

2025



GREEN CLIMATE
Perfection in Climate Engineering

GREENHOUSE CLIMATE CONTROL PRODUCT CATALOG

Top-Quality Greenhouse Climate Control Products

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Year-Round Efficiency with Greenhouse Heating Systems

Maintaining optimal temperature conditions in greenhouses is crucial for plant health and productivity. At Green Climate, we offer advanced heating systems designed to create the ideal climate for your greenhouses.

Our greenhouse heating solutions stand out for their:

- ✓ High energy efficiency, reducing operational costs
- ✓ Eco-friendly design, minimizing environmental impact

With cutting-edge technology and sustainable solutions, Green Climate ensures that your greenhouses operate efficiently while supporting plant growth and maximizing yield.

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Efficient and Reliable Heating

1. **Wall Heating Systems:** Our wall heating systems, integrated into the greenhouse walls, ensure uniform temperature distribution within your greenhouse. These systems are designed to prevent heat loss through the walls, especially in cold weather conditions, resulting in significant energy savings.

Our wall heating solutions effectively protect plants from cold air drafts, promoting their healthy growth and maintaining an optimal growing environment.

2. **Gutter Heating Systems:** Our gutter heating systems prevent the freezing of gutters on the greenhouse roof, ensuring the free flow of water. This system is especially crucial during winter months, as it eliminates icing issues, preserving the structural integrity of your greenhouse.

By facilitating proper water drainage, our gutter heating solutions help extend the lifespan of your greenhouse, protecting it from potential water damage and structural strain.

3. **Ceiling Heating Systems:** Our ceiling heating systems ensure the even distribution of warm air from the greenhouse ceiling downward. This system maintains a consistent temperature throughout the entire greenhouse, providing optimal growing conditions for plants in every area.

Additionally, our energy-efficient ceiling heating systems help retain heat within the greenhouse, reducing energy costs and improving operational efficiency.

4. **Under-Gutter Heating Systems:** Our under-gutter heating systems operate with heating elements installed beneath the greenhouse gutters. These systems prevent water from freezing, eliminating the risk of water accumulation on the greenhouse roof.

With our under-gutter heating solutions, your greenhouse remains safe and efficient during the winter months, ensuring uninterrupted operation and protection from structural damage.

BOILER MANUFACTURING



Greenhouse heating boilers are manufactured with a robust construction and efficient heat transfer system to meet sudden heat demands. These boilers can be designed to heat the greenhouse interior to $+20^{\circ}\text{C}$, even when outside temperatures drop to -55°C during harsh winter conditions.

Versatile Fuel Options: Our greenhouse boilers are compatible with various fuel types, including: Coal, Biomass, Pellets, Natural gas, Diesel (motorin), Olive pomace (pirina), And other solid, liquid, or gas-phase fuels.

Plant Health and Climate Control: Unlike conventional heating systems, our boilers maintain the desired greenhouse temperature without consuming oxygen from the environment, which minimizes the risk of plant diseases. Additionally, the system ensures homogeneous heat distribution throughout every square meter of the greenhouse while also reducing excess humidity inside the facility.

Export-Ready Production with European Standards: Our systems are designed to help growers produce crops meeting European standards, ensuring timely harvests and high market value, especially for export purposes. Since climate control is a critical factor for yield and quality, Green Climate Greenhouse Boilers are the key to achieving optimal growing conditions.

Comprehensive Project Planning: At Green Climate, we conduct a detailed site survey to determine the necessary calorific capacity, fan type, and motor specifications for your heating system.

Our climate control systems are designed with:

- Automated heating processes
- Uninterrupted energy supply
- Tailored capacity based on the greenhouse's heating demand

With Green Climate Greenhouse Boilers, you can achieve a fully integrated climate control solution, ensuring maximum efficiency, reliable operation, and superior crop quality for both domestic and export markets.

FEATURED PRODUCTS



Support Clamp GC-153-19-AKL001

Support clamps are specially manufactured clamps with threaded connections, designed to fit various post thicknesses, ensuring secure and stable installations.



Curved Hose Connector: GC-153-19-MRP006

A curved hose adapter is a specially angled connector used in greenhouse heating systems to prevent hose connections from bending or breaking, ensuring durability and efficient water or heat distribution.



Hose Connector GC-153-19-MRP004

It provides a rubber hose connection between the distribution pipes and the heating pipes in greenhouse heating systems.



Types of Steel Pipes GC-153-19-SBR001

Steel pipes are generally used to transport and distribute non-flammable light gases or liquids. They are applied in various sectors such as water installation lines, light gas pipelines, fire safety lines, water well pipelines, coupling (muff) manufacturing, elbow manufacturing, greenhouse constructions, and irrigation systems.

These pipes are produced according to the EN 10217 standard. In standard production, their diameters range from DN15 to DN300. Larger diameter pipes are manufactured using the spiral welding method. The thickness of the pipes varies according to their diameter and is proportional to their pressure resistance.



Aluminum Sheet Cladding

We provide insulation using materials such as rock wool, glass wool, or rubber-based insulators. To enhance thermal insulation and increase durability, we cover these materials with aluminum sheet cladding.

This method significantly improves the energy efficiency and overall performance of both heating and cooling systems. Additionally, aluminum sheet cladding protects the insulation materials from external factors, extending the lifespan of the systems.



Hose Clamp

GC-153-19-HKL001

A hose clamp is used to secure rubber, spiral, or PVC-based flexible hoses onto hose adapters, ensuring a tight and secure connection.



Air Collector Tube: GC-153-19-PUR002

An air collector tube is a component used in heating installations to collect and discharge air that accumulates within the pipes from the highest branch line. It ensures the efficient venting of trapped air, improving the system's performance and reliability.



Stop Lama: GC-153-19-FLM001

The stop lama is a specially designed component used in the rail tracks of greenhouse heating systems. It ensures safety at the end of the tracks for cultural operation vehicles, preventing them from derailing or going off the rails.



Automatic Purger GC-153-19-PUR001

An automatic air vent, also known as an automatic purger, continuously expels air from the system without the need for manual intervention. This prevents airlocks in the piping system, ensuring maximum efficiency and optimal performance. By eliminating trapped air, the automatic air vent improves energy efficiency, resulting in energy savings, and reduces maintenance costs by preventing air-related issues. The use of automatic air vents is particularly crucial in large-scale heating systems and central heating installations, where they play a vital role in maintaining system performance and operational efficiency.

Manometer: GC-153-19-MMT001

The manometer is filled with glycerin and features a body made of stainless steel or other corrosion-resistant materials, ensuring long-lasting and durable performance. Thanks to its variety of connection types, it can be easily integrated into different systems, providing reliable pressure measurement for various applications.



Thermometer GC-153-19-TMT001

The thermometer body is typically made of galvanized coating or stainless steel to ensure long-lasting durability. Its precision measurement capability enhances energy efficiency and helps systems operate safely. Modern digital thermometers offer real-time temperature readings with greater speed and accuracy, providing ease of use and improved system monitoring.





Hot water boilers are closed vessels where water or other fluids are heated under pressure to produce steam or other hot fluids. The boiler's size should have the capacity to handle the system's maximum hourly load. They can operate with various fuels, including natural gas (NG), liquefied natural gas (LNG), liquefied petroleum gas (LPG), compressed natural gas (CNG), diesel, fuel oil, mazut, pellets, coal, wood, and biomass. There are special boilers designed for CO₂ fertilization, which are commonly used in greenhouse applications. Boilers running on natural gas and its derivatives are equipped with specially designed combustion chambers and custom burners, ensuring complete combustion and efficient performance.

Burner (Gas/Oil) GC-153-19-BRL001



A burner is a device designed for efficient combustion of fuels. Burners are included in the delivery program for a wide range of liquid and gas fuels, standing out for their flexibility and excellent price/quality ratio.

Chimney Types GC-153-19-BCA001



Chimney types are made of aluminium, core-ten and stainless steel materials. They are available in various diameters suitable for different boiler capacities.

Expansion Tank GC-153-19-GNT001



An expansion tank, also known as an expansion vessel, is a plumbing component designed to regulate pressure within the piping system. It also provides additional water support, ensuring system stability and efficiency.



Support Ring GC-153-19-AHL014

At Green Climate, we design and manufacture custom rings specifically for greenhouse heating systems. Our rings are produced with high quality and durability, ensuring compatibility with your greenhouse structure.

We offer various designs tailored to different pipe diameters and quantities. Each ring is custom-made to fit the specific needs of greenhouse climate control projects.

These support ring are available in diameters ranging from DN40 to DN200 and can be combined with different sizes for greater flexibility in system design.



Rubber Hose GC-153-19-HRT001

A rubber hose is an intermediate connection component used in greenhouse heating systems. It features a specially designed braided reinforcement system, allowing it to function under hot water conditions.

Rubber hoses are made from high-temperature and high-pressure-resistant materials, ensuring long-lasting durability. The braided reinforcement system provides leak-proof and secure connections, enhancing the efficiency and safety of greenhouse heating systems.



Console Support GC-153-19-AKN001

Console support are designed to adapt to various structural needs and load conditions. These products stand out for their high strength and durability, ensuring reliable performance in demanding applications.

They are available in different sizes and capacities to meet a range of structural requirements. Manufactured to the highest quality standards, our consoles provide safe and efficient usage in various applications.



Support Leg GC-153-19-SPT002

We specially design support leg to ensure that cultural processing carts move securely and stably on rail pipes.

Support leg are manufactured using galvanized steel through a pressing method, ensuring durability and strength. For easy transportation, these support leg are assembled on-site, providing a practical and efficient installation process.



THREADED ELBOW

GC-153-19-DDD001

A threaded elbow is a pipe fitting manufactured according to DIN standards, designed to provide flexible solutions for various plumbing and piping needs. It facilitates the connection of pipes and fittings of different sizes, ensuring a secure and reliable joint. Crafted from high-quality materials with precision machining, the threaded elbow ensures durable and leak-proof connections, making it an essential component in heating, cooling, and industrial piping systems.



THREADED UNION

GC-153-19-DRK001

A threaded union allows for quick and easy assembly and disassembly, making it highly advantageous in systems that require frequent disconnection and reconnection or in situations where maintenance and repair are needed.

Threaded unions are selected based on the system's requirements, ensuring compatibility with specific pressure and temperature conditions, providing a secure and reliable connection.



THREADED PIPE PIECE

GC-153-19-DDP

A threaded pipe piece is a pipe component used to integrate threaded products of various diameters into a piping system. These pieces are specially threaded according to DIN standards and are designed to meet the needs of different pipe diameters and measurements.

They ensure the secure and efficient connection of piping systems, providing reliable performance in both residential and industrial applications.



THREADED NIPPLE

GC-153-19-DDDN001

Threaded nipples are durable connector components designed to provide leak-proof, reliable, and long-lasting performance. They are resistant to pressure and temperature variations, making them suitable for a wide range of applications, from greenhouse heating systems to industrial piping systems.



COMPENSATOR

GC-153-19-KMP001

Compensators are available in various types depending on their application and specific use case. They are designed to absorb expansion along pipelines or reduce vibration in front of pumps.

Compensators are offered with both flanged and welded connection types, providing versatile solutions suitable for different piping system requirements. They are known for their durability and long-lasting performance, ensuring reliable operation in industrial and heating applications.



BOLT

GC-153-19-CVT001

Bolts are manufactured according to the EN 14399 (1-4-5) standards, ensuring high strength and durability. Made from premium-quality materials, they offer excellent resistance to corrosion and wear, eliminating concerns about rust and strength loss even in demanding environments.



NUT

GC-153-19-SMN001

A nut is one of the most essential connection components in mechanical installations. Bolts, nuts, and washers are manufactured according to EN 14399 (1-4-5) standards, ensuring high tensile strength and durability. Made from high-quality materials, these components are corrosion-resistant, eliminating concerns about rust and strength loss, even under demanding conditions.



ROD JOINT

GC-153-19-TIJ001

Rod Joint are available in strength grades ranging from 5.6, 8.8, to 10.9. They are produced in diameters from M4 to M24, with the option for custom sizes upon request. Manufactured from a special zinc alloy, these components are highly corrosion-resistant. Their threaded design provides strong grip and holding power, making them a popular choice in suspension systems and other structural applications requiring reliable fastening.



GASKET

GC-153-19-CNT001

A gasket ensures water-tight sealing in flanged connections. Made from a non-asbestos material with high compression resistance, it is designed to prevent fluid leakage effectively. The gasket fits perfectly onto flange surfaces, creating a tight seal between both flanges. Gaskets are also capable of withstanding high-pressure and high-temperature conditions, ensuring durability and reliable performance in demanding applications.



WELD ELBOW

GC-153-19-DDR001

A weld elbow is a pipe fitting used to create 90-degree or 45-degree turns in iron pipes. It is available in two types: welded and seamless, offering flexibility and reliability for various piping configurations.



WELD TEE

GC-153-19-DTE001

A weld tee is used to create three-way welded connections in iron pipes. Its wall thickness varies depending on the pressure resistance and pipe diameter, ensuring durability and reliable performance in piping systems.



WELD REDUCTION

GC-153-19-DRD004

A reduction ensures the fluid flows in the desired direction and at the proper pressure while maintaining the integrity of the piping system. It is selected based on the pipe material and the characteristics of the fluid being transported.

The use of reduction provides flexibility during installation and maintenance, while also improving the system's overall performance and efficiency.



WELD CAP

GC-153-19-DKP001

An weld cap is a critical pipe fitting used at the ends of pipelines or collector inlets to seal the system. It prevents fluid leakage, ensuring the system operates safely and efficiently. Additionally, weld caps are essential for temporarily closing sections of the system during maintenance or repair operations.



THREADED SLEEVE

GC-153-19-DDM001

A threaded sleeve facilitates the use of threaded products of various diameters. Manufactured according to DIN standards, this connector component joins pipes and fittings of different sizes.

Made from high-quality materials with precision machining, it ensures a secure, durable, and leak-proof connection, enhancing the reliability of plumbing and heating systems.



THREADED TEE

GC-153-19-DDT001

A threaded tee facilitates the use of threaded components of various diameters, offering a three-way connection. Manufactured with high-quality materials according to DIN standards, it ensures precise, durable, and leak-proof connections.

This component provides a versatile, secure, and robust connection within the system, while also simplifying installation and maintenance processes.

U COUPLING

GC-153-19-DDR015



The U coupling is a specially designed component used at the ends of greenhouse heating lines. It is bent at standard intervals and of the same diameter to improve the efficiency of greenhouse heating systems.

This element is designed to allow cultural operation carts to approach the rail heating line smoothly. We also offer custom production with specific intervals tailored to meet the unique needs of our customers.

BUTTERFLY VALVES

GC-153-19-VKB001



Butterfly valves feature a cast iron body, an EPDM rubber seal, and a corrosion-resistant disc, available in both wafer and lug types. They are specially designed to accommodate a variety of fluid types, ensuring versatility and reliable performance.

The body materials are selected based on the fluid properties, ensuring compatibility, durability, and long-lasting use. Made from high-quality materials, these valves offer robust construction and are built to withstand demanding operating conditions.

STRAINER

GC-153-19-VPT001



A strainer is used to filter and remove foreign particles from the fluid passing through the piping system. It is commonly used in pipe installations and plays a crucial role in maintaining the health and efficiency of the system.

As part of the valve group, the strainer helps prevent blockages and protects equipment, ensuring the smooth operation of the entire system.

SWING CHECK VALVE

GC-153-19-VCV001



A swing check valve is a safety valve designed to prevent fluid backflow within a system. Depending on its purpose and the system's needs, check valves are available in various types to meet specific requirements. Common types of check valves include tilting weighted, tilting piston, wafer, swing (çalpara), dual plate, spring-loaded (poppet), and disc type (disco). The swing check valve operates by using a hinged disc that swings open to allow fluid flow in one direction and closes to prevent backflow, ensuring the safety and efficiency of the system.

DISCO CHECK VALVE

GC-153-19-ÇKV001



A disco check valve is a safety valve designed to prevent fluid backflow within a system. Depending on its purpose and the system's needs, check valves are available in various types to meet specific requirements. Common types of check valves include tilting weighted, tilting piston, wafer, swing (çalpara), dual plate, spring-loaded (poppet), and disc type (disco). The disco check valve operates with a disc that opens to allow fluid flow in one direction and closes to prevent backflow, ensuring the system's safety and efficiency.



BALL VALVE

GC-153-19-VKR001

A ball valve is used in mechanical installations to control the flow of liquids. Our ball valves are manufactured from various materials to ensure compatibility with different types of liquids. This allows them to provide suitable solutions for all fluid flow requirements, ensuring maximum efficiency and durability.



AUTOMATIC FILLING VALVE

GC-153-19-VOD001

An automatic filling valve is used in heating systems with reservoirs to maintain the proper water level when the system experiences a loss of heating water. This valve automatically adds water to the system until it reaches the preset pressure level, ensuring consistent system performance and preventing interruptions.



SAFETY VALVE

GC-153-19-EVN001

A safety valve is carefully adjusted to the system's maximum operating pressure to ensure optimal performance. It functions as a pressure relief device, protecting the system during high-pressure situations. These valves are made from durable materials such as brass and cast iron, depending on their application and size requirements. They are available with both threaded and flanged connection options, ensuring compatibility with various systems.



DIFFERENTIAL PRESSURE SENSOR

GC-153-19-FBS001

A differential pressure sensor is used in pump systems to measure the pressure difference between the inlet and outlet of the pump. This measurement enables frequency control, ensuring the pump operates at optimal efficiency while maintaining system performance and energy savings.



FLANGE

GC-153-19-DFL001

A flange is manufactured according to DIN standards and is available in sizes ranging from DN20 to DN1000. Its thickness and bolt hole configuration vary depending on the PN pressure standards, ensuring compatibility with different pressure levels and system requirements.

BUFFER TANK

GC-153-19-BUF001



Storage plays a critical role in energy efficiency and system safety, ensuring the effective management of produced energy while balancing sudden energy fluctuations. It allows the storage of waste heat for later reuse, optimizing energy consumption. Buffer tanks are specially designed and manufactured according to the system's specific requirements. One of the most important features of our buffer tanks is their durability. Thanks to advanced insulation, the maximum temperature loss is limited to 4°C within 48 hours, ensuring energy retention over extended periods. Additionally, nitrogen production helps maintain peak pressure balance while preventing corrosion within the system. The special valve protection system ensures complete protection against sudden water inflows and outflows, enhancing the system's operational reliability and long-term performance.

Nitrogen Generator GC-153-19-AJN001



The nitrogen generator is a device that produces N₂ with 99.9% purity.

- It will be equipped with an 8-bar screw compressor.
- It has air drying functionality.
- It contains X and Y filters.
- It includes a pressure storage tank.
- It is equipped with a pressure reducer.

Flue Gas Condenser GC-153-19-KON001



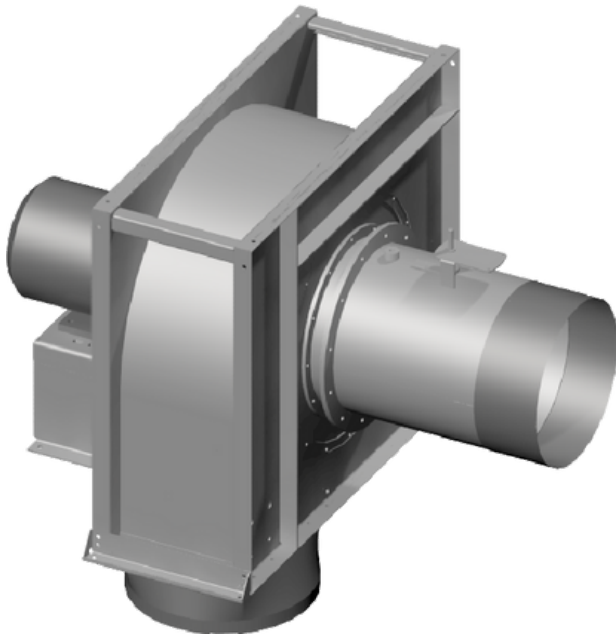
The condenser is supplied with a flue gas valve that can be used in emergency operations with oil (maximum 2×24 hours). The heat exchanger features an aluminum finned tube with a diameter of Ø63 mm and is equipped with an inspection cover for visual examination. A 2" connection is available for drainage.

Magnetic Filter GC-153-19-MNY001



Thanks to the bag filter inside, the magnetic filter effectively collects non-magnetic particles as well. This enhances the efficiency and lifespan of the piping system. The product is equipped with a pump operating at 380V, supporting a powerful and efficient filtration process.

"OPTIMAL EFFICIENCY IN EVERY SEASON"



CO2 FANS GC-153-19-FAN001

In this system, flue gases with a high CO₂ content produced during combustion are cooled through a transport and distribution pipe. They are then evenly distributed through hoses across the growing area via the condenser.

Green Climate has many years of experience in recommending, calculating, and designing complete CO₂ distribution systems. Proper adjustment of central CO₂ dosing and the efficient operation of the CO₂ distribution system are crucial for optimal performance and safety.

Green Climate assists you in accurately calculating the correct CO₂ dosage required for your CO₂ distribution system, ensuring optimal plant growth and energy efficiency.

CO2 PVC PIPES GC-153-19-PVB001

Thanks to a special compound mixture, PVC pipes exhibit high resistance to acidic condensate water. They are manufactured according to standards ranging from SN2 to SN8 and feature different wall thicknesses depending on their diameter. These properties prevent acidic condensate water, which can occur during CO₂ fertilization, from damaging the pipes, ensuring a long-lasting and durable system.

PVC pipes are easy to install and are designed with factory-made socket joints and seals. This design ensures leak-proof connections, preventing any leakage or weak points within the system, thus ensuring system reliability and operational efficiency.



CO2 DISTRIBUTION LINES GC-153-19-COB001

CO₂ Distribution Lines are specially designed pipelines used in our greenhouse carbon dioxide fertilization systems. These lines are equipped with special outlet nozzles to ensure homogeneous distribution of CO₂. They deliver efficient and reliable performance throughout their operational lifespan.

The nozzles can be easily replaced by users, ensuring that the system maintains consistently high efficiency and operational reliability at all times.



CO2 PVC ELBOWS
GC-153-19-PDS005

CO2 PVC elbows are typically manufactured at 90° or 45° angles, allowing pipelines to be directed in different directions as needed. They facilitate the efficient installation and management of CO2 distribution systems within greenhouses.

These PVC elbows are specifically designed to be compatible with the PVC pipes used in CO2 fertilization systems. This compatibility ensures a leak-proof and secure connection, preventing any leakage or weak points within the system. The use of elbows allows pipelines to be flexibly installed, helping to overcome spatial constraints and ensuring the system operates efficiently and reliably.



CO2 PVC CAP
GC-153-19-PVK001

CO2 PVC caps are designed to seal the ends of PVC pipes used in CO2 fertilization systems. These caps help maintain the integrity of the CO2 distribution system, preventing gas leakage and ensuring the system operates efficiently. They play a crucial role in maintaining the proper functioning of the system, ensuring safe and reliable performance throughout its operational lifespan.



CO2 PVC REDUCTION
GC-153-19-PRD004

CO2 PVC reductions are used in CO2 fertilization systems to connect PVC pipes of different diameters. These reduction fittings are essential for adjusting the pipe size, allowing for smooth and efficient transitions between different sections of the pipeline system. They provide an effective solution for connecting various parts of the system, ensuring optimal performance and seamless CO2 distribution throughout the greenhouse.



CO2 PVC TEE
GC-153-19-PTE001

CO2 PVC tee fittings are used in CO2 fertilization systems to create branch connections in PVC pipelines. They allow for divisions of different diameters at main distribution points, optimizing the distribution of CO2 within the greenhouse. These fittings play a crucial role in delivering CO2 effectively to different zones, ensuring uniform coverage and enhancing plant growth throughout the system.



CO2 NIPPLE ADAPTER

GC-153-19-ADP001

The CO2 nipple adapter is used in greenhouse CO2 fertilization systems. It is a connection component that allows the use of threaded products with various diameters. Designed with threads that meet DIN standards, this adapter ensures the efficient and effective connection of components within the CO2 fertilization system, contributing to the system's optimal performance and reliable operation.



PUMPS

GC-153-19-PMP001

A pump is a machine that typically converts electric energy into hydraulic energy to move liquids using mechanical force. To ensure energy efficiency and operational ergonomics, pumps can be controlled using frequency regulation.

They are widely used in mechanical installations such as heating systems, cooling systems, and high-pressure humidification systems, playing a crucial role in ensuring efficient and reliable fluid movement.



FREQUENCY CONTROL PANELS

GC-153-19-INV001

These panels effectively manage multiple pumps simultaneously. By utilizing load balancing and flow control, they help reduce operational costs. Their advanced control mechanisms minimize energy consumption and extend the system's lifespan.

For more information, visit our website. Green Climate provides high-quality control panels designed to enhance the efficiency of your pump systems, ensuring optimal performance and energy savings.



3-WAY VALVE BODY

GC-153-19-V3Y001

The 3-way valve body is used in outdoor air-compensated heating systems to regulate the flow of fluids through three different pathways. It is made from solid cast material, ensuring durability and long-term performance.

- Maximum operating temperature: 130 °C



2-WAY MOTORIZED VALVE

GC-153-19-2YMV-001

- Type: Motorized butterfly valve, available in Wafer and Lug types.
 - Sizes: DN40, 50, 65, 80, 100, 125, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600
 - Connection: Flanged
 - Pressure Rating: PN 6 / 10 / 16, ps 1600 kPa
 - Fluid Temperature Range: -20...120°C [-4.0...248°F]
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3-WAY VALVE MOTOR

GC-153-19-V3M001

- Torque Options: 10NM, 20NM, 30NM, 40NM
- Voltage Compatibility: Suitable for both 24V and 220V electrical supplies



FLOW METER

GC-153-19-DBM001

A flow meter is a device used to measure the volume or mass of a gas or liquid. Flow meters are essential for monitoring the flow rate and caloric value of water from energy sources such as geothermal systems, gas, liquid, or solid fuel heating systems, as well as solar power plants and wind power plants.

Additionally, these devices are used in mechanical installations to calculate the energy consumption based on the caloric value of the supplied energy, ensuring accurate measurement and efficient energy management.



TITANIUM/STAINLESS PLATE HEAT EXCHANGERS

GC-153-19-HEX001

Our heat exchangers are high-efficiency, gasketed, and plate-type, designed to optimize heat transfer between gases or liquids through channels of varying depths. The plates ensure maximum thermal performance, making them ideal for industrial applications.

With a cost-effective initial investment, our heat exchangers offer an attractive operating cost profile throughout their lifecycle. They are primarily used for the recovery of waste heat from geothermal sources and power plants, ensuring energy efficiency and sustainable operation.



MANUAL PURGE VALVE

GC-153-19-MPURJ003

The manual purge valve is designed to remove air residues from the system, improving heat transfer and optimizing energy consumption.

- Durability: Made from high-quality materials, it offers long-term durability and reliable performance.
- Flexible Installation: Designed to fit various pipe diameters and adapt to different system configurations, ensuring versatile application across different setups.



VACUUM VALVE

GC-153-19-VNTZ001

The vacuum valve balances pressure fluctuations within the system, ensuring a stable operating environment. It automatically discharges excess air or gas from the system.

- Optimized Heat Transfer: Removing air pockets enhances heat transfer and improves energy efficiency.
 - Protection Against Damage: Reduces the risk of damage caused by excess pressure and air accumulation, thereby extending the system's lifespan.
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ELECTRIC STEAM GENERATOR GC-153-19-EBJEN001



The electric steam generator features a compact design, making it ideal for meeting low-pressure steam needs. It is resistant to hard and turbid water, ensuring superior performance even under heavy-duty conditions. Equipped with an automatic operation system and safety features for ease of use and enhanced safety. The standard steam capacity is 57 kg/h. Custom designs are available for larger capacities, with output reaching up to 215 kg/h.

SPIRAL TUBE TYPE STEAM GENERATOR GC-153-19-SBTBJEN002



The spiral tube type steam generator operates with both liquid and gas fuels. Its compact design saves space while providing cost-effective steam production, helping to reduce operating costs. Easy to use, these generators offer fast and efficient steam production with a capacity ranging from 100 kg/h to 3000 kg/h.

COMPACT STEAM GENERATOR GC-153-19-KBJEN001



The compact steam generator is designed to withstand hard and turbid water, ensuring efficient operation under all water conditions. With a focus on ease of use, these generators offer steam capacities ranging from 100 kg/h to 3500 kg/h.

Proper climate control for sustainable success



SAND FILTER
GC-153-19-KMF001

Sand filters are one of the most commonly used filtration types in water treatment processes. They play a crucial role in purifying water, especially in the industrial and greenhouse sectors. These filters purify water by passing it through a layer of sand, effectively removing suspended solids and other foreign particles. In the industrial sector, they are used to clean process water and treat wastewater. In the greenhouse sector, they are preferred for purifying irrigation water. Sand filters are known for their durability and long-lasting performance. Additionally, they offer an easy-to-maintain and cost-effective water treatment solution.



WATER SOFTENING MACHINES
GC-153-19-SYC001

Water softening machines are used in heating systems. These machines condition the water based on analysis results, extending the lifespan of the equipment.



VACUUM BREAKER
GC-153-19-VKK001

The vacuum breaker is a safety valve specially designed for buffer tanks. These valves enhance the safety of buffer tanks by protecting them from positive and negative pressure effects. They also function as overpressure protectors. Vacuum breakers are widely used in the biogas and petrochemical industries.



BLIND PLUG

GC-153-19-KRT001

Blind plugs are available in various material options to suit different types of pipes. These products are designed to securely and effectively seal pipeline systems, providing reliable solutions for all installation needs. Manufactured using high-quality materials, they ensure durability and long-lasting performance.



HOSE ADAPTER WITH WASHER

GC-153-19-PMRP004

Hose adapters with washers are used in greenhouse heating systems to connect distribution pipes to heating pipes via rubber hoses.



GROOVED AND THREADED HOSE ADAPTER

GC-153-19-YDM004

Grooved and threaded hose adapters are used in greenhouse heating systems to connect distribution pipes to heating pipes via rubber hoses.



NOZZLE PIPE (HPFS)

GC-153-19-NZL002

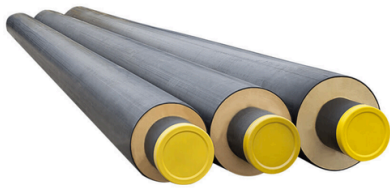
Green Climate offers durable nozzle pipes designed for high-pressure systems within greenhouses. These pipes are long-lasting and efficient. The nozzles ensure even water distribution and effective humidification.



NOZZLE (HPFS)

GC-153-19-NZL001

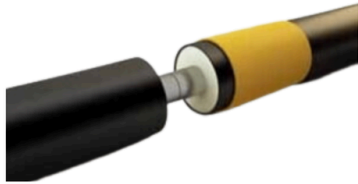
The stainless steel structure of the nozzles ensures long-lasting and durable use. Additionally, the stainless steel material is resistant to the chemical composition of water and offers high corrosion resistance. These features enable the nozzles to operate effectively and reliably in greenhouse environments.



PRE-INSULATED PIPES

GC-153-19- IBR004

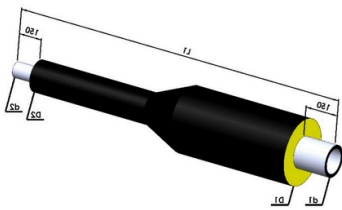
Polyurethane is used as the insulation material. The thermal conductivity is 0.0274 W/(mK) or 0.0275 W/(mK), with a minimum foam density of 60 kg/m³ as per TSE EN 253 standards. PE100 casing pipe is used as the protective sheath (UV-stabilized, black, high-density polyethylene with a density of >940 kg/m³). The pipes comply with TSE EN 253 standards.



PRE-INSULATED JOINT SETS

GC-153-19-ITE008

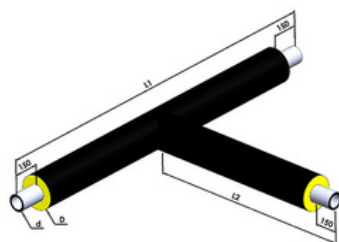
Pre-insulated joint sets are used to complete the insulation at the welding points of fittings and pre-insulated pipes. These sets include a PE pipe casing, Component A and B, and heat tape. They ensure seamless insulation, preventing heat loss and maintaining system efficiency. Their durable design provides long-lasting performance, while the heat tape ensures a secure and tight seal, enhancing the reliability of heating and cooling systems.



PRE-INSULATED REDUCTION

GC-153-19-IRD001

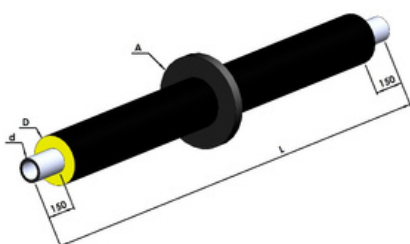
Pre-insulated reductions are specially designed to connect pipes of different diameters. These fittings enhance energy efficiency and minimize heat loss in heating and cooling systems. Commonly used in greenhouse heating systems, they support precise temperature control and energy savings. By optimizing the heating and cooling processes, these products help improve the overall efficiency of greenhouse climate control systems.



PRE-INSULATED TEE

GC-153-19-ITE008

Pre-insulated tees are used for branch connections of pre-insulated pipes. They are manufactured with insulation in various diameters and angles, ensuring efficient and reliable connections for heating and cooling systems.



PRE-INSULATED FIXED SUPPORT

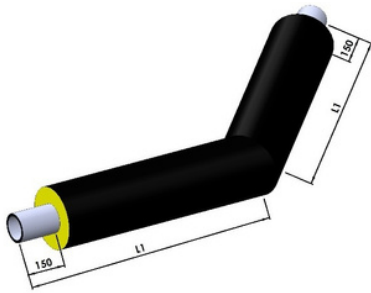
GC-153-19-ISB005

Pre-insulated fixed supports are used for anchoring connections of pre-insulated pipes. They are manufactured with insulation in various diameters and angles, ensuring secure and stable support for heating and cooling systems.



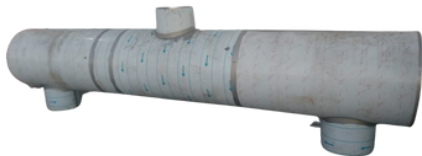
PRE-INSULATED COMPENSATOR GC-153-19-IKM001

Pre-insulated compensators are used in the expansion connections of pre-insulated pipes. They are manufactured with insulation in various diameters to suit different installation needs. Standard production diameters range from DN50 to DN600, with thicknesses varying according to diameters to ensure pressure resistance.



PRE-INSULATED ELBOWS GC-153-19-IDR004

Pre-insulated elbows are used for connecting pre-insulated pipes. They are manufactured with insulation in various diameters and angles to suit different installation needs.



CO2 COLLECTOR GC-153-19-KLK001

The CO2 collector is designed to combine various CO2 sources and distribute them into greenhouse sections with precise control. CO2 collectors maintain their form and characteristics even when exposed to carbon vapor and high temperatures. Each CO2 collector is a "tailor-made" component, customized to meet specific system requirements.



MOTORIZED VALVE FOR CHIMNEY GC-153-19-BKLP001

The chimney damper is a component used to direct exhaust gases from boilers. It is controlled by a damper motor. This element directs chimney exhaust gases to the CO2 fan, facilitating the formation of a mixture with fresh air.



EXHAUST FAN GC-153-19-EGF001

The exhaust fan ensures clean air circulation within the greenhouse. It offers a variety of airflow capacities ranging from 10,000 m³/h to 40,000 m³/h. Our fan blades are available in stainless steel, galvanized steel, and galvanized steel-coated options. The fans are equipped with automatic closing outer blades that activate when the fan stops, enhancing energy efficiency while maximizing safety.

BOILER ROOM PAINTING



Our expert team meticulously addresses the specific requirements and challenges of boiler room painting. Green Climate provides painting services that meet the highest quality standards. Each project is carefully assessed according to our clients' needs, and we develop the most suitable solutions. We apply high-quality materials using professional techniques, aiming to ensure the long-lasting durability and aesthetic appearance of boiler rooms.

"The secret to efficient production: Proper climate control."



DAMPER MOTOR
GC-153-19-DMPR001

A damper motor is an essential component used to control the position of dampers in ventilation, heating, and cooling systems. It regulates airflow by opening or closing the damper, ensuring optimal system performance. These motors are available in various torque options and voltage levels, making them suitable for different industrial and commercial applications. Damper motors are known for their durability, energy efficiency, and precise control capabilities, contributing to both system efficiency and energy savings.



DRAINAGE PUMP
GC-153-19-DRJP001

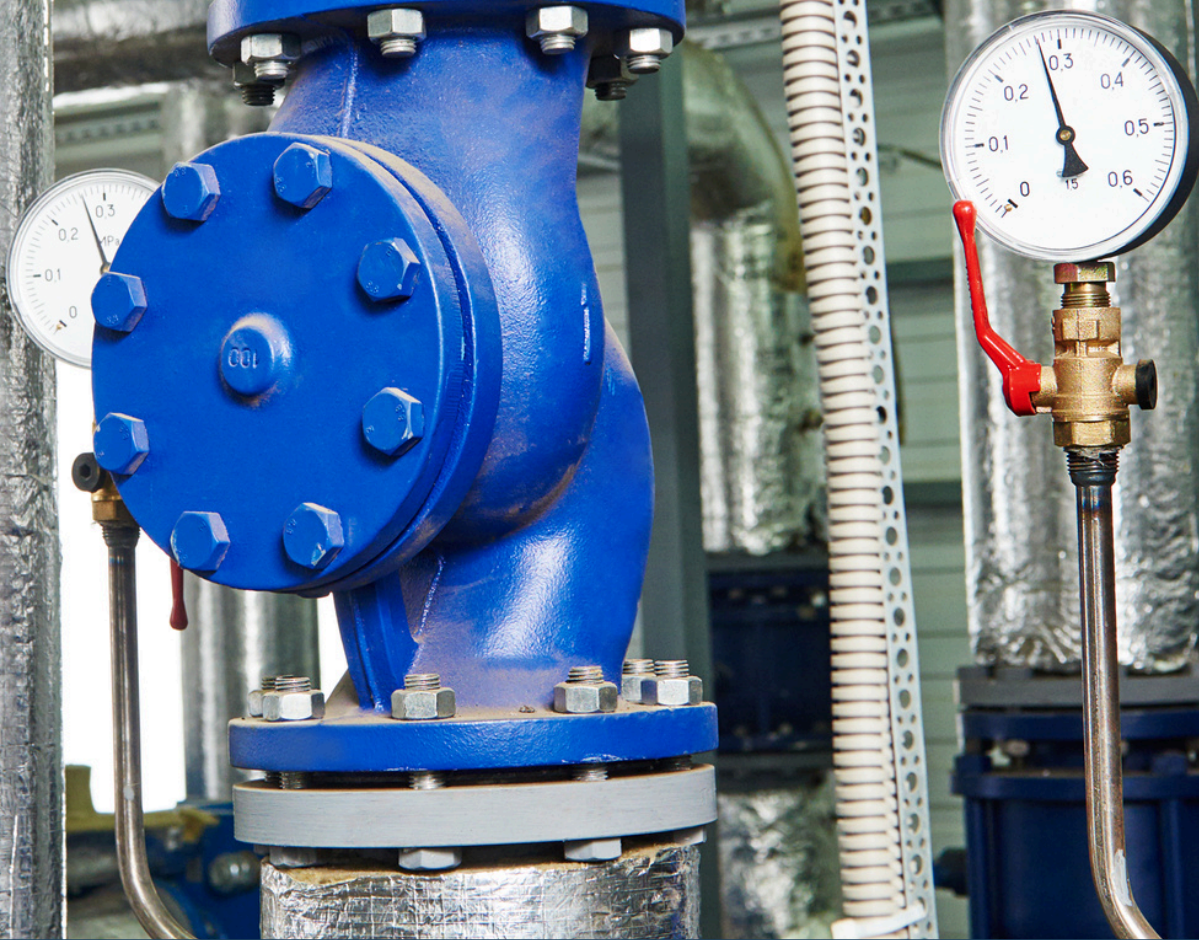
A drainage pump is designed to remove unwanted water from various systems, preventing flooding and ensuring proper operation. It is commonly used in heating systems, basements, and industrial facilities. These pumps are built to handle high volumes of water and operate efficiently under different conditions. They are durable, reliable, and capable of handling both clean and contaminated water.



HYDROFORIZED SYSTEM PUMP
GC-153-19-HDR001

A hydrofor pump is designed to automatically activate when the mains water supply is insufficient. It pressurizes the water in the tank using air and pumps it to distant points. This system ensures a consistent water supply, maintaining stable pressure across various applications. Hydrofor pumps are commonly used in residential, commercial, and industrial settings to meet water demand efficiently and reliably.

BOILER ROOM INSULATION



Boiler room insulation plays a critical role in maintaining energy efficiency and system safety. By minimizing heat loss, it ensures that the heating system operates at maximum efficiency, reducing energy consumption and operational costs. Insulation also helps maintain stable temperatures within the boiler room, preventing condensation and protecting equipment from potential damage. Using high-quality insulation materials such as mineral wool, fiberglass, or rubber-based solutions enhances thermal performance while ensuring long-lasting durability. Proper insulation not only improves system performance but also contributes to a safer and more comfortable working environment.

A perspective view down a long, narrow greenhouse tunnel. The roof is made of translucent plastic panels supported by a metal frame. The walls are covered in brown, textured cooling pads. The floor is covered in gravel. The tunnel leads to a bright light at the far end.

COOLING PAD

The working principle of the Fan-Pad system is based on the increase in air temperature after passing through the wet cooling pad, creating a temperature difference of 7-8°C between the initial air entry side and the pad, facilitated by exhaust fans. When air comes into contact with water, heat transfer occurs between air and water molecules, causing water to evaporate and absorb heat from the air. This system consists of components such as evaporative pads, a water distribution system, specially designed exhaust fans, and a control panel. All pads used are specially manufactured and feature a custom frame system for homogeneous distribution.

WARRANTY & TECHNICAL SUPPORT SERVICES

All our products are covered by a 2-year manufacturer's warranty. The warranty period begins from the date of invoice.



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WARRANTY COVERAGE

- The warranty is valid only if the products are installed in accordance with the user manual and technical documentation.
- Professional installation is mandatory.
- Manufacturing-related defects are repaired free of charge.



INTERNATIONAL STANDARDS

Our products are covered under warranty in accordance with international quality and safety standards, provided that proper installation conditions are met.



TECHNICAL SUPPORT & SERVICE SOLUTIONS

Green Climate provides support to its customers throughout the entire process—from installation to periodic maintenance:

- ✓ Commissioning services
- ✓ Technical consultancy
- ✓ Spare parts supply
- ✓ Post-warranty maintenance

Non-Covered Situations

- Unauthorized installation or intervention
- Improper operating conditions
- Electrical damage or natural disasters
- Physical impact and transport-related damages

Note: For detailed warranty coverage, please contact your customer representative.







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