

Grundfos Modular Systems for HVAC

DELTA HCU NBS(E)

The Grundfos DELTA HCU NBS(E) are integrated packaged pumping systems that offers an easier, less costly and more efficient alternative to field-built systems in HVAC applications. Pre-piped, pre-wired and pre-tested, this system includes pumps, motors, controls, VFDs and more for easier installation and commissioning, and unrivaled performance.

Using intelligent controls and smaller pumps, the DELTA HCU NBS(E) harnesses the power of parallel pumping for greater flexibility, scalability and efficiency in ever-changing load conditions. This reduces energy consumption by more than 18% compared to other VFD HVAC systems, providing substantial cost savings in the long run.

KEY FEATURES AND BENEFITS

- Every component of the DELTA HCU is Grundfos-made providing a single-source contact for service simplicity
- Modular design provides cost-effective packaged solutions with a smaller footprint than traditional pumping systems
- Grundfos single stage, split-coupled, end-suction pump is the industry standard in performance, quality, and durability
- Advanced permanent magnet motor offers an additional 7–10% energy cost decrease over NEMA Premium motors with conventional VFDs (available up to 15 hp)
- Efficiency based sequencing, CU 352 controller runs multiple pumps by intelligently monitoring power and pressure
- Grundfos proprietary Power Optimal Pump Sequencing learns pump characteristics and runs system efficiently based on pump power characteristics
- SCADA via CIM expansion card that plugs into the CU 352 for easy BMS integration, via a variety of protocols with BACnet as standard, and utilizes single poll functionality that pings device once for over 30 communication points of data and control
- Built-in logging provides easy trouble-shooting and energy analysis
- Secondary (fallback) sensors allow for backup system control
- New Silicon Carbide (SiC) / Silicon Carbide (SiC) hard faced seal's robust design offers increased temperature range, better abrasives handling and longer life versus standard designs (standard on all N-Series pumps)
- One housekeeping pad and no grouting, for easier and more cost-effective installation; fits on existing pads for retrofits

HVAC Applications

- Multizone control regulates up to 6 HVAC zones within a defined differential-pressure band
- Dedicated HVAC control (optional) using Control HVAC that can control up to 26 zones and includes chiller bypass control
- Additional sensors (optional) enable top zone control
- Suction diffuser/ strainer ensures laminar flow into the pumps and filters out debris from the system

Applications

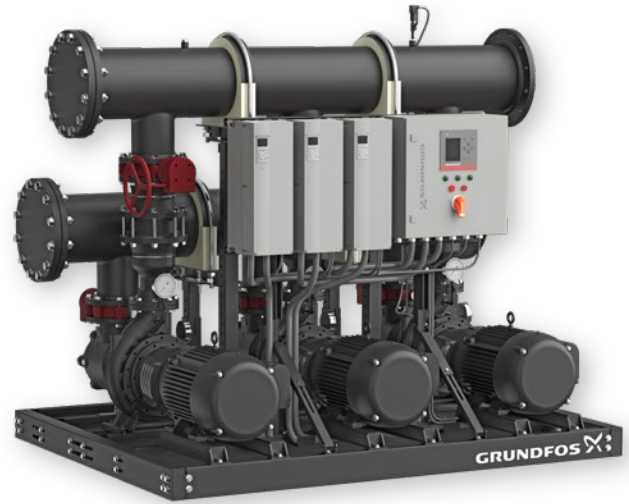
- Hydronic Heating and Cooling Systems
 - Chilled Water
 - Condenser Water
 - Hot Water
 - Distributed Pumping
 - District Energy
- Industrial Process Temperature Control

GRUNDFOS 

Possibility in every drop

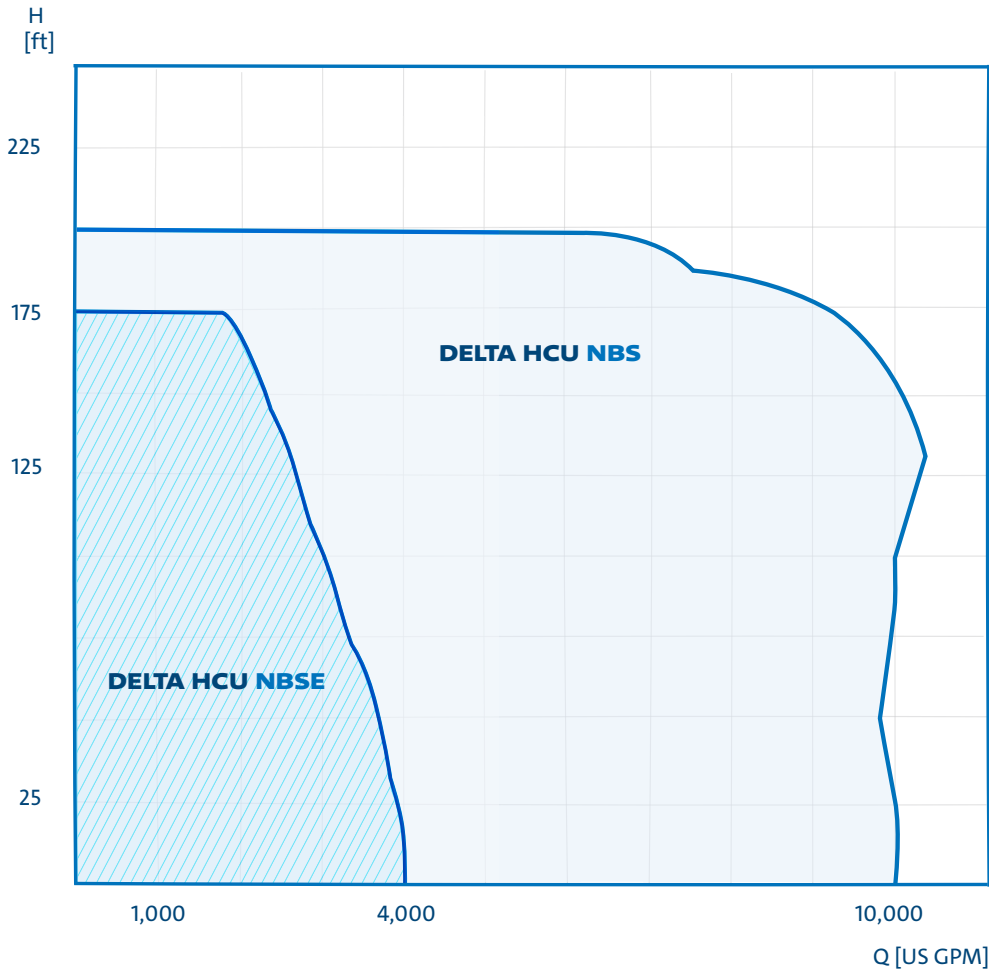
TECHNICAL DATA

DELTA HCU NBS(E)	
FLOW (2-5 PUMP), Q	MAX. 10,000 GPM
HEAD, H	MAX. 200 FT
WORKING PRESSURE	MAX 175 PSI
LIQUID TEMPERATURE	14 °F TO 194 °F (230 °F Optional)
APPROVALS	<ul style="list-style-type: none"> • UL 508A for Industrial Control Panels • UL QZCJ • OSHPD — Seismic Certification*



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PERFORMANCE DATA NBS/NBSE 4-POLE 60Hz



Visit grundfos.us/pei to learn more about Department of Energy (DOE) pump energy index (PEI) requirements and PEI ratings on specific Grundfos models.