

NRB 0800-3000

Air-water chiller

Cooling capacity 57.77 ÷ 240.8 ton



- Microchannel coil
- Night mode
- Operation up to 122.0 °F outdoor air



DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.

They are outdoor units with axial fan scroll compressors, microchannel batteries and plate exchangers.

In the unit with desuperheater, it is also possible to produce free-hot water. The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

- A** High efficiency
- E** Silenced high efficiency
- N** Silenced very high efficiency
- U** Very high efficiency

FEATURES

Operating field

Operation at full load is guaranteed up to an outside air temperature of 122.0 °F. The unit can produce chilled water at a negative temperature (up to 14.0 °F of produced water in some versions).

Dual-circuit unit

Unit with 2 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Aluminum microchannel coils

The microchannel condensing aluminum coils ensure high levels of efficiency, reduced quantities of refrigerant and lower unit weight. The treatment "O" available as configurator it ensures high resistance to corrosion even in the most aggressive environments.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

It is standard in all sizes from 2000 to 3000.

Integrated hydronic kit

The optional integrated hydronic unit contains the main hydraulic components; it is available in various configurations with one or two pumps and

an inertial storage tank to also provide a solution that provides economic savings and that facilitates the final installation.

CONTROL PC⁵

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

- Possibility to control two units in a Master-Slave configuration
- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- **Floating HP control:** available for all models with inverter fans. Together with continuous fan modulation, it optimises unit operation in any working point, enhancing energy efficiency with partial loads.
- **Night Mode:** this mode offers a quiet operation profile. It's ideal for use during the night for example, as it guarantees less noise whilst still offering optimum efficiency with the highest loads. **For the Night Mode, in non-silenced versions, the inverter fan "J" (standard in the silenced versions) is mandatory.**

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

FL: Flow switch.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

GP_: Anti-intrusion grid kit

ACCESSORIES COMPATIBILITY

| Model | Ver | 0800 | 0900 | 1000 | 1100 | 1200 | 1400 | 1600 | 1800 | 2000 | 2200 | 2400 | 2600 | 2800 | 3000 |
|------------------|---------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| AER485P1 | A,E,N,U | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| AERNET | A,E,N,U | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| FL | A,E,N,U | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| MULTICHILLER_EVO | A,E,N,U | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| PGD1 | A,E,N,U | . | . | . | . | . | . | . | . | . | . | . | . | . | . |

Antivibration

| Ver | 0800 | 0900 | 1000 | 1100 | 1200 | 1400 | 1600 | 1800 | 2000 | 2200 | 2400 | 2600 | 2800 | 3000 |
|------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Integrated hydronic kit: 00 | | | | | | | | | | | | | | |
| A | AVX1099 | AVX1099 | AVX1080 | AVX1080 | AVX1080 | AVX1080 | AVX1081 | AVX1081 | AVX1083 | AVX1100 | AVX1089 | AVX1087 | AVX1087 | AVX1087 |
| E,U | AVX1080 | AVX1080 | AVX1080 | AVX1081 | AVX1081 | AVX1081 | AVX1083 | AVX1084 | AVX1084 | AVX1087 | AVX1087 | AVX1091 | AVX1091 | AVX1092 |
| N | AVX1081 | AVX1081 | AVX1081 | AVX1083 | AVX1083 | AVX1083 | AVX1084 | AVX1085 | AVX1085 | AVX1101 | AVX1090 | AVX1092 | AVX1092 | AVX1093 |

230V and 208V power supplies: Available only with fans J for sizes from 0800 to 1200.

Device for peak current reduction

| Ver | 0800 | 0900 | 1000 | 1100 | 1200 | 1400 | 1600 | 1800 | 2000 | 2200 | 2400 | 2600 | 2800 | 3000 |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| A,E,N,U | DRE (1) |

(1) Contact the factory

A grey background indicates the accessory must be assembled in the factory

Power factor correction

| Ver | 0800 | 0900 | 1000 | 1100 | 1200 | 1400 | 1600 | 1800 | 2000 | 2200 | 2400 | 2600 | 2800 | 3000 |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| A,E,N,U | RIF (1) |

(1) Contact the factory

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

| Ver | 0800 | 0900 | 1000 | 1100 | 1200 | 1400 | 1600 | 1800 | 2000 | 2200 | 2400 | 2600 | 2800 | 3000 |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|
| A | GP2VN | GP2VN | GP3VN | GP3VN | GP3VN | GP3VN | GP4VN | GP4VN | GP5VN | GP5VN | GP6V | GP7V | GP7V | GP7V |
| E,U | GP3VN | GP3VN | GP3VN | GP4VN | GP4VN | GP4VN | GP5VN | GP6V | GP6V | GP7V | GP7V | GP8V | GP8V | GP9VN |
| N | GP4VN | GP4VN | GP4VN | GP5VN | GP5VN | GP5VN | GP6V | GP7V | GP7V | GP8V | GP8V | GP9VN | GP9VN | GP10V |

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

| Field | Description |
|---------|--|
| 1,2,3 | NRB |
| | Size |
| 4,5,6,7 | 0800, 0900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2200, 2400, 2600, 2800, 3000 |
| 8 | Operating field |
| | ◦ Standard mechanic thermostatic valve (1) |
| X | Electronic thermostatic expansion valve (2) |
| Y | Low temperature mechanic thermostatic valve (3) |
| Z | Low temperature electronic thermostatic valve (3) |
| 9 | Model |
| | ◦ Cooling only |
| 10 | Heat recovery |
| | ◦ Without heat recovery |
| D | With desuperheater (4) |
| T | With total recovery (5) |
| 11 | Version |
| A | High efficiency |
| E | Silenced high efficiency |
| N | Silenced very high efficiency |
| U | Very high efficiency |
| 12 | Coils |
| | ◦ Aluminium microchannel |
| O | Coated aluminium microchannel |
| R | Copper-copper |
| S | Tinned copper |
| 13 | Fans |
| | ◦ Standard (6) |
| J | Inverter |
| 14 | Power supply |
| 6 | 230V ±10% ~3 / 60Hz with thermomagnetic switches (7) |
| 7 | 460V ±10% ~3 / 60Hz with thermomagnetic switches |
| 8 | 575V ±10% ~3 / 60Hz with thermomagnetic switches |
| 9 | 208V ±10% ~3 / 60Hz with thermomagnetic switches (7) |
| 15,16 | Integrated hydronic kit |
| 00 | Without hydronic kit |
| | Kit with n° 1 pump |
| PA | Pump A (8) |
| PB | Pump B (8) |
| PC | Pump C (8) |
| PD | Pump D (8) |
| PE | Pump E (8) |
| PF | Pump F (8) |
| PG | Pump G (8) |
| PH | Pump H (8) |

| Field | Description |
|-------|--|
| PI | Pump I (8) |
| PJ | Pump J (8) |
| | Pump n° 1 pump + stand-by pump |
| DA | Pump A + stand-by pump (8) |
| DB | Pump B + stand-by pump (8) |
| DC | Pump C + stand-by pump (8) |
| DD | Pump D + stand-by pump (8) |
| DE | Pump E + stand-by pump (8) |
| DF | Pump F + stand-by pump (8) |
| DG | Pump G + stand-by pump (8) |
| DH | Pump H + stand-by pump (8) |
| DI | Pump I + stand-by pump (8) |
| DJ | Pump J + stand-by pump (8) |
| | Kit with storage tank and n° 1 pump |
| AA | Storage tank and pump A (8) |
| AB | Storage tank and pump B (8) |
| AC | Storage tank and pump C (8) |
| AD | Storage tank and pump D (8) |
| AE | Storage tank and pump E (8) |
| AF | Storage tank and pump F (8) |
| AG | Storage tank and pump G (8) |
| AH | Storage tank and pump H (8) |
| AI | Storage tank and pump I (8) |
| AJ | Storage tank and pump J (8) |
| | Kit with storage tank and n° 1 pump + stand-by pump |
| BA | Storage tank with pump A + stand-by pump (8) |
| BB | Storage tank with pump B + stand-by pump (8) |
| BC | Storage tank with pump C + stand-by pump (8) |
| BD | Storage tank with pump D + stand-by pump (8) |
| BE | Storage tank with pump E + stand-by pump (8) |
| BF | Storage tank with pump F + stand-by pump (8) |
| BG | Storage tank with pump G + stand-by pump (8) |
| BH | Storage tank with pump H + stand-by pump (8) |
| BI | Storage tank with pump I + stand-by pump (8) |
| BJ | Storage tank with pump J + stand-by pump (8) |

(1) Water produced up to 39.2 °F.

(2) Processed water temperature up to 39.2°F. The standard electronic expansion valve with a size from 2000 to 3000.

(3) Processed water temperature from 39.2 °F to 14.0 °F

(4) During operation, a water temperature no lower than 95° F must always be guaranteed on the heat exchanger inlet. The option is not compatible with application Y, Z and the "in" fan.

(5) The option is not compatible with application Y and Z and with the hydronic kit with storage tank A* and B*.

(6) Not available for silenced versions.

(7) Available only with fans J for sizes from 0800 to 1200.

(8) For the availability of the pumps in the different configurations, refer to the Magellano selection program or the technical documentation.

PERFORMANCE SPECIFICATIONS

| Size | | 0800 | 0900 | 1000 | 1100 | 1200 | 1400 | 1600 | 1800 | 2000 | 2200 | 2400 | 2600 | 2800 | 3000 |
|-----------------------------|-----|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Fans: ° | | | | | | | | | | | | | | | |
| Cooling capacity | A | ton | 58.80 | 66.44 | 77.70 | 87.01 | 95.12 | 107.7 | 124.3 | 138.5 | 155.7 | 169.6 | 186.9 | 205.7 | 218.5 |
| | E,N | ton | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | U | ton | 61.94 | 69.82 | 78.59 | 89.78 | 99.18 | 112.1 | 129.3 | 145.7 | 161.0 | 178.7 | 192.3 | 208.9 | 222.2 |
| Input power | A | kW | 64.83 | 75.79 | 84.44 | 95.90 | 107.6 | 125.7 | 139.7 | 160.3 | 177.5 | 195.7 | 209.7 | 228.0 | 247.5 |
| | E,N | kW | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | U | kW | 65.29 | 74.86 | 84.64 | 96.07 | 106.9 | 123.0 | 139.1 | 158.0 | 176.9 | 193.3 | 208.8 | 227.4 | 246.2 |
| Cooling total input current | A | A | 96.0 | 107.0 | 110.0 | 126.0 | 143.0 | 168.0 | 184.0 | 212.0 | 232.0 | 258.0 | 275.0 | 297.0 | 324.0 |
| | E,N | A | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | U | A | 93.0 | 102.0 | 110.0 | 123.0 | 138.0 | 160.0 | 179.0 | 201.0 | 227.0 | 247.0 | 270.0 | 292.0 | 318.0 |
| EER | A | BTU/(Wh) | 10.88 | 10.52 | 11.04 | 10.89 | 10.61 | 10.28 | 10.68 | 10.37 | 10.53 | 10.40 | 10.70 | 10.83 | 10.60 |
| | E,N | BTU/(Wh) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | U | BTU/(Wh) | 11.38 | 11.19 | 11.14 | 11.21 | 11.13 | 10.93 | 11.16 | 11.06 | 10.92 | 11.09 | 11.06 | 11.02 | 10.83 |
| IPLV | A | BTU/(Wh) | 14.81 | 14.30 | 15.01 | 14.81 | 14.43 | 14.06 | 14.50 | 14.09 | 14.43 | 14.09 | 14.13 | 14.26 | 14.23 |
| | E,N | BTU/(Wh) | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | U | BTU/(Wh) | 15.49 | 15.22 | 15.15 | 15.25 | 15.15 | 14.88 | 15.15 | 15.05 | 15.25 | 15.15 | 14.81 | 14.77 | 14.81 |
| Water flow rate system side | A | gpm | 140.7 | 159.0 | 185.9 | 208.2 | 227.6 | 257.6 | 297.4 | 331.5 | 372.4 | 405.8 | 447.1 | 492.0 | 522.8 |
| | E,N | gpm | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | U | gpm | 148.2 | 167.0 | 188.0 | 214.8 | 237.3 | 268.1 | 309.4 | 348.6 | 385.1 | 427.4 | 460.1 | 499.7 | 531.7 |
| Pressure drop system side | A | f _H O | 11.4 | 12.0 | 16.7 | 17.7 | 16.7 | 18.4 | 10.4 | 9.7 | 12.0 | 12.7 | 16.1 | 10.0 | 11.0 |
| | E,N | f _H O | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | U | f _H O | 10.4 | 13.4 | 14.4 | 18.7 | 16.1 | 20.4 | 8.7 | 11.0 | 11.4 | 9.0 | 10.4 | 10.4 | 11.7 |

(1) Reference conditions: AHRI std 550/590 I-P; Service side water 54.01°F / 44.01°F; Outside air 95°F

| Size | | 0800 | 0900 | 1000 | 1100 | 1200 | 1400 | 1600 | 1800 | 2000 | 2200 | 2400 | 2600 | 2800 | 3000 |
|-----------------------------|---|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Fans: J | | | | | | | | | | | | | | | |
| Cooling capacity | A | ton | 57.77 | 65.30 | 76.33 | 85.49 | 93.47 | 108.3 | 122.2 | 138.2 | 156.8 | 166.1 | 179.5 | 197.5 | 209.9 |
| | E | ton | 58.14 | 65.19 | 72.97 | 83.99 | 92.41 | 103.7 | 120.3 | 136.0 | 149.4 | 162.4 | 174.3 | 189.8 | 201.2 |
| | N | ton | 59.82 | 67.43 | 75.87 | 86.16 | 95.12 | 107.4 | 123.4 | 138.7 | 152.9 | 165.5 | 178.0 | 193.1 | 205.0 |
| | U | ton | 60.83 | 68.58 | 77.20 | 88.18 | 97.41 | 110.1 | 127.0 | 143.1 | 158.1 | 171.5 | 184.7 | 200.5 | 213.4 |
| Input power | A | kW | 65.08 | 75.98 | 84.87 | 96.29 | 108.0 | 125.9 | 140.2 | 160.7 | 178.0 | 196.1 | 210.4 | 228.9 | 248.3 |
| | E | kW | 60.15 | 70.81 | 81.73 | 89.99 | 102.3 | 120.8 | 134.2 | 150.3 | 171.2 | 185.7 | 203.9 | 219.5 | 240.6 |
| | N | kW | 58.73 | 68.47 | 78.43 | 87.85 | 99.16 | 116.0 | 130.4 | 147.2 | 167.1 | 181.9 | 198.9 | 215.3 | 235.5 |
| | U | kW | 65.80 | 75.33 | 85.09 | 96.72 | 107.5 | 123.5 | 139.9 | 159.0 | 177.8 | 194.3 | 209.7 | 228.5 | 247.3 |
| Cooling total input current | A | A | 108.0 | 118.0 | 127.0 | 143.0 | 160.0 | 185.0 | 206.0 | 235.0 | 260.0 | 287.0 | 309.0 | 336.0 | 363.0 |
| | E | A | 99.0 | 110.0 | 120.0 | 132.0 | 149.0 | 175.0 | 194.0 | 217.0 | 246.0 | 268.0 | 295.0 | 317.0 | 346.0 |
| | N | A | 98.0 | 107.0 | 116.0 | 130.0 | 146.0 | 169.0 | 190.0 | 213.0 | 241.0 | 263.0 | 289.0 | 312.0 | 340.0 |
| | U | A | 110.0 | 119.0 | 128.0 | 145.0 | 161.0 | 183.0 | 207.0 | 235.0 | 261.0 | 287.0 | 310.0 | 337.0 | 363.0 |
| EER | A | BTU/(Wh) | 10.65 | 10.31 | 10.79 | 10.65 | 10.39 | 10.32 | 10.46 | 10.32 | 10.56 | 10.16 | 10.24 | 10.35 | 10.14 |
| | E | BTU/(Wh) | 11.60 | 11.05 | 10.71 | 11.20 | 10.84 | 10.31 | 10.76 | 10.86 | 10.47 | 10.49 | 10.25 | 10.38 | 10.03 |
| | N | BTU/(Wh) | 12.22 | 11.82 | 11.61 | 11.77 | 11.51 | 11.10 | 11.36 | 11.31 | 10.98 | 10.92 | 10.74 | 10.76 | 10.45 |
| | U | BTU/(Wh) | 11.09 | 10.92 | 10.89 | 10.94 | 10.88 | 10.69 | 10.90 | 10.80 | 10.67 | 10.59 | 10.57 | 10.53 | 10.35 |
| IPLV | A | BTU/(Wh) | 16.96 | 16.45 | 17.20 | 16.99 | 16.55 | 16.14 | 16.65 | 16.21 | 16.41 | 16.28 | 16.34 | 16.55 | 16.21 |
| | E | BTU/(Wh) | 18.56 | 17.61 | 17.06 | 17.85 | 17.27 | 16.41 | 17.16 | 17.37 | 16.75 | 17.13 | 16.31 | 16.58 | 16.04 |
| | N | BTU/(Wh) | 19.48 | 18.90 | 18.49 | 18.77 | 18.36 | 17.67 | 18.08 | 18.02 | 17.50 | 17.85 | 17.13 | 17.20 | 16.69 |
| | U | BTU/(Wh) | 17.67 | 17.40 | 17.33 | 17.44 | 17.33 | 17.03 | 17.37 | 17.23 | 16.99 | 17.30 | 16.86 | 16.82 | 16.51 |
| Water flow rate system side | A | gpm | 138.2 | 156.2 | 182.6 | 204.5 | 223.6 | 259.0 | 292.2 | 330.7 | 375.0 | 397.4 | 429.4 | 472.4 | 502.1 |
| | E | gpm | 139.1 | 156.0 | 174.6 | 200.9 | 221.1 | 248.2 | 287.9 | 325.4 | 357.3 | 388.5 | 416.9 | 454.1 | 481.3 |
| | N | gpm | 143.1 | 161.3 | 181.5 | 206.1 | 227.6 | 256.8 | 295.3 | 331.9 | 365.7 | 396.0 | 425.8 | 462.0 | 490.5 |
| | U | gpm | 145.5 | 164.1 | 184.7 | 211.0 | 233.1 | 263.3 | 303.9 | 342.5 | 378.3 | 410.3 | 441.8 | 479.7 | 510.4 |
| Pressure drop system side | A | f _H O | 11.0 | 11.7 | 16.1 | 17.1 | 16.4 | 18.7 | 10.0 | 9.7 | 12.0 | 12.4 | 14.7 | 9.0 | 10.4 |
| | E | f _H O | 9.4 | 11.7 | 12.4 | 16.4 | 14.1 | 17.4 | 7.4 | 9.4 | 10.0 | 7.4 | 8.4 | 8.4 | 9.7 |
| | N | f _H O | 9.7 | 12.4 | 13.4 | 17.4 | 14.7 | 18.7 | 7.7 | 10.0 | 10.4 | 7.7 | 9.0 | 8.7 | 9.7 |
| | U | f _H O | 10.0 | 13.0 | 14.1 | 18.1 | 15.4 | 19.7 | 8.4 | 10.7 | 11.0 | 8.4 | 9.4 | 9.4 | 10.7 |

(1) Reference conditions: AHRI std 550/590 I-P; Service side water 54.01°F / 44.01°F; Outside air 95°F

PART LOAD IPLV

| Size | | 0800 | 0900 | 1000 | 1100 | 1200 | 1400 | 1600 | 1800 | 2000 | 2200 | 2400 | 2600 | 2800 | 3000 | |
|-----------------------|-----|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Fans: ° | | | | | | | | | | | | | | | | |
| Part load IPLV | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| 100 % | A | BTU/(Wh) | 10.88 | 10.51 | 11.06 | 10.88 | 10.61 | 10.27 | 10.68 | 10.37 | 10.54 | 10.99 | 10.99 | 10.82 | 10.61 | 10.44 |
| | E,N | BTU/(Wh) | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | U | BTU/(Wh) | 11.40 | 11.19 | 11.16 | 11.23 | 11.12 | 10.92 | 11.16 | 11.06 | 10.92 | 11.09 | 11.06 | 11.02 | 10.82 | 10.88 |
| 75 % | A | BTU/(Wh) | 13.48 | 13.03 | 13.68 | 13.48 | 13.14 | 12.69 | 13.20 | 12.83 | 13.20 | 13.96 | 14.02 | 14.19 | 13.89 | 13.24 |
| | E,N | BTU/(Wh) | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | U | BTU/(Wh) | 14.09 | 13.85 | 13.79 | 13.89 | 13.79 | 13.55 | 13.82 | 13.68 | 13.82 | 15.01 | 14.74 | 14.67 | 14.43 | 14.50 |
| 50 % | A | BTU/(Wh) | 15.66 | 15.15 | 15.90 | 15.66 | 15.25 | 14.98 | 15.35 | 14.91 | 15.29 | 14.09 | 14.09 | 14.23 | 14.54 | 14.60 |
| | E,N | BTU/(Wh) | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | U | BTU/(Wh) | 16.38 | 16.11 | 16.04 | 16.14 | 16.04 | 15.73 | 16.04 | 15.93 | 16.17 | 15.08 | 14.77 | 14.71 | 15.12 | 15.18 |
| 25 % | A | BTU/(Wh) | 16.48 | 15.93 | 16.72 | 16.51 | 16.07 | 15.59 | 16.17 | 15.70 | 15.93 | 14.71 | 14.81 | 14.95 | 14.71 | 15.25 |
| | E,N | BTU/(Wh) | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | U | BTU/(Wh) | 17.27 | 16.96 | 16.89 | 16.99 | 16.86 | 16.58 | 16.89 | 16.75 | 16.99 | 16.34 | 15.59 | 15.53 | 15.32 | 15.39 |
| Size | | 0800 | 0900 | 1000 | 1100 | 1200 | 1400 | 1600 | 1800 | 2000 | 2200 | 2400 | 2600 | 2800 | 3000 | |
| Fans: J | | | | | | | | | | | | | | | | |
| Part load IPLV | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| 100 % | A | BTU/(Wh) | 10.65 | 10.30 | 10.78 | 10.65 | 10.37 | 10.10 | 10.44 | 10.17 | 10.30 | 9.96 | 10.24 | 10.34 | 10.13 | 10.00 |
| | E | BTU/(Wh) | 11.60 | 11.06 | 10.71 | 11.19 | 10.85 | 10.30 | 10.75 | 10.85 | 10.48 | 10.51 | 10.27 | 10.37 | 10.03 | 10.20 |
| | N | BTU/(Wh) | 12.22 | 11.81 | 11.60 | 11.77 | 11.50 | 11.09 | 11.36 | 11.29 | 10.99 | 10.92 | 10.75 | 10.75 | 10.44 | 10.54 |
| 75 % | U | BTU/(Wh) | 11.09 | 10.92 | 10.88 | 10.95 | 10.88 | 10.68 | 10.88 | 10.82 | 10.68 | 10.58 | 10.58 | 10.54 | 10.34 | 10.41 |
| | A | BTU/(Wh) | 14.98 | 14.50 | 15.15 | 14.98 | 14.60 | 14.23 | 14.71 | 14.30 | 14.47 | 13.17 | 13.85 | 13.99 | 13.72 | 13.51 |
| | E | BTU/(Wh) | 16.38 | 15.53 | 15.05 | 15.73 | 15.22 | 14.47 | 15.12 | 15.32 | 14.77 | 13.85 | 13.85 | 14.02 | 13.58 | 13.82 |
| 50 % | N | BTU/(Wh) | 17.16 | 16.69 | 16.31 | 16.55 | 16.17 | 15.59 | 15.97 | 15.90 | 15.42 | 14.40 | 14.50 | 14.54 | 14.13 | 14.26 |
| | U | BTU/(Wh) | 15.59 | 15.35 | 15.29 | 15.35 | 15.29 | 15.01 | 15.32 | 15.18 | 14.98 | 13.99 | 14.30 | 14.23 | 13.99 | 14.06 |
| | A | BTU/(Wh) | 18.32 | 17.74 | 18.56 | 18.32 | 17.88 | 17.44 | 17.98 | 17.50 | 17.74 | 18.39 | 17.91 | 18.15 | 17.81 | 17.50 |
| 25 % | E | BTU/(Wh) | 20.03 | 19.01 | 18.43 | 19.28 | 18.66 | 17.74 | 18.53 | 18.77 | 18.08 | 19.35 | 17.81 | 18.19 | 17.57 | 17.88 |
| | N | BTU/(Wh) | 21.02 | 20.40 | 19.96 | 20.27 | 19.82 | 19.11 | 19.55 | 19.45 | 18.90 | 20.13 | 18.80 | 18.87 | 18.29 | 18.49 |
| | U | BTU/(Wh) | 19.11 | 18.80 | 18.73 | 18.84 | 18.70 | 18.39 | 18.77 | 18.60 | 18.36 | 19.55 | 18.49 | 18.46 | 18.15 | 18.22 |
| 25 % | A | BTU/(Wh) | 19.45 | 18.84 | 19.69 | 19.45 | 18.97 | 18.43 | 19.11 | 18.56 | 18.84 | 19.79 | 19.65 | 19.89 | 19.48 | 19.21 |
| | E | BTU/(Wh) | 21.19 | 20.17 | 19.55 | 20.44 | 19.79 | 18.80 | 19.65 | 19.82 | 19.11 | 20.85 | 19.65 | 19.93 | 19.28 | 19.62 |
| | N | BTU/(Wh) | 22.32 | 21.56 | 21.19 | 21.50 | 21.02 | 20.27 | 20.75 | 20.64 | 20.03 | 21.70 | 20.61 | 20.68 | 20.06 | 20.27 |
| 25 % | U | BTU/(Wh) | 20.27 | 19.93 | 19.89 | 19.96 | 19.86 | 19.52 | 19.89 | 19.72 | 19.48 | 21.05 | 20.30 | 20.23 | 19.89 | 19.96 |

ELECTRIC DATA

Fan °

| Size | | 0800 | 0900 | 1000 | 1100 | 1200 | 1400 | 1600 | 1800 | 2000 | 2200 | 2400 | 2600 | 2800 | 3000 | |
|--|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Integrated hydronic kit: 00 | | | | | | | | | | | | | | | | |
| Power supply 460V-3-60Hz | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| Peak current (LRA) | A | A | 303.2 | 355.2 | 374.8 | 430.3 | 447.3 | 502.2 | 543.6 | 658.8 | 700.8 | 733.5 | 691.3 | 814.1 | 848.5 | 882.9 |
| | E,N | A | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | U | A | 310.8 | 362.8 | 374.8 | 437.9 | 454.9 | 509.8 | 551.2 | 674.0 | 708.4 | 748.7 | 698.9 | 821.7 | 856.1 | 898.1 |
| Minimum circuit amperage (MCA) | A,U | A | 150.0 | 150.0 | 175.0 | 200.0 | 225.0 | 250.0 | 300.0 | 350.0 | 400.0 | 400.0 | 400.0 | 450.0 | 500.0 | 600.0 |
| | E,N | A | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | A | A | 150.0 | 150.0 | 175.0 | 225.0 | 250.0 | 250.0 | 300.0 | 350.0 | 400.0 | 400.0 | 400.0 | 500.0 | 500.0 | 600.0 |
| Maximum overcurrent permitted by the protection device (MOP) | E,N | A | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | U | A | 150.0 | 175.0 | 175.0 | 225.0 | 250.0 | 250.0 | 300.0 | 350.0 | 400.0 | 450.0 | 450.0 | 500.0 | 500.0 | 600.0 |

Fan J

| Size | | 0800 | 0900 | 1000 | 1100 | 1200 | 1400 | 1600 | 1800 | 2000 | 2200 | 2400 | 2600 | 2800 | 3000 | |
|--|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Integrated hydronic kit: 00 | | | | | | | | | | | | | | | | |
| Power supply 460V-3-60Hz | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| Peak current (LRA) | A | A | 303.6 | 355.6 | 375.4 | 430.9 | 447.9 | 502.8 | 544.4 | 659.6 | 701.8 | 734.5 | 692.5 | 815.5 | 849.9 | 884.3 |
| | E,U | A | 311.4 | 363.4 | 375.4 | 438.7 | 455.7 | 510.6 | 552.2 | 675.2 | 709.6 | 750.1 | 700.3 | 823.3 | 857.7 | 899.9 |
| | N | A | 319.2 | 371.2 | 383.2 | 446.5 | 463.5 | 518.4 | 560.0 | 683.0 | 717.4 | 757.9 | 708.1 | 831.1 | 865.5 | 907.7 |
| Minimum circuit amperage (MCA) | A | A | 150.0 | 150.0 | 175.0 | 200.0 | 225.0 | 250.0 | 300.0 | 350.0 | 400.0 | 400.0 | 400.0 | 450.0 | 500.0 | 600.0 |
| | E,U | A | 150.0 | 150.0 | 175.0 | 200.0 | 225.0 | 250.0 | 300.0 | 350.0 | 400.0 | 400.0 | 400.0 | 450.0 | 500.0 | 600.0 |
| | N | A | 150.0 | 175.0 | 175.0 | 200.0 | 225.0 | 250.0 | 300.0 | 350.0 | 400.0 | 400.0 | 400.0 | 450.0 | 500.0 | 600.0 |
| Maximum overcurrent permitted by the protection device (MOP) | A | A | 150.0 | 150.0 | 175.0 | 225.0 | 250.0 | 250.0 | 300.0 | 350.0 | 400.0 | 400.0 | 400.0 | 450.0 | 500.0 | 600.0 |
| | E,U | A | 150.0 | 175.0 | 175.0 | 225.0 | 250.0 | 250.0 | 300.0 | 350.0 | 400.0 | 400.0 | 400.0 | 450.0 | 500.0 | 600.0 |
| | N | A | 175.0 | 175.0 | 175.0 | 225.0 | 250.0 | 250.0 | 300.0 | 300.0 | 400.0 | 400.0 | 450.0 | 500.0 | 500.0 | 600.0 |

Data calculated without hydronic kit and accessories

GENERAL TECHNICAL DATA

| Size | | 0800 | 0900 | 1000 | 1100 | 1200 | 1400 | 1600 | 1800 | 2000 | 2200 | 2400 | 2600 | 2800 | 3000 |
|---|---------|-------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|
| Compressor | | | | | | | | | | | | | | | |
| Type | A,E,N,U | type | | | | | | | | | | | | | |
| Compressor regulation | A,E,N,U | Type | | | | | | | | | | | | | |
| On-Off | | | | | | | | | | | | | | | |
| Number | A,E,N,U | no. | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 6 | 6 | 6 | 6 |
| Circuits | A,E,N,U | no. | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Refrigerant | A,E,N,U | type | | | | | | | | | | | | | |
| | A | lbs | 35.3 | 35.3 | 44.1 | 46.3 | 46.3 | 48.5 | 57.3 | 61.7 | 70.5 | 75.0 | 83.8 | 105.8 | 108.0 |
| Refrigerant load circuit 1 (1) | E,U | lbs | 44.1 | 44.1 | 47.4 | 57.3 | 55.1 | 55.1 | 66.1 | 79.4 | 83.8 | 105.8 | 110.2 | 116.8 | 116.8 |
| | N | lbs | 57.3 | 57.3 | 58.4 | 63.9 | 63.9 | 63.9 | 79.4 | 79.4 | 86.0 | 112.4 | 116.8 | 127.9 | 154.3 |
| | A | lbs | 35.3 | 35.3 | 44.1 | 46.3 | 46.3 | 48.5 | 57.3 | 61.7 | 70.5 | 83.8 | 83.8 | 105.8 | 121.3 |
| Refrigerant load circuit 2 (1) | E,U | lbs | 44.1 | 44.1 | 47.4 | 59.5 | 61.7 | 61.7 | 70.5 | 86.0 | 83.8 | 105.8 | 110.2 | 127.9 | 138.9 |
| | N | lbs | 57.3 | 57.3 | 58.4 | 66.1 | 68.3 | 68.3 | 86.0 | 86.0 | 88.2 | 114.6 | 127.9 | 143.3 | 154.3 |
| System side heat exchanger | | | | | | | | | | | | | | | |
| Type | A,E,N,U | type | | | | | | | | | | | | | |
| Number | A,E,N,U | no. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Hydraulic connections without hydronic kit | | | | | | | | | | | | | | | |
| Connections (in/out) | A,E,N,U | Type | | | | | | | | | | | | | |
| Sizes (in/out) | A | Ø | 3" | 3" | 3" | 3" | 3" | 3" | 3" | 3" | 3" | 3" | 3" | 5" | 5" |
| | E,N,U | Ø | 3" | 3" | 3" | 3" | 3" | 3" | 3" | 3" | 3" | 5" | 5" | 5" | 5" |
| Hydraulic connections with hydronic kit | | | | | | | | | | | | | | | |
| Connections (in/out) | A,E,N,U | Type | | | | | | | | | | | | | |
| Sizes (in/out) | A | Ø | 3" | 3" | 3" | 3" | 3" | 3" | 3" | 3" | 3" | 3" | 3" | 5" | 5" |
| | E,N,U | Ø | 3" | 3" | 3" | 3" | 3" | 3" | 3" | 3" | 3" | 5" | 5" | 5" | 5" |
| Sound data calculated in cooling mode (2) | | | | | | | | | | | | | | | |
| Sound power level | A | dB(A) | 87.5 | 90.1 | 92.1 | 93.4 | 94.4 | 94.0 | 93.9 | 95.8 | 97.3 | 96.3 | 95.5 | 97.1 | 97.9 |
| | E | dB(A) | 84.0 | 88.5 | 90.6 | 92.4 | 93.6 | 93.1 | 92.6 | 95.0 | 96.6 | 95.6 | 94.4 | 96.1 | 97.4 |
| | N | dB(A) | 84.2 | 88.5 | 90.7 | 92.4 | 93.6 | 93.2 | 92.7 | 95.1 | 96.6 | 95.6 | 94.4 | 96.1 | 98.3 |
| | U | dB(A) | 88.6 | 90.7 | 92.1 | 93.7 | 94.7 | 94.3 | 94.2 | 96.2 | 97.4 | 96.8 | 95.9 | 97.3 | 99.2 |
| Sound pressure level (10 m / 33 ft) | A | dB(A) | 55.4 | 57.9 | 59.9 | 61.2 | 62.1 | 61.8 | 61.5 | 63.4 | 64.7 | 63.8 | 62.8 | 64.3 | 66.0 |
| | E | dB(A) | 51.8 | 56.2 | 58.4 | 60.0 | 61.2 | 60.7 | 60.1 | 62.4 | 63.9 | 62.8 | 61.6 | 63.2 | 64.4 |
| | N | dB(A) | 51.8 | 56.1 | 58.3 | 59.9 | 61.1 | 60.6 | 60.0 | 62.3 | 63.8 | 62.7 | 61.5 | 63.1 | 65.2 |
| | U | dB(A) | 56.4 | 58.5 | 59.9 | 61.3 | 62.3 | 61.9 | 61.7 | 63.5 | 64.7 | 64.0 | 63.1 | 64.4 | 66.1 |

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

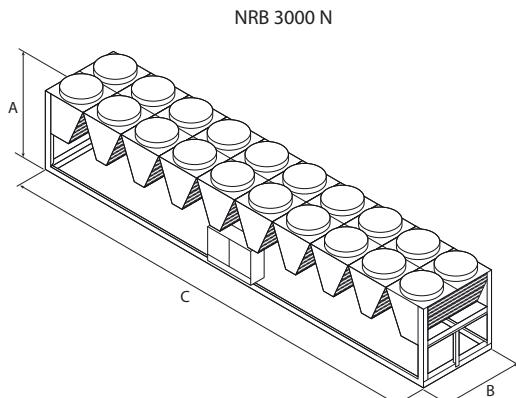
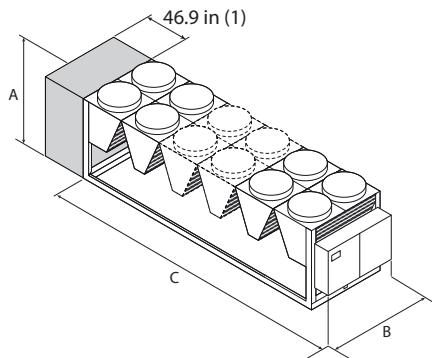
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2. Sound pressure (cold functioning) measured in free field, 10 m / 33 ft away from the unit external surface (in compliance with UNI EN ISO 3744).

FANS DATA

| Size | | 0800 | 0900 | 1000 | 1100 | 1200 | 1400 | 1600 | 1800 | 2000 | 2200 | 2400 | 2600 | 2800 | 3000 |
|---------------------------|---------|------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Fans: ° | | | | | | | | | | | | | | | |
| Power supply: 460V | | | | | | | | | | | | | | | |
| Fan motor | | | | | | | | | | | | | | | |
| Type | A,U | type | | | | | | | | | | | | | |
| | E,N | type | | | | | | | | | | | | | |
| Axial | | | | | | | | | | | | | | | |
| Number | A | no. | 4 | 4 | 6 | 6 | 6 | 6 | 8 | 8 | 10 | 10 | 12 | 14 | 14 |
| | E,N | no. | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | U | no. | 6 | 6 | 6 | 8 | 8 | 8 | 10 | 12 | 12 | 14 | 14 | 16 | 18 |
| Air flow rate | A | cfm | 47,887 | 47,887 | 71,836 | 71,836 | 71,836 | 71,836 | 95,791 | 95,791 | 119,717 | 119,717 | 143,672 | 167,627 | 167,627 |
| | E,N | cfm | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | U | cfm | 71,836 | 71,836 | 71,836 | 95,791 | 95,791 | 95,791 | 119,717 | 143,672 | 143,672 | 167,627 | 171,276 | 191,582 | 215,478 |
| Fans: J | | | | | | | | | | | | | | | |
| Power supply: 460V | | | | | | | | | | | | | | | |
| Fan motor | | | | | | | | | | | | | | | |
| Type | A,E,N,U | type | | | | | | | | | | | | | |
| | A,E,N,U | type | | | | | | | | | | | | | |
| Inverter | | | | | | | | | | | | | | | |
| Number | A | no. | 4 | 4 | 6 | 6 | 6 | 6 | 8 | 8 | 10 | 10 | 12 | 14 | 14 |
| | E,U | no. | 6 | 6 | 6 | 8 | 8 | 8 | 10 | 12 | 12 | 14 | 14 | 16 | 18 |
| | N | no. | 8 | 8 | 8 | 10 | 10 | 10 | 12 | 14 | 14 | 16 | 16 | 18 | 20 |
| Air flow rate | A | cfm | 48,940 | 48,940 | 73,425 | 73,425 | 73,425 | 73,425 | 97,880 | 97,880 | 122,365 | 122,365 | 146,850 | 171,276 | 171,276 |
| | E | cfm | 42,378 | 42,378 | 42,378 | 56,445 | 56,445 | 56,445 | 70,541 | 84,579 | 84,579 | 98,763 | 98,763 | 112,889 | 126,897 |
| | N | cfm | 56,445 | 56,445 | 56,445 | 70,541 | 70,541 | 70,541 | 84,637 | 98,763 | 98,763 | 112,889 | 112,889 | 126,956 | 141,082 |
| | U | cfm | 73,425 | 73,425 | 97,880 | 97,880 | 122,365 | 146,850 | 171,276 | 195,790 | 195,790 | 220,099 | | | |

DIMENSIONS

NRB 0800-3000 A-E-U
NRB 0800-2800 N



(1) Additional module needed to contain the hydronic kit with "accumulation" option in sizes:
NRB 0800A, 0900A

| Size | 0800 | 0900 | 1000 | 1100 | 1200 | 1400 | 1600 | 1800 | 2000 | 2200 | 2400 | 2600 | 2800 | 3000 |
|------------------------------------|---------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Integrated hydronic kit: 00 | | | | | | | | | | | | | | |
| Dimensions and weights | | | | | | | | | | | | | | |
| A | A,E,N,U | in | 96.5 | 96.5 | 96.5 | 96.5 | 96.5 | 96.5 | 96.5 | 96.5 | 96.5 | 96.5 | 96.5 | 96.5 |
| B | A,E,N,U | in | 86.6 | 86.6 | 86.6 | 86.6 | 86.6 | 86.6 | 86.6 | 86.6 | 86.6 | 86.6 | 86.6 | 86.6 |
| | A | in | 109.4 | 109.4 | 156.3 | 156.3 | 156.3 | 156.3 | 203.1 | 203.1 | 250.0 | 250.0 | 296.9 | 343.7 |
| C | E,U | in | 156.3 | 156.3 | 156.3 | 203.1 | 203.1 | 203.1 | 250.0 | 296.9 | 343.7 | 343.7 | 390.6 | 390.6 |
| | N | in | 203.1 | 203.1 | 203.1 | 250.0 | 250.0 | 250.0 | 296.9 | 343.7 | 343.7 | 390.6 | 390.6 | 437.4 |
| | | | | | | | | | | | | | | 468.5 |

The units 0800A, 0900A with the "storage tank" option, are 156.3 in long.

Aermec reserves the right to make any modifications deemed necessary.
All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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