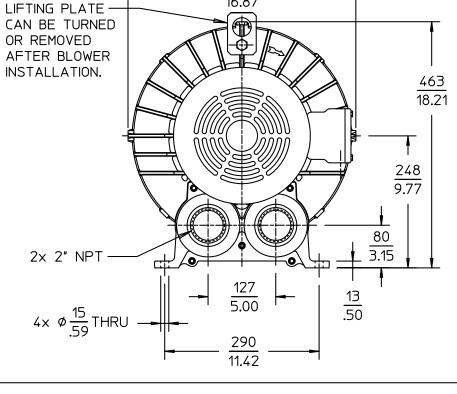
TEST CONDITIONS: INLET AIR DENSITY @ 0.075 lbs. per cu. ft. [20°C (68°F), 29.92" Hg (14.7 PSIA)].

NORMAL PERFORMANCE VARIATIONS ON THE RISISTANCE CURVE WITHIN ±10% OF SUPPLIED DATA CAN BE EXPECTED.





mm/inches





EEI ALUMINUM AIR WATER SEPARATORS

	STANDARD AWS SPECIFCATION																										
	WORKING			A	N/A	AIL.	ABL	EC	ON	NE	СТ	101	T V	YPE				CLEAN			,						
TYPE	VOLUME	ILANGE			MNPT FNPT			OUT	Α	В	C	D	Е	F	G	Н	J										
	@(LSH)	2"	3"	4"	6"	8"	10"	2"	3"	4"	6"	8"	2"	3"	4"	6"	8"	PIPE			(DIA.)						
AWS30	12 GAL	X	X	X		1-0	-	X	X	X		-	X	X	X	-	-	6"	-		16 1/4"	25"	2"	19"	30"	33 1/2"	6"
AWS60	24 GAL	X	X	X	X	_		X	X	X	X	-	X	X	X		1	6"	24"	24"	23"	25"	2"	23"	30"	36 1/2"	6"
AWS80	47 GAL	X	X	X	X	-	-	X	X	X	X	-	X	X	X	-	-	8"	24"	24"	23"	39"	2"	39"	48"	54 3/4"	12"
AWS120	50 GAL	X	X	X	X	X	-	X	X	X	X	-	X	X	X	-	-	8"	24"	24"	23"	49"	2"	49"	60"	66 3/4"	12"
AWS220	107 GAL	Ē	X	X	X	X	X	X	X	X	X	-	X	X	X	-		8"	34"	34"	33 1/2"	49"	2"	49"	60"	66 3/4"	12"

RECOMMENED AIR FLOW (ACFM)								
	2"	3"	4"	6"	8"	10" *		
ACFM	120	280	320	500	750	1000		

NOTES:

1.MATERIAL: 1/8" & 3/16" ALUMINUM SHT 5052

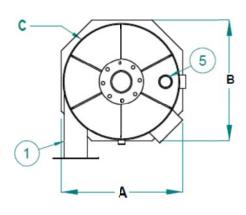
2. PROBE (SIGHT TUBE): 2" CLEAR PVC

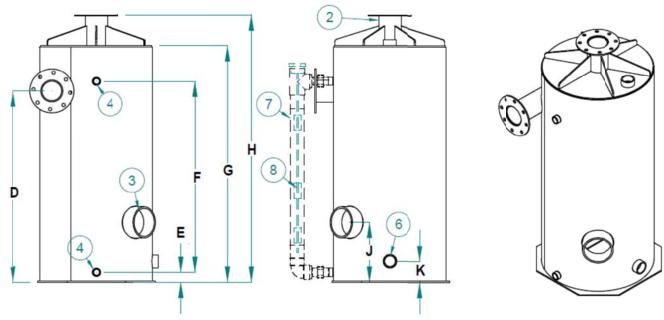
3. CUSTOM SIZES AVAILABLE



Enviro-Equipment Inc. Remediation Division 10120 Industrial Drive Pineville NC 28134 704 556 7723

ITEM#	DESCRIPTION
1	INLET PIPE (SEE TABLE FOR AVAILABLE SIZE AND CONNECTION TYPE)
2	OUTLET PIPE (SEE TABLE FOR AVAILABLE SIZE AND CONNECTION TYPE)
3	CLEAN OUT
4	1" FNPT (MULTI LEVEL PROBE)
5	2" FNPT
6	2" FNPT
7	SIGHT TUBE 2" CLEAR PVC
8	MULTI LEVEL PROBE







NPE

316L STAINLESS STEEL END SUCTION CENTRIFUGAL PUMPS



Commercial Water



A FULL RANGE OF PRODUCT FEATURES

- The close coupled compact, flexible design saves space, can be mounted horizontally or vertically, and simplifies maintenance.
- Standard NEMA motors are open drip-proof, totally enclosed fan-cooled or explosion proof enclosure, have stainless steel shaft, and are designed for continuous duty under all conditions with single and three phase available.
- Superior, complete AISI 316L stainless steel liquid handling components for corrosion resistance and improved strength and durability.
- Casing and adapter have NPT threaded centerline connections, easily accessible vent, prime and drain connections with stainless plugs.
- Unique floating O-ring enclosed impeller design maintains maximum efficiencies.
- Standard John Crane mechanical seal of silicon carbide, viton and stainless metal parts with optional high temperature and chemical duty seals available.

TYPICAL APPLICATIONS

Specifically designed for a broad range of general applications traditionally requiring various materials such as all iron, bronze fitted, all bronze or stainless construction.

- Water circulation Booster service Liquid transfer Spray system Chillers
- Washing/cleaning systems Injection molding cooling Reverse osmosis
- Air scrubbers Heat exchangers Filtration systems Jockey pumps
- OEM applications General water services

SPECIFICATIONS

Capacities to:

75 GPM (283L/min) at 1750 RPM 150 GPM (550L/min) at 3500 RPM

Heads to:

39 feet (11 m) at 1750 RPM 150 feet (50 m) at 3500 RPM

Working pressures to:

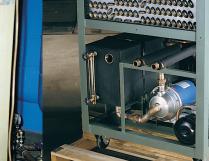
125 PSIG (9 bars)

Maximum temperatures to:

212°F (100°C) with standard seal or 250°F (121°C) with optional high temperature seal



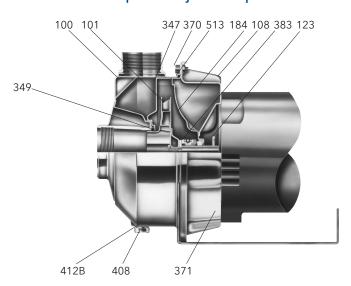




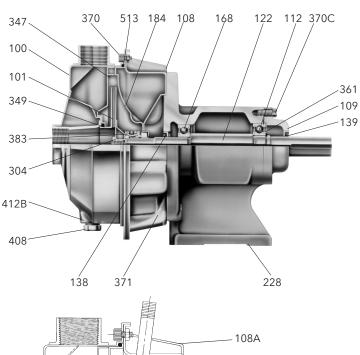


MATERIALS OF CONSTRUCTION

NPE Close-Coupled Major Components



NPE Frame-Mounted Major Components

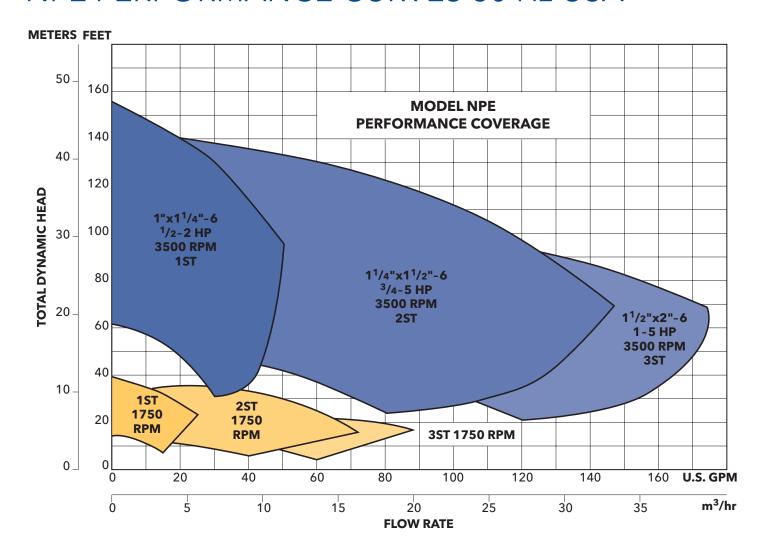


130	371	220
		108A 184A
	Seal Face Ve	nt/Flush Option

Item No.	Description	Materials
100	Casing	AISI 316 SS
101	Impeller	AISI 316 SS
108	Motor adapter	AISI 304 SS
108A	Motor adapter seal vent/flush	AISI 304 SS
109	Bearing cover	Cast iron
112	Ball bearing (outboard)	Steel
122	Shaft	AISI 316 SS
123	Deflector	BUNA-N
138	Lip-seal (inboard)	BUNA/steel
139	Lip-seal (outboard)	BUNA/steel
168	Ball bearing (inboard)	Steel
184	Seal housing	AISI 316 SS
184A	Seal housing seal vent/flush	AISI 316 SS
228	Bearing frame	Cast iron
304	Impeller locknut	AISI 316 SS
347	Guidevane	AISI 316 SS
349	O-ring	Viton
361	Retaining ring	Steel
370	Socket head screws, casing	AISI 430 SS
370C	Hex head screw, bearing cover	Plated steel
371	Bolts, motor	Plated steel
383	Mechanical seal	Carbon/Sil-Carbide, Viton elastomers, 316 Stainless metal parts*
400	Shaft key	316
408	Drain and vent plug, casing	AISI 316 SS
412B	O-ring, drain and vent plug	Viton
513	O-ring, casing	Viton
Motor	NEMA standard, 56J flange	

^{*}Optional high temperature and chemical duty seals available

NPE PERFORMANCE CURVES 60 Hz USA





Xylem Inc. 2881 East Bayard Street Ext. Seneca Falls, NY 13148 Phone: (800) 453-6777 Fax: (888) 322-5877

www.xyleminc.com/brands/gouldswatertechnology

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Mink MM 1104 - 1142 BP MM 1202 - 1322 AP



Description

The Busch Mink MM Series positive displacement pressure pumps feature a compact rotary claw design that is air cooled, dryrunning and non-contacting. These features along with quality construction results in a pump that offers extremely high reliability and a long service life.

Maintenance-Free

Non-contacting design – eliminates internal wear and parts to replace
Air cooling – no water levels to check and no cooling system to maintain
Dry running – no sealing or

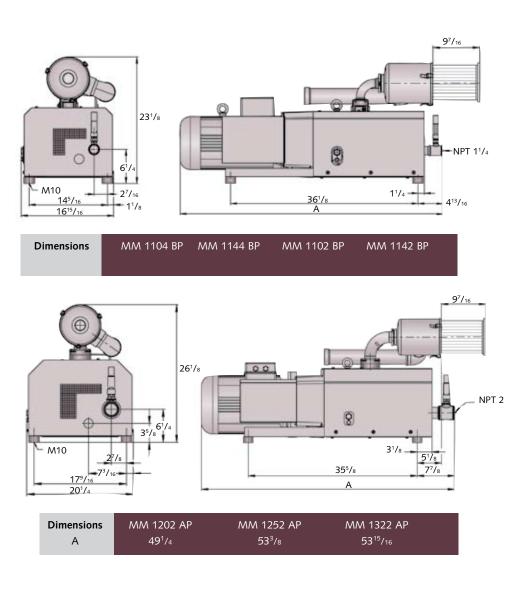
Dry running – no sealing or lubricating oil is needed in the pumping chamber, so there is minimal maintenance

Economical

Operating costs are low because of the maintenance-free design and the reduced power requirements made possible by the Mink's high volumetric efficiency along with a non-contacting pumping chamber.



Dimensions







Busch - all over the world in industry

ISO 9001-2000 Registered Company

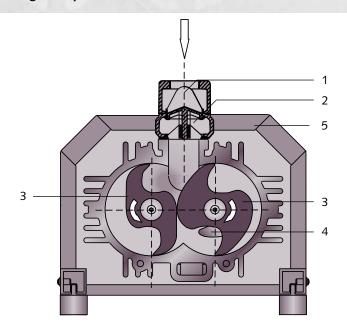
Busch LLC 516 Viking Drive Virginia Beach, VA 23452 Phone (757) 463-7800 FAX (757) 463-7407

www.buschusa.com 1-800-USA-PUMP

Amsterdam Barcelona Birmingham Basel Brussels Dublin Göteborg Helsinki Istanbul Copenhagen Kuala Lumpur Milan Maulburg Melbourne Montreal Moscow New York New Plymouth Oslo Paris San Jose São Paulo Seoul Singapore Taipei Tokyo Vienna

Dry Rotary Claw Pressure Pumps

Operating Principle



- 1 Gas Inlet
- 2 Non-return valve
- 3 Claws
- 4 Gas outlet
- 5 Acoustic enclosure

Operating Principle

Inside the pump housing, two claw shaped rotors take in air as they rotate in opposite directions. The air is compressed by the rotors, then discharged through a silencer to atmosphere.

The non-return valve incorporated into the inlet flange prevents air from back flowing through the

pump when the pump is turned off. Mink MM dry rotary claw pressure pumps are directly driven by a flanged motor, and the two rotors are synchronized by gears. A wide range of accessories allows optimum adaptation to many applications.

Applications

Busch Mink MM dry rotary claw pressure pumps are used across a broad range of industries for many different applications and are well suited to applications where dust particles may be present. Mink MM pressure pumps are especially suited to:

Beverage industry

Environmental technology

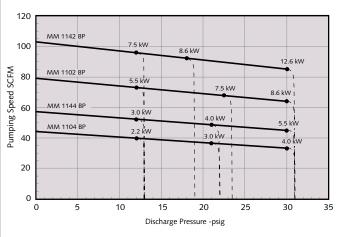
Pneumatic conveying

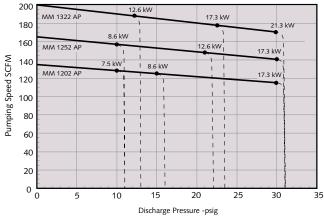
Printing industry



Technical Data

Pumping Speed vs. Discharge Pressure





Dashed lines represent pump performance for motor chosen.

Technical Data Mink MM Model	Nominal pumping speed SCFM	Motor Size kW (Hp)	Maximum pressure psig	Relief valve cracking pressure psig	Nominal motor speed RPM	Sound rating dBA	Weight approx. Lbs
	44	2.2 (3.0)	13.0	12	1800	73	381
1104 BP	44	3.0 (4.0)	22.0	21	1800	73	388
	44	4.0 (5.4)	31.0	30	1800	73	396
4444 DD	57	3.0 (4.0)	13.0	12	1800	73	403
1144 BP	57	4.0 (4.4)	22.0	21	1800	73	411
	57	5.5 (7.5)	31.0	30	1800	73	432
	79	5.5 (7.5)	13.0	12	3600	81	425
1102 BP	79	7.5 (10)	23.5	22.5	3600	81	436
	79	8.6 (11.5)	31.0	30	3600	81	444
	103	7.5 (10)	13.0	12	3600	81	448
1142 BP	103	8.6 (11.5)	19.0	18	3600	81	456
	103	12.6 (17)	31.0	30	3600	81	520
	135	7.5 (10.0)	11.0	10	3600	82	519
1202 AP	135	8.6 (11.5)	16.0	15	3600	82	519
	135	17.3 (23.2)	31.0	30	3600	82	519
1050 AB	165	8.6 (11.5)	11.0	10	3600	83	528
1252 AP	165	12.6 (16.9)	22.0	21	3600	83	528
	165	17.3 (23.2)	31.0	30	3600	83	528
4222.40	200	12.6 (16.9)	13.0	12	3600	85	550
1322 AP	200	17.3 (23.2)	23.5	22.5	3600	85	550
	200	21.3 (28.6)	31.0	30	3600	85	550

AA Series Heat Exchanger



AA Series heat exchangers cool low pressure gas streams with ambient air. These compact air cooled units are ideal for locations with limited access to cooling water and have significantly lower operating costs compared to heat exchangers that require a cooling water system. They feature a TEFC 230/460 VAC, 3 phase motor, a heavy-duty cooling fan and an OSHA approved fan guard. Alternate motors are available upon request. The exhaust hood and venturi frame are galvanized steel. Use our interactive online form to get a fast and accurate quote!

Common Applications

Aftercooling rotary-lobe and multistage centrifugal blowers used in pneumatic conveying, biogas, coal-seam methane, and wastewater aeration systems.

Core Construction

The aluminum plate-fin heat exchanger core is furnace brazed with alternating finned flow channels. Process gas flows in horizontal channels, and ambient cooling air flows upward, through vertical channels. The process stream enters and exits through rectangular aluminum headers, which are welded to the core.

Operational Considerations

The process stream must be filtered to insure particulate will not obstruct the passages. If necessary, the service side can usually be cleaned with a soapy water wash. The process channels should not be considered cleanable due to their long enclosed flow length.

Installation Considerations

Pulsating flow, such as that produced by rotary lobe blowers should be dampened by a chambered silencer. AA Series heat exchangers dissipate heat from the process stream to the ambient environment. They are designed for outdoor installation. If installed indoors, the area should be very well ventilated.

Performance

Xchanger engineers use a computer model to analyze heat exchanger performance. As with all Xchanger heat exchangers, the design performance is guaranteed.

Models

AA-250, AA-400, AA-500, AA-750, AA-1000, AA-1750, AA-2000, AA-2750 & AA-3500.

Air cooled heat exchanger (blower aftercooler) isometric drawing and typical configurations:

SENSAPHONE® REMOTE MONITORING SOLUTIONS

Sensaphone CELL682

Remote Montoring via Cellular

ASSURANCE

COUNTLESS INDUSTRIES DEPEND ON SENSAPHONE FOR THE MOST COMPREHENSIVE REMOTE MONITORING SOLUTIONS AVAILABLE. WHEN YOU NEED TO BE ABSOLUTELY SURE A REMOTE SITE IS STABLE, SECURE AND MONITORED AROUND THE CLOCK, THERE'S NO SUBSTITUTE FOR CERTAINTY.

Easy to use – everyday

The Sensaphone CELL682 is so easy to use just about anyone can figure it out. If not, we offer free tech support to walk you through it.

We've got a sensor for that

Sensaphone has a sensor for monitoring everything from climate conditions to security and more.

Your business is our business

With over 350,000 systems installed worldwide, we've put Sensaphone to the test in just about every application imaginable.

Suggested Applications



Agriculture

Know that the temperature, humidity, or other critical conditions where plants or animals live are in check while you're away.



Water & Wastewater

Use your Sensaphone SAT4D to monitor pumps, power failure and other conditions in water and wastewater applications.



Oil & Gas

Don't find out about equipment failure until the morning. The Sensaphone SAT4D will call or e-mail as soon as an alarm condition exists.

Sensaphone CELL682

Features and Specifications

Cellular

Use the CELL682 in locations where a traditional land line is not available. Receive alarms via a phone call, text, or e-mail.

LEDs

LED lights give a quick visual status. Know everything is okay by simply looking at the CELL682.

Power

Comes with a plug in power supply that also monitors for power failures.

Battery Backup

Rest easy knowing that even if the power goes out, the CELL682 will keep monitoring.

Output

Connect to an output such as a light or horn to alert anyone nearby there's a problem.

Inputs

Accept fourteen different inputs – a wide range of sensors are available.











Web Services

Program, adjust and monitor the status of the sensors on a webpage the CELL682 creates.

DELL682 SENSAPHONE

Enclosure

The CELL682 comes sealed in a NEXA 4X enclosure which allows it to be placed in less than ideal environments.

Popular Compatible Sensors & Accessories

2.8K Room Temperature Sensor FGD-0100	PowerOut Alert Power Failure Switch FGD-0054
2.8K Weatherproof Temperature SensorFGD-0101	Magnetic Reed Door and Window Switch FGD-0006
2.8K Temperature Sensor in	Zone Water Detection Sensor FGD-0056
Glass Bead Vial FGD-0107	Additional 10' of Water Rope FGD-0063
Temp Alert Temperature Switch FGD-0022	Infrared Motion Detection Sensor FGD-0007
Humidistat Humidity Switch FGD-0027	Float Switch FGD-0222

SENSAPHONE® 901 TRYENS ROAD ASTON, PA 19014

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