

Subtype Daikin Altherma 3 R MT F 12 kW (230L)

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 MT F 12 kW (230L)
Registration number	011-1W0656
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	3.25 kg
Certification Date	01.08.2023
Testing basis	HP KEYMARK certification scheme rules V12

**Model ERRA12EV3 / ELVH12S23E(6V/9W)**

Model name	ERRA12EV3 / ELVH12S23E(6V/9W)
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	L
Efficiency $\eta_{DHW}$	126 %
COP	2.96
Heating up time	2:14 h:min
Standby power input	44.8 W
Reference hot water temperature	52 °C
Mixed water at 40°C	298 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	6.17 kW	7.72 kW
El input	1.25 kW	2.62 kW
COP	4.92	2.94

**EN 14511-2 | Cooling**

	+7°C/+12°C	+18°C/+23°C
El input	2.96 kW	
Cooling capacity	8.62	
EER	2.91	

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

Sound power level outdoor	56 dB(A)	56 dB(A)
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**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	186 %	135 %
P <sub>rated</sub>	8.3 kW	12.5 kW
SCOP	4.71	3.44
T <sub>biv</sub>	-10 °C	-5 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	7.5 kW	7.6 kW
COP T <sub>j</sub> = -7°C	3.1	2.26
C <sub>dh</sub> T <sub>j</sub> = -7 °C	1	1
P <sub>dh</sub> T <sub>j</sub> = +2°C	4.4 kW	6.8 kW
COP T <sub>j</sub> = +2°C	4.76	3.39
C <sub>dh</sub> T <sub>j</sub> = +2 °C	1	1
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.3 kW	4.5 kW
COP T <sub>j</sub> = +7°C	6.14	4.9
C <sub>dh</sub> T <sub>j</sub> = +7 °C	1	1
P <sub>dh</sub> T <sub>j</sub> = 12°C	6.6 kW	5.2 kW
COP T <sub>j</sub> = 12°C	7.84	6.02
C <sub>dh</sub> T <sub>j</sub> = +12 °C	1	1
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	8.1 kW	10 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.77	2.41
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	8.1 kW	8.2 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.77	2
WTOL	35 °C	55 °C
P <sub>off</sub>	21 W	21 W
PTO	24 W	24 W
PSB	21 W	21 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	4.3 kW
Annual energy consumption Q <sub>he</sub>	3637 kWh	7510 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	8.5 kW	
SEER	5.31	
P <sub>dc</sub> T <sub>j</sub> = 35°C	8.62 kW	
EER T <sub>j</sub> = 35°C	2.91	
P <sub>dc</sub> T <sub>j</sub> = 30°C	6.68 kW	
EER T <sub>j</sub> = 30°C	4.17	
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.98	

Pdc Tj = 25°C	4.04 kW
EER Tj = 25°C	6.13
Cdc Tj = 25 °C	0.96
Pdc Tj = 20°C	2.69 kW
EER Tj = 20°C	8.75
Cdc Tj = 20 °C	0.91
Poff	25 W
PTO	3 W
PSB	25 W
PCK	0 W

**Model ERRA12EW1 / ELVH12S23E(6V/9W)**

Model name	ERRA12EW1 / ELVH12S23E(6V/9W)
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	3x400V 50Hz
Off-peak product	n/a

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

Declared load profile	L
Efficiency ηDHW	130 %
COP	3.05
Heating up time	2:14 h:min
Standby power input	43.9 W
Reference hot water temperature	52 °C
Mixed water at 40°C	298 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	6.17 kW	7.72 kW
El input	1.21 kW	2.53 kW
COP	5.1	3.05

**EN 14511-2 | Cooling**

	+7°C/+12°C	+18°C/+23°C
El input	2.86 kW	
Cooling capacity	8.62	
EER	3.01	

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

Sound power level outdoor	56 dB(A)	56 dB(A)
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**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	191 %	138 %
P <sub>rated</sub>	8.3 kW	12.5 kW
SCOP	4.84	3.53
T <sub>biv</sub>	-10 °C	-5 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	7.5 kW	7.6 kW
COP T <sub>j</sub> = -7°C	3.2	2.34
C <sub>dh</sub> T <sub>j</sub> = -7 °C	1	1
P <sub>dh</sub> T <sub>j</sub> = +2°C	4.4 kW	6.8 kW
COP T <sub>j</sub> = +2°C	4.93	3.5
C <sub>dh</sub> T <sub>j</sub> = +2 °C	1	1
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.3 kW	4.5 kW
COP T <sub>j</sub> = +7°C	6.37	5.07
C <sub>dh</sub> T <sub>j</sub> = +7 °C	1	1
P <sub>dh</sub> T <sub>j</sub> = 12°C	6.6 kW	5.2 kW
COP T <sub>j</sub> = 12°C	8.13	6.23
C <sub>dh</sub> T <sub>j</sub> = +12 °C	1	1
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	8.1 kW	10 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.86	2.48
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	8.1 kW	8.2 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.86	2.06
WTOL	35 °C	55 °C
P <sub>off</sub>	27 W	27 W
PTO	24 W	24 W
PSB	27 W	27 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	4.3 kW
Annual energy consumption Q <sub>he</sub>	3539 kWh	7309 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	8.5 kW	
SEER	5.41	
P <sub>dc</sub> T <sub>j</sub> = 35°C	8.62 kW	
EER T <sub>j</sub> = 35°C	3.01	
P <sub>dc</sub> T <sub>j</sub> = 30°C	6.68 kW	
EER T <sub>j</sub> = 30°C	4.32	
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.98	

Pdc Tj = 25°C	4.04 kW
EER Tj = 25°C	6.34
Cdc Tj = 25 °C	0.96
Pdc Tj = 20°C	2.69 kW
EER Tj = 20°C	8.72
Cdc Tj = 20 °C	0.91
Poff	31 W
PTO	0 W
PSB	31 W
PCK	0 W

**Model ERRA12EV3 / ELVX12S23E(6V/9W)**

Model name	ERRA12EV3 / ELVX12S23E(6V/9W)
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	L
Efficiency ηDHW	126 %
COP	2.96
Heating up time	2:14 h:min
Standby power input	44.8 W
Reference hot water temperature	52 °C
Mixed water at 40°C	298 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	6.17 kW	7.72 kW
El input	1.25 kW	2.62 kW
COP	4.92	2.94

**EN 14511-2 | Cooling**

	+7°C/+12°C	+18°C/+23°C
El input	2.96 kW	
Cooling capacity	8.62	
EER	2.91	

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
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Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	190 %	136 %
P <sub>rated</sub>	8.3 kW	12.5 kW
SCOP	4.82	3.47
T <sub>biv</sub>	-10 °C	-5 °C
T <sub>OL</sub>	-10 °C	-10 °C
P <sub>dh T<sub>j</sub></sub> = -7°C	7.5 kW	7.6 kW
COP T <sub>j</sub> = -7°C	3.1	2.26
C <sub>dh</sub> T <sub>j</sub> = -7 °C	1	1
P <sub>dh T<sub>j</sub></sub> = +2°C	4.4 kW	6.8 kW
COP T <sub>j</sub> = +2°C	4.76	3.39
C <sub>dh</sub> T <sub>j</sub> = +2 °C	1	1
P <sub>dh T<sub>j</sub></sub> = +7°C	4.3 kW	4.5 kW
COP T <sub>j</sub> = +7°C	6.14	4.9
C <sub>dh</sub> T <sub>j</sub> = +7 °C	1	1
P <sub>dh T<sub>j</sub></sub> = 12°C	6.6 kW	5.2 kW
COP T <sub>j</sub> = 12°C	7.84	6.02
C <sub>dh</sub> T <sub>j</sub> = +12 °C	1	1
P <sub>dh T<sub>j</sub></sub> = T <sub>biv</sub>	8.1 kW	10 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.77	2.41
P <sub>dh T<sub>j</sub></sub> = T <sub>OL</sub> or P <sub>dh T<sub>j</sub></sub> = T <sub>designh</sub> if T <sub>OL</sub> < T <sub>designh</sub>	8.1 kW	8.2 kW
COP T <sub>j</sub> = T <sub>OL</sub> or COP T <sub>j</sub> = T <sub>designh</sub> if T <sub>OL</sub> < T <sub>designh</sub>	2.77	2
WT <sub>OL</sub>	35 °C	55 °C
P <sub>off</sub>	21 W	21 W
PTO	24 W	24 W
PSB	21 W	21 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	4.3 kW
Annual energy consumption Q <sub>he</sub>	3560 kWh	7433 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	8.5 kW	
SEER	5.31	
P <sub>dc T<sub>j</sub></sub> = 35°C	8.62 kW	
EER T <sub>j</sub> = 35°C	2.91	
P <sub>dc T<sub>j</sub></sub> = 30°C	6.68 kW	
EER T <sub>j</sub> = 30°C	4.17	

Cdc Tj = 30 °C	0.98
Pdc Tj = 25°C	4.04 kW
EER Tj = 25°C	6.13
Cdc Tj = 25 °C	0.96
Pdc Tj = 20°C	2.69 kW
EER Tj = 20°C	8.75
Cdc Tj = 20 °C	0.91
Poff	25 W
PTO	3 W
PSB	25 W
PCK	0 W

**Model ERRA12EW1 / ELVX12S23E(6V/9W)**

Model name	ERRA12EW1 / ELVX12S23E(6V/9W)
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	3x400V 50Hz
Off-peak product	n/a

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

Declared load profile	L
Efficiency ηDHW	130 %
COP	3.05
Heating up time	2:14 h:min
Standby power input	43.9 W
Reference hot water temperature	52 °C
Mixed water at 40°C	298 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	6.17 kW	7.72 kW
El input	1.21 kW	2.53 kW
COP	5.1	3.05

**EN 14511-2 | Cooling**

	+7°C/+12°C	+18°C/+23°C
El input	2.86 kW	
Cooling capacity	8.62	
EER	3.01	

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
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Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	196 %	140 %
P <sub>rated</sub>	8.3 kW	12.5 kW
SCOP	4.98	3.58
T <sub>biv</sub>	-10 °C	-5 °C
T <sub>OL</sub>	-10 °C	-10 °C
P <sub>dh T<sub>j</sub></sub> = -7°C	7.5 kW	7.6 kW
COP T <sub>j</sub> = -7°C	3.2	2.34
C <sub>dh</sub> T <sub>j</sub> = -7 °C	1	1
P <sub>dh T<sub>j</sub></sub> = +2°C	4.4 kW	6.8 kW
COP T <sub>j</sub> = +2°C	4.93	3.5
C <sub>dh</sub> T <sub>j</sub> = +2 °C	1	1
P <sub>dh T<sub>j</sub></sub> = +7°C	4.3 kW	4.5 kW
COP T <sub>j</sub> = +7°C	6.37	5.07
C <sub>dh</sub> T <sub>j</sub> = +7 °C	1	1
P <sub>dh T<sub>j</sub></sub> = 12°C	6.6 kW	5.2 kW
COP T <sub>j</sub> = 12°C	8.13	6.23
C <sub>dh</sub> T <sub>j</sub> = +12 °C	1	1
P <sub>dh T<sub>j</sub></sub> = T <sub>biv</sub>	8.1 kW	10 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.86	2.48
P <sub>dh T<sub>j</sub></sub> = T <sub>OL</sub> or P <sub>dh T<sub>j</sub></sub> = T <sub>designh</sub> if T <sub>OL</sub> < T <sub>designh</sub>	8.1 kW	8.2 kW
COP T <sub>j</sub> = T <sub>OL</sub> or COP T <sub>j</sub> = T <sub>designh</sub> if T <sub>OL</sub> < T <sub>designh</sub>	2.86	2.06
WT <sub>OL</sub>	35 °C	55 °C
P <sub>off</sub>	27 W	27 W
PTO	24 W	24 W
PSB	27 W	27 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	4.3 kW
Annual energy consumption Q <sub>he</sub>	3440 kWh	7210 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	8.5 kW	
SEER	5.41	
P <sub>dc T<sub>j</sub></sub> = 35°C	8.62 kW	
EER T <sub>j</sub> = 35°C	3.01	
P <sub>dc T<sub>j</sub></sub> = 30°C	6.68 kW	
EER T <sub>j</sub> = 30°C	4.32	

Cdc Tj = 30 °C	0.98
Pdc Tj = 25°C	4.04 kW
EER Tj = 25°C	6.34
Cdc Tj = 25 °C	0.96
Pdc Tj = 20°C	2.69 kW
EER Tj = 20°C	8.72
Cdc Tj = 20 °C	0.91
Poff	31 W
PTO	0 W
PSB	31 W
PCK	0 W

**Model ERRA12EV3 / ELVZ12S23E(6V/9W)**

Model name	ERRA12EV3 / ELVZ12S23E(6V/9W)
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	L
Efficiency $\eta_{DHW}$	126 %
COP	2.96
Heating up time	2:14 h:min
Standby power input	44.8 W
Reference hot water temperature	52 °C
Mixed water at 40°C	298 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	6.17 kW	7.72 kW
El input	1.25 kW	2.62 kW
COP	4.92	2.94

**EN 14511-2 | Cooling**

	+7°C/+12°C	+18°C/+23°C
El input	2.96 kW	
Cooling capacity	8.62	
EER	2.91	

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

Sound power level outdoor	56 dB(A)	56 dB(A)
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**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	186 %	135 %
P <sub>rated</sub>	8.3 kW	12.5 kW
SCOP	4.71	3.44
T <sub>biv</sub>	-10 °C	-5 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	7.5 kW	7.6 kW
COP T <sub>j</sub> = -7°C	3.1	2.26
C <sub>dh</sub> T <sub>j</sub> = -7 °C	1	1
P <sub>dh</sub> T <sub>j</sub> = +2°C	4.4 kW	6.8 kW
COP T <sub>j</sub> = +2°C	4.76	3.39
C <sub>dh</sub> T <sub>j</sub> = +2 °C	1	1
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.3 kW	4.5 kW
COP T <sub>j</sub> = +7°C	6.14	4.9
C <sub>dh</sub> T <sub>j</sub> = +7 °C	1	1
P <sub>dh</sub> T <sub>j</sub> = 12°C	6.6 kW	5.2 kW
COP T <sub>j</sub> = 12°C	7.84	6.02
C <sub>dh</sub> T <sub>j</sub> = +12 °C	1	1
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	8.1 kW	10 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.77	2.41
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	8.1 kW	8.2 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.77	2
WTOL	35 °C	55 °C
P <sub>off</sub>	21 W	21 W
PTO	24 W	24 W
PSB	21 W	21 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	4.3 kW
Annual energy consumption Q <sub>he</sub>	3637 kWh	7510 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	8.5 kW	
SEER	5.31	
P <sub>dc</sub> T <sub>j</sub> = 35°C	8.62 kW	
EER T <sub>j</sub> = 35°C	2.91	
P <sub>dc</sub> T <sub>j</sub> = 30°C	6.68 kW	
EER T <sub>j</sub> = 30°C	4.17	
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.98	

Pdc Tj = 25°C	4.04 kW
EER Tj = 25°C	6.13
Cdc Tj = 25 °C	0.96
Pdc Tj = 20°C	2.69 kW
EER Tj = 20°C	8.75
Cdc Tj = 20 °C	0.91
Poff	25 W
PTO	3 W
PSB	25 W
PCK	0 W

**Model ERRA12EW1 / ELVZ12S23E(6V/9W)**

Model name	ERRA12EW1 / ELVZ12S23E(6V/9W)
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	3x400V 50Hz
Off-peak product	n/a

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

Declared load profile	L
Efficiency $\eta_{DHW}$	130 %
COP	3.05
Heating up time	2:14 h:min
Standby power input	43.9 W
Reference hot water temperature	52 °C
Mixed water at 40°C	298 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	6.17 kW	7.72 kW
El input	1.21 kW	2.53 kW
COP	5.1	3.05

**EN 14511-2 | Cooling**

	+7°C/+12°C	+18°C/+23°C
El input	2.86 kW	
Cooling capacity	8.62	
EER	3.01	

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)

Sound power level outdoor	56 dB(A)	56 dB(A)
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**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	191 %	138 %
P <sub>rated</sub>	8.3 kW	12.5 kW
SCOP	4.84	3.53
T <sub>biv</sub>	-10 °C	-5 °C
TOL	-10 °C	-10 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	7.5 kW	7.6 kW
COP T <sub>j</sub> = -7°C	3.2	2.34
C <sub>dh</sub> T <sub>j</sub> = -7 °C	1	1
P <sub>dh</sub> T <sub>j</sub> = +2°C	4.4 kW	6.8 kW
COP T <sub>j</sub> = +2°C	4.93	3.5
C <sub>dh</sub> T <sub>j</sub> = +2 °C	1	1
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.3 kW	4.5 kW
COP T <sub>j</sub> = +7°C	6.37	5.07
C <sub>dh</sub> T <sub>j</sub> = +7 °C	1	1
P <sub>dh</sub> T <sub>j</sub> = 12°C	6.6 kW	5.2 kW
COP T <sub>j</sub> = 12°C	8.13	6.23
C <sub>dh</sub> T <sub>j</sub> = +12 °C	1	1
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	8.1 kW	10 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.86	2.48
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	8.1 kW	8.2 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.86	2.06
WTOL	35 °C	55 °C
P <sub>off</sub>	27 W	27 W
PTO	24 W	24 W
PSB	27 W	27 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	4.3 kW
Annual energy consumption Q <sub>he</sub>	3539 kWh	7309 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	8.5 kW	
SEER	5.41	
P <sub>dc</sub> T <sub>j</sub> = 35°C	8.62 kW	
EER T <sub>j</sub> = 35°C	3.01	
P <sub>dc</sub> T <sub>j</sub> = 30°C	6.68 kW	
EER T <sub>j</sub> = 30°C	4.32	
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.98	

Pdc Tj = 25°C	4.04 kW
EER Tj = 25°C	6.34
Cdc Tj = 25 °C	0.96
Pdc Tj = 20°C	2.69 kW
EER Tj = 20°C	8.72
Cdc Tj = 20 °C	0.91
Poff	31 W
PTO	0 W
PSB	31 W
PCK	0 W

**Model ERRA12EV3 / ELVH12S23E(6V/9W) + cooling kit**

Model name	ERRA12EV3 / ELVH12S23E(6V/9W) + cooling kit
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	L
Efficiency $\eta_{DHW}$	126 %
COP	2.96
Heating up time	2:14 h:min
Standby power input	44.8 W
Reference hot water temperature	52 °C
Mixed water at 40°C	298 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	6.17 kW	7.72 kW
El input	1.25 kW	2.62 kW
COP	4.92	2.94

**EN 14511-2 | Cooling**

	+7°C/+12°C	+18°C/+23°C
El input	2.96 kW	
Cooling capacity	8.62	
EER	2.91	

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
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Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	190 %	136 %
P <sub>rated</sub>	8.3 kW	12.5 kW
SCOP	4.82	3.47
T <sub>biv</sub>	-10 °C	-5 °C
T <sub>OL</sub>	-10 °C	-10 °C
P <sub>dh T<sub>j</sub></sub> = -7°C	7.5 kW	7.6 kW
COP T <sub>j</sub> = -7°C	3.1	2.26
C <sub>dh</sub> T <sub>j</sub> = -7 °C	1	1
P <sub>dh T<sub>j</sub></sub> = +2°C	4.4 kW	6.8 kW
COP T <sub>j</sub> = +2°C	4.76	3.39
C <sub>dh</sub> T <sub>j</sub> = +2 °C	1	1
P <sub>dh T<sub>j</sub></sub> = +7°C	4.3 kW	4.5 kW
COP T <sub>j</sub> = +7°C	6.14	4.9
C <sub>dh</sub> T <sub>j</sub> = +7 °C	1	1
P <sub>dh T<sub>j</sub></sub> = 12°C	6.6 kW	5.2 kW
COP T <sub>j</sub> = 12°C	7.84	6.02
C <sub>dh</sub> T <sub>j</sub> = +12 °C	1	1
P <sub>dh T<sub>j</sub></sub> = T <sub>biv</sub>	8.1 kW	10 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.77	2.41
P <sub>dh T<sub>j</sub></sub> = T <sub>OL</sub> or P <sub>dh T<sub>j</sub></sub> = T <sub>designh</sub> if T <sub>OL</sub> < T <sub>designh</sub>	8.1 kW	8.2 kW
COP T <sub>j</sub> = T <sub>OL</sub> or COP T <sub>j</sub> = T <sub>designh</sub> if T <sub>OL</sub> < T <sub>designh</sub>	2.77	2
WT <sub>OL</sub>	35 °C	55 °C
P <sub>off</sub>	21 W	21 W
PTO	24 W	24 W
PSB	21 W	21 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	4.3 kW
Annual energy consumption Q <sub>he</sub>	3560 kWh	7433 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	8.5 kW	
SEER	5.31	
P <sub>dc T<sub>j</sub></sub> = 35°C	8.62 kW	
EER T <sub>j</sub> = 35°C	2.91	
P <sub>dc T<sub>j</sub></sub> = 30°C	6.68 kW	
EER T <sub>j</sub> = 30°C	4.17	

Cdc Tj = 30 °C	0.98
Pdc Tj = 25°C	4.04 kW
EER Tj = 25°C	6.13
Cdc Tj = 25 °C	0.96
Pdc Tj = 20°C	2.69 kW
EER Tj = 20°C	8.75
Cdc Tj = 20 °C	0.91
Poff	25 W
PTO	3 W
PSB	25 W
PCK	0 W

**Model ERRA12EW1 / ELVH12S23E(6V/9W) + cooling kit**

Model name	ERRA12EW1 / ELVH12S23E(6V/9W) + cooling kit
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	3x400V 50Hz
Off-peak product	n/a

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

Declared load profile	L
Efficiency ηDHW	130 %
COP	3.05
Heating up time	2:14 h:min
Standby power input	43.9 W
Reference hot water temperature	52 °C
Mixed water at 40°C	298 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	6.17 kW	7.72 kW
El input	1.21 kW	2.53 kW
COP	5.1	3.05

**EN 14511-2 | Cooling**

	+7°C/+12°C	+18°C/+23°C
El input	2.86 kW	
Cooling capacity	8.62	
EER	3.01	

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
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Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	196 %	140 %
P <sub>rated</sub>	8.3 kW	12.5 kW
SCOP	4.98	3.58
T <sub>biv</sub>	-10 °C	-5 °C
T <sub>OL</sub>	-10 °C	-10 °C
P <sub>dh T<sub>j</sub></sub> = -7°C	7.5 kW	7.6 kW
COP T <sub>j</sub> = -7°C	3.2	2.34
C <sub>dh T<sub>j</sub></sub> = -7 °C	1	1
P <sub>dh T<sub>j</sub></sub> = +2°C	4.4 kW	6.8 kW
COP T <sub>j</sub> = +2°C	4.93	3.5
C <sub>dh T<sub>j</sub></sub> = +2 °C	1	1
P <sub>dh T<sub>j</sub></sub> = +7°C	4.3 kW	4.5 kW
COP T <sub>j</sub> = +7°C	6.37	5.07
C <sub>dh T<sub>j</sub></sub> = +7 °C	1	1
P <sub>dh T<sub>j</sub></sub> = 12°C	6.6 kW	5.2 kW
COP T <sub>j</sub> = 12°C	8.13	6.23
C <sub>dh T<sub>j</sub></sub> = +12 °C	1	1
P <sub>dh T<sub>j</sub></sub> = T <sub>biv</sub>	8.1 kW	10 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.86	2.48
P <sub>dh T<sub>j</sub></sub> = T <sub>OL</sub> or P <sub>dh T<sub>j</sub></sub> = T <sub>designh</sub> if T <sub>OL</sub> < T <sub>designh</sub>	8.1 kW	8.2 kW
COP T <sub>j</sub> = T <sub>OL</sub> or COP T <sub>j</sub> = T <sub>designh</sub> if T <sub>OL</sub> < T <sub>designh</sub>	2.86	2.06
WT <sub>OL</sub>	35 °C	55 °C
P <sub>off</sub>	27 W	27 W
PTO	24 W	24 W
PSB	27 W	27 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	4.3 kW
Annual energy consumption Q <sub>he</sub>	3440 kWh	7210 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	8.5 kW	
SEER	5.41	
P <sub>dc T<sub>j</sub></sub> = 35°C	8.62 kW	
EER T <sub>j</sub> = 35°C	3.01	
P <sub>dc T<sub>j</sub></sub> = 30°C	6.68 kW	
EER T <sub>j</sub> = 30°C	4.32	

Cdc Tj = 30 °C	0.98
Pdc Tj = 25°C	4.04 kW
EER Tj = 25°C	6.34
Cdc Tj = 25 °C	0.96
Pdc Tj = 20°C	2.69 kW
EER Tj = 20°C	8.72
Cdc Tj = 20 °C	0.91
Poff	31 W
PTO	0 W
PSB	31 W
PCK	0 W

**Model ERRA12EV3 / ELVZ12S23E(6V/9W) + cooling kit**

Model name	ERRA12EV3 / ELVZ12S23E(6V/9W) + cooling kit
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	L
Efficiency $\eta_{DHW}$	126 %
COP	2.96
Heating up time	2:14 h:min
Standby power input	44.8 W
Reference hot water temperature	52 °C
Mixed water at 40°C	298 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	6.17 kW	7.72 kW
El input	1.25 kW	2.62 kW
COP	4.92	2.94

**EN 14511-2 | Cooling**

	+7°C/+12°C	+18°C/+23°C
El input	2.96 kW	
Cooling capacity	8.62	
EER	2.91	

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
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Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	190 %	136 %
P <sub>rated</sub>	8.3 kW	12.5 kW
SCOP	4.82	3.47
T <sub>biv</sub>	-10 °C	-5 °C
T <sub>OL</sub>	-10 °C	-10 °C
P <sub>dh T<sub>j</sub></sub> = -7°C	7.5 kW	7.6 kW
COP T <sub>j</sub> = -7°C	3.1	2.26
C <sub>dh</sub> T <sub>j</sub> = -7 °C	1	1
P <sub>dh T<sub>j</sub></sub> = +2°C	4.4 kW	6.8 kW
COP T <sub>j</sub> = +2°C	4.76	3.39
C <sub>dh</sub> T <sub>j</sub> = +2 °C	1	1
P <sub>dh T<sub>j</sub></sub> = +7°C	4.3 kW	4.5 kW
COP T <sub>j</sub> = +7°C	6.14	4.9
C <sub>dh</sub> T <sub>j</sub> = +7 °C	1	1
P <sub>dh T<sub>j</sub></sub> = 12°C	6.6 kW	5.2 kW
COP T <sub>j</sub> = 12°C	7.84	6.02
C <sub>dh</sub> T <sub>j</sub> = +12 °C	1	1
P <sub>dh T<sub>j</sub></sub> = T <sub>biv</sub>	8.1 kW	10 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.77	2.41
P <sub>dh T<sub>j</sub></sub> = T <sub>OL</sub> or P <sub>dh T<sub>j</sub></sub> = T <sub>designh</sub> if T <sub>OL</sub> < T <sub>designh</sub>	8.1 kW	8.2 kW
COP T <sub>j</sub> = T <sub>OL</sub> or COP T <sub>j</sub> = T <sub>designh</sub> if T <sub>OL</sub> < T <sub>designh</sub>	2.77	2
WT <sub>OL</sub>	35 °C	55 °C
P <sub>off</sub>	21 W	21 W
PTO	24 W	24 W
PSB	21 W	21 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	4.3 kW
Annual energy consumption Q <sub>he</sub>	3560 kWh	7433 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	8.5 kW	
SEER	5.31	
P <sub>dc T<sub>j</sub></sub> = 35°C	8.62 kW	
EER T <sub>j</sub> = 35°C	2.91	
P <sub>dc T<sub>j</sub></sub> = 30°C	6.68 kW	
EER T <sub>j</sub> = 30°C	4.17	

Cdc Tj = 30 °C	0.98
Pdc Tj = 25°C	4.04 kW
EER Tj = 25°C	6.13
Cdc Tj = 25 °C	0.96
Pdc Tj = 20°C	2.69 kW
EER Tj = 20°C	8.75
Cdc Tj = 20 °C	0.91
Poff	25 W
PTO	3 W
PSB	25 W
PCK	0 W

**Model ERRA12EW1 / ELVZ12S23E(6V/9W) + cooling kit**

Model name	ERRA12EW1 / ELVZ12S23E(6V/9W) + cooling kit
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	3x400V 50Hz
Off-peak product	n/a

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

Declared load profile	L
Efficiency ηDHW	130 %
COP	3.05
Heating up time	2:14 h:min
Standby power input	43.9 W
Reference hot water temperature	52 °C
Mixed water at 40°C	298 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	6.17 kW	7.72 kW
El input	1.21 kW	2.53 kW
COP	5.1	3.05

**EN 14511-2 | Cooling**

	+7°C/+12°C	+18°C/+23°C
El input	2.86 kW	
Cooling capacity	8.62	
EER	3.01	

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
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Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	196 %	140 %
P <sub>rated</sub>	8.3 kW	12.5 kW
SCOP	4.98	3.58
T <sub>biv</sub>	-10 °C	-5 °C
T <sub>OL</sub>	-10 °C	-10 °C
P <sub>dh T<sub>j</sub></sub> = -7°C	7.5 kW	7.6 kW
COP T <sub>j</sub> = -7°C	3.2	2.34
C <sub>dh T<sub>j</sub></sub> = -7 °C	1	1
P <sub>dh T<sub>j</sub></sub> = +2°C	4.4 kW	6.8 kW
COP T <sub>j</sub> = +2°C	4.93	3.5
C <sub>dh T<sub>j</sub></sub> = +2 °C	1	1
P <sub>dh T<sub>j</sub></sub> = +7°C	4.3 kW	4.5 kW
COP T <sub>j</sub> = +7°C	6.37	5.07
C <sub>dh T<sub>j</sub></sub> = +7 °C	1	1
P <sub>dh T<sub>j</sub></sub> = 12°C	6.6 kW	5.2 kW
COP T <sub>j</sub> = 12°C	8.13	6.23
C <sub>dh T<sub>j</sub></sub> = +12 °C	1	1
P <sub>dh T<sub>j</sub></sub> = T <sub>biv</sub>	8.1 kW	10 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.86	2.48
P <sub>dh T<sub>j</sub></sub> = T <sub>OL</sub> or P <sub>dh T<sub>j</sub></sub> = T <sub>designh</sub> if T <sub>OL</sub> < T <sub>designh</sub>	8.1 kW	8.2 kW
COP T <sub>j</sub> = T <sub>OL</sub> or COP T <sub>j</sub> = T <sub>designh</sub> if T <sub>OL</sub> < T <sub>designh</sub>	2.86	2.06
WT <sub>OL</sub>	35 °C	55 °C
P <sub>off</sub>	27 W	27 W
PTO	24 W	24 W
PSB	27 W	27 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	4.3 kW
Annual energy consumption Q <sub>he</sub>	3440 kWh	7210 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	8.5 kW	
SEER	5.41	
P <sub>dc T<sub>j</sub></sub> = 35°C	8.62 kW	
EER T <sub>j</sub> = 35°C	3.01	
P <sub>dc T<sub>j</sub></sub> = 30°C	6.68 kW	
EER T <sub>j</sub> = 30°C	4.32	

Cdc Tj = 30 °C	0.98
Pdc Tj = 25°C	4.04 kW
EER Tj = 25°C	6.34
Cdc Tj = 25 °C	0.96
Pdc Tj = 20°C	2.69 kW
EER Tj = 20°C	8.72
Cdc Tj = 20 °C	0.91
Poff	31 W
PTO	0 W
PSB	31 W
PCK	0 W