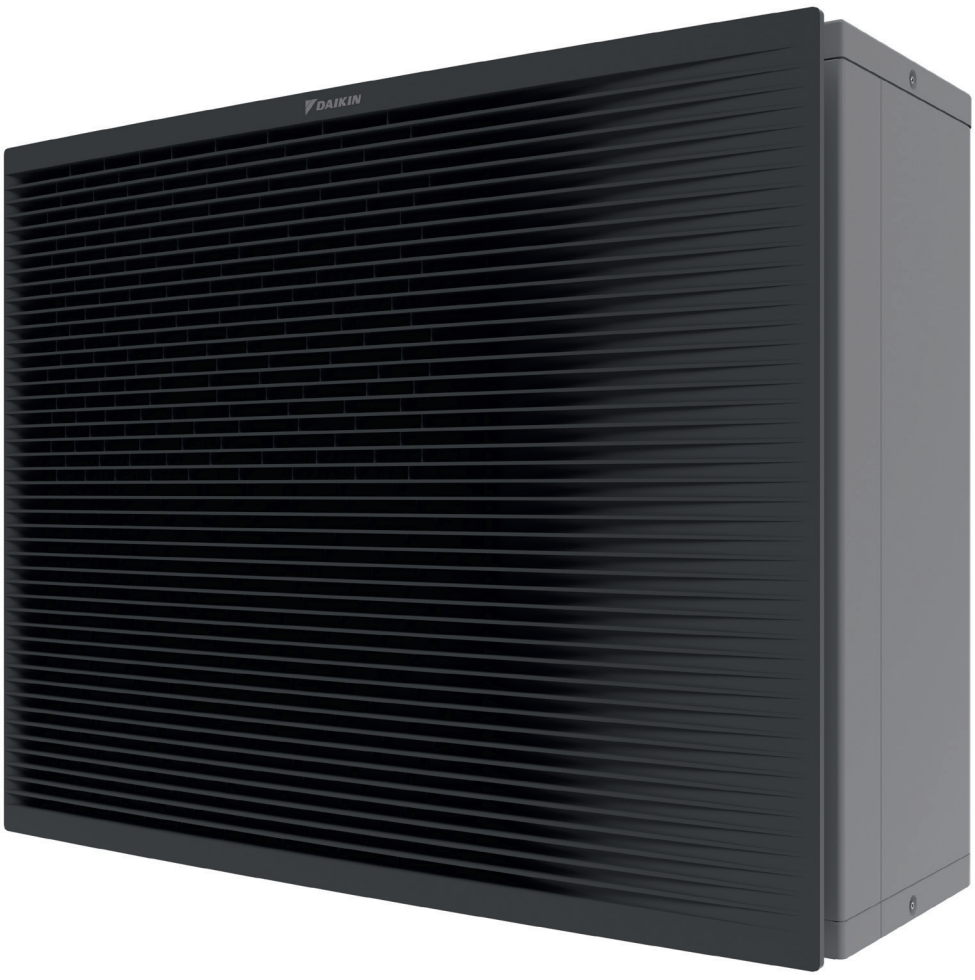
# Daikin Altherma high temperature split Technical Data

# EPRA014-018DV



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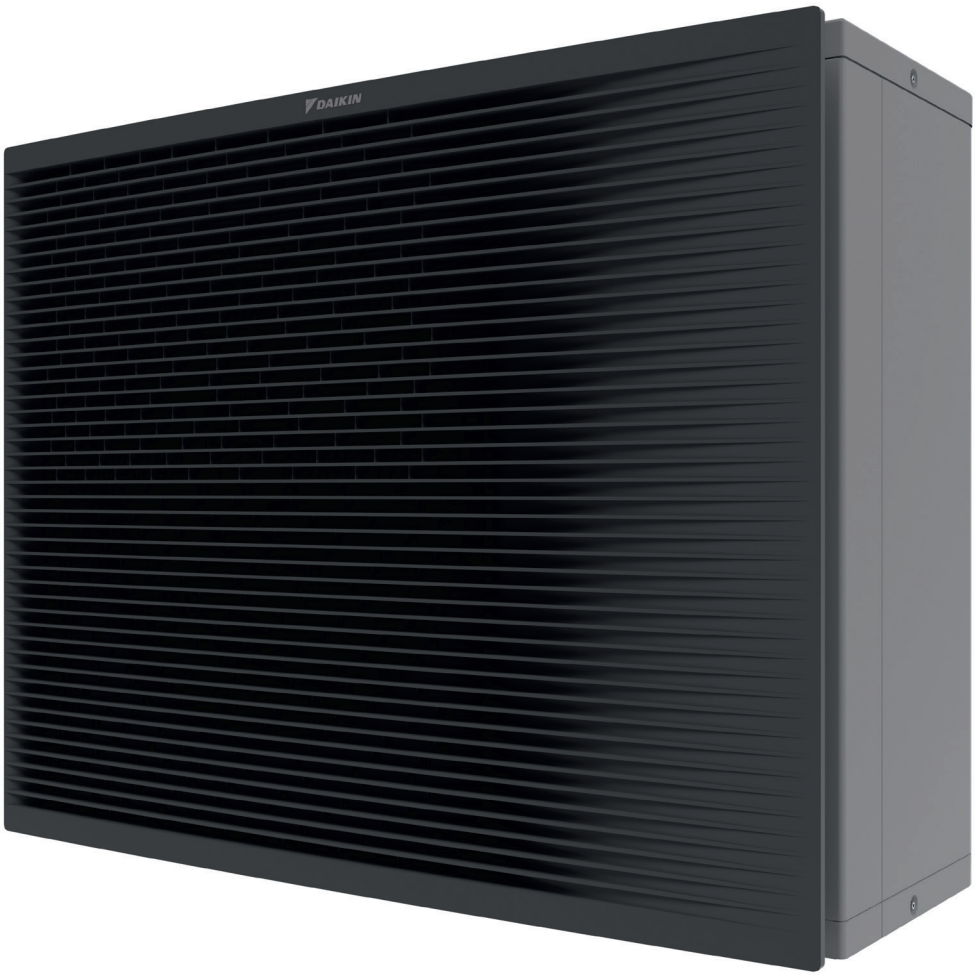
# EPRA014-018DV

# 1 Features

## 1 - 1 EPRA014-018DV



› By heat pump operation only, the outdoor unit delivers a leaving water temperature of 70°C at -15°C ambient temperature
› By -15°C ambient temperature, the outdoor unit limits heating capacity loss
› Outdoor unit extracts heat from the outdoor air, even at -28°C
› The unit's sleek design blends in with other household appliances.
› Choosing for an R-32 product, reduces the environmental impact with 68% compared to R-410A, leads directly to lower energy consumption thanks to its high energy efficiency and has a 30% lower refrigerant charge




-28°

Guaranteed operation down to -28°C

# 2 Specifications

## 1 - 1 EPRA014-018DV

| Technical Specifications | | | | | ETBH16D6V + EPRA14DV3 | ETBH16D6V + EPRA16DV3 | ETBH16D6V + EPRA18DV3 |
|---|---|---|---|---|---|---|---|
| Indoor unit | | | | | ETBH16DA6V | | |
| Outdoor unit | | | | | EPRA14DAV3 | EPRA16DAV3 | EPRA18DAV3 |
| Heating capacity | Min. | | | kW | 3.50 (1) | 3.90 (1) | 4.16 (1) |
| | Nom. | | | kW | 5.69 (2) | 9.00 (2) | |
| | Max. | | | kW | 8.75 (1) | 10.00 (1) | 11.25 (1) |
| Power input | Heating | Min. | | kW | 0.74 (3) | 0.82 (3) | 0.88 (3) |
| | | Nom. | | kW | 1.22 (2) | 1.80 (2) | |
| | | Max. | | kW | 1.86 (3) | 2.13 (3) | 2.40 (3) |
| COP | | | | | 4.67 (2) | 5.00 (2) | |
| Pump | Type | | | | Grundfos UPMXL GEO 25-125 130 PWM | | |
| | Nominal ESP unit | Heating | | kPa | 111.2 (4) | 97.4 (4) | |
| Water side Heat exchanger | Water flow rate | Heating | Nom. | l/min | 16.3 (2) | 25.8 (2) | |
| General | Supplier/ Manufacturer details | Name and address | | | Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium | | |
| | | Name or trademark | | | Daikin Europe N.V. | | |
| | Product description | Air-to-water heat pump | | | Yes | | |
| | | Brine-to-water heat pump | | | No | | |
| | | Heat pump combination heater | | | Yes | | |
| | | Low-temperature heat pump | | | No | | |
| | | Supplementary heater integrated | | | Yes | | |
| | | Water-to-water heat pump | | | No | | |
| | LW(A) Sound power level | Indoor | | dB(A) | 44.0 | | |
| LW(A) Sound power level (according to EN14825) | Outdoor | | | dB(A) | 54.0 | | |
| Sound condition Ecodesign and energy label | | | | | Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825 | | |
| Space heating general | Air to water unit | Rated airflow (outdoor) | | $m^3/h$ | 3,918 | | 3,960 |
| | Other | Capacity control | | | Inverter | | |
| | | Pck (Crankcase heater mode) | | kW | 0.000 | | |
| | | Poff (Off mode) | | kW | 0.021 | | |
| | | Psb (Standby mode) | | kW | 0.021 | | |
| | | Pto (Thermostat off) | | kW | 0.041 | | |
| | Integrated supplementary heater | Psup | | kW | 6.0 | | |
| | | Type of energy input | | | Electrical | | |
| Space heating | Average climate water outlet 55°C | General | Annual energy consumption | kWh | 7,211 | | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 140 | | |
| | | | Prated at -10°C | kW | 13 | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 26 | | |
| | | | SCOP | | 3.58 | | |
| | | | Seasonal space heating eff. class | | A++ | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | |
| | | | COPd | | 2.47 | | |
| | | | Pdh | kW | 11.2 | | |
| | | | PERd | % | 98.8 | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | |
| | | | COPd | | 3.56 | | |
| | | | Pdh | kW | 6.9 | | |
| | | | PERd | % | 142.4 | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | |
| | | | COPd | | 4.44 | | |
| | | | Pdh | kW | 6.9 | | |
| | | | PERd | % | 177.6 | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETBH16D6V + EPRA14DV3 | ETBH16D6V + EPRA16DV3 | ETBH16D6V + EPRA18DV3 |
|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 55°C | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 5.72 | |
| | | | Pdh | kW | | 6.2 | |
| | | | PERd | % | | 228.8 | |
| | | Tol (temperature operating limit) | COPd | | | 2.19 | |
| | | | Pdh | kW | | 12.2 | |
| | | | PERd | % | | 87.6 | |
| | | | TOL | °C | | -10 | |
| | | | WTOL | °C | | 55 | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | | 0.3 | |
| | | Tbiv (bivalent temperature) | COPd | | | 2.19 | |
| | | | Pdh | kW | | 12.2 | |
| | | | PERd | % | | 87.6 | |
| | | | Tbiv | °C | | -10 | |
| | Cold climate water outlet 55°C | General | Annual energy consumption | kWh | | 9,654 | |
| | | | ηs (Seasonal space heating efficiency) | % | | 125 | |
| | | | Prated at -22°C | kW | | 13 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | | 35 | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 2.74 | |
| | | | Pdh | kW | | 7.5 | |
| | | | PERd | % | | 109.6 | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 3.67 | |
| | | | Pdh | kW | | 5.8 | |
| | | | PERd | % | | 146.8 | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 4.69 | |
| | | | Pdh | kW | | 5.6 | |
| | | | PERd | % | | 187.6 | |
| | | D Condition (12°CDB/11°CWB) | COPd | | | 6.12 | |
| | | | Pdh | kW | | 6.2 | |
| | | | PERd | % | | 244.8 | |
| | | Tol (temperature operating limit) | COPd | | | 1.65 | |
| | | | Pdh | kW | | 10.6 | |
| | | | PERd | % | | 66.0 | |
| | | | TOL | °C | | -22 | |
| | | | WTOL | °C | | 55 | |
| | | G Condition (-15°CDB/-) | COPd | | | 2.17 | |
| | | | Pdh | kW | | 10.3 | |
| | | | PERd | % | | 86.8 | |
| | | Tbiv (bivalent temperature) | COPd | | | 1.90 | |
| | | | Pdh | kW | | 11.0 | |
| | | | PERd | % | | 76.0 | |
| | | | Tbiv | °C | | -18 | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | | 1.9 | |
| | Warm climate water outlet 55°C | General | Annual energy consumption | kWh | | 4,090 | |
| | | | ηs (Seasonal space heating efficiency) | % | | 160 | |
| | | | Prated at 2°C | kW | | 13 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | | 15 | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETBH16D6V + EPRA14DV3 | ETBH16D6V + EPRA16DV3 | ETBH16D6V + EPRA18DV3 |
|---|---|---|---|---|---|---|---|
| Space heating | Warm climate water outlet 55°C | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 2.45 | |
| | | | Pdh | kW | | 10.0 | |
| | | | PERd | % | | 98.0 | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 3.69 | |
| | | | Pdh | kW | | 7.9 | |
| | | | PERd | % | | 147.6 | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 5.39 | |
| | | | Pdh | kW | | 5.9 | |
| | | | PERd | % | | 215.6 | |
| | | Tbiv (bivalent temperature) | COPd | | | 3.27 | |
| | | | Pdh | kW | | 9.9 | |
| | | | PERd | % | | 130.8 | |
| | | | Tbiv | °C | | 5 | |
| | Water outlet 45°C | H Condition (-2°C / - ) | Max. | kW | 11.1 | 11.8 | |
| | Average climate water outlet 35°C | General | SCOP | | | 4.51 | |
| | | | Annual energy consumption | kWh | | 5,726 | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | | 177 | |
| | | | Prated at -10°C | kW | | 13 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | | 21 | |
| | | | Seasonal space heating eff. class | | | A+++ | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | | 3.12 | |
| | | | Pdh | kW | | 11.1 | |
| | | | PERd | % | | 124.8 | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 4.44 | |
| | | | Pdh | kW | | 6.7 | |
| | | | PERd | % | | 177.6 | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 5.84 | |
| | | | Pdh | kW | | 5.7 | |
| | | | PERd | % | | 233.6 | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 7.40 | |
| | | | Pdh | kW | | 6.0 | |
| | | | PERd | % | | 296.0 | |
| | | Tol (temperature operating limit) | COPd | | | 2.76 | |
| | | | Pdh | kW | | 11.1 | |
| | | | PERd | % | | 110.4 | |
| | | | TOL | °C | | -10 | |
| | | | WTOL | °C | | 35 | |
| | | Tbiv (bivalent temperature) | COPd | | | 3.12 | |
| | | | Pdh | kW | | 11.1 | |
| | | | PERd | % | | 124.8 | |
| | | | Tbiv | °C | | -7 | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | | 1.4 | |
| | Cold climate water outlet 35°C | General | Annual energy consumption | kWh | | 7,417 | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | | 163 | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETBH16D6V + EPRA14DV3 | ETBH16D6V + EPRA16DV3 | ETBH16D6V + EPRA18DV3 |
|---|---|---|---|---|---|---|---|
| Space heating | Cold climate water outlet 35°C | General | Prated at -22°C | kW | | 13 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | | 27 | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | | 3.50 | |
| | | | Pdh | kW | | 8.0 | |
| | | | PERd | % | | 140.0 | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 5.07 | |
| | | | Pdh | kW | | 4.9 | |
| | | | PERd | % | | 202.8 | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 6.10 | |
| | | | Pdh | kW | | 5.3 | |
| | | | PERd | % | | 244.0 | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 7.03 | |
| | | | Pdh | kW | | 5.7 | |
| | | | PERd | % | | 281.2 | |
| | | Tol (temperature operating limit) | COPd | | | 2.16 | |
| | | | Pdh | kW | | 10.1 | |
| | | | PERd | % | | 86.4 | |
| | | | TOL | °C | | -22 | |
| | | | WTOL | °C | | 35 | |
| | | G Condition (-15°CDB/-) | COPd | | | 2.62 | |
| | | | Pdh | kW | | 10.7 | |
| | | | PERd | % | | 104.8 | |
| | | Tbiv (bivalent temperature) | COPd | | | 2.62 | |
| | | | Pdh | kW | | 10.7 | |
| | | | PERd | % | | 104.8 | |
| | | | Tbiv | °C | | -15 | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | | 2.4 | |
| | Warm climate water outlet 35°C | General | Annual energy consumption | kWh | | 2,885 | |
| | | | $\Gamma_S$ (Seasonal space heating efficiency) | % | | 229 | |
| | | | Prated at 2°C | kW | | 13 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | | 10 | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 3.67 | |
| | | | Pdh | kW | | 9.8 | |
| | | | PERd | % | | 146.8 | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 5.60 | |
| | | | Pdh | kW | | 7.9 | |
| | | | PERd | % | | 224.0 | |
| | | Tbiv (bivalent temperature) | COPd | | | 4.95 | |
| | | | Pdh | kW | | 9.8 | |
| | | | PERd | % | | 198.0 | |
| | | | Tbiv | °C | | 5 | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 7.60 | |
| | | | Pdh | kW | | 6.1 | |
| | | | PERd | % | | 304.0 | |

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |
(2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |
(3)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |
(4)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed |
Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB |
Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB |
Test at Ta DB/WB 7°C/6°C. According to EN 16147.

| Technical Specifications | ETBH16D9W + EPRA14DV3 | ETBH16D9W + EPRA16DV3 | ETBH16D9W + EPRA18DV3 |
|---|---|---|---|
| Indoor unit | | ETBH16SDA9W | |

# 2 Specifications

## 1 - 1 EPRA014-018DV

| Technical Specifications | | | | | ETBH16D9W + EPRA14DV3 | ETBH16D9W + EPRA16DV3 | ETBH16D9W + EPRA18DV3 |
|---|---|---|---|---|---|---|---|
| Outdoor unit | | | | | EPRA14DAV3 | EPRA16DAV3 | EPRA18DAV3 |
| Heating capacity | Min. | | | kW | 3.50 (1) | 3.90 (1) | 4.16 (1) |
| | Nom. | | | kW | 5.69 (2) | 9.00 (2) | |
| | Max. | | | kW | 8.75 (1) | 10.00 (1) | 11.25 (1) |
| Power input | Heating | Min. | | kW | 0.74 (3) | 0.82 (3) | 0.88 (3) |
| | | Nom. | | kW | 1.22 (2) | 1.80 (2) | |
| | | Max. | | kW | 1.86 (3) | 2.13 (3) | 2.40 (3) |
| COP | | | | | 4.67 (2) | 5.00 (2) | |
| Pump | Type | | | | Grundfos UPMXL GEO 25-125 130 PWM | | |
| | Nominal ESP unit | Heating | | kPa | 111.2 (4) | 97.4 (4) | |
| Water side Heat exchanger | Water flow rate | Heating | Nom. | l/min | 16.3 (2) | 25.8 (2) | |
| General | Supplier/ Manufacturer details | Name and address | | | Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium | | |
| | | Name or trademark | | | Daikin Europe N.V. | | |
| | Product description | Air-to-water heat pump | | | Yes | | |
| | | Brine-to-water heat pump | | | No | | |
| | | Heat pump combination heater | | | Yes | | |
| | | Low-temperature heat pump | | | No | | |
| | | Supplementary heater integrated | | | Yes | | |
| | | Water-to-water heat pump | | | No | | |
| | LW(A) Sound power level | Indoor | | dB(A) | 44.0 | | |
| LW(A) Sound power level (according to EN14825) | Outdoor | | | dB(A) | 54.0 | | |
| Sound condition Ecodesign and energy label | | | | | Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825 | | |
| Space heating general | Air to water unit | Rated airflow (outdoor) | | $m^3/h$ | 3,918 | | 3,960 |
| | Other | Capacity control | | | Inverter | | |
| | | Pck (Crankcase heater mode) | | kW | 0.000 | | |
| | | Poff (Off mode) | | kW | 0.021 | | |
| | | Psb (Standby mode) | | kW | 0.021 | | |
| | | Pto (Thermostat off) | | kW | 0.041 | | |
| | Integrated supplementary heater | Psup | | kW | 9.0 | | |
| | | Type of energy input | | | Electrical | | |
| Space heating | Average climate water outlet 55°C | General | Annual energy consumption | kWh | 7,211 | | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 140 | | |
| | | | Prated at -10°C | kW | 13 | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 26 | | |
| | | | SCOP | | 3.58 | | |
| | | | Seasonal space heating eff. class | | A++ | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | |
| | | | COPd | | 2.47 | | |
| | | | Pdh | kW | 11.2 | | |
| | | | PERd | % | 98.8 | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | |
| | | | COPd | | 3.56 | | |
| | | | Pdh | kW | 6.9 | | |
| | | | PERd | % | 142.4 | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | |
| | | | COPd | | 4.44 | | |
| | | | Pdh | kW | 6.9 | | |
| | | | PERd | % | 177.6 | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETBH16D9W + EPRA14DV3 | ETBH16D9W + EPRA16DV3 | ETBH16D9W + EPRA18DV3 |
|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 55°C | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 5.72 | |
| | | | Pdh | kW | | 6.2 | |
| | | | PERd | % | | 228.8 | |
| | | Tol (temperature operating limit) | COPd | | | 2.19 | |
| | | | Pdh | kW | | 12.2 | |
| | | | PERd | % | | 87.6 | |
| | | | TOL | °C | | -10 | |
| | | | WTOL | °C | | 55 | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | | 0.3 | |
| | | Tbiv (bivalent temperature) | COPd | | | 2.19 | |
| | | | Pdh | kW | | 12.2 | |
| | | | PERd | % | | 87.6 | |
| | | | Tbiv | °C | | -10 | |
| | Cold climate water outlet 55°C | General | Annual energy consumption | kWh | | 9,654 | |
| | | | ηs (Seasonal space heating efficiency) | % | | 125 | |
| | | | Prated at -22°C | kW | | 13 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | | 35 | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 2.74 | |
| | | | Pdh | kW | | 7.5 | |
| | | | PERd | % | | 109.6 | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 3.67 | |
| | | | Pdh | kW | | 5.8 | |
| | | | PERd | % | | 146.8 | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 4.69 | |
| | | | Pdh | kW | | 5.6 | |
| | | | PERd | % | | 187.6 | |
| | | D Condition (12°CDB/11°CWB) | COPd | | | 6.12 | |
| | | | Pdh | kW | | 6.2 | |
| | | | PERd | % | | 244.8 | |
| | | Tol (temperature operating limit) | COPd | | | 1.65 | |
| | | | Pdh | kW | | 10.6 | |
| | | | PERd | % | | 66.0 | |
| | | | TOL | °C | | -22 | |
| | | | WTOL | °C | | 55 | |
| | | G Condition (-15°CDB/-) | COPd | | | 2.17 | |
| | | | Pdh | kW | | 10.3 | |
| | | | PERd | % | | 86.8 | |
| | | Tbiv (bivalent temperature) | COPd | | | 1.90 | |
| | | | Pdh | kW | | 11.0 | |
| | | | PERd | % | | 76.0 | |
| | | | Tbiv | °C | | -18 | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | | 1.9 | |
| | Warm climate water outlet 55°C | General | Annual energy consumption | kWh | | 4,090 | |
| | | | ηs (Seasonal space heating efficiency) | % | | 160 | |
| | | | Prated at 2°C | kW | | 13 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | | 15 | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETBH16D9W + EPRA14DV3 | ETBH16D9W + EPRA16DV3 | ETBH16D9W + EPRA18DV3 |
|---|---|---|---|---|---|---|---|
| Space heating | Warm climate water outlet 55°C | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 2.45 | |
| | | | Pdh | kW | | 10.0 | |
| | | | PERd | % | | 98.0 | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 3.69 | |
| | | | Pdh | kW | | 7.9 | |
| | | | PERd | % | | 147.6 | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 5.39 | |
| | | | Pdh | kW | | 5.9 | |
| | | | PERd | % | | 215.6 | |
| | | Tbiv (bivalent temperature) | COPd | | | 3.27 | |
| | | | Pdh | kW | | 9.9 | |
| | | | PERd | % | | 130.8 | |
| | | | Tbiv | °C | | 5 | |
| | Water outlet 45°C | H Condition (-2°C / - ) | Max. | kW | 11.1 | 11.8 | |
| | Average climate water outlet 35°C | General | SCOP | | | 4.51 | |
| | | | Annual energy consumption | kWh | | 5,726 | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | | 177 | |
| | | | Prated at -10°C | kW | | 13 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | | 21 | |
| | | | Seasonal space heating eff. class | | | A+++ | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | | 3.12 | |
| | | | Pdh | kW | | 11.1 | |
| | | | PERd | % | | 124.8 | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 4.44 | |
| | | | Pdh | kW | | 6.7 | |
| | | | PERd | % | | 177.6 | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 5.84 | |
| | | | Pdh | kW | | 5.7 | |
| | | | PERd | % | | 233.6 | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 7.40 | |
| | | | Pdh | kW | | 6.0 | |
| | | | PERd | % | | 296.0 | |
| | | Tol (temperature operating limit) | COPd | | | 2.76 | |
| | | | Pdh | kW | | 11.1 | |
| | | | PERd | % | | 110.4 | |
| | | | TOL | °C | | -10 | |
| | | | WTOL | °C | | 35 | |
| | | Tbiv (bivalent temperature) | COPd | | | 3.12 | |
| | | | Pdh | kW | | 11.1 | |
| | | | PERd | % | | 124.8 | |
| | | | Tbiv | °C | | -7 | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | | 1.4 | |
| | Cold climate water outlet 35°C | General | Annual energy consumption | kWh | | 7,417 | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | | 163 | |

# 2 Specifications

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| Technical Specifications | | | | | ETBH16D9W + EPRA14DV3 | ETBH16D9W + EPRA16DV3 | ETBH16D9W + EPRA18DV3 |
|---|---|---|---|---|---|---|---|
| Space heating | Cold climate water outlet 35°C | General | Prated at -22°C | kW | | 13 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | | 27 | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | | 3.50 | |
| | | | Pdh | kW | | 8.0 | |
| | | | PERd | % | | 140.0 | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 5.07 | |
| | | | Pdh | kW | | 4.9 | |
| | | | PERd | % | | 202.8 | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 6.10 | |
| | | | Pdh | kW | | 5.3 | |
| | | | PERd | % | | 244.0 | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 7.03 | |
| | | | Pdh | kW | | 5.7 | |
| | | | PERd | % | | 281.2 | |
| | | Tol (temperature operating limit) | COPd | | | 2.16 | |
| | | | Pdh | kW | | 10.1 | |
| | | | PERd | % | | 86.4 | |
| | | | TOL | °C | | -22 | |
| | | | WTOL | °C | | 35 | |
| | | G Condition (-15°CDB/-) | COPd | | | 2.62 | |
| | | | Pdh | kW | | 10.7 | |
| | | | PERd | % | | 104.8 | |
| | | Tbiv (bivalent temperature) | COPd | | | 2.62 | |
| | | | Pdh | kW | | 10.7 | |
| | | | PERd | % | | 104.8 | |
| | | | Tbiv | °C | | -15 | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | | 2.4 | |
| | Warm climate water outlet 35°C | General | Annual energy consumption | kWh | | 2,885 | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | | 229 | |
| | | | Prated at 2°C | kW | | 13 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | | 10 | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 3.67 | |
| | | | Pdh | kW | | 9.8 | |
| | | | PERd | % | | 146.8 | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 5.60 | |
| | | | Pdh | kW | | 7.9 | |
| | | | PERd | % | | 224.0 | |
| | | Tbiv (bivalent temperature) | COPd | | | 4.95 | |
| | | | Pdh | kW | | 9.8 | |
| | | | PERd | % | | 198.0 | |
| | | | Tbiv | °C | | 5 | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 7.60 | |
| | | | Pdh | kW | | 6.1 | |
| | | | PERd | % | | 304.0 | |

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |
(2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |
(3)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |
(4)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed |
Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB |
Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB |
Test at Ta DB/WB 7°C/6°C. According to EN 16147.

| Technical Specifications | ETBX16D6V + EPRA14DV3 | ETBX16D6V + EPRA16DV3 | ETBX16D6V + EPRA18DV3 |
|---|---|---|---|
| Indoor unit | | ETBX16DA6V | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETBX16D6V + EPRA14DV3 | ETBX16D6V + EPRA16DV3 | ETBX16D6V + EPRA18DV3 |
|---|---|---|---|---|---|---|---|
| Outdoor unit | | | | | EPRA14DAV3 | EPRA16DAV3 | EPRA18DAV3 |
| Heating capacity | Min. | | | kW | 3.50 (1) | 3.90 (1) | 4.16 (1) |
| | Nom. | | | kW | 5.69 (2) | 9.00 (2) | |
| | Max. | | | kW | 8.75 (1) | 10.00 (1) | 11.25 (1) |
| Cooling capacity | Nom. | | | kW | 10.6 (3) / 6.90 (4) | 11.5 (3) / 7.88 (4) | 12.5 (3) / 8.86 (4) |
| Power input | Heating | Min. | | kW | 0.74 (5) | 0.82 (5) | 0.88 (5) |
| | | Nom. | | kW | 1.22 (2) | 1.80 (2) | |
| | | Max. | | kW | 1.86 (5) | 2.13 (5) | 2.40 (5) |
| | Cooling | Nom. | | kW | 2.55 (3) / 2.56 (4) | 2.80 (3) / 2.93 (4) | 3.05 (3) / 3.31 (4) |
| COP | | | | | 4.67 (2) | 5.00 (2) | |
| EER | | | | | 4.13 (3) / 2.70 (4) | 4.11 (3) / 2.69 (4) | 4.09 (3) / 2.68 (4) |
| Pump | Type | | | | Grundfos UPMXL GEO 25-125 130 PWM | | |
| | Nominal ESP unit | Heating | | kPa | 111.2 (6) | 97.4 (6) | |
| Water side Heat exchanger | Water flow rate | Heating | Nom. | l/min | 16.3 (2) | 25.8 (2) | |
| General | Supplier/ Manufacturer details | Name and address | | | Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium | | |
| | | Name or trademark | | | Daikin Europe N.V. | | |
| | Product description | Air-to-water heat pump | | | Yes | | |
| | | Brine-to-water heat pump | | | No | | |
| | | Heat pump combination heater | | | Yes | | |
| | | Low-temperature heat pump | | | No | | |
| | | Supplementary heater integrated | | | Yes | | |
| | | Water-to-water heat pump | | | No | | |
| | LW(A) Sound power level | Indoor | | dB(A) | 44.0 | | |
| LW(A) Sound power level (according to EN14825) | Outdoor | | | dB(A) | 54.0 | | |
| Sound condition Ecodesign and energy label | | | | | Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825 | | |
| Space heating general | Air to water unit | Rated airflow (outdoor) | | $m^3/h$ | 3,918 | | 3,960 |
| | Other | Capacity control | | | Inverter | | |
| | | Pck (Crankcase heater mode) | | kW | 0.000 | | |
| | | Poff (Off mode) | | kW | 0.021 | | |
| | | Psb (Standby mode) | | kW | 0.021 | | |
| | | Pto (Thermostat off) | | kW | 0.041 | | |
| | Integrated supplementary heater | Psup | | kW | 6.0 | | |
| | | Type of energy input | | | Electrical | | |
| Space heating | Average climate water outlet 55°C | General | Annual energy consumption | kWh | 7,134 | | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 142 | | |
| | | | Prated at -10°C | kW | 13 | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 26 | | |
| | | | SCOP | | 3.62 | | |
| | | | Seasonal space heating eff. class | | A++ | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | |
| | | | COPd | | 2.47 | | |
| | | | Pdh | kW | 11.2 | | |
| | | | PERd | % | 98.8 | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | |
| | | | COPd | | 3.56 | | |
| | | | Pdh | kW | 6.9 | | |
| | | | PERd | % | 142.4 | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETBX16D6V + EPRA14DV3 | ETBX16D6V + EPRA16DV3 | ETBX16D6V + EPRA18DV3 |
|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 55°C | C Condition (7°CDB/6°CWB) | COPd | | | 4.44 | |
| | | | Pdh | kW | | 6.9 | |
| | | | PERd | % | | 177.6 | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 5.72 | |
| | | | Pdh | kW | | 6.2 | |
| | | | PERd | % | | 228.8 | |
| | | Tol (temperature operating limit) | COPd | | | 2.19 | |
| | | | Pdh | kW | | 12.2 | |
| | | | PERd | % | | 87.6 | |
| | | | TOL | °C | | -10 | |
| | | | WTOL | °C | | 55 | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | | 0.3 | |
| | | Tbiv (bivalent temperature) | COPd | | | 2.19 | |
| | | | Pdh | kW | | 12.2 | |
| | | | PERd | % | | 87.6 | |
| | | | Tbiv | °C | | -10 | |
| | Cold climate water outlet 55°C | General | Annual energy consumption | kWh | | 9,609 | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | | 125 | |
| | | | Prated at -22°C | kW | | 13 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | | 35 | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 2.74 | |
| | | | Pdh | kW | | 7.5 | |
| | | | PERd | % | | 109.6 | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 3.67 | |
| | | | Pdh | kW | | 5.8 | |
| | | | PERd | % | | 146.8 | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 4.69 | |
| | | | Pdh | kW | | 5.6 | |
| | | | PERd | % | | 187.6 | |
| | | D Condition (12°CDB/11°CWB) | COPd | | | 6.12 | |
| | | | Pdh | kW | | 6.2 | |
| | | | PERd | % | | 244.8 | |
| | | Tol (temperature operating limit) | COPd | | | 1.65 | |
| | | | Pdh | kW | | 10.6 | |
| | | | PERd | % | | 66.0 | |
| | | | TOL | °C | | -22 | |
| | | | WTOL | °C | | 55 | |
| | | G Condition (-15°CDB/-) | COPd | | | 2.17 | |
| | | | Pdh | kW | | 10.3 | |
| | | | PERd | % | | 86.8 | |
| | | Tbiv (bivalent temperature) | COPd | | | 1.90 | |
| | | | Pdh | kW | | 11.0 | |
| | | | PERd | % | | 76.0 | |
| | | | Tbiv | °C | | -18 | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | | 1.9 | |
| | Warm climate water outlet | General | Annual energy consumption | kWh | | 3,997 | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETBX16D6V + EPRA14DV3 | ETBX16D6V + EPRA16DV3 | ETBX16D6V + EPRA18DV3 |
|---|---|---|---|---|---|---|---|
| Space heating | Warm climate water outlet 55°C | General | ηs (Seasonal space heating efficiency) | % | | 164 | |
| | | | Prated at 2°C | kW | | 13 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | | 14 | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 2.45 | |
| | | | Pdh | kW | | 10.0 | |
| | | | PERd | % | | 98.0 | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 3.69 | |
| | | | Pdh | kW | | 7.9 | |
| | | | PERd | % | | 147.6 | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 5.39 | |
| | | | Pdh | kW | | 5.9 | |
| | | | PERd | % | | 215.6 | |
| | | Tbiv (bivalent temperature) | COPd | | | 3.27 | |
| | | | Pdh | kW | | 9.9 | |
| | | | PERd | % | | 130.8 | |
| | | | Tbiv | °C | | 5 | |
| | Water outlet 45°C | H Condition (-2°C / - ) | Max. | kW | 11.1 | 11.8 | |
| | Average climate water outlet 35°C | General | SCOP | | | 4.57 | |
| | | | Annual energy consumption | kWh | | 5,649 | |
| | | | ηs (Seasonal space heating efficiency) | % | | 180 | |
| | | | Prated at -10°C | kW | | 13 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | | 20 | |
| | | | Seasonal space heating eff. class | | | A+++ | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | | 3.12 | |
| | | | Pdh | kW | | 11.1 | |
| | | | PERd | % | | 124.8 | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 4.44 | |
| | | | Pdh | kW | | 6.7 | |
| | | | PERd | % | | 177.6 | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 5.84 | |
| | | | Pdh | kW | | 5.7 | |
| | | | PERd | % | | 233.6 | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 7.40 | |
| | | | Pdh | kW | | 6.0 | |
| | | | PERd | % | | 296.0 | |
| | | Tol (temperature operating limit) | COPd | | | 2.76 | |
| | | | Pdh | kW | | 11.1 | |
| | | | PERd | % | | 110.4 | |
| | | | TOL | °C | | -10 | |
| | | | WTOL | °C | | 35 | |
| | | Tbiv (bivalent temperature) | COPd | | | 3.12 | |
| | | | Pdh | kW | | 11.1 | |
| | | | PERd | % | | 124.8 | |
| | | | Tbiv | °C | | -7 | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETBX16D6V + EPRA14DV3 | ETBX16D6V + EPRA16DV3 | ETBX16D6V + EPRA18DV3 |
|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet | Rated heat output | Psup (at Tdesign -10°C) | kW | | 1.4 | |
| | Cold climate water outlet 35°C | General | Annual energy consumption | kWh | | 7,370 | |
| | | | ηs (Seasonal space heating efficiency) | % | | 164 | |
| | | | Prated at -22°C | kW | | 13 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | | 27 | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | | 3.50 | |
| | | | Pdh | kW | | 8.0 | |
| | | | PERd | % | | 140.0 | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 5.07 | |
| | | | Pdh | kW | | 4.9 | |
| | | | PERd | % | | 202.8 | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 6.10 | |
| | | | Pdh | kW | | 5.3 | |
| | | | PERd | % | | 244.0 | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 7.03 | |
| | | | Pdh | kW | | 5.7 | |
| | | | PERd | % | | 281.2 | |
| | | Tol (temperature operating limit) | COPd | | | 2.16 | |
| | | | Pdh | kW | | 10.1 | |
| | | | PERd | % | | 86.4 | |
| | | | TOL | °C | | -22 | |
| | | | WTOL | °C | | 35 | |
| | | G Condition (-15°CDB/-) | COPd | | | 2.62 | |
| | | | Pdh | kW | | 10.7 | |
| | | | PERd | % | | 104.8 | |
| | | Tbiv (bivalent temperature) | COPd | | | 2.62 | |
| | | | Pdh | kW | | 10.7 | |
| | | | PERd | % | | 104.8 | |
| | | | Tbiv | °C | | -15 | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | | 2.4 | |
| | Warm climate water outlet 35°C | General | Annual energy consumption | kWh | | 2,792 | |
| | | | ηs (Seasonal space heating efficiency) | % | | 236 | |
| | | | Prated at 2°C | kW | | 13 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | | 10 | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 3.67 | |
| | | | Pdh | kW | | 9.8 | |
| | | | PERd | % | | 146.8 | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 5.60 | |
| | | | Pdh | kW | | 7.9 | |
| | | | PERd | % | | 224.0 | |
| | | Tbiv (bivalent temperature) | COPd | | | 4.95 | |
| | | | Pdh | kW | | 9.8 | |
| | | | PERd | % | | 198.0 | |
| | | | Tbiv | °C | | 5 | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| Space heating | Warm climate water outlet 35°C | D Condition (12°CDB/11°CWB) | COPd | | | 7.60 | |
| | | | Pdh | kW | | 6.1 | |
| | | | PERd | % | | 304.0 | |

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |
(2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |
(3)Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB |
(4)Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB |
(5)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |

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(6)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed | Test at Ta DB/WB 7°C/6°C. According to EN 16147.

| Technical Specifications | | | | | ETBX16D9W + EPRA14DV3 | ETBX16D9W + EPRA16DV3 | ETBX16D9W + EPRA18DV3 |
|---|---|---|---|---|---|---|---|
| Indoor unit | | | | | ETBX16DA9W | | |
| Outdoor unit | | | | | EPRA14DAV3 | EPRA16DAV3 | EPRA18DAV3 |
| Heating capacity | Min. | | | kW | 3.50 (1) | 3.90 (1) | 4.16 (1) |
| | Nom. | | | kW | 5.69 (2) | 9.00 (2) | |
| | Max. | | | kW | 8.75 (1) | 10.00 (1) | 11.25 (1) |
| Cooling capacity | Nom. | | | kW | 10.6 (3) / 6.90 (4) | 11.5 (3) / 7.88 (4) | 12.5 (3) / 8.86 (4) |
| Power input | Heating | Min. | | kW | 0.74 (5) | 0.82 (5) | 0.88 (5) |
| | | Nom. | | kW | 1.22 (2) | 1.80 (2) | |
| | | Max. | | kW | 1.86 (5) | 2.13 (5) | 2.40 (5) |
| | Cooling | Nom. | | kW | 2.55 (3) / 2.56 (4) | 2.80 (3) / 2.93 (4) | 3.05 (3) / 3.31 (4) |
| COP | | | | | 4.67 (2) | 5.00 (2) | |
| EER | | | | | 4.13 (3) / 2.70 (4) | 4.11 (3) / 2.69 (4) | 4.09 (3) / 2.68 (4) |
| Pump | Type | | | | Grundfos UPMXL GEO 25-125 130 PWM | | |
| | Nominal ESP unit | Heating | | kPa | 111.2 (6) | 97.4 (6) | |
| Water side Heat exchanger | Water flow rate | Heating | Nom. | l/min | 16.3 (2) | 25.8 (2) | |
| General | Supplier/ Manufacturer details | Name and address | | | Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium | | |
| | | Name or trademark | | | Daikin Europe N.V. | | |
| | Product description | Air-to-water heat pump | | | Yes | | |
| | | Brine-to-water heat pump | | | No | | |
| | | Heat pump combination heater | | | Yes | | |
| | | Low-temperature heat pump | | | No | | |
| | | Supplementary heater integrated | | | Yes | | |
| | | Water-to-water heat pump | | | No | | |
| | LW(A) Sound power level | Indoor | | dB(A) | 44.0 | | |
| LW(A) Sound power level (according to EN14825) | Outdoor | | | dB(A) | 54.0 | | |
| Sound condition Ecodesign and energy label | | | | | Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825 | | |
| Space heating general | Air to water unit | Rated airflow (outdoor) | | $m^3/h$ | 3,918 | | 3,960 |
| | Other | Capacity control | | | Inverter | | |
| | | Pck (Crankcase heater mode) | | kW | 0.000 | | |
| | | Poff (Off mode) | | kW | 0.021 | | |
| | | Psb (Standby mode) | | kW | 0.021 | | |
| | | Pto (Thermostat off) | | kW | 0.041 | | |
| | Integrated supplementary heater | Psup | | kW | 9.0 | | |
| | | Type of energy input | | | Electrical | | |
| Space heating | Average climate water outlet 55°C | General | Annual energy consumption | kWh | 7,134 | | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 142 | | |
| | | | Prated at -10°C | kW | 13 | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 26 | | |
| | | | SCOP | | 3.62 | | |
| | | | Seasonal space heating eff. class | | A++ | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | |
| | | | COPd | | 2.47 | | |
| | | | Pdh | kW | 11.2 | | |
| | | | PERd | % | 98.8 | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | |
| | | | COPd | | 3.56 | | |
| | | | Pdh | kW | 6.9 | | |
| | | | PERd | % | 142.4 | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETBX16D9W + EPRA14DV3 | ETBX16D9W + EPRA16DV3 | ETBX16D9W + EPRA18DV3 |
|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 55°C | C Condition (7°CDB/6°CWB) | COPd | | | 4.44 | |
| | | | Pdh | kW | | 6.9 | |
| | | | PERd | % | | 177.6 | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 5.72 | |
| | | | Pdh | kW | | 6.2 | |
| | | | PERd | % | | 228.8 | |
| | | Tol (temperature operating limit) | COPd | | | 2.19 | |
| | | | Pdh | kW | | 12.2 | |
| | | | PERd | % | | 87.6 | |
| | | | TOL | °C | | -10 | |
| | | | WTOL | °C | | 55 | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | | 0.3 | |
| | | Tbiv (bivalent temperature) | COPd | | | 2.19 | |
| | | | Pdh | kW | | 12.2 | |
| | | | PERd | % | | 87.6 | |
| | | | Tbiv | °C | | -10 | |
| | Cold climate water outlet 55°C | General | Annual energy consumption | kWh | | 9,609 | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | | 125 | |
| | | | Prated at -22°C | kW | | 13 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | | 35 | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 2.74 | |
| | | | Pdh | kW | | 7.5 | |
| | | | PERd | % | | 109.6 | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 3.67 | |
| | | | Pdh | kW | | 5.8 | |
| | | | PERd | % | | 146.8 | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 4.69 | |
| | | | Pdh | kW | | 5.6 | |
| | | | PERd | % | | 187.6 | |
| | | D Condition (12°CDB/11°CWB) | COPd | | | 6.12 | |
| | | | Pdh | kW | | 6.2 | |
| | | | PERd | % | | 244.8 | |
| | | Tol (temperature operating limit) | COPd | | | 1.65 | |
| | | | Pdh | kW | | 10.6 | |
| | | | PERd | % | | 66.0 | |
| | | | TOL | °C | | -22 | |
| | | | WTOL | °C | | 55 | |
| | | G Condition (-15°CDB/-) | COPd | | | 2.17 | |
| | | | Pdh | kW | | 10.3 | |
| | | | PERd | % | | 86.8 | |
| | | Tbiv (bivalent temperature) | COPd | | | 1.90 | |
| | | | Pdh | kW | | 11.0 | |
| | | | PERd | % | | 76.0 | |
| | | | Tbiv | °C | | -18 | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | | 1.9 | |
| | Warm climate water outlet | General | Annual energy consumption | kWh | | 3,997 | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETBX16D9W + EPRA14DV3 | ETBX16D9W + EPRA16DV3 | ETBX16D9W + EPRA18DV3 |
|---|---|---|---|---|---|---|---|
| Space heating | Warm climate water outlet 55°C | General | ηs (Seasonal space heating efficiency) | % | | 164 | |
| | | | Prated at 2°C | kW | | 13 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | | 14 | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 2.45 | |
| | | | Pdh | kW | | 10.0 | |
| | | | PERd | % | | 98.0 | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 3.69 | |
| | | | Pdh | kW | | 7.9 | |
| | | | PERd | % | | 147.6 | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 5.39 | |
| | | | Pdh | kW | | 5.9 | |
| | | | PERd | % | | 215.6 | |
| | | Tbiv (bivalent temperature) | COPd | | | 3.27 | |
| | | | Pdh | kW | | 9.9 | |
| | | | PERd | % | | 130.8 | |
| | | | Tbiv | °C | | 5 | |
| | Water outlet 45°C | H Condition (-2°C / - ) | Max. | kW | 11.1 | 11.8 | |
| | Average climate water outlet 35°C | General | SCOP | | | 4.57 | |
| | | | Annual energy consumption | kWh | | 5,649 | |
| | | | ηs (Seasonal space heating efficiency) | % | | 180 | |
| | | | Prated at -10°C | kW | | 13 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | | 20 | |
| | | | Seasonal space heating eff. class | | | A+++ | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | | 3.12 | |
| | | | Pdh | kW | | 11.1 | |
| | | | PERd | % | | 124.8 | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 4.44 | |
| | | | Pdh | kW | | 6.7 | |
| | | | PERd | % | | 177.6 | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 5.84 | |
| | | | Pdh | kW | | 5.7 | |
| | | | PERd | % | | 233.6 | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 7.40 | |
| | | | Pdh | kW | | 6.0 | |
| | | | PERd | % | | 296.0 | |
| | | Tol (temperature operating limit) | COPd | | | 2.76 | |
| | | | Pdh | kW | | 11.1 | |
| | | | PERd | % | | 110.4 | |
| | | | TOL | °C | | -10 | |
| | | | WTOL | °C | | 35 | |
| | | Tbiv (bivalent temperature) | COPd | | | 3.12 | |
| | | | Pdh | kW | | 11.1 | |
| | | | PERd | % | | 124.8 | |
| | | | Tbiv | °C | | -7 | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETBX16D9W + EPRA14DV3 | ETBX16D9W + EPRA16DV3 | ETBX16D9W + EPRA18DV3 |
|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet | Rated heat output | Psup (at Tdesign -10°C) | kW | | 1.4 | |
| | Cold climate water outlet 35°C | General | Annual energy consumption | kWh | | 7,370 | |
| | | | ηs (Seasonal space heating efficiency) | % | | 164 | |
| | | | Prated at -22°C | kW | | 13 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | | 27 | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | | 3.50 | |
| | | | Pdh | kW | | 8.0 | |
| | | | PERd | % | | 140.0 | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 5.07 | |
| | | | Pdh | kW | | 4.9 | |
| | | | PERd | % | | 202.8 | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 6.10 | |
| | | | Pdh | kW | | 5.3 | |
| | | | PERd | % | | 244.0 | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 7.03 | |
| | | | Pdh | kW | | 5.7 | |
| | | | PERd | % | | 281.2 | |
| | | Tol (temperature operating limit) | COPd | | | 2.16 | |
| | | | Pdh | kW | | 10.1 | |
| | | | PERd | % | | 86.4 | |
| | | | TOL | °C | | -22 | |
| | | | WTOL | °C | | 35 | |
| | | G Condition (-15°CDB/-) | COPd | | | 2.62 | |
| | | | Pdh | kW | | 10.7 | |
| | | | PERd | % | | 104.8 | |
| | | Tbiv (bivalent temperature) | COPd | | | 2.62 | |
| | | | Pdh | kW | | 10.7 | |
| | | | PERd | % | | 104.8 | |
| | | | Tbiv | °C | | -15 | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | | 2.4 | |
| | Warm climate water outlet 35°C | General | Annual energy consumption | kWh | | 2,792 | |
| | | | ηs (Seasonal space heating efficiency) | % | | 236 | |
| | | | Prated at 2°C | kW | | 13 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | | 10 | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 3.67 | |
| | | | Pdh | kW | | 9.8 | |
| | | | PERd | % | | 146.8 | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | | 5.60 | |
| | | | Pdh | kW | | 7.9 | |
| | | | PERd | % | | 224.0 | |
| | | Tbiv (bivalent temperature) | COPd | | | 4.95 | |
| | | | Pdh | kW | | 9.8 | |
| | | | PERd | % | | 198.0 | |
| | | | Tbiv | °C | | 5 | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| Space heating | Warm climate water outlet 35°C | D Condition (12°CDB/11°CWB) | COPd | | | 7.60 | |
| | | | Pdh | kW | | 6.1 | |
| | | | PERd | % | | 304.0 | |

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |
(2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |
(3)Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB |
(4)Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB |
(5)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |

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## 1 - 1 EPRA014-018DV

(6)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed | Test at Ta DB/WB 7°C/6°C. According to EN 16147.



| Technical Specifications | | | | | ETVH16S18D6V + EPRA14DV3 | ETVH16S23D6V + EPRA14DV3 | ETVH16S18D6V + EPRA16DV3 | ETVH16S23D6V + EPRA16DV3 | ETVH16S18D6V + EPRA18DV3 | ETVH16S23D6V + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Indoor unit | | | | | ETVH16S18DA6V | ETVH16S23DA6V | ETVH16S18DA6V | ETVH16S23DA6V | ETVH16S18DA6V | ETVH16S23DA6V |
| Outdoor unit | | | | | EPRA14DAV3 | | EPRA16DAV3 | | EPRA18DAV3 | |
| Heating capacity | Min. | | | kW | 3.50 (1) | | 3.90 (1) | | 4.16 (1) | |
| | Nom. | | | kW | 5.69 (2) | | 9.00 (2) | | | |
| | Max. | | | kW | 8.75 (1) | | 10.00 (1) | | 11.25 (1) | |
| Power input | Heating | Min. | | kW | 0.74 (3) | | 0.82 (3) | | 0.88 (3) | |
| | | Nom. | | kW | 1.22 (2) | | 1.80 (2) | | | |
| | | Max. | | kW | 1.86 (3) | | 2.13 (3) | | 2.40 (3) | |
| | Domestic hot water from 10°C | Nom. | | kWh | 2.57 (4) | 2.85 (4) | 2.57 (4) | 2.85 (4) | 2.57 (4) | 2.85 (4) |
| Heat up time from 10°C to 50°C | | | | hr | 1h02min at 7°C ambient temperature | 1h13min at 7°C ambient temperature | 1h02min at 7°C ambient temperature | 1h13min at 7°C ambient temperature | 1h02min at 7°C ambient temperature | 1h13min at 7°C ambient temperature |
| COP | | | | | 4.67 (2) | | 5.00 (2) | | | |
| Pump | Type | | | | Grundfos UPMXL GEO 25-125 130 PWM | | | | | |
| | Nominal ESP unit | Heating | | kPa | 111.2 (5) | | 97.4 (5) | | | |
| Water side Heat exchanger | Water flow rate | Heating | Nom. | l/min | 16.3 (2) | | 25.8 (2) | | | |
| General | Supplier/ Manufacturer details | Name and address | | | Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium | | | | | |
| | | Name or trademark | | | Daikin Europe N.V. | | | | | |
| | Product description | Air-to-water heat pump | | | Yes | | | | | |
| | | Brine-to-water heat pump | | | No | | | | | |
| | | Heat pump combination heater | | | Yes | | | | | |
| | | Low-temperature heat pump | | | No | | | | | |
| | | Supplementary heater integrated | | | Yes | | | | | |
| | | Water-to-water heat pump | | | No | | | | | |
| | LW(A) Sound power level | Indoor | | dB(A) | 44.0 | | | | | |
| LW(A) Sound power level (according to EN14825) | Outdoor | | | dB(A) | 54.0 | | | | | |
| Sound condition Ecodesign and energy label | | | | | Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825 | | | | | |
| Tank | Name | | | | Stainless steel domestic hot water tank 180 l | Stainless steel domestic hot water tank 230 L | Stainless steel domestic hot water tank 180 l | Stainless steel domestic hot water tank 230 L | Stainless steel domestic hot water tank 180 l | Stainless steel domestic hot water tank 230 L |
| Space heating general | Air to water unit | Rated airflow (outdoor) | | $m^3/h$ | 3,918 | | | | 3,960 | |
| | Other | Capacity control | | | Inverter | | | | | |
| | | Pck (Crankcase heater mode) | | kW | 0.000 | | | | | |
| | | Poff (Off mode) | | kW | 0.021 | | | | | |
| | | Psb (Standby mode) | | kW | 0.021 | | | | | |
| | | Pto (Thermostat off) | | kW | 0.041 | | | | | |
| Domestic hot water heating | General | Declared load profile | | | L | XL | L | XL | L | XL |
| Space heating general | Integrated supplementary heater | Psup | | kW | 6.0 | | | | | |
| | | Type of energy input | | | Electrical | | | | | |
| Domestic hot water heating | Average climate | AEC (Annual electricity consumption) | | kWh | 935 | 1,547 | 935 | 1,547 | 935 | 1,547 |
| | | COPdhw | | | 2.62 | 2.61 | 2.62 | 2.61 | 2.62 | 2.61 |
| | | Heat up time | | | 1h 06min | 1h 19min | 1h 06min | 1h 19min | 1h 06min | 1h 19min |
| | | Πwh (water heating efficiency) | | % | 110 | 108 | 110 | 108 | 110 | 108 |
| | | Qelec (Daily electricity consumption) | | kWh | 4.450 | 7.320 | 4.450 | 7.320 | 4.450 | 7.320 |
| | | Reference hot water temperature | | °C | 52.5 | | | | | |
| | | Stand-by power input | | W | 34.2 | 49.2 | 34.2 | 49.2 | 34.2 | 49.2 |
| | | Water heating energy efficiency class | | | A | | | | | |
| | Cold climate | AEC (Annual electricity consumption) | | kWh | 1,091 | 1,814 | 1,091 | 1,814 | 1,091 | 1,814 |
| | | COPdhw | | | 2.26 | 2.23 | 2.26 | 2.23 | 2.26 | 2.23 |
| | | Heat up time | | | 1h 04min | 1h 16min | 1h 04min | 1h 16min | 1h 04min | 1h 16min |
| | | Πwh (water heating efficiency) | | % | 94 | 92 | 94 | 92 | 94 | 92 |
| | | Qelec (Daily electricity consumption) | | kWh | 5.170 | 8.560 | 5.170 | 8.560 | 5.170 | 8.560 |
| | | Reference hot water temperature | | °C | 52.5 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETVH16S18D6V + EPRA14DV3 | ETVH16S23D6V + EPRA14DV3 | ETVH16S18D6V + EPRA16DV3 | ETVH16S23D6V + EPRA16DV3 | ETVH16S18D6V + EPRA18DV3 | ETVH16S23D6V + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Domestic hot water heating | Cold climate | Stand-by power input | | W | 36.4 | 54.4 | 36.4 | 54.4 | 36.4 | 54.4 |
| | Warm climate | AEC (Annual electricity consumption) | | kWh | 843 | 1,388 | 843 | 1,388 | 843 | 1,388 |
| | | COPdhw | | | 2.90 | | | | | |
| | | Heat up time | | | 1h 15min | 1h 30min | 1h 15min | 1h 30min | 1h 15min | 1h 30min |
| | | ηwh (water heating efficiency) | | % | 122 | 121 | 122 | 121 | 122 | 121 |
| | | Qelec (Daily electricity consumption) | | kWh | 4.020 | 6.570 | 4.020 | 6.570 | 4.020 | 6.570 |
| | | Reference hot water temperature | | °C | 52.5 | | | | | |
| | | Stand-by power input | | W | 32.9 | 46.1 | 32.9 | 46.1 | 32.9 | 46.1 |
| Space heating | Average climate water outlet 55°C | General | Annual energy consumption | kWh | 7,211 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 140 | | | | | |
| | | | Prated at -10°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 26 | | | | | |
| | | | SCOP | | 3.58 | | | | | |
| | | | Seasonal space heating eff. class | | A++ | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.47 | | | | | |
| | | | Pdh | kW | 11.2 | | | | | |
| | | | PERd | % | 98.8 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.56 | | | | | |
| | | | Pdh | kW | 6.9 | | | | | |
| | | | PERd | % | 142.4 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.44 | | | | | |
| | | | Pdh | kW | 6.9 | | | | | |
| | | | PERd | % | 177.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.72 | | | | | |
| | | | Pdh | kW | 6.2 | | | | | |
| | | | PERd | % | 228.8 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.19 | | | | | |
| | | | Pdh | kW | 12.2 | | | | | |
| | | | PERd | % | 87.6 | | | | | |
| | | | TOL | °C | -10 | | | | | |
| | | | WTOL | °C | 55 | | | | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 0.3 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 2.19 | | | | | |
| | | | Pdh | kW | 12.2 | | | | | |
| | | | PERd | % | 87.6 | | | | | |
| | | | Tbiv | °C | -10 | | | | | |
| | Cold climate water outlet 55°C | General | Annual energy consumption | kWh | 9,654 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 125 | | | | | |
| | | | Prated at -22°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 35 | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.74 | | | | | |
| | | | Pdh | kW | 7.5 | | | | | |
| | | | PERd | % | 109.6 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.67 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV

| Technical Specifications | | | | | ETVH16S18D6V + EPRA14DV3 | ETVH16S23D6V + EPRA14DV3 | ETVH16S18D6V + EPRA16DV3 | ETVH16S23D6V + EPRA16DV3 | ETVH16S18D6V + EPRA18DV3 | ETVH16S23D6V + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Cold climate water outlet 55°C | B Condition (2°CDB/1°CWB) | Pdh | kW | 5.8 | | | | | |
| | | | PERd | % | 146.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.69 | | | | | |
| | | | Pdh | kW | 5.6 | | | | | |
| | | | PERd | % | 187.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | COPd | | 6.12 | | | | | |
| | | | Pdh | kW | 6.2 | | | | | |
| | | | PERd | % | 244.8 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 1.65 | | | | | |
| | | | Pdh | kW | 10.6 | | | | | |
| | | | PERd | % | 66.0 | | | | | |
| | | | TOL | °C | -22 | | | | | |
| | | | WTOL | °C | 55 | | | | | |
| | | G Condition (-15°CDB/-) | COPd | | 2.17 | | | | | |
| | | | Pdh | kW | 10.3 | | | | | |
| | | | PERd | % | 86.8 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 1.90 | | | | | |
| | | | Pdh | kW | 11.0 | | | | | |
| | | | PERd | % | 76.0 | | | | | |
| | | | Tbiv | °C | -18 | | | | | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | 1.9 | | | | | |
| | Warm climate water outlet 55°C | General | Annual energy consumption | kWh | 4,090 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 160 | | | | | |
| | | | Prated at 2°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 15 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.45 | | | | | |
| | | | Pdh | kW | 10.0 | | | | | |
| | | | PERd | % | 98.0 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.69 | | | | | |
| | | | Pdh | kW | 7.9 | | | | | |
| | | | PERd | % | 147.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.39 | | | | | |
| | | | Pdh | kW | 5.9 | | | | | |
| | | | PERd | % | 215.6 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 3.27 | | | | | |
| | | | Pdh | kW | 9.9 | | | | | |
| | | | PERd | % | 130.8 | | | | | |
| | | | Tbiv | °C | 5 | | | | | |
| | Water outlet 45°C | H Condition (-2°C / - ) | Max. | kW | 11.1 | | 11.8 | | | |
| | Average climate water outlet 35°C | General | SCOP | | 4.51 | | | | | |
| | | | Annual energy consumption | kWh | 5,726 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 177 | | | | | |
| | | | Prated at -10°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 21 | | | | | |
| | | | Seasonal space heating eff. class | | A+++ | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | 3.12 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETVH16S18D6V + EPRA14DV3 | ETVH16S23D6V + EPRA14DV3 | ETVH16S18D6V + EPRA16DV3 | ETVH16S23D6V + EPRA16DV3 | ETVH16S18D6V + EPRA18DV3 | ETVH16S23D6V + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 35°C | A Condition (-7°CDB/-8°CWB) | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 124.8 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.44 | | | | | |
| | | | Pdh | kW | 6.7 | | | | | |
| | | | PERd | % | 177.6 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.84 | | | | | |
| | | | Pdh | kW | 5.7 | | | | | |
| | | | PERd | % | 233.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.40 | | | | | |
| | | | Pdh | kW | 6.0 | | | | | |
| | | | PERd | % | 296.0 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.76 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 110.4 | | | | | |
| | | | TOL | °C | -10 | | | | | |
| | | | WTOL | °C | 35 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 3.12 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 124.8 | | | | | |
| | | | Tbiv | °C | -7 | | | | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 1.4 | | | | | |
| | Cold climate water outlet 35°C | General | Annual energy consumption | kWh | 7,417 | | | | | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 163 | | | | | |
| | | | Prated at -22°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 27 | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | 3.50 | | | | | |
| | | | Pdh | kW | 8.0 | | | | | |
| | | | PERd | % | 140.0 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.07 | | | | | |
| | | | Pdh | kW | 4.9 | | | | | |
| | | | PERd | % | 202.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 6.10 | | | | | |
| | | | Pdh | kW | 5.3 | | | | | |
| | | | PERd | % | 244.0 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.03 | | | | | |
| | | | Pdh | kW | 5.7 | | | | | |
| | | | PERd | % | 281.2 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.16 | | | | | |
| | | | Pdh | kW | 10.1 | | | | | |
| | | | PERd | % | 86.4 | | | | | |
| | | | TOL | °C | -22 | | | | | |
| | | | WTOL | °C | 35 | | | | | |
| | | G Condition (-15°CDB/-) | COPd | | 2.62 | | | | | |
| | | | Pdh | kW | 10.7 | | | | | |

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## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETVH16S18D6V + EPRA14DV3 | ETVH16S23D6V + EPRA14DV3 | ETVH16S18D6V + EPRA16DV3 | ETVH16S23D6V + EPRA16DV3 | ETVH16S18D6V + EPRA18DV3 | ETVH16S23D6V + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Cold climate water outlet 35°C | G Condition (-15°CDB/-) | PERd | % | 104.8 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 2.62 | | | | | |
| | | | Pdh | kW | 10.7 | | | | | |
| | | | PERd | % | 104.8 | | | | | |
| | | | Tbiv | °C | -15 | | | | | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | 2.4 | | | | | |
| | Warm climate water outlet 35°C | General | Annual energy consumption | kWh | 2,885 | | | | | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 229 | | | | | |
| | | | Prated at 2°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 10 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.67 | | | | | |
| | | | Pdh | kW | 9.8 | | | | | |
| | | | PERd | % | 146.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.60 | | | | | |
| | | | Pdh | kW | 7.9 | | | | | |
| | | | PERd | % | 224.0 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 4.95 | | | | | |
| | | | Pdh | kW | 9.8 | | | | | |
| | | | PERd | % | 198.0 | | | | | |
| | | | Tbiv | °C | 5 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.60 | | | | | |
| | | | Pdh | kW | 6.1 | | | | | |
| | | | PERd | % | 304.0 | | | | | |

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |
(2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |
(3)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |
(4)Test at Ta DB/WB 7°C/6°C. According to EN 16147. |
(5)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed |
Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB |
Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB

| Technical Specifications | | | | | ETVH16S18D6VG + EPRA14DV3 | ETVH16S23D6VG + EPRA14DV3 | ETVH16S18D6VG + EPRA16DV3 | ETVH16S23D6VG + EPRA16DV3 | ETVH16S18D6VG + EPRA18DV3 | ETVH16S23D6VG + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Indoor unit | | | | | ETVH16S18DA6V | ETVH16S23DA6V | ETVH16S18DA6V | ETVH16S23DA6V | ETVH16S18DA6V | ETVH16S23DA6V |
| Outdoor unit | | | | | EPRA14DAV3 | | EPRA16DAV3 | | EPRA18DAV3 | |
| Heating capacity | Min. | | | kW | 3.50 (1) | | 3.90 (1) | | 4.16 (1) | |
| | Nom. | | | kW | 5.69 (2) | | 9.00 (2) | | | |
| | Max. | | | kW | 8.75 (1) | | 10.00 (1) | | 11.25 (1) | |
| Power input | Heating | Min. | | kW | 0.74 (3) | | 0.82 (3) | | 0.88 (3) | |
| | | Nom. | | kW | 1.22 (2) | | 1.80 (2) | | | |
| | | Max. | | kW | 1.86 (3) | | 2.13 (3) | | 2.40 (3) | |
| | Domestic hot water from 10°C | Nom. | | kWh | 2.57 (4) | 2.85 (4) | 2.57 (4) | 2.85 (4) | 2.57 (4) | 2.85 (4) |
| Heat up time from 10°C to 50°C | | | | hr | 1h02min at 7°C ambient temperature | 1h13min at 7°C ambient temperature | 1h02min at 7°C ambient temperature | 1h13min at 7°C ambient temperature | 1h02min at 7°C ambient temperature | 1h13min at 7°C ambient temperature |
| COP | | | | | 4.67 (2) | | 5.00 (2) | | | |
| Pump | Type | | | | Grundfos UPMXL GEO 25-125 130 PWM | | | | | |
| | Nominal ESP unit | Heating | | kPa | 111.2 (5) | | 97.4 (5) | | | |
| Water side Heat exchanger | Water flow rate | Heating | Nom. | l/min | 16.3 (2) | | 25.8 (2) | | | |
| General | Supplier/ Manufacturer details | Name and address | | | Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium | | | | | |
| | | Name or trademark | | | Daikin Europe N.V. | | | | | |
| | Product description | Air-to-water heat pump | | | Yes | | | | | |
| | | Brine-to-water heat pump | | | No | | | | | |
| | | Heat pump combination heater | | | Yes | | | | | |
| | | Low-temperature heat pump | | | No | | | | | |
| | | Supplementary heater integrated | | | Yes | | | | | |
| | | Water-to-water heat pump | | | No | | | | | |
| | LW(A) Sound power level | Indoor | | dB(A) | 44.0 | | | | | |

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## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | ETVH16S18D6VG + EPRA14DV3 | ETVH16S23D6VG + EPRA14DV3 | ETVH16S18D6VG + EPRA16DV3 | ETVH16S23D6VG + EPRA16DV3 | ETVH16S18D6VG + EPRA18DV3 | ETVH16S23D6VG + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|
| LW(A) Sound power level (according to EN14825) | Outdoor | | dB(A) | 54.0 | | | | | |
| Sound condition Ecodesign and energy label | | | | Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825 | | | | | |
| Tank | Name | | | Stainless steel domestic hot water tank 180 l | Stainless steel domestic hot water tank 230 L | Stainless steel domestic hot water tank 180 l | Stainless steel domestic hot water tank 230 L | Stainless steel domestic hot water tank 180 l | Stainless steel domestic hot water tank 230 L |
| Space heating general | Air to water unit | Rated airflow (outdoor) | $m^3/h$ | 3,918 | | | | 3,960 | |
| | Other | Capacity control | | Inverter | | | | | |
| | | Pck (Crankcase heater mode) | kW | 0.000 | | | | | |
| | | Poff (Off mode) | kW | 0.021 | | | | | |
| | | Psb (Standby mode) | kW | 0.021 | | | | | |
| | | Pto (Thermostat off) | kW | 0.041 | | | | | |
| Domestic hot water heating | General | Declared load profile | | L | XL | L | XL | L | XL |
| Space heating general | Integrated supplementary heater | Psup | kW | 6.0 | | | | | |
| | | Type of energy input | | Electrical | | | | | |
| Domestic hot water heating | Average climate | AEC (Annual electricity consumption) | kWh | 935 | 1,547 | 935 | 1,547 | 935 | 1,547 |
| | | COPdhw | | 2.62 | 2.61 | 2.62 | 2.61 | 2.62 | 2.61 |
| | | Heat up time | | 1h 06min | 1h 19min | 1h 06min | 1h 19min | 1h 06min | 1h 19min |
| | | Πwh (water heating efficiency) | % | 110 | 108 | 110 | 108 | 110 | 108 |
| | | Qelec (Daily electricity consumption) | kWh | 4.450 | 7.320 | 4.450 | 7.320 | 4.450 | 7.320 |
| | | Reference hot water temperature | °C | 52.5 | | | | | |
| | | Stand-by power input | W | 34.2 | 49.2 | 34.2 | 49.2 | 34.2 | 49.2 |
| | | Water heating energy efficiency class | | A | | | | | |
| | Cold climate | AEC (Annual electricity consumption) | kWh | 1,091 | 1,814 | 1,091 | 1,814 | 1,091 | 1,814 |
| | | COPdhw | | 2.26 | 2.23 | 2.26 | 2.23 | 2.26 | 2.23 |
| | | Heat up time | | 1h 04min | 1h 16min | 1h 04min | 1h 16min | 1h 04min | 1h 16min |
| | | Πwh (water heating efficiency) | % | 94 | 92 | 94 | 92 | 94 | 92 |
| | | Qelec (Daily electricity consumption) | kWh | 5.170 | 8.560 | 5.170 | 8.560 | 5.170 | 8.560 |
| | | Reference hot water temperature | °C | 52.5 | | | | | |
| Domestic hot water heating | Cold climate | Stand-by power input | W | 36.4 | 54.4 | 36.4 | 54.4 | 36.4 | 54.4 |
| | Warm climate | AEC (Annual electricity consumption) | kWh | 843 | 1,388 | 843 | 1,388 | 843 | 1,388 |
| | | COPdhw | | 2.90 | | | | | |
| | | Heat up time | | 1h 15min | 1h 30min | 1h 15min | 1h 30min | 1h 15min | 1h 30min |
| | | Πwh (water heating efficiency) | % | 122 | 121 | 122 | 121 | 122 | 121 |
| | | Qelec (Daily electricity consumption) | kWh | 4.020 | 6.570 | 4.020 | 6.570 | 4.020 | 6.570 |
| | | Reference hot water temperature | °C | 52.5 | | | | | |
| | | Stand-by power input | W | 32.9 | 46.1 | 32.9 | 46.1 | 32.9 | 46.1 |

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## 1 - 1 EPRA014-018DV

| Technical Specifications | | | | | ETVH16S18D6VG + EPRA14DV3 | ETVH16S23D6VG + EPRA14DV3 | ETVH16S18D6VG + EPRA16DV3 | ETVH16S23D6VG + EPRA16DV3 | ETVH16S18D6VG + EPRA18DV3 | ETVH16S23D6VG + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 55°C | General | Annual energy consumption | kWh | 7,211 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 140 | | | | | |
| | | | Prated at -10°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 26 | | | | | |
| | | | SCOP | | 3.58 | | | | | |
| | | | Seasonal space heating eff. class | | A++ | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.47 | | | | | |
| | | | Pdh | kW | 11.2 | | | | | |
| | | | PERd | % | 98.8 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.56 | | | | | |
| | | | Pdh | kW | 6.9 | | | | | |
| | | | PERd | % | 142.4 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.44 | | | | | |
| | | | Pdh | kW | 6.9 | | | | | |
| | | | PERd | % | 177.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.72 | | | | | |
| | | | Pdh | kW | 6.2 | | | | | |
| | | | PERd | % | 228.8 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.19 | | | | | |
| | | | Pdh | kW | 12.2 | | | | | |
| | | | PERd | % | 87.6 | | | | | |
| | | | TOL | °C | -10 | | | | | |
| | | | WTOL | °C | 55 | | | | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 0.3 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 2.19 | | | | | |
| | | | Pdh | kW | 12.2 | | | | | |
| | | | PERd | % | 87.6 | | | | | |
| | | | Tbiv | °C | -10 | | | | | |
| | Cold climate water outlet 55°C | General | Annual energy consumption | kWh | 9,654 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 125 | | | | | |
| | | | Prated at -22°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 35 | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.74 | | | | | |
| | | | Pdh | kW | 7.5 | | | | | |
| | | | PERd | % | 109.6 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.67 | | | | | |

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## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETVH16S18D6VG + EPRA14DV3 | ETVH16S23D6VG + EPRA14DV3 | ETVH16S18D6VG + EPRA16DV3 | ETVH16S23D6VG + EPRA16DV3 | ETVH16S18D6VG + EPRA18DV3 | ETVH16S23D6VG + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Cold climate water outlet 55°C | B Condition (2°CDB/1°CWB) | Pdh | kW | 5.8 | | | | | |
| | | | PERd | % | 146.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.69 | | | | | |
| | | | Pdh | kW | 5.6 | | | | | |
| | | | PERd | % | 187.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | COPd | | 6.12 | | | | | |
| | | | Pdh | kW | 6.2 | | | | | |
| | | | PERd | % | 244.8 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 1.65 | | | | | |
| | | | Pdh | kW | 10.6 | | | | | |
| | | | PERd | % | 66.0 | | | | | |
| | | | TOL | °C | -22 | | | | | |
| | | | WTOL | °C | 55 | | | | | |
| | | G Condition (-15°CDB/-) | COPd | | 2.17 | | | | | |
| | | | Pdh | kW | 10.3 | | | | | |
| | | | PERd | % | 86.8 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 1.90 | | | | | |
| | | | Pdh | kW | 11.0 | | | | | |
| | | | PERd | % | 76.0 | | | | | |
| | | | Tbiv | °C | -18 | | | | | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | 1.9 | | | | | |
| | Warm climate water outlet 55°C | General | Annual energy consumption | kWh | 4,090 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 160 | | | | | |
| | | | Prated at 2°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 15 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.45 | | | | | |
| | | | Pdh | kW | 10.0 | | | | | |
| | | | PERd | % | 98.0 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.69 | | | | | |
| | | | Pdh | kW | 7.9 | | | | | |
| | | | PERd | % | 147.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.39 | | | | | |
| | | | Pdh | kW | 5.9 | | | | | |
| | | | PERd | % | 215.6 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 3.27 | | | | | |
| | | | Pdh | kW | 9.9 | | | | | |
| | | | PERd | % | 130.8 | | | | | |
| | | | Tbiv | °C | 5 | | | | | |
| | Water outlet 45°C | H Condition (-2°C / - ) | Max. | kW | 11.1 | | 11.8 | | | |
| | Average climate water outlet 35°C | General | SCOP | | 4.51 | | | | | |
| | | | Annual energy consumption | kWh | 5,726 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 177 | | | | | |
| | | | Prated at -10°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 21 | | | | | |
| | | | Seasonal space heating eff. class | | A+++ | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | 3.12 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV

| Technical Specifications | | | | | ETVH16S18D6VG + EPRA14DV3 | ETVH16S23D6VG + EPRA14DV3 | ETVH16S18D6VG + EPRA16DV3 | ETVH16S23D6VG + EPRA16DV3 | ETVH16S18D6VG + EPRA18DV3 | ETVH16S23D6VG + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 35°C | A Condition (-7°CDB/-8°CWB) | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 124.8 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.44 | | | | | |
| | | | Pdh | kW | 6.7 | | | | | |
| | | | PERd | % | 177.6 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.84 | | | | | |
| | | | Pdh | kW | 5.7 | | | | | |
| | | | PERd | % | 233.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.40 | | | | | |
| | | | Pdh | kW | 6.0 | | | | | |
| | | | PERd | % | 296.0 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.76 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 110.4 | | | | | |
| | | | TOL | °C | -10 | | | | | |
| | | | WTOL | °C | 35 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 3.12 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 124.8 | | | | | |
| | | | Tbiv | °C | -7 | | | | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 1.4 | | | | | |
| | Cold climate water outlet 35°C | General | Annual energy consumption | kWh | 7,417 | | | | | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 163 | | | | | |
| | | | Prated at -22°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 27 | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | 3.50 | | | | | |
| | | | Pdh | kW | 8.0 | | | | | |
| | | | PERd | % | 140.0 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.07 | | | | | |
| | | | Pdh | kW | 4.9 | | | | | |
| | | | PERd | % | 202.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 6.10 | | | | | |
| | | | Pdh | kW | 5.3 | | | | | |
| | | | PERd | % | 244.0 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.03 | | | | | |
| | | | Pdh | kW | 5.7 | | | | | |
| | | | PERd | % | 281.2 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.16 | | | | | |
| | | | Pdh | kW | 10.1 | | | | | |
| | | | PERd | % | 86.4 | | | | | |
| | | | TOL | °C | -22 | | | | | |
| | | | WTOL | °C | 35 | | | | | |
| | | G Condition (-15°CDB/-) | COPd | | 2.62 | | | | | |
| | | | Pdh | kW | 10.7 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETVH16S18D6VG + EPRA14DV3 | ETVH16S23D6VG + EPRA14DV3 | ETVH16S18D6VG + EPRA16DV3 | ETVH16S23D6VG + EPRA16DV3 | ETVH16S18D6VG + EPRA18DV3 | ETVH16S23D6VG + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Cold climate water outlet 35°C | G Condition (-15°CDB/-) | PERd | % | 104.8 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 2.62 | | | | | |
| | | | Pdh | kW | 10.7 | | | | | |
| | | | PERd | % | 104.8 | | | | | |
| | | | Tbiv | °C | -15 | | | | | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | 2.4 | | | | | |
| | Warm climate water outlet 35°C | General | Annual energy consumption | kWh | 2,885 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 229 | | | | | |
| | | | Prated at 2°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 10 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.67 | | | | | |
| | | | Pdh | kW | 9.8 | | | | | |
| | | | PERd | % | 146.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.60 | | | | | |
| | | | Pdh | kW | 7.9 | | | | | |
| | | | PERd | % | 224.0 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 4.95 | | | | | |
| | | | Pdh | kW | 9.8 | | | | | |
| | | | PERd | % | 198.0 | | | | | |
| | | | Tbiv | °C | 5 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.60 | | | | | |
| | | | Pdh | kW | 6.1 | | | | | |
| | | | PERd | % | 304.0 | | | | | |

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |
(2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |
(3)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |
(4)Test at Ta DB/WB 7°C/6°C. According to EN 16147. |
(5)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed |
Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB |
Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB

| Technical Specifications | | | | | ETVH16S18D9W + EPRA14DV3 | ETVH16S23D9W + EPRA14DV3 | ETVH16S18D9W + EPRA16DV3 | ETVH16S23D9W + EPRA16DV3 | ETVH16S18D9W + EPRA18DV3 | ETVH16S23D9W + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Indoor unit | | | | | ETVH16S18DA9W | ETVH16S23DA9W | ETVH16S18DA9W | ETVH16S23DA9W | ETVH16S18DA9W | ETVH16S23DA9W |
| Outdoor unit | | | | | EPRA14DAV3 | | EPRA16DAV3 | | EPRA18DAV3 | |
| Heating capacity | Min. | | | kW | 3.50 (1) | | 3.90 (1) | | 4.16 (1) | |
| | Nom. | | | kW | 5.69 (2) | | 9.00 (2) | | | |
| | Max. | | | kW | 8.75 (1) | | 10.00 (1) | | 11.25 (1) | |
| Power input | Heating | Min. | | kW | 0.74 (3) | | 0.82 (3) | | 0.88 (3) | |
| | | Nom. | | kW | 1.22 (2) | | 1.80 (2) | | | |
| | | Max. | | kW | 1.86 (3) | | 2.13 (3) | | 2.40 (3) | |
| | Domestic hot water from 10°C | Nom. | | kWh | 2.57 (4) | 2.85 (4) | 2.57 (4) | 2.85 (4) | 2.57 (4) | 2.85 (4) |
| Heat up time from 10°C to 50°C | | | | hr | 1h02min at 7°C ambient temperature | 1h13min at 7°C ambient temperature | 1h02min at 7°C ambient temperature | 1h13min at 7°C ambient temperature | 1h02min at 7°C ambient temperature | 1h13min at 7°C ambient temperature |
| COP | | | | | 4.67 (2) | | 5.00 (2) | | | |
| Pump | Type | | | | Grundfos UPMXL GEO 25-125 130 PWM | | | | | |
| | Nominal ESP unit | Heating | | kPa | 111.2 (5) | | 97.4 (5) | | | |
| Water side Heat exchanger | Water flow rate | Heating | Nom. | l/min | 16.3 (2) | | 25.8 (2) | | | |
| General | Supplier/ Manufacturer details | Name and address | | | Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium | | | | | |
| | | Name or trademark | | | Daikin Europe N.V. | | | | | |
| | Product description | Air-to-water heat pump | | | Yes | | | | | |
| | | Brine-to-water heat pump | | | No | | | | | |
| | | Heat pump combination heater | | | Yes | | | | | |
| | | Low-temperature heat pump | | | No | | | | | |
| | | Supplementary heater integrated | | | Yes | | | | | |
| | | Water-to-water heat pump | | | No | | | | | |
| | LW(A) Sound power level | Indoor | | dB(A) | 44.0 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | ETVH16S18D9W + EPRA14DV3 | ETVH16S23D9W + EPRA14DV3 | ETVH16S18D9W + EPRA16DV3 | ETVH16S23D9W + EPRA16DV3 | ETVH16S18D9W + EPRA18DV3 | ETVH16S23D9W + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|
| LW(A) Sound power level (according to EN14825) | Outdoor | | dB(A) | 54.0 | | | | | |
| Sound condition Ecodesign and energy label | | | | Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825 | | | | | |
| Tank | Name | | | Stainless steel domestic hot water tank 180 l | Stainless steel domestic hot water tank 230 L | Stainless steel domestic hot water tank 180 l | Stainless steel domestic hot water tank 230 L | Stainless steel domestic hot water tank 180 l | Stainless steel domestic hot water tank 230 L |
| Space heating general | Air to water unit | Rated airflow (outdoor) | $m^3/h$ | 3,918 | | | | 3,960 | |
| | Other | Capacity control | | Inverter | | | | | |
| | | Pck (Crankcase heater mode) | kW | 0.000 | | | | | |
| | | Poff (Off mode) | kW | 0.021 | | | | | |
| | | Psb (Standby mode) | kW | 0.021 | | | | | |
| | | Pto (Thermostat off) | kW | 0.041 | | | | | |
| Domestic hot water heating | General | Declared load profile | | L | XL | L | XL | L | XL |
| Space heating general | Integrated supplementary heater | Psup | kW | 9.0 | | | | | |
| | | Type of energy input | | Electrical | | | | | |
| Domestic hot water heating | Average climate | AEC (Annual electricity consumption) | kWh | 935 | 1,547 | 935 | 1,547 | 935 | 1,547 |
| | | COPdhw | | 2.62 | 2.61 | 2.62 | 2.61 | 2.62 | 2.61 |
| | | Heat up time | | 1h 06min | 1h 19min | 1h 06min | 1h 19min | 1h 06min | 1h 19min |
| | | Πwh (water heating efficiency) | % | 110 | 108 | 110 | 108 | 110 | 108 |
| | | Qelec (Daily electricity consumption) | kWh | 4.450 | 7.320 | 4.450 | 7.320 | 4.450 | 7.320 |
| | | Reference hot water temperature | °C | 52.5 | | | | | |
| | | Stand-by power input | W | 34.2 | 49.2 | 34.2 | 49.2 | 34.2 | 49.2 |
| | | Water heating energy efficiency class | | A | | | | | |
| | Cold climate | AEC (Annual electricity consumption) | kWh | 1,091 | 1,814 | 1,091 | 1,814 | 1,091 | 1,814 |
| | | COPdhw | | 2.26 | 2.23 | 2.26 | 2.23 | 2.26 | 2.23 |
| | | Heat up time | | 1h 04min | 1h 16min | 1h 04min | 1h 16min | 1h 04min | 1h 16min |
| | | Πwh (water heating efficiency) | % | 94 | 92 | 94 | 92 | 94 | 92 |
| | | Qelec (Daily electricity consumption) | kWh | 5.170 | 8.560 | 5.170 | 8.560 | 5.170 | 8.560 |
| | | Reference hot water temperature | °C | 52.5 | | | | | |
| Domestic hot water heating | Cold climate | Stand-by power input | W | 36.4 | 54.4 | 36.4 | 54.4 | 36.4 | 54.4 |
| | Warm climate | AEC (Annual electricity consumption) | kWh | 843 | 1,388 | 843 | 1,388 | 843 | 1,388 |
| | | COPdhw | | 2.90 | | | | | |
| | | Heat up time | | 1h 15min | 1h 30min | 1h 15min | 1h 30min | 1h 15min | 1h 30min |
| | | Πwh (water heating efficiency) | % | 122 | 121 | 122 | 121 | 122 | 121 |
| | | Qelec (Daily electricity consumption) | kWh | 4.020 | 6.570 | 4.020 | 6.570 | 4.020 | 6.570 |
| | | Reference hot water temperature | °C | 52.5 | | | | | |
| | | Stand-by power input | W | 32.9 | 46.1 | 32.9 | 46.1 | 32.9 | 46.1 |

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## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETVH16S18D9W + EPRA14DV3 | ETVH16S23D9W + EPRA14DV3 | ETVH16S18D9W + EPRA16DV3 | ETVH16S23D9W + EPRA16DV3 | ETVH16S18D9W + EPRA18DV3 | ETVH16S23D9W + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 55°C | General | Annual energy consumption | kWh | 7,211 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 140 | | | | | |
| | | | Prated at -10°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 26 | | | | | |
| | | | SCOP | | 3.58 | | | | | |
| | | | Seasonal space heating eff. class | | A++ | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.47 | | | | | |
| | | | Pdh | kW | 11.2 | | | | | |
| | | | PERd | % | 98.8 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.56 | | | | | |
| | | | Pdh | kW | 6.9 | | | | | |
| | | | PERd | % | 142.4 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.44 | | | | | |
| | | | Pdh | kW | 6.9 | | | | | |
| | | | PERd | % | 177.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.72 | | | | | |
| | | | Pdh | kW | 6.2 | | | | | |
| | | | PERd | % | 228.8 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.19 | | | | | |
| | | | Pdh | kW | 12.2 | | | | | |
| | | | PERd | % | 87.6 | | | | | |
| | | | TOL | °C | -10 | | | | | |
| | | | WTOL | °C | 55 | | | | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 0.3 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 2.19 | | | | | |
| | | | Pdh | kW | 12.2 | | | | | |
| | | | PERd | % | 87.6 | | | | | |
| | | | Tbiv | °C | -10 | | | | | |
| | Cold climate water outlet 55°C | General | Annual energy consumption | kWh | 9,654 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 125 | | | | | |
| | | | Prated at -22°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 35 | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.74 | | | | | |
| | | | Pdh | kW | 7.5 | | | | | |
| | | | PERd | % | 109.6 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.67 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETVH16S18D9W + EPRA14DV3 | ETVH16S23D9W + EPRA14DV3 | ETVH16S18D9W + EPRA16DV3 | ETVH16S23D9W + EPRA16DV3 | ETVH16S18D9W + EPRA18DV3 | ETVH16S23D9W + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Cold climate water outlet 55°C | B Condition (2°CDB/1°CWB) | Pdh | kW | 5.8 | | | | | |
| | | | PERd | % | 146.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.69 | | | | | |
| | | | Pdh | kW | 5.6 | | | | | |
| | | | PERd | % | 187.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | COPd | | 6.12 | | | | | |
| | | | Pdh | kW | 6.2 | | | | | |
| | | | PERd | % | 244.8 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 1.65 | | | | | |
| | | | Pdh | kW | 10.6 | | | | | |
| | | | PERd | % | 66.0 | | | | | |
| | | | TOL | °C | -22 | | | | | |
| | | | WTOL | °C | 55 | | | | | |
| | | G Condition (-15°CDB/-) | COPd | | 2.17 | | | | | |
| | | | Pdh | kW | 10.3 | | | | | |
| | | | PERd | % | 86.8 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 1.90 | | | | | |
| | | | Pdh | kW | 11.0 | | | | | |
| | | | PERd | % | 76.0 | | | | | |
| | | | Tbiv | °C | -18 | | | | | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | 1.9 | | | | | |
| | Warm climate water outlet 55°C | General | Annual energy consumption | kWh | 4,090 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 160 | | | | | |
| | | | Prated at 2°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 15 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.45 | | | | | |
| | | | Pdh | kW | 10.0 | | | | | |
| | | | PERd | % | 98.0 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.69 | | | | | |
| | | | Pdh | kW | 7.9 | | | | | |
| | | | PERd | % | 147.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.39 | | | | | |
| | | | Pdh | kW | 5.9 | | | | | |
| | | | PERd | % | 215.6 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 3.27 | | | | | |
| | | | Pdh | kW | 9.9 | | | | | |
| | | | PERd | % | 130.8 | | | | | |
| | | | Tbiv | °C | 5 | | | | | |
| | Water outlet 45°C | H Condition (-2°C / - ) | Max. | kW | 11.1 | | 11.8 | | | |
| | Average climate water outlet 35°C | General | SCOP | | 4.51 | | | | | |
| | | | Annual energy consumption | kWh | 5,726 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 177 | | | | | |
| | | | Prated at -10°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 21 | | | | | |
| | | | Seasonal space heating eff. class | | A+++ | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | 3.12 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETVH16S18D9W + EPRA14DV3 | ETVH16S23D9W + EPRA14DV3 | ETVH16S18D9W + EPRA16DV3 | ETVH16S23D9W + EPRA16DV3 | ETVH16S18D9W + EPRA18DV3 | ETVH16S23D9W + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 35°C | A Condition (-7°CDB/-8°CWB) | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 124.8 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.44 | | | | | |
| | | | Pdh | kW | 6.7 | | | | | |
| | | | PERd | % | 177.6 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.84 | | | | | |
| | | | Pdh | kW | 5.7 | | | | | |
| | | | PERd | % | 233.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.40 | | | | | |
| | | | Pdh | kW | 6.0 | | | | | |
| | | | PERd | % | 296.0 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.76 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 110.4 | | | | | |
| | | | TOL | °C | -10 | | | | | |
| | | | WTOL | °C | 35 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 3.12 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 124.8 | | | | | |
| | | | Tbiv | °C | -7 | | | | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 1.4 | | | | | |
| | Cold climate water outlet 35°C | General | Annual energy consumption | kWh | 7,417 | | | | | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 163 | | | | | |
| | | | Prated at -22°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 27 | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | 3.50 | | | | | |
| | | | Pdh | kW | 8.0 | | | | | |
| | | | PERd | % | 140.0 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.07 | | | | | |
| | | | Pdh | kW | 4.9 | | | | | |
| | | | PERd | % | 202.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 6.10 | | | | | |
| | | | Pdh | kW | 5.3 | | | | | |
| | | | PERd | % | 244.0 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.03 | | | | | |
| | | | Pdh | kW | 5.7 | | | | | |
| | | | PERd | % | 281.2 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.16 | | | | | |
| | | | Pdh | kW | 10.1 | | | | | |
| | | | PERd | % | 86.4 | | | | | |
| | | | TOL | °C | -22 | | | | | |
| | | | WTOL | °C | 35 | | | | | |
| | | G Condition (-15°CDB/-) | COPd | | 2.62 | | | | | |
| | | | Pdh | kW | 10.7 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETVH16S18D9W + EPRA14DV3 | ETVH16S23D9W + EPRA14DV3 | ETVH16S18D9W + EPRA16DV3 | ETVH16S23D9W + EPRA16DV3 | ETVH16S18D9W + EPRA18DV3 | ETVH16S23D9W + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Cold climate water outlet 35°C | G Condition (-15°CDB/-) | PERd | % | 104.8 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 2.62 | | | | | |
| | | | Pdh | kW | 10.7 | | | | | |
| | | | PERd | % | 104.8 | | | | | |
| | | | Tbiv | °C | -15 | | | | | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | 2.4 | | | | | |
| | Warm climate water outlet 35°C | General | Annual energy consumption | kWh | 2,885 | | | | | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 229 | | | | | |
| | | | Prated at 2°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 10 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.67 | | | | | |
| | | | Pdh | kW | 9.8 | | | | | |
| | | | PERd | % | 146.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.60 | | | | | |
| | | | Pdh | kW | 7.9 | | | | | |
| | | | PERd | % | 224.0 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 4.95 | | | | | |
| | | | Pdh | kW | 9.8 | | | | | |
| | | | PERd | % | 198.0 | | | | | |
| | | | Tbiv | °C | 5 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.60 | | | | | |
| | | | Pdh | kW | 6.1 | | | | | |
| | | | PERd | % | 304.0 | | | | | |

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |
(2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |
(3)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |
(4)Test at Ta DB/WB 7°C/6°C. According to EN 16147. |
(5)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed |
Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB |
Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB

| Technical Specifications | | | | | ETVH16S18D9WG + EPRA14DV3 | ETVH16S23D9WG + EPRA14DV3 | ETVH16S18D9WG + EPRA16DV3 | ETVH16S23D9WG + EPRA16DV3 | ETVH16S18D9WG + EPRA18DV3 | ETVH16S23D9WG + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Indoor unit | | | | | ETVH16S18DA9W | ETVH16S23DA9W | ETVH16S18DA9W | ETVH16S23DA9W | ETVH16S18DA9W | ETVH16S23DA9W |
| Outdoor unit | | | | | EPRA14DAV3 | | EPRA16DAV3 | | EPRA18DAV3 | |
| Heating capacity | Min. | | | kW | 3.50 (1) | | 3.90 (1) | | 4.16 (1) | |
| | Nom. | | | kW | 5.69 (2) | | 9.00 (2) | | | |
| | Max. | | | kW | 8.75 (1) | | 10.00 (1) | | 11.25 (1) | |
| Power input | Heating | Min. | | kW | 0.74 (3) | | 0.82 (3) | | 0.88 (3) | |
| | | Nom. | | kW | 1.22 (2) | | 1.80 (2) | | | |
| | | Max. | | kW | 1.86 (3) | | 2.13 (3) | | 2.40 (3) | |
| | Domestic hot water from 10°C | Nom. | | kWh | 2.57 (4) | 2.85 (4) | 2.57 (4) | 2.85 (4) | 2.57 (4) | 2.85 (4) |
| Heat up time from 10°C to 50°C | | | | hr | 1h02min at 7°C ambient temperature | 1h13min at 7°C ambient temperature | 1h02min at 7°C ambient temperature | 1h13min at 7°C ambient temperature | 1h02min at 7°C ambient temperature | 1h13min at 7°C ambient temperature |
| COP | | | | | 4.67 (2) | | 5.00 (2) | | | |
| Pump | Type | | | | Grundfos UPMXL GEO 25-125 130 PWM | | | | | |
| | Nominal ESP unit | Heating | | kPa | 111.2 (5) | | 97.4 (5) | | | |
| Water side Heat exchanger | Water flow rate | Heating | Nom. | l/min | 16.3 (2) | | 25.8 (2) | | | |
| General | Supplier/ Manufacturer details | Name and address | | | Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium | | | | | |
| | | Name or trademark | | | Daikin Europe N.V. | | | | | |
| | Product description | Air-to-water heat pump | | | Yes | | | | | |
| | | Brine-to-water heat pump | | | No | | | | | |
| | | Heat pump combination heater | | | Yes | | | | | |
| | | Low-temperature heat pump | | | No | | | | | |
| | | Supplementary heater integrated | | | Yes | | | | | |
| | | Water-to-water heat pump | | | No | | | | | |
| | LW(A) Sound power level | Indoor | | dB(A) | 44.0 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | ETVH16S18D9WG + EPRA14DV3 | ETVH16S23D9WG + EPRA14DV3 | ETVH16S18D9WG + EPRA16DV3 | ETVH16S23D9WG + EPRA16DV3 | ETVH16S18D9WG + EPRA18DV3 | ETVH16S23D9WG + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|
| LW(A) Sound power level (according to EN14825) | Outdoor | | dB(A) | 54.0 | | | | | |
| Sound condition Ecodesign and energy label | | | | Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825 | | | | | |
| Tank | Name | | | Stainless steel domestic hot water tank 180 l | Stainless steel domestic hot water tank 230 L | Stainless steel domestic hot water tank 180 l | Stainless steel domestic hot water tank 230 L | Stainless steel domestic hot water tank 180 l | Stainless steel domestic hot water tank 230 L |
| Space heating general | Air to water unit | Rated airflow (outdoor) | $m^3/h$ | 3,918 | | | | 3,960 | |
| | Other | Capacity control | | Inverter | | | | | |
| | | Pck (Crankcase heater mode) | kW | 0.000 | | | | | |
| | | Poff (Off mode) | kW | 0.021 | | | | | |
| | | Psb (Standby mode) | kW | 0.021 | | | | | |
| | | Pto (Thermostat off) | kW | 0.041 | | | | | |
| Domestic hot water heating | General | Declared load profile | | L | XL | L | XL | L | XL |
| Space heating general | Integrated supplementary heater | Psup | kW | 9.0 | | | | | |
| | | Type of energy input | | Electrical | | | | | |
| Domestic hot water heating | Average climate | AEC (Annual electricity consumption) | kWh | 935 | 1,547 | 935 | 1,547 | 935 | 1,547 |
| | | COPdhw | | 2.62 | 2.61 | 2.62 | 2.61 | 2.62 | 2.61 |
| | | Heat up time | | 1h 06min | 1h 19min | 1h 06min | 1h 19min | 1h 06min | 1h 19min |
| | | Πwh (water heating efficiency) | % | 110 | 108 | 110 | 108 | 110 | 108 |
| | | Qelec (Daily electricity consumption) | kWh | 4.450 | 7.320 | 4.450 | 7.320 | 4.450 | 7.320 |
| | | Reference hot water temperature | °C | 52.5 | | | | | |
| | | Stand-by power input | W | 34.2 | 49.2 | 34.2 | 49.2 | 34.2 | 49.2 |
| | | Water heating energy efficiency class | | A | | | | | |
| | Cold climate | AEC (Annual electricity consumption) | kWh | 1,091 | 1,814 | 1,091 | 1,814 | 1,091 | 1,814 |
| | | COPdhw | | 2.26 | 2.23 | 2.26 | 2.23 | 2.26 | 2.23 |
| | | Heat up time | | 1h 04min | 1h 16min | 1h 04min | 1h 16min | 1h 04min | 1h 16min |
| | | Πwh (water heating efficiency) | % | 94 | 92 | 94 | 92 | 94 | 92 |
| | | Qelec (Daily electricity consumption) | kWh | 5.170 | 8.560 | 5.170 | 8.560 | 5.170 | 8.560 |
| | | Reference hot water temperature | °C | 52.5 | | | | | |
| Domestic hot water heating | Cold climate | Stand-by power input | W | 36.4 | 54.4 | 36.4 | 54.4 | 36.4 | 54.4 |
| | Warm climate | AEC (Annual electricity consumption) | kWh | 843 | 1,388 | 843 | 1,388 | 843 | 1,388 |
| | | COPdhw | | 2.90 | | | | | |
| | | Heat up time | | 1h 15min | 1h 30min | 1h 15min | 1h 30min | 1h 15min | 1h 30min |
| | | Πwh (water heating efficiency) | % | 122 | 121 | 122 | 121 | 122 | 121 |
| | | Qelec (Daily electricity consumption) | kWh | 4.020 | 6.570 | 4.020 | 6.570 | 4.020 | 6.570 |
| | | Reference hot water temperature | °C | 52.5 | | | | | |
| | | Stand-by power input | W | 32.9 | 46.1 | 32.9 | 46.1 | 32.9 | 46.1 |

# 2 Specifications

## 1 - 1 EPRA014-018DV

| Technical Specifications | | | | | ETVH16S18D9WG + EPRA14DV3 | ETVH16S23D9WG + EPRA14DV3 | ETVH16S18D9WG + EPRA16DV3 | ETVH16S23D9WG + EPRA16DV3 | ETVH16S18D9WG + EPRA18DV3 | ETVH16S23D9WG + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 55°C | General | Annual energy consumption | kWh | 7,211 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 140 | | | | | |
| | | | Prated at -10°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 26 | | | | | |
| | | | SCOP | | 3.58 | | | | | |
| | | | Seasonal space heating eff. class | | A++ | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.47 | | | | | |
| | | | Pdh | kW | 11.2 | | | | | |
| | | | PERd | % | 98.8 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.56 | | | | | |
| | | | Pdh | kW | 6.9 | | | | | |
| | | | PERd | % | 142.4 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.44 | | | | | |
| | | | Pdh | kW | 6.9 | | | | | |
| | | | PERd | % | 177.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.72 | | | | | |
| | | | Pdh | kW | 6.2 | | | | | |
| | | | PERd | % | 228.8 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.19 | | | | | |
| | | | Pdh | kW | 12.2 | | | | | |
| | | | PERd | % | 87.6 | | | | | |
| | | | TOL | °C | -10 | | | | | |
| | | | WTOL | °C | 55 | | | | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 0.3 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 2.19 | | | | | |
| | | | Pdh | kW | 12.2 | | | | | |
| | | | PERd | % | 87.6 | | | | | |
| | | | Tbiv | °C | -10 | | | | | |
| | Cold climate water outlet 55°C | General | Annual energy consumption | kWh | 9,654 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 125 | | | | | |
| | | | Prated at -22°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 35 | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.74 | | | | | |
| | | | Pdh | kW | 7.5 | | | | | |
| | | | PERd | % | 109.6 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.67 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETVH16S18D9WG + EPRA14DV3 | ETVH16S23D9WG + EPRA14DV3 | ETVH16S18D9WG + EPRA16DV3 | ETVH16S23D9WG + EPRA16DV3 | ETVH16S18D9WG + EPRA18DV3 | ETVH16S23D9WG + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Cold climate water outlet 55°C | B Condition (2°CDB/1°CWB) | Pdh | kW | 5.8 | | | | | |
| | | | PERd | % | 146.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.69 | | | | | |
| | | | Pdh | kW | 5.6 | | | | | |
| | | | PERd | % | 187.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | COPd | | 6.12 | | | | | |
| | | | Pdh | kW | 6.2 | | | | | |
| | | | PERd | % | 244.8 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 1.65 | | | | | |
| | | | Pdh | kW | 10.6 | | | | | |
| | | | PERd | % | 66.0 | | | | | |
| | | | TOL | °C | -22 | | | | | |
| | | | WTOL | °C | 55 | | | | | |
| | | G Condition (-15°CDB/-) | COPd | | 2.17 | | | | | |
| | | | Pdh | kW | 10.3 | | | | | |
| | | | PERd | % | 86.8 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 1.90 | | | | | |
| | | | Pdh | kW | 11.0 | | | | | |
| | | | PERd | % | 76.0 | | | | | |
| | | | Tbiv | °C | -18 | | | | | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | 1.9 | | | | | |
| | Warm climate water outlet 55°C | General | Annual energy consumption | kWh | 4,090 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 160 | | | | | |
| | | | Prated at 2°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 15 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.45 | | | | | |
| | | | Pdh | kW | 10.0 | | | | | |
| | | | PERd | % | 98.0 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.69 | | | | | |
| | | | Pdh | kW | 7.9 | | | | | |
| | | | PERd | % | 147.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.39 | | | | | |
| | | | Pdh | kW | 5.9 | | | | | |
| | | | PERd | % | 215.6 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 3.27 | | | | | |
| | | | Pdh | kW | 9.9 | | | | | |
| | | | PERd | % | 130.8 | | | | | |
| | | | Tbiv | °C | 5 | | | | | |
| | Water outlet 45°C | H Condition (-2°C / - ) | Max. | kW | 11.1 | | 11.8 | | | |
| | Average climate water outlet 35°C | General | SCOP | | 4.51 | | | | | |
| | | | Annual energy consumption | kWh | 5,726 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 177 | | | | | |
| | | | Prated at -10°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 21 | | | | | |
| | | | Seasonal space heating eff. class | | A+++ | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | 3.12 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV

| Technical Specifications | | | | | ETVH16S18D9WG + EPRA14DV3 | ETVH16S23D9WG + EPRA14DV3 | ETVH16S18D9WG + EPRA16DV3 | ETVH16S23D9WG + EPRA16DV3 | ETVH16S18D9WG + EPRA18DV3 | ETVH16S23D9WG + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 35°C | A Condition (-7°CDB/-8°CWB) | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 124.8 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.44 | | | | | |
| | | | Pdh | kW | 6.7 | | | | | |
| | | | PERd | % | 177.6 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.84 | | | | | |
| | | | Pdh | kW | 5.7 | | | | | |
| | | | PERd | % | 233.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.40 | | | | | |
| | | | Pdh | kW | 6.0 | | | | | |
| | | | PERd | % | 296.0 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.76 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 110.4 | | | | | |
| | | | TOL | °C | -10 | | | | | |
| | | | WTOL | °C | 35 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 3.12 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 124.8 | | | | | |
| | | | Tbiv | °C | -7 | | | | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 1.4 | | | | | |
| | Cold climate water outlet 35°C | General | Annual energy consumption | kWh | 7,417 | | | | | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 163 | | | | | |
| | | | Prated at -22°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 27 | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | 3.50 | | | | | |
| | | | Pdh | kW | 8.0 | | | | | |
| | | | PERd | % | 140.0 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.07 | | | | | |
| | | | Pdh | kW | 4.9 | | | | | |
| | | | PERd | % | 202.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 6.10 | | | | | |
| | | | Pdh | kW | 5.3 | | | | | |
| | | | PERd | % | 244.0 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.03 | | | | | |
| | | | Pdh | kW | 5.7 | | | | | |
| | | | PERd | % | 281.2 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.16 | | | | | |
| | | | Pdh | kW | 10.1 | | | | | |
| | | | PERd | % | 86.4 | | | | | |
| | | | TOL | °C | -22 | | | | | |
| | | | WTOL | °C | 35 | | | | | |
| | | G Condition (-15°CDB/-) | COPd | | 2.62 | | | | | |
| | | | Pdh | kW | 10.7 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETVH16S18D9WG + EPRA14DV3 | ETVH16S23D9WG + EPRA14DV3 | ETVH16S18D9WG + EPRA16DV3 | ETVH16S23D9WG + EPRA16DV3 | ETVH16S18D9WG + EPRA18DV3 | ETVH16S23D9WG + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Cold climate water outlet 35°C | G Condition (-15°CDB/-) | PERd | % | 104.8 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 2.62 | | | | | |
| | | | Pdh | kW | 10.7 | | | | | |
| | | | PERd | % | 104.8 | | | | | |
| | | | Tbiv | °C | -15 | | | | | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | 2.4 | | | | | |
| | Warm climate water outlet 35°C | General | Annual energy consumption | kWh | 2,885 | | | | | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 229 | | | | | |
| | | | Prated at 2°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 10 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.67 | | | | | |
| | | | Pdh | kW | 9.8 | | | | | |
| | | | PERd | % | 146.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.60 | | | | | |
| | | | Pdh | kW | 7.9 | | | | | |
| | | | PERd | % | 224.0 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 4.95 | | | | | |
| | | | Pdh | kW | 9.8 | | | | | |
| | | | PERd | % | 198.0 | | | | | |
| | | | Tbiv | °C | 5 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.60 | | | | | |
| | | | Pdh | kW | 6.1 | | | | | |
| | | | PERd | % | 304.0 | | | | | |

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |
(2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |
(3)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |
(4)Test at Ta DB/WB 7°C/6°C. According to EN 16147. |
(5)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed |
Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB |
Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB

| Technical Specifications | | | | | ETVX16S18D6V + EPRA14DV3 | ETVX16S23D6V + EPRA14DV3 | ETVX16S18D6V + EPRA16DV3 | ETVX16S23D6V + EPRA16DV3 | ETVX16S18D6V + EPRA18DV3 | ETVX16S23D6V + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Indoor unit | | | | | ETVX16S18DA6V | ETVX16S23DA6V | ETVX16S18DA6V | ETVX16S23DA6V | ETVX16S18DA6V | ETVX16S23DA6V |
| Outdoor unit | | | | | EPRA14DAV3 | | EPRA16DAV3 | | EPRA18DAV3 | |
| Heating capacity | Min. | | | kW | 3.50 (1) | | 3.90 (1) | | 4.16 (1) | |
| | Nom. | | | kW | 5.69 (2) | | 9.00 (2) | | | |
| | Max. | | | kW | 8.75 (1) | | 10.00 (1) | | 11.25 (1) | |
| Cooling capacity | Nom. | | | kW | 10.6 (3) / 6.90 (4) | | 11.5 (3) / 7.88 (4) | | 12.5 (3) / 8.86 (4) | |
| Power input | Heating | Min. | | kW | 0.74 (5) | | 0.82 (5) | | 0.88 (5) | |
| | | Nom. | | kW | 1.22 (2) | | 1.80 (2) | | | |
| | | Max. | | kW | 1.86 (5) | | 2.13 (5) | | 2.40 (5) | |
| | Cooling | Nom. | | kW | 2.55 (3) / 2.56 (4) | | 2.80 (3) / 2.93 (4) | | 3.05 (3) / 3.31 (4) | |
| | Domestic hot water from 10°C | Nom. | | kWh | 2.57 (6) | 2.85 (6) | 2.57 (6) | 2.85 (6) | 2.57 (6) | 2.85 (6) |
| Heat up time from 10°C to 50°C | | | | hr | 1h02min at 7°C ambient temperature | 1h13min at 7°C ambient temperature | 1h02min at 7°C ambient temperature | 1h13min at 7°C ambient temperature | 1h02min at 7°C ambient temperature | 1h13min at 7°C ambient temperature |
| COP | | | | | 4.67 (2) | | 5.00 (2) | | | |
| EER | | | | | 4.13 (3) / 2.70 (4) | | 4.11 (3) / 2.69 (4) | | 4.09 (3) / 2.68 (4) | |
| Pump | Type | | | | Grundfos UPMXL GEO 25-125 130 PWM | | | | | |
| | Nominal ESP unit | Heating | | kPa | 111.2 (7) | | 97.4 (7) | | | |
| Water side Heat exchanger | Water flow rate | Heating | Nom. | l/min | 16.3 (2) | | 25.8 (2) | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | ETVX16S18D6V + EPRA14DV3 | ETVX16S23D6V + EPRA14DV3 | ETVX16S18D6V + EPRA16DV3 | ETVX16S23D6V + EPRA16DV3 | ETVX16S18D6V + EPRA18DV3 | ETVX16S23D6V + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|
| General | Supplier/ Manufacturer details | Name and address | | Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium | | | | | |
| | | Name or trademark | | Daikin Europe N.V. | | | | | |
| | Product description | Air-to-water heat pump | | Yes | | | | | |
| | | Brine-to-water heat pump | | No | | | | | |
| | | Heat pump combination heater | | Yes | | | | | |
| | | Low-temperature heat pump | | No | | | | | |
| | | Supplementary heater integrated | | Yes | | | | | |
| | | Water-to-water heat pump | | No | | | | | |
| | LW(A) Sound power level | Indoor | dB(A) | 44.0 | | | | | |
| LW(A) Sound power level (according to EN14825) | Outdoor | | dB(A) | 54.0 | | | | | |
| Sound condition Ecodesign and energy label | | | | Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825 | | | | | |
| Tank | Name | | | Stainless steel domestic hot water tank 180 l | Stainless steel domestic hot water tank 230 L | Stainless steel domestic hot water tank 180 l | Stainless steel domestic hot water tank 230 L | Stainless steel domestic hot water tank 180 l | Stainless steel domestic hot water tank 230 L |
| Space heating general | Air to water unit | Rated airflow (outdoor) | $m^3/h$ | 3,918 | | | | 3,960 | |
| | Other | Capacity control | | Inverter | | | | | |
| | | Pck (Crankcase heater mode) | kW | 0.000 | | | | | |
| | | Poff (Off mode) | kW | 0.021 | | | | | |
| | | Psb (Standby mode) | kW | 0.021 | | | | | |
| | | Pto (Thermostat off) | kW | 0.041 | | | | | |
| Domestic hot water heating | General | Declared load profile | | L | XL | L | XL | L | XL |
| Space heating general | Integrated supplementary heater | Psup | kW | 6.0 | | | | | |
| | | Type of energy input | | Electrical | | | | | |
| Domestic hot water heating | Average climate | AEC (Annual electricity consumption) | kWh | 935 | 1,547 | 935 | 1,547 | 935 | 1,547 |
| | | COPdhw | | 2.62 | 2.61 | 2.62 | 2.61 | 2.62 | 2.61 |
| | | Heat up time | | 1h 06min | 1h 19min | 1h 06min | 1h 19min | 1h 06min | 1h 19min |
| | | ηwh (water heating efficiency) | % | 110 | 108 | 110 | 108 | 110 | 108 |
| | | Qelec (Daily electricity consumption) | kWh | 4.450 | 7.320 | 4.450 | 7.320 | 4.450 | 7.320 |
| | | Reference hot water temperature | °C | 52.5 | | | | | |
| | | Stand-by power input | W | 34.2 | 49.2 | 34.2 | 49.2 | 34.2 | 49.2 |
| | | Water heating energy efficiency class | | A | | | | | |
| | Cold climate | AEC (Annual electricity consumption) | kWh | 1,091 | 1,814 | 1,091 | 1,814 | 1,091 | 1,814 |
| | | COPdhw | | 2.26 | 2.23 | 2.26 | 2.23 | 2.26 | 2.23 |
| | | Heat up time | | 1h 04min | 1h 16min | 1h 04min | 1h 16min | 1h 04min | 1h 16min |
| Domestic hot water heating | Cold climate | ηwh (water heating efficiency) | % | 94 | 92 | 94 | 92 | 94 | 92 |
| | | Qelec (Daily electricity consumption) | kWh | 5.170 | 8.560 | 5.170 | 8.560 | 5.170 | 8.560 |
| | | Reference hot water temperature | °C | 52.5 | | | | | |
| | | Stand-by power input | W | 36.4 | 54.4 | 36.4 | 54.4 | 36.4 | 54.4 |
| | Warm climate | AEC (Annual electricity consumption) | kWh | 843 | 1,388 | 843 | 1,388 | 843 | 1,388 |
| | | COPdhw | | 2.90 | | | | | |
| | | Heat up time | | 1h 15min | 1h 30min | 1h 15min | 1h 30min | 1h 15min | 1h 30min |
| | | ηwh (water heating efficiency) | % | 122 | 121 | 122 | 121 | 122 | 121 |
| | | Qelec (Daily electricity consumption) | kWh | 4.020 | 6.570 | 4.020 | 6.570 | 4.020 | 6.570 |
| | | Reference hot water temperature | °C | 52.5 | | | | | |
| | | Stand-by power input | W | 32.9 | 46.1 | 32.9 | 46.1 | 32.9 | 46.1 |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETVX16S18D6V + EPRA14DV3 | ETVX16S23D6V + EPRA14DV3 | ETVX16S18D6V + EPRA16DV3 | ETVX16S23D6V + EPRA16DV3 | ETVX16S18D6V + EPRA18DV3 | ETVX16S23D6V + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 55°C | General | Annual energy consumption | kWh | 7,134 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 142 | | | | | |
| | | | Prated at -10°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 26 | | | | | |
| | | | SCOP | | 3.62 | | | | | |
| | | | Seasonal space heating eff. class | | A++ | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.47 | | | | | |
| | | | Pdh | kW | 11.2 | | | | | |
| | | | PERd | % | 98.8 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.56 | | | | | |
| | | | Pdh | kW | 6.9 | | | | | |
| | | | PERd | % | 142.4 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.44 | | | | | |
| | | | Pdh | kW | 6.9 | | | | | |
| | | | PERd | % | 177.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.72 | | | | | |
| | | | Pdh | kW | 6.2 | | | | | |
| | | | PERd | % | 228.8 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.19 | | | | | |
| | | | Pdh | kW | 12.2 | | | | | |
| | | | PERd | % | 87.6 | | | | | |
| | | | TOL | °C | -10 | | | | | |
| | | | WTOL | °C | 55 | | | | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 0.3 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 2.19 | | | | | |
| | | | Pdh | kW | 12.2 | | | | | |
| | | | PERd | % | 87.6 | | | | | |
| | | | Tbiv | °C | -10 | | | | | |
| | Cold climate water outlet 55°C | General | Annual energy consumption | kWh | 9,609 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 125 | | | | | |
| | | | Prated at -22°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 35 | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.74 | | | | | |
| | | | Pdh | kW | 7.5 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETVX16S18D6V + EPRA14DV3 | ETVX16S23D6V + EPRA14DV3 | ETVX16S18D6V + EPRA16DV3 | ETVX16S23D6V + EPRA16DV3 | ETVX16S18D6V + EPRA18DV3 | ETVX16S23D6V + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Cold climate water outlet 55°C | A Condition (-7°CDB/-8°CWB) | PERd | % | 109.6 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.67 | | | | | |
| | | | Pdh | kW | 5.8 | | | | | |
| | | | PERd | % | 146.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.69 | | | | | |
| | | | Pdh | kW | 5.6 | | | | | |
| | | | PERd | % | 187.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | COPd | | 6.12 | | | | | |
| | | | Pdh | kW | 6.2 | | | | | |
| | | | PERd | % | 244.8 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 1.65 | | | | | |
| | | | Pdh | kW | 10.6 | | | | | |
| | | | PERd | % | 66.0 | | | | | |
| | | | TOL | °C | -22 | | | | | |
| | | | WTOL | °C | 55 | | | | | |
| | | G Condition (-15°CDB/-) | COPd | | 2.17 | | | | | |
| | | | Pdh | kW | 10.3 | | | | | |
| | | | PERd | % | 86.8 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 1.90 | | | | | |
| | | | Pdh | kW | 11.0 | | | | | |
| | | | PERd | % | 76.0 | | | | | |
| | | | Tbiv | °C | -18 | | | | | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | 1.9 | | | | | |
| | Warm climate water outlet 55°C | General | Annual energy consumption | kWh | 3,997 | | | | | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 164 | | | | | |
| | | | Prated at 2°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 14 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.45 | | | | | |
| | | | Pdh | kW | 10.0 | | | | | |
| | | | PERd | % | 98.0 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.69 | | | | | |
| | | | Pdh | kW | 7.9 | | | | | |
| | | | PERd | % | 147.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.39 | | | | | |
| | | | Pdh | kW | 5.9 | | | | | |
| | | | PERd | % | 215.6 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 3.27 | | | | | |
| | | | Pdh | kW | 9.9 | | | | | |
| | | | PERd | % | 130.8 | | | | | |
| | | | Tbiv | °C | 5 | | | | | |
| | Water outlet 45°C | H Condition (-2°C / -) | Max. | kW | 11.1 | | 11.8 | | | |
| | Average climate water outlet 35°C | General | SCOP | | 4.57 | | | | | |
| | | | Annual energy consumption | kWh | 5,649 | | | | | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 180 | | | | | |
| | | | Prated at -10°C | kW | 13 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV

| Technical Specifications | | | | | ETVX16S18D6V + EPRA14DV3 | ETVX16S23D6V + EPRA14DV3 | ETVX16S18D6V + EPRA16DV3 | ETVX16S23D6V + EPRA16DV3 | ETVX16S18D6V + EPRA18DV3 | ETVX16S23D6V + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 35°C | General | Qhe Annual energy consumption (GCV) | Gj | 20 | | | | | |
| | | | Seasonal space heating eff. class | | A+++ | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | 3.12 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 124.8 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.44 | | | | | |
| | | | Pdh | kW | 6.7 | | | | | |
| | | | PERd | % | 177.6 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.84 | | | | | |
| | | | Pdh | kW | 5.7 | | | | | |
| | | | PERd | % | 233.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.40 | | | | | |
| | | | Pdh | kW | 6.0 | | | | | |
| | | | PERd | % | 296.0 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.76 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 110.4 | | | | | |
| | | | TOL | °C | -10 | | | | | |
| | | | WTOL | °C | 35 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 3.12 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 124.8 | | | | | |
| | | | Tbiv | °C | -7 | | | | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 1.4 | | | | | |
| | Cold climate water outlet 35°C | General | Annual energy consumption | kWh | 7,370 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 164 | | | | | |
| | | | Prated at -22°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 27 | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | 3.50 | | | | | |
| | | | Pdh | kW | 8.0 | | | | | |
| | | | PERd | % | 140.0 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.07 | | | | | |
| | | | Pdh | kW | 4.9 | | | | | |
| | | | PERd | % | 202.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 6.10 | | | | | |
| | | | Pdh | kW | 5.3 | | | | | |
| | | | PERd | % | 244.0 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.03 | | | | | |
| | | | Pdh | kW | 5.7 | | | | | |
| | | | PERd | % | 281.2 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.16 | | | | | |
| | | | Pdh | kW | 10.1 | | | | | |
| | | | PERd | % | 86.4 | | | | | |
| | | | TOL | °C | -22 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETVX16S18D6V + EPRA14DV3 | ETVX16S23D6V + EPRA14DV3 | ETVX16S18D6V + EPRA16DV3 | ETVX16S23D6V + EPRA16DV3 | ETVX16S18D6V + EPRA18DV3 | ETVX16S23D6V + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Cold climate water outlet 35°C | Tol (temperature operating limit) | WTOL | °C | 35 | | | | | |
| | | G Condition (-15°CDB/-) | COPd | | 2.62 | | | | | |
| | | | Pdh | kW | 10.7 | | | | | |
| | | | PERd | % | 104.8 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 2.62 | | | | | |
| | | | Pdh | kW | 10.7 | | | | | |
| | | | PERd | % | 104.8 | | | | | |
| | | | Tbiv | °C | -15 | | | | | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | 2.4 | | | | | |
| | Warm climate water outlet 35°C | General | Annual energy consumption | kWh | 2,792 | | | | | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 236 | | | | | |
| | | | Prated at 2°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 10 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.67 | | | | | |
| | | | Pdh | kW | 9.8 | | | | | |
| | | | PERd | % | 146.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.60 | | | | | |
| | | | Pdh | kW | 7.9 | | | | | |
| | | | PERd | % | 224.0 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 4.95 | | | | | |
| | | | Pdh | kW | 9.8 | | | | | |
| | | | PERd | % | 198.0 | | | | | |
| | | | Tbiv | °C | 5 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.60 | | | | | |
| | | | Pdh | kW | 6.1 | | | | | |
| | | | PERd | % | 304.0 | | | | | |

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |
(2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |
(3)Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB |
(4)Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB |
(5)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |
(6)Test at Ta DB/WB 7°C/6°C. According to EN 16147. |
(7)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed

| Technical Specifications | | | | | ETVX16S18D6VG + EPRA14DV3 | ETVX16S23D6VG + EPRA14DV3 | ETVX16S18D6VG + EPRA16DV3 | ETVX16S23D6VG + EPRA16DV3 | ETVX16S18D6VG + EPRA18DV3 | ETVX16S23D6VG + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Indoor unit | | | | | ETVX16S18DA6V | ETVX16S23DA6V | ETVX16S18DA6V | ETVX16S23DA6V | ETVX16S18DA6V | ETVX16S23DA6V |
| Outdoor unit | | | | | EPRA14DAV3 | | EPRA16DAV3 | | EPRA18DAV3 | |
| Heating capacity | Min. | | | kW | 3.50 (1) | | 3.90 (1) | | 4.16 (1) | |
| | Nom. | | | kW | 5.69 (2) | | 9.00 (2) | | | |
| | Max. | | | kW | 8.75 (1) | | 10.00 (1) | | 11.25 (1) | |
| Cooling capacity | Nom. | | | kW | 10.6 (3) / 6.90 (4) | | 11.5 (3) / 7.88 (4) | | 12.5 (3) / 8.86 (4) | |
| Power input | Heating | Min. | | kW | 0.74 (5) | | 0.82 (5) | | 0.88 (5) | |
| | | Nom. | | kW | 1.22 (2) | | 1.80 (2) | | | |
| | | Max. | | kW | 1.86 (5) | | 2.13 (5) | | 2.40 (5) | |
| | Cooling | Nom. | | kW | 2.55 (3) / 2.56 (4) | | 2.80 (3) / 2.93 (4) | | 3.05 (3) / 3.31 (4) | |
| | Domestic hot water from 10°C | Nom. | | kWh | 2.57 (6) | 2.85 (6) | 2.57 (6) | 2.85 (6) | 2.57 (6) | 2.85 (6) |
| Heat up time from 10°C to 50°C | | | | hr | 1h02min at 7°C ambient temperature | 1h13min at 7°C ambient temperature | 1h02min at 7°C ambient temperature | 1h13min at 7°C ambient temperature | 1h02min at 7°C ambient temperature | 1h13min at 7°C ambient temperature |
| COP | | | | | 4.67 (2) | | 5.00 (2) | | | |
| EER | | | | | 4.13 (3) / 2.70 (4) | | 4.11 (3) / 2.69 (4) | | 4.09 (3) / 2.68 (4) | |
| Pump | Type | | | | Grundfos UPMXL GEO 25-125 130 PWM | | | | | |
| | Nominal ESP unit | Heating | | kPa | 111.2 (7) | | 97.4 (7) | | | |
| Water side Heat exchanger | Water flow rate | Heating | Nom. | l/min | 16.3 (2) | | 25.8 (2) | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | ETVX16S18D6VG + EPRA14DV3 | ETVX16S23D6VG + EPRA14DV3 | ETVX16S18D6VG + EPRA16DV3 | ETVX16S23D6VG + EPRA16DV3 | ETVX16S18D6VG + EPRA18DV3 | ETVX16S23D6VG + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|
| General | Supplier/ Manufacturer | Name and address | | Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium | | | | | |
| | | Name or trademark | | Daikin Europe N.V. | | | | | |
| | Product description | Air-to-water heat pump | | Yes | | | | | |
| | | Brine-to-water heat pump | | No | | | | | |
| | | Heat pump combination heater | | Yes | | | | | |
| | | Low-temperature heat pump | | No | | | | | |
| | | Supplementary heater integrated | | Yes | | | | | |
| | | Water-to-water heat pump | | No | | | | | |
| | LW(A) Sound power level | Indoor | dB(A) | 44.0 | | | | | |
| LW(A) Sound power level (according to EN14825) | Outdoor | | dB(A) | 54.0 | | | | | |
| Sound condition Ecodesign and energy label | | | | Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825 | | | | | |
| Tank | Name | | | Stainless steel domestic hot water tank 180 l | Stainless steel domestic hot water tank 230 L | Stainless steel domestic hot water tank 180 l | Stainless steel domestic hot water tank 230 L | Stainless steel domestic hot water tank 180 l | Stainless steel domestic hot water tank 230 L |
| Space heating general | Air to water unit | Rated airflow (outdoor) | $m^3/h$ | 3,918 | | | | 3,960 | |
| | Other | Capacity control | | Inverter | | | | | |
| | | Pck (Crankcase heater mode) | kW | 0.000 | | | | | |
| | | Poff (Off mode) | kW | 0.021 | | | | | |
| | | Psb (Standby mode) | kW | 0.021 | | | | | |
| | | Pto (Thermostat off) | kW | 0.041 | | | | | |
| Domestic hot water heating | General | Declared load profile | | L | XL | L | XL | L | XL |
| Space heating general | Integrated supplementary heater | Psup | kW | 6.0 | | | | | |
| | | Type of energy input | | Electrical | | | | | |
| Domestic hot water heating | Average climate | AEC (Annual electricity consumption) | kWh | 935 | 1,547 | 935 | 1,547 | 935 | 1,547 |
| | | COPdhw | | 2.62 | 2.61 | 2.62 | 2.61 | 2.62 | 2.61 |
| | | Heat up time | | 1h 06min | 1h 19min | 1h 06min | 1h 19min | 1h 06min | 1h 19min |
| | | ηwh (water heating efficiency) | % | 110 | 108 | 110 | 108 | 110 | 108 |
| | | Qelec (Daily electricity consumption) | kWh | 4.450 | 7.320 | 4.450 | 7.320 | 4.450 | 7.320 |
| | | Reference hot water temperature | °C | 52.5 | | | | | |
| | | Stand-by power input | W | 34.2 | 49.2 | 34.2 | 49.2 | 34.2 | 49.2 |
| | | Water heating energy efficiency class | | A | | | | | |
| | Cold climate | AEC (Annual electricity consumption) | kWh | 1,091 | 1,814 | 1,091 | 1,814 | 1,091 | 1,814 |
| | | COPdhw | | 2.26 | 2.23 | 2.26 | 2.23 | 2.26 | 2.23 |
| | | Heat up time | | 1h 04min | 1h 16min | 1h 04min | 1h 16min | 1h 04min | 1h 16min |
| Domestic hot water heating | Cold climate | ηwh (water heating efficiency) | % | 94 | 92 | 94 | 92 | 94 | 92 |
| | | Qelec (Daily electricity consumption) | kWh | 5.170 | 8.560 | 5.170 | 8.560 | 5.170 | 8.560 |
| | | Reference hot water temperature | °C | 52.5 | | | | | |
| | | Stand-by power input | W | 36.4 | 54.4 | 36.4 | 54.4 | 36.4 | 54.4 |
| | Warm climate | AEC (Annual electricity consumption) | kWh | 843 | 1,388 | 843 | 1,388 | 843 | 1,388 |
| | | COPdhw | | 2.90 | | | | | |
| | | Heat up time | | 1h 15min | 1h 30min | 1h 15min | 1h 30min | 1h 15min | 1h 30min |
| | | ηwh (water heating efficiency) | % | 122 | 121 | 122 | 121 | 122 | 121 |
| | | Qelec (Daily electricity consumption) | kWh | 4.020 | 6.570 | 4.020 | 6.570 | 4.020 | 6.570 |
| | | Reference hot water temperature | °C | 52.5 | | | | | |
| | | Stand-by power input | W | 32.9 | 46.1 | 32.9 | 46.1 | 32.9 | 46.1 |

# 2 Specifications

## 1 - 1 EPRA014-018DV

| Technical Specifications | | | | | ETVX16S18D6VG + EPRA14DV3 | ETVX16S23D6VG + EPRA14DV3 | ETVX16S18D6VG + EPRA16DV3 | ETVX16S23D6VG + EPRA16DV3 | ETVX16S18D6VG + EPRA18DV3 | ETVX16S23D6VG + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 55°C | General | Annual energy consumption | kWh | 7,134 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 142 | | | | | |
| | | | Prated at -10°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 26 | | | | | |
| | | | SCOP | | 3.62 | | | | | |
| | | | Seasonal space heating eff. class | | A++ | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.47 | | | | | |
| | | | Pdh | kW | 11.2 | | | | | |
| | | | PERd | % | 98.8 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.56 | | | | | |
| | | | Pdh | kW | 6.9 | | | | | |
| | | | PERd | % | 142.4 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.44 | | | | | |
| | | | Pdh | kW | 6.9 | | | | | |
| | | | PERd | % | 177.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.72 | | | | | |
| | | | Pdh | kW | 6.2 | | | | | |
| | | | PERd | % | 228.8 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.19 | | | | | |
| | | | Pdh | kW | 12.2 | | | | | |
| | | | PERd | % | 87.6 | | | | | |
| | | | TOL | °C | -10 | | | | | |
| | | | WTOL | °C | 55 | | | | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 0.3 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 2.19 | | | | | |
| | | | Pdh | kW | 12.2 | | | | | |
| | | | PERd | % | 87.6 | | | | | |
| | | | Tbiv | °C | -10 | | | | | |
| | Cold climate water outlet 55°C | General | Annual energy consumption | kWh | 9,609 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 125 | | | | | |
| | | | Prated at -22°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 35 | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.74 | | | | | |
| | | | Pdh | kW | 7.5 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETVX16S18D6VG + EPRA14DV3 | ETVX16S23D6VG + EPRA14DV3 | ETVX16S18D6VG + EPRA16DV3 | ETVX16S23D6VG + EPRA16DV3 | ETVX16S18D6VG + EPRA18DV3 | ETVX16S23D6VG + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Cold climate water outlet 55°C | A Condition (-7°CDB/-8°CWB) | PERd | % | 109.6 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.67 | | | | | |
| | | | Pdh | kW | 5.8 | | | | | |
| | | | PERd | % | 146.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.69 | | | | | |
| | | | Pdh | kW | 5.6 | | | | | |
| | | | PERd | % | 187.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | COPd | | 6.12 | | | | | |
| | | | Pdh | kW | 6.2 | | | | | |
| | | | PERd | % | 244.8 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 1.65 | | | | | |
| | | | Pdh | kW | 10.6 | | | | | |
| | | | PERd | % | 66.0 | | | | | |
| | | | TOL | °C | -22 | | | | | |
| | | | WTOL | °C | 55 | | | | | |
| | | G Condition (-15°CDB/-) | COPd | | 2.17 | | | | | |
| | | | Pdh | kW | 10.3 | | | | | |
| | | | PERd | % | 86.8 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 1.90 | | | | | |
| | | | Pdh | kW | 11.0 | | | | | |
| | | | PERd | % | 76.0 | | | | | |
| | | | Tbiv | °C | -18 | | | | | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | 1.9 | | | | | |
| | Warm climate water outlet 55°C | General | Annual energy consumption | kWh | 3,997 | | | | | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 164 | | | | | |
| | | | Prated at 2°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 14 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.45 | | | | | |
| | | | Pdh | kW | 10.0 | | | | | |
| | | | PERd | % | 98.0 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.69 | | | | | |
| | | | Pdh | kW | 7.9 | | | | | |
| | | | PERd | % | 147.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.39 | | | | | |
| | | | Pdh | kW | 5.9 | | | | | |
| | | | PERd | % | 215.6 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 3.27 | | | | | |
| | | | Pdh | kW | 9.9 | | | | | |
| | | | PERd | % | 130.8 | | | | | |
| | | | Tbiv | °C | 5 | | | | | |
| | Water outlet 45°C | H Condition (-2°C / -) | Max. | kW | 11.1 | | 11.8 | | | |
| | Average climate water outlet 35°C | General | SCOP | | 4.57 | | | | | |
| | | | Annual energy consumption | kWh | 5,649 | | | | | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 180 | | | | | |
| | | | Prated at -10°C | kW | 13 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV

| Technical Specifications | | | | | ETVX16S18D6VG + EPRA14DV3 | ETVX16S23D6VG + EPRA14DV3 | ETVX16S18D6VG + EPRA16DV3 | ETVX16S23D6VG + EPRA16DV3 | ETVX16S18D6VG + EPRA18DV3 | ETVX16S23D6VG + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 35°C | General | Qhe Annual energy consumption (GCV) | Gj | 20 | | | | | |
| | | | Seasonal space heating eff. class | | A+++ | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | 3.12 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 124.8 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.44 | | | | | |
| | | | Pdh | kW | 6.7 | | | | | |
| | | | PERd | % | 177.6 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.84 | | | | | |
| | | | Pdh | kW | 5.7 | | | | | |
| | | | PERd | % | 233.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.40 | | | | | |
| | | | Pdh | kW | 6.0 | | | | | |
| | | | PERd | % | 296.0 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.76 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 110.4 | | | | | |
| | | | TOL | °C | -10 | | | | | |
| | | | WTOL | °C | 35 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 3.12 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 124.8 | | | | | |
| | | | Tbiv | °C | -7 | | | | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 1.4 | | | | | |
| | Cold climate water outlet 35°C | General | Annual energy consumption | kWh | 7,370 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 164 | | | | | |
| | | | Prated at -22°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 27 | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | 3.50 | | | | | |
| | | | Pdh | kW | 8.0 | | | | | |
| | | | PERd | % | 140.0 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.07 | | | | | |
| | | | Pdh | kW | 4.9 | | | | | |
| | | | PERd | % | 202.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 6.10 | | | | | |
| | | | Pdh | kW | 5.3 | | | | | |
| | | | PERd | % | 244.0 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.03 | | | | | |
| | | | Pdh | kW | 5.7 | | | | | |
| | | | PERd | % | 281.2 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.16 | | | | | |
| | | | Pdh | kW | 10.1 | | | | | |
| | | | PERd | % | 86.4 | | | | | |
| | | | TOL | °C | -22 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETVX16S18D6VG + EPRA14DV3 | ETVX16S23D6VG + EPRA14DV3 | ETVX16S18D6VG + EPRA16DV3 | ETVX16S23D6VG + EPRA16DV3 | ETVX16S18D6VG + EPRA18DV3 | ETVX16S23D6VG + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Cold climate water outlet 35°C | Tol (temperature operating limit) | WTOL | °C | 35 | | | | | |
| | | G Condition (-15°CDB/-) | COPd | | 2.62 | | | | | |
| | | | Pdh | kW | 10.7 | | | | | |
| | | | PERd | % | 104.8 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 2.62 | | | | | |
| | | | Pdh | kW | 10.7 | | | | | |
| | | | PERd | % | 104.8 | | | | | |
| | | | Tbiv | °C | -15 | | | | | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | 2.4 | | | | | |
| | Warm climate water outlet 35°C | General | Annual energy consumption | kWh | 2,792 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 236 | | | | | |
| | | | Prated at 2°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 10 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.67 | | | | | |
| | | | Pdh | kW | 9.8 | | | | | |
| | | | PERd | % | 146.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.60 | | | | | |
| | | | Pdh | kW | 7.9 | | | | | |
| | | | PERd | % | 224.0 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 4.95 | | | | | |
| | | | Pdh | kW | 9.8 | | | | | |
| | | | PERd | % | 198.0 | | | | | |
| | | | Tbiv | °C | 5 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.60 | | | | | |
| | | | Pdh | kW | 6.1 | | | | | |
| | | | PERd | % | 304.0 | | | | | |

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |
(2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |
(3)Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB |
(4)Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB |
(5)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |
(6)Test at Ta DB/WB 7°C/6°C. According to EN 16147. |
(7)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed

| Technical Specifications | | | | | ETVX16S18D9W + EPRA14DV3 | ETVX16S23D9W + EPRA14DV3 | ETVX16S18D9W + EPRA16DV3 | ETVX16S23D9W + EPRA16DV3 | ETVX16S18D9W + EPRA18DV3 | ETVX16S23D9W + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Indoor unit | | | | | ETVX16S18DA9W | ETVX16S23DA9W | ETVX16S18DA9W | ETVX16S23DA9W | ETVX16S18DA9W | ETVX16S23DA9W |
| Outdoor unit | | | | | EPRA14DAV3 | | EPRA16DAV3 | | EPRA18DAV3 | |
| Heating capacity | Min. | | | kW | 3.50 (1) | | 3.90 (1) | | 4.16 (1) | |
| | Nom. | | | kW | 5.69 (2) | | 9.00 (2) | | | |
| | Max. | | | kW | 8.75 (1) | | 10.00 (1) | | 11.25 (1) | |
| Cooling capacity | Nom. | | | kW | 10.6 (3) / 6.90 (4) | | 11.5 (3) / 7.88 (4) | | 12.5 (3) / 8.86 (4) | |
| Power input | Heating | Min. | | kW | 0.74 (5) | | 0.82 (5) | | 0.88 (5) | |
| | | Nom. | | kW | 1.22 (2) | | 1.80 (2) | | | |
| | | Max. | | kW | 1.86 (5) | | 2.13 (5) | | 2.40 (5) | |
| | Cooling | Nom. | | kW | 2.55 (3) / 2.56 (4) | | 2.80 (3) / 2.93 (4) | | 3.05 (3) / 3.31 (4) | |
| | Domestic hot water from 10°C | Nom. | | kWh | 2.57 (6) | 2.85 (6) | 2.57 (6) | 2.85 (6) | 2.57 (6) | 2.85 (6) |
| Heat up time from 10°C to 50°C | | | | hr | 1h02min at 7°C ambient temperature | 1h13min at 7°C ambient temperature | 1h02min at 7°C ambient temperature | 1h13min at 7°C ambient temperature | 1h02min at 7°C ambient temperature | 1h13min at 7°C ambient temperature |
| COP | | | | | 4.67 (2) | | 5.00 (2) | | | |
| EER | | | | | 4.13 (3) / 2.70 (4) | | 4.11 (3) / 2.69 (4) | | 4.09 (3) / 2.68 (4) | |
| Pump | Type | | | | Grundfos UPMXL GEO 25-125 130 PWM | | | | | |
| | Nominal ESP unit | Heating | | kPa | 111.2 (7) | | 97.4 (7) | | | |
| Water side Heat exchanger | Water flow rate | Heating | Nom. | l/min | 16.3 (2) | | 25.8 (2) | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV

| Technical Specifications | | | | ETVX16S18D9W + EPRA14DV3 | ETVX16S23D9W + EPRA14DV3 | ETVX16S18D9W + EPRA16DV3 | ETVX16S23D9W + EPRA16DV3 | ETVX16S18D9W + EPRA18DV3 | ETVX16S23D9W + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|
| General | Supplier/ Manufacturer details | Name and address | | Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium | | | | | |
| | | Name or trademark | | Daikin Europe N.V. | | | | | |
| | Product description | Air-to-water heat pump | | Yes | | | | | |
| | | Brine-to-water heat pump | | No | | | | | |
| | | Heat pump combination heater | | Yes | | | | | |
| | | Low-temperature heat pump | | No | | | | | |
| | | Supplementary heater integrated | | Yes | | | | | |
| | | Water-to-water heat pump | | No | | | | | |
| | LW(A) Sound power level | Indoor | dB(A) | 44.0 | | | | | |
| LW(A) Sound power level (according to EN14825) | Outdoor | | dB(A) | 54.0 | | | | | |
| Sound condition Ecodesign and energy label | | | | Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825 | | | | | |
| Tank | Name | | | Stainless steel domestic hot water tank 180 l | Stainless steel domestic hot water tank 230 L | Stainless steel domestic hot water tank 180 l | Stainless steel domestic hot water tank 230 L | Stainless steel domestic hot water tank 180 l | Stainless steel domestic hot water tank 230 L |
| Space heating general | Air to water unit | Rated airflow (outdoor) | $m^3/h$ | 3,918 | | | | 3,960 | |
| | Other | Capacity control | | Inverter | | | | | |
| | | Pck (Crankcase heater mode) | kW | 0.000 | | | | | |
| | | Poff (Off mode) | kW | 0.021 | | | | | |
| | | Psb (Standby mode) | kW | 0.021 | | | | | |
| | | Pto (Thermostat off) | kW | 0.041 | | | | | |
| Domestic hot water heating | General | Declared load profile | | L | XL | L | XL | L | XL |
| Space heating general | Integrated supplementary heater | Psup | kW | 9.0 | | | | | |
| | | Type of energy input | | Electrical | | | | | |
| Domestic hot water heating | Average climate | AEC (Annual electricity consumption) | kWh | 935 | 1,547 | 935 | 1,547 | 935 | 1,547 |
| | | COPdhw | | 2.62 | 2.61 | 2.62 | 2.61 | 2.62 | 2.61 |
| | | Heat up time | | 1h 06min | 1h 19min | 1h 06min | 1h 19min | 1h 06min | 1h 19min |
| | | ηwh (water heating efficiency) | % | 110 | 108 | 110 | 108 | 110 | 108 |
| | | Qelec (Daily electricity consumption) | kWh | 4.450 | 7.320 | 4.450 | 7.320 | 4.450 | 7.320 |
| | | Reference hot water temperature | °C | 52.5 | | | | | |
| | | Stand-by power input | W | 34.2 | 49.2 | 34.2 | 49.2 | 34.2 | 49.2 |
| | | Water heating energy efficiency class | | A | | | | | |
| | Cold climate | AEC (Annual electricity consumption) | kWh | 1,091 | 1,814 | 1,091 | 1,814 | 1,091 | 1,814 |
| | | COPdhw | | 2.26 | 2.23 | 2.26 | 2.23 | 2.26 | 2.23 |
| | | Heat up time | | 1h 04min | 1h 16min | 1h 04min | 1h 16min | 1h 04min | 1h 16min |
| Domestic hot water heating | Cold climate | ηwh (water heating efficiency) | % | 94 | 92 | 94 | 92 | 94 | 92 |
| | | Qelec (Daily electricity consumption) | kWh | 5.170 | 8.560 | 5.170 | 8.560 | 5.170 | 8.560 |
| | | Reference hot water temperature | °C | 52.5 | | | | | |
| | | Stand-by power input | W | 36.4 | 54.4 | 36.4 | 54.4 | 36.4 | 54.4 |
| | Warm climate | AEC (Annual electricity consumption) | kWh | 843 | 1,388 | 843 | 1,388 | 843 | 1,388 |
| | | COPdhw | | 2.90 | | | | | |
| | | Heat up time | | 1h 15min | 1h 30min | 1h 15min | 1h 30min | 1h 15min | 1h 30min |
| | | ηwh (water heating efficiency) | % | 122 | 121 | 122 | 121 | 122 | 121 |
| | | Qelec (Daily electricity consumption) | kWh | 4.020 | 6.570 | 4.020 | 6.570 | 4.020 | 6.570 |
| | | Reference hot water temperature | °C | 52.5 | | | | | |
| | | Stand-by power input | W | 32.9 | 46.1 | 32.9 | 46.1 | 32.9 | 46.1 |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETVX16S18D9W + EPRA14DV3 | ETVX16S23D9W + EPRA14DV3 | ETVX16S18D9W + EPRA16DV3 | ETVX16S23D9W + EPRA16DV3 | ETVX16S18D9W + EPRA18DV3 | ETVX16S23D9W + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 55°C | General | Annual energy consumption | kWh | 7,134 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 142 | | | | | |
| | | | Prated at -10°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 26 | | | | | |
| | | | SCOP | | 3.62 | | | | | |
| | | | Seasonal space heating eff. class | | A++ | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.47 | | | | | |
| | | | Pdh | kW | 11.2 | | | | | |
| | | | PERd | % | 98.8 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.56 | | | | | |
| | | | Pdh | kW | 6.9 | | | | | |
| | | | PERd | % | 142.4 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.44 | | | | | |
| | | | Pdh | kW | 6.9 | | | | | |
| | | | PERd | % | 177.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.72 | | | | | |
| | | | Pdh | kW | 6.2 | | | | | |
| | | | PERd | % | 228.8 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.19 | | | | | |
| | | | Pdh | kW | 12.2 | | | | | |
| | | | PERd | % | 87.6 | | | | | |
| | | | TOL | °C | -10 | | | | | |
| | | | WTOL | °C | 55 | | | | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 0.3 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 2.19 | | | | | |
| | | | Pdh | kW | 12.2 | | | | | |
| | | | PERd | % | 87.6 | | | | | |
| | | | Tbiv | °C | -10 | | | | | |
| | Cold climate water outlet 55°C | General | Annual energy consumption | kWh | 9,609 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 125 | | | | | |
| | | | Prated at -22°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 35 | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.74 | | | | | |
| | | | Pdh | kW | 7.5 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETVX16S18D9W + EPRA14DV3 | ETVX16S23D9W + EPRA14DV3 | ETVX16S18D9W + EPRA16DV3 | ETVX16S23D9W + EPRA16DV3 | ETVX16S18D9W + EPRA18DV3 | ETVX16S23D9W + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Cold climate water outlet 55°C | A Condition (-7°CDB/-8°CWB) | PERd | % | 109.6 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.67 | | | | | |
| | | | Pdh | kW | 5.8 | | | | | |
| | | | PERd | % | 146.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.69 | | | | | |
| | | | Pdh | kW | 5.6 | | | | | |
| | | | PERd | % | 187.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | COPd | | 6.12 | | | | | |
| | | | Pdh | kW | 6.2 | | | | | |
| | | | PERd | % | 244.8 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 1.65 | | | | | |
| | | | Pdh | kW | 10.6 | | | | | |
| | | | PERd | % | 66.0 | | | | | |
| | | | TOL | °C | -22 | | | | | |
| | | | WTOL | °C | 55 | | | | | |
| | | G Condition (-15°CDB/-) | COPd | | 2.17 | | | | | |
| | | | Pdh | kW | 10.3 | | | | | |
| | | | PERd | % | 86.8 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 1.90 | | | | | |
| | | | Pdh | kW | 11.0 | | | | | |
| | | | PERd | % | 76.0 | | | | | |
| | | | Tbiv | °C | -18 | | | | | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | 1.9 | | | | | |
| | Warm climate water outlet 55°C | General | Annual energy consumption | kWh | 3,997 | | | | | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 164 | | | | | |
| | | | Prated at 2°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 14 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.45 | | | | | |
| | | | Pdh | kW | 10.0 | | | | | |
| | | | PERd | % | 98.0 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.69 | | | | | |
| | | | Pdh | kW | 7.9 | | | | | |
| | | | PERd | % | 147.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.39 | | | | | |
| | | | Pdh | kW | 5.9 | | | | | |
| | | | PERd | % | 215.6 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 3.27 | | | | | |
| | | | Pdh | kW | 9.9 | | | | | |
| | | | PERd | % | 130.8 | | | | | |
| | | | Tbiv | °C | 5 | | | | | |
| | Water outlet 45°C | H Condition (-2°C / -) | Max. | kW | 11.1 | | 11.8 | | | |
| | Average climate water outlet 35°C | General | SCOP | | 4.57 | | | | | |
| | | | Annual energy consumption | kWh | 5,649 | | | | | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 180 | | | | | |
| | | | Prated at -10°C | kW | 13 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETVX16S18D9W + EPRA14DV3 | ETVX16S23D9W + EPRA14DV3 | ETVX16S18D9W + EPRA16DV3 | ETVX16S23D9W + EPRA16DV3 | ETVX16S18D9W + EPRA18DV3 | ETVX16S23D9W + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 35°C | General | Qhe Annual energy consumption (GCV) | Gj | 20 | | | | | |
| | | | Seasonal space heating eff. class | | A+++ | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | 3.12 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 124.8 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.44 | | | | | |
| | | | Pdh | kW | 6.7 | | | | | |
| | | | PERd | % | 177.6 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.84 | | | | | |
| | | | Pdh | kW | 5.7 | | | | | |
| | | | PERd | % | 233.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.40 | | | | | |
| | | | Pdh | kW | 6.0 | | | | | |
| | | | PERd | % | 296.0 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.76 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 110.4 | | | | | |
| | | | TOL | °C | -10 | | | | | |
| | | | WTOL | °C | 35 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 3.12 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 124.8 | | | | | |
| | | | Tbiv | °C | -7 | | | | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 1.4 | | | | | |
| | Cold climate water outlet 35°C | General | Annual energy consumption | kWh | 7,370 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 164 | | | | | |
| | | | Prated at -22°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 27 | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | 3.50 | | | | | |
| | | | Pdh | kW | 8.0 | | | | | |
| | | | PERd | % | 140.0 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.07 | | | | | |
| | | | Pdh | kW | 4.9 | | | | | |
| | | | PERd | % | 202.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 6.10 | | | | | |
| | | | Pdh | kW | 5.3 | | | | | |
| | | | PERd | % | 244.0 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.03 | | | | | |
| | | | Pdh | kW | 5.7 | | | | | |
| | | | PERd | % | 281.2 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.16 | | | | | |
| | | | Pdh | kW | 10.1 | | | | | |
| | | | PERd | % | 86.4 | | | | | |
| | | | TOL | °C | -22 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETVX16S18D9W + EPRA14DV3 | ETVX16S23D9W + EPRA14DV3 | ETVX16S18D9W + EPRA16DV3 | ETVX16S23D9W + EPRA16DV3 | ETVX16S18D9W + EPRA18DV3 | ETVX16S23D9W + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Cold climate water outlet 35°C | Tol (temperature operating limit) | WTOL | °C | 35 | | | | | |
| | | G Condition (-15°CDB/-) | COPd | | 2.62 | | | | | |
| | | | Pdh | kW | 10.7 | | | | | |
| | | | PERd | % | 104.8 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 2.62 | | | | | |
| | | | Pdh | kW | 10.7 | | | | | |
| | | | PERd | % | 104.8 | | | | | |
| | | | Tbiv | °C | -15 | | | | | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | 2.4 | | | | | |
| | Warm climate water outlet 35°C | General | Annual energy consumption | kWh | 2,792 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 236 | | | | | |
| | | | Prated at 2°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 10 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.67 | | | | | |
| | | | Pdh | kW | 9.8 | | | | | |
| | | | PERd | % | 146.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.60 | | | | | |
| | | | Pdh | kW | 7.9 | | | | | |
| | | | PERd | % | 224.0 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 4.95 | | | | | |
| | | | Pdh | kW | 9.8 | | | | | |
| | | | PERd | % | 198.0 | | | | | |
| | | | Tbiv | °C | 5 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.60 | | | | | |
| | | | Pdh | kW | 6.1 | | | | | |
| | | | PERd | % | 304.0 | | | | | |

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |
(2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |
(3)Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB |
(4)Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB |
(5)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |
(6)Test at Ta DB/WB 7°C/6°C. According to EN 16147. |
(7)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed

| Technical Specifications | | | | | ETVX16S18D9WG + EPRA14DV3 | ETVX16S23D9WG + EPRA14DV3 | ETVX16S18D9WG + EPRA16DV3 | ETVX16S23D9WG + EPRA16DV3 | ETVX16S18D9WG + EPRA18DV3 | ETVX16S23D9WG + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Indoor unit | | | | | ETVX16S18DA9W | ETVX16S23DA9W | ETVX16S18DA9W | ETVX16S23DA9W | ETVX16S18DA9W | ETVX16S23DA9W |
| Outdoor unit | | | | | EPRA14DAV3 | | EPRA16DAV3 | | EPRA18DAV3 | |
| Heating capacity | Min. | | | kW | 3.50 (1) | | 3.90 (1) | | 4.16 (1) | |
| | Nom. | | | kW | 5.69 (2) | | 9.00 (2) | | | |
| | Max. | | | kW | 8.75 (1) | | 10.00 (1) | | 11.25 (1) | |
| Cooling capacity | Nom. | | | kW | 10.6 (3) / 6.90 (4) | | 11.5 (3) / 7.88 (4) | | 12.5 (3) / 8.86 (4) | |
| Power input | Heating | Min. | | kW | 0.74 (5) | | 0.82 (5) | | 0.88 (5) | |
| | | Nom. | | kW | 1.22 (2) | | 1.80 (2) | | | |
| | | Max. | | kW | 1.86 (5) | | 2.13 (5) | | 2.40 (5) | |
| | Cooling | Nom. | | kW | 2.55 (3) / 2.56 (4) | | 2.80 (3) / 2.93 (4) | | 3.05 (3) / 3.31 (4) | |
| | Domestic hot water from 10°C | Nom. | | kWh | 2.57 (6) | 2.85 (6) | 2.57 (6) | 2.85 (6) | 2.57 (6) | 2.85 (6) |
| Heat up time from 10°C to 50°C | | | | hr | 1h02min at 7°C ambient temperature | 1h13min at 7°C ambient temperature | 1h02min at 7°C ambient temperature | 1h13min at 7°C ambient temperature | 1h02min at 7°C ambient temperature | 1h13min at 7°C ambient temperature |
| COP | | | | | 4.67 (2) | | 5.00 (2) | | | |
| EER | | | | | 4.13 (3) / 2.70 (4) | | 4.11 (3) / 2.69 (4) | | 4.09 (3) / 2.68 (4) | |
| Pump | Type | | | | Grundfos UPMXL GEO 25-125 130 PWM | | | | | |
| | Nominal ESP unit | Heating | | kPa | 111.2 (7) | | 97.4 (7) | | | |
| Water side Heat exchanger | Water flow rate | Heating | Nom. | l/min | 16.3 (2) | | 25.8 (2) | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | ETVX16S18D9WG + EPRA14DV3 | ETVX16S23D9WG + EPRA14DV3 | ETVX16S18D9WG + EPRA16DV3 | ETVX16S23D9WG + EPRA16DV3 | ETVX16S18D9WG + EPRA18DV3 | ETVX16S23D9WG + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|
| General | Supplier/ Manufacturer | Name and address | | Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium | | | | | |
| | | Name or trademark | | Daikin Europe N.V. | | | | | |
| | Product details description | Air-to-water heat pump | | Yes | | | | | |
| | | Brine-to-water heat pump | | No | | | | | |
| | | Heat pump combination heater | | Yes | | | | | |
| | | Low-temperature heat pump | | No | | | | | |
| | | Supplementary heater integrated | | Yes | | | | | |
| | | Water-to-water heat pump | | No | | | | | |
| | LW(A) Sound power level | Indoor | dB(A) | 44.0 | | | | | |
| LW(A) Sound power level (according to EN14825) | Outdoor | | dB(A) | 54.0 | | | | | |
| Sound condition Ecodesign and energy label | | | | Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825 | | | | | |
| Tank | Name | | | Stainless steel domestic hot water tank 180 l | Stainless steel domestic hot water tank 230 L | Stainless steel domestic hot water tank 180 l | Stainless steel domestic hot water tank 230 L | Stainless steel domestic hot water tank 180 l | Stainless steel domestic hot water tank 230 L |
| Space heating general | Air to water unit | Rated airflow (outdoor) | $m^3/h$ | 3,918 | | | | 3,960 | |
| | Other | Capacity control | | Inverter | | | | | |
| | | Pck (Crankcase heater mode) | kW | 0.000 | | | | | |
| | | Poff (Off mode) | kW | 0.021 | | | | | |
| | | Psb (Standby mode) | kW | 0.021 | | | | | |
| | | Pto (Thermostat off) | kW | 0.041 | | | | | |
| Domestic hot water heating | General | Declared load profile | | L | XL | L | XL | L | XL |
| Space heating general | Integrated supplementary heater | Psup | kW | 9.0 | | | | | |
| | | Type of energy input | | Electrical | | | | | |
| Domestic hot water heating | Average climate | AEC (Annual electricity consumption) | kWh | 935 | 1,547 | 935 | 1,547 | 935 | 1,547 |
| | | COPdhw | | 2.62 | 2.61 | 2.62 | 2.61 | 2.62 | 2.61 |
| | | Heat up time | | 1h 06min | 1h 19min | 1h 06min | 1h 19min | 1h 06min | 1h 19min |
| | | ηwh (water heating efficiency) | % | 110 | 108 | 110 | 108 | 110 | 108 |
| | | Qelec (Daily electricity consumption) | kWh | 4.450 | 7.320 | 4.450 | 7.320 | 4.450 | 7.320 |
| | | Reference hot water temperature | °C | 52.5 | | | | | |
| | | Stand-by power input | W | 34.2 | 49.2 | 34.2 | 49.2 | 34.2 | 49.2 |
| | | Water heating energy efficiency class | | A | | | | | |
| | Cold climate | AEC (Annual electricity consumption) | kWh | 1,091 | 1,814 | 1,091 | 1,814 | 1,091 | 1,814 |
| | | COPdhw | | 2.26 | 2.23 | 2.26 | 2.23 | 2.26 | 2.23 |
| | | Heat up time | | 1h 04min | 1h 16min | 1h 04min | 1h 16min | 1h 04min | 1h 16min |
| Domestic hot water heating | Cold climate | ηwh (water heating efficiency) | % | 94 | 92 | 94 | 92 | 94 | 92 |
| | | Qelec (Daily electricity consumption) | kWh | 5.170 | 8.560 | 5.170 | 8.560 | 5.170 | 8.560 |
| | | Reference hot water temperature | °C | 52.5 | | | | | |
| | | Stand-by power input | W | 36.4 | 54.4 | 36.4 | 54.4 | 36.4 | 54.4 |
| | Warm climate | AEC (Annual electricity consumption) | kWh | 843 | 1,388 | 843 | 1,388 | 843 | 1,388 |
| | | COPdhw | | 2.90 | | | | | |
| | | Heat up time | | 1h 15min | 1h 30min | 1h 15min | 1h 30min | 1h 15min | 1h 30min |
| | | ηwh (water heating efficiency) | % | 122 | 121 | 122 | 121 | 122 | 121 |
| | | Qelec (Daily electricity consumption) | kWh | 4.020 | 6.570 | 4.020 | 6.570 | 4.020 | 6.570 |
| | | Reference hot water temperature | °C | 52.5 | | | | | |
| | | Stand-by power input | W | 32.9 | 46.1 | 32.9 | 46.1 | 32.9 | 46.1 |

# 2 Specifications

## 1 - 1 EPRA014-018DV

| Technical Specifications | | | | | ETVX16S18D9WG + EPRA14DV3 | ETVX16S23D9WG + EPRA14DV3 | ETVX16S18D9WG + EPRA16DV3 | ETVX16S23D9WG + EPRA16DV3 | ETVX16S18D9WG + EPRA18DV3 | ETVX16S23D9WG + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 55°C | General | Annual energy consumption | kWh | 7,134 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 142 | | | | | |
| | | | Prated at -10°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 26 | | | | | |
| | | | SCOP | | 3.62 | | | | | |
| | | | Seasonal space heating eff. class | | A++ | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.47 | | | | | |
| | | | Pdh | kW | 11.2 | | | | | |
| | | | PERd | % | 98.8 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.56 | | | | | |
| | | | Pdh | kW | 6.9 | | | | | |
| | | | PERd | % | 142.4 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.44 | | | | | |
| | | | Pdh | kW | 6.9 | | | | | |
| | | | PERd | % | 177.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.72 | | | | | |
| | | | Pdh | kW | 6.2 | | | | | |
| | | | PERd | % | 228.8 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.19 | | | | | |
| | | | Pdh | kW | 12.2 | | | | | |
| | | | PERd | % | 87.6 | | | | | |
| | | | TOL | °C | -10 | | | | | |
| | | | WTOL | °C | 55 | | | | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 0.3 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 2.19 | | | | | |
| | | | Pdh | kW | 12.2 | | | | | |
| | | | PERd | % | 87.6 | | | | | |
| | | | Tbiv | °C | -10 | | | | | |
| | Cold climate water outlet 55°C | General | Annual energy consumption | kWh | 9,609 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 125 | | | | | |
| | | | Prated at -22°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 35 | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.74 | | | | | |
| | | | Pdh | kW | 7.5 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETVX16S18D9WG + EPRA14DV3 | ETVX16S23D9WG + EPRA14DV3 | ETVX16S18D9WG + EPRA16DV3 | ETVX16S23D9WG + EPRA16DV3 | ETVX16S18D9WG + EPRA18DV3 | ETVX16S23D9WG + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Cold climate water outlet 55°C | A Condition (-7°CDB/-8°CWB) | PERd | % | 109.6 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.67 | | | | | |
| | | | Pdh | kW | 5.8 | | | | | |
| | | | PERd | % | 146.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.69 | | | | | |
| | | | Pdh | kW | 5.6 | | | | | |
| | | | PERd | % | 187.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | COPd | | 6.12 | | | | | |
| | | | Pdh | kW | 6.2 | | | | | |
| | | | PERd | % | 244.8 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 1.65 | | | | | |
| | | | Pdh | kW | 10.6 | | | | | |
| | | | PERd | % | 66.0 | | | | | |
| | | | TOL | °C | -22 | | | | | |
| | | | WTOL | °C | 55 | | | | | |
| | | G Condition (-15°CDB/-) | COPd | | 2.17 | | | | | |
| | | | Pdh | kW | 10.3 | | | | | |
| | | | PERd | % | 86.8 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 1.90 | | | | | |
| | | | Pdh | kW | 11.0 | | | | | |
| | | | PERd | % | 76.0 | | | | | |
| | | | Tbiv | °C | -18 | | | | | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | 1.9 | | | | | |
| | Warm climate water outlet 55°C | General | Annual energy consumption | kWh | 3,997 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 164 | | | | | |
| | | | Prated at 2°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 14 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.45 | | | | | |
| | | | Pdh | kW | 10.0 | | | | | |
| | | | PERd | % | 98.0 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.69 | | | | | |
| | | | Pdh | kW | 7.9 | | | | | |
| | | | PERd | % | 147.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.39 | | | | | |
| | | | Pdh | kW | 5.9 | | | | | |
| | | | PERd | % | 215.6 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 3.27 | | | | | |
| | | | Pdh | kW | 9.9 | | | | | |
| | | | PERd | % | 130.8 | | | | | |
| | | | Tbiv | °C | 5 | | | | | |
| | Water outlet 45°C | H Condition (-2°C / -) | Max. | kW | 11.1 | | 11.8 | | | |
| | Average climate water outlet 35°C | General | SCOP | | 4.57 | | | | | |
| | | | Annual energy consumption | kWh | 5,649 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 180 | | | | | |
| | | | Prated at -10°C | kW | 13 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV

| Technical Specifications | | | | | ETVX16S18D9WG + EPRA14DV3 | ETVX16S23D9WG + EPRA14DV3 | ETVX16S18D9WG + EPRA16DV3 | ETVX16S23D9WG + EPRA16DV3 | ETVX16S18D9WG + EPRA18DV3 | ETVX16S23D9WG + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 35°C | General | Qhe Annual energy consumption (GCV) | Gj | 20 | | | | | |
| | | | Seasonal space heating eff. class | | A+++ | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | 3.12 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 124.8 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.44 | | | | | |
| | | | Pdh | kW | 6.7 | | | | | |
| | | | PERd | % | 177.6 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.84 | | | | | |
| | | | Pdh | kW | 5.7 | | | | | |
| | | | PERd | % | 233.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.40 | | | | | |
| | | | Pdh | kW | 6.0 | | | | | |
| | | | PERd | % | 296.0 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.76 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 110.4 | | | | | |
| | | | TOL | °C | -10 | | | | | |
| | | | WTOL | °C | 35 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 3.12 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 124.8 | | | | | |
| | | | Tbiv | °C | -7 | | | | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 1.4 | | | | | |
| | Cold climate water outlet 35°C | General | Annual energy consumption | kWh | 7,370 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 164 | | | | | |
| | | | Prated at -22°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 27 | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | 3.50 | | | | | |
| | | | Pdh | kW | 8.0 | | | | | |
| | | | PERd | % | 140.0 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.07 | | | | | |
| | | | Pdh | kW | 4.9 | | | | | |
| | | | PERd | % | 202.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 6.10 | | | | | |
| | | | Pdh | kW | 5.3 | | | | | |
| | | | PERd | % | 244.0 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.03 | | | | | |
| | | | Pdh | kW | 5.7 | | | | | |
| | | | PERd | % | 281.2 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.16 | | | | | |
| | | | Pdh | kW | 10.1 | | | | | |
| | | | PERd | % | 86.4 | | | | | |
| | | | TOL | °C | -22 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETVX16S18D9WG + EPRA14DV3 | ETVX16S23D9WG + EPRA14DV3 | ETVX16S18D9WG + EPRA16DV3 | ETVX16S23D9WG + EPRA16DV3 | ETVX16S18D9WG + EPRA18DV3 | ETVX16S23D9WG + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Cold climate water outlet 35°C | Tol (temperature operating limit) | WTOL | °C | 35 | | | | | |
| | | G Condition (-15°CDB/-) | COPd | | 2.62 | | | | | |
| | | | Pdh | kW | 10.7 | | | | | |
| | | | PERd | % | 104.8 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 2.62 | | | | | |
| | | | Pdh | kW | 10.7 | | | | | |
| | | | PERd | % | 104.8 | | | | | |
| | | | Tbiv | °C | -15 | | | | | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | 2.4 | | | | | |
| | Warm climate water outlet 35°C | General | Annual energy consumption | kWh | 2,792 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 236 | | | | | |
| | | | Prated at 2°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 10 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.67 | | | | | |
| | | | Pdh | kW | 9.8 | | | | | |
| | | | PERd | % | 146.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.60 | | | | | |
| | | | Pdh | kW | 7.9 | | | | | |
| | | | PERd | % | 224.0 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 4.95 | | | | | |
| | | | Pdh | kW | 9.8 | | | | | |
| | | | PERd | % | 198.0 | | | | | |
| | | | Tbiv | °C | 5 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.60 | | | | | |
| | | | Pdh | kW | 6.1 | | | | | |
| | | | PERd | % | 304.0 | | | | | |

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |
(2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |
(3)Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB |
(4)Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB |
(5)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |
(6)Test at Ta DB/WB 7°C/6°C. According to EN 16147. |
(7)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed

| Technical Specifications | | | | | ETVZ16S18D6V + EPRA14DV3 | ETVZ16S23D6V + EPRA14DV3 | ETVZ16S18D6V + EPRA16DV3 | ETVZ16S23D6V + EPRA16DV3 | ETVZ16S18D6V + EPRA18DV3 | ETVZ16S23D6V + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Indoor unit | | | | | ETVZ16S18DA6V | ETVZ16S23DA6V | ETVZ16S18DA6V | ETVZ16S23DA6V | ETVZ16S18DA6V | ETVZ16S23DA6V |
| Outdoor unit | | | | | EPRA14DAV3 | | EPRA16DAV3 | | EPRA18DAV3 | |
| Heating capacity | Min. | | | kW | 3.50 (1) | | 3.90 (1) | | 4.16 (1) | |
| | Nom. | | | kW | 5.69 (2) | | 9.00 (2) | | | |
| | Max. | | | kW | 8.75 (1) | | 10.00 (1) | | 11.25 (1) | |
| Power input | Heating | Min. | | kW | 0.74 (3) | | 0.82 (3) | | 0.88 (3) | |
| | | Nom. | | kW | 1.22 (2) | | 1.80 (2) | | | |
| | | Max. | | kW | 1.86 (3) | | 2.13 (3) | | 2.40 (3) | |
| | Domestic hot water from 10°C | Nom. | | kWh | 2.57 (4) | 2.85 (4) | 2.57 (4) | 2.85 (4) | 2.57 (4) | 2.85 (4) |
| Heat up time from 10°C to 50°C | | | | hr | 1h02min at 7°C ambient temperature | 1h13min at 7°C ambient temperature | 1h02min at 7°C ambient temperature | 1h13min at 7°C ambient temperature | 1h02min at 7°C ambient temperature | 1h13min at 7°C ambient temperature |
| COP | | | | | 4.67 (2) | | 5.00 (2) | | | |
| Pump | Type | | | | Grundfos UPML GEO 25-105 130 PWM | | | | | |
| Pump Additional Zone | Nominal ESP unit | Heating | | kPa | 97.6 (5) | | 84.1 (5) | | | |
| Pump Main Zone | Nominal ESP unit | Heating | | kPa | 90.2 (5) | | 80.0 (5) | | | |
| Water side Heat exchanger | Water flow rate | Heating | Nom. | l/min | 16.3 (2) | | 25.8 (2) | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV

| Technical Specifications | | | | ETVZ16S18D6V + EPRA14DV3 | ETVZ16S23D6V + EPRA14DV3 | ETVZ16S18D6V + EPRA16DV3 | ETVZ16S23D6V + EPRA16DV3 | ETVZ16S18D6V + EPRA18DV3 | ETVZ16S23D6V + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|
| General | Supplier/ Manufacturer details | Name and address | | Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium | | | | | |
| | | Name or trademark | | Daikin Europe N.V. | | | | | |
| | Product description | Air-to-water heat pump | | Yes | | | | | |
| | | Brine-to-water heat pump | | No | | | | | |
| | | Heat pump combination heater | | Yes | | | | | |
| | | Low-temperature heat pump | | No | | | | | |
| | | Supplementary heater integrated | | Yes | | | | | |
| | | Water-to-water heat pump | | No | | | | | |
| | LW(A) Sound power level | Indoor | dB(A) | 44.0 | | | | | |
| LW(A) Sound power level (according to EN14825) | Outdoor | | dB(A) | 54.0 | | | | | |
| Sound condition Ecodesign and energy label | | | | Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825 | | | | | |
| Tank | Name | | | Stainless steel domestic hot water tank 180 l | Stainless steel domestic hot water tank 230 L | Stainless steel domestic hot water tank 180 l | Stainless steel domestic hot water tank 230 L | Stainless steel domestic hot water tank 180 l | Stainless steel domestic hot water tank 230 L |
| Space heating general | Air to water unit | Rated airflow (outdoor) | $m^3/h$ | 3,918 | | | | 3,960 | |
| | Other | Capacity control | | Inverter | | | | | |
| | | Pck (Crankcase heater mode) | kW | 0.000 | | | | | |
| | | Poff (Off mode) | kW | 0.021 | | | | | |
| | | Psb (Standby mode) | kW | 0.021 | | | | | |
| | | Pto (Thermostat off) | kW | 0.041 | | | | | |
| Domestic hot water heating | General | Declared load profile | | L | XL | L | XL | L | XL |
| Space heating general | Integrated supplementary heater | Psup | kW | 6.0 | | | | | |
| | | Type of energy input | | Electrical | | | | | |
| Domestic hot water heating | Average climate | AEC (Annual electricity consumption) | kWh | 935 | 1,547 | 935 | 1,547 | 935 | 1,547 |
| | | COPdhw | | 2.62 | 2.61 | 2.62 | 2.61 | 2.62 | 2.61 |
| | | Heat up time | | 1h 06min | 1h 19min | 1h 06min | 1h 19min | 1h 06min | 1h 19min |
| | | Πwh (water heating efficiency) | % | 110 | 108 | 110 | 108 | 110 | 108 |
| | | Qelec (Daily electricity consumption) | kWh | 4.450 | 7.320 | 4.450 | 7.320 | 4.450 | 7.320 |
| | | Reference hot water temperature | °C | 52.5 | | | | | |
| | | Stand-by power input | W | 34.2 | 49.2 | 34.2 | 49.2 | 34.2 | 49.2 |
| | | Water heating energy efficiency class | | A | | | | | |
| | Cold climate | AEC (Annual electricity consumption) | kWh | 1,091 | 1,814 | 1,091 | 1,814 | 1,091 | 1,814 |
| | | COPdhw | | 2.26 | 2.23 | 2.26 | 2.23 | 2.26 | 2.23 |
| | | Heat up time | | 1h 04min | 1h 16min | 1h 04min | 1h 16min | 1h 04min | 1h 16min |
| | | Πwh (water heating efficiency) | % | 94 | 92 | 94 | 92 | 94 | 92 |
| | | Qelec (Daily electricity consumption) | kWh | 5.170 | 8.560 | 5.170 | 8.560 | 5.170 | 8.560 |
| Domestic hot water heating | Cold climate | Reference hot water temperature | °C | 52.5 | | | | | |
| | | Stand-by power input | W | 36.4 | 54.4 | 36.4 | 54.4 | 36.4 | 54.4 |
| | Warm climate | AEC (Annual electricity consumption) | kWh | 843 | 1,388 | 843 | 1,388 | 843 | 1,388 |
| | | COPdhw | | 2.90 | | | | | |
| | | Heat up time | | 1h 15min | 1h 30min | 1h 15min | 1h 30min | 1h 15min | 1h 30min |
| | | Πwh (water heating efficiency) | % | 122 | 121 | 122 | 121 | 122 | 121 |
| | | Qelec (Daily electricity consumption) | kWh | 4.020 | 6.570 | 4.020 | 6.570 | 4.020 | 6.570 |
| | | Reference hot water temperature | °C | 52.5 | | | | | |
| | | Stand-by power input | W | 32.9 | 46.1 | 32.9 | 46.1 | 32.9 | 46.1 |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETVZ16S18D6V + EPRA14DV3 | ETVZ16S23D6V + EPRA14DV3 | ETVZ16S18D6V + EPRA16DV3 | ETVZ16S23D6V + EPRA16DV3 | ETVZ16S18D6V + EPRA18DV3 | ETVZ16S23D6V + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 55°C | General | Annual energy consumption | kWh | 7,211 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 140 | | | | | |
| | | | Prated at -10°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 26 | | | | | |
| | | | SCOP | | 3.58 | | | | | |
| | | | Seasonal space heating eff. class | | A++ | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.47 | | | | | |
| | | | Pdh | kW | 11.2 | | | | | |
| | | | PERd | % | 98.8 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.56 | | | | | |
| | | | Pdh | kW | 6.9 | | | | | |
| | | | PERd | % | 142.4 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.44 | | | | | |
| | | | Pdh | kW | 6.9 | | | | | |
| | | | PERd | % | 177.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.72 | | | | | |
| | | | Pdh | kW | 6.2 | | | | | |
| | | | PERd | % | 228.8 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.19 | | | | | |
| | | | Pdh | kW | 12.2 | | | | | |
| | | | PERd | % | 87.6 | | | | | |
| | | | TOL | °C | -10 | | | | | |
| | | | WTOL | °C | 55 | | | | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 0.3 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 2.19 | | | | | |
| | | | Pdh | kW | 12.2 | | | | | |
| | | | PERd | % | 87.6 | | | | | |
| | | | Tbiv | °C | -10 | | | | | |
| | Cold climate water outlet 55°C | General | Annual energy consumption | kWh | 9,654 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 125 | | | | | |
| | | | Prated at -22°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 35 | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.74 | | | | | |
| | | | Pdh | kW | 7.5 | | | | | |
| | | | PERd | % | 109.6 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV

| Technical Specifications | | | | | ETVZ16S18D6V + EPRA14DV3 | ETVZ16S23D6V + EPRA14DV3 | ETVZ16S18D6V + EPRA16DV3 | ETVZ16S23D6V + EPRA16DV3 | ETVZ16S18D6V + EPRA18DV3 | ETVZ16S23D6V + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Cold climate water outlet 55°C | B Condition (2°CDB/1°CWB) | COPd | | 3.67 | | | | | |
| | | | Pdh | kW | 5.8 | | | | | |
| | | | PERd | % | 146.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.69 | | | | | |
| | | | Pdh | kW | 5.6 | | | | | |
| | | | PERd | % | 187.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | COPd | | 6.12 | | | | | |
| | | | Pdh | kW | 6.2 | | | | | |
| | | | PERd | % | 244.8 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 1.65 | | | | | |
| | | | Pdh | kW | 10.6 | | | | | |
| | | | PERd | % | 66.0 | | | | | |
| | | | TOL | °C | -22 | | | | | |
| | | | WTOL | °C | 55 | | | | | |
| | | G Condition (-15°CDB/-) | COPd | | 2.17 | | | | | |
| | | | Pdh | kW | 10.3 | | | | | |
| | | | PERd | % | 86.8 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 1.90 | | | | | |
| | | | Pdh | kW | 11.0 | | | | | |
| | | | PERd | % | 76.0 | | | | | |
| | | | Tbiv | °C | -18 | | | | | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | 1.9 | | | | | |
| | Warm climate water outlet 55°C | General | Annual energy consumption | kWh | 4,090 | | | | | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 160 | | | | | |
| | | | Prated at 2°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 15 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.45 | | | | | |
| | | | Pdh | kW | 10.0 | | | | | |
| | | | PERd | % | 98.0 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.69 | | | | | |
| | | | Pdh | kW | 7.9 | | | | | |
| | | | PERd | % | 147.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.39 | | | | | |
| | | | Pdh | kW | 5.9 | | | | | |
| | | | PERd | % | 215.6 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 3.27 | | | | | |
| | | | Pdh | kW | 9.9 | | | | | |
| | | | PERd | % | 130.8 | | | | | |
| | | | Tbiv | °C | 5 | | | | | |
| | Water outlet 45°C | H Condition (-2°C / -) | Max. | kW | 11.1 | | 11.8 | | | |
| | Average climate water outlet 35°C | General | SCOP | | 4.51 | | | | | |
| | | | Annual energy consumption | kWh | 5,726 | | | | | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 177 | | | | | |
| | | | Prated at -10°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 21 | | | | | |
| | | | Seasonal space heating eff. class | | A+++ | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETVZ16S18D6V + EPRA14DV3 | ETVZ16S23D6V + EPRA14DV3 | ETVZ16S18D6V + EPRA16DV3 | ETVZ16S23D6V + EPRA16DV3 | ETVZ16S18D6V + EPRA18DV3 | ETVZ16S23D6V + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 35°C | A Condition (-7°CDB/-8°CWB) | COPd | | 3.12 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 124.8 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.44 | | | | | |
| | | | Pdh | kW | 6.7 | | | | | |
| | | | PERd | % | 177.6 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.84 | | | | | |
| | | | Pdh | kW | 5.7 | | | | | |
| | | | PERd | % | 233.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.40 | | | | | |
| | | | Pdh | kW | 6.0 | | | | | |
| | | | PERd | % | 296.0 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.76 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 110.4 | | | | | |
| | | | TOL | °C | -10 | | | | | |
| | | | WTOL | °C | 35 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 3.12 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 124.8 | | | | | |
| | | | Tbiv | °C | -7 | | | | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 1.4 | | | | | |
| | Cold climate water outlet 35°C | General | Annual energy consumption | kWh | 7,417 | | | | | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 163 | | | | | |
| | | | Prated at -22°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 27 | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | 3.50 | | | | | |
| | | | Pdh | kW | 8.0 | | | | | |
| | | | PERd | % | 140.0 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.07 | | | | | |
| | | | Pdh | kW | 4.9 | | | | | |
| | | | PERd | % | 202.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 6.10 | | | | | |
| | | | Pdh | kW | 5.3 | | | | | |
| | | | PERd | % | 244.0 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.03 | | | | | |
| | | | Pdh | kW | 5.7 | | | | | |
| | | | PERd | % | 281.2 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.16 | | | | | |
| | | | Pdh | kW | 10.1 | | | | | |
| | | | PERd | % | 86.4 | | | | | |
| | | | TOL | °C | -22 | | | | | |
| | | | WTOL | °C | 35 | | | | | |
| | | G Condition (-15°CDB/-) | COPd | | 2.62 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETVZ16S18D6V + EPRA14DV3 | ETVZ16S23D6V + EPRA14DV3 | ETVZ16S18D6V + EPRA16DV3 | ETVZ16S23D6V + EPRA16DV3 | ETVZ16S18D6V + EPRA18DV3 | ETVZ16S23D6V + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Cold climate water outlet 35°C | G Condition (-15°CDB/-) | Pdh | kW | 10.7 | | | | | |
| | | | PERd | % | 104.8 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 2.62 | | | | | |
| | | | Pdh | kW | 10.7 | | | | | |
| | | | PERd | % | 104.8 | | | | | |
| | | | Tbiv | °C | -15 | | | | | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | 2.4 | | | | | |
| | Warm climate water outlet 35°C | General | Annual energy consumption | kWh | 2,885 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 229 | | | | | |
| | | | Prated at 2°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 10 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.67 | | | | | |
| | | | Pdh | kW | 9.8 | | | | | |
| | | | PERd | % | 146.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.60 | | | | | |
| | | | Pdh | kW | 7.9 | | | | | |
| | | | PERd | % | 224.0 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 4.95 | | | | | |
| | | | Pdh | kW | 9.8 | | | | | |
| | | | PERd | % | 198.0 | | | | | |
| | | | Tbiv | °C | 5 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.60 | | | | | |
| | | | Pdh | kW | 6.1 | | | | | |
| | | | PERd | % | 304.0 | | | | | |

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |
(2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |
(3)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |
(4)Test at Ta DB/WB 7°C/6°C. According to EN 16147. |
(5)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed |
Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB |
Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB

| Technical Specifications | | | | | ETVZ16S18D9W + EPRA14DV3 | ETVZ16S23D9W + EPRA14DV3 | ETVZ16S18D9W + EPRA16DV3 | ETVZ16S23D9W + EPRA16DV3 | ETVZ16S18D9W + EPRA18DV3 | ETVZ16S23D9W + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Indoor unit | | | | | ETVZ16S18DA9W | ETVZ16S23DA9W | ETVZ16S18DA9W | ETVZ16S23DA9W | ETVZ16S18DA9W | ETVZ16S23DA9W |
| Outdoor unit | | | | | EPRA14DAV3 | | EPRA16DAV3 | | EPRA18DAV3 | |
| Heating capacity | Min. | | | kW | 3.50 (1) | | 3.90 (1) | | 4.16 (1) | |
| | Nom. | | | kW | 5.69 (2) | | 9.00 (2) | | | |
| | Max. | | | kW | 8.75 (1) | | 10.00 (1) | | 11.25 (1) | |
| Power input | Heating | Min. | | kW | 0.74 (3) | | 0.82 (3) | | 0.88 (3) | |
| | | Nom. | | kW | 1.22 (2) | | 1.80 (2) | | | |
| | | Max. | | kW | 1.86 (3) | | 2.13 (3) | | 2.40 (3) | |
| | Domestic hot water from 10°C | Nom. | | kWh | 2.57 (4) | 2.85 (4) | 2.57 (4) | 2.85 (4) | 2.57 (4) | 2.85 (4) |
| Heat up time from 10°C to 50°C | | | | hr | 1h02min at 7°C ambient temperature | 1h13min at 7°C ambient temperature | 1h02min at 7°C ambient temperature | 1h13min at 7°C ambient temperature | 1h02min at 7°C ambient temperature | 1h13min at 7°C ambient temperature |
| COP | | | | | 4.67 (2) | | 5.00 (2) | | | |
| Pump | Type | | | | Grundfos UPML GEO 25-105 130 PWM | | | | | |
| Pump Additional Zone | Nominal ESP unit | Heating | | kPa | 97.6 (5) | | 84.1 (5) | | | |
| Pump Main Zone | Nominal ESP unit | Heating | | kPa | 90.2 (5) | | 80.0 (5) | | | |
| Water side Heat exchanger | Water flow rate | Heating | Nom. | l/min | 16.3 (2) | | 25.8 (2) | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | ETVZ16S18D9W + EPRA14DV3 | ETVZ16S23D9W + EPRA14DV3 | ETVZ16S18D9W + EPRA16DV3 | ETVZ16S23D9W + EPRA16DV3 | ETVZ16S18D9W + EPRA18DV3 | ETVZ16S23D9W + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|
| General | Supplier/ Manufacturer details | Name and address | | Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium | | | | | |
| | | Name or trademark | | Daikin Europe N.V. | | | | | |
| | Product description | Air-to-water heat pump | | Yes | | | | | |
| | | Brine-to-water heat pump | | No | | | | | |
| | | Heat pump combination heater | | Yes | | | | | |
| | | Low-temperature heat pump | | No | | | | | |
| | | Supplementary heater integrated | | Yes | | | | | |
| | | Water-to-water heat pump | | No | | | | | |
| | LW(A) Sound power level | Indoor | dB(A) | 44.0 | | | | | |
| LW(A) Sound power level (according to EN14825) | Outdoor | | dB(A) | 54.0 | | | | | |
| Sound condition Ecodesign and energy label | | | | Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825 | | | | | |
| Tank | Name | | | Stainless steel domestic hot water tank 180 l | Stainless steel domestic hot water tank 230 L | Stainless steel domestic hot water tank 180 l | Stainless steel domestic hot water tank 230 L | Stainless steel domestic hot water tank 180 l | Stainless steel domestic hot water tank 230 L |
| Space heating general | Air to water unit | Rated airflow (outdoor) | $m^3/h$ | 3,918 | | | | 3,960 | |
| | Other | Capacity control | | Inverter | | | | | |
| | | Pck (Crankcase heater mode) | kW | 0.000 | | | | | |
| | | Poff (Off mode) | kW | 0.021 | | | | | |
| | | Psb (Standby mode) | kW | 0.021 | | | | | |
| | | Pto (Thermostat off) | kW | 0.041 | | | | | |
| Domestic hot water heating | General | Declared load profile | | L | XL | L | XL | L | XL |
| Space heating general | Integrated supplementary heater | Psup | kW | 9.0 | | | | | |
| | | Type of energy input | | Electrical | | | | | |
| Domestic hot water heating | Average climate | AEC (Annual electricity consumption) | kWh | 935 | 1,547 | 935 | 1,547 | 935 | 1,547 |
| | | COPdhw | | 2.62 | 2.61 | 2.62 | 2.61 | 2.62 | 2.61 |
| | | Heat up time | | 1h 06min | 1h 19min | 1h 06min | 1h 19min | 1h 06min | 1h 19min |
| | | Πwh (water heating efficiency) | % | 110 | 108 | 110 | 108 | 110 | 108 |
| | | Qelec (Daily electricity consumption) | kWh | 4.450 | 7.320 | 4.450 | 7.320 | 4.450 | 7.320 |
| | | Reference hot water temperature | °C | 52.5 | | | | | |
| | | Stand-by power input | W | 34.2 | 49.2 | 34.2 | 49.2 | 34.2 | 49.2 |
| | | Water heating energy efficiency class | | A | | | | | |
| | Cold climate | AEC (Annual electricity consumption) | kWh | 1,091 | 1,814 | 1,091 | 1,814 | 1,091 | 1,814 |
| | | COPdhw | | 2.26 | 2.23 | 2.26 | 2.23 | 2.26 | 2.23 |
| | | Heat up time | | 1h 04min | 1h 16min | 1h 04min | 1h 16min | 1h 04min | 1h 16min |
| | | Πwh (water heating efficiency) | % | 94 | 92 | 94 | 92 | 94 | 92 |
| | | Qelec (Daily electricity consumption) | kWh | 5.170 | 8.560 | 5.170 | 8.560 | 5.170 | 8.560 |
| Domestic hot water heating | Cold climate | Reference hot water temperature | °C | 52.5 | | | | | |
| | | Stand-by power input | W | 36.4 | 54.4 | 36.4 | 54.4 | 36.4 | 54.4 |
| | Warm climate | AEC (Annual electricity consumption) | kWh | 843 | 1,388 | 843 | 1,388 | 843 | 1,388 |
| | | COPdhw | | 2.90 | | | | | |
| | | Heat up time | | 1h 15min | 1h 30min | 1h 15min | 1h 30min | 1h 15min | 1h 30min |
| | | Πwh (water heating efficiency) | % | 122 | 121 | 122 | 121 | 122 | 121 |
| | | Qelec (Daily electricity consumption) | kWh | 4.020 | 6.570 | 4.020 | 6.570 | 4.020 | 6.570 |
| | | Reference hot water temperature | °C | 52.5 | | | | | |
| | | Stand-by power input | W | 32.9 | 46.1 | 32.9 | 46.1 | 32.9 | 46.1 |

# 2 Specifications

## 1 - 1 EPRA014-018DV

| Technical Specifications | | | | | ETVZ16S18D9W + EPRA14DV3 | ETVZ16S23D9W + EPRA14DV3 | ETVZ16S18D9W + EPRA16DV3 | ETVZ16S23D9W + EPRA16DV3 | ETVZ16S18D9W + EPRA18DV3 | ETVZ16S23D9W + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 55°C | General | Annual energy consumption | kWh | 7,211 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 140 | | | | | |
| | | | Prated at -10°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 26 | | | | | |
| | | | SCOP | | 3.58 | | | | | |
| | | | Seasonal space heating eff. class | | A++ | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.47 | | | | | |
| | | | Pdh | kW | 11.2 | | | | | |
| | | | PERd | % | 98.8 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.56 | | | | | |
| | | | Pdh | kW | 6.9 | | | | | |
| | | | PERd | % | 142.4 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.44 | | | | | |
| | | | Pdh | kW | 6.9 | | | | | |
| | | | PERd | % | 177.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.72 | | | | | |
| | | | Pdh | kW | 6.2 | | | | | |
| | | | PERd | % | 228.8 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.19 | | | | | |
| | | | Pdh | kW | 12.2 | | | | | |
| | | | PERd | % | 87.6 | | | | | |
| | | | TOL | °C | -10 | | | | | |
| | | | WTOL | °C | 55 | | | | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 0.3 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 2.19 | | | | | |
| | | | Pdh | kW | 12.2 | | | | | |
| | | | PERd | % | 87.6 | | | | | |
| | | | Tbiv | °C | -10 | | | | | |
| | Cold climate water outlet 55°C | General | Annual energy consumption | kWh | 9,654 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 125 | | | | | |
| | | | Prated at -22°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 35 | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.74 | | | | | |
| | | | Pdh | kW | 7.5 | | | | | |
| | | | PERd | % | 109.6 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETVZ16S18D9W + EPRA14DV3 | ETVZ16S23D9W + EPRA14DV3 | ETVZ16S18D9W + EPRA16DV3 | ETVZ16S23D9W + EPRA16DV3 | ETVZ16S18D9W + EPRA18DV3 | ETVZ16S23D9W + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Cold climate water outlet 55°C | B Condition (2°CDB/1°CWB) | COPd | | 3.67 | | | | | |
| | | | Pdh | kW | 5.8 | | | | | |
| | | | PERd | % | 146.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.69 | | | | | |
| | | | Pdh | kW | 5.6 | | | | | |
| | | | PERd | % | 187.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | COPd | | 6.12 | | | | | |
| | | | Pdh | kW | 6.2 | | | | | |
| | | | PERd | % | 244.8 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 1.65 | | | | | |
| | | | Pdh | kW | 10.6 | | | | | |
| | | | PERd | % | 66.0 | | | | | |
| | | | TOL | °C | -22 | | | | | |
| | | | WTOL | °C | 55 | | | | | |
| | | G Condition (-15°CDB/-) | COPd | | 2.17 | | | | | |
| | | | Pdh | kW | 10.3 | | | | | |
| | | | PERd | % | 86.8 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 1.90 | | | | | |
| | | | Pdh | kW | 11.0 | | | | | |
| | | | PERd | % | 76.0 | | | | | |
| | | | Tbiv | °C | -18 | | | | | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | 1.9 | | | | | |
| | Warm climate water outlet 55°C | General | Annual energy consumption | kWh | 4,090 | | | | | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 160 | | | | | |
| | | | Prated at 2°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 15 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.45 | | | | | |
| | | | Pdh | kW | 10.0 | | | | | |
| | | | PERd | % | 98.0 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.69 | | | | | |
| | | | Pdh | kW | 7.9 | | | | | |
| | | | PERd | % | 147.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.39 | | | | | |
| | | | Pdh | kW | 5.9 | | | | | |
| | | | PERd | % | 215.6 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 3.27 | | | | | |
| | | | Pdh | kW | 9.9 | | | | | |
| | | | PERd | % | 130.8 | | | | | |
| | | | Tbiv | °C | 5 | | | | | |
| | Water outlet 45°C | H Condition (-2°C / -) | Max. | kW | 11.1 | | 11.8 | | | |
| | Average climate water outlet 35°C | General | SCOP | | 4.51 | | | | | |
| | | | Annual energy consumption | kWh | 5,726 | | | | | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 177 | | | | | |
| | | | Prated at -10°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 21 | | | | | |
| | | | Seasonal space heating eff. class | | A+++ | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV

| Technical Specifications | | | | | ETVZ16S18D9W + EPRA14DV3 | ETVZ16S23D9W + EPRA14DV3 | ETVZ16S18D9W + EPRA16DV3 | ETVZ16S23D9W + EPRA16DV3 | ETVZ16S18D9W + EPRA18DV3 | ETVZ16S23D9W + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 35°C | A Condition (-7°CDB/-8°CWB) | COPd | | 3.12 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 124.8 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.44 | | | | | |
| | | | Pdh | kW | 6.7 | | | | | |
| | | | PERd | % | 177.6 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.84 | | | | | |
| | | | Pdh | kW | 5.7 | | | | | |
| | | | PERd | % | 233.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.40 | | | | | |
| | | | Pdh | kW | 6.0 | | | | | |
| | | | PERd | % | 296.0 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.76 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 110.4 | | | | | |
| | | | TOL | °C | -10 | | | | | |
| | | | WTOL | °C | 35 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 3.12 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 124.8 | | | | | |
| | | | Tbiv | °C | -7 | | | | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 1.4 | | | | | |
| | Cold climate water outlet 35°C | General | Annual energy consumption | kWh | 7,417 | | | | | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 163 | | | | | |
| | | | Prated at -22°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 27 | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | 3.50 | | | | | |
| | | | Pdh | kW | 8.0 | | | | | |
| | | | PERd | % | 140.0 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.07 | | | | | |
| | | | Pdh | kW | 4.9 | | | | | |
| | | | PERd | % | 202.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 6.10 | | | | | |
| | | | Pdh | kW | 5.3 | | | | | |
| | | | PERd | % | 244.0 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.03 | | | | | |
| | | | Pdh | kW | 5.7 | | | | | |
| | | | PERd | % | 281.2 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.16 | | | | | |
| | | | Pdh | kW | 10.1 | | | | | |
| | | | PERd | % | 86.4 | | | | | |
| | | | TOL | °C | -22 | | | | | |
| | | | WTOL | °C | 35 | | | | | |
| | | G Condition (-15°CDB/-) | COPd | | 2.62 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETVZ16S18D9W + EPRA14DV3 | ETVZ16S23D9W + EPRA14DV3 | ETVZ16S18D9W + EPRA16DV3 | ETVZ16S23D9W + EPRA16DV3 | ETVZ16S18D9W + EPRA18DV3 | ETVZ16S23D9W + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Cold climate water outlet 35°C | G Condition (-15°CDB/-) | PERd | % | 104.8 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 2.62 | | | | | |
| | | | Pdh | kW | 10.7 | | | | | |
| | | | PERd | % | 104.8 | | | | | |
| | | | Tbiv | °C | -15 | | | | | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | 2.4 | | | | | |
| | Warm climate water outlet 35°C | General | Annual energy consumption | kWh | 2,885 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 229 | | | | | |
| | | | Prated at 2°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 10 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.67 | | | | | |
| | | | Pdh | kW | 9.8 | | | | | |
| | | | PERd | % | 146.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.60 | | | | | |
| | | | Pdh | kW | 7.9 | | | | | |
| | | | PERd | % | 224.0 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 4.95 | | | | | |
| | | | Pdh | kW | 9.8 | | | | | |
| | | | PERd | % | 198.0 | | | | | |
| | | | Tbiv | °C | 5 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.60 | | | | | |
| | | | Pdh | kW | 6.1 | | | | | |
| | | | PERd | % | 304.0 | | | | | |

(1)Capacity according to standard EN14511 and valid for heated water range dT = 3~8°C at Ta 7°C |
(2)Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |
(3)Power input is total input of indoor and outdoor units, including the circulation pump; according to EN14511 |
(4)Test at Ta DB/WB 7°C/6°C. According to EN 16147. |
(5)DB/WB 7°C/6°C - LWC 35°C (dT=5°C) with pump at full speed |
Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB |
Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB

| Technical Specifications | | | | | ETSHB16P30D + EPRA14DV3 | ETSHB16P50D + EPRA14DV3 | ETSHB16P30D + EPRA16DV3 | ETSHB16P50D + EPRA16DV3 | ETSHB16P30D + EPRA18DV3 | ETSHB16P50D + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Indoor unit | | | | | ETSHB16P30DA | ETSHB16P50DA | ETSHB16P30DA | ETSHB16P50DA | ETSHB16P30DA | ETSHB16P50DA |
| Outdoor unit | | | | | EPRA14DAV3 | | EPRA16DAV3 | | EPRA18DAV3 | |
| Heating capacity | Nom. | | | kW | 5.69 (1) | | 9.00 (1) | | | |
| Power input | Heating | Nom. | | kW | 1.22 (1) | | 1.80 (1) | | | |
| | Domestic hot water from 10°C | Nom. | | kWh | 3.92 | 5.26 | 3.92 | 5.26 | 3.92 | 5.26 |
| Heat up time from 10°C to 50°C | | | | hr | 1h41min at 7°C ambient temperature | 2h11min at 7°C ambient temperature | 1h41min at 7°C ambient temperature | 2h11min at 7°C ambient temperature | 1h41min at 7°C ambient temperature | 2h11min at 7°C ambient temperature |
| COP | | | | | 4.67 (1) | | 5.00 (1) | | | |
| Pump | Type | | | | Grundfos UPMXL 20-125 CHBL PWM RT | | | | | |
| Water side Heat exchanger | Water flow rate | Heating | Nom. | l/min | 16.3 (1) | | 25.8 (1) | | | |
| General | Supplier/ Manufacturer details | Name and address | | | Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium | | | | | |
| | | Name or trademark | | | Daikin Europe N.V. | | | | | |
| | Product description | Air-to-water heat pump | | | Yes | | | | | |
| | | Brine-to-water heat pump | | | No | | | | | |
| | | Heat pump combination heater | | | Yes | | | | | |
| | | Low-temperature heat pump | | | No | | | | | |
| | | Supplementary heater integrated | | | No | | | | | |
| | | Water-to-water heat pump | | | No | | | | | |
| | LW(A) Sound power level | Indoor | | dB(A) | 45.6 | | | | | |
| LW(A) Sound power level (according to EN14825) | Outdoor | | | dB(A) | 54.0 | | | | | |
| Sound condition Ecodesign and energy label | | | | | Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV

| Technical Specifications | | | | | ETSHB16P30D + EPRA14DV3 | ETSHB16P50D + EPRA14DV3 | ETSHB16P30D + EPRA16DV3 | ETSHB16P50D + EPRA16DV3 | ETSHB16P30D + EPRA18DV3 | ETSHB16P50D + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating general | Air to water unit | Rated airflow (outdoor) | | $m^3/h$ | 3,918 | | | | 3,960 | |
| | Other | Capacity control | | | Inverter | | | | | |
| | | Poff (Off mode) | | kW | 0.021 | | | | | |
| | | Psb (Standby mode) | | kW | 0.021 | | | | | |
| | | Pto (Thermostat off) | | kW | 0.041 | | | | | |
| Domestic hot water heating | General | Declared load profile | | | L | XL | L | XL | L | XL |
| | | Function to fix water heating during off peak hours | | | Yes | | | | | |
| Space heating general | Integrated supplementary | Type of energy input | | | Electrical | | | | | |
| Domestic hot water heating | Average climate | AEC (Annual electricity consumption) | | kWh | 1,017 | 1,551 | 1,017 | 1,551 | 1,017 | 1,551 |
| | | COPdhw | | | 2.38 | 2.58 | 2.38 | 2.58 | 2.38 | 2.58 |
| | | Mixed water at 40°C | | l | 149.0 | 211.0 | 149.0 | 211.0 | 149.0 | 211.0 |
| | | ηwh (water heating efficiency) | | % | 101 | 108 | 101 | 108 | 101 | 108 |
| | | Qelec (Daily electricity consumption) | | kWh | 4.900 | 7.379 | 4.900 | 7.379 | 4.900 | 7.379 |
| | | Reference hot water temperature | | °C | 47.0 | 48.0 | 47.0 | 48.0 | 47.0 | 48.0 |
| | | Stand-by power input | | W | 49.0 | 57.6 | 49.0 | 57.6 | 49.0 | 57.6 |
| | | Water heating energy efficiency class | | | A | | | | | |
| | Cold climate | AEC (Annual electricity consumption) | | kWh | 1,143 | 1,725 | 1,143 | 1,725 | 1,143 | 1,725 |
| | | COPdhw | | | 2.12 | 2.32 | 2.12 | 2.32 | 2.12 | 2.32 |
| | | Mixed water at 40°C | | l | 149.0 | 211.0 | 149.0 | 211.0 | 149.0 | 211.0 |
| | | ηwh (water heating efficiency) | | % | 90 | 97 | 90 | 97 | 90 | 97 |
| | | Qelec (Daily electricity consumption) | | kWh | 5.506 | 8.211 | 5.506 | 8.211 | 5.506 | 8.211 |
| | | Reference hot water temperature | | °C | 47.0 | 48.0 | 47.0 | 48.0 | 47.0 | 48.0 |
| | Warm climate | AEC (Annual electricity consumption) | | kWh | 902 | 1,388 | 902 | 1,388 | 902 | 1,388 |
| | | COPdhw | | | 2.67 | 2.87 | 2.67 | 2.87 | 2.67 | 2.87 |
| | | Mixed water at 40°C | | l | 149.0 | 211.0 | 149.0 | 211.0 | 149.0 | 211.0 |
| | | ηwh (water heating efficiency) | | % | 114 | 121 | 114 | 121 | 114 | 121 |
| | | Qelec (Daily electricity consumption) | | kWh | 4.377 | 6.636 | 4.377 | 6.636 | 4.377 | 6.636 |
| | | Reference hot water temperature | | °C | 47.0 | 48.0 | 47.0 | 48.0 | 47.0 | 48.0 |
| Space heating | Average climate water outlet | General | Annual energy consumption | kWh | 7,211 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETSHB16P30D + EPRA14DV3 | ETSHB16P50D + EPRA14DV3 | ETSHB16P30D + EPRA16DV3 | ETSHB16P50D + EPRA16DV3 | ETSHB16P30D + EPRA18DV3 | ETSHB16P50D + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 55°C | General | ηs (Seasonal space heating efficiency) | % | 140 | | | | | |
| | | | Prated at -10°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 26 | | | | | |
| | | | SCOP | | 3.58 | | | | | |
| | | | Seasonal space heating eff. class | | A++ | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.47 | | | | | |
| | | | Pdh | kW | 11.2 | | | | | |
| | | | PERd | % | 98.8 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.56 | | | | | |
| | | | Pdh | kW | 6.9 | | | | | |
| | | | PERd | % | 142.4 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.44 | | | | | |
| | | | Pdh | kW | 6.9 | | | | | |
| | | | PERd | % | 177.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.72 | | | | | |
| | | | Pdh | kW | 6.2 | | | | | |
| | | | PERd | % | 228.8 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.19 | | | | | |
| | | | Pdh | kW | 12.2 | | | | | |
| | | | PERd | % | 87.6 | | | | | |
| | | | TOL | °C | -10 | | | | | |
| | | | WTOL | °C | 55 | | | | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 0.3 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 2.19 | | | | | |
| | | | Pdh | kW | 12.2 | | | | | |
| | | | PERd | % | 87.6 | | | | | |
| | | | Tbiv | °C | -10 | | | | | |
| | Cold climate water outlet 55°C | General | Annual energy consumption | kWh | 9,654 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 125 | | | | | |
| | | | Prated at -22°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 35 | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.74 | | | | | |
| | | | Pdh | kW | 7.5 | | | | | |
| | | | PERd | % | 109.6 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.67 | | | | | |
| | | | Pdh | kW | 5.8 | | | | | |
| | | | PERd | % | 146.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.69 | | | | | |
| | | | Pdh | kW | 5.6 | | | | | |
| | | | PERd | % | 187.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | COPd | | 6.12 | | | | | |
| | | | Pdh | kW | 6.2 | | | | | |
| | | | PERd | % | 244.8 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV

| Technical Specifications | | | | | ETSHB16P30D + EPRA14DV3 | ETSHB16P50D + EPRA14DV3 | ETSHB16P30D + EPRA16DV3 | ETSHB16P50D + EPRA16DV3 | ETSHB16P30D + EPRA18DV3 | ETSHB16P50D + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Cold climate water outlet 55°C | Tol (temperature operating limit) | COPd | | 1.65 | | | | | |
| | | | Pdh | kW | 10.6 | | | | | |
| | | | PERd | % | 66.0 | | | | | |
| | | | TOL | °C | -22 | | | | | |
| | | | WTOL | °C | 55 | | | | | |
| | | G Condition (-15°CDB/-) | COPd | | 2.17 | | | | | |
| | | | Pdh | kW | 10.3 | | | | | |
| | | | PERd | % | 86.8 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 1.90 | | | | | |
| | | | Pdh | kW | 11.0 | | | | | |
| | | | PERd | % | 76.0 | | | | | |
| | | | Tbiv | °C | -18 | | | | | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | 1.9 | | | | | |
| | Warm climate water outlet 55°C | General | Annual energy consumption | kWh | 4,090 | | | | | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 160 | | | | | |
| | | | Prated at 2°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 15 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.45 | | | | | |
| | | | Pdh | kW | 10.0 | | | | | |
| | | | PERd | % | 98.0 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.69 | | | | | |
| | | | Pdh | kW | 7.9 | | | | | |
| | | | PERd | % | 147.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.39 | | | | | |
| | | | Pdh | kW | 5.9 | | | | | |
| | | | PERd | % | 215.6 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 3.27 | | | | | |
| | | | Pdh | kW | 9.9 | | | | | |
| | | | PERd | % | 130.8 | | | | | |
| | | | Tbiv | °C | 5 | | | | | |
| | Water outlet 45°C | H Condition (-2°C / -) | Max. | kW | 11.1 | | 11.8 | | | |
| | Average climate water outlet 35°C | General | SCOP | | 4.51 | | | | | |
| | | | Annual energy consumption | kWh | 5,726 | | | | | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 177 | | | | | |
| | | | Prated at -10°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 21 | | | | | |
| | | | Seasonal space heating eff. class | | A+++ | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | 3.12 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 124.8 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.44 | | | | | |
| | | | Pdh | kW | 6.7 | | | | | |
| | | | PERd | % | 177.6 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.84 | | | | | |
| | | | Pdh | kW | 5.7 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETSHB16P30D + EPRA14DV3 | ETSHB16P50D + EPRA14DV3 | ETSHB16P30D + EPRA16DV3 | ETSHB16P50D + EPRA16DV3 | ETSHB16P30D + EPRA18DV3 | ETSHB16P50D + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 35°C | C Condition (7°CDB/6°CWB) | PERd | % | 233.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.40 | | | | | |
| | | | Pdh | kW | 6.0 | | | | | |
| | | | PERd | % | 296.0 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.76 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 110.4 | | | | | |
| | | | TOL | °C | -10 | | | | | |
| | | | WTOL | °C | 35 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 3.12 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 124.8 | | | | | |
| | | | Tbiv | °C | -7 | | | | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 1.4 | | | | | |
| | Cold climate water outlet 35°C | General | Annual energy consumption | kWh | 7,417 | | | | | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 163 | | | | | |
| | | | Prated at -22°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 27 | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | 3.50 | | | | | |
| | | | Pdh | kW | 8.0 | | | | | |
| | | | PERd | % | 140.0 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.07 | | | | | |
| | | | Pdh | kW | 4.9 | | | | | |
| | | | PERd | % | 202.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 6.10 | | | | | |
| | | | Pdh | kW | 5.3 | | | | | |
| | | | PERd | % | 244.0 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.03 | | | | | |
| | | | Pdh | kW | 5.7 | | | | | |
| | | | PERd | % | 281.2 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.16 | | | | | |
| | | | Pdh | kW | 10.1 | | | | | |
| | | | PERd | % | 86.4 | | | | | |
| | | | TOL | °C | -22 | | | | | |
| | | | WTOL | °C | 35 | | | | | |
| | | G Condition (-15°CDB/-) | COPd | | 2.62 | | | | | |
| | | | Pdh | kW | 10.7 | | | | | |
| | | | PERd | % | 104.8 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 2.62 | | | | | |
| | | | Pdh | kW | 10.7 | | | | | |
| | | | PERd | % | 104.8 | | | | | |
| | | | Tbiv | °C | -15 | | | | | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | 2.4 | | | | | |
| | Warm climate water outlet 35°C | General | Annual energy consumption | kWh | 2,885 | | | | | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 229 | | | | | |
| | | | Prated at 2°C | kW | 13 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETSHB16P30D + EPRA14DV3 | ETSHB16P50D + EPRA14DV3 | ETSHB16P30D + EPRA16DV3 | ETSHB16P50D + EPRA16DV3 | ETSHB16P30D + EPRA18DV3 | ETSHB16P50D + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Warm climate water outlet 35°C | General | Qhe Annual energy consumption (GCV) | Gj | 10 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.67 | | | | | |
| | | | Pdh | kW | 9.8 | | | | | |
| | | | PERd | % | 146.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.60 | | | | | |
| | | | Pdh | kW | 7.9 | | | | | |
| | | | PERd | % | 224.0 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 4.95 | | | | | |
| | | | Pdh | kW | 9.8 | | | | | |
| | | | PERd | % | 198.0 | | | | | |
| | | | Tbiv | °C | 5 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.60 | | | | | |
| | | | Pdh | kW | 6.1 | | | | | |
| | | | PERd | % | 304.0 | | | | | |

(1)Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) | Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB | Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB

| Technical Specifications | | | | | ETSH16P30D + EPRA14DV3 | EPRA14DAV3 | ETSH16P30D + EPRA16DV3 | EPRA16DAV3 | ETSH16P30D + EPRA18DV3 | EPRA18DAV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Indoor unit | | | | | ETSH16P30DA | ETSH16P50DA | ETSH16P30DA | ETSH16P50DA | ETSH16P30DA | ETSH16P50DA |
| Outdoor unit | | | | | EPRA14DAV3 | | EPRA16DAV3 | | EPRA18DAV3 | |
| Heating capacity | Nom. | | | kW | 5.69 (1) | | 9.00 (1) | | | |
| Power input | Heating | Nom. | | kW | 1.22 (1) | | 1.80 (1) | | | |
| | Domestic hot water from 10°C | Nom. | | kWh | 3.92 | 5.78 | 3.92 | 5.78 | 3.92 | 5.78 |
| Heat up time from 10°C to 50°C | | | | hr | 1h41min at 7°C ambient temperature | 2h18min at 7°C ambient temperature | 1h41min at 7°C ambient temperature | 2h18min at 7°C ambient temperature | 1h41min at 7°C ambient temperature | 2h18min at 7°C ambient temperature |
| COP | | | | | 4.67 (1) | | 5.00 (1) | | | |
| Pump | Type | | | | Grundfos UPMXL 20-125 CHBL PWM RT | | | | | |
| Water side Heat exchanger | Water flow rate | Heating | Nom. | l/min | 16.3 (1) | | 25.8 (1) | | | |
| General | Supplier/ Manufacturer details | Name and address | | | Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium | | | | | |
| | | Name or trademark | | | Daikin Europe N.V. | | | | | |
| | Product description | Air-to-water heat pump | | | Yes | | | | | |
| | | Brine-to-water heat pump | | | No | | | | | |
| | | Heat pump combination heater | | | Yes | | | | | |
| | | Low-temperature heat pump | | | No | | | | | |
| | | Supplementary heater integrated | | | No | | | | | |
| | | Water-to-water heat pump | | | No | | | | | |
| | LW(A) Sound power level | Indoor | | dB(A) | 45.6 | | | | | |
| LW(A) Sound power level (according to EN14825) | Outdoor | | | dB(A) | 54.0 | | | | | |
| Sound condition Ecodesign and energy label | | | | | Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825 | | | | | |
| Space heating general | Air to water unit | Rated airflow (outdoor) | | $m^3/h$ | 3,918 | | | | 3,960 | |
| | Other | Capacity control | | | Inverter | | | | | |
| | | Poff (Off mode) | | kW | 0.021 | | | | | |
| | | Psb (Standby mode) | | kW | 0.021 | | | | | |
| | | Pto (Thermostat off) | | kW | 0.041 | | | | | |
| Domestic hot water heating | General | Declared load profile | | | L | XL | L | XL | L | XL |
| | | Function to fix water heating during off peak hours | | | Yes | | | | | |
| Space heating general | Integrated supplementary | Type of energy input | | | Electrical | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETSH16P30D + EPRA14DV3 | EPRA14DAV3 | ETSH16P30D + EPRA16DV3 | EPRA16DAV3 | ETSH16P30D + EPRA18DV3 | EPRA18DAV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Domestic hot water heating | Average climate | AEC (Annual electricity consumption) | | kWh | 1,017 | 1,459 | 1,017 | 1,459 | 1,017 | 1,459 |
| | | COPdhw | | | 2.38 | 2.75 | 2.38 | 2.75 | 2.38 | 2.75 |
| | | Mixed water at 40°C | | l | 149.0 | 237.2 | 149.0 | 237.2 | 149.0 | 237.2 |
| | | ηwh (water heating efficiency) | | % | 101 | 115 | 101 | 115 | 101 | 115 |
| | | Qelec (Daily electricity consumption) | | kWh | 4.900 | 6.924 | 4.900 | 6.924 | 4.900 | 6.924 |
| | | Reference hot water temperature | | °C | 47.0 | | | | | |
| | | Stand-by power input | | W | 49.0 | 51.0 | 49.0 | 51.0 | 49.0 | 51.0 |
| | | Water heating energy efficiency class | | | A | | | | | |
| | Cold climate | AEC (Annual electricity consumption) | | kWh | 1,143 | 1,669 | 1,143 | 1,669 | 1,143 | 1,669 |
| | | COPdhw | | | 2.12 | 2.41 | 2.12 | 2.41 | 2.12 | 2.41 |
| | | Mixed water at 40°C | | l | 149.0 | 237.2 | 149.0 | 237.2 | 149.0 | 237.2 |
| | | ηwh (water heating efficiency) | | % | 90 | 100 | 90 | 100 | 90 | 100 |
| | | Qelec (Daily electricity consumption) | | kWh | 5.506 | 7.902 | 5.506 | 7.902 | 5.506 | 7.902 |
| | | Reference hot water temperature | | °C | 47.0 | | | | | |
| | Warm climate | AEC (Annual electricity consumption) | | kWh | 902 | 1,430 | 902 | 1,430 | 902 | 1,430 |
| | | COPdhw | | | 2.67 | 2.81 | 2.67 | 2.81 | 2.67 | 2.81 |
| | | Mixed water at 40°C | | l | 149.0 | 237.2 | 149.0 | 237.2 | 149.0 | 237.2 |
| | | ηwh (water heating efficiency) | | % | 114 | 117 | 114 | 117 | 114 | 117 |
| | | Qelec (Daily electricity consumption) | | kWh | 4.377 | 6.794 | 4.377 | 6.794 | 4.377 | 6.794 |
| | | Reference hot water temperature | | °C | 47.0 | | | | | |
| Space heating | Average climate water outlet | General | Annual energy consumption | kWh | 7,211 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV

| Technical Specifications | | | | | ETSH16P30D + EPRA14DV3 | EPRA14DAV3 | ETSH16P30D + EPRA16DV3 | EPRA16DAV3 | ETSH16P30D + EPRA18DV3 | EPRA18DAV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 55°C | General | ηs (Seasonal space heating efficiency) | % | 140 | | | | | |
| | | | Prated at -10°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 26 | | | | | |
| | | | SCOP | | 3.58 | | | | | |
| | | | Seasonal space heating eff. class | | A++ | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.47 | | | | | |
| | | | Pdh | kW | 11.2 | | | | | |
| | | | PERd | % | 98.8 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.56 | | | | | |
| | | | Pdh | kW | 6.9 | | | | | |
| | | | PERd | % | 142.4 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.44 | | | | | |
| | | | Pdh | kW | 6.9 | | | | | |
| | | | PERd | % | 177.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.72 | | | | | |
| | | | Pdh | kW | 6.2 | | | | | |
| | | | PERd | % | 228.8 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.19 | | | | | |
| | | | Pdh | kW | 12.2 | | | | | |
| | | | PERd | % | 87.6 | | | | | |
| | | | TOL | °C | -10 | | | | | |
| | | | WTOL | °C | 55 | | | | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 0.3 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 2.19 | | | | | |
| | | | Pdh | kW | 12.2 | | | | | |
| | | | PERd | % | 87.6 | | | | | |
| | | | Tbiv | °C | -10 | | | | | |
| | Cold climate water outlet 55°C | General | Annual energy consumption | kWh | 9,654 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 125 | | | | | |
| | | | Prated at -22°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 35 | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.74 | | | | | |
| | | | Pdh | kW | 7.5 | | | | | |
| | | | PERd | % | 109.6 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.67 | | | | | |
| | | | Pdh | kW | 5.8 | | | | | |
| | | | PERd | % | 146.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.69 | | | | | |
| | | | Pdh | kW | 5.6 | | | | | |
| | | | PERd | % | 187.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | COPd | | 6.12 | | | | | |
| | | | Pdh | kW | 6.2 | | | | | |
| | | | PERd | % | 244.8 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETSH16P30D + EPRA14DV3 | EPRA14DAV3 | ETSH16P30D + EPRA16DV3 | EPRA16DAV3 | ETSH16P30D + EPRA18DV3 | EPRA18DAV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Cold climate water outlet 55°C | Tol (temperature operating limit) | COPd | | 1.65 | | | | | |
| | | | Pdh | kW | 10.6 | | | | | |
| | | | PERd | % | 66.0 | | | | | |
| | | | TOL | °C | -22 | | | | | |
| | | | WTOL | °C | 55 | | | | | |
| | | G Condition (-15°CDB/-) | COPd | | 2.17 | | | | | |
| | | | Pdh | kW | 10.3 | | | | | |
| | | | PERd | % | 86.8 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 1.90 | | | | | |
| | | | Pdh | kW | 11.0 | | | | | |
| | | | PERd | % | 76.0 | | | | | |
| | | | Tbiv | °C | -18 | | | | | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | 1.9 | | | | | |
| | Warm climate water outlet 55°C | General | Annual energy consumption | kWh | 4,090 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 160 | | | | | |
| | | | Prated at 2°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 15 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.45 | | | | | |
| | | | Pdh | kW | 10.0 | | | | | |
| | | | PERd | % | 98.0 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.69 | | | | | |
| | | | Pdh | kW | 7.9 | | | | | |
| | | | PERd | % | 147.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.39 | | | | | |
| | | | Pdh | kW | 5.9 | | | | | |
| | | | PERd | % | 215.6 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 3.27 | | | | | |
| | | | Pdh | kW | 9.9 | | | | | |
| | | | PERd | % | 130.8 | | | | | |
| | | | Tbiv | °C | 5 | | | | | |
| | Water outlet 45°C | H Condition (-2°C / -) | Max. | kW | 11.1 | | 11.8 | | | |
| | Average climate water outlet 35°C | General | SCOP | | 4.51 | | | | | |
| | | | Annual energy consumption | kWh | 5,726 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 177 | | | | | |
| | | | Prated at -10°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 21 | | | | | |
| | | | Seasonal space heating eff. class | | A+++ | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | 3.12 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 124.8 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.44 | | | | | |
| | | | Pdh | kW | 6.7 | | | | | |
| | | | PERd | % | 177.6 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.84 | | | | | |
| | | | Pdh | kW | 5.7 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETSH16P30D + EPRA14DV3 | EPRA14DAV3 | ETSH16P30D + EPRA16DV3 | EPRA16DAV3 | ETSH16P30D + EPRA18DV3 | EPRA18DAV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 35°C | C Condition (7°CDB/6°CWB) | PERd | % | 233.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.40 | | | | | |
| | | | Pdh | kW | 6.0 | | | | | |
| | | | PERd | % | 296.0 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.76 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 110.4 | | | | | |
| | | | TOL | °C | -10 | | | | | |
| | | | WTOL | °C | 35 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 3.12 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 124.8 | | | | | |
| | | | Tbiv | °C | -7 | | | | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 1.4 | | | | | |
| | Cold climate water outlet 35°C | General | Annual energy consumption | kWh | 7,417 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 163 | | | | | |
| | | | Prated at -22°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 27 | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | 3.50 | | | | | |
| | | | Pdh | kW | 8.0 | | | | | |
| | | | PERd | % | 140.0 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.07 | | | | | |
| | | | Pdh | kW | 4.9 | | | | | |
| | | | PERd | % | 202.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 6.10 | | | | | |
| | | | Pdh | kW | 5.3 | | | | | |
| | | | PERd | % | 244.0 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.03 | | | | | |
| | | | Pdh | kW | 5.7 | | | | | |
| | | | PERd | % | 281.2 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.16 | | | | | |
| | | | Pdh | kW | 10.1 | | | | | |
| | | | PERd | % | 86.4 | | | | | |
| | | | TOL | °C | -22 | | | | | |
| | | | WTOL | °C | 35 | | | | | |
| | | G Condition (-15°CDB/-) | COPd | | 2.62 | | | | | |
| | | | Pdh | kW | 10.7 | | | | | |
| | | | PERd | % | 104.8 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 2.62 | | | | | |
| | | | Pdh | kW | 10.7 | | | | | |
| | | | PERd | % | 104.8 | | | | | |
| | | | Tbiv | °C | -15 | | | | | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | 2.4 | | | | | |
| | Warm climate water outlet 35°C | General | Annual energy consumption | kWh | 2,885 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 229 | | | | | |
| | | | Prated at 2°C | kW | 13 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETSH16P30D + EPRA14DV3 | EPRA14DAV3 | ETSH16P30D + EPRA16DV3 | EPRA16DAV3 | ETSH16P30D + EPRA18DV3 | EPRA18DAV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Warm climate water outlet 35°C | General | Qhe Annual energy consumption (GCV) | Gj | 10 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.67 | | | | | |
| | | | Pdh | kW | 9.8 | | | | | |
| | | | PERd | % | 146.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.60 | | | | | |
| | | | Pdh | kW | 7.9 | | | | | |
| | | | PERd | % | 224.0 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 4.95 | | | | | |
| | | | Pdh | kW | 9.8 | | | | | |
| | | | PERd | % | 198.0 | | | | | |
| | | | Tbiv | °C | 5 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.60 | | | | | |
| | | | Pdh | kW | 6.1 | | | | | |
| | | | PERd | % | 304.0 | | | | | |

(1)Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) | Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB | Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB

| Technical Specifications | | | | | ETSXB16P30D + EPRA14DV3 | ETSXB16P50D + EPRA14DV3 | ETSXB16P30D + EPRA16DV3 | ETSXB16P50D + EPRA16DV3 | ETSXB16P30D + EPRA18DV3 | ETSXB16P50D + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Indoor unit | | | | | ETSXB16P30DA | ETSXB16P50DA | ETSXB16P30DA | ETSXB16P50DA | ETSXB16P30DA | ETSXB16P50DA |
| Outdoor unit | | | | | EPRA14DAV3 | | EPRA16DAV3 | | EPRA18DAV3 | |
| Heating capacity | Nom. | | | kW | 5.69 (1) | | 9.00 (1) | | | |
| Cooling capacity | Nom. | | | kW | 10.6 (2) / 6.90 (3) | | 11.5 (2) / 7.88 (3) | | 12.5 (2) / 8.86 (3) | |
| Power input | Heating | Nom. | | kW | 1.22 (1) | | 1.80 (1) | | | |
| | Cooling | Nom. | | kW | 2.55 (2) / 2.56 (3) | | 2.80 (2) / 2.93 (3) | | 3.05 (2) / 3.31 (3) | |
| | Domestic hot water from 10°C | Nom. | | kWh | 3.92 | 5.26 | 3.92 | 5.26 | 3.92 | 5.26 |
| Heat up time from 10°C to 50°C | | | | hr | 1h41min at 7°C ambient temperature | 2h11min at 7°C ambient temperature | 1h41min at 7°C ambient temperature | 2h11min at 7°C ambient temperature | 1h41min at 7°C ambient temperature | 2h11min at 7°C ambient temperature |
| COP | | | | | 4.67 (1) | | 5.00 (1) | | | |
| EER | | | | | 4.13 (2) / 2.70 (3) | | 4.11 (2) / 2.69 (3) | | 4.09 (2) / 2.68 (3) | |
| Pump | Type | | | | Grundfos UPMXL 20-125 CHBL PWM RT | | | | | |
| Water side Heat exchanger | Water flow rate | Heating | Nom. | l/min | 16.3 (1) | | 25.8 (1) | | | |
| General | Supplier/ Manufacturer details | Name and address | | | Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium | | | | | |
| | | Name or trademark | | | Daikin Europe N.V. | | | | | |
| | Product description | Air-to-water heat pump | | | Yes | | | | | |
| | | Brine-to-water heat pump | | | No | | | | | |
| | | Heat pump combination heater | | | Yes | | | | | |
| | | Low-temperature heat pump | | | No | | | | | |
| | | Supplementary heater integrated | | | No | | | | | |
| | | Water-to-water heat pump | | | No | | | | | |
| | LW(A) Sound power level | Indoor | | dB(A) | 45.6 | | | | | |
| LW(A) Sound power level (according to EN14825) | Outdoor | | | dB(A) | 54.0 | | | | | |
| Sound condition Ecodesign and energy label | | | | | Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825 | | | | | |
| Space heating general | Air to water unit | Rated airflow (outdoor) | | $m^3/h$ | 3,918 | | | | 3,960 | |
| | Other | Capacity control | | | Inverter | | | | | |
| | | Poff (Off mode) | | kW | 0.021 | | | | | |
| | | Psb (Standby mode) | | kW | 0.021 | | | | | |
| | | Pto (Thermostat off) | | kW | 0.041 | | | | | |
| Domestic hot water heating | General | Declared load profile | | | L | XL | L | XL | L | XL |
| | | Function to fix water heating during off peak hours | | | Yes | | | | | |
| Space heating general | Integrated supplementary | Type of energy input | | | Electrical | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV

| Technical Specifications | | | | ETSXB16P30D + EPRA14DV3 | ETSXB16P50D + EPRA14DV3 | ETSXB16P30D + EPRA16DV3 | ETSXB16P50D + EPRA16DV3 | ETSXB16P30D + EPRA18DV3 | ETSXB16P50D + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|
| Domestic hot water heating | Average climate | AEC (Annual electricity consumption) | kWh | 1,017 | 1,551 | 1,017 | 1,551 | 1,017 | 1,551 |
| | | COPdhw | | 2.38 | 2.58 | 2.38 | 2.58 | 2.38 | 2.58 |
| | | Mixed water at 40°C | l | 149.0 | 211.0 | 149.0 | 211.0 | 149.0 | 211.0 |
| | | ηwh (water heating efficiency) | % | 101 | 108 | 101 | 108 | 101 | 108 |
| | | Qelec (Daily electricity consumption) | kWh | 4.900 | 7.379 | 4.900 | 7.379 | 4.900 | 7.379 |
| | | Reference hot water temperature | °C | 47.0 | 48.0 | 47.0 | 48.0 | 47.0 | 48.0 |
| | | Stand-by power input | W | 49.0 | 57.6 | 49.0 | 57.6 | 49.0 | 57.6 |
| | | Water heating energy efficiency class | | A | | | | | |
| | Cold climate | AEC (Annual electricity consumption) | kWh | 1,143 | 1,725 | 1,143 | 1,725 | 1,143 | 1,725 |
| | | COPdhw | | 2.12 | 2.32 | 2.12 | 2.32 | 2.12 | 2.32 |
| | | Mixed water at 40°C | l | 149.0 | 211.0 | 149.0 | 211.0 | 149.0 | 211.0 |
| | | ηwh (water heating efficiency) | % | 90 | 97 | 90 | 97 | 90 | 97 |
| | | Qelec (Daily electricity consumption) | kWh | 5.506 | 8.211 | 5.506 | 8.211 | 5.506 | 8.211 |
| | | Reference hot water temperature | °C | 47.0 | 48.0 | 47.0 | 48.0 | 47.0 | 48.0 |
| | Warm climate | AEC (Annual electricity consumption) | kWh | 902 | 1,388 | 902 | 1,388 | 902 | 1,388 |
| | | COPdhw | | 2.67 | 2.87 | 2.67 | 2.87 | 2.67 | 2.87 |
| | | Mixed water at 40°C | l | 149.0 | 211.0 | 149.0 | 211.0 | 149.0 | 211.0 |
| | | ηwh (water heating efficiency) | % | 114 | 121 | 114 | 121 | 114 | 121 |
| Domestic hot water heating | Warm climate | Qelec (Daily electricity consumption) | kWh | 4.377 | 6.636 | 4.377 | 6.636 | 4.377 | 6.636 |
| | | Reference hot water temperature | °C | 47.0 | 48.0 | 47.0 | 48.0 | 47.0 | 48.0 |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETSXB16P30D + EPRA14DV3 | ETSXB16P50D + EPRA14DV3 | ETSXB16P30D + EPRA16DV3 | ETSXB16P50D + EPRA16DV3 | ETSXB16P30D + EPRA18DV3 | ETSXB16P50D + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 55°C | General | Annual energy consumption | kWh | 7,134 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 142 | | | | | |
| | | | Prated at -10°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 26 | | | | | |
| | | | SCOP | | 3.62 | | | | | |
| | | | Seasonal space heating eff. class | | A++ | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.47 | | | | | |
| | | | Pdh | kW | 11.2 | | | | | |
| | | | PERd | % | 98.8 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.56 | | | | | |
| | | | Pdh | kW | 6.9 | | | | | |
| | | | PERd | % | 142.4 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.44 | | | | | |
| | | | Pdh | kW | 6.9 | | | | | |
| | | | PERd | % | 177.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.72 | | | | | |
| | | | Pdh | kW | 6.2 | | | | | |
| | | | PERd | % | 228.8 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.19 | | | | | |
| | | | Pdh | kW | 12.2 | | | | | |
| | | | PERd | % | 87.6 | | | | | |
| | | | TOL | °C | -10 | | | | | |
| | | | WTOL | °C | 55 | | | | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 0.3 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 2.19 | | | | | |
| | | | Pdh | kW | 12.2 | | | | | |
| | | | PERd | % | 87.6 | | | | | |
| | | | Tbiv | °C | -10 | | | | | |
| | Cold climate water outlet 55°C | General | Annual energy consumption | kWh | 9,609 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 125 | | | | | |
| | | | Prated at -22°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 35 | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.74 | | | | | |
| | | | Pdh | kW | 7.5 | | | | | |
| | | | PERd | % | 109.6 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.67 | | | | | |
| | | | Pdh | kW | 5.8 | | | | | |
| | | | PERd | % | 146.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.69 | | | | | |
| | | | Pdh | kW | 5.6 | | | | | |
| | | | PERd | % | 187.6 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV

| Technical Specifications | | | | | ETSXB16P30D + EPRA14DV3 | ETSXB16P50D + EPRA14DV3 | ETSXB16P30D + EPRA16DV3 | ETSXB16P50D + EPRA16DV3 | ETSXB16P30D + EPRA18DV3 | ETSXB16P50D + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Cold climate water outlet 55°C | D Condition (12°CDB/11°CWB) | COPd | | 6.12 | | | | | |
| | | | Pdh | kW | 6.2 | | | | | |
| | | | PERd | % | 244.8 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 1.65 | | | | | |
| | | | Pdh | kW | 10.6 | | | | | |
| | | | PERd | % | 66.0 | | | | | |
| | | | TOL | °C | -22 | | | | | |
| | | | WTOL | °C | 55 | | | | | |
| | | G Condition (-15°CDB/-) | COPd | | 2.17 | | | | | |
| | | | Pdh | kW | 10.3 | | | | | |
| | | | PERd | % | 86.8 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 1.90 | | | | | |
| | | | Pdh | kW | 11.0 | | | | | |
| | | | PERd | % | 76.0 | | | | | |
| | | | Tbiv | °C | -18 | | | | | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | 1.9 | | | | | |
| | Warm climate water outlet 55°C | General | Annual energy consumption | kWh | 3,997 | | | | | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 164 | | | | | |
| | | | Prated at 2°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 14 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.45 | | | | | |
| | | | Pdh | kW | 10.0 | | | | | |
| | | | PERd | % | 98.0 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.69 | | | | | |
| | | | Pdh | kW | 7.9 | | | | | |
| | | | PERd | % | 147.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.39 | | | | | |
| | | | Pdh | kW | 5.9 | | | | | |
| | | | PERd | % | 215.6 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 3.27 | | | | | |
| | | | Pdh | kW | 9.9 | | | | | |
| | | | PERd | % | 130.8 | | | | | |
| | | | Tbiv | °C | 5 | | | | | |
| | Water outlet 45°C | H Condition (-2°C / -) | Max. | kW | 11.1 | | 11.8 | | | |
| | Average climate water outlet 35°C | General | SCOP | | 4.57 | | | | | |
| | | | Annual energy consumption | kWh | 5,649 | | | | | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 180 | | | | | |
| | | | Prated at -10°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 20 | | | | | |
| | | | Seasonal space heating eff. class | | A+++ | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | 3.12 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 124.8 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.44 | | | | | |
| | | | Pdh | kW | 6.7 | | | | | |
| | | | PERd | % | 177.6 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETSXB16P30D + EPRA14DV3 | ETSXB16P50D + EPRA14DV3 | ETSXB16P30D + EPRA16DV3 | ETSXB16P50D + EPRA16DV3 | ETSXB16P30D + EPRA18DV3 | ETSXB16P50D + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 35°C | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.84 | | | | | |
| | | | Pdh | kW | 5.7 | | | | | |
| | | | PERd | % | 233.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.40 | | | | | |
| | | | Pdh | kW | 6.0 | | | | | |
| | | | PERd | % | 296.0 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.76 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 110.4 | | | | | |
| | | | TOL | °C | -10 | | | | | |
| | | | WTOL | °C | 35 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 3.12 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 124.8 | | | | | |
| | | | Tbiv | °C | -7 | | | | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 1.4 | | | | | |
| | Cold climate water outlet 35°C | General | Annual energy consumption | kWh | 7,370 | | | | | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 164 | | | | | |
| | | | Prated at -22°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 27 | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | 3.50 | | | | | |
| | | | Pdh | kW | 8.0 | | | | | |
| | | | PERd | % | 140.0 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.07 | | | | | |
| | | | Pdh | kW | 4.9 | | | | | |
| | | | PERd | % | 202.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 6.10 | | | | | |
| | | | Pdh | kW | 5.3 | | | | | |
| | | | PERd | % | 244.0 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.03 | | | | | |
| | | | Pdh | kW | 5.7 | | | | | |
| | | | PERd | % | 281.2 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.16 | | | | | |
| | | | Pdh | kW | 10.1 | | | | | |
| | | | PERd | % | 86.4 | | | | | |
| | | | TOL | °C | -22 | | | | | |
| | | | WTOL | °C | 35 | | | | | |
| | | G Condition (-15°CDB/-) | COPd | | 2.62 | | | | | |
| | | | Pdh | kW | 10.7 | | | | | |
| | | | PERd | % | 104.8 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 2.62 | | | | | |
| | | | Pdh | kW | 10.7 | | | | | |
| | | | PERd | % | 104.8 | | | | | |
| | | | Tbiv | °C | -15 | | | | | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | 2.4 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETSXB16P30D + EPRA14DV3 | ETSXB16P50D + EPRA14DV3 | ETSXB16P30D + EPRA16DV3 | ETSXB16P50D + EPRA16DV3 | ETSXB16P30D + EPRA18DV3 | ETSXB16P50D + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Warm climate water outlet 35°C | General | Annual energy consumption | kWh | 2,792 | | | | | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 236 | | | | | |
| | | | Prated at 2°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 10 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.67 | | | | | |
| | | | Pdh | kW | 9.8 | | | | | |
| | | | PERd | % | 146.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.60 | | | | | |
| | | | Pdh | kW | 7.9 | | | | | |
| | | | PERd | % | 224.0 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 4.95 | | | | | |
| | | | Pdh | kW | 9.8 | | | | | |
| | | | PERd | % | 198.0 | | | | | |
| | | | Tbiv | °C | 5 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.60 | | | | | |
| | | | Pdh | kW | 6.1 | | | | | |
| | | | PERd | % | 304.0 | | | | | |

(1)Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |
(2)Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB |
(3)Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB

| Technical Specifications | | | | | ETSX16P30D + EPRA14DV3 | ETSX16P50D + EPRA14DV3 | ETSX16P30D + EPRA16DV3 | ETSX16P50D + EPRA16DV3 | ETSX16P30D + EPRA18DV3 | ETSX16P50D + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Indoor unit | | | | | ETSX16P30DA | ETSX16P50DA | ETSX16P30DA | ETSX16P50DA | ETSX16P30DA | ETSX16P50DA |
| Outdoor unit | | | | | EPRA14DAV3 | | EPRA16DAV3 | | EPRA18DAV3 | |
| Heating capacity | Nom. | | | kW | 5.69 (1) | | 9.00 (1) | | | |
| Cooling capacity | Nom. | | | kW | 10.6 (2) / 6.90 (3) | | 11.5 (2) / 7.88 (3) | | 12.5 (2) / 8.86 (3) | |
| Power input | Heating | Nom. | | kW | 1.22 (1) | | 1.80 (1) | | | |
| | Cooling | Nom. | | kW | 2.55 (2) / 2.56 (3) | | 2.80 (2) / 2.93 (3) | | 3.05 (2) / 3.31 (3) | |
| | Domestic hot water from 10°C | Nom. | | kWh | 3.92 | 5.78 | 3.92 | 5.78 | 3.92 | 5.78 |
| Heat up time from 10°C to 50°C | | | | hr | 1h41min at 7°C ambient temperature | 2h18min at 7°C ambient temperature | 1h41min at 7°C ambient temperature | 2h18min at 7°C ambient temperature | 1h41min at 7°C ambient temperature | 2h18min at 7°C ambient temperature |
| COP | | | | | 4.67 (1) | | 5.00 (1) | | | |
| EER | | | | | 4.13 (2) / 2.70 (3) | | 4.11 (2) / 2.69 (3) | | 4.09 (2) / 2.68 (3) | |
| Pump | Type | | | | Grundfos UPMXL 20-125 CHBL PWM RT | | | | | |
| Water side Heat exchanger | Water flow rate | Heating | Nom. | l/min | 16.3 (1) | | 25.8 (1) | | | |
| General | Supplier/ Manufacturer details | Name and address | | | Daikin Europe N.V. - Zandvoordestraat 300, 8400 Oostende, Belgium | | | | | |
| | | Name or trademark | | | Daikin Europe N.V. | | | | | |
| | Product description | Air-to-water heat pump | | | Yes | | | | | |
| | | Brine-to-water heat pump | | | No | | | | | |
| | | Heat pump combination heater | | | Yes | | | | | |
| | | Low-temperature heat pump | | | No | | | | | |
| | | Supplementary heater integrated | | | No | | | | | |
| | | Water-to-water heat pump | | | No | | | | | |
| | LW(A) Sound power level | Indoor | | dB(A) | 45.6 | | | | | |
| LW(A) Sound power level (according to EN14825) | Outdoor | | | dB(A) | 54.0 | | | | | |
| Sound condition Ecodesign and energy label | | | | | Sound power in heating mode, measured according to the EN12102 under conditions of the EN14825 | | | | | |
| Space heating general | Air to water unit | Rated airflow (outdoor) | | $m^3/h$ | 3,918 | | | | 3,960 | |
| | Other | Capacity control | | | Inverter | | | | | |
| | | Poff (Off mode) | | kW | 0.021 | | | | | |
| | | Psb (Standby mode) | | kW | 0.021 | | | | | |
| | | Pto (Thermostat off) | | kW | 0.041 | | | | | |
| Domestic hot water heating | General | Declared load profile | | | L | XL | L | XL | L | XL |
| | | Function to fix water heating during off peak hours | | | Yes | | | | | |
| Space heating general | Integrated supplementary | Type of energy input | | | Electrical | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | ETSX16P30D + EPRA14DV3 | ETSX16P50D + EPRA14DV3 | ETSX16P30D + EPRA16DV3 | ETSX16P50D + EPRA16DV3 | ETSX16P30D + EPRA18DV3 | ETSX16P50D + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|
| Domestic hot water heating | Average climate | AEC (Annual electricity consumption) | kWh | 1,017 | 1,459 | 1,017 | 1,459 | 1,017 | 1,459 |
| | | COPdhw | | 2.38 | 2.75 | 2.38 | 2.75 | 2.38 | 2.75 |
| | | Mixed water at 40°C | l | 149.0 | 237.2 | 149.0 | 237.2 | 149.0 | 237.2 |
| | | ηwh (water heating efficiency) | % | 101 | 115 | 101 | 115 | 101 | 115 |
| | | Qelec (Daily electricity consumption) | kWh | 4.900 | 6.924 | 4.900 | 6.924 | 4.900 | 6.924 |
| | | Reference hot water temperature | °C | 47.0 | | | | | |
| | | Stand-by power input | W | 49.0 | 51.0 | 49.0 | 51.0 | 49.0 | 51.0 |
| | | Water heating energy efficiency class | | A | | | | | |
| | Cold climate | AEC (Annual electricity consumption) | kWh | 1,143 | 1,669 | 1,143 | 1,669 | 1,143 | 1,669 |
| | | COPdhw | | 2.12 | 2.41 | 2.12 | 2.41 | 2.12 | 2.41 |
| | | Mixed water at 40°C | l | 149.0 | 237.2 | 149.0 | 237.2 | 149.0 | 237.2 |
| | | ηwh (water heating efficiency) | % | 90 | 100 | 90 | 100 | 90 | 100 |
| | | Qelec (Daily electricity consumption) | kWh | 5.506 | 7.902 | 5.506 | 7.902 | 5.506 | 7.902 |
| | | Reference hot water temperature | °C | 47.0 | | | | | |
| | Warm climate | AEC (Annual electricity consumption) | kWh | 902 | 1,430 | 902 | 1,430 | 902 | 1,430 |
| | | COPdhw | | 2.67 | 2.81 | 2.67 | 2.81 | 2.67 | 2.81 |
| | | Mixed water at 40°C | l | 149.0 | 237.2 | 149.0 | 237.2 | 149.0 | 237.2 |
| | | ηwh (water heating efficiency) | % | 114 | 117 | 114 | 117 | 114 | 117 |
| Domestic hot water heating | Warm climate | Qelec (Daily electricity consumption) | kWh | 4.377 | 6.794 | 4.377 | 6.794 | 4.377 | 6.794 |
| | | Reference hot water temperature | °C | 47.0 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV

| Technical Specifications | | | | | ETSX16P30D + EPRA14DV3 | ETSX16P50D + EPRA14DV3 | ETSX16P30D + EPRA16DV3 | ETSX16P50D + EPRA16DV3 | ETSX16P30D + EPRA18DV3 | ETSX16P50D + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 55°C | General | Annual energy consumption | kWh | 7,134 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 142 | | | | | |
| | | | Prated at -10°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 26 | | | | | |
| | | | SCOP | | 3.62 | | | | | |
| | | | Seasonal space heating eff. class | | A++ | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.47 | | | | | |
| | | | Pdh | kW | 11.2 | | | | | |
| | | | PERd | % | 98.8 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.56 | | | | | |
| | | | Pdh | kW | 6.9 | | | | | |
| | | | PERd | % | 142.4 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.44 | | | | | |
| | | | Pdh | kW | 6.9 | | | | | |
| | | | PERd | % | 177.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.72 | | | | | |
| | | | Pdh | kW | 6.2 | | | | | |
| | | | PERd | % | 228.8 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.19 | | | | | |
| | | | Pdh | kW | 12.2 | | | | | |
| | | | PERd | % | 87.6 | | | | | |
| | | | TOL | °C | -10 | | | | | |
| | | | WTOL | °C | 55 | | | | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 0.3 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 2.19 | | | | | |
| | | | Pdh | kW | 12.2 | | | | | |
| | | | PERd | % | 87.6 | | | | | |
| | | | Tbiv | °C | -10 | | | | | |
| | Cold climate water outlet 55°C | General | Annual energy consumption | kWh | 9,609 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 125 | | | | | |
| | | | Prated at -22°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 35 | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.74 | | | | | |
| | | | Pdh | kW | 7.5 | | | | | |
| | | | PERd | % | 109.6 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.67 | | | | | |
| | | | Pdh | kW | 5.8 | | | | | |
| | | | PERd | % | 146.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.69 | | | | | |
| | | | Pdh | kW | 5.6 | | | | | |
| | | | PERd | % | 187.6 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETSX16P30D + EPRA14DV3 | ETSX16P50D + EPRA14DV3 | ETSX16P30D + EPRA16DV3 | ETSX16P50D + EPRA16DV3 | ETSX16P30D + EPRA18DV3 | ETSX16P50D + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Cold climate water outlet 55°C | D Condition (12°CDB/11°CWB) | COPd | | 6.12 | | | | | |
| | | | Pdh | kW | 6.2 | | | | | |
| | | | PERd | % | 244.8 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 1.65 | | | | | |
| | | | Pdh | kW | 10.6 | | | | | |
| | | | PERd | % | 66.0 | | | | | |
| | | | TOL | °C | -22 | | | | | |
| | | | WTOL | °C | 55 | | | | | |
| | | G Condition (-15°CDB/-) | COPd | | 2.17 | | | | | |
| | | | Pdh | kW | 10.3 | | | | | |
| | | | PERd | % | 86.8 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 1.90 | | | | | |
| | | | Pdh | kW | 11.0 | | | | | |
| | | | PERd | % | 76.0 | | | | | |
| | | | Tbiv | °C | -18 | | | | | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | 1.9 | | | | | |
| | Warm climate water outlet 55°C | General | Annual energy consumption | kWh | 3,997 | | | | | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 164 | | | | | |
| | | | Prated at 2°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 14 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 2.45 | | | | | |
| | | | Pdh | kW | 10.0 | | | | | |
| | | | PERd | % | 98.0 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.69 | | | | | |
| | | | Pdh | kW | 7.9 | | | | | |
| | | | PERd | % | 147.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.39 | | | | | |
| | | | Pdh | kW | 5.9 | | | | | |
| | | | PERd | % | 215.6 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 3.27 | | | | | |
| | | | Pdh | kW | 9.9 | | | | | |
| | | | PERd | % | 130.8 | | | | | |
| | | | Tbiv | °C | 5 | | | | | |
| | Water outlet 45°C | H Condition (-2°C / -) | Max. | kW | 11.1 | | 11.8 | | | |
| | Average climate water outlet 35°C | General | SCOP | | 4.57 | | | | | |
| | | | Annual energy consumption | kWh | 5,649 | | | | | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 180 | | | | | |
| | | | Prated at -10°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 20 | | | | | |
| | | | Seasonal space heating eff. class | | A+++ | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | 3.12 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 124.8 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 4.44 | | | | | |
| | | | Pdh | kW | 6.7 | | | | | |
| | | | PERd | % | 177.6 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV

| Technical Specifications | | | | | ETSX16P30D + EPRA14DV3 | ETSX16P50D + EPRA14DV3 | ETSX16P30D + EPRA16DV3 | ETSX16P50D + EPRA16DV3 | ETSX16P30D + EPRA18DV3 | ETSX16P50D + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 35°C | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.84 | | | | | |
| | | | Pdh | kW | 5.7 | | | | | |
| | | | PERd | % | 233.6 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.40 | | | | | |
| | | | Pdh | kW | 6.0 | | | | | |
| | | | PERd | % | 296.0 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.76 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 110.4 | | | | | |
| | | | TOL | °C | -10 | | | | | |
| | | | WTOL | °C | 35 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 3.12 | | | | | |
| | | | Pdh | kW | 11.1 | | | | | |
| | | | PERd | % | 124.8 | | | | | |
| | | | Tbiv | °C | -7 | | | | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 1.4 | | | | | |
| | Cold climate water outlet 35°C | General | Annual energy consumption | kWh | 7,370 | | | | | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 164 | | | | | |
| | | | Prated at -22°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 27 | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | 3.50 | | | | | |
| | | | Pdh | kW | 8.0 | | | | | |
| | | | PERd | % | 140.0 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.07 | | | | | |
| | | | Pdh | kW | 4.9 | | | | | |
| | | | PERd | % | 202.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 6.10 | | | | | |
| | | | Pdh | kW | 5.3 | | | | | |
| | | | PERd | % | 244.0 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.03 | | | | | |
| | | | Pdh | kW | 5.7 | | | | | |
| | | | PERd | % | 281.2 | | | | | |
| | | Tol (temperature operating limit) | COPd | | 2.16 | | | | | |
| | | | Pdh | kW | 10.1 | | | | | |
| | | | PERd | % | 86.4 | | | | | |
| | | | TOL | °C | -22 | | | | | |
| | | | WTOL | °C | 35 | | | | | |
| | | G Condition (-15°CDB/-) | COPd | | 2.62 | | | | | |
| | | | Pdh | kW | 10.7 | | | | | |
| | | | PERd | % | 104.8 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 2.62 | | | | | |
| | | | Pdh | kW | 10.7 | | | | | |
| | | | PERd | % | 104.8 | | | | | |
| | | | Tbiv | °C | -15 | | | | | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | 2.4 | | | | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | ETSX16P30D + EPRA14DV3 | ETSX16P50D + EPRA14DV3 | ETSX16P30D + EPRA16DV3 | ETSX16P50D + EPRA16DV3 | ETSX16P30D + EPRA18DV3 | ETSX16P50D + EPRA18DV3 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Warm climate water outlet 35°C | General | Annual energy consumption | kWh | 2,792 | | | | | |
| | | | ηs (Seasonal space heating efficiency) | % | 236 | | | | | |
| | | | Prated at 2°C | kW | 13 | | | | | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 10 | | | | | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 3.67 | | | | | |
| | | | Pdh | kW | 9.8 | | | | | |
| | | | PERd | % | 146.8 | | | | | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 5.60 | | | | | |
| | | | Pdh | kW | 7.9 | | | | | |
| | | | PERd | % | 224.0 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 4.95 | | | | | |
| | | | Pdh | kW | 9.8 | | | | | |
| | | | PERd | % | 198.0 | | | | | |
| | | | Tbiv | °C | 5 | | | | | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 1.0 | | | | | |
| | | | COPd | | 7.60 | | | | | |
| | | | Pdh | kW | 6.1 | | | | | |
| | | | PERd | % | 304.0 | | | | | |

(1)Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |
(2)Cooling: EW 23°C; LW 18°C; ambient conditions: 35°CDB |
(3)Cooling: EW 12°C; LW 7°C; ambient conditions: 35°CDB

| Technical Specifications | | | | | EPRA14DV3 | EPRA16DV3 | EPRA18DV3 |
|---|---|---|---|---|---|---|---|
| Casing | Colour | | | | Silver / Black | | |
| | Material | | | | Polyester painted galvanised steel plate | | |
| Dimensions | Unit | Height | | mm | 1,003 | | |
| | | Width | | mm | 1,270 | | |
| | | Depth | | mm | 533 | | |
| | Packed unit | Height | | mm | 1,340 | | |
| | | Width | | mm | 1,440 | | |
| | | Depth | | mm | 690 | | |
| Weight | Unit | | | kg | 146 | | |
| | Packed unit | | | kg | 182 | | |
| Packing | Material | | | | Carton / Wood (pallet) / PE (Straps) / Plastic foil | | |
| | Weight | | | kg | 27 | | |
| Heat exchanger | Length | | | mm | 1,200 | | |
| | Rows | Quantity | | | 3 | | |
| | Fin pitch | | | mm | 2.20 | | |
| | Passes | Quantity | | | 10 | | |
| | Face area | | | $m^2$ | 119 | | |
| | Stages | Quantity | | | 44 | | |
| | Tube type | | | | ø7 Hi-XSL | | |
| | Fin | Type | | | WF fin | | |
| | | Treatment | | | Anti-corrosion treatment (PE) | | |
| Fan | Type | | | | Propeller fan | | |
| | Quantity | | | | 1 | | |
| | Air flow rate | Heating | Nom. | $m^3$/min | 65.3 | | 66.0 |
| | | Cooling | Nom. | $m^3$/min | 106 | | |
| | Discharge direction | | | | Horizontal | | |
| Fan motor | Quantity | | | | 1 | | |
| | Model | | | | Brushless DC motor | | |
| | Output | | | W | 210 | | |
| | Drive | | | | Direct drive | | |
| | Speed | Steps | | | 12 | | |
| | | Heating | Nom. | rpm | 470 | | 475 |
| | | Cooling | Nom. | rpm | 750 | | |
| Compressor | Quantity | | | | 1 | | |
| | Model | | | | JT90KFDM@SP | | |
| | Type | | | | Hermetically sealed scroll compressor | | |
| | Starting method | | | | Inverter driven | | |
| PED | Category | | | | Category III | | |

# 2 Specifications

## 1 - 1 EPRA014-018DV



| Technical Specifications | | | | | EPRA14DV3 | EPRA16DV3 | EPRA18DV3 |
|---|---|---|---|---|---|---|---|
| Operation range | Heating | Min. | | °CDB | -28.0 | | |
| | | Max. | | °CDB | 35 | | |
| | Cooling | Min. | | °CDB | 10 | | |
| | | Max. | | °CDB | 43 | | |
| | Domestic hot water | Max. | | °CDB | 35 | | |
| | | Min. | | °CDB | -28 | | |
| PED | Most critical part | Name | | | Compressor | | |
| | | Ps*V | | Bar*l | 213 | | |
| Piping connections | Water inlet heat exchanger diameter | | | inch | G1" (male) | | |
| | Water outlet heat exchanger diameter | | | inch | G1" (male) | | |
| Sound power level | Heating | Nom. | | dBA | 56.0 (1) | | 59.0 (1) |
| Sound power level | Cooling | Nom. | | dBA | 56.0 (1) | | 59.0 (1) |
| Sound pressure level | Heating | Nom. | | dBA | 43.0 (2) | | 48.0 (2) |
| | Cooling | Nom. | | dBA | 43.0 (2) | | 48.0 (2) |
| | Night quiet mode | Heating | | dBA | 54.0 (2) | | |
| Refrigerant | Type | | | | R-32 | | |
| | GWP | | | | 675.0 | | |
| | Charge | | | TCO2Eq | 2.84 | | |
| | Charge | | | kg | 4.20 | | |
| | Control | | | | Expansion valve | | |
| | Circuits | Quantity | | | 1 | | |
| Refrigerant oil | Type | | | | FW68DE | | |
| | Charged volume | | | l | 1.85 | | |
| Piping connections | Piping length | OU - IU | Max. | m | 50 | | |
| | High pressure side | Design pressure | | bar | 56 | | |
| | Level difference | IU - OU | Max. | m | 10.0 | | |
| | Water circuit | Filter ball valve | | | Yes | | |
| Defrost method | | | | | Reversed cycle | | |
| Defrost control | | | | | Sensor for outdoor heat exchanger temperature | | |
| Capacity control | Method | | | | Inverter controlled | | |
| Safety devices | Item | 01 | | | High pressure switch | | |
| | | 02 | | | Low pressure switch | | |
| | | 03 | | | Fuse | | |
| | | 04 | | | Compressor motor protection | | |
| | | 05 | | | Pressure relief valve | | |

| Electrical Specifications | | | | | EPRA14DV3 | EPRA16DV3 | EPRA18DV3 |
|---|---|---|---|---|---|---|---|
| Power supply | Name | | | | V3 | | |
| | Phase | | | | 1~ | | |
| | Frequency | | | Hz | 50 | | |
| | Voltage | | | V | 230 | | |
| | Voltage range | Min. | | % | -10 | | |
| | | cos phi | Nom. | | 0.90 | | 0.95 |
| | | | Max. | | 0.98 | | |
| | | Max. | | % | 10 | | |
| Current | Minimum Ssc value | | | kVa | Equipment complying with EN / IEC 61000-3-12 | | |
| | Recommended fuses | | | A | 32 | | |
| | Inverter modulation | Min. | | % | 40 (3) | 39 (3) | 37 (3) |
| Wiring connections | For power supply | Remark | | | See installation manual outdoor unit | | |
| | For connection with indoor | Remark | | | See installation manual indoor unit | | |

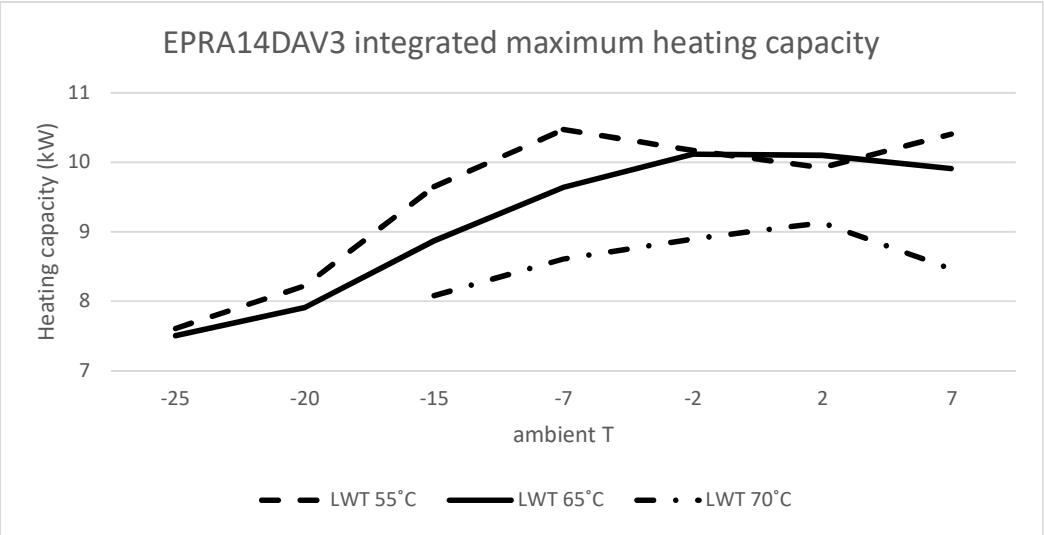
(1)Cooling Ta 35°C - LWE 18°C (DT = 5°C); Heating Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |
(2)The sound pressure level is measured via a microphone at a certain distance from the unit. It is a relative value depending on the distance and acoustic environment. Refer to sound spectrum drawing for more information. Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C). |
(3)Percentage of heating capacity at Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C)

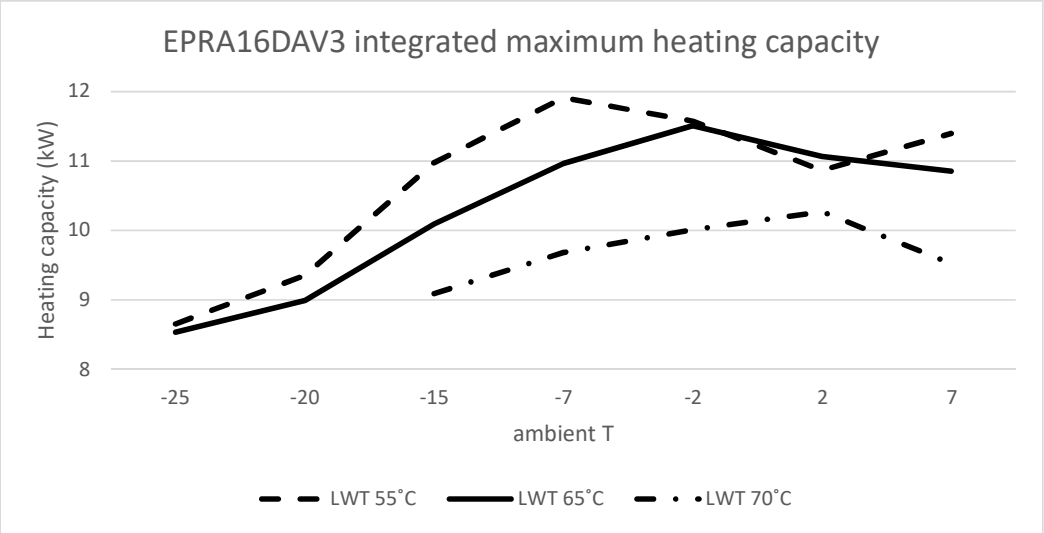
# 3 Capacity graphs

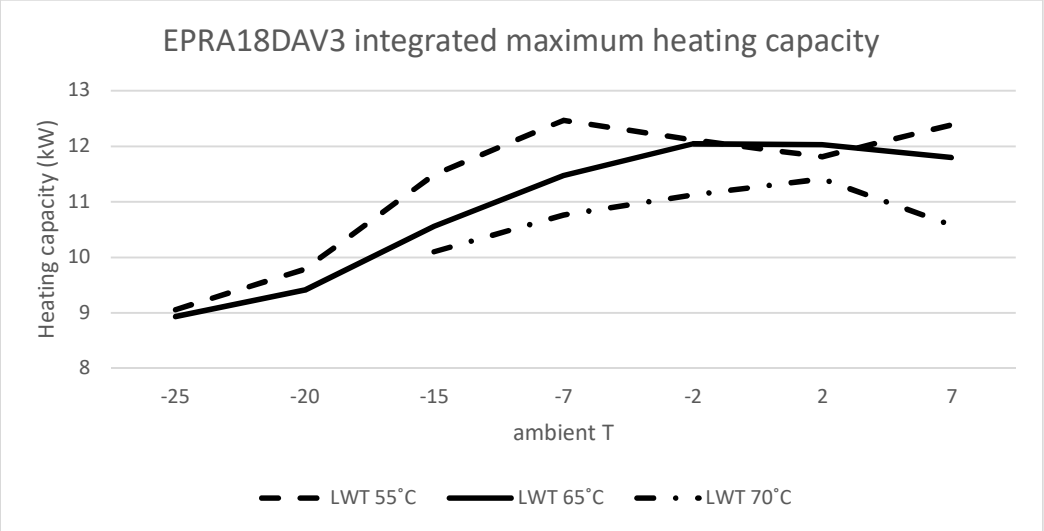
## 3 - 1 Heating Capacity Graphs



**EPRA014-018DV**

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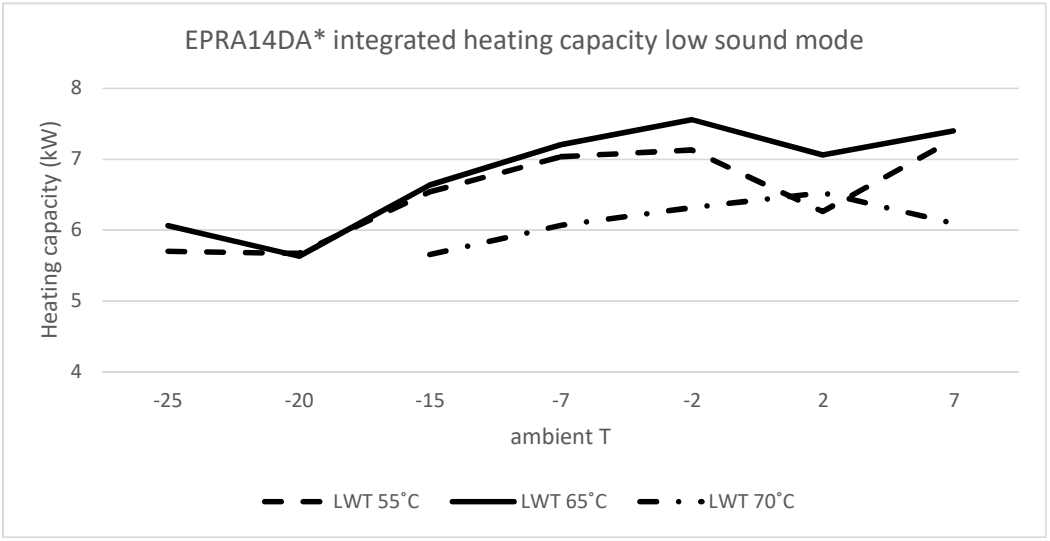
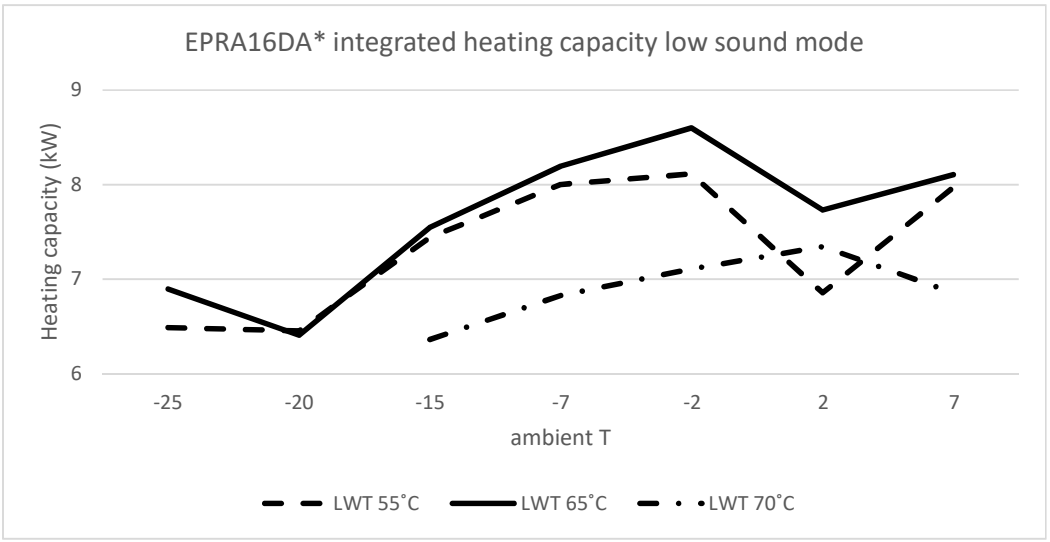
# 3 Capacity graphs

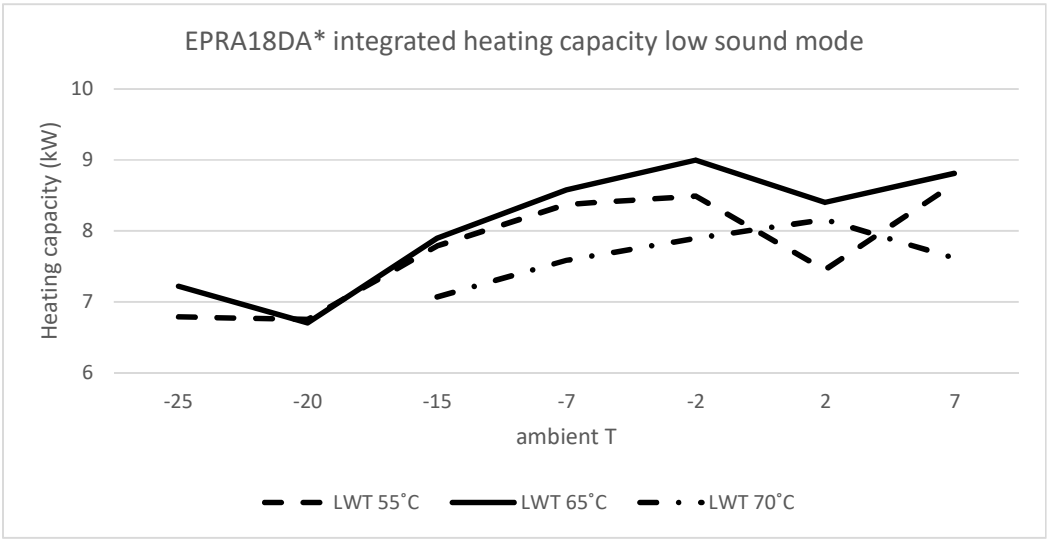
## 3 - 2 Heating Capacity Graphs

**EPRA014-018DV**





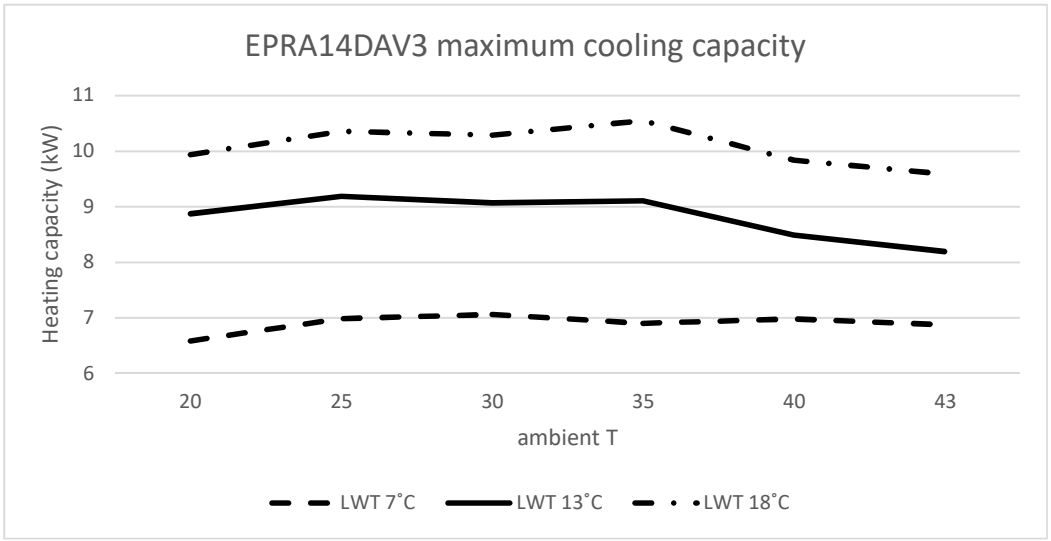

**4D126948**

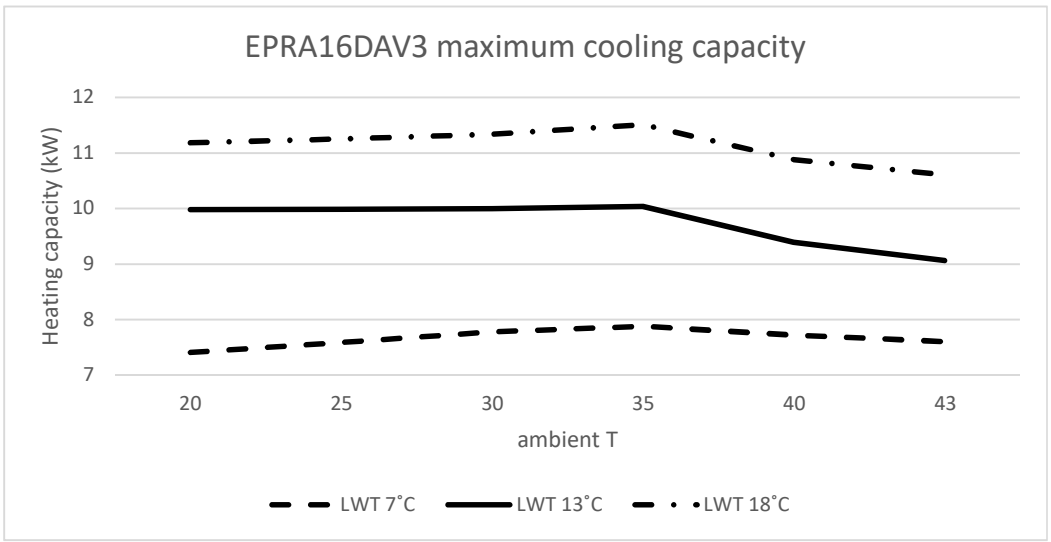
# 3 Capacity graphs

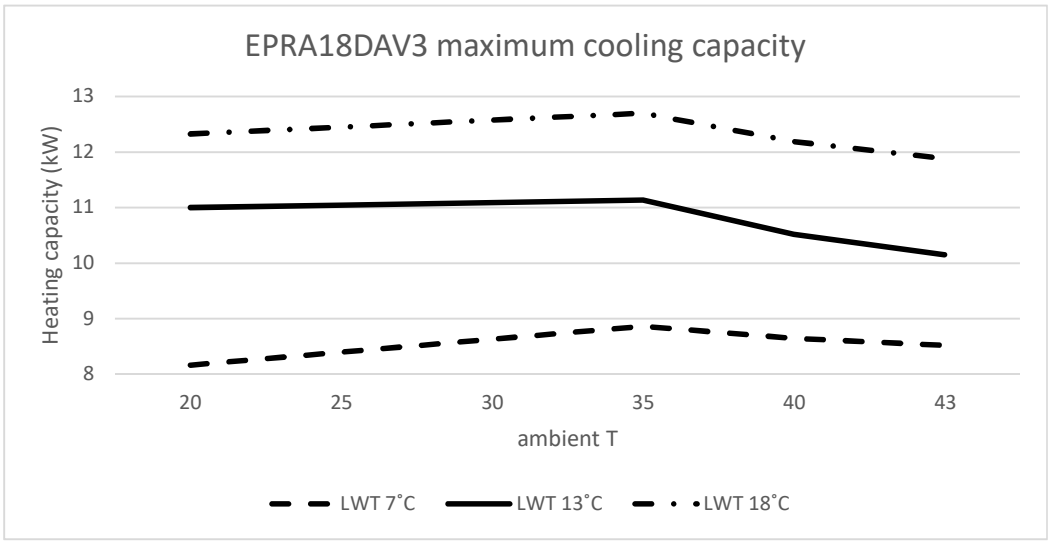
## 3 - 3 Cooling Capacity Graphs



**EPRA014-018DV**



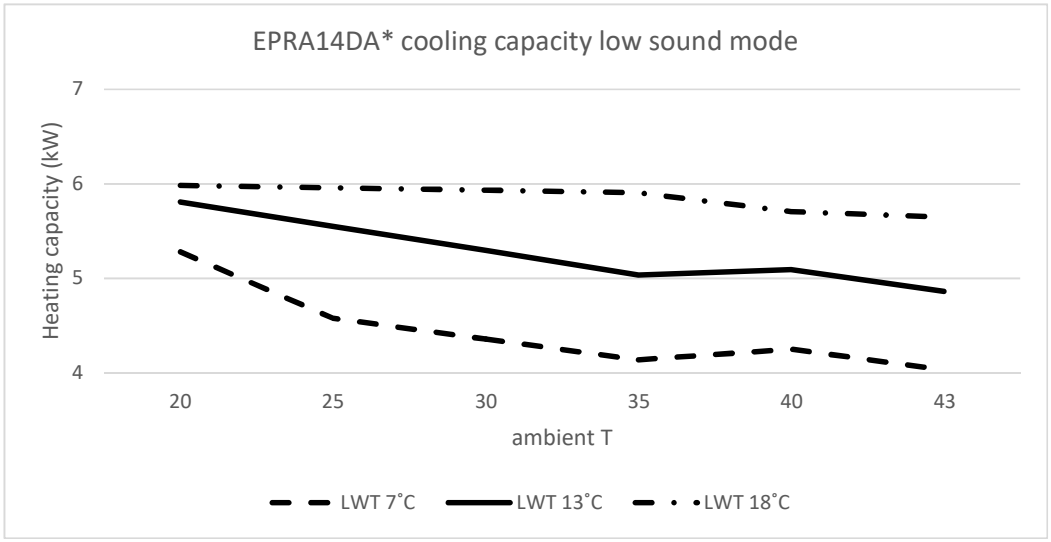

**4D126949**

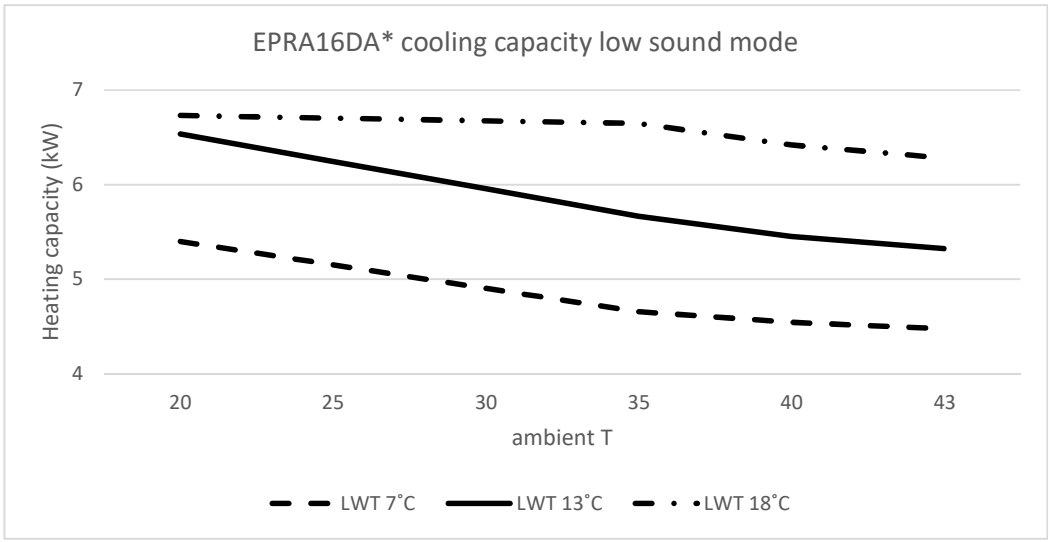
# 3 Capacity graphs

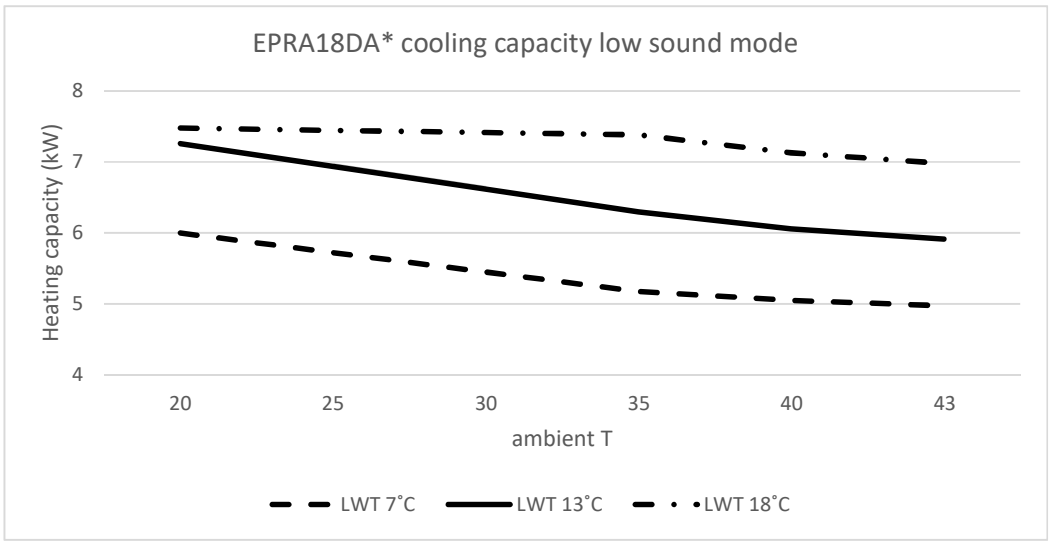
## 3 - 4 Cooling Capacity Graphs

**EPRA014-018DV**





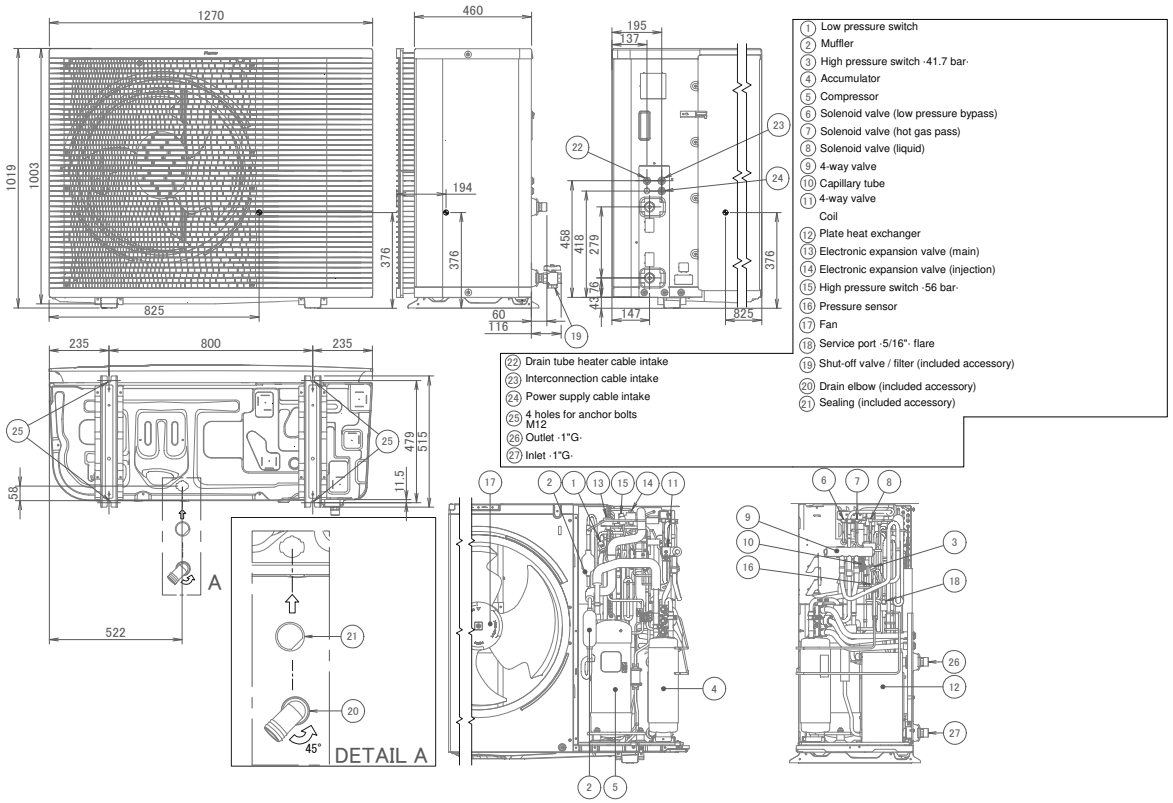




**4D126947**

# 4 Dimensional drawings

## 4 - 1 Dimensional Drawings

**EPRA014-018DV**
**EPRA014-018DW**

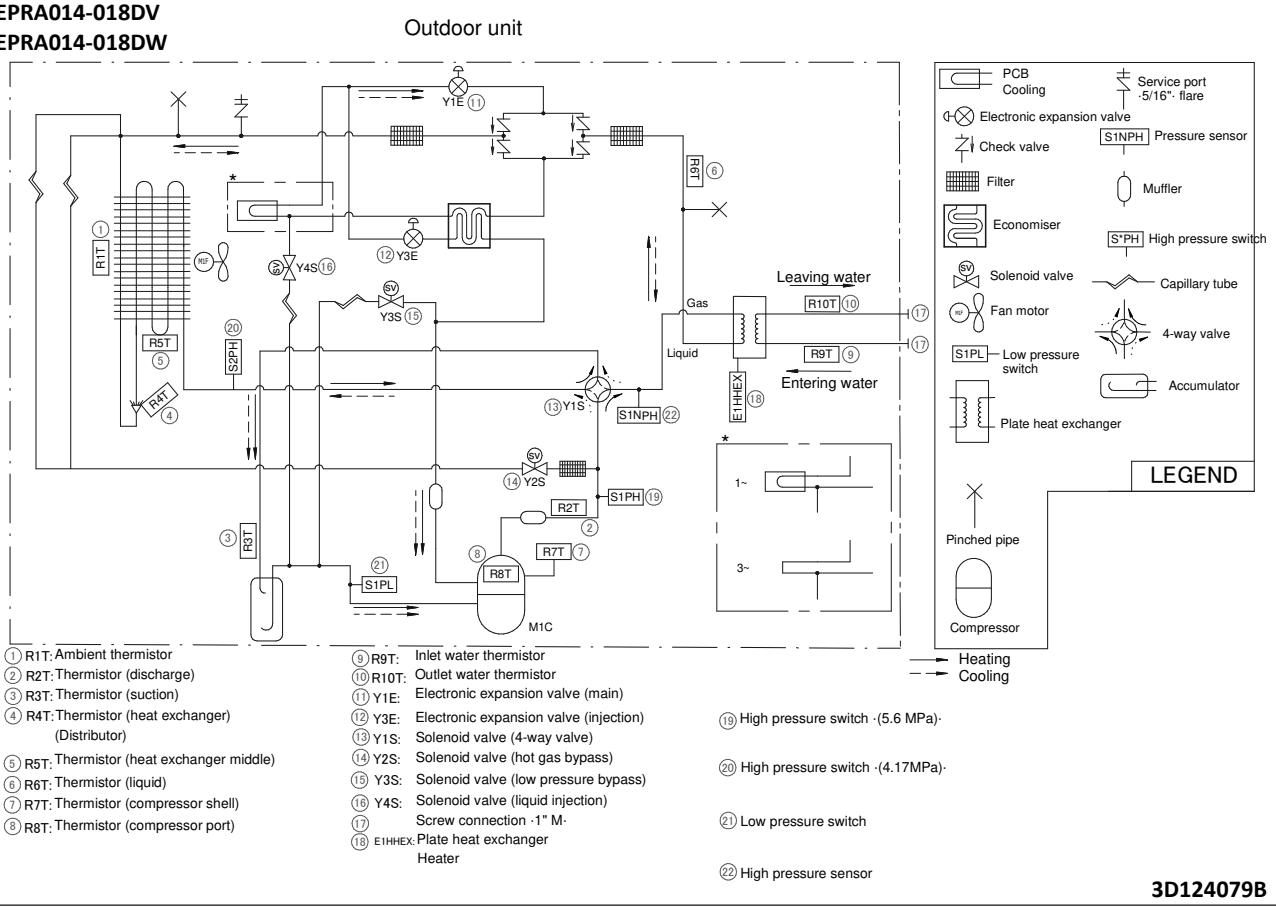



**3D124101B**

# 5 Piping diagrams

## 5 - 1 Piping Diagrams

**EPRA014-018DV**
**EPRA014-018DW**




① R1T: Ambient thermistor
② R2T: Thermistor (discharge)
③ R3T: Thermistor (suction)
④ R4T: Thermistor (heat exchanger) (Distributor)
⑤ R5T: Thermistor (heat exchanger middle)
⑥ R6T: Thermistor (liquid)
⑦ R7T: Thermistor (compressor shell)
⑧ R8T: Thermistor (compressor port)

⑨ R9T: Inlet water thermistor
⑩ R10T: Outlet water thermistor
⑪ Y1E: Electronic expansion valve (main)
⑫ Y3E: Electronic expansion valve (injection)
⑬ Y1S: Solenoid valve (4-way valve)
⑭ Y2S: Solenoid valve (hot gas bypass)
⑮ Y3S: Solenoid valve (low pressure bypass)
⑯ Y4S: Solenoid valve (liquid injection)
⑰ Screw connection ·1" M·
⑱ E1HHEX: Plate heat exchanger Heater

⑲ High pressure switch ·(5.6 MPa)·
⑳ High pressure switch ·(4.17MPa)·
㉑ Low pressure switch
㉒ High pressure sensor

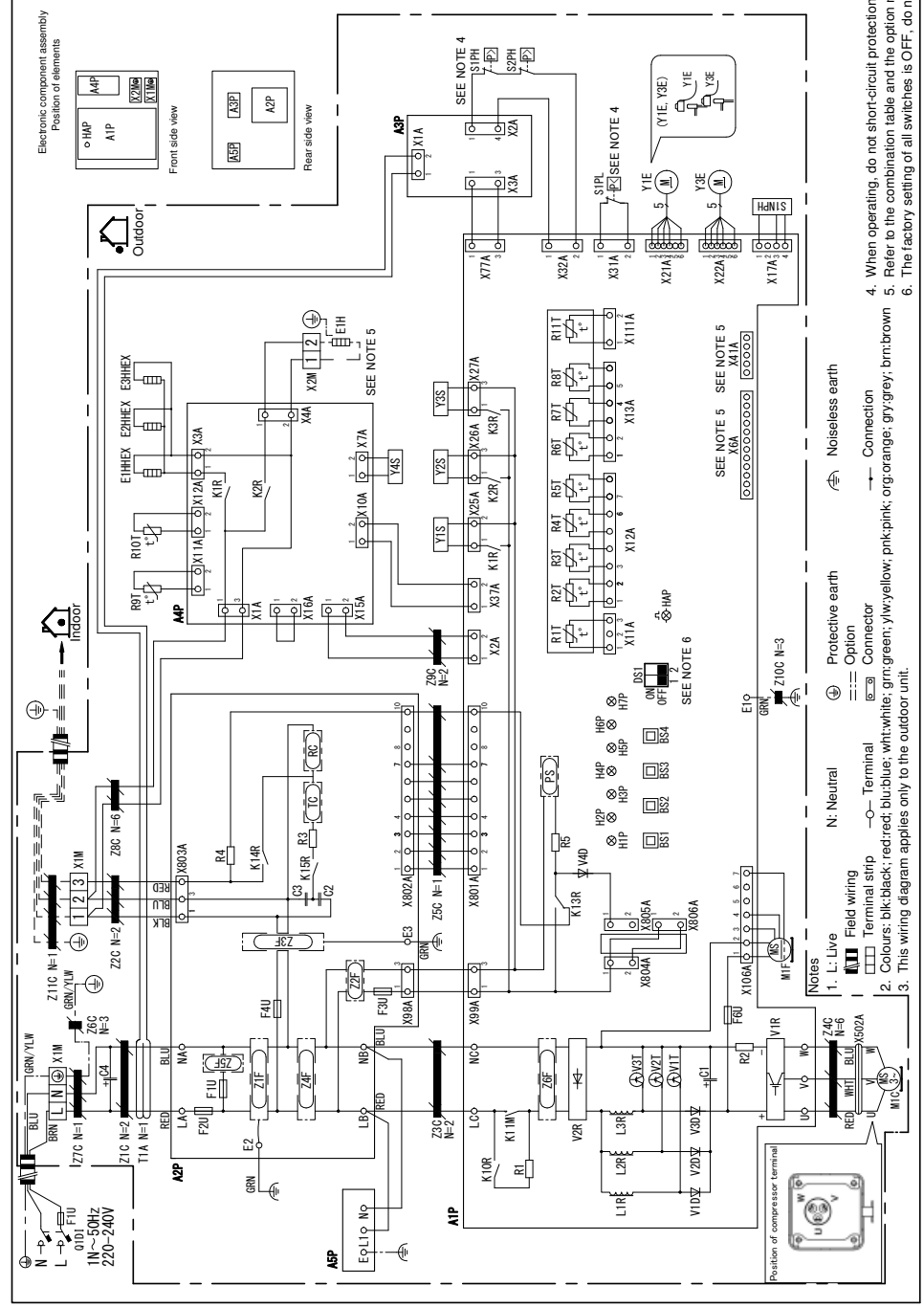
**3D124079B**

# 6 Wiring diagrams

## 6 - 1 Wiring Diagrams - Single Phase

**EPRA014-018DV**

| | |
|---|---|
| A1P | Printed circuit board (main) |
| A2P | Printed circuit board (noise filter) |
| A3P | Printed circuit board (leakage current) |
| A4P | Printed circuit board (ACS) |
| A5P | Printed circuit board (flash) |
| BS1 ~ BS4 (A1P) | Push button switch |
| C1 ~ C4 (A1P, A2P) | Capacitor |
| DS1 (A1P) | DIP switch |
| E1H | Drain tube heater (field supply) |
| E1HHEX ~ E3HHEX | PHE heaters |
| F1U | Field fuse (field supply) |
| F1U ~ F4U (A2P) | Fuse |
| F6U (A1P) | Fuse (T 5.0A / 250V) |
| H1P ~ H7P (A1P) | Light-emitting diode (service monitor is orange) |
| HAP (A1P) | Light-emitting diode (service monitor is green) |
| K1R (A1P) | Magnetic relay (Y1S) |
| K1R (A4P) | Magnetic relay (E1HHEX ~ E3HHEX) |
| K2R (A1P) | Magnetic relay (Y2S) |
| K2R (A4P) | Magnetic relay (E1H) |
| K3R (A1P) | Magnetic relay (Y3S) |
| K10R (A1P) | Magnetic relay |
| K11M (A1P) | Magnetic contactor |
| K13R ~ K15R (A1P,A2P) | Magnetic relay |
| L1R ~ L3R (A1P) | Reactor |
| M1C | Motor (compressor) |
| M1F | Motor (fan) |
| PS (A1P) | Switching power supply |
| Q1DI | Earth leakage circuit breaker (30mA)(field supply) |
| R1 ~ R5 (A1P,A2P) | Resistor |
| R1T | Thermistor (ambient) |
| R2T | Thermistor (discharge) |
| R3T | Thermistor (suction) |
| R4T | Thermistor (heat exchanger distributor) |
| R5T | Thermistor (heat exchanger middle) |
| R6T | Thermistor (refrigerant liquid) |
| R7T | Thermistor (compressor) |
| R8T | Thermistor (port) |
| R9T | Thermistor (inlet water) |
| R10T | Thermistor (outlet water) |
| R11T | Thermistor (fin) |
| RC (A2P) | Signal receiver circuit |
| S1NPH | High pressure sensor |
| S1PH~S2PH | High pressure switch |
| S1PL | Low pressure switch |
| T1A | Current transfo |
| TC (A2P) | Signal transmission circuit |
| V1D ~ V4D (A1P) | Diode |
| V1R (A1P) | IGBT power module |
| V2R (A1P) | Diode module |
| V1T ~ V3T (A1P) | Insulated Gate Bipolar Transistor (IGBT) |
| X1M ~ X2M | Terminal strip |
| Y1E | Electronic expansion valve (main) |
| Y3E | Electronic expansion valve (injection) |
| Y1S | Solenoid valve (4-way valve) |
| Y2S | Solenoid valve (hot gas bypass) |
| Y3S | Solenoid valve (low pressure bypass) |
| Y4S | Solenoid valve (liquid injection) |
| Z1C ~ Z11C | Noise filter (ferrite core) |
| Z1F ~ Z6F (A1P,A2P) | Noise filter |




**2D124518A**

# 7 Sound data

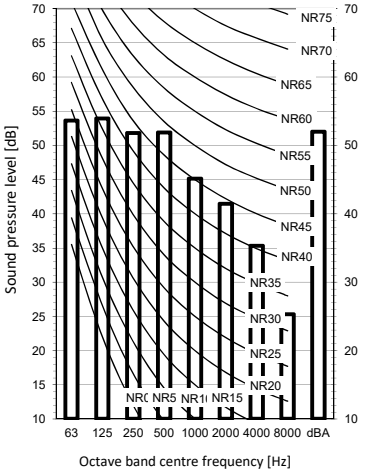
## 7 - 1 Sound Pressure Spectrum - Cooling

**EPRA014-018DV**
**EPRA014-018DW**

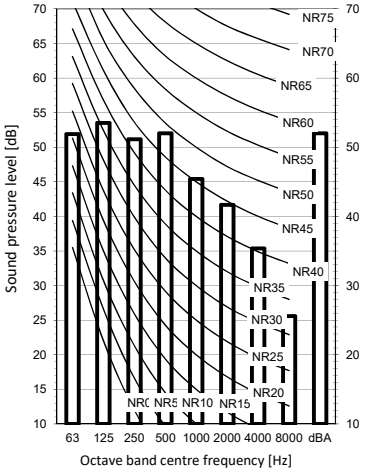
**Cooling Sound**



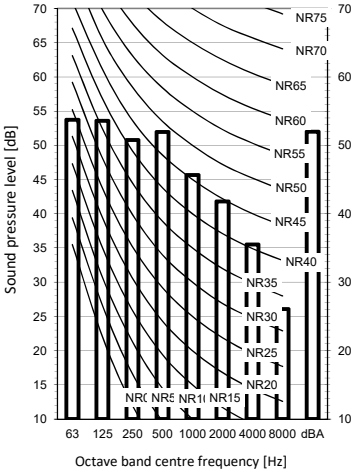
EPRA14*



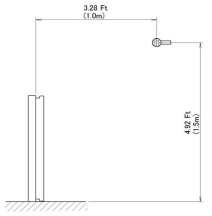

EPRA16*




EPRA18*




Notes
1. Data is valid at free field condition.
   Measured in a semi-anechoic chamber
2. Data is valid at nominal operation condition.
3. dBA = A-weighted sound pressure level (A scale according to IEC).
4. Reference acoustic pressure 0 dB = 20 µPa
5. If the sound is measured under actual installation conditions, the measured value will be higher due to environmental noise and sound reflections.

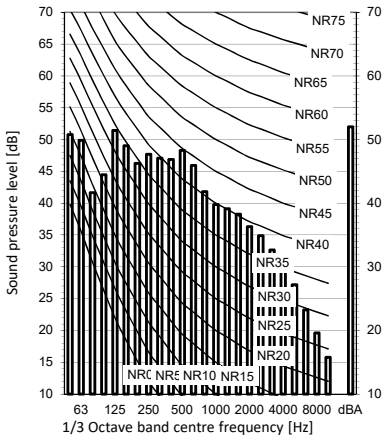



Measuring location (discharge side)

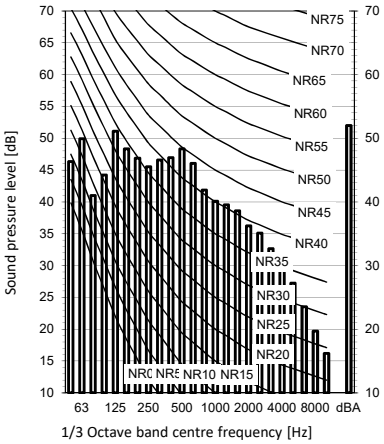
**3D126758-1**

**EPRA014-018DV**
**EPRA014-018DW**

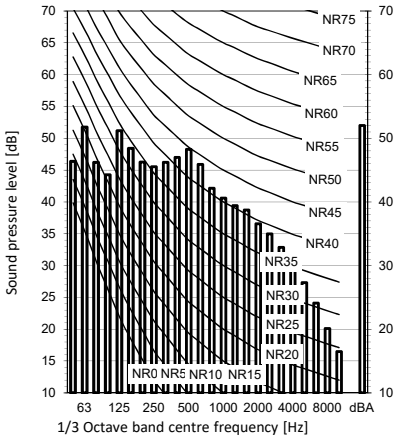
EPRA14*



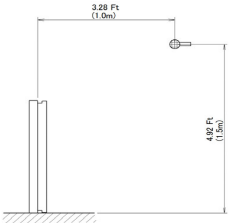

EPRA16*




EPRA18*




Notes
1. Data is valid at free field condition.
   Measured in a semi-anechoic chamber
2. Data is valid at nominal operation condition.
3. dBA = A-weighted sound pressure level (A scale according to IEC).
4. Reference acoustic pressure 0 dB = 20 µPa
5. If the sound is measured under actual installation conditions, the measured value will be higher due to environmental noise and sound reflections.




Measuring location (discharge side)

**3D126758-2**

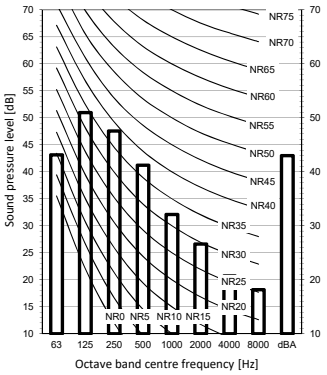
# 7 Sound data

## 7 - 2 Sound Pressure Spectrum - Heating

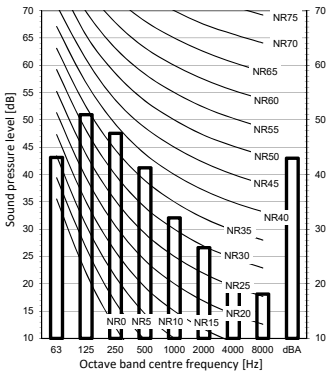
**EPRA014-018DV**
**EPRA014-018DW**

**Heating Sound**

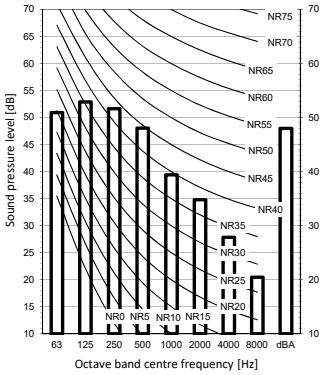
EPRA14*




EPRA16*



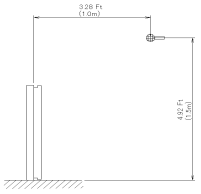

EPRA18*




Notes (graphics only)

1. Data is valid at free field condition.
   Measured in a semi-anechoic chamber
2. Data is valid at nominal operation condition.
3. dBA = A-weighted sound pressure level (A scale according to IEC).
4. Reference acoustic pressure 0 dB = 20 µPa
5. If the sound is measured under actual installation conditions, the measured value will be higher due to environmental noise and sound reflections.

| | | Day | | | Night | | |
|---|---|---|---|---|---|---|---|
| | | Sound power level [dB] | | | Sound power level [dB] | | |
| Day | Night | EPRA14* | EPRA16* | EPRA18* | EPRA14* | EPRA16* | EPRA18* |
| Default | Low noise level ·2· | 60,2 | 60,2 | 60,2 | 53,7 | 53,7 | 53,7 |
| Low noise level ·2· | Low noise level ·3· | 53,7 | 53,7 | 53,7 | 49,5 | 49,5 | 49,5 |
| Full load (maximum fan rps and maximum compressor rps for the dedicated low noise mode) | | | | | | | |

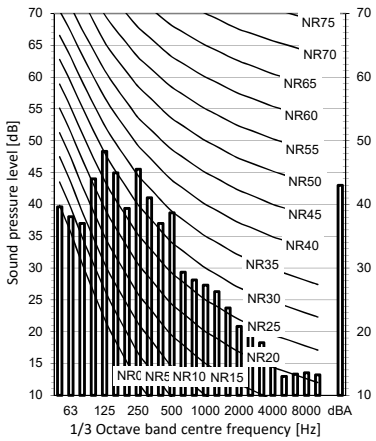



Measuring location (discharge side)

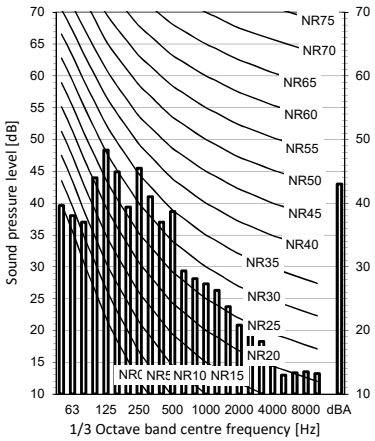
**3D125215A-1**

**EPRA014-018DV**
**EPRA014-018DW**

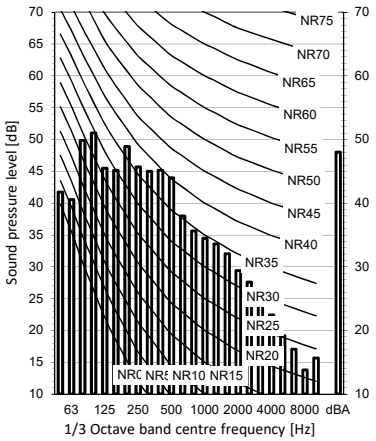
EPRA14*




EPRA16*

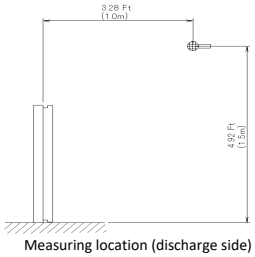



EPRA18*




Notes

1. Data is valid at free field condition.
   Measured in a semi-anechoic chamber
2. Data is valid at nominal operation condition.
3. dBA = A-weighted sound pressure level (A scale according to IEC).
4. Reference acoustic pressure 0 dB = 20 µPa
5. If the sound is measured under actual installation conditions, the measured value will be higher due to environmental noise and sound reflections.




Measuring location (discharge side)

**3D125215A-2**

# 7 Sound data

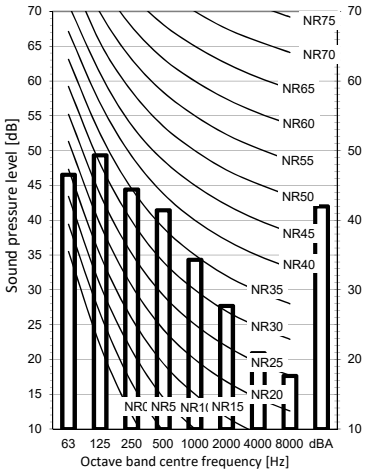
## 7 - 3 Sound Pressure Spectrum Quiet Mode



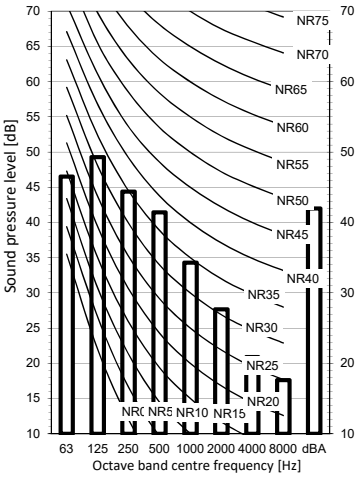
**EPRA014-018DV**
**EPRA014-018DW**

**Heating Low Sound Mode 2**

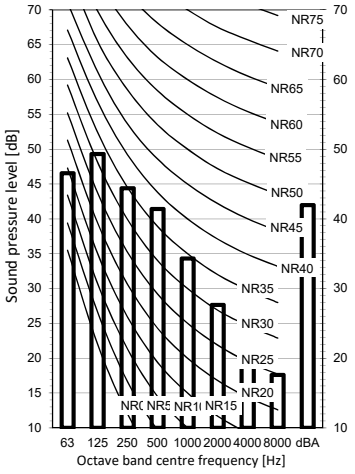
EPRA14*



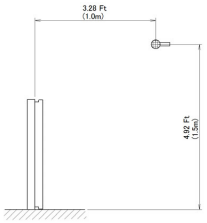

EPRA16*




EPRA18*




Notes
1. Data is valid at free field condition.
   Measured in a semi-anechoic chamber
2. Data is valid at nominal operation condition.
3. dBA = A-weighted sound pressure level (A scale according to IEC).
4. Reference acoustic pressure 0 dB = 20 µPa
5. If the sound is measured under actual installation conditions, the measured value will be higher due to environmental noise and sound reflections.

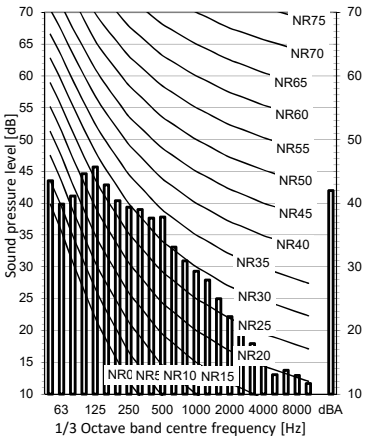



Measuring location (discharge side)

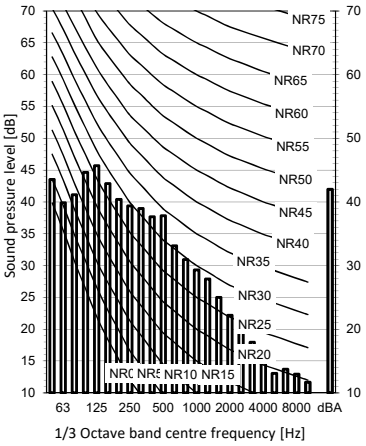
**3D125214-1**

**EPRA014-018DV**
**EPRA014-018DW**

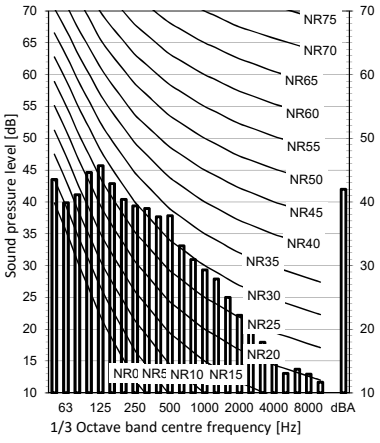
EPRA14*



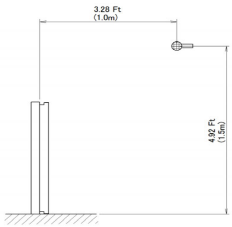

EPRA16*




EPRA18*




Notes
1. Data is valid at free field condition.
   Measured in a semi-anechoic chamber
2. Data is valid at nominal operation condition.
3. dBA = A-weighted sound pressure level (A scale according to IEC).
4. Reference acoustic pressure 0 dB = 20 µPa
5. If the sound is measured under actual installation conditions, the measured value will be higher due to environmental noise and sound reflections.




Measuring location (discharge side)

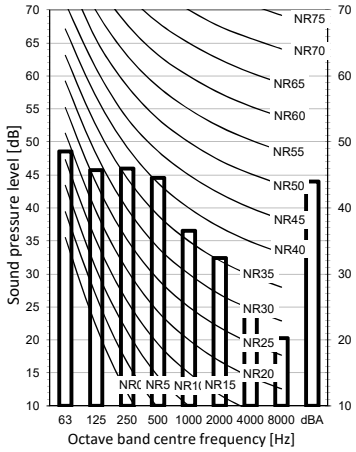
**3D125214-2**

# 7 Sound data

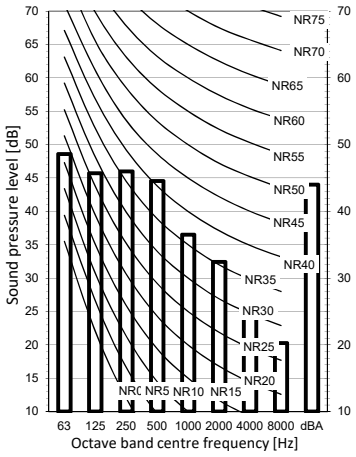
## 7 - 3 Sound Pressure Spectrum Quiet Mode

**EPRA014-018DV**
**EPRA014-018DW** **Cooling: Low Sound Mode 2**

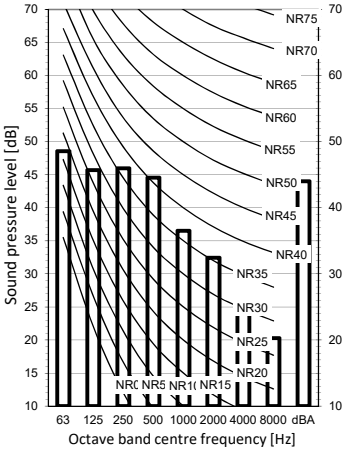
EPRA14*



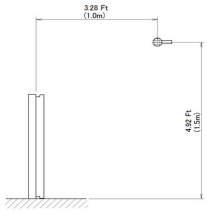

EPRA16*




EPRA18*




Notes
1. Data is valid at free field condition.
   Measured in a semi-anechoic chamber
2. Data is valid at nominal operation condition.
3. dBA = A-weighted sound pressure level (A scale according to IEC).
4. Reference acoustic pressure 0 dB = 20 µPa
5. If the sound is measured under actual installation conditions, the measured value will be higher due to environmental noise and sound reflections.

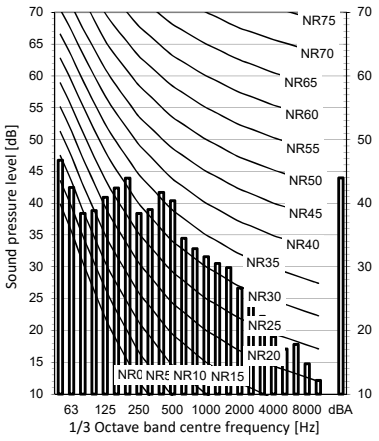



Measuring location (discharge side)

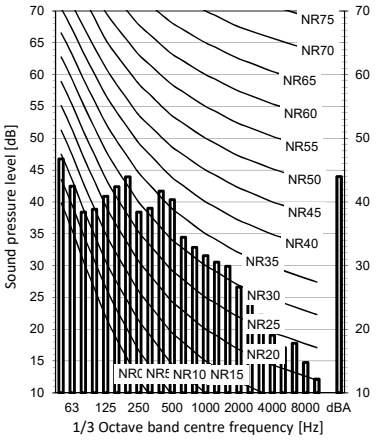
**3D126757-1**

**EPRA014-018DV**
**EPRA014-018DW**

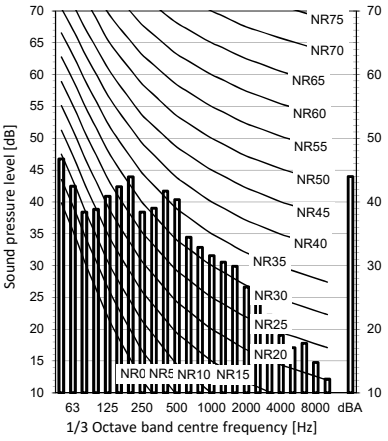
EPRA14*



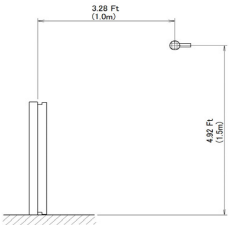

EPRA16*




EPRA18*




Notes
1. Data is valid at free field condition.
   Measured in a semi-anechoic chamber
2. Data is valid at nominal operation condition.
3. dBA = A-weighted sound pressure level (A scale according to IEC).
4. Reference acoustic pressure 0 dB = 20 µPa
5. If the sound is measured under actual installation conditions, the measured value will be higher due to environmental noise and sound reflections.




Measuring location (discharge side)

**3D126757-2**

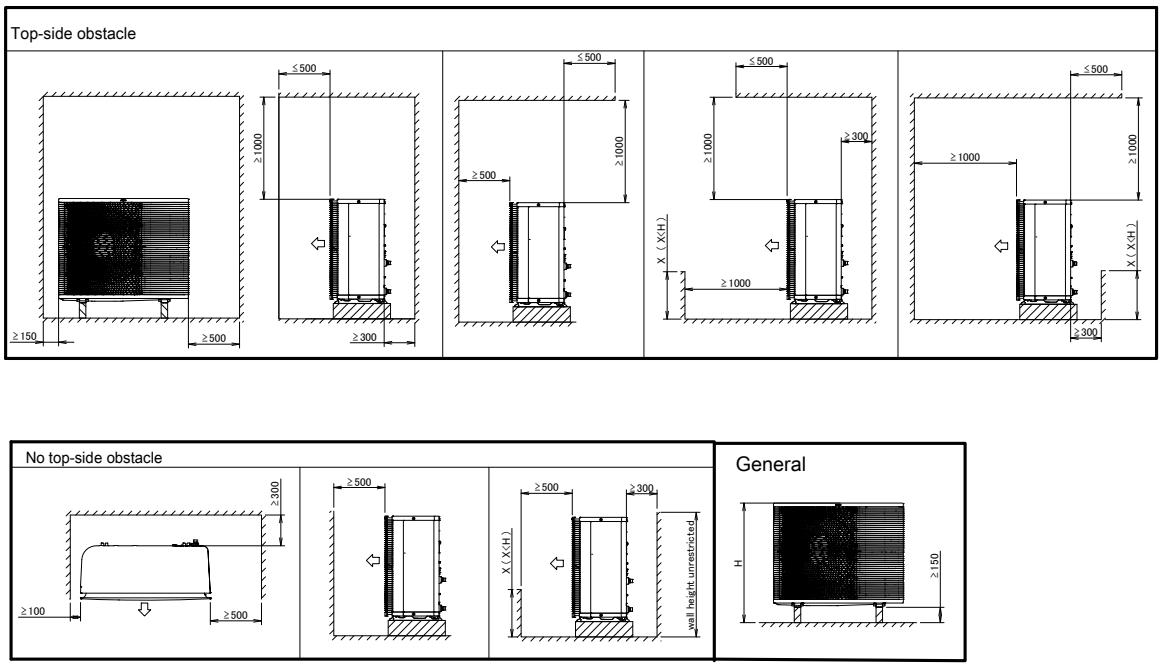
# 8 Installation

## 8 - 1 Installation Method

**EPRA014-018DV**
**EPRA014-018DW**



Minimum space for air passage



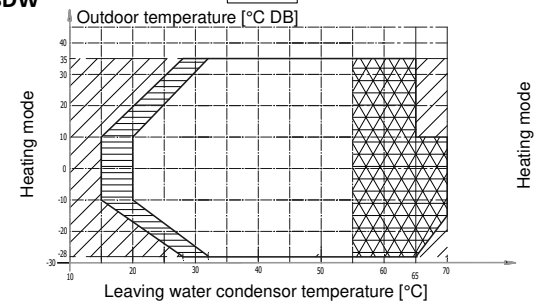

**3D124412**

# 9 Operation range

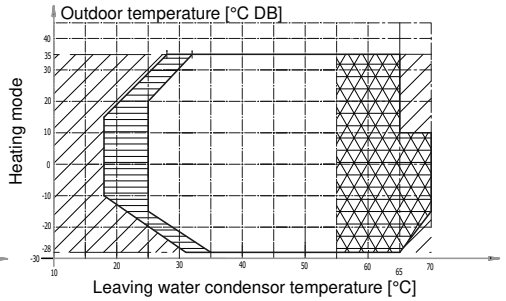
## 9 - 1 Operation Range

**EPRA014-018DV**
**EPRA014-018DW**

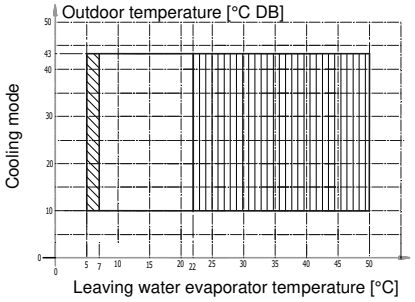
ETV*DA*




ETB*DA*




ETV*DA*
+
ETB*DA*




Legend

Backup heater only operation
No outdoor unit operation

Outdoor unit operation if setpoint ≥ ·20·

Pull-down area

Outdoor unit operation if setpoint >·55·°C and ΔT = ·10·°C (ΔT = outlet temperature – inlet temperature)

In case valve kit ·AFVALVE1· is part of the system, then the minimum setpoint is ·7·°C.

Remark

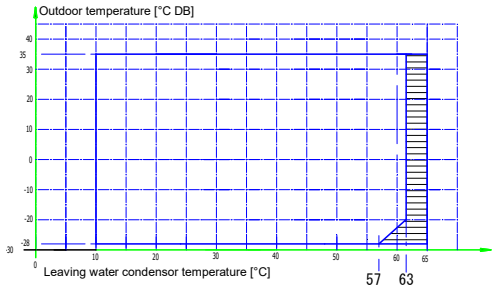
In restricted power supply mode, the outdoor unit, booster heater and backup heater can only operate separately.

**3D125788**

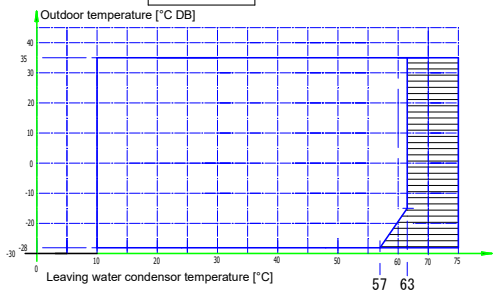
**EPRA014-018DV**
**EPRA014-018DW**

Domestic hot water heating mode

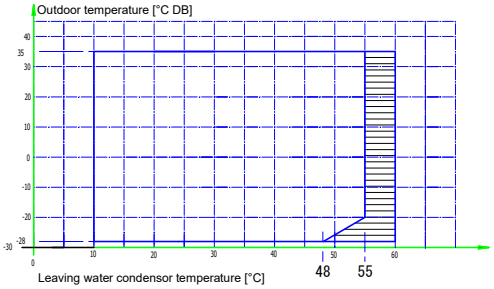
ETV*




EKHWP* + ETS* + EKHWS*200* / EKHWS*250* / EKHWS*300* + Third-party with identical specifications as ·EKHWS*200*·




EKHWS*150*
EKHWS*180*
+
Third-party with identical specifications as ·EKHWS*150*·




Legend

Backup heater only operation (or booster heater, if part of the system)

Remark

1. In restricted power supply mode (·EKHW*· only ), the outdoor unit, booster heater and backup heater can only operate separately.
2. Third-party with identical specifications as ·EHKWS*150*·
   Coil surface >·1.05·m2
   Tank thermistor: top part of heat pump coil. Small overlap.
3. Third-party with identical specifications as ·EKHWS*200*·
   Coil surface >·1.8·m2
   Tank thermistor: top part of heat pump coil. Small overlap.

**3D125789B**

# 10 Capacity tables

## 10 - 1 Certification Programs

**EPRA014-018DW**

**EPRA014-018DV**

3

Rated data for certification programmes - heating mode

| Tamb [°C] | EWC [°C] | LWC [°C] | EPRA14DAV3 HC [kW] | EPRA14DAV3 COP | EPRA16DAV3 HC [kW] | EPRA16DAV3 COP | EPRA18DAV3 HC [kW] | EPRA18DAV3 COP | EPRA14DAW1 HC [kW] | EPRA14DAW1 COP | EPRA16DAW1 HC [kW] | EPRA16DAW1 COP | EPRA18DAW1 HC [kW] | EPRA18DAW1 COP | Used for: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7/6 | 30 | 35 | 5,69 | 4,67 | 9,00 | 5,00 | 9,00 | 5,00 | 5,90 | 4,79 | 9,00 | 5,00 | 9,00 | 5,00 | Keymark, EHPA |
| 2/1 | (30) | 35 | 7,88 | 4,31 | 7,88 | 4,31 | 7,88 | 4,31 | 7,52 | 4,09 | 7,52 | 4,09 | 7,52 | 4,09 | EHPA |
| -7/-8 | (30) | 35 | 10,81 | 3,27 | 11,78 | 3,21 | 12,78 | 3,15 | 10,18 | 3,21 | 11,40 | 3,13 | 12,67 | 3,05 | General |
| 7/6 | 40 | 45 | 7,92 | 3,42 | 7,92 | 3,42 | 7,92 | 3,42 | 7,92 | 3,42 | 7,92 | 3,42 | 7,92 | 3,42 | General |
| 7/6 | 47 | 55 | 7,24 | 3,01 | 7,24 | 3,01 | 7,24 | 3,01 | 7,24 | 2,93 | 7,24 | 2,93 | 7,24 | 2,93 | Keymark, EHPA |

Rated data for certification programmes - cooling mode

| Tamb [°C] | EWE [°C] | LWE [°C] | EPRA14DAV3 CC [kW] | EPRA14DAV3 EER | EPRA16DAV3 CC [kW] | EPRA16DAV3 EER | EPRA18DAV3 CC [kW] | EPRA18DAV3 EER | EPRA14DAW1 CC [kW] | EPRA14DAW1 EER | EPRA16DAW1 CC [kW] | EPRA16DAW1 EER | EPRA18DAW1 CC [kW] | EPRA18DAW1 EER | Used for: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 35 | 23 | 18 | 10,55 | 4,13 | 11,51 | 4,11 | 12,46 | 4,09 | 10,55 | 4,13 | 11,51 | 4,11 | 12,46 | 4,09 | General |
| 35 | 12 | 7 | 6,90 | 2,7 | 7,88 | 2,69 | 8,86 | 2,68 | 6,90 | 2,7 | 7,88 | 2,69 | 8,86 | 2,68 | DAPT General |

Rated data for certification programmes - domestic hot water performance

| Indoor unit | | ETV*16S18DA* | | ETV*16S23DA* | | ETSH16P30DA | | ETSHB16P30DA | | ETSX16P30DA | | ETSXB16P30DA | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Outdoor unit | | EPRA*DAV3 | EPRA*DAW1 | EPRA*DAV3 | EPRA*DAW1 | EPRA*DAW1 | EPRA*DAV3 | EPRA*DAW1 | EPRA*DAV3 | EPRA*DAW1 | EPRA*DAV3 | EPRA*DAW1 | EPRA*DAV3 |
| Application | | Average climate | | Average climate | | Average climate | | | | | | | |
| Domestic hot water tank volume | | 180L | | 230L | | 294L | | | | | | | |
| Tapping pattern | | L | | XL | | L | | | | | | | |
| Heat-up time (hh:mm:ss) | | 01:06:36 | | 01:19:36 | | 01:25:00 | 01:41:00 | 01:25:00 | 01:41:00 | 01:25:00 | 01:41:00 | 01:25:00 | 01:41:00 |
| $\vartheta_{wh}$ | [°C] | 52,5 | | 52,5 | | 47,0 | | | | | | | |
| $P_{es}$ | [W] | 34,2 | 42,9 | 49,2 | 58,5 | 49,0 | | | | | | | |
| $V_{40}$ | [l] | 240 | | 298 | | 149,0 | | | | | | | |
| $\eta_{wh}$ | [%] | 109,5 | 105,7 | 108,3 | 106,6 | 101 | | | | | | | |
| $COP_{DHW}$ | [] | 2,62 | 2,51 | 2,61 | 2,55 | 2,38 | | | | | | | |

| Indoor unit | | ETSH16P50DA | | ETSHB16P50DA | | ETSX16P50DA | | ETSXB16P50DA | | Used for: |
|---|---|---|---|---|---|---|---|---|---|---|
| Outdoor unit | | EPRA*DAW1 | EPRA*DAV3 | EPRA*DAW1 | EPRA*DAV3 | EPRA*DAW1 | EPRA*DAV3 | EPRA*DAW1 | EPRA*DAV3 | |
| Application | | Average climate | | | | | | | | |
| Domestic hot water tank volume | | 477L | | | | | | | | |
| Tapping pattern | | XL | | | | | | | | |
| Heat-up time (hh:mm:ss) | | 02:18:00 | | 01:46:00 | 02:11:00 | 02:18:00 | | 01:46:00 | 02:11:00 | |
| $\vartheta_{wh}$ | [°C] | 47,0 | | | 48,0 | 47,0 | | | 48,0 | Keymark |
| $P_{es}$ | [W] | 51,0 | | 57,1 | 57,6 | 51,0 | | 57,1 | 57,6 | |
| $V_{40}$ | [l] | 237,2 | | 215,7 | 211,0 | 237,2 | | 215,7 | 211,0 | |
| $\eta_{wh}$ | [%] | 111 | 115 | | 108 | 111 | 115 | | 108 | |
| $COP_{DHW}$ | [] | 2,67 | 2,75 | | 2,58 | 2,67 | 2,75 | | 2,58 | |

Symbols

| | | |
|---|---|---|
| HC | Heating capacity measured according to EN 14511 | |
| CC | Cooling capacity, measured according to ·EN 14511·. | |
| COP/EER | Coefficient of Performance/Energy efficiency ratio according to EN 14511. | |
| EWC | Entering water condenser temperature [°C] | |
| LWC | Leaving water condensor temperature [°C] | |
| EWE | Entering water evaporator temperature [°C] | |
| LWE | Leaving water evaporator temperature [°C] | |
| Tamb | Ambient temperature [°C DB/WB] | |
| $\vartheta_{wh}$ | Reference Domestic hot water temperature [°C] | According to EN16147. |
| $P_{es}$ | Standby power input | According to EN16147. |
| $V_{eq40}$ | Equivalent domestic hot water volume [l] | According to EN16147. |
| $\eta_{wh}$ | Efficiency [%] Domestic hot water heating mode | According to EN16147. |
| $COP_{DHW}$ | Domestic hot water COP | |

**4D126945A**

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03/2020