# Daikin Altherma low temperature split Technical Data

# ERLQ-CW1

# Table of contents

# ERLQ-CW1

# 1 Features

## 1 - 1 ERLQ-CW1

› Outdoor unit extracts heat from the outdoor air, even at -25°C

› Inverter-controlled scroll compressor





Guaranteed operation down to -25°C


Inverter

# 2 Specifications

## 1 - 1 ERLQ-CW1

| Technical specifications | | | | | EHBH11CB3V + ERLQ011CW1 | EHBH11CB9W + ERLQ011CW1 | EHBH16CB3V + ERLQ014CW1 | EHBH16CB9W + ERLQ014CW1 | EHBH16CB3V + ERLQ016CW1 | EHBH16CB9W + ERLQ016CW1 |
|---|---|---|---|---|---|---|---|---|---|---|
| Heating capacity | Nom. | | | kW | 11.2 (1) / 11.0 (2) | | 14.5 (1) / 13.6 (2) | | 16.0 (1) / 15.2 (2) | |
| | Max. | | | kW | 8.60 (3) / 8.60 (4) | | 10.6 (3) / 10.8 (4) | | 11.4 (3) / 10.9 (4) | |
| Power input | Heating | Nom. | | kW | 2.43 (1) / 3.10 (2) | | 3.37 (1) / 4.10 (2) | | 3.76 (1) / 4.66 (2) | |
| | | Max. | | kW | 3.13 (3) / 4.10 (4) | | 4.00 (3) / 5.19 (4) | | 4.32 (3) / 5.22 (4) | |
| COP | | | | | 4.60 (1) / 2.75 (3) / 3.55 (2) / 2.10 (4) | | 4.30 (1) / 2.65 (3) / 3.32 (2) / 2.08 (4) | | 4.25 (1) / 2.64 (3) / 3.26 (2) / 2.09 (4) | |
| Pump | Nominal ESP unit | Heating | | kPa | 37.0 (5) / 39.0 (6) | | 49.0 (5) / 57.0 (6) | | 33.0 (5) / 42.0 (6) | |
| Water side Heat exchanger | Water flow rate | Heating | Nom. | l/min | 32.1 (5) / 31.5 (6) | | 41.6 (5) / 39.0 (6) | | 45.9 (5) / 43.6 (6) | |
| 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 | | | No | | | | | |
| | | Low-temperature heat pump | | | No | | | | | |
| | | Supplementary heater integrated | | | Yes | | | | | |
| | | Water-to-water heat pump | | | No | | | | | |
| | LW(A) Sound power level | Indoor | | dB(A) | 41.0 | | 44.0 | | | |
| LW(A) Sound power level (according to EN14825) | Outdoor | | | dB(A) | 64.0 | | | | 66.0 | |
| 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) | | $m^3/h$ | 5,400 | | | | | |
| | Other | Capacity control | | | Inverter | | | | | |
| | | Cdh (Degradation heating) | | | 1.00 | | | | | |
| | | Pck (Crankcase heater mode) | | kW | 0.055 | | | | | |
| | | Poff (Off mode) | | kW | 0.055 | | | | | |
| | | Psb (Standby mode) | | kW | 0.055 | | | | | |
| | | Pto (Thermostat off) | | kW | 0.057 | | | | | |
| | Integrated supplementary heater | NOx emission | | mg/kWh | 0.00 | | | | | |
| | | Psup | | kW | 3.00 | 9.00 | 3.00 | 9.00 | 3.00 | 9.00 |
| | | Type of energy input | | | Electrical | | | | | |
| Space heating | Average climate water outlet 55°C | General | Annual energy consumption | kWh | 6,260 | | 7,900 | | 8,970 | |
| | | | ηs (Seasonal space heating efficiency) | % | 120 | | 123 | | 119 | |
| | | | Prated at -10°C | kW | 9.99 | | 12.7 | | 13.9 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 22.6 | | 28.4 | | 32.3 | |
| | | | SCOP | | 3.09 | | 3.16 | | 3.06 | |
| | | | Seasonal space heating eff. class | | A+ | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.00 | | | | | |
| | | | COPd | | 1.99 | | 1.76 | | 1.78 | |

# 2 Specifications

## 1 - 1 ERLQ-CW1

| Technical specifications | | | | | EHBH11CB3V + ERLQ011CW1 | EHBH11CB9W + ERLQ011CW1 | EHBH16CB3V + ERLQ014CW1 | EHBH16CB9W + ERLQ014CW1 | EHBH16CB3V + ERLQ016CW1 | EHBH16CB9W + ERLQ016CW1 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 55°C | A Condition (-7°CDB/-8°CWB) | Pdh | kW | 8.83 | | 9.97 | | 12.2 | |
| | | | PERd | % | 79.6 | | 70.4 | | 71.2 | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.00 | | | | | |
| | | | COPd | | 3.24 | | 3.55 | | 3.12 | |
| | | | Pdh | kW | 5.28 | | 6.76 | | 7.61 | |
| | | | PERd | % | 130 | | 142 | | 125 | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 0.950 | | | | 1.00 | |
| | | | COPd | | 4.31 | | 4.22 | | 4.40 | |
| | | | Pdh | kW | 4.47 | | 4.66 | | 4.83 | |
| | | | PERd | % | 172 | | 169 | | 176 | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 0.930 | | 0.940 | | 0.930 | |
| | | | COPd | | 6.41 | | 5.44 | | 6.36 | |
| | | | Pdh | kW | 5.37 | | 5.26 | | 5.38 | |
| | | | PERd | % | 256 | | 218 | | 254 | |
| | | Tol (temperature operating limit) | COPd | | 1.79 | | 1.75 | | 1.71 | |
| | | | Pdh | kW | 9.08 | | 12.2 | | 13.3 | |
| | | | PERd | % | 71.6 | | 70.0 | | 68.4 | |
| | | | TOL | °C | -10.0 | | | | | |
| | | | WTOL | °C | 55.0 | | | | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 0.910 | | 0.550 | | 0.580 | |
| | | Tbiv (bivalent temperature) | COPd | | 1.99 | | 1.92 | | 1.78 | |
| | | | Pdh | kW | 8.83 | | 11.0 | | 12.2 | |
| | | | PERd | % | 79.6 | | 76.8 | | 71.2 | |
| | | | Tbiv | °C | -7.00 | | -6.00 | | -7.00 | |
| | Cold climate water outlet 55°C | General | Annual energy consumption | kWh | 6,740 | | 7,870 | | 8,580 | |
| | | | ηs (Seasonal space heating efficiency) | % | 95.0 | | 95.5 | | 98.3 | |
| | | | Prated at -22°C | kW | 6.99 | | 8.15 | | 9.12 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 24.3 | | 28.3 | | 30.9 | |
| | Warm climate water outlet 55°C | General | Annual energy consumption | kWh | 2,630 | | 3,270 | | 3,420 | |
| | | | ηs (Seasonal space heating efficiency) | % | 125 | | 135 | | 136 | |
| | | | Prated at 2°C | kW | 7.58 | | 9.84 | | 10.3 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 9.47 | | 11.8 | | 12.3 | |
| | Average climate water outlet 35°C | General | Annual energy consumption | kWh | 5,380 | | 7,250 | | 8,270 | |
| | | | ηs (Seasonal space heating efficiency) | % | 156 | | 153 | | 149 | |
| | | | Prated at -10°C | kW | 11.2 | | 14.5 | | 16.0 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 19.4 | | 26.1 | | 29.8 | |
| | | | SCOP | | 3.98 | | 3.90 | | 3.80 | |

# 2 Specifications

## 1 - 1 ERLQ-CW1

| Technical specifications | | | | | EHBH11CB3V + ERLQ011CW1 | EHBH11CB9W + ERLQ011CW1 | EHBH16CB3V + ERLQ014CW1 | EHBH16CB9W + ERLQ014CW1 | EHBH16CB3V + ERLQ016CW1 | EHBH16CB9W + ERLQ016CW1 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 35°C | General | Seasonal space heating eff. class | | A++ | | | | A+ | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | 2.63 | | | | 2.33 | |
| | | | Pdh | kW | 8.88 | | 10.7 | | 12.4 | |
| | | | PERd | % | 105 | | | | 93.2 | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.00 | | | | | |
| | | | COPd | | 4.05 | | 4.07 | | 3.74 | |
| | | | Pdh | kW | 6.03 | | 7.71 | | 8.62 | |
| | | | PERd | % | 162 | | 163 | | 150 | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 0.940 | | 1.00 | | 0.940 | |
| | | | COPd | | 6.77 | | 5.71 | | 6.77 | |
| | | | Pdh | kW | 5.74 | | 5.05 | | 5.74 | |
| | | | PERd | % | 271 | | 228 | | 271 | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 0.920 | | 0.930 | | 0.920 | |
| | | | COPd | | 8.97 | | 6.71 | | 8.97 | |
| | | | Pdh | kW | 6.50 | | 5.16 | | 6.50 | |
| | | | PERd | % | 359 | | 268 | | 359 | |
| | | Tol (temperature operating limit) | COPd | | 2.34 | | 2.60 | | 2.05 | |
| | | | Pdh | kW | 8.76 | | 12.6 | | 11.7 | |
| | | | PERd | % | 93.6 | | 104 | | 82.0 | |
| | | | TOL | °C | -10.0 | | | | | |
| | | | WTOL | °C | 35.0 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 2.82 | | 2.83 | | 2.56 | |
| | | | Pdh | kW | 9.09 | | 11.6 | | 12.1 | |
| | | | PERd | % | 113 | | | | 102 | |
| | | | Tbiv | °C | -5.00 | | | | -4.00 | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 2.44 | | 1.93 | | 4.35 | |
| | Cold climate water outlet 35°C | General | Annual energy consumption | kWh | 6,430 | | 8,170 | | 9,050 | |
| | | | ηs (Seasonal space heating efficiency) | % | 148 | | 141 | | 137 | |
| | | | Prated at -22°C | kW | 10.3 | | 12.3 | | 13.3 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 23.1 | | 29.4 | | 32.6 | |
| | Warm climate water outlet 35°C | General | Annual energy consumption | kWh | 1,950 | | 2,350 | | 2,480 | |
| | | | ηs (Seasonal space heating efficiency) | % | 192 | | 199 | | | |
| | | | Prated at 2°C | kW | 9.06 | | 10.9 | | 11.4 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 7.02 | | 8.46 | | 8.92 | |

(1)Condition 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)Condition 2: cooling Ta 35°C - LWE 7°C ( DT = 5°C); heating Ta DB/WB 7°C/6°C - LWC 45°C ( DT = 5°C ) |
(3)Condition 3: heating Ta DB -7°C (RH85%) - LWC 35°C |
(4)Condition 4: heating Ta DB -7°C (RH85%) - LWC 45°C |
(5)DB/WB 7°C/6°C - LWC 35°C (DT=5°C) |
(6)DB/WB 7°C/6°C - LWC 45°C (Dt=5°C) |
Tamb 35°C - LWE 7°C (DT=5°C) |
Tamb 35°C - LWE 18°C (DT=5°C)

| Technical specifications | | | | | EHBX11CB3V + ERLQ011CW1 | EHBX11CB9W + ERLQ011CW1 | EHBX16CB3V + ERLQ014CW1 | EHBX16CB9W + ERLQ014CW1 | EHBX16CB3V + ERLQ016CW1 | EHBX16CB9W + ERLQ016CW1 |
|---|---|---|---|---|---|---|---|---|---|---|
| Heating capacity | Nom. | | | kW | 11.2 (1) / 11.0 (2) | | 14.5 (1) / 13.6 (2) | | 16.0 (1) / 15.2 (2) | |
| | Max. | | | kW | 8.60 (3) / 8.60 (4) | | 10.6 (3) / 10.8 (4) | | 11.4 (3) / 10.9 (4) | |
| Cooling capacity | Nom. | | | kW | 12.1 (1) / 11.7 (2) | | 12.7 (1) / 12.6 (2) | | 13.8 (1) / 13.1 (2) | |
| Power input | Heating | Nom. | | kW | 2.43 (1) / 3.10 (2) | | 3.37 (1) / 4.10 (2) | | 3.76 (1) / 4.66 (2) | |
| | | Max. | | kW | 3.13 (3) / 4.10 (4) | | 4.00 (3) / 5.19 (4) | | 4.32 (3) / 5.22 (4) | |
| | Cooling | Nom. | | kW | 3.05 (1) / 4.31 (2) | | 3.21 (1) / 5.08 (2) | | 3.74 (1) / 5.73 (2) | |
| COP | | | | | 4.60 (1) / 2.75 (3) / 3.55 (2) / 2.10 (4) | | 4.30 (1) / 2.65 (3) / 3.32 (2) / 2.08 (4) | | 4.25 (1) / 2.64 (3) / 3.26 (2) / 2.09 (4) | |
| EER | | | | | 3.98 (1) / 2.72 (2) | | 3.96 (1) / 2.47 (2) | | 3.69 (1) / 2.29 (2) | |
| Pump | Nominal ESP unit | Cooling | | kPa | 33.0 (5) / 3.00 (6) | | 64.0 (5) / 32.0 (6) | | 61.0 (5) / 23.0 (6) | |
| | | Heating | | kPa | 37.0 (7) / 39.0 (8) | | 49.0 (7) / 57.0 (8) | | 33.0 (7) / 42.0 (8) | |
| Water side Heat exchanger | Water flow rate | Cooling | Nom. | l/min | 33.6 (5) / 43.1 (6) | | 36.0 (5) / 46.0 (6) | | 37.6 (5) / 48.0 (6) | |
| | | Heating | Nom. | l/min | 32.1 (7) / 31.5 (8) | | 41.6 (7) / 39.0 (8) | | 45.9 (7) / 43.6 (8) | |

# 2 Specifications

## 1 - 1 ERLQ-CW1

| Technical specifications | | | | | EHBX11CB3V + ERLQ011CW1 | EHBX11CB9W + ERLQ011CW1 | EHBX16CB3V + ERLQ014CW1 | EHBX16CB9W + ERLQ014CW1 | EHBX16CB3V + ERLQ016CW1 | EHBX16CB9W + ERLQ016CW1 |
|---|---|---|---|---|---|---|---|---|---|---|
| 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 | | | No | | | | | |
| | | Low-temperature heat pump | | | No | | | | | |
| | | Supplementary heater integrated | | | Yes | | | | | |
| | | Water-to-water heat pump | | | No | | | | | |
| | LW(A) Sound power level | Indoor | | dB(A) | 41.0 | | 44.0 | | | |
| LW(A) Sound power level (according to EN14825) | Outdoor | | | dB(A) | 64.0 | | | | 66.0 | |
| 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) | | $m^3/h$ | 5,400 | | | | | |
| | Other | Capacity control | | | Inverter | | | | | |
| | | Cdh (Degradation heating) | | | 1.00 | | | | | |
| | | Pck (Crankcase heater mode) | | kW | 0.055 | | | | | |
| | | Poff (Off mode) | | kW | 0.055 | | | | | |
| | | Psb (Standby mode) | | kW | 0.055 | | | | | |
| | | Pto (Thermostat off) | | kW | 0.057 | | | | | |
| | Integrated supplementary heater | NOx emission | | mg/kWh | 0.00 | | | | | |
| | | Psup | | kW | 3.00 | 9.00 | 3.00 | 9.00 | 3.00 | 9.00 |
| | | Type of energy input | | | Electrical | | | | | |
| Space heating | Average climate water outlet 55°C | General | Annual energy consumption | kWh | 6,280 | | 7,920 | | 8,990 | |
| | | | $\eta_s$ (Seasonal space heating efficiency) | % | 128 | | 130 | | 125 | |
| | | | Prated at -10°C | kW | 9.99 | | 12.7 | | 13.9 | |

# 2 Specifications

## 1 - 1 ERLQ-CW1

| Technical specifications | | | | | EHBX11CB3V + ERLQ011CW1 | EHBX11CB9W + ERLQ011CW1 | EHBX16CB3V + ERLQ014CW1 | EHBX16CB9W + ERLQ014CW1 | EHBX16CB3V + ERLQ016CW1 | EHBX16CB9W + ERLQ016CW1 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 55°C | General | Qhe Annual energy consumption (GCV) | Gj | 22.6 | | 28.5 | | 32.4 | |
| | | | SCOP | | 3.28 | | 3.32 | | 3.20 | |
| | | | Seasonal space heating eff. class | | A++ | | A+ | | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.00 | | | | | |
| | | | COPd | | 1.99 | | 1.76 | | 1.78 | |
| | | | Pdh | kW | 8.83 | | 9.97 | | 12.2 | |
| | | | PERd | % | 79.6 | | 70.4 | | 71.2 | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.00 | | | | | |
| | | | COPd | | 3.24 | | 3.55 | | 3.12 | |
| | | | Pdh | kW | 5.28 | | 6.76 | | 7.61 | |
| | | | PERd | % | 130 | | 142 | | 125 | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 0.950 | | | | 1.00 | |
| | | | COPd | | 4.31 | | 4.22 | | 4.40 | |
| | | | Pdh | kW | 4.47 | | 4.66 | | 4.83 | |
| | | | PERd | % | 172 | | 169 | | 176 | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 0.930 | | 0.940 | | 0.930 | |
| | | | COPd | | 6.41 | | 5.44 | | 6.36 | |
| | | | Pdh | kW | 5.37 | | 5.26 | | 5.38 | |
| | | | PERd | % | 256 | | 218 | | 254 | |
| | | Tol (temperature operating limit) | COPd | | 1.79 | | 1.75 | | 1.71 | |
| | | | Pdh | kW | 9.08 | | 12.2 | | 13.3 | |
| | | | PERd | % | 71.6 | | 70.0 | | 68.4 | |
| | | | TOL | °C | -10.0 | | | | | |
| | | | WTOL | °C | 55.0 | | | | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 0.910 | | 0.550 | | 0.580 | |
| | | Tbiv (bivalent temperature) | COPd | | 1.99 | | 1.92 | | 1.78 | |
| | | | Pdh | kW | 8.83 | | 11.0 | | 12.2 | |
| | | | PERd | % | 79.6 | | 76.8 | | 71.2 | |
| | | | Tbiv | °C | -7.00 | | -6.00 | | -7.00 | |
| | Cold climate water outlet 55°C | General | Annual energy consumption | kWh | 6,750 | | 7,890 | | 8,600 | |
| | | | ηs (Seasonal space heating efficiency) | % | 99.0 | | 98.9 | | 102 | |
| | | | Prated at -22°C | kW | 6.99 | | 8.15 | | 9.12 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 24.3 | | 28.4 | | 31.0 | |
| | Warm climate water outlet 55°C | General | Annual energy consumption | kWh | 2,720 | | 3,360 | | 3,500 | |
| | | | ηs (Seasonal space heating efficiency) | % | 146 | | 154 | | | |
| | | | Prated at 2°C | kW | 7.58 | | 9.84 | | 10.3 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 9.78 | | 12.1 | | 12.6 | |

# 2 Specifications

## 1 - 1 ERLQ-CW1

| Technical specifications | | | | | EHBX11CB3V + ERLQ011CW1 | EHBX11CB9W + ERLQ011CW1 | EHBX16CB3V + ERLQ014CW1 | EHBX16CB9W + ERLQ014CW1 | EHBX16CB3V + ERLQ016CW1 | EHBX16CB9W + ERLQ016CW1 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 35°C | General | Annual energy consumption | kWh | 5,410 | | 7,270 | | 8,290 | |
| | | | ηs (Seasonal space heating efficiency) | % | 168 | | 162 | | 157 | |
| | | | Prated at -10°C | kW | 11.2 | | 14.5 | | 16.0 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 19.5 | | 26.2 | | 29.8 | |
| | | | SCOP | | 4.28 | | 4.12 | | 3.99 | |
| | | | Seasonal space heating eff. class | | A++ | | | | A+ | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | 2.63 | | | | 2.33 | |
| | | | Pdh | kW | 8.88 | | 10.7 | | 12.4 | |
| | | | PERd | % | 105 | | | | 93.2 | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.00 | | | | | |
| | | | COPd | | 4.05 | | 4.07 | | 3.74 | |
| | | | Pdh | kW | 6.03 | | 7.71 | | 8.62 | |
| | | | PERd | % | 162 | | 163 | | 150 | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 0.940 | | 1.00 | | 0.940 | |
| | | | COPd | | 6.77 | | 5.71 | | 6.77 | |
| | | | Pdh | kW | 5.74 | | 5.05 | | 5.74 | |
| | | | PERd | % | 271 | | 228 | | 271 | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 0.920 | | 0.930 | | 0.920 | |
| | | | COPd | | 8.97 | | 6.71 | | 8.97 | |
| | | | Pdh | kW | 6.50 | | 5.16 | | 6.50 | |
| | | | PERd | % | 359 | | 268 | | 359 | |
| | | Tol (temperature operating limit) | COPd | | 2.34 | | 2.60 | | 2.05 | |
| | | | Pdh | kW | 8.76 | | 12.6 | | 11.7 | |
| | | | PERd | % | 93.6 | | 104 | | 82.0 | |
| | | | TOL | °C | -10.0 | | | | | |
| | | | WTOL | °C | 35.0 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 2.82 | | 2.83 | | 2.56 | |
| | | | Pdh | kW | 9.09 | | 11.6 | | 12.1 | |
| | | | PERd | % | 113 | | | | 102 | |
| | | | Tbiv | °C | -5.00 | | | | -4.00 | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 2.44 | | 1.93 | | 4.35 | |
| | Cold climate water outlet 35°C | General | Annual energy consumption | kWh | 6,440 | | 8,190 | | 9,070 | |
| | | | ηs (Seasonal space heating efficiency) | % | 154 | | 145 | | 142 | |
| | | | Prated at -22°C | kW | 10.3 | | 12.3 | | 13.3 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 23.2 | | 29.5 | | 32.6 | |
| | Warm climate water outlet 35°C | General | Annual energy consumption | kWh | 2,040 | | 2,440 | | 2,570 | |
| | | | ηs (Seasonal space heating efficiency) | % | 235 | | | | 234 | |
| Space heating | Warm climate water outlet 35°C | General | Prated at 2°C | kW | 9.06 | | 10.9 | | 11.4 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 7.34 | | 8.78 | | 9.24 | |

(1)Condition 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)Condition 2: cooling Ta 35°C - LWE 7°C ( DT = 5°C); heating Ta DB/WB 7°C/6°C - LWC 45°C ( DT = 5°C ) |
(3)Condition 3: heating Ta DB -7°C (RH85%) - LWC 35°C |
(4)Condition 4: heating Ta DB -7°C (RH85%) - LWC 45°C |
(5)Tamb 35°C - LWE 7°C (DT=5°C) |
(6)Tamb 35°C - LWE 18°C (DT=5°C) |
(7)DB/WB 7°C/6°C - LWC 35°C (DT=5°C) |
(8)DB/WB 7°C/6°C - LWC 45°C (Dt=5°C)

| Technical specifications | | | | EHVH11S18CB3V + ERLQ011CW1 | EHVH11S26CB9W + ERLQ011CW1 | EHVH16S18CB3V + ERLQ014CW1 | EHVH16S26CB9W + ERLQ014CW1 | EHVH16S18CB3V + ERLQ016CW1 | EHVH16S26CB9W + ERLQ016CW1 |
|---|---|---|---|---|---|---|---|---|---|
| Heating capacity | Nom. | | kW | 11.2 (1) / 11.0 (2) | | 14.5 (1) / 13.6 (2) | | 16.0 (1) / 15.2 (2) | |
| | Max. | | kW | 8.60 (3) / 8.60 (4) | | 10.6 (3) / 10.8 (4) | | 11.4 (3) / 10.9 (4) | |
| Power input | Heating | Nom. | kW | 2.43 (1) / 3.10 (2) | | 3.37 (1) / 4.10 (2) | | 3.76 (1) / 4.66 (2) | |
| | | Max. | kW | 3.13 (3) / 4.10 (4) | | 4.00 (3) / 5.19 (4) | | 4.32 (3) / 5.22 (4) | |
| COP | | | | 4.60 (1) / 2.75 (3) / 3.55 (2) / 2.10 (4) | | 4.30 (1) / 2.65 (3) / 3.32 (2) / 2.08 (4) | | 4.25 (1) / 2.64 (3) / 3.26 (2) / 2.09 (4) | |
| Pump | Nominal ESP unit | Heating | kPa | 34.2 (5) / 35.9 (6) | | 43.2 (5) / 51.2 (6) | | 26.8 (5) / 36.3 (6) | |

# 2 Specifications

## 1 - 1 ERLQ-CW1

| Technical specifications | | | | EHVH11S18CB3V + ERLQ011CW1 | EHVH11S26CB9W + ERLQ011CW1 | EHVH16S18CB3V + ERLQ014CW1 | EHVH16S26CB9W + ERLQ014CW1 | EHVH16S18CB3V + ERLQ016CW1 | EHVH16S26CB9W + ERLQ016CW1 |
|---|---|---|---|---|---|---|---|---|---|
| Water side Heat exchanger | Water flow rate | Heating Nom. | l/min | 32.1 (5) / 31.5 (6) | | 41.6 (5) / 39.0 (6) | | 45.9 (5) / 43.6 (6) | |
| 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) | 42.0 | | 44.0 | | | |
| LW(A) Sound power level (according to EN14825) | Outdoor | | dB(A) | 64.0 | | | | 66.0 | |
| 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 260 l | Stainless steel domestic hot water tank 180 l | Stainless steel domestic hot water tank 260 l | Stainless steel domestic hot water tank 180 l | Stainless steel domestic hot water tank 260 l |
| Space heating general | Air to water unit | Rated airflow (outdoor) | $m^3/h$ | 5,400 | | | | | |
| | Other | Capacity control | | Inverter | | | | | |
| | | Cdh (Degradation heating) | | 1.00 | | | | | |
| | | Pck (Crankcase heater mode) | kW | 0.055 | | | | | |
| | | Poff (Off mode) | kW | 0.055 | | | | | |
| | | Psb (Standby mode) | kW | 0.055 | | | | | |
| | | Pto (Thermostat off) | kW | 0.057 | | | | | |
| Domestic hot water heating | General | Declared load profile | | L | XL | L | XL | L | XL |
| | | Function to fix water heating during off peak hours | | No | | | | | |
| Space heating general | Integrated supplementary heater | NOx emission | mg/kWh | 0.00 | | | | | |
| | | Psup | kW | 3.00 | 9.00 | 3.00 | 9.00 | 3.00 | 9.00 |
| | | Type of energy input | | Electrical | | | | | |
| Domestic hot water heating | Average climate | AEC (Annual electricity consumption) | kWh | 1,170 | 1,720 | 1,170 | 1,720 | 1,170 | 1,720 |
| | | ηwh (water heating efficiency) | % | 87.4 | 97.7 | 87.4 | 97.7 | 87.4 | 97.7 |
| | | Qelec (Daily electricity consumption) | kWh | 5.32 | 7.83 | 5.32 | 7.83 | 5.32 | 7.83 |
| | | Qfuel (Daily fuel consumption) | kWh | 0.00 | | | | | |
| | | Water heating energy efficiency class | | A | | | | | |
| Domestic hot water heating | Cold climate | AEC (Annual electricity consumption) | kWh | 1,340 | 1,980 | 1,340 | 1,980 | 1,340 | 1,980 |
| | | ηwh (water heating efficiency) | % | 76.6 | 85.1 | 76.6 | 85.1 | 76.6 | 85.1 |
| | | Qelec (Daily electricity consumption) | kWh | 6.08 | 8.99 | 6.08 | 8.99 | 6.08 | 8.99 |
| | | Qfuel (Daily fuel consumption) | kWh | 0.00 | | | | | |
| | Warm climate | AEC (Annual electricity consumption) | kWh | 1,110 | 1,630 | 1,110 | 1,630 | 1,110 | 1,630 |
| | | ηwh (water heating efficiency) | % | 92.3 | 103 | 92.3 | 103 | 92.3 | 103 |
| | | Qelec (Daily electricity consumption) | kWh | 5.04 | 7.40 | 5.04 | 7.40 | 5.04 | 7.40 |
| | | Qfuel (Daily fuel consumption) | kWh | 0.00 | | | | | |

# 2 Specifications

## 1 - 1 ERLQ-CW1

| Technical specifications | | | | | EHVH11S18CB3V + ERLQ011CW1 | EHVH11S26CB9W + ERLQ011CW1 | EHVH16S18CB3V + ERLQ014CW1 | EHVH16S26CB9W + ERLQ014CW1 | EHVH16S18CB3V + ERLQ016CW1 | EHVH16S26CB9W + ERLQ016CW1 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 55°C | General | Annual energy consumption | kWh | 6,260 | | 7,900 | | 8,970 | |
| | | | ηs (Seasonal space heating efficiency) | % | 120 | | 123 | | 119 | |
| | | | Prated at -10°C | kW | 9.99 | | 12.7 | | 13.9 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 22.6 | | 28.4 | | 32.3 | |
| | | | SCOP | | 3.09 | | 3.16 | | 3.06 | |
| | | | Seasonal space heating eff. class | | A+ | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.00 | | | | | |
| | | | COPd | | 1.99 | | 1.76 | | 1.78 | |
| | | | Pdh | kW | 8.83 | | 9.97 | | 12.2 | |
| | | | PERd | % | 79.6 | | 70.4 | | 71.2 | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.00 | | | | | |
| | | | COPd | | 3.24 | | 3.55 | | 3.12 | |
| | | | Pdh | kW | 5.28 | | 6.76 | | 7.61 | |
| | | | PERd | % | 130 | | 142 | | 125 | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 0.950 | | | | 1.00 | |
| | | | COPd | | 4.31 | | 4.22 | | 4.40 | |
| | | | Pdh | kW | 4.47 | | 4.66 | | 4.83 | |
| | | | PERd | % | 172 | | 169 | | 176 | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 0.930 | | 0.940 | | 0.930 | |
| | | | COPd | | 6.41 | | 5.44 | | 6.36 | |
| | | | Pdh | kW | 5.37 | | 5.26 | | 5.38 | |
| | | | PERd | % | 256 | | 218 | | 254 | |
| | | Tol (temperature operating limit) | COPd | | 1.79 | | 1.75 | | 1.71 | |
| | | | Pdh | kW | 9.08 | | 12.2 | | 13.3 | |
| | | | PERd | % | 71.6 | | 70.0 | | 68.4 | |
| | | | TOL | °C | -10.0 | | | | | |
| | | | WTOL | °C | 55.0 | | | | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 0.910 | | 0.550 | | 0.580 | |
| | | Tbiv (bivalent temperature) | COPd | | 1.99 | | 1.92 | | 1.78 | |

# 2 Specifications

## 1 - 1 ERLQ-CW1

| Technical specifications | | | | | EHVH11S18CB3V + ERLQ011CW1 | EHVH11S26CB9W + ERLQ011CW1 | EHVH16S18CB3V + ERLQ014CW1 | EHVH16S26CB9W + ERLQ014CW1 | EHVH16S18CB3V + ERLQ016CW1 | EHVH16S26CB9W + ERLQ016CW1 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 55°C | Tbiv (bivalent temperature) | Pdh | kW | 8.83 | | 11.0 | | 12.2 | |
| | | | PERd | % | 79.6 | | 76.8 | | 71.2 | |
| | | | Tbiv | °C | -7.00 | | -6.00 | | -7.00 | |
| | Cold climate water outlet 55°C | General | Annual energy consumption | kWh | 6,740 | | 7,870 | | 8,580 | |
| | | | ηs (Seasonal space heating efficiency) | % | 95.0 | | 95.5 | | 98.3 | |
| | | | Prated at -22°C | kW | 6.99 | | 8.15 | | 9.12 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 24.3 | | 28.3 | | 30.9 | |
| | Warm climate water outlet 55°C | General | Annual energy consumption | kWh | 2,630 | | 3,270 | | 3,420 | |
| | | | ηs (Seasonal space heating efficiency) | % | 125 | | 135 | | 136 | |
| | | | Prated at 2°C | kW | 7.58 | | 9.84 | | 10.3 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 9.47 | | 11.8 | | 12.3 | |
| | Average climate water outlet 35°C | General | Annual energy consumption | kWh | 5,380 | | 7,250 | | 8,270 | |
| | | | ηs (Seasonal space heating efficiency) | % | 156 | | 153 | | 149 | |
| | | | Prated at -10°C | kW | 11.2 | | 14.5 | | 16.0 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 19.4 | | 26.1 | | 29.8 | |
| | | | SCOP | | 3.98 | | 3.90 | | 3.80 | |
| | | | Seasonal space heating eff. class | | A++ | | | | A+ | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | 2.63 | | | | 2.33 | |
| | | | Pdh | kW | 8.88 | | 10.7 | | 12.4 | |
| | | | PERd | % | 105 | | | | 93.2 | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.00 | | | | | |
| | | | COPd | | 4.05 | | 4.07 | | 3.74 | |
| | | | Pdh | kW | 6.03 | | 7.71 | | 8.62 | |
| | | | PERd | % | 162 | | 163 | | 150 | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 0.940 | | 1.00 | | 0.940 | |
| | | | COPd | | 6.77 | | 5.71 | | 6.77 | |
| | | | Pdh | kW | 5.74 | | 5.05 | | 5.74 | |
| | | | PERd | % | 271 | | 228 | | 271 | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 0.920 | | 0.930 | | 0.920 | |
| | | | COPd | | 8.97 | | 6.71 | | 8.97 | |
| | | | Pdh | kW | 6.50 | | 5.16 | | 6.50 | |
| | | | PERd | % | 359 | | 268 | | 359 | |
| | | Tol (temperature operating limit) | COPd | | 2.34 | | 2.60 | | 2.05 | |
| | | | Pdh | kW | 8.76 | | 12.6 | | 11.7 | |
| | | | PERd | % | 93.6 | | 104 | | 82.0 | |
| | | | TOL | °C | -10.0 | | | | | |
| | | | WTOL | °C | 35.0 | | | | | |
| Space heating | Average climate water outlet 35°C | Tbiv (bivalent temperature) | COPd | | 2.82 | | 2.83 | | 2.56 | |
| | | | Pdh | kW | 9.09 | | 11.6 | | 12.1 | |
| | | | PERd | % | 113 | | | | 102 | |
| | | | Tbiv | °C | -5.00 | | | | -4.00 | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 2.44 | | 1.93 | | 4.35 | |
| | Cold climate water outlet 35°C | General | Annual energy consumption | kWh | 6,430 | | 8,170 | | 9,050 | |
| | | | ηs (Seasonal space heating efficiency) | % | 148 | | 141 | | 137 | |
| | | | Prated at -22°C | kW | 10.3 | | 12.3 | | 13.3 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 23.1 | | 29.4 | | 32.6 | |
| | Warm climate water outlet 35°C | General | Annual energy consumption | kWh | 1,950 | | 2,350 | | 2,480 | |
| | | | ηs (Seasonal space heating efficiency) | % | 192 | | 199 | | | |
| | | | Prated at 2°C | kW | 9.06 | | 10.9 | | 11.4 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 7.02 | | 8.46 | | 8.92 | |

(1)Condition 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 Specifications

## 1 - 1 ERLQ-CW1

(2)Condition 2: cooling Ta 35°C - LWE 7°C ( DT = 5°C); heating Ta DB/WB 7°C/6°C - LWC 45°C ( DT = 5°C ) |
(3)Condition 3: heating Ta DB -7°C (RH85%) - LWC 35°C |
(4)Condition 4: heating Ta DB -7°C (RH85%) - LWC 45°C |
(5)DB/WB 7°C/6°C - LWC 35°C (DT=5°C) |
(6)DB/WB 7°C/6°C - LWC 45°C (Dt=5°C) |
Tamb 35°C - LWE 7°C (DT=5°C) |
Tamb 35°C - LWE 18°C (DT=5°C)



| Technical specifications | | | | | EHVX11S18CB3V + ERLQ011CW1 | EHVX11S26CB9W + ERLQ011CW1 | EHVX16S18CB3V + ERLQ014CW1 | EHVX16S26CB9W + ERLQ014CW1 | EHVX16S18CB3V + ERLQ016CW1 | EHVX16S26CB9W + ERLQ016CW1 |
|---|---|---|---|---|---|---|---|---|---|---|
| Heating capacity | Nom. | | | kW | 11.2 (1) / 11.0 (2) | | 14.5 (1) / 13.6 (2) | | 16.0 (1) / 15.2 (2) | |
| | Max. | | | kW | 8.60 (3) / 8.60 (4) | | 10.6 (3) / 10.8 (4) | | 11.4 (3) / 10.9 (4) | |
| Cooling capacity | Nom. | | | kW | 12.1 (1) / 11.7 (2) | | 12.7 (1) / 12.6 (2) | | 13.8 (1) / 13.1 (2) | |
| Power input | Heating | Nom. | | kW | 2.43 (1) / 3.10 (2) | | 3.37 (1) / 4.10 (2) | | 3.76 (1) / 4.66 (2) | |
| | | Max. | | kW | 3.13 (3) / 4.10 (4) | | 4.00 (3) / 5.19 (4) | | 4.32 (3) / 5.22 (4) | |
| | Cooling | Nom. | | kW | 3.05 (1) / 4.31 (2) | | 3.21 (1) / 5.08 (2) | | 3.74 (1) / 5.73 (2) | |
| COP | | | | | 4.60 (1) / 2.75 (3) / 3.55 (2) / 2.10 (4) | | 4.30 (1) / 2.65 (3) / 3.32 (2) / 2.08 (4) | | 4.25 (1) / 2.64 (3) / 3.26 (2) / 2.09 (4) | |
| EER | | | | | 3.98 (1) / 2.72 (2) | | 3.96 (1) / 2.47 (2) | | 3.69 (1) / 2.29 (2) | |
| Pump | Nominal ESP unit | Cooling | | kPa | 29.8 (5) / 1.30 (6) | | 59.2 (5) / 27.2 (6) | | 55.0 (5) / 18.8 (6) | |
| | | Heating | | kPa | 34.2 (7) / 35.9 (8) | | 43.2 (7) / 51.2 (8) | | 26.8 (7) / 36.3 (8) | |
| Water side Heat exchanger | Water flow rate | Cooling | Nom. | l/min | 33.6 (5) / 43.1 (6) | | 36.0 (5) / 46.0 (6) | | 37.6 (5) / 48.0 (6) | 37.6 (5) / 51.0 (6) |
| | | Heating | Nom. | l/min | 32.1 (7) / 31.5 (8) | | 41.6 (7) / 39.0 (8) | | 45.9 (7) / 43.6 (8) | |
| 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) | 42.0 | | 44.0 | | | |
| LW(A) Sound power level (according to EN14825) | Outdoor | | | dB(A) | 64.0 | | | | 66.0 | |
| 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 260 l | Stainless steel domestic hot water tank 180 l | Stainless steel domestic hot water tank 260 l | Stainless steel domestic hot water tank 180 l | Stainless steel domestic hot water tank 260 l |
| Space heating general | Air to water unit | Rated airflow (outdoor) | | $m^3/h$ | 5,400 | | | | | |
| | Other | Capacity control | | | Inverter | | | | | |
| | | Cdh (Degradation heating) | | | 1.00 | | | | | |
| | | Pck (Crankcase heater mode) | | kW | 0.055 | | | | | |
| | | Poff (Off mode) | | kW | 0.055 | | | | | |
| | | Psb (Standby mode) | | kW | 0.055 | | | | | |
| | | Pto (Thermostat off) | | kW | 0.057 | | | | | |
| Domestic hot water heating | General | Declared load profile | | | L | XL | L | XL | L | XL |
| | | Function to fix water heating during off peak hours | | | No | | | | | |
| Space heating general | Integrated supplementary heater | NOx emission | | mg/kWh | 0.00 | | | | | |
| | | Psup | | kW | 3.00 | 9.00 | 3.00 | 9.00 | 3.00 | 9.00 |
| | | Type of energy input | | | Electrical | | | | | |

# 2 Specifications

## 1 - 1 ERLQ-CW1

| Technical specifications | | | | | EHVX11S18CB3V + ERLQ011CW1 | EHVX11S26CB9W + ERLQ011CW1 | EHVX16S18CB3V + ERLQ014CW1 | EHVX16S26CB9W + ERLQ014CW1 | EHVX16S18CB3V + ERLQ016CW1 | EHVX16S26CB9W + ERLQ016CW1 |
|---|---|---|---|---|---|---|---|---|---|---|
| Domestic hot water heating | Average climate | AEC (Annual electricity consumption) | | kWh | 1,170 | 1,720 | 1,170 | 1,720 | 1,170 | 1,720 |
| | | ηwh (water heating efficiency) | | % | 87.4 | 97.7 | 87.4 | 97.7 | 87.4 | 97.7 |
| | | Qelec (Daily electricity consumption) | | kWh | 5.32 | 7.83 | 5.32 | 7.83 | 5.32 | 7.83 |
| | | Qfuel (Daily fuel consumption) | | kWh | 0.00 | | | | | |
| | | Water heating energy efficiency class | | | A | | | | | |
| | Cold climate | AEC (Annual electricity consumption) | | kWh | 1,340 | 1,980 | 1,340 | 1,980 | 1,340 | 1,980 |
| | | ηwh (water heating efficiency) | | % | 76.6 | 85.1 | 76.6 | 85.1 | 76.6 | 85.1 |
| | | Qelec (Daily electricity consumption) | | kWh | 6.08 | 8.99 | 6.08 | 8.99 | 6.08 | 8.99 |
| | | Qfuel (Daily fuel consumption) | | kWh | 0.00 | | | | | |
| | Warm climate | AEC (Annual electricity consumption) | | kWh | 1,110 | 1,630 | 1,110 | 1,630 | 1,110 | 1,630 |
| | | ηwh (water heating efficiency) | | % | 92.3 | 103 | 92.3 | 103 | 92.3 | 103 |
| | | Qelec (Daily electricity consumption) | | kWh | 5.04 | 7.40 | 5.04 | 7.40 | 5.04 | 7.40 |
| | | Qfuel (Daily fuel consumption) | | kWh | 0.00 | | | | | |
| Space heating | Average climate water outlet 55°C | General | Annual energy consumption | kWh | 6,280 | | 7,920 | | 8,990 | |
| | | | ηs (Seasonal space heating efficiency) | % | 128 | | 130 | | 125 | |
| | | | Prated at -10°C | kW | 9.99 | | 12.7 | | 13.9 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 22.6 | | 28.5 | | 32.4 | |
| | | | SCOP | | 3.28 | | 3.32 | | 3.20 | |
| | | | Seasonal space heating eff. class | | A+ | | | | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.00 | | | | | |
| | | | COPd | | 1.99 | | 1.76 | | 1.78 | |
| | | | Pdh | kW | 8.83 | | 9.97 | | 12.2 | |
| | | | PERd | % | 79.6 | | 70.4 | | 71.2 | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.00 | | | | | |
| | | | COPd | | 3.24 | | 3.55 | | 3.12 | |
| | | | Pdh | kW | 5.28 | | 6.76 | | 7.61 | |
| | | | PERd | % | 130 | | 142 | | 125 | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 0.950 | | | | 1.00 | |
| | | | COPd | | 4.31 | | 4.22 | | 4.40 | |
| | | | Pdh | kW | 4.47 | | 4.66 | | 4.83 | |
| | | | PERd | % | 172 | | 169 | | 176 | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 0.930 | | 0.940 | | 0.930 | |
| | | | COPd | | 6.41 | | 5.44 | | 6.36 | |
| | | | Pdh | kW | 5.37 | | 5.26 | | 5.38 | |
| | | | PERd | % | 256 | | 218 | | 254 | |
| | | Tol (temperature operating limit) | COPd | | 1.79 | | 1.75 | | 1.71 | |
| | | | Pdh | kW | 9.08 | | 12.2 | | 13.3 | |

# 2 Specifications

## 1 - 1 ERLQ-CW1



| Technical specifications | | | | | EHVX11S18CB3V + ERLQ011CW1 | EHVX11S26CB9W + ERLQ011CW1 | EHVX16S18CB3V + ERLQ014CW1 | EHVX16S26CB9W + ERLQ014CW1 | EHVX16S18CB3V + ERLQ016CW1 | EHVX16S26CB9W + ERLQ016CW1 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 55°C | Tol (temperature operating limit) | PERd | % | 71.6 | | 70.0 | | 68.4 | |
| | | | TOL | °C | -10.0 | | | | | |
| | | | WTOL | °C | 55.0 | | | | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 0.910 | | 0.550 | | 0.580 | |
| | | Tbiv (bivalent temperature) | COPd | | 1.99 | | 1.92 | | 1.78 | |
| | | | Pdh | kW | 8.83 | | 11.0 | | 12.2 | |
| | | | PERd | % | 79.6 | | 76.8 | | 71.2 | |
| | | | Tbiv | °C | -7.00 | | -6.00 | | -7.00 | |
| | Cold climate water outlet 55°C | General | Annual energy consumption | kWh | 6,750 | | 7,890 | | 8,600 | |
| | | | ηs (Seasonal space heating efficiency) | % | 99.0 | | 98.9 | | 102 | |
| | | | Prated at -22°C | kW | 6.99 | | 8.15 | | 9.12 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 24.3 | | 28.4 | | 31.0 | |
| | Warm climate water outlet 55°C | General | Annual energy consumption | kWh | 2,720 | | 3,360 | | 3,500 | |
| | | | ηs (Seasonal space heating efficiency) | % | 146 | | 154 | | | |
| | | | Prated at 2°C | kW | 7.58 | | 9.84 | | 10.3 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 9.78 | | 12.1 | | 12.6 | |
| | Average climate water outlet 35°C | General | Annual energy consumption | kWh | 5,410 | | 7,270 | | 8,290 | |
| | | | ηs (Seasonal space heating efficiency) | % | 168 | | 162 | | 157 | |
| | | | Prated at -10°C | kW | 11.2 | | 14.5 | | 16.0 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 19.5 | | 26.2 | | 29.8 | |
| | | | SCOP | | 4.28 | | 4.12 | | 3.99 | |
| | | | Seasonal space heating eff. class | | A++ | | | | A+ | |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | 2.63 | | | | 2.33 | |
| | | | Pdh | kW | 8.88 | | 10.7 | | 12.4 | |
| | | | PERd | % | 105 | | | | 93.2 | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.00 | | | | | |
| | | | COPd | | 4.05 | | 4.07 | | 3.74 | |
| | | | Pdh | kW | 6.03 | | 7.71 | | 8.62 | |
| | | | PERd | % | 162 | | 163 | | 150 | |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 0.940 | | 1.00 | | 0.940 | |
| | | | COPd | | 6.77 | | 5.71 | | 6.77 | |
| | | | Pdh | kW | 5.74 | | 5.05 | | 5.74 | |
| | | | PERd | % | 271 | | 228 | | 271 | |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 0.920 | | 0.930 | | 0.920 | |
| | | | COPd | | 8.97 | | 6.71 | | 8.97 | |
| | | | Pdh | kW | 6.50 | | 5.16 | | 6.50 | |
| | | | PERd | % | 359 | | 268 | | 359 | |

# 2 Specifications

## 1 - 1 ERLQ-CW1

| Technical specifications | | | | | EHVX11S18CB3V + ERLQ011CW1 | EHVX11S26CB9W + ERLQ011CW1 | EHVX16S18CB3V + ERLQ014CW1 | EHVX16S26CB9W + ERLQ014CW1 | EHVX16S18CB3V + ERLQ016CW1 | EHVX16S26CB9W + ERLQ016CW1 |
|---|---|---|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 35°C | Tol (temperature operating limit) | COPd | | 2.34 | | 2.60 | | 2.05 | |
| | | | Pdh | kW | 8.76 | | 12.6 | | 11.7 | |
| | | | PERd | % | 93.6 | | 104 | | 82.0 | |
| | | | TOL | °C | -10.0 | | | | | |
| | | | WTOL | °C | 35.0 | | | | | |
| | | Tbiv (bivalent temperature) | COPd | | 2.82 | | 2.83 | | 2.56 | |
| | | | Pdh | kW | 9.09 | | 11.6 | | 12.1 | |
| | | | PERd | % | 113 | | | | 102 | |
| | | | Tbiv | °C | -5.00 | | | | -4.00 | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 2.44 | | 1.93 | | 4.35 | |
| | Cold climate water outlet 35°C | General | Annual energy consumption | kWh | 6,440 | | 8,190 | | 9,070 | |
| | | | ηs (Seasonal space heating efficiency) | % | 154 | | 145 | | 142 | |
| | | | Prated at -22°C | kW | 10.3 | | 12.3 | | 13.3 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 23.2 | | 29.5 | | 32.6 | |
| | Warm climate water outlet 35°C | General | Annual energy consumption | kWh | 2,040 | | 2,440 | | 2,570 | |
| | | | ηs (Seasonal space heating efficiency) | % | 235 | | | | 234 | |
| | | | Prated at 2°C | kW | 9.06 | | 10.9 | | 11.4 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 7.34 | | 8.78 | | 9.24 | |

(1)Condition 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)Condition 2: cooling Ta 35°C - LWE 7°C ( DT = 5°C); heating Ta DB/WB 7°C/6°C - LWC 45°C ( DT = 5°C ) |
(3)Condition 3: heating Ta DB -7°C (RH85%) - LWC 35°C |
(4)Condition 4: heating Ta DB -7°C (RH85%) - LWC 45°C |
(5)Tamb 35°C - LWE 7°C (DT=5°C) |
(6)Tamb 35°C - LWE 18°C (DT=5°C) |
(7)DB/WB 7°C/6°C - LWC 35°C (DT=5°C) |
(8)DB/WB 7°C/6°C - LWC 45°C (Dt=5°C)

| Technical specifications | | | | | EHVZ16S18CB3V + ERLQ011CW1 | EHVZ16S18CB3V + ERLQ014CW1 | EHVZ16S18CB3V + ERLQ016CW1 |
|---|---|---|---|---|---|---|---|
| Heating capacity | Nom. | | | kW | 11.2 (1) / 11.0 (2) | 14.4 (1) / 13.5 (2) | 15.9 (1) / 15.1 (2) |
| | Max. | | | kW | 8.60 (3) / 8.60 (4) | 10.5 (3) / 10.7 (4) | 11.3 (3) / 10.8 (4) |
| Power input | Heating | Nom. | | kW | 2.43 (1) / 3.10 (2) | 3.39 (1) / 4.12 (2) | 3.77 (1) / 4.67 (2) |
| | | Max. | | kW | 3.13 (3) / 4.10 (4) | 4.02 (3) / 5.21 (4) | 4.33 (3) / 5.22 (4) |
| COP | | | | | 4.60 (1) / 2.75 (3) / 3.55 (2) / 2.10 (4) | 4.24 (1) / 2.61 (3) / 3.28 (2) / 2.05 (4) | 4.22 (1) / 2.61 (3) / 3.23 (2) / 2.07 (4) |
| Pump Additional Zone | Nominal ESP unit (*RLQ*C*) | Heating | | kPa | 26.2 (1) / 28.3 (2) | 25.0 (5) | |
| Pump Main Zone | Nominal ESP unit (*RLQ*C*) | Heating | | kPa | 18.2 (1) / 20.7 (2) | 25.0 (5) | |
| Water side Heat exchanger | Water flow rate | Heating | Nom. | l/min | 32.1 (1) / 31.5 (1) | 41.3 (1) / 38.7 (2) | 45.6 (1) / 43.3 (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) | 47.0 | | |
| LW(A) Sound power level (according to EN14825) | Outdoor | | | dB(A) | 64.0 | | 66.0 |
| 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 | | |
| Space heating general | Air to water unit | Rated airflow (outdoor) | | $m^3/h$ | 5,400 | | |
| | Brine/water to water unit | Rated water/brine flow | | $m^3/h$ | 0.00 | | |
| | Other | Capacity control | | | Inverter | | |
| | | Cdh (Degradation heating) | | | 1.00 | | |
| | | Pck (Crankcase heater mode) | | kW | 0.055 | | |
| | | Poff (Off mode) | | kW | 0.055 | | |
| | | Psb (Standby mode) | | kW | 0.055 | | |
| | | Pto (Thermostat off) | | kW | 0.057 | | |

# 2 Specifications

## 1 - 1 ERLQ-CW1



| Technical specifications | | | | | EHVZ16S18CB3V + ERLQ011CW1 | EHVZ16S18CB3V + ERLQ014CW1 | EHVZ16S18CB3V + ERLQ016CW1 |
|---|---|---|---|---|---|---|---|
| Domestic hot water heating | General | Declared load profile | | | | L | |
| | | Function to fix water heating during off peak hours | | | | Yes | |
| Space heating general | Integrated supplementary heater | NOx emission | | mg/kWh | | 0.00 | |
| | | Psup | | kW | | 3.00 | |
| | | Type of energy input | | | | Electrical | |
| Domestic hot water heating | Average climate | AEC (Annual electricity consumption) | | kWh | | 1,170 | |
| | | AFC (Annual fuel consumption) | | Gj | | 0.00 | |
| | | ηwh (water heating efficiency) | | % | | 87.4 | |
| Domestic hot water heating | Average climate | Qelec (Daily electricity consumption) | | kWh | | 5.32 | |
| | | Qfuel (Daily fuel consumption) | | kWh | | 0.00 | |
| | | Water heating energy efficiency class | | | | A | |
| | Cold climate | AEC (Annual electricity consumption) | | kWh | | 1,340 | |
| | | AFC (Annual fuel consumption) | | Gj | | 0.00 | |
| | | ηwh (water heating efficiency) | | % | | 76.6 | |
| | | Qelec (Daily electricity consumption) | | kWh | | 6.08 | |
| | | Qfuel (Daily fuel consumption) | | kWh | | 0.00 | |
| | Warm climate | AEC (Annual electricity consumption) | | kWh | | 1,110 | |
| | | AFC (Annual fuel consumption) | | Gj | | 0.00 | |
| | | ηwh (water heating efficiency) | | % | | 92.3 | |
| | | Qelec (Daily electricity consumption) | | kWh | | 5.04 | |
| | | Qfuel (Daily fuel consumption) | | kWh | | 0.00 | |
| Space heating | Average climate water outlet 55°C | General | Annual energy consumption | kWh | 6,264 | 7,895 | 8,972 |
| | | | ηs (Seasonal space heating efficiency) | % | 120 | 123 | 119 |
| | | | Prated at -10°C | kW | 9.99 | 12.7 | 13.9 |
| | | | Qhe Annual energy consumption (GCV) | Gj | 22.6 | 28.4 | 32.3 |
| | | | SCOP | | 3.09 | 3.16 | 3.06 |
| | | | Seasonal space heating eff. class | | | A+ | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | | 1.00 | |
| | | | COPd | | 1.99 | 1.76 | 1.78 |
| | | | Pdh | kW | 8.83 | 9.97 | 12.2 |
| | | | PERd | % | 79.6 | 70.4 | 71.2 |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | | 1.00 | |
| | | | COPd | | 3.24 | 3.55 | 3.12 |
| | | | Pdh | kW | 5.28 | 6.76 | 7.61 |
| | | | PERd | % | 130 | 142 | 125 |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 0.950 | | 1.00 |
| | | | COPd | | 4.31 | 4.22 | 4.40 |
| | | | Pdh | kW | 4.47 | 4.66 | 4.83 |
| | | | PERd | % | 172 | 169 | 176 |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 0.930 | 0.940 | 0.930 |
| | | | COPd | | 6.41 | 5.44 | 6.36 |
| | | | Pdh | kW | 5.37 | 5.26 | 5.38 |
| | | | PERd | % | 256 | 218 | 254 |
| | | Tol (temperature operating limit) | COPd | | 1.79 | 1.75 | 1.71 |
| | | | Pdh | kW | 9.08 | 12.2 | 13.3 |

# 2 Specifications

## 1 - 1 ERLQ-CW1

| Technical specifications | | | | | EHVZ16S18CB3V + ERLQ011CW1 | EHVZ16S18CB3V + ERLQ014CW1 | EHVZ16S18CB3V + ERLQ016CW1 |
|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 55°C | Tol (temperature operating limit) | PERd | % | 71.6 | 70.0 | 68.4 |
| | | | TOL | °C | | -10.0 | |
| | | | WTOL | °C | | 55.0 | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 0.910 | 0.550 | 0.580 |
| | | Tbiv (bivalent temperature) | COPd | | 1.99 | 1.92 | 1.78 |
| | | | Pdh | kW | 8.83 | 11.0 | 12.2 |
| | | | PERd | % | 79.6 | 76.8 | 71.2 |
| | | | Tbiv | °C | -7.00 | -6.00 | -7.00 |
| | Cold climate water outlet 55°C | General | Annual energy consumption | kWh | 6,740 | 7,870 | 8,580 |
| | | | ηs (Seasonal space heating efficiency) | % | 95.0 | 95.5 | 98.3 |
| | | | Prated at -22°C | kW | 6.99 | 8.15 | 9.12 |
| | | | Qhe Annual energy consumption (GCV) | Gj | 24.3 | 28.3 | 30.9 |
| | Warm climate water outlet 55°C | General | Annual energy consumption | kWh | 2,630 | 3,270 | 3,420 |
| | | | ηs (Seasonal space heating efficiency) | % | 125 | 135 | 136 |
| | | | Prated at 2°C | kW | 7.58 | 9.84 | 1,030 |
| | | | Qhe Annual energy consumption (GCV) | Gj | 9.47 | 11.8 | 12.3 |
| | Average climate water outlet 35°C | General | Annual energy consumption | kWh | 5,380 | 7,250 | 8,270 |
| | | | ηs (Seasonal space heating efficiency) | % | 156 | 153 | 149 |
| | | | Prated at -10°C | kW | 11.2 | 14.5 | 16.0 |
| | | | Qhe Annual energy consumption (GCV) | Gj | 19.4 | 26.1 | 29.8 |
| | | | SCOP | | 3.98 | 3.90 | 3.80 |
| | | | Seasonal space heating eff. class | | A++ | | A+ |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | 2.63 | | 2.33 |
| | | | Pdh | kW | 8.88 | 10.7 | 12.4 |
| | | | PERd | % | 105 | | 93.2 |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.00 | | |
| | | | COPd | | 4.05 | 4.07 | 3.74 |
| | | | Pdh | kW | 6.03 | 7.71 | 8.62 |
| | | | PERd | % | 162 | 163 | 150 |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 0.940 | 1.00 | 0.940 |
| | | | COPd | | 6.77 | 5.71 | 6.77 |
| | | | Pdh | kW | 5.74 | 5.05 | 5.74 |
| | | | PERd | % | 271 | 228 | 271 |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 0.920 | 0.930 | 0.920 |
| | | | COPd | | 8.97 | 6.71 | 8.97 |
| | | | Pdh | kW | 6.50 | 5.16 | 6.50 |
| | | | PERd | % | 359 | 268 | 359 |
| Space heating | Average climate water outlet 35°C | Tol (temperature operating limit) | COPd | | 2.34 | 2.60 | 2.05 |
| | | | Pdh | kW | 8.76 | 12.6 | 11.7 |
| | | | PERd | % | 93.6 | 104 | 82.0 |
| | | | TOL | °C | | -10.0 | |
| | | | WTOL | °C | | 35.0 | |
| | | Tbiv (bivalent temperature) | COPd | | 2.82 | 2.83 | 2.56 |
| | | | Pdh | kW | 9.09 | 11.6 | 12.1 |
| | | | PERd | % | 113 | | 102 |
| | | | Tbiv | °C | -5.00 | | -4.00 |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 2.44 | 1.93 | 4.35 |

(1)Condition 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)Condition 2: cooling Ta 35°C - LWE 7°C ( DT = 5°C); heating Ta DB/WB 7°C/6°C - LWC 45°C ( DT = 5°C ) |
(3)Condition 3: heating Ta DB -7°C (RH85%) - LWC 35°C |
(4)Condition 4: heating Ta DB -7°C (RH85%) - LWC 45°C |
(5)Capacity must be split up over the additional and main zone. Refer to ESP-data for more details on available head (kPa). |
DB/WB 7°C/6°C - LWC 35°C (DT=5°C) |
DB/WB 7°C/6°C - LWC 45°C (Dt=5°C) |
15°C-25°C: BUH only, no heat pump operation = during commissioning

# 2 Specifications

## 1 - 1 ERLQ-CW1



| Technical specifications | | | | EHSH16P50B + ERLQ011CW1 | EHSH16P50B + ERLQ014CW1 | EHSH16P50B + ERLQ016CW1 |
|---|---|---|---|---|---|---|
| Indoor unit | | | | EHSH16P50BA | | |
| Outdoor unit | | | | ERLQ011CAW1 | ERLQ014CAW1 | ERLQ016CAW1 |
| Heating capacity | Nom. | | kW | 5.95 (3) / 7.74 (4) / 11.80 (1) / 10.40 (2) | 8.28 (3) / 9.57 (4) / 14.81 (1) / 13.73 (2) | 8.04 (3) / 10.05 (4) / 15.34 (1) / 14.86 (2) |
| | Max. | | kW | 11.38 (1) / 11.00 (2) | 14.55 (1) / 13.59 (2) | 16.10 (1) / 15.22 (2) |
| Power input | Heating | Nom. | kW | 2.57 (5) / 3.13 (6) / 2.43 (3) / 2.35 (4) | 3.42 (5) / 4.07 (6) / 3.17 (3) / 2.93 (4) | |
| | | Max. | kW | 2.64 (5) / 3.25 (6) | 3.43 (5) / 4.22 (6) | 3.83 (5) / 4.71 (6) |
| COP | | | | 4.38 (5) / 3.32 (6) / 2.45 (3) / 3.29 (4) | 4.27 (5) / 3.34 (6) / 2.58 (3) / 3.22 (4) | 4.10 (5) / 3.22 (6) / 2.44 (3) / 3.15 (4) |
| Pump | Type | | | Grundfos UPM3 25-75 CHBL | | |
| Water side Heat exchanger | Water flow rate | Heating Nom. | l/min | 33.8 (7) / 29.8 (8) | 42.4 (7) / 39.4 (8) | 44.0 (7) / 42.6 (8) |
| 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) | 39.0 | | |
| LW(A) Sound power level (according to EN14825) | Outdoor | | dB(A) | 64.0 | | 66.0 |
| 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) | $m^3/h$ | 5,400 | | |
| | Other | Capacity control | | Inverter | | |
| | | Cdh (Degradation heating) | | 0.9 | | |
| | | Pck (Crankcase heater mode) | kW | 0.000 | | |
| | | Poff (Off mode) | kW | 0.050 | | |
| | | Psb (Standby mode) | kW | 0.050 | | |
| | | Pto (Thermostat off) | kW | 0.105 | | |
| Domestic hot water heating | General | Declared load profile | | XL | | |
| | | Function to fix water heating during off peak hours | | Yes | | |
| | Average climate | AEC (Annual electricity consumption) | kWh | 2,187 | | |
| | | ηwh (water heating efficiency) | % | 83 | | |
| | | Qelec (Daily electricity consumption) | kWh | 9.811 | | |
| | | Water heating energy efficiency class | | A | | |
| | Cold climate | AEC (Annual electricity consumption) | kWh | 2,435 | | |
| | | ηwh (water heating efficiency) | % | 73 | | |
| | | Qelec (Daily electricity consumption) | kWh | 10.938 | | |
| Domestic hot water heating | Warm climate | AEC (Annual electricity consumption) | kWh | 1,956 | | |
| | | ηwh (water heating efficiency) | % | 93 | | |
| | | Qelec (Daily electricity consumption) | kWh | 8.760 | | |

# 2 Specifications

## 1 - 1 ERLQ-CW1

| Technical specifications | | | | | EHSH16P50B + ERLQ011CW1 | EHSH16P50B + ERLQ014CW1 | EHSH16P50B + ERLQ016CW1 |
|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 55°C | General | Annual energy consumption | kWh | 6,547 | 7,856 | 9,181 |
| | | | ηs (Seasonal space heating efficiency) | % | 125 | 126 | 125 |
| | | | Prated at -10°C | kW | 10 | 12 | 14 |
| | | | Qhe Annual energy consumption (GCV) | Gj | 24 | 28 | 33 |
| | | | Seasonal space heating eff. class | | A++ | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | |
| | | | COPd | | 1.94 | 1.92 | 1.85 |
| | | | Pdh | kW | 9.0 | 10.9 | 12.6 |
| | | | PERd | % | 77.6 | 76.8 | 74.0 |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | |
| | | | COPd | | 3.30 | | 3.19 |
| | | | Pdh | kW | 5.4 | 6.6 | 7.8 |
| | | | PERd | % | 132.0 | | 127.6 |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 0.9 | 1.0 | |
| | | | COPd | | 4.26 | 4.34 | 4.47 |
| | | | Pdh | kW | 4.6 | | 4.9 |
| | | | PERd | % | 170.4 | 173.6 | 178.8 |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 0.9 | | |
| | | | COPd | | 6.30 | 6.45 | 6.52 |
| | | | Pdh | kW | 5.5 | | |
| | | | PERd | % | 252.0 | 258.0 | 260.8 |
| | | Tol (temperature operating limit) | COPd | | 1.78 | 1.63 | 1.58 |
| | | | Pdh | kW | 9.1 | 9.8 | 11.2 |
| | | | PERd | % | 71.2 | 65.2 | 63.2 |
| | | | TOL | °C | -10 | | |
| | | | WTOL | °C | 55 | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 1.0 | 2.5 | 3.0 |
| | | Tbiv (bivalent temperature) | COPd | | 1.94 | 1.92 | 1.85 |
| | | | Pdh | kW | 9.0 | 10.9 | 12.6 |
| | | | PERd | % | 77.6 | 76.8 | 74.0 |
| | | | Tbiv | °C | -7 | | |
| | Cold climate water outlet 55°C | General | Annual energy consumption | kWh | 8,307 | 9,798 | 10,526 |
| | | | ηs (Seasonal space heating efficiency) | % | 100 | | |
| | | | Prated at -22°C | kW | 9 | 10 | 11 |

# 2 Specifications

## 1 - 1 ERLQ-CW1

| Technical specifications | | | | | EHSH16P50B + ERLQ011CW1 | EHSH16P50B + ERLQ014CW1 | EHSH16P50B + ERLQ016CW1 |
|---|---|---|---|---|---|---|---|
| Space heating | Cold climate water outlet 55°C | General | Qhe Annual energy consumption (GCV) | Gj | 30 | 35 | 38 |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | 1.98 | 2.04 | 2.05 |
| | | | Pdh | kW | 5.2 | 6.2 | 6.6 |
| | | | PERd | % | 79.2 | 81.6 | 82.0 |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | 3.25 | 3.20 | 3.19 |
| | | | Pdh | kW | 3.2 | 3.8 | 4.0 |
| | | | PERd | % | 130.0 | 128.0 | 127.6 |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | | 0.9 | |
| | | | COPd | | | 5.50 | |
| | | | Pdh | kW | | 5.2 | |
| | | | PERd | % | | 220.0 | |
| | | D Condition (12°CDB/11°CWB) | COPd | | | 7.56 | |
| | | | Pdh | kW | | 6.1 | |
| | | | PERd | % | | 302.4 | |
| | | Tol (temperature operating limit) | COPd | | 1.22 | 1.13 | 1.08 |
| | | | Pdh | kW | 5.7 | 6.4 | 6.8 |
| | | | PERd | % | 48.8 | 45.2 | 43.2 |
| | | | TOL | °C | | -20 | |
| | | | WTOL | °C | | 55 | |
| | | G Condition (-15°CDB/-) | COPd | | 1.51 | 1.50 | 1.42 |
| | | | Pdh | kW | 7.1 | 8.4 | 8.9 |
| | | | PERd | % | 60.4 | 60.0 | 56.8 |
| | | Tbiv (bivalent temperature) | COPd | | 1.51 | 1.50 | 1.42 |
| | | | Pdh | kW | 7.1 | 8.4 | 8.9 |
| | | | PERd | % | 60.4 | 60.0 | 56.8 |
| | | | Tbiv | °C | | -15 | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | 8.7 | 10.3 | 11.0 |
| | Warm climate water outlet 55°C | General | Annual energy consumption | kWh | 2,937 | 3,582 | 3,729 |
| | | | ηs (Seasonal space heating efficiency) | % | 135 | 144 | |
| | | | Prated at 2°C | kW | 8 | 10 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 11 | 13 | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | 1.82 | 1.90 | 1.78 |
| | | | Pdh | kW | 7.6 | 9.8 | 10.3 |
| | | | PERd | % | 72.8 | 76.0 | 71.2 |

# 2 Specifications

## 1 - 1 ERLQ-CW1

| Technical specifications | | | | | EHSH16P50B + ERLQ011CW1 | EHSH16P50B + ERLQ014CW1 | EHSH16P50B + ERLQ016CW1 |
|---|---|---|---|---|---|---|---|
| Space heating | Warm climate water outlet 55°C | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | 3.07 | 3.22 | 3.25 |
| | | | Pdh | kW | 4.9 | 6.3 | 6.6 |
| | | | PERd | % | 122.8 | 128.8 | 130.0 |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | | 0.9 | |
| | | | COPd | | | 5.88 | |
| | | | Pdh | kW | | 5.4 | |
| | | | PERd | % | | 235.2 | |
| | | Tbiv (bivalent temperature) | COPd | | 1.82 | 1.90 | 1.78 |
| | | | Pdh | kW | 7.6 | 9.8 | 10.3 |
| | | | PERd | % | 72.8 | 76.0 | 71.2 |
| | | | Tbiv | °C | | 2 | |
| | Average climate water outlet 35°C | General | Annual energy consumption | kWh | 5,380 | 7,250 | 8,270 |
| | | | ηs (Seasonal space heating efficiency) | % | 156 | 153 | 149 |
| | | | Prated at -10°C | kW | 11 | 15 | 16 |
| | | | Qhe Annual energy consumption (GCV) | Gj | 19 | 26 | 30 |
| | | | SCOP | | 3.98 | 3.90 | 3.80 |
| | | | Seasonal space heating eff. class | | A++ | | A+ |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | 2.63 | | 2.33 |
| | | | Pdh | kW | 8.9 | 10.7 | 12.4 |
| | | | PERd | % | 105.0 | | 93.2 |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | 4.05 | 4.07 | 3.74 |
| | | | Pdh | kW | 6.0 | 7.7 | 8.6 |
| | | | PERd | % | 162.0 | 163.0 | 150.0 |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 0.9 | 1.0 | 0.9 |
| | | | COPd | | 6.77 | 5.71 | 6.77 |
| | | | Pdh | kW | 5.7 | 5.1 | 5.7 |
| | | | PERd | % | 271.0 | 228.0 | 271.0 |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | | 0.9 | |
| | | | COPd | | 8.97 | 6.71 | 8.97 |
| | | | Pdh | kW | 6.5 | 5.2 | 6.5 |
| | | | PERd | % | 359.0 | 268.0 | 359.0 |
| | | Tol (temperature operating limit) | COPd | | 2.34 | 2.60 | 2.05 |
| | | | Pdh | kW | 8.8 | 12.6 | 11.7 |
| | | | PERd | % | 93.6 | 104.0 | 82.0 |
| | | | TOL | °C | | -10 | |
| Space heating | Average climate water outlet 35°C | Tol (temperature operating limit) | WTOL | °C | | 35 | |
| | | Tbiv (bivalent temperature) | COPd | | 2.82 | 2.83 | 2.56 |
| | | | Pdh | kW | 9.1 | 11.6 | 12.1 |
| | | | PERd | % | | 113.0 | 102.0 |
| | | | Tbiv | °C | | -5 | -4 |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 2.4 | 1.9 | 4.4 |

(1)EW 30°C; LW 35°C; ambient conditions: 7°CDB/6°CWB |
(2)EW 40°C; LW 45°C; ambient conditions: 7°CDB/6°CWB |
(3)EW 30°C; LW 35°C; ambient conditions: -7°CDB/-8°CWB |
(4)EW 30°C; LW 35°C; ambient conditions: 2°CDB/1°CWB |
(5)Condition 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) |
(6)Condition 2: cooling Ta 35°C - LWE 7°C ( DT = 5°C); heating Ta DB/WB 7°C/6°C - LWC 45°C ( DT = 5°C ) |
(7)DB/WB 7°C/6°C - LWC 35°C (DT=5°C) |
(8)DB/WB 7°C/6°C - LWC 45°C (Dt=5°C) |
Tamb 35°C - LWE 18°C (DT=5°C) |
Tamb 35°C - LWE 7°C (DT=5°C)

| Technical specifications | | | EHSHB16P50B + ERLQ011CW1 | EHSHB16P50B + ERLQ014CW1 | EHSHB16P50B + ERLQ016CW1 |
|---|---|---|---|---|---|
| Indoor unit | | | | EHSHB16P50BA | |
| Outdoor unit | | | ERLQ011CAW1 | ERLQ014CAW1 | ERLQ016CAW1 |
| Heating capacity | Nom. | kW | 5.95 (3) / 7.74 (4) / 11.80 (1) / 10.40 (2) | 8.28 (3) / 9.57 (4) / 14.81 (1) / 13.73 (2) | 8.04 (3) / 10.05 (4) / 15.34 (1) / 14.86 (2) |
| | Max. | kW | 11.38 (1) / 11.00 (2) | 14.55 (1) / 13.59 (2) | 16.10 (1) / 15.22 (2) |

# 2 Specifications

## 1 - 1 ERLQ-CW1



| Technical specifications | | | | EHSHB16P50B + ERLQ011CW1 | EHSHB16P50B + ERLQ014CW1 | EHSHB16P50B + ERLQ016CW1 |
|---|---|---|---|---|---|---|
| Power input | Heating | Nom. | kW | 2.57 (5) / 3.13 (6) / 2.43 (3) / 2.35 (4) | 3.42 (5) / 4.07 (6) / 3.17 (3) / 2.93 (4) | |
| | | Max. | kW | 2.64 (5) / 3.25 (6) | 3.43 (5) / 4.22 (6) | 3.83 (5) / 4.71 (6) |
| COP | | | | 4.38 (5) / 3.32 (6) / 2.45 (3) / 3.29 (4) | 4.27 (5) / 3.34 (6) / 2.58 (3) / 3.22 (4) | 4.10 (5) / 3.22 (6) / 2.44 (3) / 3.15 (4) |
| Pump | Type | | | Grundfos UPM3 25-75 CHBL | | |
| Water side Heat exchanger | Water flow rate | Heating Nom. | l/min | 33.8 (7) / 29.8 (8) | 42.4 (7) / 39.4 (8) | 44.0 (7) / 42.6 (8) |
| 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) | 39.0 | | |
| LW(A) Sound power level (according to EN14825) | Outdoor | | dB(A) | 64.0 | | 66.0 |
| 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) | $m^3/h$ | 5,400 | | |
| | Other | Capacity control | | Inverter | | |
| | | Cdh (Degradation heating) | | 0.9 | | |
| | | Pck (Crankcase heater mode) | kW | 0.000 | | |
| | | Poff (Off mode) | kW | 0.050 | | |
| | | Psb (Standby mode) | kW | 0.050 | | |
| | | Pto (Thermostat off) | kW | 0.105 | | |
| Domestic hot water heating | General | Declared load profile | | XL | | |
| | | Function to fix water heating during off peak hours | | Yes | | |
| | Average climate | AEC (Annual electricity consumption) | kWh | 2,158 | | |
| | | ηwh (water heating efficiency) | % | 84 | | |
| | | Qelec (Daily electricity consumption) | kWh | 9.681 | | |
| | | Water heating energy efficiency class | | A | | |
| | Cold climate | AEC (Annual electricity consumption) | kWh | 2,394 | | |
| | | ηwh (water heating efficiency) | % | 75 | | |
| | | Qelec (Daily electricity consumption) | kWh | 10.755 | | |
| Domestic hot water heating | Warm climate | AEC (Annual electricity consumption) | kWh | 1,921 | | |
| | | ηwh (water heating efficiency) | % | 95 | | |
| | | Qelec (Daily electricity consumption) | kWh | 8.600 | | |

# 2 Specifications

## 1 - 1 ERLQ-CW1

| Technical specifications | | | | | EHSHB16P50B + ERLQ011CW1 | EHSHB16P50B + ERLQ014CW1 | EHSHB16P50B + ERLQ016CW1 |
|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 55°C | General | Annual energy consumption | kWh | 6,547 | 7,856 | 9,181 |
| | | | ηs (Seasonal space heating efficiency) | % | 125 | 126 | 125 |
| | | | Prated at -10°C | kW | 10 | 12 | 14 |
| | | | Qhe Annual energy consumption (GCV) | Gj | 24 | 28 | 33 |
| | | | Seasonal space heating eff. class | | A++ | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | |
| | | | COPd | | 1.94 | 1.92 | 1.85 |
| | | | Pdh | kW | 9.0 | 10.9 | 12.6 |
| | | | PERd | % | 77.6 | 76.8 | 74.0 |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | |
| | | | COPd | | 3.30 | | 3.19 |
| | | | Pdh | kW | 5.4 | 6.6 | 7.8 |
| | | | PERd | % | 132.0 | | 127.6 |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 0.9 | 1.0 | |
| | | | COPd | | 4.26 | 4.34 | 4.47 |
| | | | Pdh | kW | 4.6 | | 4.9 |
| | | | PERd | % | 170.4 | 173.6 | 178.8 |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 0.9 | | |
| | | | COPd | | 6.30 | 6.45 | 6.52 |
| | | | Pdh | kW | 5.5 | | |
| | | | PERd | % | 252.0 | 258.0 | 260.8 |
| | | Tol (temperature operating limit) | COPd | | 1.78 | 1.63 | 1.58 |
| | | | Pdh | kW | 9.1 | 9.8 | 11.2 |
| | | | PERd | % | 71.2 | 65.2 | 63.2 |
| | | | TOL | °C | -10 | | |
| | | | WTOL | °C | 55 | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 1.0 | 2.5 | 3.0 |
| | | Tbiv (bivalent temperature) | COPd | | 1.94 | 1.92 | 1.85 |
| | | | Pdh | kW | 9.0 | 10.9 | 12.6 |
| | | | PERd | % | 77.6 | 76.8 | 74.0 |
| | | | Tbiv | °C | -7 | | |
| | Cold climate water outlet 55°C | General | Annual energy consumption | kWh | 8,307 | 9,798 | 10,526 |
| | | | ηs (Seasonal space heating efficiency) | % | 100 | | |
| | | | Prated at -22°C | kW | 9 | 10 | 11 |

# 2 Specifications

## 1 - 1 ERLQ-CW1

| Technical specifications | | | | | EHSHB16P50B + ERLQ011CW1 | EHSHB16P50B + ERLQ014CW1 | EHSHB16P50B + ERLQ016CW1 |
|---|---|---|---|---|---|---|---|
| Space heating | Cold climate water outlet 55°C | General | Qhe Annual energy consumption (GCV) | Gj | 30 | 35 | 38 |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | 1.98 | 2.04 | 2.05 |
| | | | Pdh | kW | 5.2 | 6.2 | 6.6 |
| | | | PERd | % | 79.2 | 81.6 | 82.0 |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | 3.25 | 3.20 | 3.19 |
| | | | Pdh | kW | 3.2 | 3.8 | 4.0 |
| | | | PERd | % | 130.0 | 128.0 | 127.6 |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | | 0.9 | |
| | | | COPd | | | 5.50 | |
| | | | Pdh | kW | | 5.2 | |
| | | | PERd | % | | 220.0 | |
| | | D Condition (12°CDB/11°CWB) | COPd | | | 7.56 | |
| | | | Pdh | kW | | 6.1 | |
| | | | PERd | % | | 302.4 | |
| | | Tol (temperature operating limit) | COPd | | 1.22 | 1.13 | 1.08 |
| | | | Pdh | kW | 5.7 | 6.4 | 6.8 |
| | | | PERd | % | 48.8 | 45.2 | 43.2 |
| | | | TOL | °C | | -20 | |
| | | | WTOL | °C | | 55 | |
| | | G Condition (-15°CDB/-) | COPd | | 1.51 | 1.50 | 1.42 |
| | | | Pdh | kW | 7.1 | 8.4 | 8.9 |
| | | | PERd | % | 60.4 | 60.0 | 56.8 |
| | | Tbiv (bivalent temperature) | COPd | | 1.51 | 1.50 | 1.42 |
| | | | Pdh | kW | 7.1 | 8.4 | 8.9 |
| | | | PERd | % | 60.4 | 60.0 | 56.8 |
| | | | Tbiv | °C | | -15 | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | 8.7 | 10.3 | 11.0 |
| | Warm climate water outlet 55°C | General | Annual energy consumption | kWh | 2,937 | 3,582 | 3,729 |
| | | | ηs (Seasonal space heating efficiency) | % | 135 | 144 | |
| | | | Prated at 2°C | kW | 8 | 10 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 11 | 13 | |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | 1.82 | 1.90 | 1.78 |
| | | | Pdh | kW | 7.6 | 9.8 | 10.3 |
| | | | PERd | % | 72.8 | 76.0 | 71.2 |

# 2 Specifications

## 1 - 1 ERLQ-CW1

| Technical specifications | | | | | EHSHB16P50B + ERLQ011CW1 | EHSHB16P50B + ERLQ014CW1 | EHSHB16P50B + ERLQ016CW1 |
|---|---|---|---|---|---|---|---|
| Space heating | Warm climate water outlet 55°C | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | 3.07 | 3.22 | 3.25 |
| | | | Pdh | kW | 4.9 | 6.3 | 6.6 |
| | | | PERd | % | 122.8 | 128.8 | 130.0 |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | | 0.9 | |
| | | | COPd | | | 5.88 | |
| | | | Pdh | kW | | 5.4 | |
| | | | PERd | % | | 235.2 | |
| | | Tbiv (bivalent temperature) | COPd | | 1.82 | 1.90 | 1.78 |
| | | | Pdh | kW | 7.6 | 9.8 | 10.3 |
| | | | PERd | % | 72.8 | 76.0 | 71.2 |
| | | | Tbiv | °C | | 2 | |
| | Average climate water outlet 35°C | General | Annual energy consumption | kWh | 5,380 | 7,250 | 8,270 |
| | | | ηs (Seasonal space heating efficiency) | % | 156 | 153 | 149 |
| | | | Prated at -10°C | kW | 11 | 15 | 16 |
| | | | Qhe Annual energy consumption (GCV) | Gj | 19 | 26 | 30 |
| | | | SCOP | | 3.98 | 3.90 | 3.80 |
| | | | Seasonal space heating eff. class | | A++ | | A+ |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | 2.63 | | 2.33 |
| | | | Pdh | kW | 8.9 | 10.7 | 12.4 |
| | | | PERd | % | 105.0 | | 93.2 |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | 4.05 | 4.07 | 3.74 |
| | | | Pdh | kW | 6.0 | 7.7 | 8.6 |
| | | | PERd | % | 162.0 | 163.0 | 150.0 |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 0.9 | 1.0 | 0.9 |
| | | | COPd | | 6.77 | 5.71 | 6.77 |
| | | | Pdh | kW | 5.7 | 5.1 | 5.7 |
| | | | PERd | % | 271.0 | 228.0 | 271.0 |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | | 0.9 | |
| | | | COPd | | 8.97 | 6.71 | 8.97 |
| | | | Pdh | kW | 6.5 | 5.2 | 6.5 |
| | | | PERd | % | 359.0 | 268.0 | 359.0 |
| | | Tol (temperature operating limit) | COPd | | 2.34 | 2.60 | 2.05 |
| | | | Pdh | kW | 8.8 | 12.6 | 11.7 |
| | | | PERd | % | 93.6 | 104.0 | 82.0 |
| | | | TOL | °C | | -10 | |
| Space heating | Average climate water outlet 35°C | Tol (temperature operating limit) | WTOL | °C | | 35 | |
| | | Tbiv (bivalent temperature) | COPd | | 2.82 | 2.83 | 2.56 |
| | | | Pdh | kW | 9.1 | 11.6 | 12.1 |
| | | | PERd | % | 113.0 | | 102.0 |
| | | | Tbiv | °C | -5 | | -4 |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 2.4 | 1.9 | 4.4 |

(1)EW 30°C; LW 35°C; ambient conditions: 7°CDB/6°CWB |
(2)EW 40°C; LW 45°C; ambient conditions: 7°CDB/6°CWB |
(3)EW 30°C; LW 35°C; ambient conditions: -7°CDB/-8°CWB |
(4)EW 30°C; LW 35°C; ambient conditions: 2°CDB/1°CWB |
(5)Condition 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) |
(6)Condition 2: cooling Ta 35°C - LWE 7°C ( DT = 5°C); heating Ta DB/WB 7°C/6°C - LWC 45°C ( DT = 5°C ) |
(7)DB/WB 7°C/6°C - LWC 35°C (DT=5°C) |
(8)DB/WB 7°C/6°C - LWC 45°C (Dt=5°C) |
Tamb 35°C - LWE 18°C (DT=5°C) |
Tamb 35°C - LWE 7°C (DT=5°C)

| Technical specifications | | | EHSX16P50B + ERLQ011CW1 | EHSX16P50B + ERLQ014CW1 | EHSX16P50B + ERLQ016CW1 |
|---|---|---|---|---|---|
| Indoor unit | | | | EHSX16P50BA | |
| Outdoor unit | | | ERLQ011CAW1 | ERLQ014CAW1 | ERLQ016CAW1 |
| Heating capacity | Nom. | kW | 5.95 (3) / 7.74 (4) / 11.80 (1) / 10.40 (2) | 8.28 (3) / 9.57 (4) / 14.81 (1) / 13.73 (2) | 8.04 (3) / 10.05 (4) / 15.34 (1) / 14.86 (2) |
| | Max. | kW | 11.38 (1) / 11.00 (2) | 14.55 (1) / 13.59 (2) | 16.10 (1) / 15.22 (2) |

# 2 Specifications

## 1 - 1 ERLQ-CW1



| Technical specifications | | | | | EHSX16P50B + ERLQ011CW1 | EHSX16P50B + ERLQ014CW1 | EHSX16P50B + ERLQ016CW1 |
|---|---|---|---|---|---|---|---|
| Cooling capacity | Min. | | | kW | 2.5 (5) / 2.6 (6) | | - |
| | Nom. | | | kW | 10.6 (5) / 11.7 (6) | | |
| | Max. | | | kW | 15.1 (5) / 11.7 (6) | 16.1 (5) / 12.6 (6) | 16.8 (5) / 13.1 (6) |
| Power input | Heating | Nom. | | kW | 2.57 (5) / 3.13 (6) / 2.43 (3) / 2.35 (4) | 3.42 (5) / 4.07 (6) / 3.17 (3) / 2.93 (4) | |
| | | Max. | | kW | 2.64 (5) / 3.25 (6) | 3.43 (5) / 4.22 (6) | 3.83 (5) / 4.71 (6) |
| | Cooling | Nom. | | kW | 2.72 (5) / 4.30 (6) | | |
| | | Max. | | kW | 4.53 (5) / 4.31 (6) | 5.42 (5) / 5.09 (6) | 6.15 (5) / 5.74 (6) |
| COP | | | | | 4.38 (5) / 3.32 (6) / 2.45 (3) / 3.29 (4) | 4.27 (5) / 3.34 (6) / 2.58 (3) / 3.22 (4) | 4.10 (5) / 3.22 (6) / 2.44 (3) / 3.15 (4) |
| EER | | | | | 3.90 (5) / 2.72 (6) | | |
| Pump | Type | | | | Grundfos UPM3 25-75 CHBL | | |
| Water side Heat exchanger | Water flow rate | Cooling | Nom. | l/min | 43.3 (7) / 33.5 (8) | 46.0 (7) / 36.1 (8) | 48.1 (7) / 37.5 (8) |
| | | Heating | Nom. | l/min | 33.8 (9) / 29.8 (10) | 42.4 (9) / 39.4 (10) | 44.0 (9) / 42.6 (10) |
| 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) | 39.0 | | |
| LW(A) Sound power level (according to EN14825) | Outdoor | | | dB(A) | 64.0 | | 66.0 |
| 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) | | $m^3/h$ | 5,400 | | |
| | Other | Capacity control | | | Inverter | | |
| | | Cdh (Degradation heating) | | | 0.9 | | |
| | | Pck (Crankcase heater mode) | | kW | 0.000 | | |
| | | Poff (Off mode) | | kW | 0.050 | | |
| | | Psb (Standby mode) | | kW | 0.050 | | |
| | | Pto (Thermostat off) | | kW | 0.105 | | |
| Domestic hot water heating | General | Declared load profile | | | XL | | |
| | | Function to fix water heating during off peak hours | | | Yes | | |
| Domestic hot water heating | Average climate | AEC (Annual electricity consumption) | | kWh | 2,187 | | |
| | | ηwh (water heating efficiency) | | % | 83 | | |
| | | Qelec (Daily electricity consumption) | | kWh | 9.811 | | |
| | | Water heating energy efficiency class | | | A | | |
| | Cold climate | AEC (Annual electricity consumption) | | kWh | 2,435 | | |
| | | ηwh (water heating efficiency) | | % | 73 | | |
| | | Qelec (Daily electricity consumption) | | kWh | 10.938 | | |
| | Warm climate | AEC (Annual electricity consumption) | | kWh | 1,956 | | |
| | | ηwh (water heating efficiency) | | % | 93 | | |
| | | Qelec (Daily electricity consumption) | | kWh | 8.760 | | |

# 2 Specifications

## 1 - 1 ERLQ-CW1

| Technical specifications | | | | | EHSX16P50B + ERLQ011CW1 | EHSX16P50B + ERLQ014CW1 | EHSX16P50B + ERLQ016CW1 |
|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 55°C | General | Annual energy consumption | kWh | 6,363 | 7,673 | 8,997 |
| | | | ηs (Seasonal space heating efficiency) | % | 128 | 129 | 127 |
| | | | Prated at -10°C | kW | 10 | 12 | 14 |
| | | | Qhe Annual energy consumption (GCV) | Gj | 23 | 28 | 32 |
| | | | Seasonal space heating eff. class | | A++ | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | |
| | | | COPd | | 1.94 | 1.92 | 1.85 |
| | | | Pdh | kW | 9.0 | 10.9 | 12.6 |
| | | | PERd | % | 77.6 | 76.8 | 74.0 |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | |
| | | | COPd | | 3.30 | | 3.19 |
| | | | Pdh | kW | 5.4 | 6.6 | 7.8 |
| | | | PERd | % | 132.0 | | 127.6 |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 0.9 | 1.0 | |
| | | | COPd | | 4.26 | 4.34 | 4.47 |
| | | | Pdh | kW | 4.6 | | 4.9 |
| | | | PERd | % | 170.4 | 173.6 | 178.8 |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 0.9 | | |
| | | | COPd | | 6.30 | 6.45 | 6.52 |
| | | | Pdh | kW | 5.5 | | |
| | | | PERd | % | 252.0 | 258.0 | 260.8 |
| | | Tol (temperature operating limit) | COPd | | 1.78 | 1.63 | 1.58 |
| | | | Pdh | kW | 9.1 | 9.8 | 11.2 |
| | | | PERd | % | 71.2 | 65.2 | 63.2 |
| | | | TOL | °C | -10 | | |
| | | | WTOL | °C | 55 | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 1.0 | 2.5 | 3.0 |

# 2 Specifications

## 1 - 1 ERLQ-CW1

| Technical specifications | | | | | EHSX16P50B + ERLQ011CW1 | EHSX16P50B + ERLQ014CW1 | EHSX16P50B + ERLQ016CW1 |
|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 55°C | Tbiv (bivalent temperature) | COPd | | 1.94 | 1.92 | 1.85 |
| | | | Pdh | kW | 9.0 | 10.9 | 12.6 |
| | | | PERd | % | 77.6 | 76.8 | 74.0 |
| | | | Tbiv | °C | | -7 | |
| | Cold climate water outlet 55°C | General | Annual energy consumption | kWh | 8,196 | 9,688 | 10,416 |
| | | | ηs (Seasonal space heating efficiency) | % | | 101 | |
| | | | Prated at -22°C | kW | 9 | 10 | 11 |
| | | | Qhe Annual energy consumption (GCV) | Gj | 30 | 35 | 37 |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | 1.98 | 2.04 | 2.05 |
| | | | Pdh | kW | 5.2 | 6.2 | 6.6 |
| | | | PERd | % | 79.2 | 81.6 | 82.0 |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | 3.25 | 3.20 | 3.19 |
| | | | Pdh | kW | 3.2 | 3.8 | 4.0 |
| | | | PERd | % | 130.0 | 128.0 | 127.6 |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | | 0.9 | |
| | | | COPd | | | 5.50 | |
| | | | Pdh | kW | | 5.2 | |
| | | | PERd | % | | 220.0 | |
| | | D Condition (12°CDB/11°CWB) | COPd | | | 7.56 | |
| | | | Pdh | kW | | 6.1 | |
| | | | PERd | % | | 302.4 | |
| | | Tol (temperature operating limit) | COPd | | 1.22 | 1.13 | 1.08 |
| | | | Pdh | kW | 5.7 | 6.4 | 6.8 |
| | | | PERd | % | 48.8 | 45.2 | 43.2 |
| | | | TOL | °C | | -20 | |
| | | | WTOL | °C | | 55 | |
| | | G Condition (-15°CDB/-) | COPd | | 1.51 | 1.50 | 1.42 |
| | | | Pdh | kW | 7.1 | 8.4 | 8.9 |
| | | | PERd | % | 60.4 | 60.0 | 56.8 |
| | | Tbiv (bivalent temperature) | COPd | | 1.51 | 1.50 | 1.42 |
| | | | Pdh | kW | 7.1 | 8.4 | 8.9 |
| | | | PERd | % | 60.4 | 60.0 | 56.8 |
| | | | Tbiv | °C | | -15 | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | 8.7 | 10.3 | 11.0 |
| | Warm climate water outlet | General | Annual energy consumption | kWh | 2,716 | 3,361 | 3,508 |

# 2 Specifications

## 1 - 1 ERLQ-CW1

| Technical specifications | | | | | EHSX16P50B + ERLQ011CW1 | EHSX16P50B + ERLQ014CW1 | EHSX16P50B + ERLQ016CW1 |
|---|---|---|---|---|---|---|---|
| Space heating | Warm climate water outlet 55°C | General | ηs (Seasonal space heating efficiency) | % | 146 | 153 | 154 |
| | | | Prated at 2°C | kW | 8 | 10 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 10 | 12 | 13 |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | 1.82 | 1.90 | 1.78 |
| | | | Pdh | kW | 7.6 | 9.8 | 10.3 |
| | | | PERd | % | 72.8 | 76.0 | 71.2 |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | 3.07 | 3.22 | 3.25 |
| | | | Pdh | kW | 4.9 | 6.3 | 6.6 |
| | | | PERd | % | 122.8 | 128.8 | 130.0 |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | | 0.9 | |
| | | | COPd | | | 5.88 | |
| | | | Pdh | kW | | 5.4 | |
| | | | PERd | % | | 235.2 | |
| | | Tbiv (bivalent temperature) | COPd | | 1.82 | 1.90 | 1.78 |
| | | | Pdh | kW | 7.6 | 9.8 | 10.3 |
| | | | PERd | % | 72.8 | 76.0 | 71.2 |
| | | | Tbiv | °C | | 2 | |
| | Average climate water outlet 35°C | General | Annual energy consumption | kWh | 5,380 | 7,250 | 8,270 |
| | | | ηs (Seasonal space heating efficiency) | % | 156 | 153 | 149 |
| | | | Prated at -10°C | kW | 11 | 15 | 16 |
| | | | Qhe Annual energy consumption (GCV) | Gj | 19 | 26 | 30 |
| | | | SCOP | | 3.98 | 3.90 | 3.80 |
| | | | Seasonal space heating eff. class | | A++ | | A+ |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | 2.63 | | 2.33 |
| | | | Pdh | kW | 8.9 | 10.7 | 12.4 |
| | | | PERd | % | 105.0 | | 93.2 |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | 4.05 | 4.07 | 3.74 |
| | | | Pdh | kW | 6.0 | 7.7 | 8.6 |
| | | | PERd | % | 162.0 | 163.0 | 150.0 |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 0.9 | 1.0 | 0.9 |
| | | | COPd | | 6.77 | 5.71 | 6.77 |
| | | | Pdh | kW | 5.7 | 5.1 | 5.7 |
| | | | PERd | % | 271.0 | 228.0 | 271.0 |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | | 0.9 | |
| Space heating | Average climate water outlet 35°C | D Condition (12°CDB/11°CWB) | COPd | | 8.97 | 6.71 | 8.97 |
| | | | Pdh | kW | 6.5 | 5.2 | 6.5 |
| | | | PERd | % | 359.0 | 268.0 | 359.0 |
| | | Tol (temperature operating limit) | COPd | | 2.34 | 2.60 | 2.05 |
| | | | Pdh | kW | 8.8 | 12.6 | 11.7 |
| | | | PERd | % | 93.6 | 104.0 | 82.0 |
| | | | TOL | °C | | -10 | |
| | | | WTOL | °C | | 35 | |
| | | Tbiv (bivalent temperature) | COPd | | 2.82 | 2.83 | 2.56 |
| | | | Pdh | kW | 9.1 | 11.6 | 12.1 |
| | | | PERd | % | 113.0 | | 102.0 |
| | | | Tbiv | °C | -5 | | -4 |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 2.4 | 1.9 | 4.4 |

(1)EW 30°C; LW 35°C; ambient conditions: 7°CDB/6°CWB |
(2)EW 40°C; LW 45°C; ambient conditions: 7°CDB/6°CWB |
(3)EW 30°C; LW 35°C; ambient conditions: -7°CDB/-8°CWB |
(4)EW 30°C; LW 35°C; ambient conditions: 2°CDB/1°CWB |
(5)Condition 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) |
(6)Condition 2: cooling Ta 35°C - LWE 7°C ( DT = 5°C); heating Ta DB/WB 7°C/6°C - LWC 45°C ( DT = 5°C ) |
(7)Tamb 35°C - LWE 18°C (DT=5°C) |
(8)Tamb 35°C - LWE 7°C (DT=5°C) |
(9)DB/WB 7°C/6°C - LWC 35°C (DT=5°C) |
(10)DB/WB 7°C/6°C - LWC 45°C (Dt=5°C)

# 2 Specifications

## 1 - 1 ERLQ-CW1



| Technical specifications | | | | | EHSXB16P50B + ERLQ011CW1 | EHSXB16P50B + ERLQ014CW1 | EHSXB16P50B + ERLQ016CW1 |
|---|---|---|---|---|---|---|---|
| Indoor unit | | | | | EHSXB16P50BA | | |
| Outdoor unit | | | | | ERLQ011CAW1 | ERLQ014CAW1 | ERLQ016CAW1 |
| Heating capacity | Nom. | | | kW | 5.95 (3) / 7.74 (4) / 11.80 (1) / 10.40 (2) | 8.28 (3) / 9.57 (4) / 14.81 (1) / 13.73 (2) | 8.04 (3) / 10.05 (4) / 15.34 (1) / 14.86 (2) |
| | Max. | | | kW | 11.38 (1) / 11.00 (2) | 14.55 (1) / 13.59 (2) | 16.10 (1) / 15.22 (2) |
| Cooling capacity | Min. | | | kW | 2.5 (5) / 2.6 (6) | | - |
| | Nom. | | | kW | 10.6 (5) / 11.7 (6) | | |
| | Max. | | | kW | 15.1 (5) / 11.7 (6) | 16.1 (5) / 12.6 (6) | 16.8 (5) / 13.1 (6) |
| Power input | Heating | Nom. | | kW | 2.57 (5) / 3.13 (6) / 2.43 (3) / 2.35 (4) | 3.42 (5) / 4.07 (6) / 3.17 (3) / 2.93 (4) | |
| | | Max. | | kW | 2.64 (5) / 3.25 (6) | 3.43 (5) / 4.22 (6) | 3.83 (5) / 4.71 (6) |
| | Cooling | Nom. | | kW | 2.72 (5) / 4.30 (6) | | |
| | | Max. | | kW | 4.53 (5) / 4.31 (6) | 5.42 (5) / 5.09 (6) | 6.15 (5) / 5.74 (6) |
| COP | | | | | 4.38 (5) / 3.32 (6) / 2.45 (3) / 3.29 (4) | 4.27 (5) / 3.34 (6) / 2.58 (3) / 3.22 (4) | 4.10 (5) / 3.22 (6) / 2.44 (3) / 3.15 (4) |
| EER | | | | | 3.90 (5) / 2.72 (6) | | |
| Pump | Type | | | | Grundfos UPM3 25-75 CHBL | | |
| Water side Heat exchanger | Water flow rate | Cooling | Nom. | l/min | 43.3 (7) / 33.5 (8) | 46.0 (7) / 36.1 (8) | 48.1 (7) / 37.5 (8) |
| | | Heating | Nom. | l/min | 33.8 (9) / 29.8 (10) | 42.4 (9) / 39.4 (10) | 44.0 (9) / 42.6 (10) |
| 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) | 39.0 | | |
| LW(A) Sound power level (according to EN14825) | Outdoor | | | dB(A) | 64.0 | | 66.0 |
| 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) | | $m^3/h$ | 5,400 | | |
| | Other | Capacity control | | | Inverter | | |
| | | Cdh (Degradation heating) | | | 0.9 | | |
| | | Pck (Crankcase heater mode) | | kW | 0.000 | | |
| | | Poff (Off mode) | | kW | 0.050 | | |
| | | Psb (Standby mode) | | kW | 0.050 | | |
| | | Pto (Thermostat off) | | kW | 0.105 | | |
| Domestic hot water heating | General | Declared load profile | | | XL | | |
| | | Function to fix water heating during off peak hours | | | Yes | | |
| Domestic hot water heating | Average climate | AEC (Annual electricity consumption) | | kWh | 2,158 | | |
| | | ηwh (water heating efficiency) | | % | 84 | | |
| | | Qelec (Daily electricity consumption) | | kWh | 9.681 | | |
| | | Water heating energy efficiency class | | | A | | |
| | Cold climate | AEC (Annual electricity consumption) | | kWh | 2,394 | | |
| | | ηwh (water heating efficiency) | | % | 75 | | |
| | | Qelec (Daily electricity consumption) | | kWh | 10.755 | | |
| | Warm climate | AEC (Annual electricity consumption) | | kWh | 1,921 | | |
| | | ηwh (water heating efficiency) | | % | 95 | | |
| | | Qelec (Daily electricity consumption) | | kWh | 8.600 | | |

# 2 Specifications

## 1 - 1 ERLQ-CW1

| Technical specifications | | | | | EHSXB16P50B + ERLQ011CW1 | EHSXB16P50B + ERLQ014CW1 | EHSXB16P50B + ERLQ016CW1 |
|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 55°C | General | Annual energy consumption | kWh | 6,363 | 7,673 | 8,997 |
| | | | ηs (Seasonal space heating efficiency) | % | 128 | 129 | 127 |
| | | | Prated at -10°C | kW | 10 | 12 | 14 |
| | | | Qhe Annual energy consumption (GCV) | Gj | 23 | 28 | 32 |
| | | | Seasonal space heating eff. class | | A++ | | |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | 1.0 | | |
| | | | COPd | | 1.94 | 1.92 | 1.85 |
| | | | Pdh | kW | 9.0 | 10.9 | 12.6 |
| | | | PERd | % | 77.6 | 76.8 | 74.0 |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | 1.0 | | |
| | | | COPd | | 3.30 | | 3.19 |
| | | | Pdh | kW | 5.4 | 6.6 | 7.8 |
| | | | PERd | % | 132.0 | | 127.6 |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 0.9 | 1.0 | |
| | | | COPd | | 4.26 | 4.34 | 4.47 |
| | | | Pdh | kW | 4.6 | | 4.9 |
| | | | PERd | % | 170.4 | 173.6 | 178.8 |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | 0.9 | | |
| | | | COPd | | 6.30 | 6.45 | 6.52 |
| | | | Pdh | kW | 5.5 | | |
| | | | PERd | % | 252.0 | 258.0 | 260.8 |
| | | Tol (temperature operating limit) | COPd | | 1.78 | 1.63 | 1.58 |
| | | | Pdh | kW | 9.1 | 9.8 | 11.2 |
| | | | PERd | % | 71.2 | 65.2 | 63.2 |
| | | | TOL | °C | -10 | | |
| | | | WTOL | °C | 55 | | |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 1.0 | 2.5 | 3.0 |

# 2 Specifications

## 1 - 1 ERLQ-CW1

| Technical specifications | | | | | EHSXB16P50B + ERLQ011CW1 | EHSXB16P50B + ERLQ014CW1 | EHSXB16P50B + ERLQ016CW1 |
|---|---|---|---|---|---|---|---|
| Space heating | Average climate water outlet 55°C | Tbiv (bivalent temperature) | COPd | | 1.94 | 1.92 | 1.85 |
| | | | Pdh | kW | 9.0 | 10.9 | 12.6 |
| | | | PERd | % | 77.6 | 76.8 | 74.0 |
| | | | Tbiv | °C | | -7 | |
| | Cold climate water outlet 55°C | General | Annual energy consumption | kWh | 8,196 | 9,688 | 10,416 |
| | | | ηs (Seasonal space heating efficiency) | % | | 101 | |
| | | | Prated at -22°C | kW | 9 | 10 | 11 |
| | | | Qhe Annual energy consumption (GCV) | Gj | 30 | 35 | 37 |
| | | A Condition (-7°CDB/-8°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | 1.98 | 2.04 | 2.05 |
| | | | Pdh | kW | 5.2 | 6.2 | 6.6 |
| | | | PERd | % | 79.2 | 81.6 | 82.0 |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | 3.25 | 3.20 | 3.19 |
| | | | Pdh | kW | 3.2 | 3.8 | 4.0 |
| | | | PERd | % | 130.0 | 128.0 | 127.6 |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | | 0.9 | |
| | | | COPd | | | 5.50 | |
| | | | Pdh | kW | | 5.2 | |
| | | | PERd | % | | 220.0 | |
| | | D Condition (12°CDB/11°CWB) | COPd | | | 7.56 | |
| | | | Pdh | kW | | 6.1 | |
| | | | PERd | % | | 302.4 | |
| | | Tol (temperature operating limit) | COPd | | 1.22 | 1.13 | 1.08 |
| | | | Pdh | kW | 5.7 | 6.4 | 6.8 |
| | | | PERd | % | 48.8 | 45.2 | 43.2 |
| | | | TOL | °C | | -20 | |
| | | | WTOL | °C | | 55 | |
| | | G Condition (-15°CDB/-) | COPd | | 1.51 | 1.50 | 1.42 |
| | | | Pdh | kW | 7.1 | 8.4 | 8.9 |
| | | | PERd | % | 60.4 | 60.0 | 56.8 |
| | | Tbiv (bivalent temperature) | COPd | | 1.51 | 1.50 | 1.42 |
| | | | Pdh | kW | 7.1 | 8.4 | 8.9 |
| | | | PERd | % | 60.4 | 60.0 | 56.8 |
| | | | Tbiv | °C | | -15 | |
| | | Rated heat output | Psup (at Tdesign -22°C) | kW | 8.7 | 10.3 | 11.0 |
| | Warm climate water outlet | General | Annual energy consumption | kWh | 2,716 | 3,361 | 3,508 |

# 2 Specifications

## 1 - 1 ERLQ-CW1

| Technical specifications | | | | | EHSXB16P50B + ERLQ011CW1 | EHSXB16P50B + ERLQ014CW1 | EHSXB16P50B + ERLQ016CW1 |
|---|---|---|---|---|---|---|---|
| Space heating | Warm climate water outlet 55°C | General | ηs (Seasonal space heating efficiency) | % | 146 | 153 | 154 |
| | | | Prated at 2°C | kW | 8 | 10 | |
| | | | Qhe Annual energy consumption (GCV) | Gj | 10 | 12 | 13 |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | 1.82 | 1.90 | 1.78 |
| | | | Pdh | kW | 7.6 | 9.8 | 10.3 |
| | | | PERd | % | 72.8 | 76.0 | 71.2 |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | 3.07 | 3.22 | 3.25 |
| | | | Pdh | kW | 4.9 | 6.3 | 6.6 |
| | | | PERd | % | 122.8 | 128.8 | 130.0 |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | | 0.9 | |
| | | | COPd | | | 5.88 | |
| | | | Pdh | kW | | 5.4 | |
| | | | PERd | % | | 235.2 | |
| | | Tbiv (bivalent temperature) | COPd | | 1.82 | 1.90 | 1.78 |
| | | | Pdh | kW | 7.6 | 9.8 | 10.3 |
| | | | PERd | % | 72.8 | 76.0 | 71.2 |
| | | | Tbiv | °C | | 2 | |
| | Average climate water outlet 35°C | General | Annual energy consumption | kWh | 5,380 | 7,250 | 8,270 |
| | | | ηs (Seasonal space heating efficiency) | % | 156 | 153 | 149 |
| | | | Prated at -10°C | kW | 11 | 15 | 16 |
| | | | Qhe Annual energy consumption (GCV) | Gj | 19 | 26 | 30 |
| | | | SCOP | | 3.98 | 3.90 | 3.80 |
| | | | Seasonal space heating eff. class | | A++ | | A+ |
| | | A Condition (-7°CDB/-8°CWB) | COPd | | 2.63 | | 2.33 |
| | | | Pdh | kW | 8.9 | 10.7 | 12.4 |
| | | | PERd | % | 105.0 | | 93.2 |
| | | B Condition (2°CDB/1°CWB) | Cdh (Degradation heating) | | | 1.0 | |
| | | | COPd | | 4.05 | 4.07 | 3.74 |
| | | | Pdh | kW | 6.0 | 7.7 | 8.6 |
| | | | PERd | % | 162.0 | 163.0 | 150.0 |
| | | C Condition (7°CDB/6°CWB) | Cdh (Degradation heating) | | 0.9 | 1.0 | 0.9 |
| | | | COPd | | 6.77 | 5.71 | 6.77 |
| | | | Pdh | kW | 5.7 | 5.1 | 5.7 |
| | | | PERd | % | 271.0 | 228.0 | 271.0 |
| | | D Condition (12°CDB/11°CWB) | Cdh (Degradation heating) | | | 0.9 | |
| Space heating | Average climate water outlet 35°C | D Condition (12°CDB/11°CWB) | COPd | | 8.97 | 6.71 | 8.97 |
| | | | Pdh | kW | 6.5 | 5.2 | 6.5 |
| | | | PERd | % | 359.0 | 268.0 | 359.0 |
| | | Tol (temperature operating limit) | COPd | | 2.34 | 2.60 | 2.05 |
| | | | Pdh | kW | 8.8 | 12.6 | 11.7 |
| | | | PERd | % | 93.6 | 104.0 | 82.0 |
| | | | TOL | °C | | -10 | |
| | | | WTOL | °C | | 35 | |
| | | Tbiv (bivalent temperature) | COPd | | 2.82 | 2.83 | 2.56 |
| | | | Pdh | kW | 9.1 | 11.6 | 12.1 |
| | | | PERd | % | 113.0 | | 102.0 |
| | | | Tbiv | °C | -5 | | -4 |
| | | Rated heat output | Psup (at Tdesign -10°C) | kW | 2.4 | 1.9 | 4.4 |

(1)EW 30°C; LW 35°C; ambient conditions: 7°CDB/6°CWB |
(2)EW 40°C; LW 45°C; ambient conditions: 7°CDB/6°CWB |
(3)EW 30°C; LW 35°C; ambient conditions: -7°CDB/-8°CWB |
(4)EW 30°C; LW 35°C; ambient conditions: 2°CDB/1°CWB |
(5)Condition 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) |
(6)Condition 2: cooling Ta 35°C - LWE 7°C ( DT = 5°C); heating Ta DB/WB 7°C/6°C - LWC 45°C ( DT = 5°C ) |
(7)Tamb 35°C - LWE 18°C (DT=5°C) |
(8)Tamb 35°C - LWE 7°C (DT=5°C) |
(9)DB/WB 7°C/6°C - LWC 35°C (DT=5°C) |
(10)DB/WB 7°C/6°C - LWC 45°C (Dt=5°C)

# 2 Specifications

## 1 - 1 ERLQ-CW1



| Technical Specifications | | | | | ERLQ011CW1 | ERLQ014CW1 | ERLQ016CW1 |
|---|---|---|---|---|---|---|---|
| Casing | Colour | | | | Ivory white | | |
| | Material | | | | Painted galvanized steel plate | | |
| Dimensions | Unit | Height | | mm | 1,345 | | |
| | | Width | | mm | 900 | | |
| | | Depth | | mm | 320 | | |
| | Packed unit | Height | | mm | 1,524 | | |
| | | Width | | mm | 980 | | |
| | | Depth | | mm | 420 | | |
| Weight | Unit | | | kg | 114 | | |
| | Packed unit | | | kg | 129 | | |
| Packing | Material | | | | Wood / EPS / Carton / PE (Straps) | | |
| | Weight | | | kg | 15 | | |
| Heat exchanger | Length | | | mm | 857 | | |
| | Rows | Quantity | | | 2 | | |
| | Fin pitch | | | mm | 1.40 | | |
| | Passes | Quantity | | | 7 | | |
| | Face area | | | $m^2$ | 1.131 | | |
| | Stages | Quantity | | | 60 | | |
| | Tube type | | | | ø8 Hi-XSS | | |
| | Fin | Type | | | WF fin | | |
| | | Treatment | | | Anti-corrosion treatment (PE) | | |
| Fan | Type | | | | Propeller fan | | |
| | Quantity | | | | 2 | | |
| | Discharge direction | | | | Horizontal | | |
| Fan motor | Quantity | | | | 2 | | |
| | Model | | | | Brushless DC motor | | |
| | Output | | | W | 70.00 | | |
| | Drive | | | | Direct drive | | |
| | Speed | Steps | | | 8 | | |
| | | Heating | Nom. | rpm | 740 | 750 | 760 |
| | | Cooling | Nom. | rpm | 780 | | |
| Compressor | Quantity | | | | 1 | | |
| | Model | | | | JT1G-VDYR@B2 | | |
| | Type | | | | Hermetically sealed scroll compressor | | |
| | Output | | | W | 2,200.0 | | |
| | Starting method | | | | Inverter driven | | |
| Compressor | Motor | Crankcase heater | Quantity | | 1 | | |
| | | | Output | W | 33 | | |
| PED | Category | | | | Category I / Excluded from scope of PED due to article 1, item 3.6 of 97/23/EC | | |
| Operation range | Heating | Min. | | °CDB | -25 (1) | | |
| | | Max. | | °CDB | 35 | | |
| | Cooling | Min. | | °CDB | 10.0 | | |
| | | Max. | | °CDB | 46.0 | | |
| | Domestic hot water | Max. | | °CDB | 35 (2) | | |
| | | Min. | | °CDB | -20 (2) | | |
| Sound power level | Heating | Nom. | | dBA | 64 (3) | | 66 (3) |
| | Cooling | Nom. | | dBA | 64 (4) | 66 (4) | 69 (4) |
| Sound pressure level | Heating | Nom. | | dBA | 51 (5) | | 52 (5) |
| | Cooling | Nom. | | dBA | 50 (5) | 52 (5) | 54 (5) |
| | Night quiet mode | Heating | | dBA | 42 (5) | | 43 (5) |
| | | Cooling | | dBA | 45 (5) | | 46 (5) |
| Refrigerant | Type | | | | R-410A | | |
| | GWP | | | | 2,087.5 | | |
| | Charge | | | TCO2Eq | 7.1 | | |
| | Charge | | | kg | 3.4 | | |
| | Control | | | | Expansion valve (electronic type) | | |
| | Circuits | Quantity | | | 1 | | |
| Refrigerant oil | Type | | | | Daphne FVC68D | | |
| | Charged volume | | | l | 1.5 | | |

# 2 Specifications

## 1 - 1 ERLQ-CW1

| Technical Specifications | | | | | ERLQ011CW1 | ERLQ014CW1 | ERLQ016CW1 |
|---|---|---|---|---|---|---|---|
| Piping connections | Liquid | Quantity | | | 1 | | |
| | | Type | | | Flare connection | | |
| | | OD | | mm | 9.52 | | |
| | Gas | Quantity | | | 1 | | |
| | | Type | | | Flare connection | | |
| | | OD | | mm | 15.90 | | |
| | Drain | Quantity | | | 3 | | |
| | | Type | | | Hole | | |
| | | OD | | mm | 26 | | |
| | Drain 2 | Quantity | | | 1 | | |
| | | Type | | | Hole | | |
| | | OD | | mm | 18 | | |
| | Piping length | OU - IU | Min. | m | 3 | | |
| | | | Max. | m | 50 | | |
| Piping connections | Piping length | System | Equivalent | m | 70 | | |
| | | | Chargeless | m | 10 | | |
| | Additional refrigerant charge | | | kg/m | See installation manual | | |
| | Level difference | IU - OU | Max. | m | 30.0 | | |
| | Heat insulation | | | | Both liquid and gas pipes | | |
| 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 | | | Fan motor thermal protection | | |
| | | 03 | | | Fuse | | |

| Electrical Specifications | | | | ERLQ011CW1 | ERLQ014CW1 | ERLQ016CW1 |
|---|---|---|---|---|---|---|
| Power supply | Name | | | W1 | | |
| | Phase | | | 3N~ | | |
| | Frequency | | Hz | 50 | | |
| | Voltage | | V | 400 | | |
| | Voltage range | Min. | % | -10 | | |
| | | Max. | % | 10 | | |
| Current | Minimum Ssc value | | kVa | Equipment complying with EN / IEC 61000-3-12 | | |
| | Maximum running current | Cooling | A | 16.3 | | |
| | Recommended fuses | | A | 20 | | |
| Wiring connections | For power supply | Remark | | See installation manual outdoor unit | | |
| | For connection with indoor | Remark | | See installation manual outdoor unit | | |
| Power supply intake | | | | Outdoor unit only | | |

(1)Operation range heating (outdoor unit): range increase by support back-up heater. See separate drawing for operation range. |
(2)Operation range domestic hot water (outdoor unit): range increase by support booster heater or backup heater. See separate drawing for operation range. |
(3)Condition: Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C) |
(4)Condition: Ta 35°C - LWE 7°C ( DT = 5°C) |
(5)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. |
Contains fluorinated greenhouse gases

# 3 Options

## 3 - 1 Options

**ERLQ011-016C**

**Kit availability for *RLQ011-016C***



| | | *RLQ011C*V3 | *RLQ014C*V3 | *RLQ016C*V3 | *RLQ011C*W1 | *RLQ014C*W1 | *RLQ016C*W1 |
|---|---|---|---|---|---|---|---|
| *K016SNC (1) | Snow cover | ● | ● | ● | ● | ● | ● |
| KRP58M51 (2) | Demand PCB | ● | ● | ● | - | - | - |
| KRP58M51 (2) | Demand PCB | - | - | - | ● | ● | ● |

**NOTES**

1 It is very important to select an installation site where the snow will not affect the unit.
If lateral snowfall is possible, snow cover is recommended or make sure that the heat exchanger coil is not affected by the snow.
(See 'Installation service space' and 'Installation guideline/precaution outdoor')

2 This demand PCB option is only applicable for the 'Setting of demand running'

3TW60339-4

# 4 Capacity tables

## 4 - 1 Cooling Capacity Tables

**ERLQ-CW1**

**Maximum cooling capacity**

| | Tamb [°C] | 20 | | 25 | | 30 | | 35 | | 40 | | 45 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LWE [°C] | CC [kW] | PI [kW] | CC [kW] | PI [kW] | CC [kW] | PI [kW] | CC [kW] | PI [kW] | CC [kW] | PI [kW] | CC [kW] | PI [kW] |
| *RLQ011* | 7 | 12,99 | 3,26 | 12,88 | 3,57 | 12,44 | 3,92 | 11,72 | 4,31 | 10,74 | 4,74 | 9,54 | 5,22 |
| | 10 | 13,79 | 3,29 | 13,67 | 3,61 | 13,20 | 3,97 | 12,44 | 4,37 | 11,40 | 4,81 | 10,14 | 5,30 |
| | 13 | 15,16 | 3,33 | 15,02 | 3,65 | 14,51 | 4,02 | 13,67 | 4,43 | 12,54 | 4,88 | 11,00 | 5,54 |
| | 15 | 16,10 | 3,35 | 15,95 | 3,68 | 15,41 | 4,05 | 14,52 | 4,47 | 13,33 | 4,92 | 11,40 | 5,41 |
| | 18 | 17,77 | 3,38 | 17,18 | 3,72 | 16,26 | 4,11 | 15,05 | 4,53 | 13,61 | 4,99 | 11,54 | 5,00 |
| | 22 | 19,82 | 3,43 | 19,17 | 3,78 | 18,16 | 4,18 | 16,83 | 4,61 | 15,23 | 5,08 | 12,10 | 4,47 |
| *RLQ014* | 7 | 13,92 | 3,88 | 13,81 | 4,23 | 13,34 | 4,63 | 12,55 | 5,09 | 11,13 | 4,88 | 9,85 | 5,37 |
| | 10 | 14,98 | 3,94 | 14,85 | 4,30 | 14,34 | 4,71 | 13,49 | 5,18 | 11,97 | 4,96 | 10,61 | 5,46 |
| | 13 | 16,45 | 4,01 | 16,30 | 4,38 | 15,74 | 4,79 | 14,81 | 5,27 | 13,15 | 5,05 | 11,00 | 5,54 |
| | 15 | 17,46 | 4,05 | 17,30 | 4,43 | 16,71 | 4,85 | 15,73 | 5,33 | 13,97 | 5,11 | 11,40 | 5,41 |
| | 18 | 19,00 | 4,12 | 18,36 | 4,50 | 17,37 | 4,94 | 16,06 | 5,42 | 14,05 | 5,19 | 11,54 | 5,00 |
| | 22 | 21,16 | 4,21 | 20,45 | 4,61 | 19,36 | 5,06 | 17,93 | 5,55 | 15,71 | 5,31 | 12,10 | 4,47 |
| *RLQ016* | 7 | 14,55 | 4,39 | 14,46 | 4,79 | 13,98 | 5,24 | 13,12 | 5,74 | 11,59 | 5,48 | 9,85 | 5,37 |
| | 10 | 15,67 | 4,48 | 15,56 | 4,89 | 15,02 | 5,34 | 14,09 | 5,85 | 12,45 | 5,58 | 10,61 | 5,46 |
| | 13 | 17,22 | 4,57 | 17,08 | 4,99 | 16,48 | 5,45 | 15,47 | 5,96 | 13,67 | 5,68 | 11,00 | 5,54 |
| | 15 | 18,29 | 4,63 | 18,13 | 5,06 | 17,49 | 5,52 | 16,42 | 6,04 | 14,52 | 5,75 | 11,40 | 5,41 |
| | 18 | 19,91 | 4,73 | 19,23 | 5,16 | 18,17 | 5,63 | 16,76 | 6,15 | 14,60 | 5,85 | 11,54 | 5,00 |
| | 22 | 22,18 | 4,86 | 21,42 | 5,30 | 20,25 | 5,79 | 18,69 | 6,31 | 16,31 | 5,99 | 12,10 | 4,47 |

**Symbols:**

| | |
|---|---|
| CC | Cooling capacity at maximum operating frequency, measured acc. EN14511 |
| PI | Power input, measured acc. EN14511 |
| LWE | Leaving Water Evaporator temperature |
| LWC | Leaving Water Condensor temperature |
| Tamb | Ambient temperature; RH (heating) = 85% |

**Notes**:
- The bottom plate heater is controlled by outdoor unit (linked at defrost operation) and power input is included
- The capacity and power input is valid for V3-models at 230V or W1-models at 400V
- The capacity and power input for Ta ≦ 7°C is at maximum operation and power input 100%
- The capacity and power input for Ta > 7°C is at nominal operation (nominal = maximum)

**3TW60332-1B**

# 4 Capacity tables

## 4 - 2 Heating Capacity Tables

### ERLQ-CW1



**Maximum heating capacity - Peak values**

| | LWC [°C] | 30 | | 35 | | 40 | | 45 | | 50 | | 55 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Tamb [°C] | HC [kW] | PI [kW] | HC [kW] | PI [kW] | HC [kW] | PI [kW] | HC [kW] | PI [kW] | HC [kW] | PI [kW] | HC [kW] | PI [kW] |
| *RLQ011* | -20 | 8,64 | 3,87 | 8,61 | 4,22 | 8,61 | 4,64 | 7,99 | 4,89 | | | | |
| | -15 | 10,37 | 4,12 | 10,24 | 4,49 | 10,03 | 4,89 | 9,19 | 4,89 | 8,13 | 4,89 | | |
| | -7 | 10,79 | 3,33 | 10,41 | 3,62 | 10,04 | 3,97 | 9,83 | 4,28 | 9,45 | 4,80 | 8,39 | 4,89 |
| | -2 | 11,80 | 3,15 | 11,31 | 3,44 | 10,83 | 3,78 | 10,70 | 4,14 | 10,48 | 4,56 | 9,68 | 4,89 |
| | 2 | 11,91 | 2,83 | 11,33 | 3,10 | 10,75 | 3,42 | 10,69 | 3,71 | 10,32 | 4,05 | 9,72 | 4,49 |
| | 7 | 11,92 | 2,38 | 11,38 | 2,64 | 11,18 | 2,92 | 11,00 | 3,25 | 10,65 | 3,61 | 9,99 | 4,02 |
| | 12 | 12,93 | 2,31 | 12,31 | 2,56 | 12,20 | 2,85 | 12,02 | 3,18 | 11,69 | 3,55 | 11,01 | 3,96 |
| | 15 | 13,99 | 2,29 | 13,34 | 2,54 | 13,24 | 2,83 | 13,07 | 3,17 | 12,74 | 3,54 | 12,02 | 3,95 |
| | 20 | 15,90 | 2,23 | 15,20 | 2,49 | 15,13 | 2,79 | 14,98 | 3,13 | 14,22 | 3,51 | 13,46 | 3,93 |
| *RLQ014* | -20 | 10,54 | 5,17 | 10,49 | 5,52 | 10,37 | 5,89 | 8,45 | 5,89 | | | | |
| | -15 | 12,46 | 5,27 | 12,29 | 5,66 | 11,70 | 5,89 | 10,46 | 5,89 | 9,68 | 5,89 | | |
| | -7 | 14,01 | 4,73 | 13,69 | 5,16 | 13,40 | 5,64 | 12,88 | 5,89 | 11,51 | 5,89 | 10,26 | 5,89 |
| | -2 | 14,59 | 4,25 | 14,19 | 4,64 | 13,79 | 5,09 | 13,59 | 5,52 | 12,84 | 5,89 | 11,21 | 5,89 |
| | 2 | 14,78 | 3,79 | 14,30 | 4,13 | 13,81 | 4,53 | 13,39 | 4,88 | 12,90 | 5,29 | 12,38 | 5,84 |
| | 7 | 15,11 | 3,16 | 14,55 | 3,43 | 13,90 | 3,81 | 13,59 | 4,22 | 13,35 | 4,65 | 12,73 | 5,14 |
| | 12 | 15,99 | 3,06 | 15,36 | 3,36 | 14,74 | 3,71 | 14,40 | 4,10 | 14,18 | 4,53 | 13,54 | 5,01 |
| | 15 | 17,33 | 3,05 | 16,66 | 3,35 | 16,00 | 3,70 | 15,64 | 4,10 | 15,41 | 4,54 | 14,72 | 5,02 |
| | 20 | 19,77 | 3,02 | 19,04 | 3,33 | 18,30 | 3,68 | 17,92 | 4,09 | 17,17 | 4,53 | 16,41 | 5,02 |
| *RLQ016* | -20 | 11,52 | 5,85 | 11,64 | 6,26 | 11,56 | 6,59 | 9,26 | 6,58 | | | | |
| | -15 | 12,89 | 6,11 | 12,88 | 6,57 | 11,95 | 6,59 | 11,55 | 6,59 | 10,64 | 6,59 | | |
| | -7 | 15,23 | 5,27 | 14,89 | 5,71 | 14,54 | 6,19 | 13,74 | 6,59 | 12,42 | 6,59 | 11,12 | 6,59 |
| | -2 | 15,83 | 4,84 | 15,41 | 5,28 | 15,01 | 5,77 | 14,89 | 6,31 | 13,64 | 6,59 | 12,18 | 6,59 |
| | 2 | 16,09 | 4,30 | 15,62 | 4,68 | 15,16 | 5,14 | 14,97 | 5,55 | 14,43 | 6,18 | 13,46 | 6,59 |
| | 7 | 16,63 | 3,55 | 16,10 | 3,83 | 15,47 | 4,26 | 15,22 | 4,71 | 14,51 | 5,17 | 13,92 | 5,71 |
| | 12 | 17,34 | 3,45 | 16,74 | 3,78 | 16,13 | 4,15 | 15,76 | 4,58 | 15,13 | 5,05 | 14,51 | 5,58 |
| | 15 | 18,81 | 3,45 | 18,16 | 3,78 | 17,51 | 4,16 | 17,10 | 4,58 | 16,43 | 5,06 | 15,75 | 5,59 |
| | 20 | 21,49 | 3,43 | 20,77 | 3,77 | 20,04 | 4,15 | 19,59 | 4,59 | 18,83 | 5,07 | 18,07 | 5,61 |

**Maximum heating capacity - Integrated value**

| | LWC [°C] | 30 | | 35 | | 40 | | 45 | | 50 | | 55 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Tamb [°C] | HC [kW] | PI [kW] | HC [kW] | PI [kW] | HC [kW] | PI [kW] | HC [kW] | PI [kW] | HC [kW] | PI [kW] | HC [kW] | PI [kW] |
| *RLQ011* | -20 | 7,31 | 3,79 | 7,29 | 4,14 | 7,29 | 4,55 | 6,76 | 4,79 | | | | |
| | -15 | 8,78 | 3,99 | 8,67 | 4,36 | 8,49 | 4,75 | 7,78 | 4,76 | 6,88 | 4,78 | | |
| | -7 | 9,14 | 3,23 | 8,81 | 3,52 | 8,50 | 3,85 | 8,16 | 4,14 | 8,00 | 4,59 | 7,10 | 4,77 |
| | -2 | 9,56 | 3,00 | 9,16 | 3,27 | 8,77 | 3,59 | 8,56 | 3,90 | 8,59 | 4,38 | 7,84 | 4,69 |
| | 2 | 9,53 | 2,66 | 9,06 | 2,92 | 8,60 | 3,22 | 8,87 | 3,53 | 8,36 | 3,87 | 7,58 | 4,27 |
| | 7 | 11,92 | 2,38 | 11,38 | 2,64 | 11,18 | 2,92 | 11,00 | 3,25 | 10,65 | 3,61 | 9,99 | 4,02 |
| | 12 | 12,93 | 2,31 | 12,31 | 2,56 | 12,20 | 2,85 | 12,02 | 3,18 | 11,69 | 3,55 | 11,01 | 3,96 |
| | 15 | 13,99 | 2,29 | 13,34 | 2,54 | 13,24 | 2,83 | 13,07 | 3,17 | 12,74 | 3,54 | 12,02 | 3,95 |
| | 20 | 15,90 | 2,23 | 15,20 | 2,49 | 15,13 | 2,79 | 14,98 | 3,13 | 14,22 | 3,51 | 13,46 | 3,93 |
| *RLQ014* | -20 | 8,96 | 5,01 | 8,92 | 5,35 | 8,82 | 5,71 | 7,19 | 5,71 | | | | |
| | -15 | 10,34 | 5,06 | 10,20 | 5,43 | 9,71 | 5,65 | 8,90 | 5,66 | 8,24 | 5,69 | | |
| | -7 | 11,91 | 4,54 | 11,65 | 4,95 | 11,39 | 5,42 | 10,96 | 5,66 | 9,79 | 5,68 | 8,73 | 5,68 |
| | -2 | 11,38 | 3,81 | 11,07 | 4,16 | 10,76 | 4,56 | 10,46 | 4,92 | 10,20 | 5,33 | 8,92 | 5,33 |
| | 2 | 11,24 | 3,34 | 10,87 | 3,65 | 10,50 | 4,00 | 10,65 | 4,43 | 10,26 | 4,77 | 9,84 | 5,27 |
| | 7 | 15,11 | 3,16 | 14,55 | 3,43 | 13,90 | 3,81 | 13,59 | 4,22 | 13,35 | 4,65 | 12,73 | 5,14 |
| | 12 | 15,99 | 3,06 | 15,36 | 3,36 | 14,74 | 3,71 | 14,40 | 4,10 | 14,18 | 4,53 | 13,54 | 5,01 |
| | 15 | 17,33 | 3,05 | 16,66 | 3,35 | 16,00 | 3,70 | 15,64 | 4,10 | 15,41 | 4,54 | 14,72 | 5,02 |
| | 20 | 19,77 | 3,02 | 19,04 | 3,33 | 18,30 | 3,68 | 17,92 | 4,09 | 17,17 | 4,53 | 16,41 | 5,02 |
| *RLQ016* | -20 | 9,56 | 5,67 | 9,66 | 6,07 | 9,59 | 6,40 | 7,69 | 6,38 | | | | |
| | -15 | 10,57 | 5,84 | 10,56 | 6,28 | 9,86 | 6,30 | 9,55 | 6,34 | 8,79 | 6,38 | | |
| | -7 | 12,59 | 5,07 | 12,30 | 5,49 | 12,02 | 5,95 | 11,35 | 6,34 | 10,26 | 6,37 | 9,18 | 6,37 |
| | -2 | 12,11 | 4,32 | 11,79 | 4,71 | 11,48 | 5,15 | 11,39 | 5,63 | 10,44 | 5,86 | 9,32 | 5,86 |
| | 2 | 11,74 | 3,75 | 11,40 | 4,09 | 11,07 | 4,48 | 11,37 | 4,84 | 11,04 | 5,51 | 10,29 | 5,88 |
| | 7 | 16,63 | 3,55 | 16,10 | 3,83 | 15,47 | 4,26 | 15,22 | 4,71 | 14,51 | 5,17 | 13,92 | 5,71 |
| | 12 | 17,34 | 3,45 | 16,74 | 3,78 | 16,13 | 4,15 | 15,76 | 4,58 | 15,13 | 5,05 | 14,51 | 5,58 |
| | 15 | 18,81 | 3,45 | 18,16 | 3,78 | 17,51 | 4,16 | 17,10 | 4,58 | 16,43 | 5,06 | 15,75 | 5,59 |
| | 20 | 21,49 | 3,43 | 20,77 | 3,77 | 20,04 | 4,15 | 19,59 | 4,59 | 18,83 | 5,07 | 18,07 | 5,61 |

**Symbols:**

| | |
|---|---|
| HC | Heating capacity at maximum operating frequency, measured acc. EN14511 |
| PI | Power input, measured acc. EN14511 |
| LWE | Leaving Water Evaporator temperature |
| LWC | Leaving Water Condensor temperature |
| Tamb | Ambient temperature; RH (heating) = 85% |

**Notes:**

- The bottom plate heater is controlled by outdoor unit (linked at defrost operation) and power input is included
- The capacity and power input is valid for V3-models at 230V or W1-models at 400V
- The capacity and power input for Ta ≦ 7°C is at maximum operation and power input 100%
- The capacity and power input for Ta > 7°C is at nominal operation (nominal = maximum)

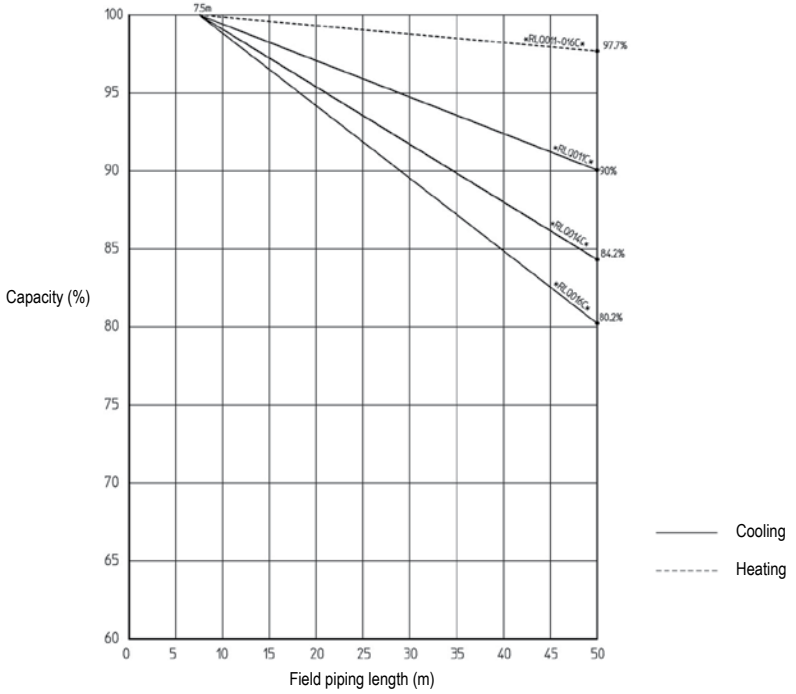
3TW60332-1B

# 4 Capacity tables

## 4 - 2 Heating Capacity Tables

**ERLQ011-016C**

Capacity in function of field piping length for inverter




**NOTE**

Capacity drop is at nominal capacity

3TW60332-5A

# 4 Capacity tables

## 4 - 3 Certification Programs



**ERLQ-CW1**

**Rated data for certification programmes - heating mode**

| | | Certification programme | Ta [°C] | EWC [°C] | LWC [°C] | HC [kW] | COP | Minimum required COP NF PAC | Minimum required COP EHPA | Minimum required COP Ecolabel | Minimum required COP SPF (DAB) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *RLQ011C* | Floor | EHPA | 10 | | 35 | 11,20 | 4,85 | - | - | - | - | - | - |
| | | NF PAC, EHPA | 7/6 | 30 | 35 | 11,20 | 4,60 | 3,40 | - | - | - | - | - |
| | | EHPA | 2/1 | | 35 | 8,56 | 3,60 | - | 3,10 | | - | - | - |
| | | SPF (DAB) | 2/1 | 30 | 35 | 5,71 | 3,71 | - | - | - | 3,71 | - | - |
| | | NF PAC, EHPA | -7/-8 | | 35 | 8,60 | 2,75 | 2,10 | - | - | - | - | - |
| | Fan coil | NF PAC | 7/6 | 40 | 45 | 11,00 | 3,55 | 2,70 | - | - | - | - | - |
| | | | 2/1 | | 45 | 8,20 | 2,84 | - | - | 2,60 | - | - | - |
| | | NF PAC | -7/-8 | | 45 | 8,60 | 2,10 | 1,60 | - | - | - | - | - |
| | Radiator | EHPA | 7/6 | 47 | 55 | 10,76 | 2,71 | - | - | - | - | - | - |
| | | EHPA | -7/-8 | | 55 | 8,79 | 1,74 | - | - | - | - | - | - |
| *RLQ014C* | Floor | EHPA | 10 | | 35 | 14,30 | 4,70 | - | - | - | - | - | - |
| | | NF PAC, EHPA | 7/6 | 30 | 35 | 14,40 | 4,24 | 3,40 | - | - | - | - | - |
| | | EHPA | 2/1 | | 35 | 10,20 | 3,35 | - | 3,10 | | - | - | - |
| | | SPF (DAB) | 2/1 | 30 | 35 | 5,71 | 3,71 | - | - | - | 3,71 | - | - |
| | | NF PAC, EHPA | -7/-8 | | 35 | 10,50 | 2,61 | 2,10 | - | - | - | - | - |
| | Fan coil | NF PAC | 7/6 | 40 | 45 | 13,50 | 3,28 | 2,70 | - | - | - | - | - |
| | | | 2/1 | | 45 | 9,90 | 2,63 | - | - | - | - | - | - |
| | | NF PAC | -7/-8 | | 45 | 10,70 | 2,05 | 1,60 | - | - | - | - | - |
| | Radiator | EHPA | 7/6 | 47 | 55 | 13,30 | 2,71 | - | - | - | - | - | - |
| | | EHPA | -7/-8 | | 55 | 10,83 | 1,74 | - | - | - | - | - | - |
| *RLQ016C* | Floor | EHPA | 10 | | 35 | 15,70 | 4,50 | - | - | - | - | - | - |
| | | NF PAC, EHPA | 7/6 | 30 | 35 | 15,90 | 4,22 | 3,40 | - | - | - | - | - |
| | | EHPA | 2/1 | | 35 | 10,90 | 3,31 | - | 3,10 | - | - | - | - |
| | | SPF (DAB) | 2/1 | 30 | 35 | 5,71 | 3,71 | - | - | - | 3,71 | - | - |
| | | NF PAC | -7/-8 | | 35 | 11,30 | 2,61 | 2,10 | - | - | - | - | - |
| | Fan coil | NF PAC | 7/6 | 40 | 45 | 15,10 | 3,23 | 2,70 | - | - | - | - | - |
| | | | 2/1 | | 45 | 10,80 | 2,63 | - | - | 2,60 | - | - | - |
| | | NF PAC | -7/-8 | | 45 | 10,80 | 2,07 | 1,60 | - | - | - | - | - |
| | Radiator | EHPA | 7/6 | 47 | 55 | 15,04 | 2,80 | - | - | - | - | - | - |
| | | EHPA | -7/-8 | | 55 | 10,79 | 1,71 | - | - | - | - | - | - |

**Rated data for certification programmes - standby power consumption**

| | Certification programme | |
|---|---|---|
| ***RLQ011C* V3** | NF PAC | 22W |
| ***RLQ011C* W1** | NF PAC | 25W |
| ***RLQ014C* V3** | NF PAC | 22W |
| ***RLQ014C* W1** | NF PAC | 25W |
| ***RLQ016C* V3** | NF PAC | 22W |
| ***RLQ016C* W1** | NF PAC | 25W |

Symbols

CC= Cooling capacity at nominal operating frequency, measured according to EN14511.
HC= Heating capacity at nominal operating frequency, measured according to EN14511.
COP/EER= Coefficient of Performance/Energy efficiency ratio according to EN 14511.
LWE= Leaving water evaporator temperature [°C]
LWC= Leaving water condensor temperature [°C]
Ta= Ambient temperature [°C DB/WB]

**3D091994**

**ERLQ-CW1**

**Rated data for certification programmes - heating mode**

| | | Certification programme | Ta [°C] | EWC [°C] | LWC [°C] | HC [kW] | COP | Minimum required COP NF PAC | Minimum required COP EHPA | Minimum required COP Ecolabel | Minimum required COP SPF (DAB) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *RLQ011C* | Floor | EHPA | 10 | | 35 | 11,20 | 4,85 | - | - | - | - | - | - |
| | | NF PAC, EHPA | 7/6 | 30 | 35 | 11,20 | 4,60 | 3,40 | - | - | - | - | - |
| | | EHPA | 2/1 | | 35 | 8,56 | 3,60 | - | 3,10 | - | - | - | - |
| | | Ecolabel | 2/1 | 30 | 35 | 8,56 | 3,60 | - | - | 3,10 | - | - | - |
| | | SPF (DAB) | 2/1 | 30 | 35 | 5,71 | 3,71 | - | - | - | 3,71 | - | - |
| | | NF PAC, EHPA, Piemonte (Italy) | -7/-8 | | 35 | 8,60 | 2,75 | 2,10 | - | - | - | - | - |
| | Fan coil | NF PAC | 7/6 | 40 | 45 | 11,00 | 3,55 | 2,70 | - | - | - | - | - |
| | | | 2/1 | | 45 | 8,20 | 2,84 | - | - | 2,60 | - | - | - |
| | | NF PAC | -7/-8 | | 45 | 8,60 | 2,10 | 1,60 | - | - | - | - | - |
| | | Ecolabel | 2/1 | 40 | 45 | 8,20 | 2,80 | - | - | - | - | - | - |
| | Radiator | EHPA | 7/6 | 47 | 55 | 10,76 | 2,71 | - | - | - | - | - | - |
| | | EHPA | -7/-8 | | 55 | 8,79 | 1,74 | - | - | - | - | - | - |
| *RLQ014C* | Floor | EHPA | 10 | | 35 | 14,30 | 4,70 | - | - | - | - | - | - |
| | | NF PAC, EHPA | 7/6 | 30 | 35 | 14,50 | 4,30 | 3,40 | - | - | - | - | - |
| | | EHPA | 2/1 | | 35 | 10,30 | 3,41 | - | 3,10 | - | - | - | - |
| | | Ecolabel | 2/1 | 30 | 35 | 10,30 | 3,41 | - | - | 3,10 | - | - | - |
| | | SPF (DAB) | 2/1 | 30 | 35 | 5,71 | 3,71 | - | - | - | 3,71 | - | - |
| | | NF PAC, EHPA | -7/-8 | | 35 | 10,60 | 2,65 | 2,10 | - | - | - | - | - |
| | | Piemonte (Italy) | -7/-8 | | 35 | 8,60 | 2,75 | - | - | - | - | - | - |
| | Fan coil | NF PAC | 7/6 | 40 | 45 | 13,60 | 3,32 | 2,70 | - | - | - | - | - |
| | | | 2/1 | | 45 | 10,00 | 2,67 | - | - | - | - | - | - |
| | | NF PAC | -7/-8 | | 45 | 10,80 | 2,08 | 1,60 | - | - | - | - | - |
| | | Ecolabel | 2/1 | 40 | 45 | 10,00 | 2,70 | - | - | 2,60 | - | - | - |
| | Radiator | EHPA | 7/6 | 47 | 55 | 13,30 | 2,71 | - | - | - | - | - | - |
| | | EHPA | -7/-8 | | 55 | 10,83 | 1,74 | - | - | - | - | - | - |
| *RLQ016C* | Floor | EHPA | 10 | | 35 | 15,70 | 4,50 | - | - | - | - | - | - |
| | | NF PAC, EHPA | 7/6 | 30 | 35 | 16,00 | 4,25 | 3,40 | - | - | - | - | - |
| | | EHPA | 2/1 | | 35 | 11,10 | 3,35 | - | 3,10 | - | - | - | - |
| | | Ecolabel | 2/1 | 30 | 35 | 11,10 | 3,35 | - | - | 3,10 | - | - | - |
| | | SPF (DAB) | 2/1 | 30 | 35 | 5,71 | 3,71 | - | - | - | 3,71 | - | - |
| | | NF PAC | -7/-8 | | 35 | 11,40 | 2,64 | 2,10 | - | - | - | - | - |
| | | Piemonte (Italy) | -7/-8 | | 35 | 8,60 | 2,75 | - | - | - | - | - | - |
| | Fan coil | NF PAC | 7/6 | 40 | 45 | 15,20 | 3,26 | 2,70 | - | - | - | - | - |
| | | | 2/1 | | 45 | 10,90 | 2,69 | - | - | 2,60 | - | - | - |
| | | NF PAC | -7/-8 | | 45 | 10,90 | 2,09 | 1,60 | - | - | - | - | - |
| | | Ecolabel | 2/1 | 40 | 45 | 10,90 | 2,66 | - | - | - | - | - | - |
| | Radiator | EHPA | 7/6 | 47 | 55 | 15,04 | 2,80 | - | - | - | - | - | - |
| | | EHPA | -7/-8 | | 55 | 10,79 | 1,71 | - | - | - | - | - | - |

**Rated data for certification programmes - cooling mode**

| | | Certification programme | Ta [°C] | EWC [°C] | LWC [°C] | CC [kW] | EER | Minimum required EER Ecolabel | Minimum required EER Italy D1 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *RLQ011C* | Floor | Ecolabel, Italy D1 | 35 | 23 | 18 | 12,13 | 3,98 | 2,20 | 3,60 | - | - | - | - | - |
| | Fan coil | Ecolabel | 35 | 12 | 7 | 11,72 | 2,72 | 2,20 | | - | - | - | - | - |
| *RLQ014C* | Floor | Ecolabel, Italy D1 | 35 | 23 | 18 | 12,72 | 3,96 | 2,20 | 3,60 | - | - | - | - | - |
| | Fan coil | Ecolabel | 35 | 12 | 7 | 12,55 | 2,47 | 2,20 | | - | - | - | - | - |
| *RLQ016C* | Floor | Ecolabel, Italy D1 | 35 | 23 | 18 | 13,79 | 3,69 | 2,20 | 3,60 | - | - | - | - | - |
| | Fan coil | Ecolabel | 35 | 12 | 7 | 13,12 | 2,29 | 2,20 | | - | - | - | - | - |

**Rated data for certification programmes - standby power consumption**

| | Certification programme | |
|---|---|---|
| *RLQ011C* V3 | NF PAC | 22W |
| *RLQ011C* W1 | NF PAC | 25W |
| *RLQ014C* V3 | NF PAC | 22W |
| *RLQ014C* W1 | NF PAC | 25W |
| *RLQ016C* V3 | NF PAC | 22W |
| *RLQ016C* W1 | NF PAC | 25W |

Symbols

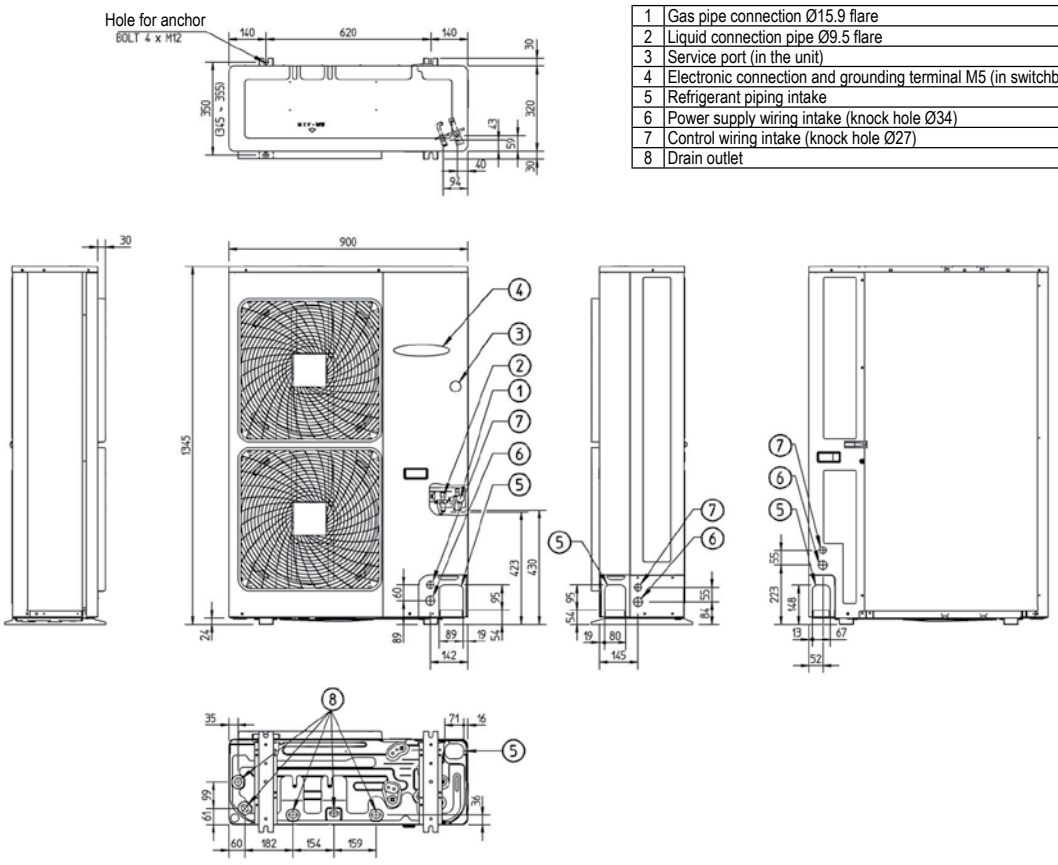
CC= Cooling capacity at nominal operating frequency, measured according to EN14511.
HC= Heating capacity at nominal operating frequency, measured according to EN14511.
COP/EER= Coefficient of Performance/Energy efficiency ratio according to EN 14511.
LWE= Leaving water evaporator temperature [°C]
LWC= Leaving water condensor temperature [°C]
Ta= Ambient temperature [°C DB/WB]

**3TW60332-3F**

# 5 Dimensional drawings

## 5 - 1 Dimensional Drawings

**ERLQ011-016CW1**



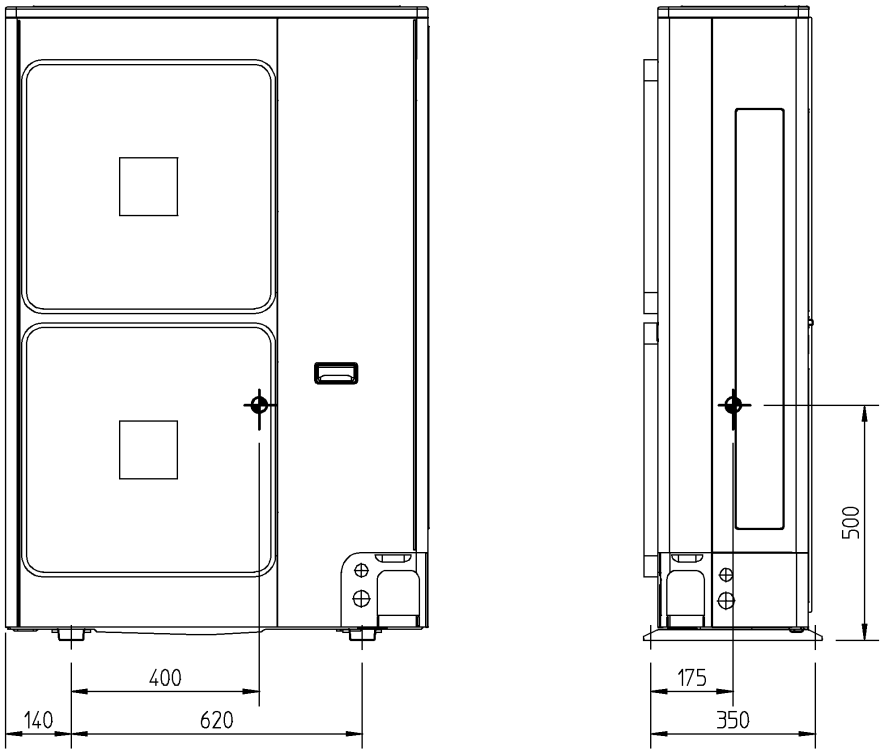

| | |
|---|---|
| 1 | Gas pipe connection Ø15.9 flare |
| 2 | Liquid connection pipe Ø9.5 flare |
| 3 | Service port (in the unit) |
| 4 | Electronic connection and grounding terminal M5 (in switchbox) |
| 5 | Refrigerant piping intake |
| 6 | Power supply wiring intake (knock hole Ø34) |
| 7 | Control wiring intake (knock hole Ø27) |
| 8 | Drain outlet |

3TW60334-1

# 6 Centre of gravity

## 6 - 1 Centre of Gravity

**ERLQ-CW1**



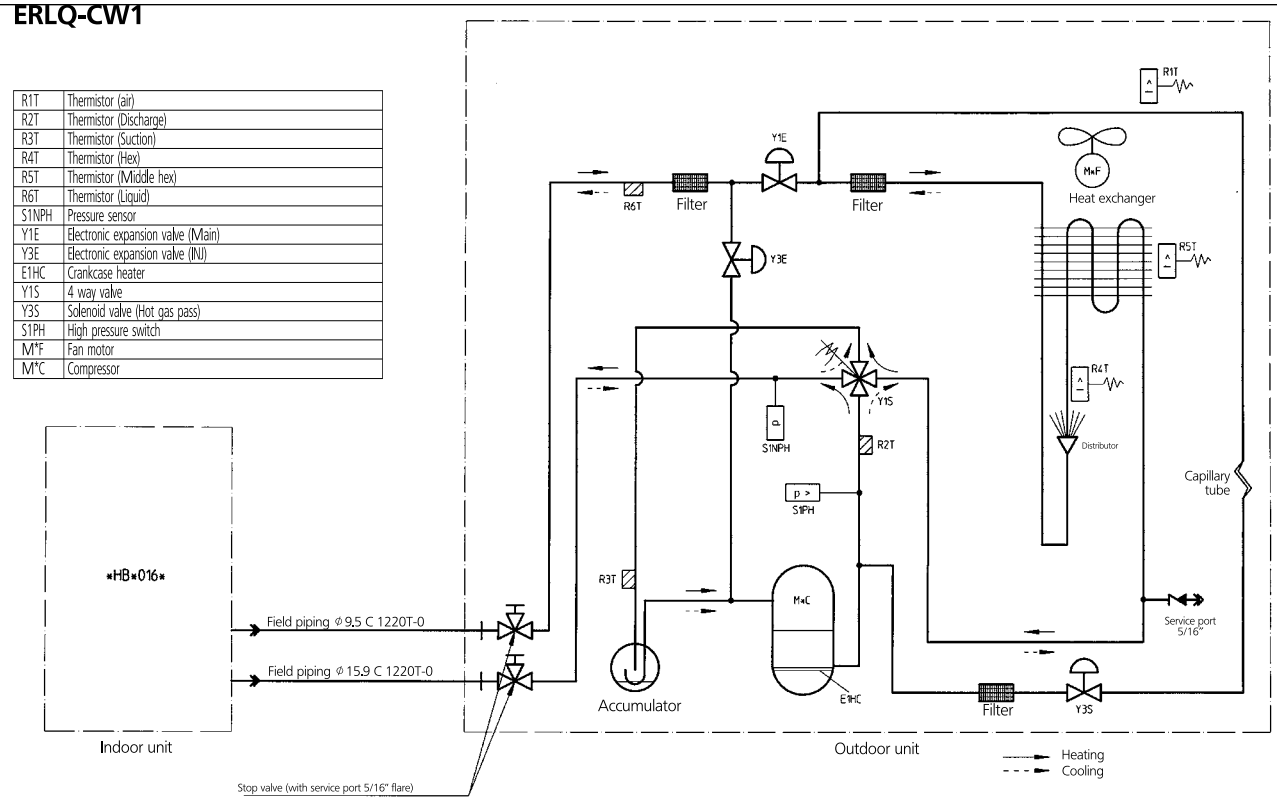

4TW57919-5

# 7 Piping diagrams

## 7 - 1 Piping Diagrams

**ERLQ-CW1**

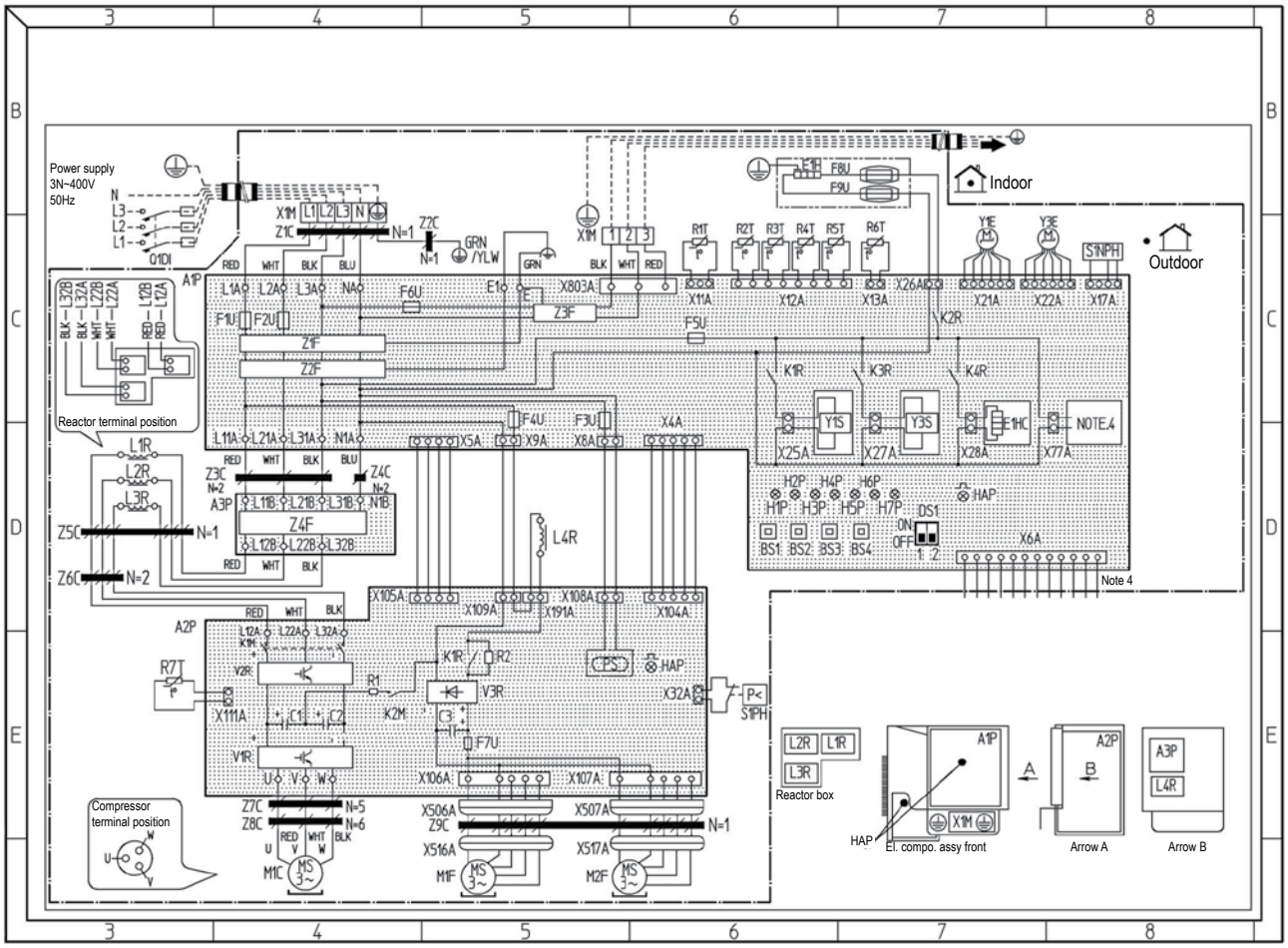
| | |
|---|---|
| R1T | Thermistor (air) |
| R2T | Thermistor (Discharge) |
| R3T | Thermistor (Suction) |
| R4T | Thermistor (Hex) |
| R5T | Thermistor (Middle hex) |
| R6T | Thermistor (Liquid) |
| S1NPH | Pressure sensor |
| Y1E | Electronic expansion valve (Main) |
| Y3E | Electronic expansion valve (INJ) |
| E1HC | Crankcase heater |
| Y1S | 4 way valve |
| Y3S | Solenoid valve (Hot gas pass) |
| S1PH | High pressure switch |
| M*F | Fan motor |
| M*C | Compressor |



# 8 Wiring diagrams

## 8 - 1 Wiring Diagrams - Three Phase

**ERLQ011-016CW1**




| | | | | | |
|---|---|---|---|---|---|
| A1P | Printed circuit board (control) | H1P~7P (A1P) | Pilot lamp (service monitor-orange) | R5T | Thermistor (heat exchanger middle) |
| A2P | Printed circuit board (inv) | K1M-K2M | Magnetic contactor (main - upload) | R6T | Thermistor (liquid) |
| A3P | Printed circuit board (noise filter) | K1R (A1P) | Magnetic relay (Y1S) | R7T | Thermistor (fin) |
| BS1~BS4 | Push button switch | K1R (A2P) | Magnetic relay (upload) | S1NPH | Pressure sensor |
| C1~C4 | Capacitor | K2R (A1P) | Magnetic relay (E1H) | SPH | Pressure switch (high) |
| DS1 | Dip switch | K3R (A1P) | Magnetic relay (Y3S) | V1R,V2R | Power module |
| E1HC | Crankcase heater | K4R (A1P) | Magnetic relay (E1HC) | V3R | Diode module |
| E1H | Bottomplate heater | L1R~L3R | Reactor | X1M | Terminal strip |
| F1U | Fuse (31.5A 500V) | L4R | Reactor (for outdoor fan motor) | Y1E | Electronic expansion valve (main) |
| F2U | Fuse (31.5A 500V) | M1C | Motor (compressor) | Y3E | Electronic expansion valve (inj) |
| F3U | Fuse (T 6.3A / 250V) | M1F | Motor (fan) (upper) | Y1S | Solenoid valve (4 way valve) |
| F4U | Fuse (T 6.3A / 250V) | M2F | Motor (fan) (lower) | Y3S | Solenoid valve (hot gas pass) |
| F5U | Fuse (T 6.3A / 250V) | PS | Swtiching power supply | Z1C~Z3C | Noise filter |
| F6U | Fuse (T 6.3A / 250V) | R1~R4 | Resistor | Z1F~Z4F | Noise filter |
| F7U | Fuse (T 5.0A / 250V) | R1T | Thermistor (air) | Q1DI | Earth leakage circuit breaker |
| F8U,F9U | Fuse (F 1.0A / 250V) | R2T | Thermistor (discharge) | Optional connector | |
| HAP (A1P) | Pilot lamp (service monitor-green) | R3T | Thermistor (suction) | X6A | Connector |
| HAP (A2P) | Pilot lamp (service monitor-green) | R4T | Thermistor (heat exchanger) | X77A | Connector |

2TW60336-1

**NOTES**

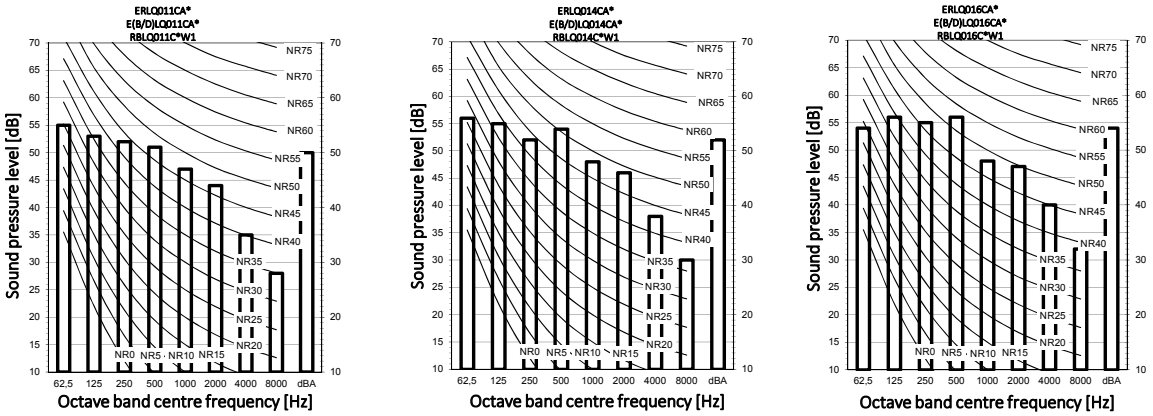
1. This wiring diagram only applies to the outdoor unit
2. L: live, N: neutral, ▬▮▮▮▬: field wiring
3. ▭▭▭: terminal strip, ▭○○▭: connector, —●—: connection, ⏚: protective earth (screw), —▮▶—: connector, ⏚: noiseless earth, —○—: terminal
4. Refer to the option manual, for connecting wiring to X6A and X77A.
5. Refer to the 'wiring diagram sticker' (on back of front plate) on how to use BS1~BS4 and DS1 switch
6. Do not operate the unit by short-circuiting protection device S1PH
7. Colors: BLU= blue, BRN= brown, GRN= green, RED= red, WHT= white, YLW= yellow, ORG= orange, BLK= black
8. Confirm the method of setting the selector switches (DS1) by service manual; Factory setting of all switches: "off"
9. ▭: option, ┆┆: wiring dependent on model

# 9 Sound data

## 9 - 1 Sound Pressure Spectrum - Cooling

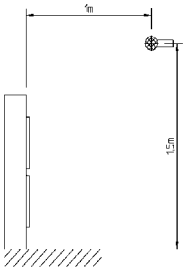
**ERLQ011-016CV3**
**ERLQ011-016CW1**

**Cooling**




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)

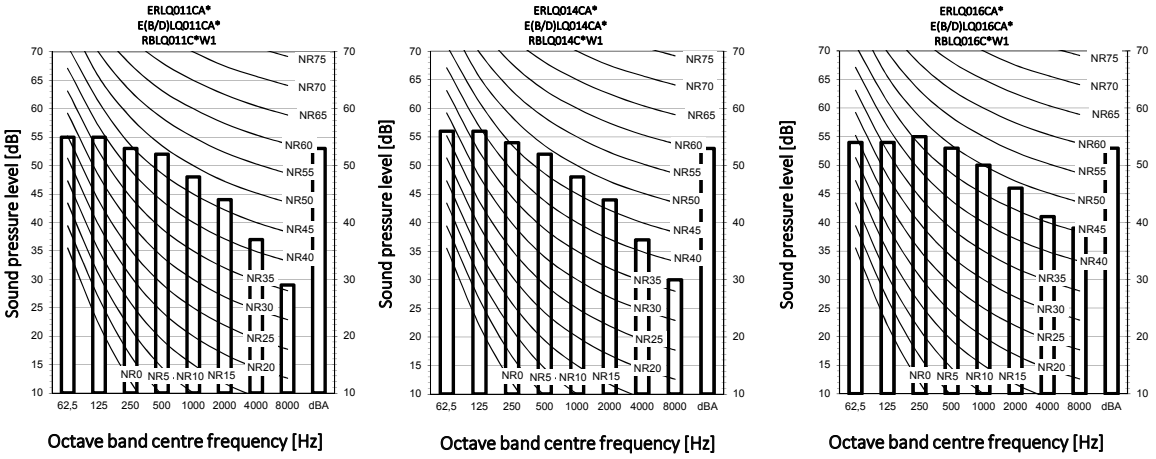
**3TW60337-1B**

# 9 Sound data

## 9 - 2 Sound Pressure Spectrum - Heating

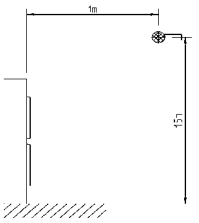
**ERLQ011-016CV3**
**ERLQ011-016CW1**

**Heating**




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)

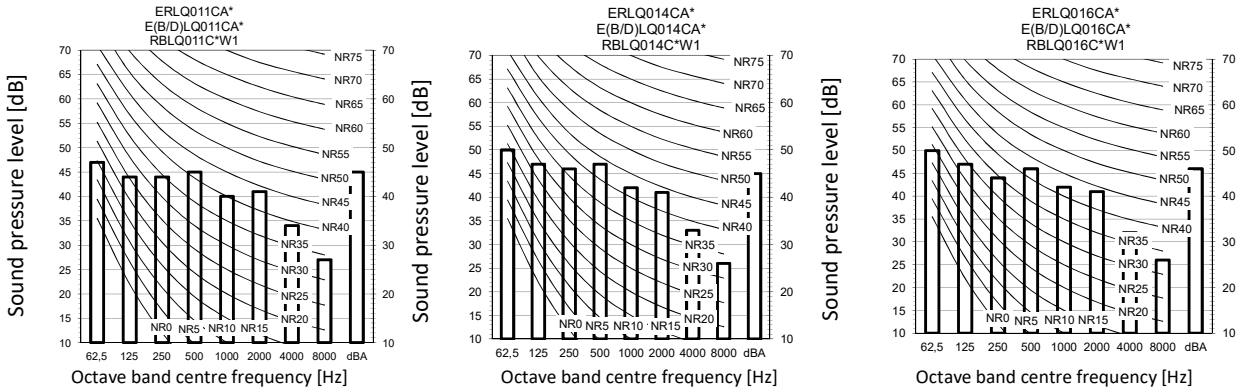
**3TW60337-2B**

# 9 Sound data

## 9 - 3 Sound Pressure Spectrum Quiet Mode

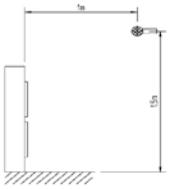
**ERLQ011-016CV3**
**ERLQ011-016CW1**

### Cooling




Notes

1. Data is valid at free field condition.
   Measured in a semi-anechoic chamber
2. The data applies to level 2 of Night Quiet mode.
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.

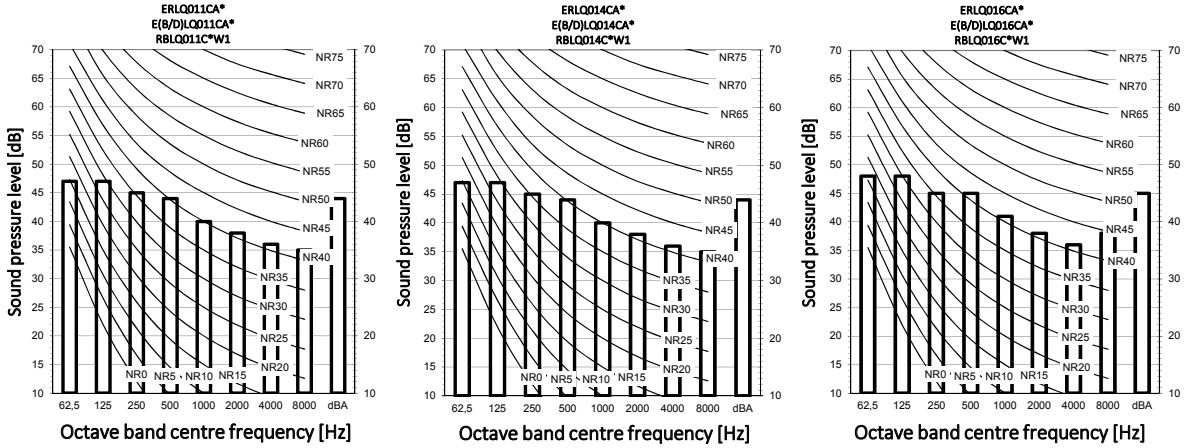



Measuring location (discharge side)

**3TW60337-3B**

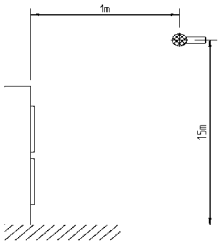
**ERLQ011-016CV3**
**ERLQ011-016CW1**

### Heating




Notes

1. Data is valid at free field condition.
   Measured in a semi-anechoic chamber
2. The data applies to level 2 of Night Quiet mode.
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)

**3TW60337-4B**

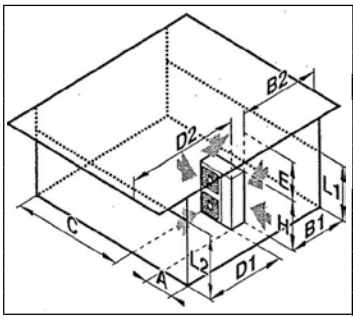
# 10 Installation

## 10 - 1 Installation Method

**ERLQ011-016C**



### Installation servicing space




| ↙ | ↗ | ↘ | ↖ | ↓ | | | A | B1 | B2 | C | D1 | D2 | E | L1/L2 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ✓ | | | | | | | | ≥200 | | | | | | | |
| ✓ | | ✓ | ✓ | | | | ≥200 | ≥200 | | ≥200 | | | | | |
| ✓ | | | | ✓ | | | | ≥200 | | | | ≥500 | ≥1000 | | |
| ✓ | | ✓ | ✓ | ✓ | | | ≥300 | ≥300 | | ≥300 | | ≥500 | ≥1000 | | 1 |
| | ✓ | | | | | | | | | | ≥500 | | | | |
| | ✓ | | | ✓ | | | | | ≥500 | | ≥500 | | ≥1000 | | |
| ✓ | ✓ | | | | L1<L2 | | | ≥200 | | | ≥500 | | | | |
| | | | | | L2<L1 | | | ≥200 | | | ≥500 | | | | |
| ✓ | ✓ | | | ✓ | L1<L2 | L1≤H | | ≥350 | ≥500 | | ≥750 | | ≥1000 | 0<L1≤1/2H | 2 |
| | | | | | | | | | | | ≥1000 | | | 0<L1≤1/2H | |
| | | | | | | ~~H<L1~~ | L1≤H | | | | | | | | |
| | | | | | L2<L1 | L2≤H | | ≥200 | | | ≥1000 | ≥500 | ≥1000 | 0<L2≤1/2H | |
| | | | | | | | | ≥300 | | | | | | 1/2H<L2≤H | |
| | | | | | | ~~H<L2~~ | L2≤H | | | | | | | | |

**NOTES**

Legend (Unit: mm)

- ↙ Suction side obstacle
- ↗ Discharge side obstacle
- ↘ Left side obstacle
- ↖ Right side obstacle
- ↓ Top side obstacle
- ✓ Obstacle is present
- ~~⟋~~ This situation is not allowed

1 Recommended installation set-up for the ERLQ011~016*
(to prevent exposure to wind or that the heat exchanger coil is affected by snow)

2 In these cases, close bottom of the installation frame to prevent discharged air from being bypassed

3TW60339-1

# 10 Installation

## 10 - 1 Installation Method

**ERLQ011-016C**

### Installation guidelines / precautions Daikin Altherma



#### Outdoor unit

Installation location (general)

Select an installation site that meets the following requirements:

- The foundation must be strong enough to support the weight of the unit. The floor is flat to prevent vibrations and noise generation and to have sufficient stability.
- The space around the unit is adequate for maintenance/servicing and allows for sufficient air circulation.(Refer to “Installation and service space” information sheet}
- There is no danger of fire due to leakage of inflammable gas.
- The equipment is not intended for use in a potentially explosive atmosphere.
- Select the location of the unit in such a way that the sound and discharged cold/hot air generated by the unit does not disturb anyone, and the location is selected according the applicable legislation.
- All piping lengths and distances have been taken into consideration (refer to “Technical specification” information sheet).
- Take care that in the event of a water leak, water cannot cause any damage to the installation space and surroundings.
- Install units, power cords and inter-unit cables at least 3 m away from television and radio sets. This is to prevent interference to images and sounds.
- Depending on radio wave conditions, electromagnetic interference may still occur even if installed more than 3 m away.

Do not install in the following locations:

- Locations where sulphurous acids and other corrosive gases may be present in the atmosphere.
- Locations where a mineral oil mist, spray or vapour may be present in the atmosphere.
- Locations where flammable gases may leak, where thinner, gasoline and other volatile substances are handled, or where carbon dust and other incendiary substances are found in the atmosphere.
- In areas where the air contains high levels of salt such as that near the ocean.
- To prevent exposure to wind, install the outdoor unit with its suction side facing the wall.
- Never install the outdoor unit at a site where the suction side (left and back) may be exposed directly to wind, snow. (See “Installation and Service space” information sheet and figure 1)

Installation location (in cold climates)

- To prevent exposure to wind, install a baffle plate on the air discharge side of the outdoor unit.
- Unit should be installed in a way that a minimum of 10 cm free space is assured below the unit’s bottom plate at all conditions (prevent burying in snow), e.g.: heavy snowfall (if necessary construct a pedestal).
- In heavy snowfall areas it is very important to select an installation site where the snow will not affect the unit. Make sure that the heat exchanger coil (left and back side) is not affected by the snow (if necessary construct a lateral canopy and baffle plate on the air side).
- Recommended installation set-up. (See “Installation and Service space” information sheet and figure 2)

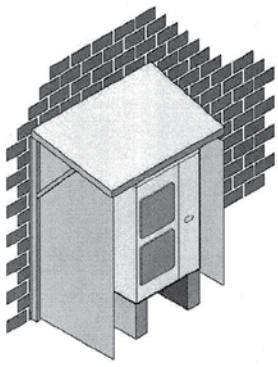


Figure 1: construction to prevent exposure to wind and snow

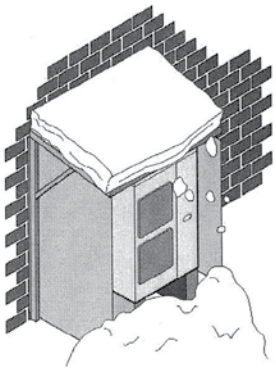


Figure 2: construction to prevent affect of snow to the unit

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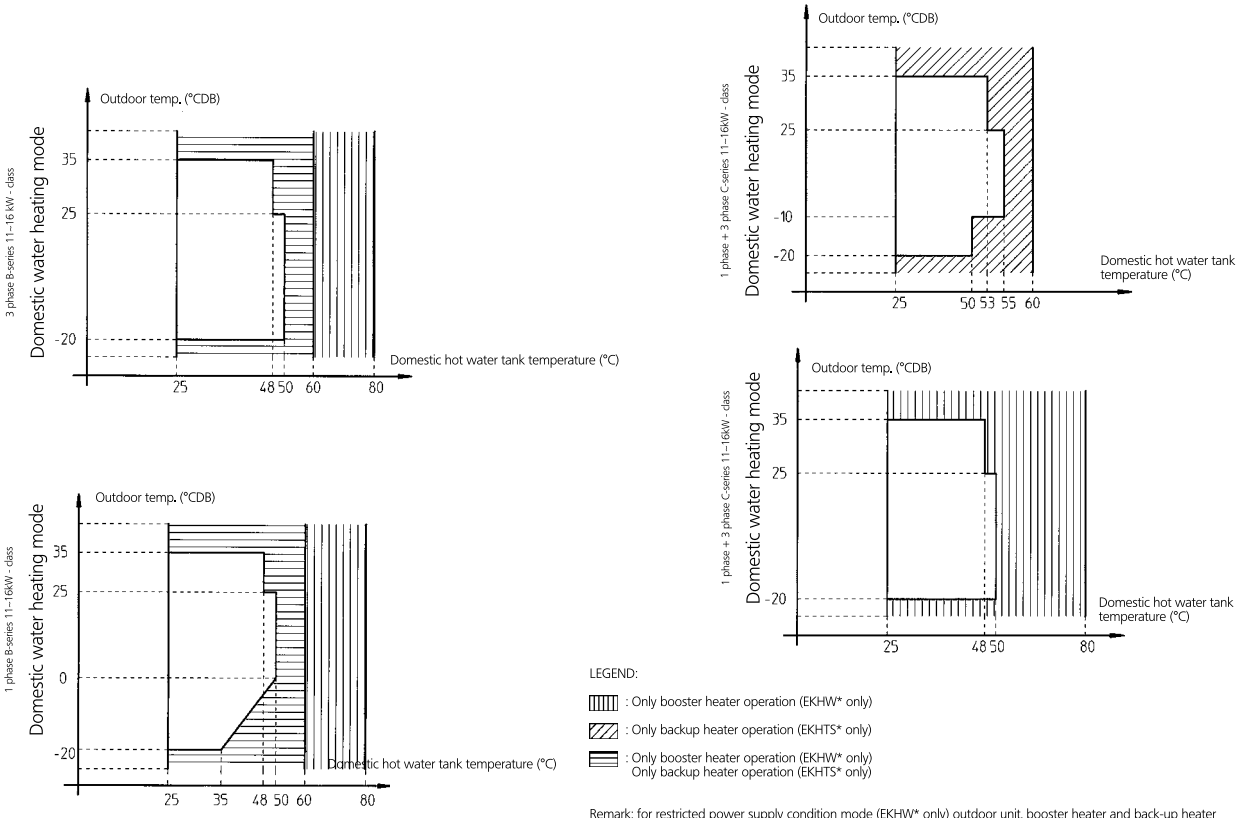
# 11 Operation range

## 11 - 1 Operation Range

**ERLQ-CW1**




LEGEND:

: Only booster heater operation (EKHW* only)

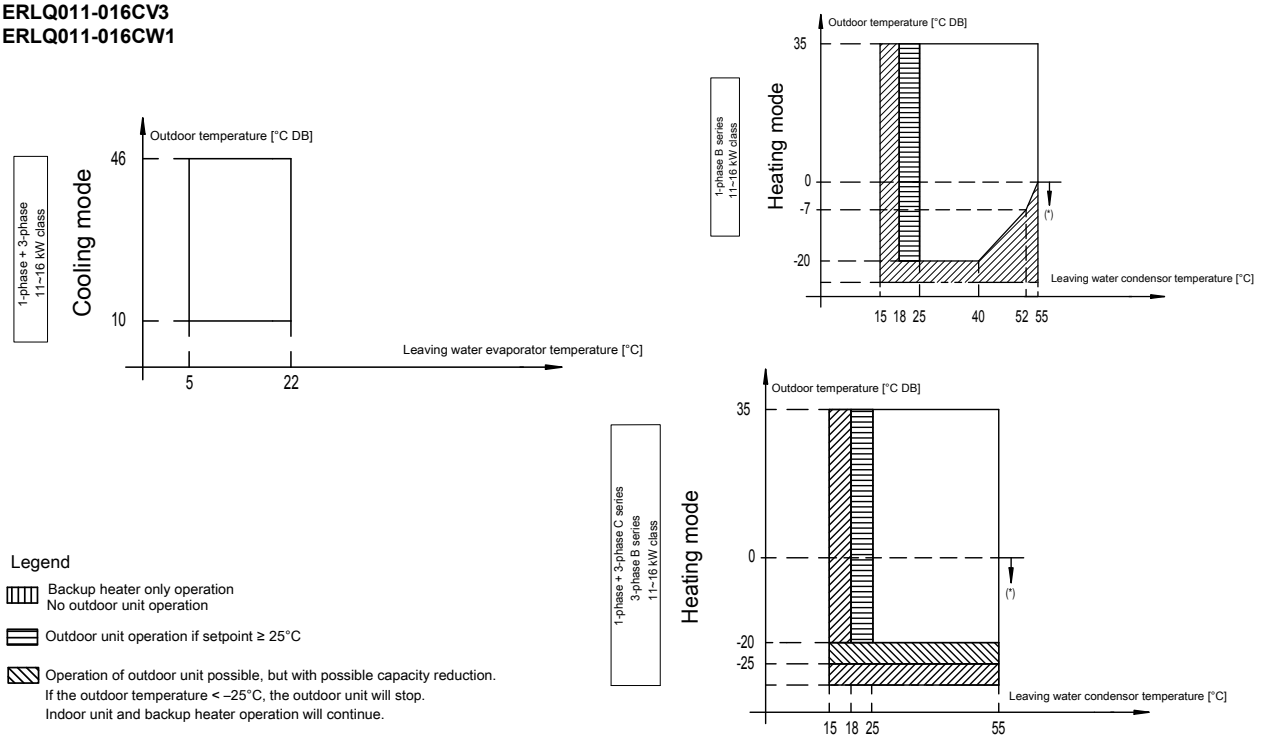
: Only backup heater operation (EKHTS* only)

: Only booster heater operation (EKHW* only)
Only backup heater operation (EKHTS* only)

Remark: for restricted power supply condition mode (EKHW* only) outdoor unit, booster heater and back-up heater can only operate seperately.

3TW60343-2B

**ERLQ011-016CV3**
**ERLQ011-016CW1**




Legend

Backup heater only operation
No outdoor unit operation

Outdoor unit operation if setpoint ≥ 25°C

Operation of outdoor unit possible, but with possible capacity reduction.
If the outdoor temperature < –25°C, the outdoor unit will stop.
Indoor unit and backup heater operation will continue.

Pull-down area

Remark

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

(*) *RLQ units include special equipment (insulation, heater sheet, ...) to ensure proper operation in areas with low ambient temperatures and high humidity conditions.
In such conditions, the *RHQ models may experience problems with severe ice buildup on the air-cooled coil.
If such conditions are expected, the *RLQ must be installed instead.
These models contain countermeasures (insulation, heater sheet, ...) to prevent freeze-up.

**3TW60343-1C**

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EEDEN21 02/2021