

air conditioning

## NRL - NRLH MultiScroll Technology

+ SAVING

+ COMFORT

+ WELL-BEING





# -35%

IS THE ANNUAL SAVING OF ELECTRICITY COMPARED TO TRADITIONAL R407C SERIES.

-6dB(A)

IS THE AVERAGE NOISE LEVEL REDUCTION OF THE EXTRA SILENT MODELS IN RELATION TO THE STANDARD MODELS.

-35%

IS THE REDUCTION OF CARBON
DIOXIDE EMISSIONS RESPONSIBLE FOR
THE GREENHOUSE EFFECT.

### SAVINGS ON BILLS Thanks to

Thanks to
Multiscroll
Technology the

NRL - NRLH chillers and heat pumps can achieve substantial savings in electricity bills, both for summer air conditioning and for heating purposes, as well as for domestic hot water production.

These savings can reach

These savings can reach 35% a year compared to traditional R407C machines. That is to say that for every 100 USD spent on electricity, the new series will save you about 35 USD.

#### **QUIET NIGHTS**

The NRL - NRLH series Multiscroll Technology was

designed with particular emphasis on quiet operation, thanks to the choice of components with the highest acoustic quality and the continuous monitoring of the machines being developed within the Aermec Research and Development Department. The NRL-NRLH Multiscroll Technology series features the extra Silent version, which achieves extra low sound levels (up to 8 db(A) less than the standard version). The accuracy of

acoustic data reported by Aermec is guaranteed by the european body of certification Eurovent.

#### MAXIMUM VERSATILITY

The NRL-NRLH series Multiscroll

Technology is available in over 12900 different configurations. One of the available configurations for example is with electronic expansion valve which allows a more efficient operation and a wider range of applications. Inverter fans are also available, for a quick and precise adjustment of the fan speeds resulting in low noise and savings. The heat recovery systems (partial or total) allow to recover free domestic hot water in large quantities, thus further raising the overall performance of the system. The versions with pumps and/or water tanks make the units really plug-and-play. Of great energy interest is the free Cooling version that produces chilled water free of charge, using the ambient cold air. The free Cooling machines are also available in the Glycol free configuration.

allow to choose the machine most suited for the specific system requirements.

### LESS WEIGHT AND SIZE

The use of R410A refrigerant with higher specific efficiency and the optimisation of the hydraulic and refrigerant circuit layouts, makes the NRL-NRLH Multiscroll Technology series lighter and less bulky than the traditional R407C series.

### RESPECT FOR THE ENVIRONMENT

The NRL-NRLH series is

environmentally friendly thanks to the increased energy efficiency and the use of R410A refrigerant, which is harmless to the ozone layer: R410A is a refrigerant with high thermodynamic efficiency that allows, together with the use of Multiscroll Technology, to reduce Co2 emissions. By adding up the savings obtained in air conditioning in summer, heating in winter and the production of domestic hot water, Co2 emissions are reduced by 35% compared to traditional R407C heat pumps.

A wide range of accessories

## +35%

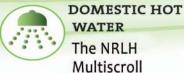
+100%

-25%

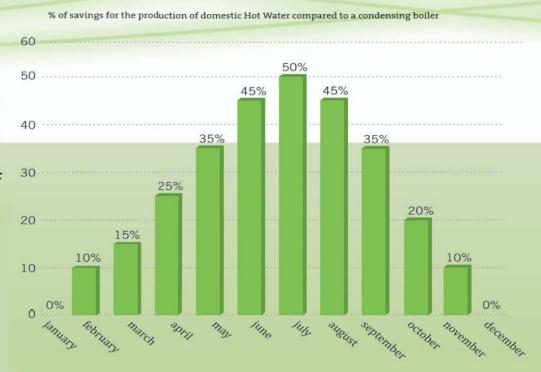
IS THE INCREASE OF THE SEASONAL ENERGY EFFICIENCY ESEER COMPARED TO TRADITIONAL R407C CHILLERS.

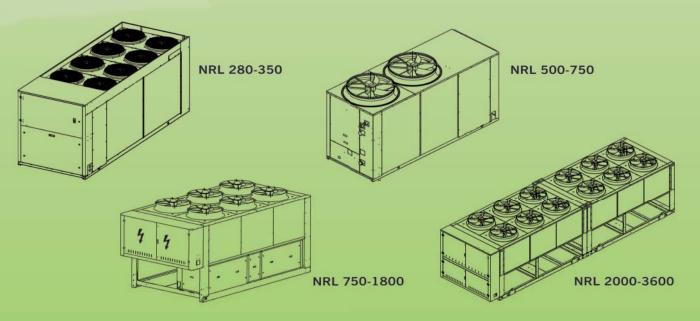
IS THE INCREASED RELIABILITY OF DUAL COOLING CIRCUIT SYSTEMS IN RELATION TO SYSTEMS WITH MONO-CIRCUITS

IS THE AVERAGE ANNUAL COST SAVING FOR THE PRODUCTION OF DOMESTIC HOT WATER IN RELATION TO A CONDENSING BOILER.



Technology heat pumps can produce hot water with outside temperatures down to 5°F. The outlet water temperature can reach 131°F even in the summer (up to 108°F ambient). This allows the use of NRL-H multiscroll Technology for the production of domestic hot water and swimming pool heating all year round.





The technical data in the present literature is not binding. Aermec reserves the right to make all the modifications considered necessary to improve the product at any time.

# Multiscroll Technology Chillers and Heat Pumps Series MULTISCROLL tecnology NRL - NRLH with R410A

### Green Comfort, Reliability and Savings

· High energy efficiency, especially at partial loads thanks to the ecological refrigerant R410A and MultiScroll Technology;



- Maximum reliability thanks to the MultiCircuit system;
- Unmatched versatility: over 12900 configurations;
- Free-Cooling and Free Heating options for maximum overall energy efficiency;
- Production of Domestic Hot Water all year round;
- Performance guaranteed by Eurovent certification for the entire range.



IS THE ANNUAL POWER SAVING COMPARED TO TRADITIONAL R407C SERIES.

POWER CONSUMPTION OF THE TRADITIONAL R407C SCROLL CHILLERS-HEAT PUMPS



POWER CONSUMPTION OF THE NEW NRL/NRLH WITH R410A MULTISCROLL TECHNOLOGY





IS THE REDUCTION OF CARBON DIOXIDE EMISSIONS RESPONSIBLE FOR THE GREENHOUSE EFFECT.





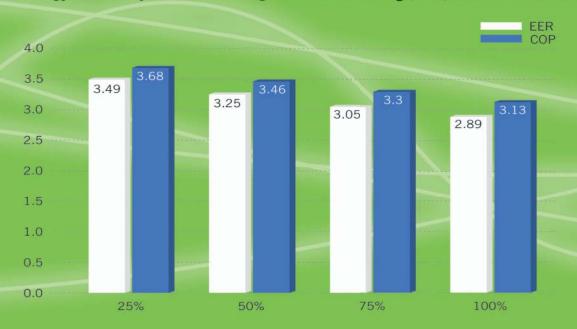








Energy efficiency ratio in cooling (EER) and heating (COP) in relation to the load variation



The Multiscroll Technology is the ideal choice for all commercial and industrial applications where the system is expected to operate at partial loads. In fact, with NRL/NRLH chillers and heat pumps, greater energy efficiencies are gradually obtained as the heating/cooling loads of the building being cooled/heated decrease.

