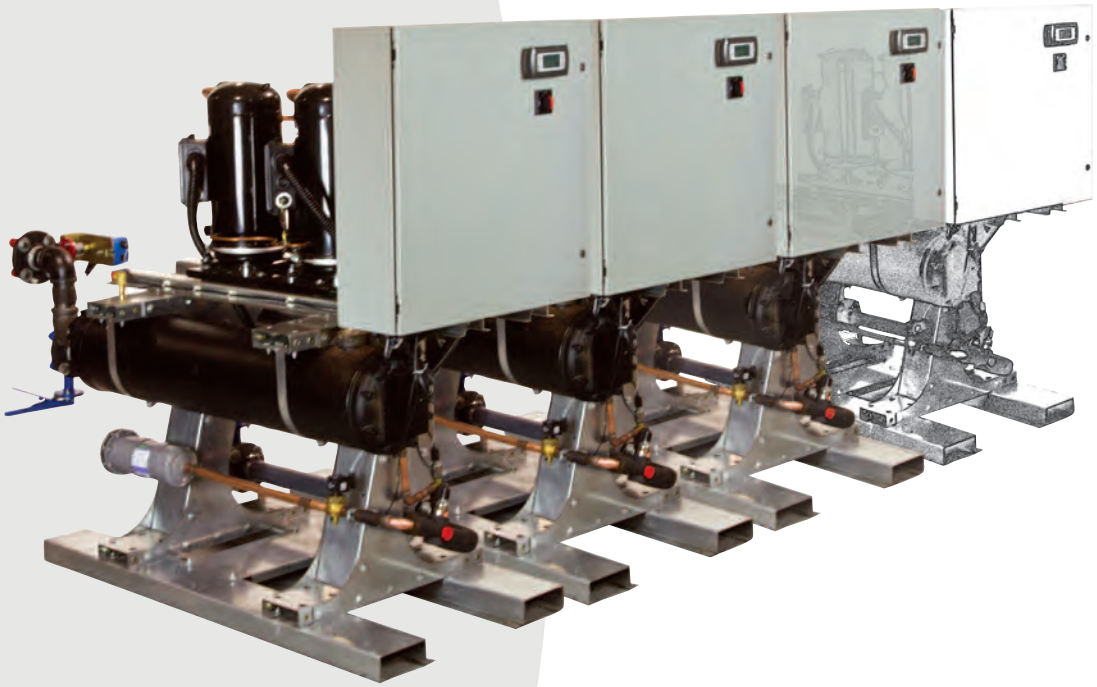
MODULAR TO EXPAND WHEN YOU NEED TO, ENGINEERED TO MEET YOUR NEEDS

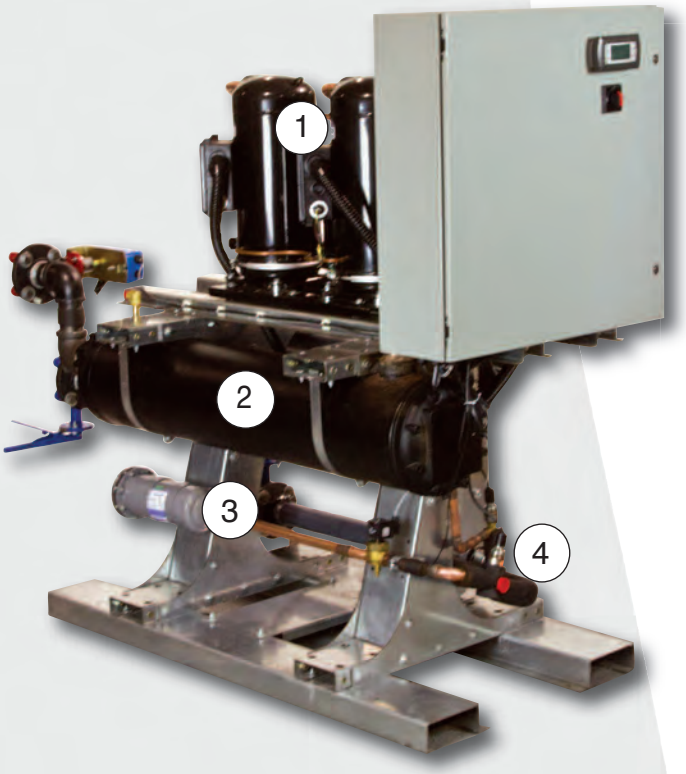
Sterling's GC Series Central Chiller modules offer 70-210 kW (20-60 tons) of refrigeration; available in either water or remote air-cooled models, you can assemble these modules to provide over 1,000 kW (300 tons) on your time. These modules provide a leaving fluid temperature between 20°F to 80°F (-7°C to 30°C) utilizing the environmentally-friendly R410a refrigerant.

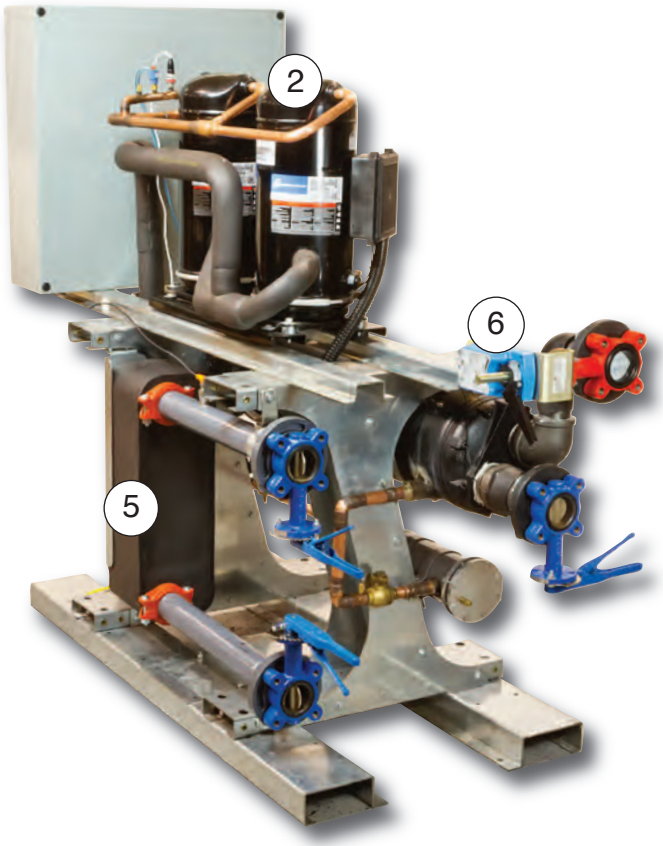
Features

- Tandem scroll compressors
- Stainless steel brazed plate evaporators
- Shell and tube water-cooled condensers or aluminum fine tube remote air-cooled condensers
- Electronic modulating expansion valve
- Non-ferrous process fluid piping



Water-Cooled Module Details





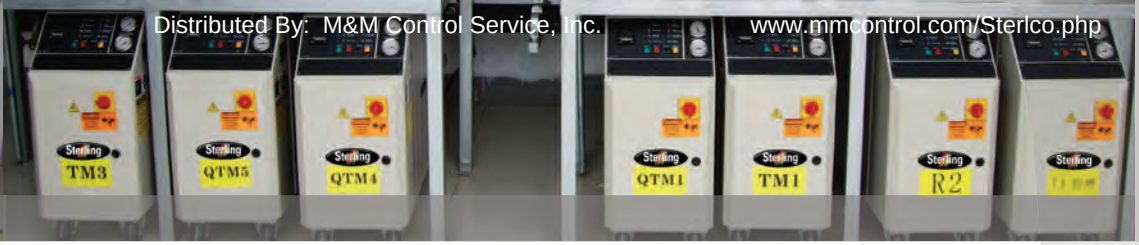
1. Tandem scroll compressors with staging capability
2. Shell and tube water-cooled condenser with accessible tubes for ease of cleaning
3. Replaceable-core filter drier
4. Electronic modulating expansion valve for precise capacity control
5. Stainless steel brazed plate evaporator
6. Electronic modulating condenser water regulating valve

Standard features available on the Water and Remote Air-Cooled models

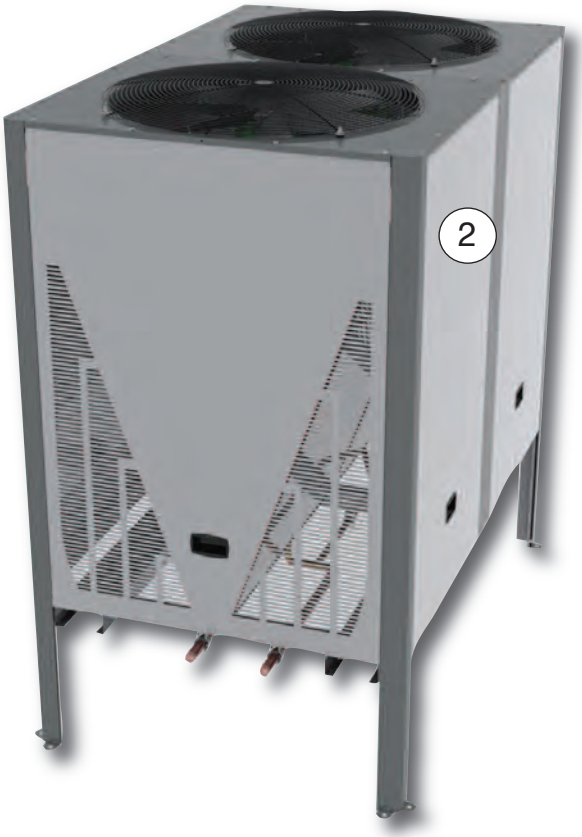
High-pressure safety high pressure transducer

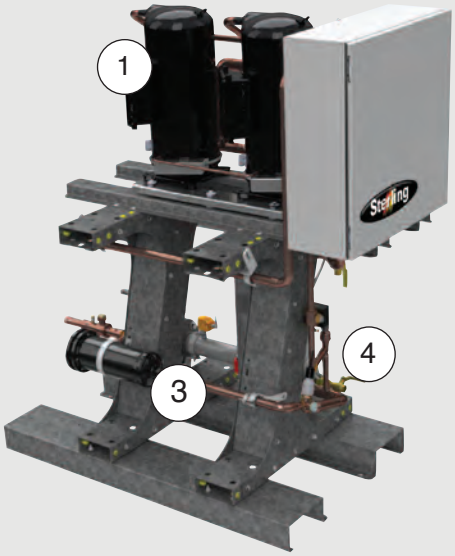
Pressure relief valve

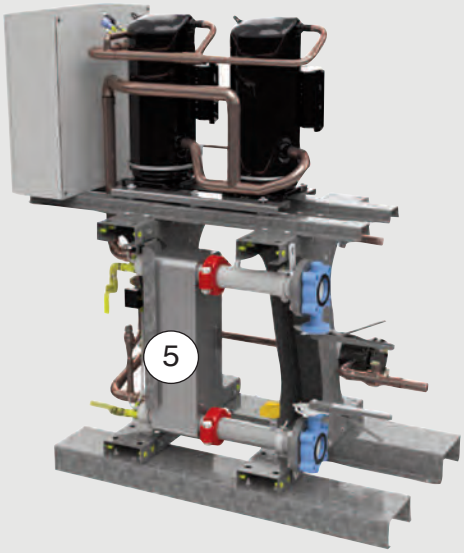
800-876-0036 847-356-0566



Remote Air-Cooled Module Details







1. Tandem scroll compressors with staging capability
2. Aluminum microchannel remote air-cooled condenser with variable speed fan control
3. Replaceable-core filter drier
4. Electronic modulating expansion valve for precise capacity control
5. Stainless steel brazed plate evaporator

Control Details

At the heart of each module is the Carel pCO1 series controller. This controller, in combination with either the Basic or Advanced display, allows for accurate and repeatable control of the entire chiller. When multiple modules are installed, each controller "talks" to each other to make sure that the system is operating at the highest level. Temperatures and pressures, along with the status of each device on each module are monitored and controlled to maintain peak performance of the system.

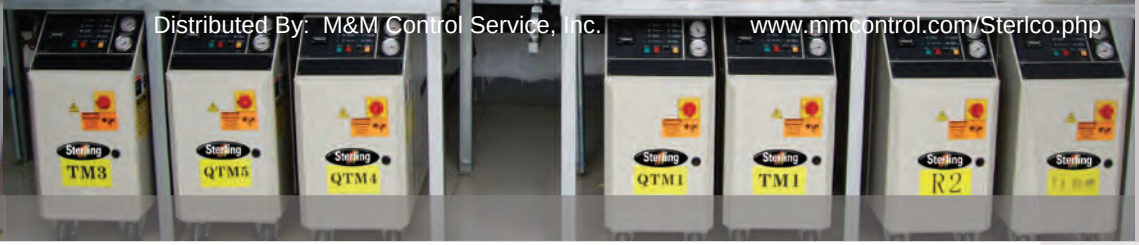
Electrical sub-panel

Main status menu

Circuit 1, analog in

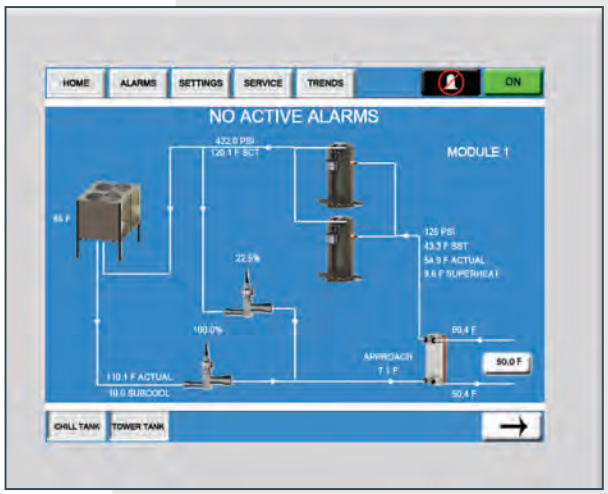
Circuit 1, hour meters

The easy-to-use Basic display, with 8 lines x 22 characters wide, will not only show the main system status in plain language, but will allow for the user to place it anywhere in their system with the magnetic back and extended cable. Press the power button, adjust the setpoint, and let the controller do the rest



GC SERIES

Main status menu



Module operation

Supervisor settings

The 10 inch (245mm) Advanced display takes this system to the next level. Graphical depiction of the entire chiller, as well as the pumping system, allows the user to observe and control any part of the system with a touch of the screen.

GC SERIES

Water-Cooled Modules

Model	Capacity[1]		Amp Draw[2]	Est. Shipping Weight	
	Tons	kW		Lbs.	kgs.
GCWC70	23	80	45	950	432
GCWC90	28	100	58	965	440
GCWC105	34	118	68	1140	518
GCWC140	43	153	91	1605	730
GCWC175	54	191	106	1760	800
GCWC210	71	248	137	2065	940

1 Capacity rated at 60hz and 50°F (10°C) leaving coolant fluid temperature with 85°F (30°C) entering condenser water temperatures. For 50hz multiply by 0.83.
2 Amp draw rated at 460V/3/60. For 380V/3/50-60 multiply by 1.2.

Remote Air-Cooled Modules

Model	Capacity[1]		Amp Draw[2]	Est. Shipping Weight	
	Tons	kW		Lbs.	kgs.
GCRC70	20	70	49	1075	490
GCRC90	25	90	63	1125	512
GCRC105	30	106	75	1210	550
GCRC140	40	140	97	1815	825
GCRC175	49	174	116	2025	920
GCRC210	64	225	151	2375	1080

1 Capacity rated at 60hz and 50°F (10°C) leaving coolant fluid temperature with 95°F (35°C) entering condenser water temperatures. For 50hz multiply by 0.83.
2 Amp draw rated at 460V/3/60. For 380V/3/50-60 multiply by 1.2.

Features

- Modular installation
- Redundancy
- Future expansion
- Front-side service accessibility
- Complete system access through Advanced Display

Benefits

- Ease of installation of new or replacement parts in a small footprint
- Redundancy in a modular sense reduces the risk of the system losing control through losing a single critical component
- Compressor wear is handled through auto-rotation of which the compressor turns on and off based on run-time hours
- Be conservative up front, yet easy to expand to meet future needs
- Reduces time to service a single module. Reduction in time = reduction in service costs
- One location to monitor and control the entire cooling system

Options

Hot gas by-pass

- Allows for better partial load temperature control

Evaporator and water-cooled condenser manifolds

- Ease of installation
- Select right or left facing connections

GC SERIES

Sterling Global Solutions

Process chilling is just one piece of equipment that Sterling can assemble into an entire solution for your global needs. We are a complete solution provider meeting the many needs of our customers. Talk to us about how we can make your cooling system a complete success.

Sterling