## AG-CHILL INDUSTRIAL FLUID CHILLERS

**Optimizing Botanical Production** 



DESIGNED FOR CANNABIS & HEMP MANUFACTURING

## CANNABIS EXTRACTION TEMPERATURE CONTROL

Extra low temperature control is essential to cannabis extraction. It is important that the cold solvent dissolves just the valuable glandular trichromes - cannabinoids, terpenes, and flavonoids. Extracting at temperatures any warmer than -22°F (-30°C) would result in extracting undesirable compounds including lipids (fats) and chlorophyll. If these are dissolved during extraction, they would then need to be removed via further expensive processing down the line. Ultra low temperature extraction ensures consistent and high-quality end-products such as vape cartridges, tinctures, or dabbable concentrates.





## FREEZE THE COLD STANDARD

#### 40°F COOLING CAPACITY 75°F

Freeze by AG-CHILL is our standard, industrial grade chiller ideal for continuous critical cooling applications such as cultivation and hydroponics. With a robust condensing unit, oversized reservoir, and a high horsepower pump, Freeze is a dependable and powerful industrial chiller that you can rely on to always do the job well.



## DEEP FREEZE GETTING COLDER

#### 10°F COOLING CAPACITY 60°F

Deep Freeze by AG-CHILL is our industrial grade chiller similar to Freeze, except this chiller's temperature range is 10°F to 60°F (-12°C to 16°C) ideal for continuous solvent recovery. All internal components of Deep Freeze are insulated to enhance efficiency. If you need a liquid cooling system that is reliably cold, look to Deep Freeze.



## ULTRA LOW TEMP RIDICULOUSLY FROZEN

#### -112°F COOLING CAPACITY 70°F

Ultra Low Temp by AG-CHILL is our flagship cryo-chiller. For optimal extraction, this is your cornerstone.

Rest assured knowing the engineered cooling capacity specified at -112°F (-80°C) is verifiably always producing your highest-grade concentrates. With the highest quality you and your customers can depend on, your brands will have the ultimate competitive advantage.

## EXTRA LOW TEMP EXTREMELY FRIGID



#### -30°F COOLING CAPACITY 10°F

AG-CHILL'S Extra Low Temp Chiller is your perfect option for cost effective extraction. Economically designed, our "ELT" series is your lower cost powerhouse. Cooling capacities are specified to take your extraction solvents down to -30°F (-34°C) lightning fast and keep it at this extra low temperature ensuring consistent quality concentrates.

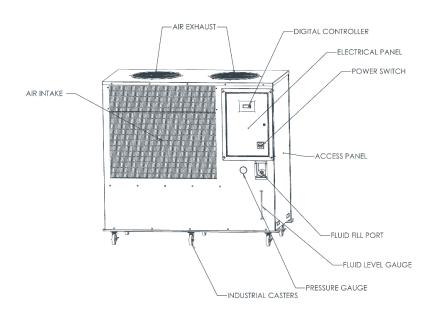
## SUPER LOW TEMP IMPOSSIBLY FREEZING

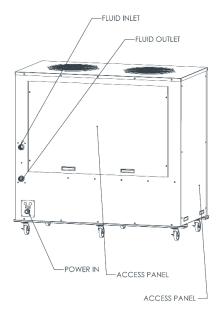


#### -58°F COOLING CAPACITY 86°F

This Super Low Temp Series by AG-CHILL is our extreme value offering for those of you who are serious about high quality extraction and production throughput. Featuring specially designed two-stage reciprocating compressors, these "SLT" chillers will bring your solvents down to -58°F (-50°C) at light speed. Specified with tons of extra capacity at the coldest temperatures, SLT maximizes high quality production.

## STANDARDIZED DESIGN







Industrial Grade Temperature Control



Non-Ferrous Piping System



Hermetically Sealed Compressor



Continuous
Duty NonFerrous Pump



Environmentally Friendlier Refrigerant



Brazed
Plate
Heat
Exchanger



Smart Chiller Capabilities



Available In Multiple Voltages



## FREEZE - THE COLD STANDARD

Freeze, AG-CHILLS's standard industrial chiller, is an absolute workhorse. Equipped with a hermetically sealed compressor, a non-ferrous piping system, an oversized reservoir, and a brazed plate heat exchanger, Freeze will provide powerful chilling for a very long time. Boasting a powerful pump that will supply up to 65 gallons per minute up to 65 psi, this industrial cooling equipment provides enough flow to cool multiple fluid circuits at one time. The Freeze industrial cooling line is perfect for hydroponics as well as soil cultivation.

# DEEP FREEZE - YOU'RE GETTING COLDER

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## SUPER LOW TEMP - IMPOSSIBLY FREEZING

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## ULTRA LOW TEMP - RIDICULOUSLY FROZEN

Ultra Low Temp by AG-CHILL is our flagship cryo chiller. For optimal extraction, this is your cornerstone. Rest assured knowing the engineered cooling capacity specified at -112°F (-80°C) is verifiably always producing your highest-grade concentrates. With the highest quality you and your customers can depend on, your brands will have the ultimate competitive advantage.





## **CUSTOM CHILLERS**

- Often, a cooling solution requires engineering expertise and custom attention. As a premier industrial process chiller manufacturer, AG-CHILL is happy to create the complete custom chiller or cooling solution to quickly meet your needs.
- AG-CHILL's world-class engineering team solve every kind of temperature problem from simple to very complex. Our expertise guarantees satisfied customers in a very short turnaround time.



## CUSTOM CHILLER SIZES

Whether you need a 1/4ton industrial chiller, or a 100-ton system, we will create the best solution for your needs.



#### ANTI BACKFLOW

If the chilling fluid is located above the chiller, anti-backflow prevents fluid from flowing back into the system when the process chiller is turned off.



## ADVANCED CONTROLS

We can integrate the latest in smart controls with our chiller systems, so you can control your chiller remotely or leverage temperature.

## **CUSTOM OPTIONS**



## COMPLETE TEMPERATURE CONTROL SOLUTIONS

Our engineers can design a complete system that solves all your temp control needs – From industrial chillers and controls to cooling jackets.



#### WATER FILTER

Add a filter on the inlet to keep the inside of the process chiller clean, even if the fluid is dirty. UL or CE rated.



## CUSTOM TEMPERATURE RANGES

We can create a custom solution for temperatures from -112F to 200 F.



#### HEATER

Add a heater to the commercial chiller. Whether you need increased or decreased temperatures, your commercial water chiller will be equipped to do both jobs.



## DEIONIZED CHILLERS

If you need de-ionized water compatibility for your EDM system or integrated circuit manufacturing, we have you covered.



## ALTERNATIVE FLUIDS

We can design a build systems for whichever fluid you need – from deionized water to heat transfer fluid or oil.

## **FLUX WRAP**



Fluxwrap™ can chill materials in drums, totes, tanks and all manner of vessels, even when a heat exchanger is not currently present. The proprietary, multi-channel fluid path allows maximum flow of the cooling liquid with minimal pressure. The wrap conforms to the container shape and maintains thermal contact over uneven surfaces—creating full coverage cooling. Do you have a need for cooling and heating? Simply change the temperature of the Fluxwrap™ fluid, and you have an effective medium for heating. Fluxwrap™ is a versatile fluid temperature control solution.

#### **FLUXWRAP FEATURES**



Proprietary multi-channel fluid path allows maximum flow with minimal pressure



Elastic strap design ensures good thermal conductivity between blanket and drum



Wrap conforms to drum or tote to maintain thermal contact over uneven surfaces



Lightweight compact design, full coverage cooling

#### PERFECT PAIR

Fixe wrap can chill nuterate in thurse, totes, tarits and all number of second. Thomas proples chilling to many veccels that seem previously difficult is financially although to chill









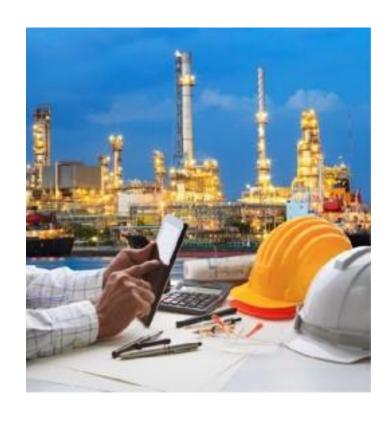
RAP THE CONTAINER

SOSES APPLY INSUL

TURN IT OF

## **SMART CHILLERS WITH BEACON**

At the end of the day, everyone wants things to be easier and more efficient. Smart phones help track everything from steps and calories to weather and traffic. With Beacon Inside, this same ease and access are available to you for industrial temperature control. Beacon remote temperature controller has the same features as many single-stage electronic temperature controllers, and also boasts many added benefits made possible by internet connectivity. Your extraction chiller will work seamlessly with Beacon industrial temperature controller.





Monitor Conditions Remotely



Customize Alerts And Schedules



Enjoy Peace Of Mind



Historical Data
Storage For Process
Analysis



#### DEEP FREEZE IS AG-CHILL'S MOST ROBUST CHILLER

Energy

Efficient Susutainable

Solutions -Wide Variety

of Refrigerants Available (R507B/R508B for

World-Class

#### **HOW LOW CAN YOU GO?**

Bring on Deep Freeze for ultimate industrial cooling. Designed to provide supreme industrial chilling. Deep Freeze shares many of the same robust qualities as our Freeze models, along with the capacity to cool from +70°F to -112°F (+21°C to -80°C). Fully insulated internal parts to ensure no internal temperature loss. Keep your critical materials, equipment, and processes cold even in hot conditions.



Ideal process cooling solution for Biotech, Dairy, Chemicals, Cannabis, Oil Extraction, EDM, Fermentation, Hydroponoics, Lasers, Printing, Welding, Food, and Plastics.

Shortest Industry Lead Times UL/CSA Certified Award Winning Manufacturer ISO 9001 Made in the USA





SUITABLE FOR HAZARDOUS

LOCATIONS

PORTABLE, SCALABLE, SIMPLE



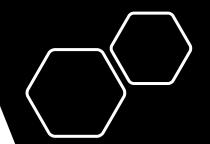


PROGRAMMABLE CONTROLLER w/ MODBUS INTERFACE





DEEP FREEZE



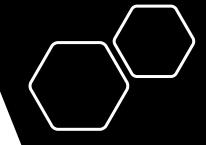


#### DEEP FREEZE AND ULTRA LOW TEMPERATURE SPECIFICATIONS

Model Number	Fluid Temp Range (F)	Ambient Temp Range	Refrigerant	Inlet/ Outlet	Pump		Reservoir Capacity	Cooling Capacity (BTU/hr)	Dimensions	Max Amps (FLA)	Recommended Breaker/Service (MCA)	Available Voltages	
NSC0500-LT	10°F - 45°F	40°F - 100°F	R404a	1/2* NPT	Continuous Duty, non-fer- rous	1/3 HP Fixed Displacement Pump	4 GPM Fixed 50 PSI Max	4 Gallon Poly Tank	10°F - 2,500 BTU/hr 45°F - 5,070 BTU/hr	28.25"L x 22.5"W x32.5"H	16.6 Amps	20 Amp	120/1/60 (std)
NSC1000-LT	10°F - 45°F	40°F - 100°F	R404a	1/2* NPT	Continuous Duty, non-fer- rous	1/3 HP Fixed Displacement Pump	4 GPM Fixed 50 PSI Max	15 Gallon Poly Tank	10°F - 5,900 BTU/hr 45°F - 11,900 BTU/hr	34%"L x 28%"W x 39"H	16.3 Amps (std) 14 Amps 6 Amps	20 Amp (std) 20 Amp 15 Amp	208-240/1/60 (std) 208-240/3/60 480/3/60
NSC2000-LT	10°F - 45°F	40°F - 100°F	R404a	3/4° NPT	Continuous Duty, Stainless Steel	3/4 HP Centrifugal Pump	15 GPM @ 28 PSI 25 GPM @ 23 PSI 35 GPM @ 16 PSI 45 GPM Max	15 Gallon Poly Tank	10°F - 13,800 BTU/hr 45°F - 27,200 BTU/hr	34%"L x 43%"W x 40"H	30.9 Amps (std) 20.1 Amps 9.2 Amps	40 Amp (std) 25 Amp 15 Amp	208-240/1/60 (std) 208-240/3/60 480/3/60
NSC5000-LT	10°F - 45°F	40°F - 90°F	R404a	1-1/4" NPT	Continuous Duty, Stainless Steel	1-1/2 HP Centrifugal Pump	15 GPM @ 39 PSI 30 GPM @ 35 PSI 45 GPM @ 28 PSI 60 GPM Max	50 Gallon Poly Tank	0°F - 19,200 BTU/hr 45°F - 44,900 BTU/hr	34"L x 65"W x 62"H	29.3 Amps 13.6 Amps (std)	35 Amp 20 Amp (std)	208-240/3/60 480/3/60 (std)
NSC5000E- LT	10°F - 45°F	0°F - 90°F	R404a	1-1/4" NPT	Continuous Duty, Stainless Steel	1-1/2 HP Centrifugal Pump	15 GPM @ 39 PSI 30 GPM @ 35 PSI 45 GPM @ 28 PSI 60 GPM Max	50 Gallon Poly Tank	0°F - 19,200 BTU/hr 45°F - 44,900 BTU/hr	34"L x 65"W x 62"H	29.3 Amps 13.6 Amps (std)	35 Amp 20 Amp (std)	208-240/3/60 480/3/60 (std)
NSC10000- LT	10°F - 45°F	40°F - 90°F	R404a	1-1/4* NPT	Continuous Duty, Stainless Steel	2 HP Centrif- ugal Pump	15 GPM @ 54 PSI 30 GPM @ 48 PSI 45 GPM @ 40 PSI 65 GPM Max	50 Gallon Poly Tank	15°F - 53,000 BTU/hr 45°F - 90,000 BTU/hr	34"L x 65"W x 62"H	26.6 Amps (std)	35 Amp (std)	480/3/60 (std)
NSC10000E- LT	10°F - 45°F	0°F - 90°F	R404a	1-1/4* NPT	Continuous Duty, Stainless Steel	2 HP Centrif- ugal Pump	15 GPM @ 54 PSI 30 GPM @ 48 PSI 45 GPM @ 40 PSI 65 GPM Max	50 Gallon Poly Tank	15°F - 53,000 BTU/hr 45°F - 90,000 BTU/hr	34"L x 65"W x 62"H	26.6 Amps (std)	35 Amp (std)	480/3/60 (std)
Model Number	Fluid Temp Range (F)	Refrigerant	Condenser	Inlet/ Outlet	Pump			Reservoir Capacity	Cooling Capacity (BTU/hr)	Dimensions	Max Amps (FLA)	Recommended Breaker/Service (MCA)	Available Voltages
NSC0500- ULT	-112°F to +70°F -80°C to +21°C	R404a/ R508b	Air-cooled	1/2* NPT	Continuous Duty, Stainless Steel	Fixed Displacement	4 GPM Fixed	5 Gallon Stainless Steel	-40°C (-40°F) - 1,700 Watts (5,800 BTU/hr) -80°C (-112°F) - 600 Watts (2,000 BTU/hr)	34"L x 64.3"W x 72"H	16 Amps	20 Amp	208-240/3/60 (std)
NSC1000- ULT	-112°F to +70°F -80°C to +21°C	R404a/ R508b	Air-cooled	3/4° NPT	Continuous Duty, Stainless Steel	Fixed Displacement	4 GPM Fixed	5 Gallon Stainless Steel	-40°C (-40°F) - 3,700 Watts (12,000 BTU/ hr) -80°C (-112°F) - 1,750 Watts (4,600 BTU/hr)	34"L x 64.3"W x 72"H	25 Amps (std)	30 Amp (std)	208-240/3/60 (std)
NSC2000- ULT	-112°F to +70°F -80°C to +21°C	R404a/ R508b	Air-cooled	3/4* NPT	Continuous Duty, Stainless Steel	Fixed Displacement	8 GPM Fixed	10 Gallon Stainless Steel	-40°C (-40°F) - 7,000 Watts (24,000 BTU/ hr) -80°C (-112°F) - 3,000 Watts (10,200 BTU/hr)	34"L x 64.3"W x 72"H	20 Amps (std)	30 Amp (std)	480/3/60 (std)

MORE UL/CSA CERTIFIED OPTIONS AVAILABLE: UP TO 30 TONS COOLING CAPACITY, FLUID TEMPERATURES AS LOW AS -80°C (-112°F), 480VAC/3/60 100 AMPS, UP TO 60,000 WATTS HEATING CAPABILITY, -20F AMBIENT OUTDOOR MODELS.







#### FREEZE IS AG-CHILL'S STANDARD LIGHT INDUSTRIAL WORKHORSE

#### THE COLD STANDARD

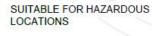
Meet the compact chiller that is both dependable and powerful. With up to 30 tons cooling capacity, FREEZE is AG-CHILL'S standard industrial chiller that controls the temperature of your process fluids down to as low as 40F. A small workhorse with precise accuracy, FREEZE boasts a robust condensing unit and high horsepower. It's a lot of chilling power in a compactpackage.



World-Class Custom Engineering Team. Wide variety of UL/ CSA Certified options up to 30 tons cooling capacity 480VAC 20 HP 100 amps. Smart Chiller™ capabilities

(R507B/R508B for ULT)

**Energy Efficient** Susutainable Solutions - Wide Variety of Refrigerants Available



PORTABLE, SCALABLE, SIMPLE

















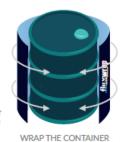


#### FREEZE BY AG-CHILL CHILLERS

Model Number	Fluid Temp Range (F)	Ambient Temp Range	Refrigerant	Inlet/ Outlet		Pump		Reservoir Capacity	Cooling Capacity (BTU/hr)	Dimensions	Max Amps (FLA)	Recommended Breaker/Service (MCA)	Available Voltages
NSC0500	40°F - 75°F	40°F - 100°F	R134a	1/2* NPT	Continuous Duty, non-fer- rous	1/3 HP Fixed Displacement Pump	4 GPM Fixed 50 PSI Max	4 Gallon Poly Tank	40°F - 3,800 BTU/hr 65°F - 6,000 BTU/hr	28¼"L x 22½"W x 32½"H	15.6 Amps (std) 9.1 Amps	20 Amp (std) 15 Amp	120/1/60 (std) 208-240/1/60
NSC1000	40°F - 75°F	40°F - 100°F	R134a	1/2* NPT	Continuous Duty, non-fer- rous	1/3 HP Fixed Displacement Pump	4 GPM Fixed 50 PSI Max	15 Gallon Poly Tank	40°F - 7,600 BTU/hr 65°F - 12,000 BTU/hr	34%"L x 28%"W x 39"H	16.3 Amps (std) 14 Amps 6 Amps	20 Amp (std) 20 Amp 15 Amp	208-240/1/60 (std) 208-240/3/60 480/3/60
NSC2000	40°F - 75°F	40°F - 100°F	R134a	3/4° NPT	Continuous Duty, Stainless Steel	3/4 HP Centrifugal Pump	15 GPM @ 28 PSI 25 GPM @ 23 PSI 35 GPM @ 16 PSI 45 GPM Max	15 Gallon Poly Tank	40°F - 16,100 BTU/hr 65°F - 25,400 BTU/hr	34%"L x 43%"W x 40"H	30.9 Amps (std) 20.1 Amps 9.2 Amps	40 Amp (std) 25 Amp 15 Amp	208-240/1/60 (std) 208-240/3/60 480/3/60
NSC5000	40°F - 65°F	40°F - 100°F	R404a	1-1/4" NPT	Continuous Duty, Stainless Steel	1-1/2 HP Centrifugal Pump	15 GPM @ 39 PSI 30 GPM @ 35 PSI 45 GPM @ 28 PSI 60 GPM Max	50 Gallon Poly Tank	40°F - 41,400 BTU/hr 65°F - 60,500 BTU/hr	34"Lx 65"W x 62"H	29.3 Amps 13.6 Amps (std)	35 Amp 20 Amp (std)	208-240/3/60 480/3/60 (std)
NSC5000E	40°F - 65°F	0°F - 100°F	R404a	1-1/4" NPT	Continuous Duty, Stainless Steel	1-1/2 HP Centrifugal Pump	15 GPM @ 39 PSI 30 GPM @ 35 PSI 45 GPM @ 28 PSI 60 GPM Max	50 Gallon Poly Tank	40°F - 41,400 BTU/hr 65°F - 60,500 BTU/hr	34"Lx 65"W x 62"H	29.3 Amps 13.6 Amps (std)	35 Amp 20 Amp (std)	208-240/3/60 480/3/60 (std)
NSC10000	40°F - 65°F	40°F - 100°F	R404a	1-1/4° NPT	Continuous Duty, Stainless Steel	2 HP Centrif- ugal Pump	15 GPM @ 54 PSI 30 GPM @ 48 PSI 45 GPM @ 40 PSI 65 GPM Max	50 Gallon Poly Tank	40°F - 83,000 BTU/ hr 65°F - 120,000 BTU/hr	34"L x 65"W x 62"H	26.6 Amps (std)	35 Amp (std)	480/3/60 (std)
NSC10000E	40°F - 65°F	0°F - 100°F	R404a	1-1/4" NPT	Continuous Duty, Stainless Steel	2 HP Centrif- ugal Pump	15 GPM @ 54 PSI 30 GPM @ 48 PSI 45 GPM @ 40 PSI 65 GPM Max	50 Gallon Poly Tank	40°F - 83,000 BTU/ hr 65°F - 120,000 BTU/hr	34"L x 65"W x 62"H	26.6 Amps (std)	35 Amp (std)	480/3/60 (std)

#### PERFECT PAIR

Flux wrap can chill materials in drums, totes, tanks and all manner of vessels. Fluxwrap applies chilling to many vessels that were previously difficult or financially unfeasible to chill.





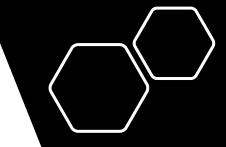




APPLY INSULATION TURN IT ON!

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#### SMALL BUT MIGHTY

AG-CHILL experts in temperature control for your botanical production, bring you a line of efficient, high-performance glycol chillers. Engineered for efficiency, value, and minimal footprint, these chillers also allow up to three separate circuits for optimal versatility.

- Digital temperature control for maximum efficiency
- Interface effortlessly with your process
- Quick mount system: save time and money, and avoid frustration with easy wall installation
- Multiple mounting positions
- Insulated reservoir and lines protects glycol temperature and minimizes condensation
- Anti-vibration pads reduce motor noise
- Rugged powder-coated steel cabinet

AIR-COOLED CONDENSER

POWDER-COATED STEEL CABINET

> BRAZED PLATE HEAT EXCHANGER







Shortest Industry Lead Made in the USA Award-Winning Manufacturer World-Class Custom Engineering Team ETL Safety Listed Smart Chiller™ capabilities

CONTROL

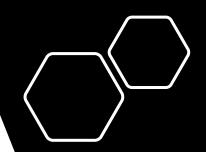


POLY TANK RESERVOIR

QUICK MOUNT SYSTEM & MULTIPLE MOUNTING POSITIONS



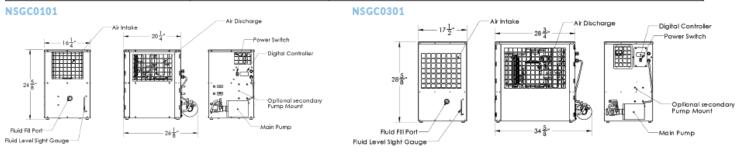
www.ag-chill.com 1-541-610-6858 2400 E 6895 S, Suite 16, Cottonwood Heights, UT 84121



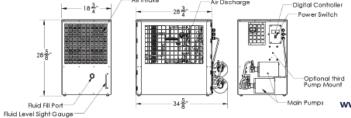


#### **GLYCOL CHILLER POWER PACK**

		NSGC0101	NSGC0301	NSGC0401				
Dimensions L x W x H (Including Pumps and Motors)		26-1/8" x 16-1/4" x 24-5/8"	34-5/8" x 17-1/2" x 28-5/8"	34-5/8" x 18-3/4" x 28-5/8"				
	Voltage	120VAC, 60Hz, 1P	208-240VAC, 60Hz, 1P	208-240VAC, 60Hz, 1P				
	RLA (Rated Load Amps)	16	16	25				
	MCA (Min. Circuit Ampacity)	18.6	19.4	29.2				
Electrical	MOCP (Max. over Current Protection)	28.6	32.0	47.2				
	Plug Type	5-20P	6-20P	L6-30P				
	Compressor	1/2 hp	1 hp	1-1/2 hp				
Refrigeration Circuit	Cooling Capacity 30°F Fluid at 90°F Ambient	3,600 BTU/hr	7,250 BTU/hr	11,500 BTU/hr				
	Refrigerant		R134a	R134a				
	Reservoir Capacity	4 Gallon						
	Glycol Pumps	Single Pump (du	Dual Pump (Triple pump capable)					
Fluid Circuit	Fluid Connections	3/8" Barbed						
	Pump	80 GPH 1/3 HP Rotary Vane						

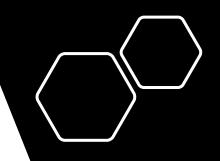


#### NSGC0401





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