### Packaged Heat Transfer Systems

# **GRUNDFOS ENGINEERED SYSTEMS**

Grundfos Engineered Systems (GES) designs and manufactures packaged units to transfer energy such as water and steam to usable energy for commercial and industrial applications. The GES engineering team designs each unit utilizing the most efficient and cost effective heat exchanger technology for each project need combined with pumps, valves, controls, VFDs and other customer specified equipment. ASME coded pressure vessels, accessories and piping are a standard for every GES packaged system.

## Key Features and Benefits

- Integration of heat exchangers, pumps, controls, control valves and accessories on a common skid base
- Utilization of proper heat transfer technology custom engineered for your needs. Shell and tube, plate and frame or brazed plate heat exchangers as options
- Complete electrical distribution for single-point input power connection.
- Systems may be designed for up to 30 psi steam intake
- Innovative design and intensive engineering effort translate into lower initial cost and lower maintenance costs
- Systems designed for maximum efficiency, reliability, and quieter operation for the end user
- Fixed costs and guaranteed delivery for a major portion of your project
- CU 352 control system for ease of use and integration with your facility
- GES systems are built to be shipped to jobsite, installed quickly, and efficiently for immediate operation. Factory built systems minimize jobsite disruption and various construction delays.
- Pressure testing of all finished piping and components up to 300 psi as needed by project
- Engineered to order design with 3D modeling
- Continuity test of all 480V power wiring for proper phasing and grounding
- Single source of manufacturing and ISO 9001 facility provides quality construction and value-added services



#### **APPLICATIONS**

- HVAC
- Critical cooling
- · Industrial processing
- · District heating and cooling



## GES Packaged Heat Transfer Systems Technical Data

Hydraulic data  Maximum head ft [m] 690 ft [ 210 m]  Flow rate gpm [m3/h] 1 to 32,000 gpm (7268 m^3/h)  Liquid temperature °F [°C] 0° to 200° F [-18° to 93° C]  Maximum operating pressure psi [bar] 300 psi [ 20 bar]  Pump and motor data  Number of pumps as specified	
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Number of numps as specified	
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Motor power hp 1 hp to 600 hp [0.7457 KW-447.42 KW]	
Heat Transfer System types	
Steam to Hot Water system O	
Chilled water System O	
Hot water System O	
Heat Exchanger Data	
Plate and Frame O	
Shell and Tube O	
Temp. range as specified	
Heat Transfer System types	
Hot water and Steam system O	
Chilled water System O	
Hot water System O	
Heat Exchanger Data	
Plate and Frame O	
Shell and Tube O	
Temp. range 0° to 200° F [-18° to 93° C]	
General materials and fittings	
Pipe supports welded to frame	
Decking: 3/16" gage hot rolled	
Channel base frame 4" to 14"	
Piping	
Carbon steel •	
Stainless steel 316/304 O	
Threaded O	
Approvals	
ISO 9001 •	
ETL listed O	
Electrical data	
VFDs •	
Power distribution panel	
Control panel O	
Options	
Standby pumps O	
CIM (Communication Interface Module)	
Air Separator: ASME tangential O	
Expansion Tank: ASME, bladder O	
Pressure reducing valves (PRVs)	
<u>Enclosure</u> O	

• Available as standard

O Available as option or accessory

