

# BLUEDIAMOND<sup>®</sup>

CONDENSATE REMOVAL PUMPS



+1 770 831 1122



[WWW.BLUEDIAMONDPUMPS.COM](http://WWW.BLUEDIAMONDPUMPS.COM)



[INFO@BLUEDIAMONDPUMPS.COM](mailto:INFO@BLUEDIAMONDPUMPS.COM)



## DID YOU KNOW?

Our refrigeration pumps are environmentally friendly and can save (on average) over \$400 per unit in energy bills per year.



# ABOUT US

All BLUEDIAMOND® condensate removal products are designed, developed, tooled and manufactured in house, meeting our strict approach to quality, stemming from our proud UK heritage and extensive production capabilities.

Our team of research and design engineers are dedicated to designing a range of pumps and accessories that not only benefit the end user but also the installer. Offering a new approach to efficiently, quietly and reliably removing large quantities of condensate.

From design to packaging ready for distribution, our team takes pride in every single product despatched from our warehouse facilities. BLUEDIAMOND® consistently invests in both training and development of its team along with new machinery to keep up with ever changing technological advancements.

Each BLUEDIAMOND® product is vigorously tested at the end of the production line, allowing us to ensure our customers are receiving the best product possible to the ISO 9001 quality standard.

For more information visit: [www.bluediamondpump.us](http://www.bluediamondpump.us)

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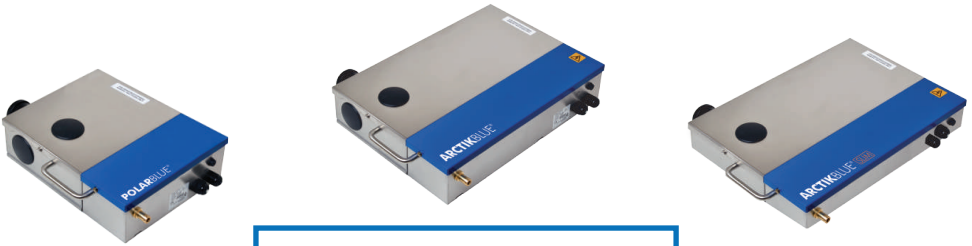
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# REFRIGERATION RANGE



## POLARBLUE™

Designed for small free stand fridges.

### APPLICATION



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## ARCTIKBLUE®

Designed for standard model fridges.

### APPLICATION



(Page 15)

## ARCTIKBLUE® SLIM

Designed for space premium fridges.

### APPLICATION



(Page 14)

## APPROVALS & WARRANTY



Unlike every other cabinet tray in the market, all of the BLUEDIAMOND refrigeration pumps offer the only UL recognized dry pump.



BLUEDIAMOND® condensate removal pumps offer an industry leading 3 year warranty. We have faith in our reliability and so can you.

# MONEY SAVING

**\$2000 TO RUN  
5 EVAPORATOR PANS  
PER YEAR**



FOR THE SAME \$2000 YOU CAN RUN  
**1527 ARCTIKBLUE®  
DAIRY PUMPS!**

**WHEN YOU BURN CONDENSATE, YOU BURN MONEY**

	ARCTIKBLUE®	EVAPORATOR PAN
POWER CONSUMPTION	✓ 12W	✗ 400W
COST TO RUN PER YEAR	✓ \$1.31	✗ \$420

5 CASES PER STORE (AVERAGE)

ANNUAL COST PER STORE	✓ \$6.55	✗ \$2100
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\*Average KW p/hr at \$0.12 across the USA in 2018.

**SAVING \$418.69 PER FRIDGE PER YEAR**



# MONEY SAVING

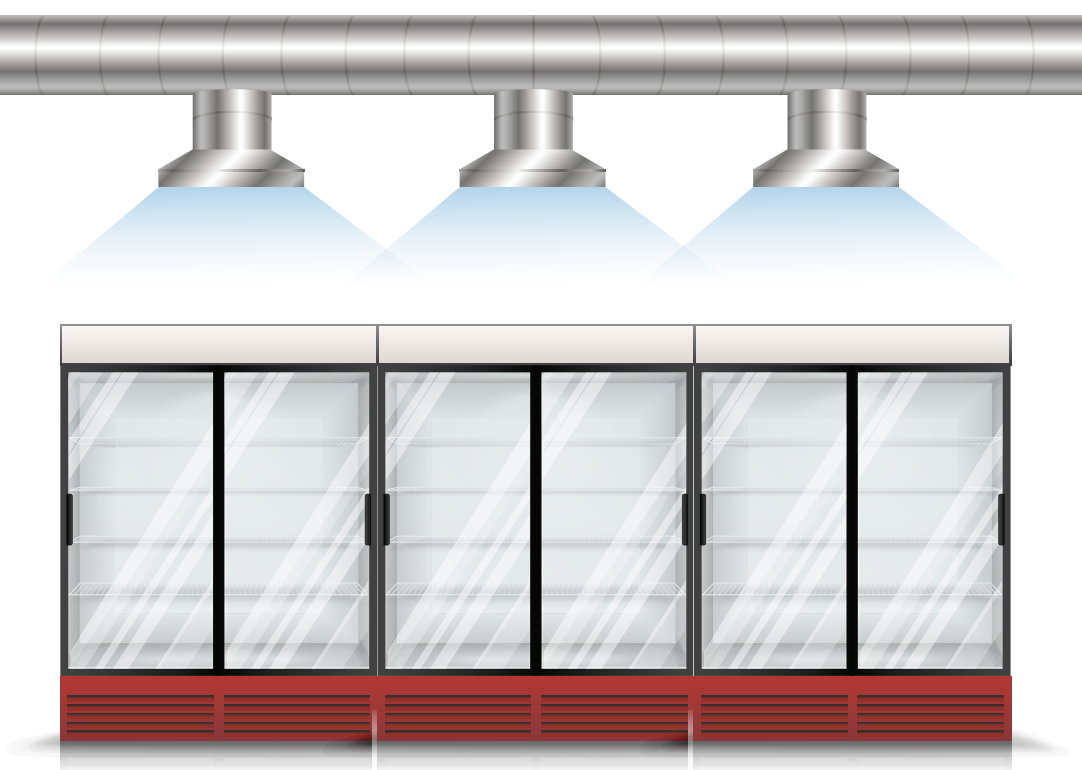
## HOW EFFECTIVE IS THIS FOR STORE CHAINS?

For example, a chain of 1000 stores containing an average of 5 units per store.

Cost to run 5000 evaporator pans: \$2,100,000 per year

Cost to run 5000 ARCTIKBLUE: \$6,500 per year

Average saving of: **\$2,093,500** per chain, per year!



## DID YOU KNOW?

Evaporating the condensate in a store environment adds unnecessary cost and additional energy wastage due to the need for complicated dehumidification systems. On top of this, stores fitted with air conditioning systems will waste further energy due to the heating factor of an evaporation pan.

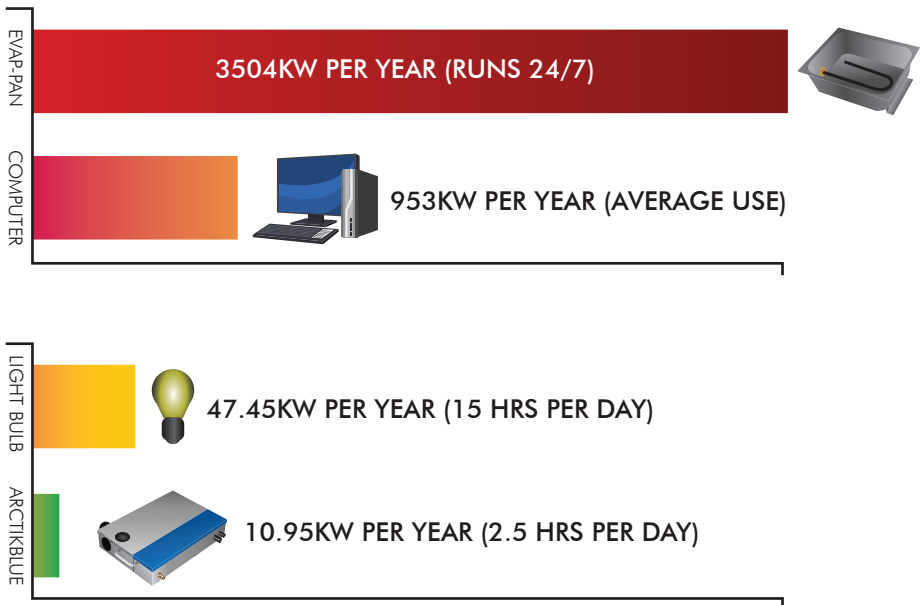
# ENVIRONMENTAL BENEFITS

## ENERGY EFFICIENCY

The BLUEDIAMOND refrigeration range prides itself on its massively increased power efficiency in comparison to other options on the market. In an ever more environmentally conscious world, the massive financial benefit of using less energy is partnered with the crucial benefit of being kinder to the planet.

The graph below quantifies the amount of electricity it takes to run a traditional evaporator pan versus an ARCTIKBLUE for a year. Also included are the running costs of a light bulb and desktop computer for comparison.

## KW CONSUMED PER YEAR



- The required constant usage of Evaporator pan = 3504KW per year.
- The average usage of a Computer = 953.4KW per year
- The average commercial usage (15 HRS) of a LED 8.5W Light-bulb = 47.45KW per year.
- The required usage of an ARCTIKBLUE (2.5 HRS) = 10.95KW per year.

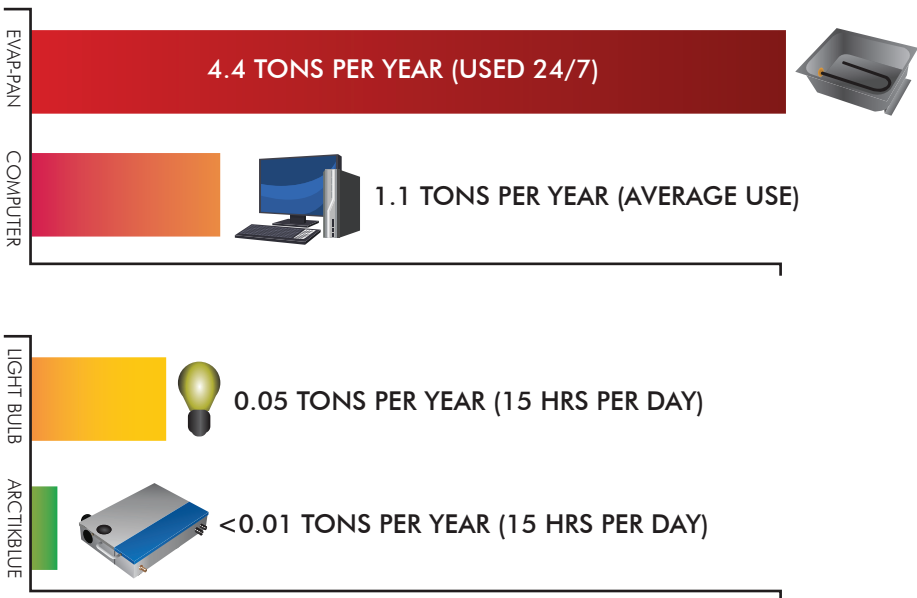


# ENVIRONMENTAL BENEFITS

The alternative question to where else could that energy be used, is how much damage does producing it cost? Not only are our fossil fuel resources dwindling at an alarming rate, the environmental impact of producing energy is still staggering. The poignant issue, brought to the forefront of the dilemma is the phenomenon of global warming, especially human production of greenhouse gasses.

The graph below highlights the amount of greenhouse gas emitted into the atmosphere due to the energy requirement of an Evaporator pan, an ARCTIKBLUE and a light bulb for comparison.

## CO2 'FOOTPRINT' PRODUCED PER YEAR



- The required constant usage of Evaporator pan = 4.4 Tons of CO2 per year.
- The average usage of a Computer = 1.1 Tons of CO2 per year
- The average commercial usage (15 HRS) of a LED 8.5W Light-bulb = 0.05 Tons CO2 per year.
- The required usage of an ARCTIKBLUE (15 HRS) = 0.01 Tons CO2 per year.

# BETTER HYGIENE

## WHAT IS BEING EVAPORATED?

Sludge and slime build up in refrigeration units is a common and consistent problem. What others see as an after-market fix (cleaning products & chemicals) we see as an unrequired but expensive maintenance cost. Evaporator pans will burn an unsavoury cocktail into the store atmosphere, aerating a mixture of chemicals and bacteria near food and customers.

## EXOPOLYSACCHARIDES (BIO FILMS/ JELLY)



Due to BLUEDIAMOND's patented rotary diaphragm technology, our refrigeration range has the unique capability to pump the slime and potential blockages away. The jelly (BIO-FILM) would consist of both 'Exopolysaccharides' and other substances such as dust and bacteria build up and condensate. Hygienically it's best to pump the jelly away from foodstuff instead of evaporating and contaminating the surrounding atmosphere.

In order to prove our pumps versatility and performance we have created a short video of the ARCTIKBLUE pumping the jelly, debris and condensate away.



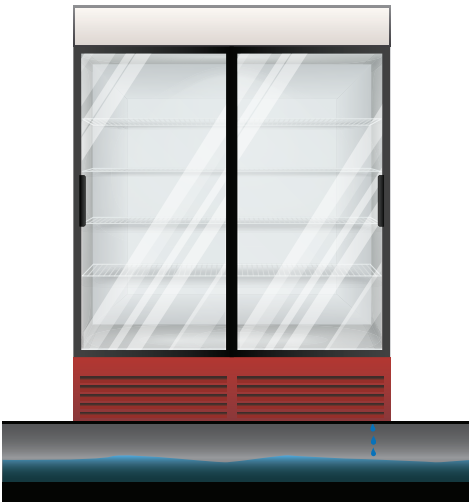
SCAN TO VIEW VIDEO

# STORE VERSATILITY

Another possible condensate method that is common in the North American market is the digging of floor drains. Not only does this massively increase install costs, but it also raises an overwhelming number of maintenance and huge limitation issues.

The digging of drains will lock a store to its designed configuration. If a store desires to alter its layout in the future, extensive work must be completed, not only to re-dig drains but to fill in existing obsolete ones. When this old fashioned method is replaced with an ARCTIKBLUE, store layout becomes much more versatile, allowing total freedom to reposition cabinets for ergonomic or promotional cause. The use of an ARCTIKBLUE also opens up the opportunity to retrofit stores with little effort or expense, ensuring stores are totally future-proofed.

## FIXED DRAINAGE



## PUMP INSTALLATION



## ALTERNATIVE HYGIENE ISSUES

In addition to this lack of freedom, floor drains also raise questionable hygiene issues. In many occasions units can appear to smell damp or mouldy thanks to stagnant liquid lurking under the floor. Floor drains can also offer a potential risk of vermin infestation within an uncomfortable distance to food.

For stores based in colder climates, store drains also have a frustrating habit of freezing and clogging in the winter. This is of course not a problem with the ARCTIKBLUE in which you can run condensate removal alongside the fridge piping.

# HOW IT WORKS

The refrigeration range utilises the patented rotary diaphragm pumping principle technology to offer benefits impossible in other competitors.



**ROTARY  
DIAPHRAGM**

The flow of liquid is initiated by an eccentrically mounted bearing on a drive shaft revolved within a flexible diaphragm. As the shaft rotates, the bearing flexes the diaphragm, squeezing liquid through the pump. These pumps have outstanding self-priming characteristics and are of a valve-less, seal-less design.

## BENEFITS OF ROTARY DIAPHRAGM TECHNOLOGY



**SELF PRIMING**

All of the patented pumping principles that BLUEDIAMOND uses are self priming. There's no need to siphon the pump before use due to its ability to run dry.



**RUN  
DRY**

All of the BLUEDIAMOND® pumps have the ability to run dry without burning out. Enabling them to remove any liquids, preventing organic growth inside the tubing.



**POWERFUL  
PUMPING**

Flow rates remain powerful when high lift/ head applications are applied, this gives you a competitive edge and versatility in every installation.



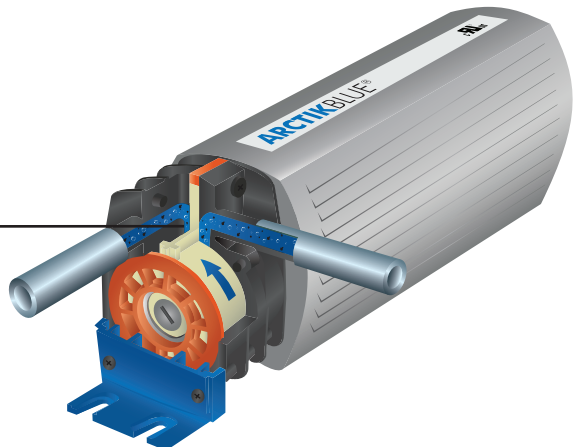
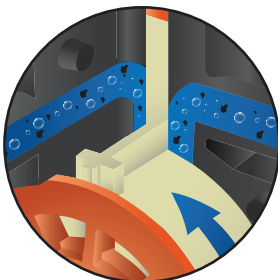
**PATENTED  
DESIGN**

BLUEDIAMOND® Pumps are the only manufacturer of patented Rotary Diaphragm (RD) and GyRok™ technology.



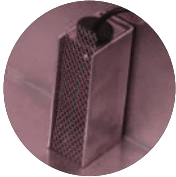
**PUMPS  
DEBRIS**

The BLUEDIAMOND range are the only ductless pump on the market that can remove sediment/ debris with no need of filters or regular servicing intervals.



# HOW IT WORKS

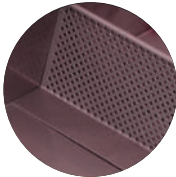
## THERMISTOR SENSOR (ENERGY EFFICIENT)



The presence of condensate trips the hi-low solid state level sensors to switch the pump on/off. This means that the pump is run only when condensate is produced and the alarm shuts off the unit in the case of a fault, restarting when clear.

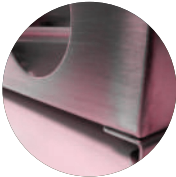
The slim filter probe, which houses the water sensors and high level alarm has no moving parts to become clogged or stuck making it an ideal alternative to existing float switches.

## FILTRATION



Protecting the sensors is our swap out guard, the filter element can be changed over as a complete assembly during preventative maintenance service schedules. The main tray is also protected against objects larger than Ø2.5mm allowing the pump to remove condensate, sludge and debris.

## PITCHED

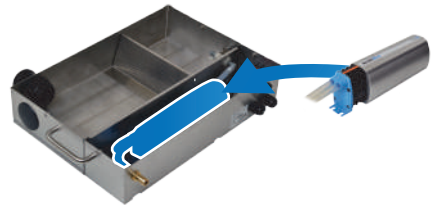


All of the refrigeration trays have been tilted on a 10 degree angle. This ensures that the condensate that has been produced by the fridges can be gravity fed into the pump inlet. This also helps to push any debris through the filtration guard without having to use vacuum devices.

## SWAP OUT KITS

BLUEDIAMOND always has the installer in mind. In this case in order to save you time and money you can now purchase a 'swap-out kit' allowing you to keep the sturdy metal case.

This is a straight like for like swap with a brand new sensor to ensure that your system continues to run smoothly. This removes the need to disconnect the pump tray, re-wire and reconnect drainage tubes.



Available for:

**POLARBLUE™**

**ARCTIKBLUE®**  
SLIM

**ARCTIKBLUE®**

For more information on our swap-out kit and their product codes visit page 18.

## PERFORMANCE

MAX FLOW	MAX HEAD
3.7 G/ HOUR	23 FEET

A compact and slim unit designed for mounting directly underneath 'Grab & Go' display units. Specifically designed to offer the most energy efficiency solution for smaller convenience stores. The POLARBLUE™ maintains the required flexibility required when changing the store layout. The POLARBLUE™ is the only solution to eliminate costly evaporation without limiting retail space and options.

WATER TANK CAP.	PUMP ON/ OFF	ALARM ON VOL.
0.79 GALLONS	11.2 FL Oz	121.7 FL Oz



The POLARBLUE™ is half the size of the ARCTIKBLUE® range making it ideal for space conscience applications such as small free standing fridges.

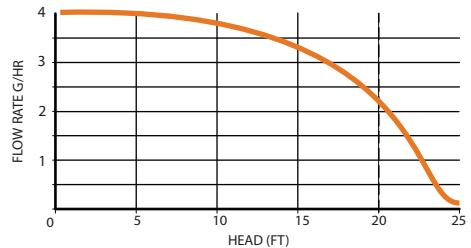


The POLARBLUE™ has the unique capability of being able to pump sludge that commonly builds up in refrigeration units.

Designed for:  
Small drink cabinets



## PERFORMANCE

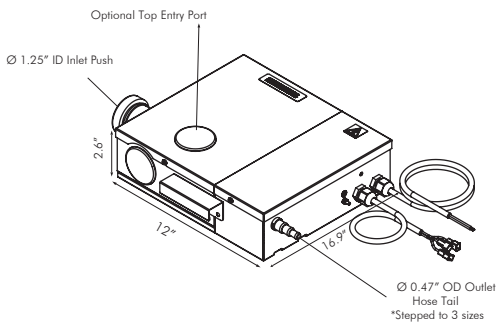


ALARM SIGNAL	MAX ALARM RATING
0 volt relay	5A 250v AC

INPUT VOLTAGE
110V or 230V, 50/60 Hz

INLET FITTING	OUTLET FITTING
Ø 1.25" ID PUSH FIT CONNECTOR	Ø 0.47" OD HOSE TAIL STEPPED 3 SIZES
	Ø 0.37" (5/8")
	Ø 0.5" (1/2")
	Ø 0.61" (3/8")

## DIMENSIONS (")



# ARCTIKBLUE<sup>®</sup> SLIM



**3** YEAR WARRANTY

## PERFORMANCE

MAX FLOW	MAX HEAD
13.2 G/ HOUR	66 FEET

The market leading lowest profile dairy pump available. The ARCTIKBLUE Slim easily sits below even the lowest profile kick-plates. Utilising the same pump as the already proven standard ARCTIKBLUE the performance and capability to pump the slime, dirt and debris remains the same. Incorporating a low profile dairy pump into the design of a cabinet gives the advantage of additional refrigerated retail space.

Designed for:  
Low profile fridges



WATER TANK CAP.	PUMP ON/ OFF	ALARM ON VOL.
1.08 GALLONS	11.2 FL Oz	121.7 FL Oz



**LOW PROFILE**

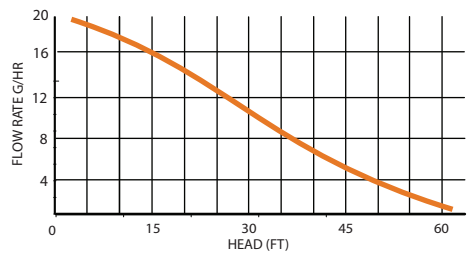
The ARCTIKBLUE<sup>®</sup> SLIM has been specially adapted to fit under low profile cabinets where space is at a premium. Reducing the need to bore the trays into the ground.



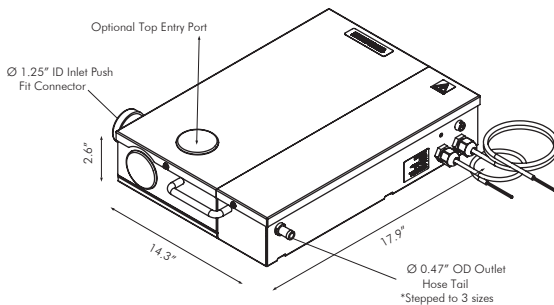
**QUICK INSTALLATION**

The ARCTIKBLUE<sup>®</sup> SLIM has a minimum amount of components when setting up. Fewer components means less time wasted on installation.

## PERFORMANCE



## DIMENSIONS (")



ALARM SIGNAL	MAX ALARM RATING
0 volt relay	5A 240v AC

## DUAL VOLTAGE

110V-230V, 50/60 Hz

INLET FITTING	OUTLET FITTING
Ø 1.25" ID PUSH FIT CONNECTOR	Ø 0.47" OD HOSE TAIL STEPPED 3 SIZES
	Ø 0.37" (5/8")
	Ø 0.5" (1/2")
	Ø 0.61" (3/8")

## PERFORMANCE

MAX FLOW	MAX HEAD
13.2 G/ HOUR	66 FEET

Proven in service the ARCTIKBLUE® incorporates the MEGABLU® pump in a tough steel tray. Eliminating stuck float switches, the use of the BLUEDIAMOND® thermistor technology quickly and efficiently removes all the condensate from the dairy pan, reducing the conditions that allow organic growth to build up and block drains.

Designed for:  
Large industrial fridges



WATER TANK CAP.	PUMP ON/ OFF	ALARM ON VOL.
1.08 GALLONS	11.2 FL Oz	121.7 FL Oz



**DURABLE DESIGN**

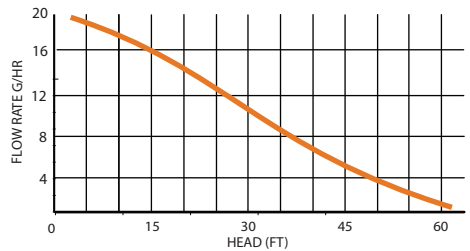
Thanks to a strong steel casing the ARCTIKBLUE® can withstand far rougher treatment than many other cabinet pumps on the market.



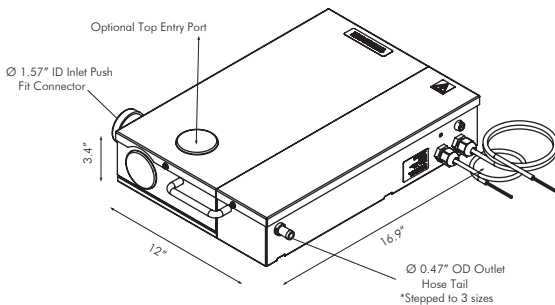
**FAULT FREE SENSING**

The ARCTIKBLUE® utilizes our unique thermistor sensing which detect when liquid is present in the tray, running the pump only when required.

## PERFORMANCE



## DIMENSIONS (")



ALARM SIGNAL	MAX ALARM RATING
0 volt relay	5A 240v AC

## DUAL VOLTAGE

110V-230V, 50/60 Hz

INLET FITTING	OUTLET FITTING
Ø 1.57" ID PUSH FIT CONNECTOR	Ø 0.47" OD HOSE TAIL STEPPED 3 SIZES
	Ø 0.37" (5/8")
	Ø 0.5" (1/2")
	Ø 0.61" (3/8")



# MULTITANK

**3** YEAR  
WARRANTY

The MULTITANK is favoured among architects and design consultants and is available for use with either MEGABLU<sup>®</sup> or MAXIBLU<sup>®</sup> pumps. The tank incorporates an energy efficient solid state level sensor which eliminates the use of moving floats, which often become stuck. By manifolding a number of fan coil units into the 0.4 Gallons MULTITANK, it offers the installer complete flexibility surrounding any multi-unit installation.



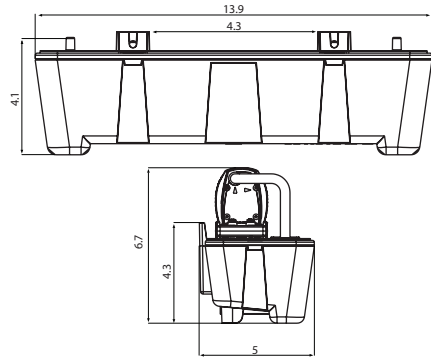
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## REVOLUTIONARY SENSORY TECHNOLOGY



With no moving parts the MULTITANK offers a reliable alternative to stuck or sunken float switches. Incorporating our patented and proven thermistor technology the hi-low solid state level sensor only runs the pump when condensate is produced. With no moving parts to become clogged or stuck it is an ideal alternative to existing float switches.

## DIMENSIONS (")



\*PUMP SOLD SEPARATELY



\*PUMP SOLD SEPARATELY



## OPTION 1: MULTITANK WITH MAXIBLU<sup>®</sup>

Designed for high lift applications (26 FT) the MULTITANK and MAXIBLU<sup>®</sup> make an ideal combination. Quiet enough for ceiling mounting and powerful enough for remote location makes a wide variety of installation possibilities a lot faster and simpler.

## OPTION 1: MULTITANK WITH MEGABLU<sup>®</sup>

Offering exceptional performance the MEGABLU<sup>®</sup> can remove condensate far away and fast. With a head of 65.6 FT (6 storeys!) the MULTITANK with MEGABLU<sup>®</sup> can be used as a remote central collection point for condensate drainage.

# SWAP OUT KITS

## POLARBLUE™ SWAP OUT KIT

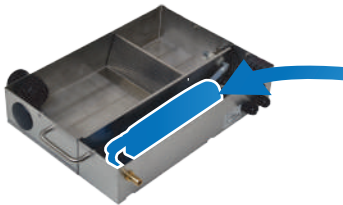


### APPLICATION



The POLARBLUE swap out kit consists of the replacement pump and sensor. The POLARBLUE can run dry and self-prime, meaning it can be sited above or below any pipe work and away from hazardous areas. Its versatile design enables it to pump debris and slime without hampering its performance.

## ARCTIKBLUE® SWAP OUT KIT **SLIM**

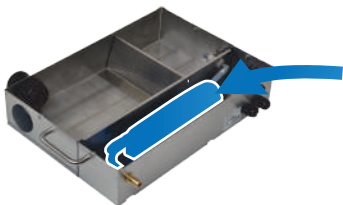


### APPLICATION



The ARCTIKBLUE SLIM swap out kit consists of the replacement pump and sensor. With the ability to pump up to 13.2 g/hour. The ARCTIKBLUE SLIM uses a flawless design enabling it to maintain a powerful flow.

## ARCTIKBLUE® SWAP OUT KIT



### APPLICATION

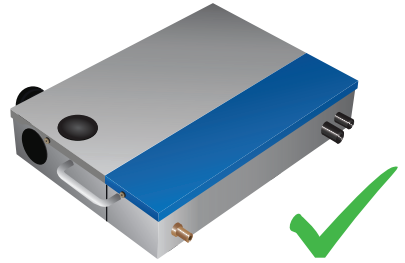


The ARCTIKBLUE swap out kit consists of the replacement pump and sensor. The ARCTIKBLUE has the ability to pump up to 13.2 g/hour and uses the patented rotary diaphragm technology to run dry, self prime and pump debris.

# WHY UPGRADE?

## THE ARCTIKBLUE® OFFERS ALL THE SOLUTIONS:

- ✓ Low in power consumption as the pump turns on only when liquid is present in the tray.
- ✓ Can pump sludge and slime that often builds up inside the tray without clogging and burning out.
- ✓ Leaves no debris inside the tray which thanks to a stainless steel construction, doesn't corrode over time.
- ✓ The pump is completely self-priming and doesn't release unsavoury vapour into the surrounding atmosphere.
- ✓ Low profile versions enable the pump to be mounted under any refrigeration unit making installation quick and easy.
- ✓ Due to no need for mounting brackets, digging drains or multiple power connections, the ARCTIKBLUE is incredibly easy to install.
- ✓ No maintenance required to the pump or tubing. Rotary diaphragm technology is service and maintenance free.



## ADDITIONAL BENEFITS TO ROTARY DIAPHRAGM TECHNOLOGY:



# HVACR RANGE GUIDE

BLUEDIAMOND® PUMP SELECTOR GUIDE	INDUSTRY		UNIT			PERFORMANCE				INSTALLATION		
	AIR CONDITIONING	REFRIGERATION	0-18,000 BTU	18,000 - 48,000 BTU	48,000 - 170,000 BTU	MAX FLOW (G/HR)	MAX HEAD (FT)	MAX LIFT (FT)	SOUND (DBA)	IN UNIT	DUCTING	REMOTELY
<b>MICROBLUE™</b>	✓		✓			1.3	16	6	17	✓	✓	✓
<b>MAXIBLUE®</b>	✓	✓		✓		3.7	23	16.5	21		✓	✓
<b>MEGABLUE®</b>	✓	✓			✓	13.2	66.5	23	23			✓
<b>POLARBLUE®</b>		✓		✓		3.7	23	16.5	21	✓		
<b>ARCTIKBLUE® <small>SLIM</small></b>		✓			✓	13.2	66.5	23	23	✓		
<b>ARCTIKBLUE®</b>		✓			✓	13.2	66.5	23	23	✓		

**BLUEDIAMOND®**

Has a dedicated range of condensate removal pumps and Air conditioning accessories to support the HVACR market. Visit [www.bluediamondpump.us](http://www.bluediamondpump.us) for more information.

\*Contact us if you have any OEM or bespoke condensate removal requirements.

Manufactured by:

