

# Air cooled mini inverter chiller

- › Inverter technology to ensure low sound values and **leader-of-class ESEER**
- › Wide operating range
- › Easy Plug & Play installation
- › Single phase power supply and low starting currents make the unit ideal **for residential applications**
- › **Built-in hydronic module:** no buffer tank required and a standard pump and main switch are included



| Cooling only         |                             |         |           | GWAQ-ADVP              |       | 005                                  |          | 006      |          | 007      |          |  |
|----------------------|-----------------------------|---------|-----------|------------------------|-------|--------------------------------------|----------|----------|----------|----------|----------|--|
| Cooling capacity     | Nom.                        |         |           | kW                     |       | 5.28 (1)                             |          | 6.08 (1) |          | 7.18 (1) |          |  |
| Power input          | Cooling                     | Nom.    |           |                        | kW    |                                      | 1.94 (1) |          | 2.40 (1) |          | 3.00 (1) |  |
| Capacity control     | Method                      |         |           |                        |       | Inverter controlled                  |          |          |          |          |          |  |
| EER                  |                             |         |           |                        |       | 2.72 (1)                             |          | 2.53 (1) |          | 2.39 (1) |          |  |
| Dimensions           | Unit                        | Height  |           |                        | mm    |                                      | 805      |          |          |          |          |  |
|                      |                             | Width   |           |                        | mm    |                                      | 1,190    |          |          |          |          |  |
|                      |                             | Depth   |           |                        | mm    |                                      | 360      |          |          |          |          |  |
| Weight               | Unit                        |         |           | kg                     |       | 100                                  |          |          |          |          |          |  |
|                      | Operation weight            |         |           | kg                     |       | 104                                  |          |          |          |          |          |  |
| Water heat exchanger | Type                        |         |           |                        |       | Brazed plate                         |          |          |          |          |          |  |
|                      | Water flow rate             | Cooling | Nom.      |                        | l/min | 14.9                                 |          | 17.2     |          | 20.4     |          |  |
| Air heat exchanger   | Type                        |         |           |                        |       | Tube type                            |          |          |          |          |          |  |
| Hydraulic components | Expansion vessel            | Volume  |           |                        | l     | 6                                    |          |          |          |          |          |  |
| Compressor           | Type                        |         |           |                        |       | Hermetically sealed swing compressor |          |          |          |          |          |  |
|                      | Quantity                    |         |           |                        |       | 1                                    |          |          |          |          |          |  |
| Fan                  | Type                        |         |           |                        |       | Propeller fan                        |          |          |          |          |          |  |
|                      | Quantity                    |         |           |                        |       | 1                                    |          |          |          |          |          |  |
| Sound power level    | Cooling                     | Nom.    |           |                        | dBA   | 62                                   |          |          |          | 63       |          |  |
| Sound pressure level | Cooling                     | Nom.    |           |                        | dBA   | 48                                   |          |          |          | 50       |          |  |
| Operation range      | Water side                  | Cooling | Min.~Max. |                        | °CDB  | 5~20                                 |          |          |          |          |          |  |
|                      | Air side                    | Cooling | Min.~Max. |                        | °CDB  | 10~43                                |          |          |          |          |          |  |
| Refrigerant          | Type / GWP                  |         |           |                        |       | R-410A / 2,087.5                     |          |          |          |          |          |  |
|                      | Control                     |         |           |                        |       | Inverter                             |          |          |          |          |          |  |
|                      | Circuits                    |         |           |                        |       | 1                                    |          |          |          |          |          |  |
| Refrigerant charge   | Per circuit                 |         |           | kg/TCO <sub>2</sub> Eq |       | 1.7 / 3.5                            |          |          |          |          |          |  |
| Water circuit        | Piping connections diameter |         |           |                        |       | 1" MBSP                              |          |          |          |          |          |  |
| Piping connections   | Water heat exchanger drain  |         |           |                        |       | 5/16 SAE flare                       |          |          |          |          |          |  |
| Unit                 | Maximum running current     |         |           |                        |       | A                                    |          |          |          |          |          |  |
| Power supply         | Phase/Frequency/Voltage     |         |           |                        |       | Hz/V                                 |          |          |          |          |          |  |
|                      |                             |         |           |                        |       | 1~/50/230                            |          |          |          |          |          |  |

(1) Tamb 35°C - LWE 7°C (Dt: 5°C)

# Air cooled mini chiller

- › New technology to ensure low sound values and **leader-of-class ESEER**
- › Wide operating range
- › Electronic expansion valve
- › Easy Plug & Play installation
- › Single phase power supply **for residential applications**, three phase power supply model available **for light commercial applications**



| Cooling only         |                             |                                  |           | GWAQ                   | 012ACV                                                         | 014ACV | 016ACV | 0013ACW    | 016ACW | 018ACW |
|----------------------|-----------------------------|----------------------------------|-----------|------------------------|----------------------------------------------------------------|--------|--------|------------|--------|--------|
| Cooling capacity     | Nom.                        |                                  |           | kW                     | 12.2                                                           | 14.0   | 15.7   | 12.9       | 16.0   | 18.0   |
| Power input          | Cooling                     | Nom.                             |           | kW                     | 3.75                                                           | 4.28   | 4.75   | 3.85       | 4.70   | 5.20   |
| Capacity control     | Method                      |                                  |           |                        | PCB Board controller                                           |        |        |            |        |        |
| EER                  |                             |                                  |           |                        | 3.25                                                           | 3.27   | 3.30   | 3.35       | 3.40   | 3.46   |
| ESEER                |                             |                                  |           |                        | 3.81                                                           | 3.82   | 3.86   | 3.92       | 4.01   | 4.05   |
| Dimensions           | Unit                        | Height                           |           | mm                     | 940                                                            |        |        |            |        |        |
|                      |                             | Width                            |           | mm                     | 1,320                                                          |        |        |            |        |        |
|                      |                             | Depth                            |           | mm                     | 340                                                            |        |        |            |        |        |
| Weight               | Unit                        |                                  |           | kg                     | 100                                                            |        |        |            |        |        |
| Water heat exchanger | Type                        |                                  |           |                        | Braze plate                                                    |        |        |            |        |        |
|                      | Quantity                    |                                  |           |                        | 1                                                              |        |        |            |        |        |
|                      | Water volume                |                                  |           | l                      | 1.01                                                           |        |        |            |        |        |
|                      | Water flow rate             | Cooling                          | Nom.      | l/min                  | 24.7                                                           | 27.6   | 31.9   | 26.1       | 31.9   | 38.2   |
| Air heat exchanger   | Type                        |                                  |           |                        | High efficiency blue-fin and tube type with integral subcooler |        |        |            |        |        |
| Hydraulic components | Expansion vessel(option)    |                                  | Volume    | l                      | 10                                                             |        |        |            |        |        |
| Compressor           | Type                        |                                  |           |                        | Hermetically sealed scroll compressor                          |        |        |            |        |        |
|                      | Quantity                    |                                  |           |                        | 1                                                              |        |        |            |        |        |
| Fan                  | Type                        |                                  |           |                        | Propeller fan                                                  |        |        |            |        |        |
|                      | Quantity                    |                                  |           |                        | 2                                                              |        |        |            |        |        |
|                      | Air flow rate               | Cooling                          | Nom.      | m <sup>3</sup> /min    | 96                                                             | 100    | 97     | 96         | 100    | 105    |
| Fan motor            | Speed                       | Cooling                          | Nom.      | rpm                    | 780                                                            |        |        |            |        |        |
|                      |                             | Steps                            |           |                        | 2                                                              |        |        |            |        |        |
| Sound power level    | Cooling                     | Nom.                             |           | dBA                    | 58                                                             |        |        |            |        | 60     |
| Sound pressure level | Cooling                     | Nom.                             |           | dBA                    | 46                                                             |        |        |            |        | 48     |
|                      |                             | Cooling Night quiet mode(option) |           | dBA                    | 45                                                             |        |        |            |        | 45     |
| Operation range      | Water side                  | Cooling                          | Min.~Max. | °CDB                   | 5~22                                                           |        |        |            |        |        |
|                      | Air side                    | Cooling                          | Min.~Max. | °CDB                   | 10~46                                                          |        |        |            |        |        |
| Refrigerant          | Type / GWP                  |                                  |           |                        | R-410A / 2,087.5                                               |        |        |            |        |        |
|                      | Control                     |                                  |           |                        | Electronic expansion valve                                     |        |        |            |        |        |
|                      | Circuits                    | Quantity                         |           |                        | 1                                                              |        |        |            |        |        |
| Refrigerant charge   | Per circuit                 |                                  |           | kg/TCO <sub>2</sub> Eq | 2.95 / 6.2                                                     |        |        |            |        |        |
| Water circuit        | Piping connections diameter |                                  |           | inch                   | G 1" (female)                                                  |        |        |            |        |        |
|                      | Piping                      |                                  |           | inch                   | 1"                                                             |        |        |            |        |        |
| Power supply         | Phase/Frequency/Voltage     |                                  |           | Hz/V                   | 1~/50/230                                                      |        |        | 3N~/50/400 |        |        |

(1) Underfloor program: cooling Ta 35°C - LWE 18°C (Dt: 5°C) (2) Fan coil program: cooling Ta 35°C - LWE 7°C (Dt: 5°C)

# Air cooled scroll inverter chiller

- › High efficiency with **leader-of-class ESEER**
- › Minimal starting currents and short payback times
- › No buffertank required for standard applications
- › **Large operation range** (ambient temperature up to 43°C)
- › A modbus gateway (RTD-W) can be installed per unit in order allow the control and monitoring by a Galx°C controller or a third-party BMS, which will increase further the efficiency of the system
- › All systems that are connected with RTD-W can be controlled and **monitored centrally** with the master/slave control kit: the sequencing controller



| Cooling only         |                             |         |           | GWAQ-BAWN/BAWP                        |                     |                     |                     | 016                 |                     | 021                 |                     | 025                 |                     | 032                 |                     | 040                 |                     | 050                 |     | 064 |  |  |
|----------------------|-----------------------------|---------|-----------|---------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-----|-----|--|--|
| Cooling capacity     | Nom.                        |         |           | kW                                    | 17.4 (1) / 16.6 (2) |                     | 21.7 (1) / 20.7 (2) |                     | 25.8 (1) / 24.7 (2) |                     | 32.3 (1) / 30.9 (2) |                     | 43.4 (1) / 41.5 (2) |                     | 51.8 (1) / 49.7 (2) |                     | 64.5 (1) / 62.3 (2) |                     |     |     |  |  |
| Power input          | Cooling                     | Nom.    |           |                                       | kW                  | 5.60 (1) / 5.80 (2) |                     | 7.25 (1) / 7.59 (2) |                     | 9.29 (1) / 9.74 (2) |                     | 13.0 (1) / 13.5 (2) |                     | 14.7 (1) / 15.4 (2) |                     | 18.8 (1) / 19.7 (2) |                     | 26.4 (1) / 27.4 (2) |     |     |  |  |
| Capacity control     | Method                      |         |           | Inverter controlled                   |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |     |     |  |  |
|                      | Minimum capacity            |         |           | %                                     | 25                  |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |     |     |  |  |
| EER                  |                             |         |           |                                       | 3.11 (1) / 2.86 (2) |                     | 2.99 (1) / 2.73 (2) |                     | 2.78 (1) / 2.54 (2) |                     | 2.48 (1) / 2.29 (2) |                     | 2.95 (1) / 2.69 (2) |                     | 2.76 (1) / 2.52 (2) |                     | 2.44 (1) / 2.27 (2) |                     |     |     |  |  |
| ESEER                |                             |         |           |                                       | 4.33 (1) / 4.21 (2) |                     | 4.08 (1) / 4.18 (2) |                     | 3.85 (1) / 4.04 (2) |                     | 3.39 (1) / 3.62 (2) |                     | 4.19 (1) / 4.24 (2) |                     | 3.96 (1) / 4.12 (2) |                     | 3.64 (1) / 3.78 (2) |                     |     |     |  |  |
| Dimensions           | Unit                        | Height  | Width     | Depth                                 | mm                  | 1,684               |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |     |     |  |  |
|                      |                             |         |           |                                       |                     | 1,371               |                     |                     |                     | 1,684               |                     |                     |                     | 2,358               |                     |                     |                     | 2,980               |     |     |  |  |
|                      |                             |         |           |                                       |                     | 774                 |                     |                     |                     |                     |                     |                     |                     | 780                 |                     |                     |                     |                     |     |     |  |  |
| Weight               | Unit                        |         |           |                                       | kg                  | 264                 |                     | 317                 |                     | 397                 |                     | 571                 |                     | 730                 |                     |                     |                     |                     |     |     |  |  |
|                      | Operation weight            |         |           | kg                                    | 267                 |                     | 320                 |                     | 401                 |                     | 577                 |                     | 738                 |                     |                     |                     |                     |                     |     |     |  |  |
| Water heat exchanger | Type                        |         |           | Braze plate                           |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |     |     |  |  |
|                      | Water volume                |         |           | l                                     | 1.9                 |                     |                     |                     | 2.9                 |                     |                     |                     | 3.8                 |                     |                     |                     | 5.7                 |                     |     |     |  |  |
|                      | Water flow rate             |         |           | Cooling                               | Nom.                | l/min               | 50                  |                     | 62                  |                     | 74                  |                     | 93                  |                     | 124                 |                     | 148                 |                     | 185 |     |  |  |
|                      | Water pressure drop         |         |           | Cooling                               | Total               | kPa                 | 20                  |                     | 30                  |                     | 42                  |                     | 30                  |                     | 42                  |                     | 30                  |                     |     |     |  |  |
| Air heat exchanger   | Type                        |         |           | Hi-XSS                                |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |     |     |  |  |
| Compressor           | Type                        |         |           | Hermetically sealed scroll compressor |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |     |     |  |  |
|                      | Quantity                    |         |           | 1                                     |                     | 2                   |                     | 3                   |                     | 4                   |                     | 6                   |                     |                     |                     |                     |                     |                     |     |     |  |  |
| Fan                  | Type                        |         |           | Axial                                 |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |     |     |  |  |
|                      | Quantity                    |         |           | 1                                     |                     |                     |                     | 2                   |                     |                     |                     | 4                   |                     |                     |                     |                     |                     |                     |     |     |  |  |
|                      | Air flow rate               | Cooling | Nom.      | m³/min                                | 171                 |                     | 185                 |                     | 233                 |                     | 370                 |                     | 466                 |                     |                     |                     |                     |                     |     |     |  |  |
| Sound power level    | Cooling                     | Nom.    |           |                                       | dBA                 | 78                  |                     |                     |                     | 80                  |                     |                     |                     | 81                  |                     |                     |                     | 83                  |     |     |  |  |
| Operation range      | Water side                  | Cooling | Min.~Max. | °CDB                                  | -10~20              |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |     |     |  |  |
|                      | Air side                    | Cooling | Min.~Max. | °CDB                                  | -5~43               |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |     |     |  |  |
| Refrigerant          | Type / GWP                  |         |           | R-410A / 2,087.5                      |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |     |     |  |  |
|                      | Control                     |         |           | Electronic expansion valve            |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |     |     |  |  |
|                      | Circuits                    |         |           | Quantity                              | 1                   |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |     |     |  |  |
| Refrigerant charge   | Per circuit                 |         |           | kg/TCO₂Eq                             | 7.6 / 15.9          |                     |                     |                     | 9.6 / 20.0          |                     |                     |                     | 15.2 / 31.7         |                     |                     |                     | 19.2 / 40.1         |                     |     |     |  |  |
| Water circuit        | Piping connections diameter |         |           | inch                                  | 1-1/4" (female)     |                     |                     |                     |                     |                     |                     |                     | 2" (female)         |                     |                     |                     |                     |                     |     |     |  |  |
|                      | Piping                      |         |           | inch                                  | 1-1/4"              |                     |                     |                     |                     |                     |                     |                     | 1-1/2"              |                     |                     |                     |                     |                     |     |     |  |  |
| Unit                 | Maximum starting current    |         |           | A                                     | 0                   |                     | 77.7                |                     | 78.7                |                     | 88.7                |                     | 99.8                |                     | 101.9               |                     | 120.7               |                     |     |     |  |  |
|                      | Maximum running current     |         |           | A                                     | 22.2                |                     | 25.3                |                     | 26.4                |                     | 35.2                |                     | 47.4                |                     | 49.6                |                     | 67.2                |                     |     |     |  |  |
| Power supply         | Phase/Frequency/Voltage     |         |           | Hz/V                                  | 3N~/50/400          |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |                     |     |     |  |  |

(1) EWAQ-BAWN: Version without pump (2) EWAQ-BAWP: Version with pump