

# NQ Series Accuchiller Portable Chillers

AIR-COOLED, WATER-COOLED, OR  
REMOTE AIR-COOLED CONDENSER

3 to 60 tons

*For more than forty years, Thermal Care has been manufacturing high-quality portable chillers for a multitude of industries and applications. Every NQ Series Accuchiller Portable Chiller is built using the best available components and latest innovative technology – making us the unmatched choice for all your process cooling needs.*



NQW10

NQA20

NQA05

## Innovative, reliable and efficient

NQ Series Portable Chillers will provide years of dependable service using quality components such as scroll compressors, micro-channel condensers, low noise fans, stainless steel brazed plate evaporators and R410 refrigerant. Plus, units are now available with optional energy-efficient VFD compressors. Sophisticated controllers add to each chiller's performance, reliability and efficiency.

# Innovative, reliable and efficient

## Features

- High efficiency, low noise fans
- Stainless steel brazed plate evaporators with flow and temperature safeties to prevent freezing
- Low voltage 24 VDC control keeps the control circuit signals free from AC interference
- NEMA-12, C-UL 508A industrial control panel with single point electrical connection
- Rotary non-fused disconnect for quick and safe main power disconnect
- Remote 4-20 mA set point input capability for increased application flexibility
- Wetted materials in the process water circuit, including a stainless steel pump, are 100% nonferrous
- Solid state safety switches with electronic sensing devices
- Hot gas bypass provides accurate capacity control and extends compressor life

## Available Options

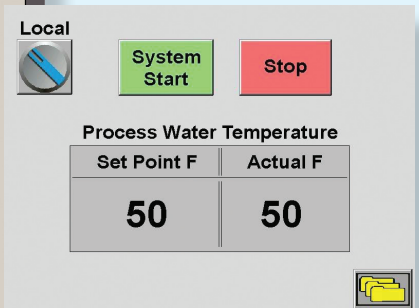
- Outdoor duty construction
- Two pump system with dedicated pumps for process and recirculation
- VFD compressor for energy savings

## Warranty Protection

- 5-year warranty on the standard controller with a lifetime exchange price of \$175
- 3-year warranty on the optional premium controller PLC
- 18-month warranty on parts
- 12-month warranty on labor



Standard controller interface



Premium controller interface

## Choose From 2 Easy-To-Operate Controllers

Our **standard** microprocessor control panel has a large, user-friendly interface, includes 19 operational and diagnostic lights, and comes with a unique 4-plug wiring design that makes it easy to replace the control board in just minutes.

The more advanced, **premium** controller option comes with a Panasonic PLC that features operational and diagnostic screens with a touch screen interface. Both control panel display screens are easy to access, view, and operate without cryptic codes.

## Controller Features

- Set point, process supply and return water temperatures
- Unit alarms easily reset on control panel
- Password protected operational parameters
- Start-to-start anti-cycle timer prevents short-cycling of compressor while minimizing unnecessary off periods
- RTD temperature sensors and full PID temperature control loops provide precise and consistent temperatures within +/- 1°F accuracy
- Temperature readouts easily switched from °F to °C
- Compressor and pump running hours
- Pump test button allows for quick and easy pump rotation check from the main control panel
- Reservoir low level alarm and cut-off safety shuts down if there is not enough water
- Loss of flow alarm
- Supply and return temperature sensor fault alarms

## Controller Options

- Remote control operator panel\*\*
- SPI communication port\*\*
- ModBus RTU communication port\*
- Set point ambient tracking or remote control\*

\*premium controller only \*\*standard controller only



Typical air-cooled unit with tools-free removable doors for easy access to interior components.



**THERMALCARE**

7720 N Lehigh Ave Niles, IL 60714-3491  
847-966-2260 info@thermalcare.com  
www.thermalcare.com

Form 3-221.2