

## Modular Pumping Systems for HVAC

# Grundfos DELTA HCU NBS(E)

*The Grundfos DELTA HCU NBS(E) are integrated packaged pumping systems that offer an easier, less costly and more efficient alternative to field-built systems in HVAC applications. Pre-piped, pre-wired and pre-tested, the systems include 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

- DELTA HCU is Grundfos-manufactured, supplying single-source responsibility for installation and service simplicity
- Modular design provides a cost-effective packaged solution with a smaller footprint than traditional pumping systems
- One housekeeping pad and no grouting, for easier and more cost-effective installation; fits on existing pads for retrofits
- Grundfos NBS(E) split-coupled, end-suction pump is the industry standard in performance, quality and durability
- 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)
- 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, delivering unparalleled comfort and maximum efficiency
- 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 troubleshooting and energy analysis
- Secondary (fallback) sensors allow for backup system control

### HVAC Applications

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

### Applications

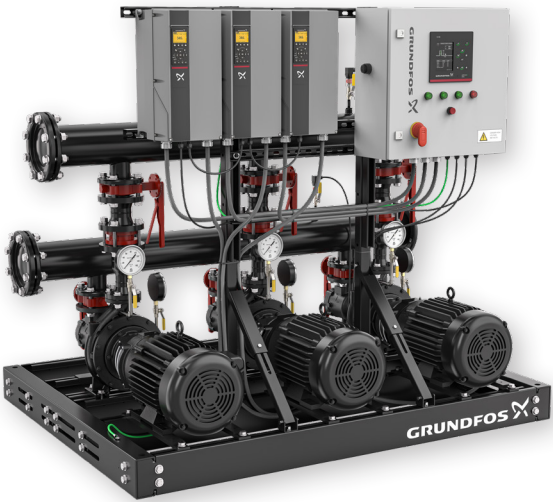
- Hydronic Heating and Cooling Systems
  - Chilled Water
  - Condenser Water
  - Hot Water
  - Distributed Pumping
  - District Energy
- Industrial Process Temperature Control

# GRUNDFOS

Possibility in every drop

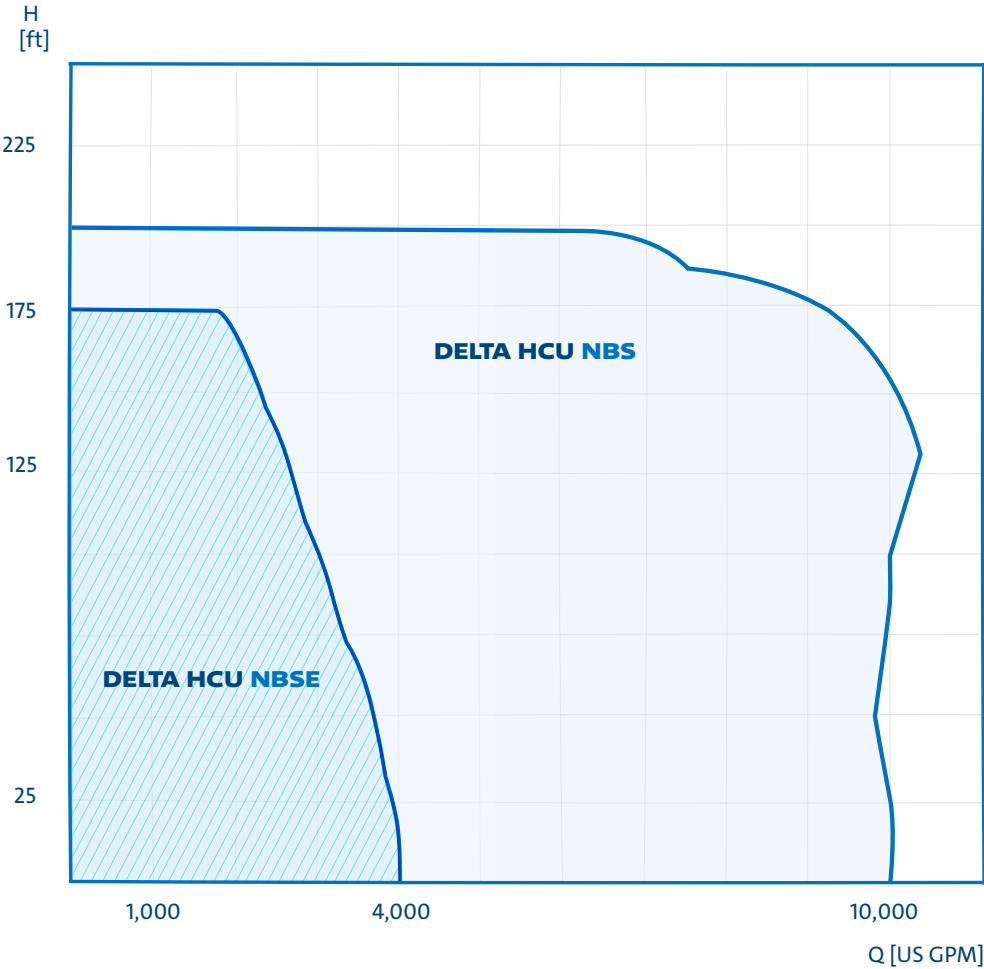
# Technical Data

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"><li>• UL 508A for Industrial Control Panels</li><li>• UL QZCJ</li><li>• OSHPD — Seismic Certification (optional)</li></ul>



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# Performance Data NBS/NBSE 60Hz



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