

| Model                                                                             |                             | Performance at A7W35 | Thermal loss of the building Qz | Seasonal energy efficiency of heating at 35 °C low temperature operation |       | Seasonal energy efficiency of heating at 55 °C medium temperature operation |       | Maximum heating / SHW temperature | Order number (according to heating circuit control) |                                        |
|-----------------------------------------------------------------------------------|-----------------------------|----------------------|---------------------------------|--------------------------------------------------------------------------|-------|-----------------------------------------------------------------------------|-------|-----------------------------------|-----------------------------------------------------|----------------------------------------|
|                                                                                   |                             | kW                   | kW                              | SCOP                                                                     | class | SCOP                                                                        | class | °C                                | regulation STANDARD (µPC)                           | regulation PLUS (pCO5)                 |
|  | <b>BoxAir 22 Inverter P</b> | 2-7                  | up to 5                         | 4.85                                                                     | A+++  | 3.76                                                                        | A++   | 75                                | 3-ph: BA22IP-301U<br>1-ph: BA22IP-101U              | 3-ph: BA22IP-311U<br>1-ph: BA22IP-111U |
|                                                                                   | <b>BoxAir 26 Inverter P</b> | 4-14                 | up to 10                        | 5.14                                                                     | A+++  | 3.83                                                                        | A+++  | 75                                | 3-ph: BA26IP-301U<br>1-ph: BA22IP-101U              | 3-ph: BA26IP-311U<br>1-ph: BA26IP-111U |
|  | <b>BoxAir 37 Inverter P</b> | 6-20                 | up to 14                        | 4.93                                                                     | A+++  | 3.93                                                                        | A+++  | 75                                | 3-ph: BA37IP-301U<br>1-ph: BA37IP-101U              | 3-ph: BA37IP-311U<br>1-ph: BA37IP-111U |
|                                                                                   | <b>BoxAir 45 Inverter P</b> | 8-25                 | up to 18                        | 4.74                                                                     | A+++  | 3.61                                                                        | A++   | 75                                | 3-ph: BA45IP-301U                                   | 3-ph: BA45IP-311U                      |



The BoxAir 22IP and BoxAir 26IP models offer even more compact dimensions.

|                                  |                                |                                  |
|----------------------------------|--------------------------------|----------------------------------|
| <b>Designed for</b>              | single-circuit heating systems | multiple-circuit heating systems |
| <b>Main heating circuit</b>      | yes                            | yes                              |
| <b>Auxiliary heating circuit</b> | –                              | independently<br>2 incl. mixing  |
| <b>Space temperature</b>         | in 1 zone                      | in 2 zones                       |
| <b>Hot water (SHW)</b>           | yes                            | yes                              |
| <b>Selectable</b>                | –                              | up to 6 heating circuits         |

## KEY FEATURES

- Compact monobloc outdoor thermal air-to-water pump
  - **Easy installation without intervention to the cooling (compressor) circuit and into the existing heating system**
  - Without indoor unit, all accessories including control and circulation pump integrated into the external unit
  - Full serviceability of all components
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- Zero internal noise
  - **Minimised external noise due to ultra-quiet fans** with smooth rotation control
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- Use for **heating and cooling of the building** including SHW preparation
  - Smart home integration: online 24/7 monitoring, modbus/BMS, integrated electricity meter, communication with PV inverter and batteries, connection to Smart Grids, etc.
  - Support for connection to a power cascade without the need to use a higher-level MaR (measure and regulation) third-party system
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- **Heating water and SHW temperature up to 75 °C**
  - Anti-legionella function from compressor only
  - Outdoor temperature range from -20 °C to +40 °C
  - Integrated bivalent power supply as standard



## Optional equipment

### 7-year warranty on the complete pump

Extended warranty valid from the time of the pump's installation

### Master Therm Online App

Connecting the pump to a central Master Therm server allows the pump to be controlled online from anywhere via the web or app. Includes remote service access.

### Full (active) cooling mode

Reverse pump operation allowing long-term cooling of the interior in summer.

### Room unit for auxiliary heating circuit

Terminal with temperature sensor for placing additional heating circuits in the reference rooms (only for PLUS control).

### Room unit for auxiliary heating circuit with humidity sensor

An extra humidity sensor for eliminating condensation during cooling (only for PLUS control regulation).

### Expansion module for PLUS control

Increases the number of regulated auxiliary heating circuits up to 6 (from the basic 2).

### Integrated electric meter 3x 65 A / 1x 100 A

Built-in electric meter for local measurement of electricity consumption. MID certification.

### RAL colour

Individual colour for pump panels.

### Evaporator with corrosion resistant coating

Increased resistance for applications near the sea, etc.

# BoxAir Inverter P



|                                                                          |                                                |       | BoxAir 22IP          | BoxAir 26IP          | BoxAir 37IP | BoxAir 45IP    |
|--------------------------------------------------------------------------|------------------------------------------------|-------|----------------------|----------------------|-------------|----------------|
| Power range at A7W35                                                     |                                                | kW    | 2–7                  | 4–14                 | 6–20        | 8–25           |
| Thermal loss of the building $Q_z$                                       |                                                | kW    | up to 5              | up to 10             | up to 14    | up to 18       |
| P-Design                                                                 |                                                |       | 4                    | 7                    | 11          | 14             |
| Power A7W35 <sup>1</sup>                                                 | 40 rps (if not defined otherwise)              | kW    | 4.18 (60 rps)        | 5.55                 | 9.66        | 11.44          |
|                                                                          | COP                                            |       | 5.01                 | 5.18                 | 5.10        | 4.73           |
| Power A2W35                                                              | 40 rps                                         | kW    | 2.38                 | 4.66                 | 8.19        | 9.39           |
|                                                                          | COP                                            |       | 4.19                 | 4.13                 | 4.15        | 4.04           |
| Power A-7W35                                                             | 80 rps                                         | kW    | 3.67                 | 7.85                 | 11.43       | 14.61          |
|                                                                          | COP                                            |       | 3.11                 | 3.07                 | 2.71        | 3.08           |
| Power A-15W35                                                            | 90 rps                                         | kW    | 3.71                 | 7.93                 | 10.97       | 14.29          |
|                                                                          | COP                                            |       | 2.88                 | 3.01                 | 2.53        | 2.77           |
| Power A7W55                                                              | 60 rps                                         | kW    | 4.18                 | 5.55                 | 9.66        | 11.44          |
|                                                                          | COP                                            |       | 5.01                 | 5.18                 | 5.10        | 4.73           |
| Power A7W45                                                              | 90 rps (if not defined otherwise)              | kW    | 6.05                 | 8.16 (60 rps)        | 18.15       | 16.75 (60 rps) |
|                                                                          | COP                                            |       | 3.75                 | 4.03                 | 3.14        | 3.80           |
| Power A-3W45                                                             | 90 rps (if not defined otherwise)              | kW    | 4.38                 | 8.36 (80 rps)        | 13.68       | 18.15          |
|                                                                          | COP                                            |       | 2.79                 | 2.76                 | 2.39        | 2.81           |
| Power A-3W55                                                             | 90 rps (if not defined otherwise)              | kW    | 4.19                 | 8.19 (80 rps)        | 13.36       | 17.35          |
|                                                                          | COP                                            |       | 2.39                 | 2.42                 | 2.11        | 2.41           |
| Seasonal heating energy efficiency at 35 °C low temperature operation    | power <sup>3</sup>                             | kW    | 4.04                 | 6.57                 | 11.50       | 14.96          |
|                                                                          | SCOP                                           |       | 4.85                 | 5.14                 | 4.93        | 4.74           |
|                                                                          | $\eta_s$                                       | %     | 191                  | 203                  | 194         | 187            |
|                                                                          | class                                          |       | A+++                 | A+++                 | A+++        | A+++           |
| Seasonal heating energy efficiency at 55 °C medium temperature operation | power <sup>3</sup>                             | kW    | 3.63                 | 6.22                 | 10.85       | 13.62          |
|                                                                          | SCOP                                           |       | 3.76                 | 3.83                 | 3.93        | 3.61           |
|                                                                          | $\eta_s$                                       | %     | 147                  | 150                  | 154         | 141            |
|                                                                          | class                                          |       | A++                  | A+++                 | A+++        | A++            |
| Refrigerant                                                              |                                                |       | R290                 | R290                 | R290        | R290           |
| Electric circuit breaker <sup>2</sup>                                    |                                                |       | 16 A"B"              | 20 A"B"              | 25 A"B"     | 32 A"B"        |
| Compressor                                                               | connection                                     |       | 1x 230 V or 3x 400 V | 1x 230 V or 3x 400 V | 3x 400 V    | 3x 400 V       |
| Weight                                                                   |                                                | kg    | 120                  | 130                  | 165         | 165            |
| Mandatory leakage checks according to EP 517/2014                        |                                                |       | no                   | no                   | no          | no             |
| Maximum heating water temperature                                        |                                                | °C    | 75                   | 75                   | 75          | 75             |
| Heating capacity of integrated electric boiler                           | bivalence mode                                 | kW    | 4.5                  | 4.5                  | 7.5         | 7.5            |
|                                                                          | backup mode (and at temperatures below -20 °C) | kW    | 4.5 + 4.5            | 4.5 + 4.5            | 7.5 + 7.5   | 7.5 + 7.5      |
| Acoustic performance $L_{w\alpha}$                                       |                                                | dB(A) | 50                   | 53                   | 55          | 60             |
| Sound pressure level $L_p$ at a distance from the outdoor unit           | 1 m                                            | dB(A) | 41                   | 44                   | 46          | 51             |
|                                                                          | 5 m                                            | dB(A) | 29                   | 32                   | 34          | 39             |
|                                                                          | 10 m                                           | dB(A) | 23                   | 26                   | 28          | 33             |

1 Performance data according to EN 14 511, in accordance with EHPA requirements for the award of the Q quality mark. A7W35 60 Hz - air 7 °C, water 35 °C, compressor frequency 60 Hz.

2 Recommended value of electrical protection 3x 400 V, incl. auxiliary integrated electric boiler. The 22IP, 26IP, 37IP and 45IP units can also be connected to a mains supply of 1x 230 V with a fuse of 40 A "B" (22I) or 50 A "B" (26I, 30I).

3 Design output at an outdoor temperature of -10 °C according to EN 14 825.