

**AEC**Material Handling | **Process Cooling** | Temperature Control | Size Reduction

TRIDENT™ GS SERIES

Central Chiller



Technical Specifications

The Trident™ GS Series Modular Central Chiller integrates advanced technologies with proven component design to offer a capable and innovative process chilling solution, with a leaving fluid temperature range of 30°F to 65°F (-1°C to 18°C).

The state-of-the-art controls provide the operator with intuitive command structures while offering critical unit performance data in understandable dashboard sets. Individual circuit capabilities range from 50 tons to 120 tons of cooling capacity. Each circuit has the ability to parallel with other Trident™ circuits of the same size for maximum system scalability. Drone circuits offer market leading connectivity, as every unit has the same control set. This allows Trident™ to offer the ultimate plug-and-play capability currently available and can even integrate with AEC pump tanks.

COMPACT

- Maximum chilling capacity in space saving package

INNOVATIVE

- Intelligent design, advanced connectivity, virtually effortless maintenance

SCALABLE

- 50 to 120 tons per module
- Parallel up to 5 units

Features

Mechanical Features

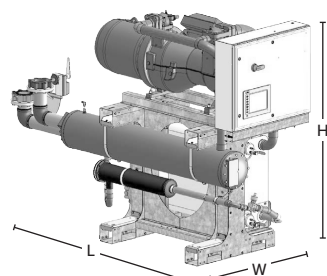
- Semi-hermetic dual screw with crank case heaters and pressure sensors
- Stainless steel, copper brazed plate evaporator
- TS Tech™ tool-less evaporator inlet strainer and evaporator back flush ports and strainer blow down valve
- Remote air-cooled condensers are rated to -20°F (-29°C) ambient and feature aluminum v-coils with washable filters, VFD fan control, and ambient temperature sensors

Electrical Features

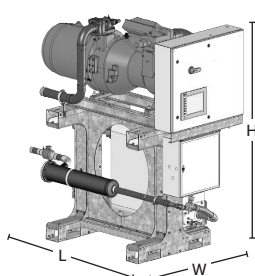
- Non-ferrous construction on chilled water side
- Fully accessible NEMA 12-style electrical control enclosure with non-fused power disconnect
- Single-point power and ground wiring connection per module

Product Diagrams

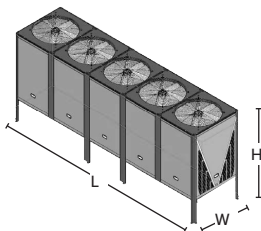
Water-Cooled Circuit



Air-Cooled Circuit



Remote Condenser



Advanced Controller



Each circuit provides real-time sensor data to help gauge system performance.



Convenient graphs of each circuit provide overall performance trends.



Component view shows flow parameters on each circuit, divided by component regions.

Specifications

Water-cooled Circuits

| Water-cooled Circuits | Cooling Capacity @ 50° LFT | Minimum Load | Condenser Water Flow GPM (LPM) | Power MCA | Power MOP | Height inches (CM) | Width inches (CM) | Depth inches (CM) |
|-----------------------|----------------------------|--------------|--------------------------------|-----------|-----------|--------------------|-------------------|-------------------|
| GSWC175 | 51 (179) | 19.9 (70) | 153 (579) | 92 | 165 | 79.0 (201) | 36.0 (92) | 96.4 (245) |
| GSWC210 | 62 (218) | 23.8 (84) | 187 (708) | 101 | 181 | 79.0 (201) | 36.0 (92) | 102.3 (260) |
| GSWC245 | 71 (250) | 28.7 (101) | 213 (806) | 123 | 222 | 79.0 (201) | 36.0 (92) | 103.9 (264) |
| GSWC280 | 81 (285) | 30.8 (108) | 242 (916) | 133 | 239 | 79.0 (201) | 36.0 (92) | 104.0 (265) |
| GSWC350 | 101 (355) | 30.9 (109) | 304 (1151) | 131 | 235 | 79.0 (201) | 36.0 (92) | 111.0 (282) |
| GSWC420 | 125 (440) | 42.2 (148) | 375 (1420) | 183 | 328 | 79.0 (201) | 36.0 (92) | 114.4 (291) |

Air-cooled Circuits

| Air-cooled Circuits | Cooling Capacity @ 50° LFT | Minimum Load | Power MCA | Power MOP | Height inches (CM) | Width inches (CM) | Depth Inches (CM) |
|---------------------|----------------------------|--------------|-----------|-----------|--------------------|-------------------|-------------------|
| GSRC175 | 46 (162) | 13.7 (48) | 122 | 210 | 79.0 (201) | 36.0 (92) | 80.5 (205) |
| GSRC210 | 54 (190) | 15.7 (55) | 138 | 235 | 79.0 (201) | 36.0 (92) | 84.6 (215) |
| GSRC245 | 63 (222) | 18.9 (66) | 121 | 205 | 79.0 (201) | 36.0 (92) | 82.8 (211) |
| GSRC280 | 72 (253) | 21.5 (76) | 145 | 246 | 79.0 (201) | 36.0 (92) | 83.6 (213) |
| GSRC350 | 90 (317) | 25.1 (88) | 171 | 290 | 79.0 (201) | 36.0 (92) | 87.8 (223) |
| GSRC420 | 113 (397) | 34.9 (123) | 225 | 382 | 79.0 (201) | 36.0 (92) | 90.5 (230) |

Remote Condensers

| Remote Condenser | Nominal Capacity Tons (Kw) | Condenser Sections | Total CFM | Height inches (CM) | Width inches (CM) | Depth inches (CM) |
|------------------|----------------------------|--------------------|-----------|--------------------|-------------------|-------------------|
| RC175 | 50 (175) | 3 | 38,061 | 76.0 (193) | 107.8 (274) | 46.7 (119) |
| RC245 | 60 - 70 (210 - 245) | 4 | 50,748 | 76.0 (193) | 142.8 (363) | 46.7 (119) |
| RC280 | 80 (280) | 5 | 63,436 | 76.0 (193) | 177.9 (452) | 46.7 (119) |
| RC350* | 100 (350) | 6* | 76,123 | 76.0 (193) | 107.8 (274) | 134.8 (343) |
| RC420* | 120 (420) | 8* | 101,498 | 76.0 (193) | 142.8 (363) | 134.8 (343) |