

TWO (2) COMPRESSOR MODEL: 45 kW - 250 kW IN HEATING 40 kW - 225 kW IN COOLING





REVERSIBLE AIR SOURCE HEAT PUMP FOR OUTDOOR INSTALLATION, 45-250 kW HEATING CAPACITY

Outdoor reversible heat pump for the production of chilled or hot water, with hermetic rotary scroll compressors, axial fans and plate heat exchanger.

VERSIONS AND CONFIGURATIONS:

NX-N-G02-U / 152-812P: High-Efficiency Version NX-N-G02-U / D / 152-812P: High-Efficiency Version, with Partial **Condensing Heat Recovery Function**



NX-N Series Air-to-Water heat pumps produce chilled water down to -8 °C, and hot water up to +55 °C. The performance is optimized to ensure proper unit operation in external temperatures as low as -15 °C in heating mode and up to +46 °C in cooling mode.

Available with a desuperheater for partial heat recovery while producing chilled water to satisfy cooling demand.

The NX-N Heat Pumps are optimized for heating performance for the Canadian Climate and are available with a multitude of options and accessories to suit a wide variety of project applications.

The comfort range of NX-N heat pumps are designed with two compressors in a single-circuit configuration for increased efficiency at partial loads, when only one compressor is running.

MINIMIZE YOUR CARBON FOOTPRINT WITHOUT COMPROMISE

ASHRAE 90.1-2019 EFFICIENCY

NX-N models have been optimized for high energyefficiency in both heating and cooling modes. All NX-N models meet ASHRAE 90.1 minimum efficiency requirements when operating in cooling mode, making it the ideal alternative to the conventional chiller. With the added benefit of producing hot water for heating in winter, the NX-N provides a new approach to achieve GHG emission reductions.



CONDENSING COILS

Heat Exchangers are designed to optimize airflow and heat transfer, and feature expanded copper tubes with aluminum fins. Specialized protective coil coatings are available to suit various installation climates, such as industrial or seacoast applications.



MANAGER 3000+ PLANT OPTIMIZER

Manager 3000+ is a plug-and-play plant room controller that can manage up to 8 NX-N units in a central plant and optimizes the overall performance of the system.





EASY INTEGRATION

Maximum flexibility for the hydronic system thanks to the proprietary logic that ensures close control of heating and cooling set points. The NX-N series can easily be integrated with a supplemental or auxiliary boiler, as required.



ELECTRONIC EXPANSION VALVE

The electronic expansion valve is standard on the NX-N series, and ensures a guick response to changes in heating or cooling loads, as well as changes in outdoor ambient conditions throughout the day.



EXTENDED WARRANTY

All of our products are backed by a 5 year parts and compressor extended warranty. For more information, visit www.Climaventa.ca or contact your local distributor.





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ACCESSORIES

- ▶ Auxiliary 4-20mA input signal for BMS Operation
- ▶ Serial Cards available for the most common Building Automation System Protocols for quick and simple system integration: Modbus, BACnet MS/TP RS485, BACnet/IP, Echelon Lonworks and Mitsubishi M-NET
- ▶ Soft Starters available for reduced inrush current
- ▶ Phase-Loss Protection
- ▶ A wide variety of additional mechanical and electrical options and accessories are available. Contact Mitsubishi Electric with your specific project requirements

ELECTRONIC CONTROLS

A standalone proprietary control system developed and perfected by Climaveneta maximizes energy efficiency while maintaining occupant comfort, and comes standard on every Climaveneta Heat Pump. The controls are based on the proprietary QuickMind algorithm that includes self-adaptive control logic, and is beneficial on smaller hydronic systems in order to prevent short-cycling of the heat pump. Standard Proportional or Proportional-Integral control algorithms are also available.

The W3000+ Controller offers advanced functions and algorithms to ensure perfect operation of the heat pump regardless of changes in the system or weather conditions. The controller features an LCD display with a keypad and an easy to use, multi-level menu interface, which allows the operator to quickly and easily make adjustments to the set points, view alarm history and to troubleshoot system issues. The controller includes an internal time clock and 7-day schedule to provide an easily configurable solution when the unit is not connected to a Building Automation System.





The proprietary defrost control strategy included in the W3000+ controller monitors several operational parameters to reduce the frequency and duration of defrost cycles, to ensure optimal heat pump performance and the best Energy Efficiency in colder climates.

- ▶ Reduced frequency of defrost cycles; reduced cycle duration
- ▶ Minimal impact on leaving water temperature
- ▶ Reduced energy consumption during defrost cycle
- ▶ Increase of COP



compared to units with traditional defrost cycles.











