

Subtype DAIKIN ALTHERMA 3 R ECH2O 11-16kW (500L)

Certificate Holder	DAIKIN Europe N.V.
Address	Zandvoordestraat 300
ZIP	B-8400
City	Oostende
Country	BE
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	DAIKIN ALTHERMA 3 R ECH2O 11-16kW (500L)
Registration number	011-1W0494
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	3.8 kg
Certification Date	23.11.2021
Testing basis	HP KEYMARK certification scheme rules rev. 14
Testing laboratory	Centro de Ensayos, Innovación y Servicios (CEIS), ES

**Model ERLA11DV3 / EBSH(B)11P50D**

Model name	ERLA11DV3 / EBSH(B)11P50D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	126 %
COP	3.05
Heating up time	2:34 h:min
Standby power input	36.4 W
Reference hot water temperature	44.1 °C
Mixed water at 40°C	242 l

**EN 16147 | Warmer Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	153 %
COP	3.68
Heating up time	2:49 h:min
Standby power input	35.5 W
Reference hot water temperature	44.1 °C
Mixed water at 40°C	242 l

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	10.56 kW	10.64 kW
El input	2.19 kW	3.62 kW
COP	4.83	2.94

**EN 14511-2 | Cooling**

El input	+7°C/+12°C	+18°C/+23°C
Cooling capacity	3.47 kW	
EER	11.2	
	3.22	

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	44.7 dB(A)	44.7 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
ηs	182 %	126 %
Prated	10 kW	10 kW
SCOP	4.63	3.23
Tbiv	-8 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.2 kW	7.9 kW
COP Tj = -7°C	3.03	1.89
Cdh Tj = -7 °C	1	
Pdh Tj = +2°C	5.5 kW	5.4 kW
COP Tj = +2°C	4.37	3.25
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	4.6 kW	4.4 kW
COP Tj = +7°C	6.74	4.81
Cdh Tj = +7 °C	1	1
Pdh Tj = 12°C	5.4 kW	5.3 kW
COP Tj = 12°C	8.54	6.41
Cdh Tj = +12 °C	1	1
Pdh Tj = Tbiv	9.2 kW	8.2 kW
COP Tj = Tbiv	3.01	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.4 kW	6.8 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.73	1.68
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1	1
WTOL	35 °C	55 °C
Poff	23 W	23 W
PTO	23 W	23 W
PSB	23 W	23 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.6 kW	3.2 kW
Annual energy consumption Qhe	4462 kWh	6397 kWh

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	45 dB(A)	45 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
$\eta_s$	237 %	161 %
Prated	10 kW	10 kW
SCOP	6	4.1
Tbiv	3 °C	4 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	9.8 kW	9 kW
COP Tj = +2°C	3.64	2.24
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	6.7 kW	6.2 kW
COP Tj = +7°C	5.7	3.74
Cdh Tj = +7 °C	1	1
Pdh Tj = 12°C	5.2 kW	5 kW
COP Tj = 12°C	7.87	5.68
Cdh Tj = +12 °C	1	1
Pdh Tj = Tbiv	9.2 kW	8.5 kW
COP Tj = Tbiv	3.81	2.41
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.76 kW	8.99 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.64	2.24
WTOL	35 °C	55 °C
Poff	23 W	23 W
PTO	23 W	23 W
PSB	23 W	23 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.24 kW	1.01 kW
Annual energy consumption Qhe	2228 kWh	3258 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
Pdesignc	11 kW	
SEER	5.92	
Pdc Tj = 35°C	11 kW	
EER Tj = 35°C	3.19	
Pdc Tj = 30°C	8.1 kW	
EER Tj = 30°C	4.94	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	5.7 kW	

EER Tj = 25°C	7.18
Cdc Tj = 25 °C	0.97
Pdc Tj = 20°C	5.9 kW
EER Tj = 20°C	8.47
Cdc Tj = 20 °C	0.97
Poff	23 W
PTO	23 W
PSB	23 W
PCK	0 W
Annual energy consumption Qce	1116 kWh

**Model ERLA11DV3 / EBSX(B)11P50D**

Model name	ERLA11DV3 / EBSX(B)11P50D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	126 %
COP	3.05
Heating up time	2:34 h:min
Standby power input	36.4 W
Reference hot water temperature	44.1 °C
Mixed water at 40°C	242 l

**EN 16147 | Warmer Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	153 %
COP	3.68
Heating up time	2:49 h:min
Standby power input	35.5 W
Reference hot water temperature	44.1 °C
Mixed water at 40°C	242 l

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	10.56 kW	10.64 kW
El input	2.19 kW	3.62 kW
COP	4.83	2.94

**EN 14511-2 | Cooling**

El input	+7°C/+12°C	+18°C/+23°C
Cooling capacity	3.47 kW	
EER	11.2	
	3.22	

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	44.7 dB(A)	44.7 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
ηs	186 %	128 %
Prated	10 kW	10 kW
SCOP	4.72	3.27
Tbiv	-8 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.2 kW	7.9 kW
COP Tj = -7°C	3.03	1.89
Cdh Tj = -7 °C	1	
Pdh Tj = +2°C	5.5 kW	5.4 kW
COP Tj = +2°C	4.37	3.25
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	4.6 kW	4.4 kW
COP Tj = +7°C	6.74	4.81
Cdh Tj = +7 °C	1	1
Pdh Tj = 12°C	5.4 kW	5.3 kW
COP Tj = 12°C	8.54	6.41
Cdh Tj = +12 °C	1	1
Pdh Tj = Tbiv	9.2 kW	8.2 kW
COP Tj = Tbiv	3.01	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.4 kW	6.8 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.73	1.68
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1	1
WTOL	35 °C	55 °C
Poff	23 W	23 W
PTO	23 W	23 W
PSB	23 W	23 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.6 kW	3.2 kW
Annual energy consumption Qhe	4378 kWh	6312 kWh

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	45 dB(A)	45 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
$\eta_s$	248 %	166 %
Prated	10 kW	10 kW
SCOP	6	4.1
Tbiv	3 °C	4 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	9.8 kW	9 kW
COP Tj = +2°C	3.64	2.24
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	6.7 kW	6.2 kW
COP Tj = +7°C	5.7	3.74
Cdh Tj = +7 °C	1	1
Pdh Tj = 12°C	5.2 kW	5 kW
COP Tj = 12°C	7.87	5.68
Cdh Tj = +12 °C	1	1
Pdh Tj = Tbiv	9.2 kW	8.5 kW
COP Tj = Tbiv	3.81	2.41
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.76 kW	8.99 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.64	2.24
WTOL	35 °C	55 °C
Poff	23 W	23 W
PTO	23 W	23 W
PSB	23 W	23 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.24 kW	1.01 kW
Annual energy consumption Qhe	2126 kWh	3157 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
Pdesignc	11 kW	
SEER	5.92	
Pdc Tj = 35°C	11 kW	
EER Tj = 35°C	3.19	
Pdc Tj = 30°C	8.1 kW	
EER Tj = 30°C	4.94	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	5.7 kW	

EER Tj = 25°C	7.18
Cdc Tj = 25 °C	0.97
Pdc Tj = 20°C	5.9 kW
EER Tj = 20°C	8.47
Cdc Tj = 20 °C	0.97
Poff	23 W
PTO	23 W
PSB	23 W
PCK	0 W
Annual energy consumption Qce	1116 kWh

**Model ERLA11DW1 / EBSH(B)11P50D**

Model name	ERLA11DW1 / EBSH(B)11P50D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	128 %
COP	3.1
Heating up time	2:34 h:min
Standby power input	31.4 W
Reference hot water temperature	44.1 °C
Mixed water at 40°C	242 l

**EN 16147 | Warmer Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	155 %
COP	3.76
Heating up time	2:49 h:min
Standby power input	30.5 W
Reference hot water temperature	44.1 °C
Mixed water at 40°C	242 l

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	10.56 kW	10.64 kW
El input	2.19 kW	3.62 kW
COP	4.83	2.94

**EN 14511-2 | Cooling**

El input	+7°C/+12°C	+18°C/+23°C
Cooling capacity	3.47 kW	
EER	11.2	
	3.22	

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	44.7 dB(A)	44.7 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
ηs	182 %	126 %
Prated	10 kW	10 kW
SCOP	4.63	3.23
Tbiv	-8 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.2 kW	7.9 kW
COP Tj = -7°C	3.03	1.89
Cdh Tj = -7 °C	1	
Pdh Tj = +2°C	5.5 kW	5.4 kW
COP Tj = +2°C	4.37	3.25
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	4.6 kW	4.4 kW
COP Tj = +7°C	6.74	4.81
Cdh Tj = +7 °C	1	1
Pdh Tj = 12°C	5.4 kW	5.3 kW
COP Tj = 12°C	8.54	6.41
Cdh Tj = +12 °C	1	1
Pdh Tj = Tbiv	9.2 kW	8.2 kW
COP Tj = Tbiv	3.01	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.4 kW	6.8 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.73	1.68
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1	1
WTOL	35 °C	55 °C
Poff	23 W	23 W
PTO	23 W	23 W
PSB	23 W	23 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.6 kW	3.2 kW
Annual energy consumption Qhe	4462 kWh	6397 kWh

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	45 dB(A)	45 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
$\eta_S$	237 %	161 %
P <sub>rated</sub>	10 kW	10 kW
SCOP	6	4.1
T <sub>biv</sub>	3 °C	4 °C
TOL	2 °C	2 °C
P <sub>dh T<sub>j</sub></sub> = +2°C	9.8 kW	9 kW
COP T <sub>j</sub> = +2°C	3.64	2.24
Cd <sub>h</sub> T <sub>j</sub> = +2 °C	1	1
P <sub>dh T<sub>j</sub></sub> = +7°C	6.7 kW	6.2 kW
COP T <sub>j</sub> = +7°C	5.7	3.74
Cd <sub>h</sub> T <sub>j</sub> = +7 °C	1	1
P <sub>dh T<sub>j</sub></sub> = 12°C	5.2 kW	5 kW
COP T <sub>j</sub> = 12°C	7.87	5.68
Cd <sub>h</sub> T <sub>j</sub> = +12 °C	1	1
P <sub>dh T<sub>j</sub></sub> = T <sub>biv</sub>	9.2 kW	8.5 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.81	2.41
P <sub>dh T<sub>j</sub></sub> = TOL or P <sub>dh T<sub>j</sub></sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	9.76 kW	8.99 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.64	2.24
WTOL	35 °C	55 °C
P <sub>off</sub>	23 W	23 W
PTO	23 W	23 W
PSB	23 W	23 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.24 kW	1.01 kW
Annual energy consumption Q <sub>he</sub>	2228 kWh	3258 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	11 kW	
SEER	5.92	
P <sub>dc T<sub>j</sub></sub> = 35°C	11 kW	
EER T <sub>j</sub> = 35°C	3.19	
P <sub>dc T<sub>j</sub></sub> = 30°C	8.1 kW	
EER T <sub>j</sub> = 30°C	4.94	
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.99	
P <sub>dc T<sub>j</sub></sub> = 25°C	5.7 kW	

EER Tj = 25°C	7.18
Cdc Tj = 25 °C	0.97
Pdc Tj = 20°C	5.9 kW
EER Tj = 20°C	8.47
Cdc Tj = 20 °C	0.97
Poff	23 W
PTO	23 W
PSB	23 W
PCK	0 W
Annual energy consumption Qce	1116 kWh

**Model ERLA11DW1 / EBSX(B)11P50D**

Model name	ERLA11DW1 / EBSX(B)11P50D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	128 %
COP	3.1
Heating up time	2:34 h:min
Standby power input	31.4 W
Reference hot water temperature	44.1 °C
Mixed water at 40°C	242 l

**EN 16147 | Warmer Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	155 %
COP	3.76
Heating up time	2:49 h:min
Standby power input	30.5 W
Reference hot water temperature	44.1 °C
Mixed water at 40°C	242 l

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	10.56 kW	10.64 kW
El input	2.19 kW	3.62 kW
COP	4.83	2.94

**EN 14511-2 | Cooling**

El input	+7°C/+12°C	+18°C/+23°C
Cooling capacity	3.47 kW	
EER	11.2	
	3.22	

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	44.7 dB(A)	44.7 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
ηs	186 %	128 %
Prated	10 kW	10 kW
SCOP	4.72	3.27
Tbiv	-8 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.2 kW	7.9 kW
COP Tj = -7°C	3.03	1.89
Cdh Tj = -7 °C	1	
Pdh Tj = +2°C	5.5 kW	5.4 kW
COP Tj = +2°C	4.37	3.25
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	4.6 kW	4.4 kW
COP Tj = +7°C	6.74	4.81
Cdh Tj = +7 °C	1	1
Pdh Tj = 12°C	5.4 kW	5.3 kW
COP Tj = 12°C	8.54	6.41
Cdh Tj = +12 °C	1	1
Pdh Tj = Tbiv	9.2 kW	8.2 kW
COP Tj = Tbiv	3.01	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.4 kW	6.8 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.73	1.68
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1	1
WTOL	35 °C	55 °C
Poff	23 W	23 W
PTO	23 W	23 W
PSB	23 W	23 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.6 kW	3.2 kW
Annual energy consumption Qhe	4378 kWh	6312 kWh

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	Low temperature	Medium temperature
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Sound power level outdoor	62 dB(A)	62 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
$\eta_s$	248 %	166 %
Prated	10 kW	10 kW
SCOP	6.28	4.23
Tbiv	3 °C	4 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	9.8 kW	9 kW
COP Tj = +2°C	3.64	2.24
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	6.7 kW	6.2 kW
COP Tj = +7°C	5.7	3.74
Cdh Tj = +7 °C	1	1
Pdh Tj = 12°C	5.2 kW	5 kW
COP Tj = 12°C	7.87	5.68
Cdh Tj = +12 °C	1	1
Pdh Tj = Tbiv	9.2 kW	8.5 kW
COP Tj = Tbiv	3.81	2.41
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.76 kW	8.99 kW
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WTOL	35 °C	55 °C
Poff	23 W	23 W
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Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.24 kW	1.01 kW
Annual energy consumption Qhe	2126 kWh	3157 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
Pdesignc	11 kW	
SEER	5.92	
Pdc Tj = 35°C	11 kW	
EER Tj = 35°C	3.19	
Pdc Tj = 30°C	8.1 kW	
EER Tj = 30°C	4.94	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	5.7 kW	

EER Tj = 25°C	7.18
Cdc Tj = 25 °C	0.97
Pdc Tj = 20°C	5.9 kW
EER Tj = 20°C	8.47
Cdc Tj = 20 °C	0.97
Poff	23 W
PTO	23 W
PSB	23 W
PCK	0 W
Annual energy consumption Qce	1116 kWh

**Model ERLA14DV3 / EBSH(B)16P50D**

Model name	ERLA14DV3 / EBSH(B)16P50D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	126 %
COP	3.05
Heating up time	2:34 h:min
Standby power input	36.4 W
Reference hot water temperature	44.1 °C
Mixed water at 40°C	242 l

**EN 16147 | Warmer Climate**

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Efficiency $\eta_{DHW}$	153 %
COP	3.68
Heating up time	2:49 h:min
Standby power input	35.5 W
Reference hot water temperature	44.1 °C
Mixed water at 40°C	242 l

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	12 kW	11.87 kW
El input	2.46 kW	4.11 kW
COP	4.87	2.89

**EN 14511-2 | Cooling**

El input	+7°C/+12°C	+18°C/+23°C
Cooling capacity	4.34 kW	
EER	12.9	
	2.98	

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
ηs	181 %	126 %
Prated	11 kW	11 kW
SCOP	4.6	3.22
Tbiv	-7 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.8 kW	8.5 kW
COP Tj = -7°C	2.99	1.8
Cdh Tj = -7 °C	1	
Pdh Tj = +2°C	6.1 kW	6.2 kW
COP Tj = +2°C	4.35	3.28
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	4.6 kW	4.4 kW
COP Tj = +7°C	6.7	4.88
Cdh Tj = +7 °C	1	1
Pdh Tj = 12°C	5.4 kW	5.3 kW
COP Tj = 12°C	8.65	6.58
Cdh Tj = +12 °C	1	1
Pdh Tj = Tbiv	9.8 kW	8.9 kW
COP Tj = Tbiv	2.99	1.87
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.1 kW	7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.71	1.76
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1	1
WTOL	35 °C	55 °C
Poff	23 W	23 W
PTO	23 W	23 W
PSB	23 W	23 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.9 kW	4 kW
Annual energy consumption Qhe	4935 kWh	7047 kWh

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
$\eta_S$	239 %	166 %
P <sub>rated</sub>	11 kW	12.1 kW
SCOP	6.04	4.23
T <sub>biv</sub>	2 °C	4 °C
TOL	2 °C	2 °C
P <sub>dh T<sub>j</sub></sub> = +2°C	11 kW	10.1 kW
COP T <sub>j</sub> = +2°C	3.51	2.2
Cd <sub>h</sub> T <sub>j</sub> = +2 °C	1	1
P <sub>dh T<sub>j</sub></sub> = +7°C	7.4 kW	7.6 kW
COP T <sub>j</sub> = +7°C	5.77	3.83
Cd <sub>h</sub> T <sub>j</sub> = +7 °C	1	1
P <sub>dh T<sub>j</sub></sub> = 12°C	5.2 kW	5 kW
COP T <sub>j</sub> = 12°C	7.73	5.69
Cd <sub>h</sub> T <sub>j</sub> = +12 °C	1	1
P <sub>dh T<sub>j</sub></sub> = T <sub>biv</sub>	11 kW	11.1 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.51	2.65
P <sub>dh T<sub>j</sub></sub> = TOL or P <sub>dh T<sub>j</sub></sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	10.95 kW	10.06 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.51	2.2
WTOL	35 °C	55 °C
P <sub>off</sub>	23 W	23 W
PTO	23 W	23 W
PSB	23 W	23 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.05 kW	2.04 kW
Annual energy consumption Q <sub>he</sub>	2431 kWh	3818 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	12.9 kW	
SEER	5.86	
P <sub>dc T<sub>j</sub></sub> = 35°C	12.9 kW	
EER T <sub>j</sub> = 35°C	2.96	
P <sub>dc T<sub>j</sub></sub> = 30°C	8.8 kW	
EER T <sub>j</sub> = 30°C	4.77	
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.99	
P <sub>dc T<sub>j</sub></sub> = 25°C	6.2 kW	

EER Tj = 25°C	7
Cdc Tj = 25 °C	0.97
Pdc Tj = 20°C	5.9 kW
EER Tj = 20°C	8.88
Cdc Tj = 20 °C	0.96
Poff	23 W
PTO	23 W
PSB	23 W
PCK	0 W
Annual energy consumption Qce	1314 kWh

**Model ERLA14DV3 / EBSX(B)16P50D**

Model name	ERLA14DV3 / EBSX(B)16P50D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	126 %
COP	3.05
Heating up time	2:34 h:min
Standby power input	36.4 W
Reference hot water temperature	44.1 °C
Mixed water at 40°C	242 l

**EN 16147 | Warmer Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	153 %
COP	3.68
Heating up time	2:49 h:min
Standby power input	35.5 W
Reference hot water temperature	44.1 °C
Mixed water at 40°C	242 l

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	12 kW	11.87 kW
El input	2.46 kW	4.11 kW
COP	4.87	2.89

**EN 14511-2 | Cooling**

El input	+7°C/+12°C	+18°C/+23°C
Cooling capacity	4.34 kW	
EER	12.9	
	2.98	

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
ηs	184 %	128 %
Prated	11 kW	11 kW
SCOP	4.68	3.26
Tbiv	-7 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.8 kW	8.5 kW
COP Tj = -7°C	2.99	1.8
Cdh Tj = -7 °C	1	
Pdh Tj = +2°C	6.1 kW	6.2 kW
COP Tj = +2°C	4.35	3.28
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	4.6 kW	4.4 kW
COP Tj = +7°C	6.7	4.88
Cdh Tj = +7 °C	1	1
Pdh Tj = 12°C	5.4 kW	5.3 kW
COP Tj = 12°C	8.65	6.58
Cdh Tj = +12 °C	1	1
Pdh Tj = Tbiv	9.8 kW	8.9 kW
COP Tj = Tbiv	2.99	1.87
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.1 kW	7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.71	1.76
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1	1
WTOL	35 °C	55 °C
Poff	23 W	23 W
PTO	23 W	23 W
PSB	23 W	23 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.9 kW	4 kW
Annual energy consumption Qhe	4851 kWh	6962 kWh

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
$\eta_S$	249 %	171 %
P <sub>rated</sub>	11 kW	12.1 kW
SCOP	6.31	4.35
T <sub>biv</sub>	2 °C	4 °C
TOL	2 °C	2 °C
P <sub>dh T<sub>j</sub></sub> = +2°C	11 kW	10.1 kW
COP T <sub>j</sub> = +2°C	3.51	2.2
Cd <sub>h</sub> T <sub>j</sub> = +2 °C	1	1
P <sub>dh T<sub>j</sub></sub> = +7°C	7.4 kW	7.6 kW
COP T <sub>j</sub> = +7°C	5.77	3.83
Cd <sub>h</sub> T <sub>j</sub> = +7 °C	1	1
P <sub>dh T<sub>j</sub></sub> = 12°C	5.2 kW	5 kW
COP T <sub>j</sub> = 12°C	7.73	5.69
Cd <sub>h</sub> T <sub>j</sub> = +12 °C	1	1
P <sub>dh T<sub>j</sub></sub> = T <sub>biv</sub>	11 kW	11.1 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.51	2.65
P <sub>dh T<sub>j</sub></sub> = TOL or P <sub>dh T<sub>j</sub></sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	10.95 kW	10.06 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.51	2.2
WTOL	35 °C	55 °C
P <sub>off</sub>	23 W	23 W
PTO	23 W	23 W
PSB	23 W	23 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.05 kW	2.04 kW
Annual energy consumption Q <sub>he</sub>	2330 kWh	3717 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	12.9 kW	
SEER	5.86	
P <sub>dc T<sub>j</sub></sub> = 35°C	12.9 kW	
EER T <sub>j</sub> = 35°C	2.96	
P <sub>dc T<sub>j</sub></sub> = 30°C	8.8 kW	
EER T <sub>j</sub> = 30°C	4.77	
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.99	
P <sub>dc T<sub>j</sub></sub> = 25°C	6.2 kW	

EER Tj = 25°C	7
Cdc Tj = 25 °C	0.97
Pdc Tj = 20°C	5.9 kW
EER Tj = 20°C	8.88
Cdc Tj = 20 °C	0.96
Poff	23 W
PTO	23 W
PSB	23 W
PCK	0 W
Annual energy consumption Qce	1314 kWh

**Model ERLA14DW1 / EBSH(B)16P50D**

Model name	ERLA14DW1 / EBSH(B)16P50D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	128 %
COP	3.1
Heating up time	2:34 h:min
Standby power input	31.4 W
Reference hot water temperature	44.1 °C
Mixed water at 40°C	242 l

**EN 16147 | Warmer Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	155 %
COP	3.76
Heating up time	2:49 h:min
Standby power input	30.5 W
Reference hot water temperature	44.1 °C
Mixed water at 40°C	242 l

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	12 kW	11.87 kW
El input	2.46 kW	4.11 kW
COP	4.87	2.89

**EN 14511-2 | Cooling**

El input	+7°C/+12°C	+18°C/+23°C
Cooling capacity	4.34 kW	
EER	12.9	
	2.98	

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
ηs	181 %	126 %
Prated	11 kW	11 kW
SCOP	4.6	3.22
Tbiv	-7 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.8 kW	8.5 kW
COP Tj = -7°C	2.99	1.8
Cdh Tj = -7 °C	1	
Pdh Tj = +2°C	6.1 kW	6.2 kW
COP Tj = +2°C	4.35	3.28
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	4.6 kW	4.4 kW
COP Tj = +7°C	6.7	4.88
Cdh Tj = +7 °C	1	1
Pdh Tj = 12°C	5.4 kW	5.3 kW
COP Tj = 12°C	8.65	6.58
Cdh Tj = +12 °C	1	1
Pdh Tj = Tbiv	9.8 kW	8.9 kW
COP Tj = Tbiv	2.99	1.87
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.1 kW	7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.71	1.76
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1	1
WTOL	35 °C	55 °C
Poff	23 W	23 W
PTO	23 W	23 W
PSB	23 W	23 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.9 kW	4 kW
Annual energy consumption Qhe	4935 kWh	7047 kWh

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
$\eta_S$	239 %	166 %
P <sub>rated</sub>	11 kW	12.1 kW
SCOP	6.04	4.23
T <sub>biv</sub>	2 °C	4 °C
TOL	2 °C	2 °C
P <sub>dh Tj = +2°C</sub>	11 kW	10.1 kW
COP T <sub>j</sub> = +2°C	3.51	2.2
Cd <sub>h Tj = +2 °C</sub>	1	1
P <sub>dh Tj = +7°C</sub>	7.4 kW	7.6 kW
COP T <sub>j</sub> = +7°C	5.77	3.83
Cd <sub>h Tj = +7 °C</sub>	1	1
P <sub>dh Tj = 12°C</sub>	5.2 kW	5 kW
COP T <sub>j</sub> = 12°C	7.73	5.69
Cd <sub>h Tj = +12 °C</sub>	1	1
P <sub>dh Tj = T<sub>biv</sub></sub>	11 kW	11.1 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.51	2.65
P <sub>dh Tj = TOL or P<sub>dh Tj = T<sub>designh</sub></sub> if TOL &lt; T<sub>designh</sub></sub>	10.95 kW	10.06 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.51	2.2
WTOL	35 °C	55 °C
P <sub>off</sub>	23 W	23 W
PTO	23 W	23 W
PSB	23 W	23 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.05 kW	2.04 kW
Annual energy consumption Q <sub>he</sub>	2431 kWh	3818 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	12.9 kW	
SEER	5.86	
P <sub>dc Tj = 35°C</sub>	12.9 kW	
EER T <sub>j</sub> = 35°C	2.96	
P <sub>dc Tj = 30°C</sub>	8.8 kW	
EER T <sub>j</sub> = 30°C	4.77	
C <sub>dc Tj = 30 °C</sub>	0.99	
P <sub>dc Tj = 25°C</sub>	6.2 kW	

EER Tj = 25°C	7
Cdc Tj = 25 °C	0.97
Pdc Tj = 20°C	5.9 kW
EER Tj = 20°C	8.88
Cdc Tj = 20 °C	0.96
Poff	23 W
PTO	23 W
PSB	23 W
PCK	0 W
Annual energy consumption Qce	1314 kWh

**Model ERLA14DW1 / EBSX(B)16P50D**

Model name	ERLA14DW1 / EBSX(B)16P50D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	128 %
COP	3.1
Heating up time	2:34 h:min
Standby power input	31.4 W
Reference hot water temperature	44.1 °C
Mixed water at 40°C	242 l

**EN 16147 | Warmer Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	155 %
COP	3.76
Heating up time	2:49 h:min
Standby power input	30.5 W
Reference hot water temperature	44.1 °C
Mixed water at 40°C	242 l

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	12 kW	11.87 kW
El input	2.46 kW	4.11 kW
COP	4.87	2.89

**EN 14511-2 | Cooling**

El input	+7°C/+12°C	+18°C/+23°C
Cooling capacity	4.34 kW	
EER	12.9	
	2.98	

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
ηs	184 %	128 %
Prated	11 kW	11 kW
SCOP	4.68	3.26
Tbiv	-7 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.8 kW	8.5 kW
COP Tj = -7°C	2.99	1.8
Cdh Tj = -7 °C	1	
Pdh Tj = +2°C	6.1 kW	6.2 kW
COP Tj = +2°C	4.35	3.28
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	4.6 kW	4.4 kW
COP Tj = +7°C	6.7	4.88
Cdh Tj = +7 °C	1	1
Pdh Tj = 12°C	5.4 kW	5.3 kW
COP Tj = 12°C	8.65	6.58
Cdh Tj = +12 °C	1	1
Pdh Tj = Tbiv	9.8 kW	8.9 kW
COP Tj = Tbiv	2.99	1.87
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.1 kW	7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.71	1.76
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1	1
WTOL	35 °C	55 °C
Poff	23 W	23 W
PTO	23 W	23 W
PSB	23 W	23 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.9 kW	4 kW
Annual energy consumption Qhe	4851 kWh	6962 kWh

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
$\eta_S$	249 %	171 %
P <sub>rated</sub>	11 kW	12.1 kW
SCOP	6.31	4.35
T <sub>biv</sub>	2 °C	4 °C
TOL	2 °C	2 °C
P <sub>dh T<sub>j</sub></sub> = +2°C	11 kW	10.1 kW
COP T <sub>j</sub> = +2°C	3.51	2.2
Cd <sub>h</sub> T <sub>j</sub> = +2 °C	1	1
P <sub>dh T<sub>j</sub></sub> = +7°C	7.4 kW	7.6 kW
COP T <sub>j</sub> = +7°C	5.77	3.83
Cd <sub>h</sub> T <sub>j</sub> = +7 °C	1	1
P <sub>dh T<sub>j</sub></sub> = 12°C	5.2 kW	5 kW
COP T <sub>j</sub> = 12°C	7.73	5.69
Cd <sub>h</sub> T <sub>j</sub> = +12 °C	1	1
P <sub>dh T<sub>j</sub></sub> = T <sub>biv</sub>	11 kW	11.1 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.51	2.65
P <sub>dh T<sub>j</sub></sub> = TOL or P <sub>dh T<sub>j</sub></sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	10.95 kW	10.06 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.51	2.2
WTOL	35 °C	55 °C
P <sub>off</sub>	23 W	23 W
PTO	23 W	23 W
PSB	23 W	23 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.05 kW	2.04 kW
Annual energy consumption Q <sub>he</sub>	2330 kWh	3717 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	12.9 kW	
SEER	5.86	
P <sub>dc T<sub>j</sub></sub> = 35°C	12.9 kW	
EER T <sub>j</sub> = 35°C	2.96	
P <sub>dc T<sub>j</sub></sub> = 30°C	8.8 kW	
EER T <sub>j</sub> = 30°C	4.77	
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.99	
P <sub>dc T<sub>j</sub></sub> = 25°C	6.2 kW	

EER Tj = 25°C	7
Cdc Tj = 25 °C	0.97
Pdc Tj = 20°C	5.9 kW
EER Tj = 20°C	8.88
Cdc Tj = 20 °C	0.96
Poff	23 W
PTO	23 W
PSB	23 W
PCK	0 W
Annual energy consumption Qce	1314 kWh

**Model ERLA16DV37 / EBSH(B)16P50D**

Model name	ERLA16DV37 / EBSH(B)16P50D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	126 %
COP	3.05
Heating up time	2:34 h:min
Standby power input	36.4 W
Reference hot water temperature	44.1 °C
Mixed water at 40°C	242 l

**EN 16147 | Warmer Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	153 %
COP	3.68
Heating up time	2:49 h:min
Standby power input	35.5 W
Reference hot water temperature	44.1 °C
Mixed water at 40°C	242 l

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	16 kW	15.63 kW
El input	3.53 kW	5.68 kW
COP	4.53	2.75

**EN 14511-2 | Cooling**

El input	+7°C/+12°C	+18°C/+23°C
Cooling capacity	4.68 kW	
EER	13.6	
	2.91	

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
ηs	181 %	130 %
Prated	12 kW	12 kW
SCOP	4.61	3.32
Tbiv	-8 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.2 kW	9.4 kW
COP Tj = -7°C	2.87	1.95
Cdh Tj = -7 °C	1	
Pdh Tj = +2°C	6.7 kW	6.9 kW
COP Tj = +2°C	4.33	3.27
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	4.7 kW	4.4 kW
COP Tj = +7°C	6.83	4.93
Cdh Tj = +7 °C	1	1
Pdh Tj = 12°C	5.5 kW	5.3 kW
COP Tj = 12°C	8.82	6.6
Cdh Tj = +12 °C	1	1
Pdh Tj = Tbiv	11.4 kW	10.1 kW
COP Tj = Tbiv	2.72	2.13
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.6 kW	6 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.52	1.5
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1	1
WTOL	35 °C	55 °C
Poff	23 W	23 W
PTO	23 W	23 W
PSB	23 W	23 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.4 kW	6.1 kW
Annual energy consumption Qhe	5377 kWh	7477 kWh

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
$\eta_S$	237 %	162 %
P <sub>rated</sub>	12 kW	12 kW
SCOP	5.99	4.26
T <sub>biv</sub>	2 °C	5 °C
TOL	2 °C	2 °C
P <sub>dh T<sub>j</sub></sub> = +2°C	11.9 kW	9.8 kW
COP T <sub>j</sub> = +2°C	3.3	2.17
Cd <sub>h</sub> T <sub>j</sub> = +2 °C	1	1
P <sub>dh T<sub>j</sub></sub> = +7°C	8.1 kW	9.1 kW
COP T <sub>j</sub> = +7°C	5.64	3.7
Cd <sub>h</sub> T <sub>j</sub> = +7 °C	1	1
P <sub>dh T<sub>j</sub></sub> = 12°C	5.2 kW	5 kW
COP T <sub>j</sub> = 12°C	7.73	5.69
Cd <sub>h</sub> T <sub>j</sub> = +12 °C	1	1
P <sub>dh T<sub>j</sub></sub> = T <sub>biv</sub>	11.9 kW	11.1 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.3	2.91
P <sub>dh T<sub>j</sub></sub> = TOL or P <sub>dh T<sub>j</sub></sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	11.92 kW	9.83 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	3.3	2.17
WTOL	35 °C	55 °C
P <sub>off</sub>	23 W	23 W
PTO	23 W	23 W
PSB	23 W	23 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.08 kW	2.17 kW
Annual energy consumption Q <sub>he</sub>	2675 kWh	4576 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	13.6 kW	
SEER	5.76	
P <sub>dc T<sub>j</sub></sub> = 35°C	13.6 kW	
EER T <sub>j</sub> = 35°C	2.88	
P <sub>dc T<sub>j</sub></sub> = 30°C	9.7 kW	
EER T <sub>j</sub> = 30°C	4.58	
Cd <sub>c</sub> T <sub>j</sub> = 30 °C	0.99	
P <sub>dc T<sub>j</sub></sub> = 25°C	6.2 kW	

EER Tj = 25°C	6.99
Cdc Tj = 25 °C	0.98
Pdc Tj = 20°C	5.9 kW
EER Tj = 20°C	8.69
Cdc Tj = 20 °C	0.97
Poff	23 W
PTO	23 W
PSB	23 W
PCK	0 W
Annual energy consumption Qce	1417 kWh

**Model ERLA16DV37 / EBSX(B)16P50D**

Model name	ERLA16DV37 / EBSX(B)16P50D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	126 %
COP	3.05
Heating up time	2:34 h:min
Standby power input	36.4 W
Reference hot water temperature	44.1 °C
Mixed water at 40°C	242 l

**EN 16147 | Warmer Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	153 %
COP	3.68
Heating up time	2:49 h:min
Standby power input	35.5 W
Reference hot water temperature	44.1 °C
Mixed water at 40°C	242 l

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	16 kW	15.63 kW
El input	3.53 kW	5.68 kW
COP	4.53	2.75

**EN 14511-2 | Cooling**

El input	+7°C/+12°C	+18°C/+23°C
Cooling capacity	4.68 kW	
EER	13.6	
	2.91	

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
ηs	184 %	131 %
Prated	12 kW	12 kW
SCOP	4.68	3.35
Tbiv	-8 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.2 kW	9.4 kW
COP Tj = -7°C	2.87	1.95
Cdh Tj = -7 °C	1	
Pdh Tj = +2°C	6.7 kW	6.9 kW
COP Tj = +2°C	4.33	3.27
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	4.7 kW	4.4 kW
COP Tj = +7°C	6.83	4.93
Cdh Tj = +7 °C	1	1
Pdh Tj = 12°C	5.5 kW	5.3 kW
COP Tj = 12°C	8.82	6.6
Cdh Tj = +12 °C	1	1
Pdh Tj = Tbiv	11.4 kW	10.1 kW
COP Tj = Tbiv	2.72	2.13
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.6 kW	6 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.52	1.5
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1	1
WTOL	35 °C	55 °C
Poff	23 W	23 W
PTO	23 W	23 W
PSB	23 W	23 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.4 kW	6.1 kW
Annual energy consumption Qhe	5293 kWh	7392 kWh

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
$\eta_s$	246 %	165 %
Prated	12 kW	12 kW
SCOP	6.23	4.38
Tbiv	2 °C	5 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	11.9 kW	9.8 kW
COP Tj = +2°C	3.3	2.17
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	8.1 kW	9.1 kW
COP Tj = +7°C	5.64	3.7
Cdh Tj = +7 °C	1	1
Pdh Tj = 12°C	5.2 kW	5 kW
COP Tj = 12°C	7.73	5.69
Cdh Tj = +12 °C	1	1
Pdh Tj = Tbiv	11.9 kW	11.1 kW
COP Tj = Tbiv	3.3	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.92 kW	9.83 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.3	2.17
WTOL	35 °C	55 °C
Poff	23 W	23 W
PTO	23 W	23 W
PSB	23 W	23 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.08 kW	2.17 kW
Annual energy consumption Qhe	2573 kWh	4474 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
Pdesignc	13.6 kW	
SEER	5.76	
Pdc Tj = 35°C	13.6 kW	
EER Tj = 35°C	2.88	
Pdc Tj = 30°C	9.7 kW	
EER Tj = 30°C	4.58	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	6.2 kW	

EER Tj = 25°C	6.99
Cdc Tj = 25 °C	0.98
Pdc Tj = 20°C	5.9 kW
EER Tj = 20°C	8.69
Cdc Tj = 20 °C	0.97
Poff	23 W
PTO	23 W
PSB	23 W
PCK	0 W
Annual energy consumption Qce	1417 kWh

**Model ERLA16DW17 / EBSH(B)16P50D**

Model name	ERLA16DW17 / EBSH(B)16P50D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	128 %
COP	3.1
Heating up time	2:34 h:min
Standby power input	31.4 W
Reference hot water temperature	44.1 °C
Mixed water at 40°C	242 l

**EN 16147 | Warmer Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	155 %
COP	3.76
Heating up time	2:49 h:min
Standby power input	30.5 W
Reference hot water temperature	44.1 °C
Mixed water at 40°C	242 l

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	16 kW	15.63 kW
El input	3.53 kW	5.68 kW
COP	4.53	2.75

**EN 14511-2 | Cooling**

El input	+7°C/+12°C	+18°C/+23°C
Cooling capacity	4.68 kW	
EER	13.6	
	2.91	

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
ηs	181 %	130 %
Prated	12 kW	12 kW
SCOP	4.61	3.32
Tbiv	-8 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.2 kW	9.4 kW
COP Tj = -7°C	2.87	1.95
Cdh Tj = -7 °C	1	
Pdh Tj = +2°C	6.7 kW	6.9 kW
COP Tj = +2°C	4.33	3.27
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	4.7 kW	4.4 kW
COP Tj = +7°C	6.83	4.93
Cdh Tj = +7 °C	1	1
Pdh Tj = 12°C	5.5 kW	5.3 kW
COP Tj = 12°C	8.82	6.6
Cdh Tj = +12 °C	1	1
Pdh Tj = Tbiv	11.4 kW	10.1 kW
COP Tj = Tbiv	2.72	2.13
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.6 kW	6 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.52	1.5
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1	1
WTOL	35 °C	55 °C
Poff	23 W	23 W
PTO	23 W	23 W
PSB	23 W	23 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.4 kW	6.1 kW
Annual energy consumption Qhe	5377 kWh	7477 kWh

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
$\eta_s$	237 %	162 %
Prated	12 kW	12 kW
SCOP	5.99	4.26
Tbiv	2 °C	5 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	11.9 kW	9.8 kW
COP Tj = +2°C	3.3	2.17
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	8.1 kW	9.1 kW
COP Tj = +7°C	5.64	3.7
Cdh Tj = +7 °C	1	1
Pdh Tj = 12°C	5.2 kW	5 kW
COP Tj = 12°C	7.73	5.69
Cdh Tj = +12 °C	1	1
Pdh Tj = Tbiv	11.9 kW	11.1 kW
COP Tj = Tbiv	3.3	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.92 kW	9.83 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.3	2.17
WTOL	35 °C	55 °C
Poff	23 W	23 W
PTO	23 W	23 W
PSB	23 W	23 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.08 kW	2.17 kW
Annual energy consumption Qhe	2675 kWh	4576 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
Pdesignc	13.6 kW	
SEER	5.76	
Pdc Tj = 35°C	13.6 kW	
EER Tj = 35°C	2.88	
Pdc Tj = 30°C	9.7 kW	
EER Tj = 30°C	4.58	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	6.2 kW	

EER Tj = 25°C	6.99
Cdc Tj = 25 °C	0.98
Pdc Tj = 20°C	5.9 kW
EER Tj = 20°C	8.69
Cdc Tj = 20 °C	0.97
Poff	23 W
PTO	23 W
PSB	23 W
PCK	0 W
Annual energy consumption Qce	1417 kWh

**Model ERLA16DW17 / EBSX(B)16P50D**

Model name	ERLA16DW17 / EBSX(B)16P50D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C
Any additional heat sources	n/a

**General data**

Power supply	1x230V 50Hz
Off-peak product	n/a

**Outdoor Air/Water****EN 16147 | Average Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	128 %
COP	3.1
Heating up time	2:34 h:min
Standby power input	31.4 W
Reference hot water temperature	44.1 °C
Mixed water at 40°C	242 l

**EN 16147 | Warmer Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	155 %
COP	3.76
Heating up time	2:49 h:min
Standby power input	30.5 W
Reference hot water temperature	44.1 °C
Mixed water at 40°C	242 l

**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

**EN 14511-2 | Heating**

	Low temperature	Medium temperature
Heat output	16 kW	15.63 kW
El input	3.53 kW	5.68 kW
COP	4.53	2.75

**EN 14511-2 | Cooling**

El input	+7°C/+12°C	+18°C/+23°C
Cooling capacity	4.68 kW	
EER	13.6	
	2.91	

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
ηs	184 %	131 %
Prated	12 kW	12 kW
SCOP	4.68	3.35
Tbiv	-8 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.2 kW	9.4 kW
COP Tj = -7°C	2.87	1.95
Cdh Tj = -7 °C	1	
Pdh Tj = +2°C	6.7 kW	6.9 kW
COP Tj = +2°C	4.33	3.27
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	4.7 kW	4.4 kW
COP Tj = +7°C	6.83	4.93
Cdh Tj = +7 °C	1	1
Pdh Tj = 12°C	5.5 kW	5.3 kW
COP Tj = 12°C	8.82	6.6
Cdh Tj = +12 °C	1	1
Pdh Tj = Tbiv	11.4 kW	10.1 kW
COP Tj = Tbiv	2.72	2.13
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.6 kW	6 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.52	1.5
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1	1
WTOL	35 °C	55 °C
Poff	23 W	23 W
PTO	23 W	23 W
PSB	23 W	23 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.4 kW	6.1 kW
Annual energy consumption Qhe	5293 kWh	7392 kWh

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
$\eta_s$	246 %	165 %
Prated	12 kW	12 kW
SCOP	6.23	4.38
Tbiv	2 °C	5 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	11.9 kW	9.8 kW
COP Tj = +2°C	3.3	2.17
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	8.1 kW	9.1 kW
COP Tj = +7°C	5.64	3.7
Cdh Tj = +7 °C	1	1
Pdh Tj = 12°C	5.2 kW	5 kW
COP Tj = 12°C	7.73	5.69
Cdh Tj = +12 °C	1	1
Pdh Tj = Tbiv	11.9 kW	11.1 kW
COP Tj = Tbiv	3.3	2.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.92 kW	9.83 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.3	2.17
WTOL	35 °C	55 °C
Poff	23 W	23 W
PTO	23 W	23 W
PSB	23 W	23 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.08 kW	2.17 kW
Annual energy consumption Qhe	2573 kWh	4474 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
Pdesignc	13.6 kW	
SEER	5.76	
Pdc Tj = 35°C	13.6 kW	
EER Tj = 35°C	2.88	
Pdc Tj = 30°C	9.7 kW	
EER Tj = 30°C	4.58	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	6.2 kW	

EER Tj = 25°C	6.99
Cdc Tj = 25 °C	0.98
Pdc Tj = 20°C	5.9 kW
EER Tj = 20°C	8.69
Cdc Tj = 20 °C	0.97
Poff	23 W
PTO	23 W
PSB	23 W
PCK	0 W
Annual energy consumption Qce	1417 kWh