



GEA BluGenium Chiller

Ultra-low charge, high efficiency

GEA Omni control panel

- High-definition, 15.6" color display (1,366 × 768 pixel)
- Remote access via GEA OmniLink
- Full data history via GEA OmniHistorian
- Configurable Ethernet communication
- Optional multiple-chiller sequencing

Power panel with infinitely variable capacity

- Capacity control via frequency inverter
- Variable speed range of 500 1,500 rpm for superior part-load efficiency and turn down
- Single-point power connection (460V)

Highly efficient piston compressor

- GEA-designed welded casing with cast iron heads
- Minimum oil carryover eliminates the need for an oil separator
- Industrial bearings with long service life and inherently quiet operation
- Optimized for low-discharge temps
- Extended product life of all moving parts due to inverter operation

Water-cooled condenser

- Fully welded plate heat exchanger
- Utilizes water or glycol
- Low design approach temperatures

Combined evaporator-liquid separator

- Fully welded plate heat exchanger
- Integrated liquid separator for liquid-free suction gas
- Low approach temperatures for reduced energy costs
- Suitable for all common secondary fluids
- Flooded design, safe drain operation
- Simple connections with detachable ASME flanged connections on the fluid side

Industry-leading warranty

• Two year parts; one year labor

Featuring a sleek design and requiring minimal maintenance, the GEA BluGenium ammonia chiller delivers reliable performance and operational advantages.

Having received high accolades from customers in Europe and other global markets, the GEA BluGenium chiller now makes its way to North America.

Key features and benefits

- Minimal maintenance requirements
- Extremely compact equipment size
- Cooling capacity nominal 100 600 TR
- Chilled process fluid outlet temperature range approximately -20° to +64°F
- Ultra-low refrigerant charge
- Seven standard model sizes
- Piston compressor w/variable speed control
- GEA Omni control panel
- Environmentally friendly refrigerant will not be phased out
- Designed for indoor, low-noise operation

Compact and low maintenance

Narrow widths of approximately 55" (depending on model) and the resulting small footprints allow for simple transport, as well as ease of relocation and installation in space-restricted machine rooms.

A key aspect of the BluGenium is its low maintenance requirements. This benefit is the result of the latest industrial piston compressor technology and design features such as the elimination of an oil separator. Units are safe and reliable with all-welded construction of both piping and heat exchangers.

Optional GEA BluGenium remote version is provided (with or without a pilot receiver) that can be connected to an external condenser (air-cooled or evaporative) supplied by the customer.

Technical Data

GEA BluGenium - Maximum sizes and capabilities

| | | Water +55°F/+45°F | | | 20% Propylene Glycol +30°F/+20°F | | | | | | |
|--------------|-------------------------|-------------------|---------------------|------------|----------------------------------|---------------------|------------|------------------------|--------------------|-------------------|-----------------|
| Model No. | Compressor Model No. | Capacity (TR) | Motor Size (HP)* | Line kW/TR | Capacity (TR) | Motor Size (HP)* | Line kW/TR | R-717 Charge (lbs.) | Length (inches) | Width (inches) | Height (inches) |
| BG300 | V300 | 93 | 75 | 0.57 | 49 | 75 | 1.00 | 107 | 181 | 54 | 89 |
| BG450 | V450 | 139 | 125 | 0.56 | 74 | 100 | 0.96 | 148 | 197 | 54 | 89 |
| BG600 | V600 | 237 | 150 | 0.56 | 98 | 150 | 0.96 | 192 | 220 | 54 | 89 |
| BG900 | V700 | 257 | 200 | 0.56 | 156 | 200 | 0.95 | 192 | 220 | 54 | 91 |
| BG1200 | V1100 | 384 | 300 | 0.56 | 209 | 300 | 0.94 | 244 | 236 | 54 | 98 |
| BG1400 | V1400 | 501 | 400 | 0.58 | 276 | 350 | 0.95 | 269 | 307 | 54 | 97 |
| BG1800 | V1800 | 608 | 500 | 0.60 | 340 | 450 | 0.96 | 270 | 343 | 66 | 97 |

 $\label{lem:contact} \mbox{Contact your GEA sales representative for access to RTS elect and a software demonstration.}$

GEA Systems North America LLC

GEA Heating & Refrigeration Technologies 3475 Board Road York, PA 17406

+1 717 767 6411 sales.unitedstates@gea.com sales.canada@gea.com

^{*}Motor HP may change for actual design conditions. Assumes 85°F inlet / 95°F outlet cooling water.