

Subtype DAIKIN ALTHERMA 3 H MT F 12KW (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 H MT F 12KW (230L)
Registration number	011-1W0505
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	3.25 kg
Certification Date	24.11.2021
Testing basis	HP KEYMARK certification scheme rules rev. 9

Model EPRA12EV3 / ETVH12S23E(6V/9W)

Model name	EPRA12EV3 / ETVH12S23E(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 η_{DHW}	126 %
COP	2.96
Heating up time	2:14 h:min
Standby power input	44.8 W
Reference hot water temperature	52.5 °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	2.63 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	44.0 dB(A)	44.0 dB(A)

Sound power level outdoor	53.0 dB(A)	53.0 dB(A)
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EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	186 %	134 %
P _{rated}	8.3 kW	8.5 kW
SCOP	4.71	3.43
T _{biv}	-10 °C	-10 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	7.5 kW	7.6 kW
COP T _j = -7°C	3.10	2.21
C _{dh} T _j = -7 °C	1.0	1.0
P _{dh} T _j = +2°C	4.4 kW	4.6 kW
COP T _j = +2°C	4.76	3.37
C _{dh} T _j = +2 °C	1.0	1.0
P _{dh} T _j = +7°C	4.3 kW	3.0 kW
COP T _j = +7°C	6.14	4.48
C _{dh} T _j = +7 °C	1.0	1.0
P _{dh} T _j = 12°C	6.6 kW	3.7 kW
COP T _j = 12°C	7.84	5.98
C _{dh} T _j = +12 °C	1.0	1.0
P _{dh} T _j = T _{biv}	8.1 kW	8.3 kW
COP T _j = T _{biv}	2.77	1.97
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	8.1 kW	8.3 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	2.77	1.97
WTOL	35 °C	55 °C
P _{off}	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	0.0 kW	0.0 kW
Annual energy consumption Q _{he}	3637 kWh	5120 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
P _{designc}	8.5 kW	
SEER	5.31	
P _{dc} T _j = 35°C	8.62 kW	
EER T _j = 35°C	2.91	
P _{dc} T _j = 30°C	6.68 kW	
EER T _j = 30°C	4.17	
C _{dc} T _j = 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
Annual energy consumption Qce	961 kWh

Model EPRA12EV3 / ETVH12SU23E6V

Model name	EPRA12EV3 / ETVH12SU23E6V
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 ηDHW	126 %
COP	2.96
Heating up time	2:14 h:min
Standby power input	44.8 W
Reference hot water temperature	52.5 °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	2.63 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	44.0 dB(A)	44.0 dB(A)

Sound power level outdoor	53.0 dB(A)	53.0 dB(A)
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EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	186 %	134 %
P _{rated}	8.3 kW	8.5 kW
SCOP	4.71	3.43
T _{biv}	-10 °C	-10 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	7.5 kW	7.6 kW
COP T _j = -7°C	3.10	2.21
C _{dh} T _j = -7 °C	1.0	1.0
P _{dh} T _j = +2°C	4.4 kW	4.6 kW
COP T _j = +2°C	4.76	3.37
C _{dh} T _j = +2 °C	1.0	1.0
P _{dh} T _j = +7°C	4.3 kW	3.0 kW
COP T _j = +7°C	6.14	4.48
C _{dh} T _j = +7 °C	1.0	1.0
P _{dh} T _j = 12°C	6.6 kW	3.7 kW
COP T _j = 12°C	7.84	5.98
C _{dh} T _j = +12 °C	1.0	1.0
P _{dh} T _j = T _{biv}	8.1 kW	8.3 kW
COP T _j = T _{biv}	2.77	1.97
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	8.1 kW	8.3 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	2.77	1.97
WTOL	35 °C	55 °C
P _{off}	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	0.0 kW	0.0 kW
Annual energy consumption Q _{he}	3637 kWh	5120 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
P _{designc}	8.5 kW	
SEER	5.31	
P _{dc} T _j = 35°C	8.62 kW	
EER T _j = 35°C	2.91	
P _{dc} T _j = 30°C	6.68 kW	
EER T _j = 30°C	4.17	
C _{dc} T _j = 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
Annual energy consumption Qce	961 kWh

Model EPRA12EV3 / ETVX12S23E(6V/9W)

Model name	EPRA12EV3 / ETVX12S23E(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	52.5 °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	2.63 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	44.0 dB(A)	44.0 dB(A)
Sound power level outdoor	53.0 dB(A)	53.0 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	190 %	136 %
P _{rated}	8.3 kW	8.5 kW
SCOP	4.82	3.48
T _{biv}	-10 °C	-10 °C
T _{OL}	-10 °C	-10 °C
P _{dh T_j} = -7°C	7.5 kW	7.6 kW
COP T _j = -7°C	3.10	2.21
C _{dh T_j} = -7 °C	1.0	1.0
P _{dh T_j} = +2°C	4.4 kW	4.6 kW
COP T _j = +2°C	4.76	3.37
C _{dh T_j} = +2 °C	1.0	1.0
P _{dh T_j} = +7°C	4.3 kW	3.0 kW
COP T _j = +7°C	6.14	4.48
C _{dh T_j} = +7 °C	1.0	1.0
P _{dh T_j} = 12°C	6.6 kW	3.7 kW
COP T _j = 12°C	7.84	5.98
C _{dh T_j} = +12 °C	1.0	1.0
P _{dh T_j} = T _{biv}	8.1 kW	8.3 kW
COP T _j = T _{biv}	2.77	1.97
P _{dh T_j} = T _{OL} or P _{dh T_j} = T _{designh} if T _{OL} < T _{designh}	8.1 kW	8.3 kW
COP T _j = T _{OL} or COP T _j = T _{designh} if T _{OL} < T _{designh}	2.77	1.97
WT _{OL}	35 °C	55 °C
P _{off}	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	0.0 kW	0.0 kW
Annual energy consumption Q _{he}	3560 kWh	5043 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
P _{designc}	8.5 kW	
SEER	5.31	
P _{dc T_j} = 35°C	8.62 kW	
EER T _j = 35°C	2.91	
P _{dc T_j} = 30°C	6.68 kW	
EER T _j = 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
Annual energy consumption Qce	961 kWh

Model EPRA12EV3 / ETVZ12S23E(6V/9W)

Model name	EPRA12EV3 / ETVZ12S23E(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 ηDHW	126 %
COP	2.96
Heating up time	2:14 h:min
Standby power input	44.8 W
Reference hot water temperature	52.5 °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	2.63 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	44.0 dB(A)	44.0 dB(A)

Sound power level outdoor	53.0 dB(A)	53.0 dB(A)
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EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	186 %	134 %
P _{rated}	8.3 kW	8.5 kW
SCOP	4.71	3.43
T _{biv}	-10 °C	-10 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	7.5 kW	7.6 kW
COP T _j = -7°C	3.10	2.21
C _{dh} T _j = -7 °C	1.0	1.0
P _{dh} T _j = +2°C	4.4 kW	4.6 kW
COP T _j = +2°C	4.76	3.37
C _{dh} T _j = +2 °C	1.0	1.0
P _{dh} T _j = +7°C	4.3 kW	3.0 kW
COP T _j = +7°C	6.14	4.48
C _{dh} T _j = +7 °C	1.0	1.0
P _{dh} T _j = 12°C	6.6 kW	3.7 kW
COP T _j = 12°C	7.84	5.98
C _{dh} T _j = +12 °C	1.0	1.0
P _{dh} T _j = T _{biv}	8.1 kW	8.3 kW
COP T _j = T _{biv}	2.77	1.97
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	8.1 kW	8.3 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	2.77	1.97
WTOL	35 °C	55 °C
P _{off}	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	0.0 kW	0.0 kW
Annual energy consumption Q _{he}	3637 kWh	5120 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
P _{designc}	8.5 kW	
SEER	5.31	
P _{dc} T _j = 35°C	8.62 kW	
EER T _j = 35°C	2.91	
P _{dc} T _j = 30°C	6.68 kW	
EER T _j = 30°C	4.17	
C _{dc} T _j = 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
Annual energy consumption Qce	961 kWh

Model EPRA12EW1 / ETVH12S23E(6V/9W)

Model name	EPRA12EW1 / ETVH12S23E(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	52.5 °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	5.10	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	44.0 dB(A)	44.0 dB(A)

Sound power level outdoor	53.0 dB(A)	53.0 dB(A)
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EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	191 %	138 %
P _{rated}	8.3 kW	8.5 kW
SCOP	4.84	3.53
T _{biv}	-10 °C	-10 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	7.5 kW	7.6 kW
COP T _j = -7°C	3.20	2.30
C _{dh} T _j = -7 °C	1.0	1.0
P _{dh} T _j = +2°C	4.4 kW	4.6 kW
COP T _j = +2°C	4.93	3.50
C _{dh} T _j = +2 °C	1.0	1.0
P _{dh} T _j = +7°C	4.3 kW	3.0 kW
COP T _j = +7°C	6.37	4.61
C _{dh} T _j = +7 °C	1.0	1.0
P _{dh} T _j = 12°C	6.6 kW	3.7 kW
COP T _j = 12°C	8.13	6.16
C _{dh} T _j = +12 °C	1.0	1.0
P _{dh} T _j = T _{biv}	8.1 kW	8.3 kW
COP T _j = T _{biv}	2.86	2.05
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	8.1 kW	8.3 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	2.86	2.05
WTOL	35 °C	55 °C
P _{off}	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	0.0 kW	0.0 kW
Annual energy consumption Q _{he}	3539 kWh	4970 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
P _{designc}	8.5 kW	
SEER	5.41	
P _{dc} T _j = 35°C	8.62 kW	
EER T _j = 35°C	3.01	
P _{dc} T _j = 30°C	6.68 kW	
EER T _j = 30°C	4.32	
C _{dc} T _j = 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
Annual energy consumption Qce	943 kWh

Model EPRA12EW1 / ETVH12SU23E6V

Model name	EPRA12EW1 / ETVH12SU23E6V
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	52.5 °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	5.10	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	44.0 dB(A)	44.0 dB(A)

Sound power level outdoor	53.0 dB(A)	53.0 dB(A)
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EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	191 %	138 %
P _{rated}	8.3 kW	8.5 kW
SCOP	4.84	3.53
T _{biv}	-10 °C	-10 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	7.5 kW	7.6 kW
COP T _j = -7°C	3.20	2.30
C _{dh} T _j = -7 °C	1.0	1.0
P _{dh} T _j = +2°C	4.4 kW	4.6 kW
COP T _j = +2°C	4.93	3.50
C _{dh} T _j = +2 °C	1.0	1.0
P _{dh} T _j = +7°C	4.3 kW	3.0 kW
COP T _j = +7°C	6.37	4.61
C _{dh} T _j = +7 °C	1.0	1.0
P _{dh} T _j = 12°C	6.6 kW	3.7 kW
COP T _j = 12°C	8.13	6.16
C _{dh} T _j = +12 °C	1.0	1.0
P _{dh} T _j = T _{biv}	8.1 kW	8.3 kW
COP T _j = T _{biv}	2.86	2.05
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	8.1 kW	8.3 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	2.86	2.05
WTOL	35 °C	55 °C
P _{off}	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	0.0 kW	0.0 kW
Annual energy consumption Q _{he}	3539 kWh	4970 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
P _{designc}	8.5 kW	
SEER	5.41	
P _{dc} T _j = 35°C	8.62 kW	
EER T _j = 35°C	3.01	
P _{dc} T _j = 30°C	6.68 kW	
EER T _j = 30°C	4.32	
C _{dc} T _j = 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
Annual energy consumption Qce	943 kWh

Model EPRA12EW1 / ETVX12S23E(6V/9W)

Model name	EPRA12EW1 / ETVX12S23E(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	52.5 °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	5.10	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	44.0 dB(A)	44.0 dB(A)
Sound power level outdoor	53.0 dB(A)	53.0 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	196 %	141 %
P _{rated}	8.3 kW	8.5 kW
SCOP	4.98	3.60
T _{biv}	-10 °C	-10 °C
T _{OL}	-10 °C	-10 °C
P _{dh T_j} = -7°C	7.5 kW	7.6 kW
COP T _j = -7°C	3.20	2.30
C _{dh T_j} = -7 °C	1.0	1.0
P _{dh T_j} = +2°C	4.4 kW	4.6 kW
COP T _j = +2°C	4.93	3.50
C _{dh T_j} = +2 °C	1.0	1.0
P _{dh T_j} = +7°C	4.3 kW	3.0 kW
COP T _j = +7°C	6.37	4.61
C _{dh T_j} = +7 °C	1.0	1.0
P _{dh T_j} = 12°C	6.6 kW	3.7 kW
COP T _j = 12°C	8.13	6.16
C _{dh T_j} = +12 °C	1.0	1.0
P _{dh T_j} = T _{biv}	8.1 kW	8.3 kW
COP T _j = T _{biv}	2.86	2.05
P _{dh T_j} = T _{OL} or P _{dh T_j} = T _{designh} if T _{OL} < T _{designh}	8.1 kW	8.3 kW
COP T _j = T _{OL} or COP T _j = T _{designh} if T _{OL} < T _{designh}	2.86	2.05
WT _{OL}	35 °C	55 °C
P _{off}	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	0.0 kW	0.0 kW
Annual energy consumption Q _{he}	3440 kWh	4871 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
P _{designc}	8.5 kW	
SEER	5.41	
P _{dc T_j} = 35°C	8.62 kW	
EER T _j = 35°C	3.01	
P _{dc T_j} = 30°C	6.68 kW	
EER T _j = 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
Annual energy consumption Qce	943 kWh

Model EPRA12EW1 / ETVZ12S23E(6V/9W)

Model name	EPRA12EW1 / ETVZ12S23E(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	52.5 °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	5.10	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	44.0 dB(A)	44.0 dB(A)

Sound power level outdoor	53.0 dB(A)	53.0 dB(A)
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EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	191 %	138 %
P _{rated}	8.3 kW	8.5 kW
SCOP	4.84	3.53
T _{biv}	-10 °C	-10 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	7.5 kW	7.6 kW
COP T _j = -7°C	3.20	2.30
C _{dh} T _j = -7 °C	1.0	1.0
P _{dh} T _j = +2°C	4.4 kW	4.6 kW
COP T _j = +2°C	4.93	3.50
C _{dh} T _j = +2 °C	1.0	1.0
P _{dh} T _j = +7°C	4.3 kW	3.0 kW
COP T _j = +7°C	6.37	4.61
C _{dh} T _j = +7 °C	1.0	1.0
P _{dh} T _j = 12°C	6.6 kW	3.7 kW
COP T _j = 12°C	8.13	6.16
C _{dh} T _j = +12 °C	1.0	1.0
P _{dh} T _j = T _{biv}	8.1 kW	8.3 kW
COP T _j = T _{biv}	2.86	2.05
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	8.1 kW	8.3 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	2.86	2.05
WTOL	35 °C	55 °C
P _{off}	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	0.0 kW	0.0 kW
Annual energy consumption Q _{he}	3539 kWh	4970 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
P _{designc}	8.5 kW	
SEER	5.41	
P _{dc} T _j = 35°C	8.62 kW	
EER T _j = 35°C	3.01	
P _{dc} T _j = 30°C	6.68 kW	
EER T _j = 30°C	4.32	
C _{dc} T _j = 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
Annual energy consumption Qce	943 kWh

Model EPRA12EV3 / ETVH12S23E(6V/9W) + cooling kit

Model name	EPRA12EV3 / ETVH12S23E(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 ηDHW	126 %
COP	2.96
Heating up time	2:14 h:min
Standby power input	44.8 W
Reference hot water temperature	52.5 °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	2.63 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	44.0 dB(A)	44.0 dB(A)
Sound power level outdoor	53.0 dB(A)	53.0 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	190 %	136 %
P _{rated}	8.3 kW	8.5 kW
SCOP	4.82	3.48
T _{biv}	-10 °C	-10 °C
T _{OL}	-10 °C	-10 °C
P _{dh T_j} = -7°C	7.5 kW	7.6 kW
COP T _j = -7°C	3.10	2.21
C _{dh T_j} = -7 °C	1.0	1.0
P _{dh T_j} = +2°C	4.4 kW	4.6 kW
COP T _j = +2°C	4.76	3.37
C _{dh T_j} = +2 °C	1.0	1.0
P _{dh T_j} = +7°C	4.3 kW	3.0 kW
COP T _j = +7°C	6.14	4.48
C _{dh T_j} = +7 °C	1.0	1.0
P _{dh T_j} = 12°C	6.6 kW	3.7 kW
COP T _j = 12°C	7.84	5.98
C _{dh T_j} = +12 °C	1.0	1.0
P _{dh T_j} = T _{biv}	8.1 kW	8.3 kW
COP T _j = T _{biv}	2.77	1.97
P _{dh T_j} = T _{OL} or P _{dh T_j} = T _{designh} if T _{OL} < T _{designh}	8.1 kW	8.3 kW
COP T _j = T _{OL} or COP T _j = T _{designh} if T _{OL} < T _{designh}	2.77	1.97
WT _{OL}	35 °C	55 °C
P _{off}	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	0.0 kW	0.0 kW
Annual energy consumption Q _{he}	3560 kWh	5043 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
P _{designc}	8.5 kW	
SEER	5.31	
P _{dc T_j} = 35°C	8.62 kW	
EER T _j = 35°C	2.91	
P _{dc T_j} = 30°C	6.68 kW	
EER T _j = 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
Annual energy consumption Qce	961 kWh

Model EPRA12EW1 / ETVH12S23E(6V/9W) + cooling kit

Model name	EPRA12EW1 / ETVH12S23E(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	52.5 °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	5.10	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	44.0 dB(A)	44.0 dB(A)
Sound power level outdoor	53.0 dB(A)	53.0 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	196 %	141 %
P _{rated}	8.3 kW	8.5 kW
SCOP	4.98	3.60
T _{biv}	-10 °C	-10 °C
T _{OL}	-10 °C	-10 °C
P _{dh T_j} = -7°C	7.5 kW	7.6 kW
COP T _j = -7°C	3.20	2.30
Cd _h T _j = -7 °C	1.0	1.0
P _{dh T_j} = +2°C	4.4 kW	4.6 kW
COP T _j = +2°C	4.93	3.50
Cd _h T _j = +2 °C	1.0	1.0
P _{dh T_j} = +7°C	4.3 kW	3.0 kW
COP T _j = +7°C	6.37	4.61
Cd _h T _j = +7 °C	1.0	1.0
P _{dh T_j} = 12°C	6.6 kW	3.7 kW
COP T _j = 12°C	8.13	6.16
Cd _h T _j = +12 °C	1.0	1.0
P _{dh T_j} = T _{biv}	8.1 kW	8.3 kW
COP T _j = T _{biv}	2.86	2.05
P _{dh T_j} = T _{OL} or P _{dh T_j} = T _{designh} if T _{OL} < T _{designh}	8.1 kW	8.3 kW
COP T _j = T _{OL} or COP T _j = T _{designh} if T _{OL} < T _{designh}	2.86	2.05
WT _{OL}	35 °C	55 °C
P _{off}	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	0.0 kW	0.0 kW
Annual energy consumption Q _{he}	3440 kWh	4871 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
P _{designc}	8.5 kW	
SEER	5.41	
P _{dc T_j} = 35°C	8.62 kW	
EER T _j = 35°C	3.01	
P _{dc T_j} = 30°C	6.68 kW	
EER T _j = 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
Annual energy consumption Qce	943 kWh

Model EPRA12EV3 / ETVH12S23E(6V/9W) + cooling kit

Model name	EPRA12EV3 / ETVH12S23E(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 ηDHW	126 %
COP	2.96
Heating up time	2:14 h:min
Standby power input	44.8 W
Reference hot water temperature	52.5 °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	2.63 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	44.0 dB(A)	44.0 dB(A)
Sound power level outdoor	53.0 dB(A)	53.0 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	190 %	136 %
P _{rated}	8.3 kW	8.5 kW
SCOP	4.82	3.48
T _{biv}	-10 °C	-10 °C
T _{OL}	-10 °C	-10 °C
P _{dh T_j} = -7°C	7.5 kW	7.6 kW
COP T _j = -7°C	3.10	2.21
C _{dh T_j} = -7 °C	1.0	1.0
P _{dh T_j} = +2°C	4.4 kW	4.6 kW
COP T _j = +2°C	4.76	3.37
C _{dh T_j} = +2 °C	1.0	1.0
P _{dh T_j} = +7°C	4.3 kW	3.0 kW
COP T _j = +7°C	6.14	4.48
C _{dh T_j} = +7 °C	1.0	1.0
P _{dh T_j} = 12°C	6.6 kW	3.7 kW
COP T _j = 12°C	7.84	5.98
C _{dh T_j} = +12 °C	1.0	1.0
P _{dh T_j} = T _{biv}	8.1 kW	8.3 kW
COP T _j = T _{biv}	2.77	1.97
P _{dh T_j} = T _{OL} or P _{dh T_j} = T _{designh} if T _{OL} < T _{designh}	8.1 kW	8.3 kW
COP T _j = T _{OL} or COP T _j = T _{designh} if T _{OL} < T _{designh}	2.77	1.97
WT _{OL}	35 °C	55 °C
P _{off}	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	0.0 kW	0.0 kW
Annual energy consumption Q _{he}	3560 kWh	5043 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
P _{designc}	8.5 kW	
SEER	5.31	
P _{dc T_j} = 35°C	8.62 kW	
EER T _j = 35°C	2.91	
P _{dc T_j} = 30°C	6.68 kW	
EER T _j = 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
Annual energy consumption Qce	961 kWh

Model EPRA12EW1 / ETVH12S23E(6V/9W) + cooling kit

Model name	EPRA12EW1 / ETVH12S23E(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	52.5 °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	5.10	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	44.0 dB(A)	44.0 dB(A)
Sound power level outdoor	53.0 dB(A)	53.0 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	196 %	141 %
P _{rated}	8.3 kW	8.5 kW
SCOP	4.98	3.60
T _{biv}	-10 °C	-10 °C
T _{OL}	-10 °C	-10 °C
P _d h T _j = -7°C	7.5 kW	7.6 kW
COP T _j = -7°C	3.20	2.30
Cd _h T _j = -7 °C	1.0	1.0
P _d h T _j = +2°C	4.4 kW	4.6 kW
COP T _j = +2°C	4.93	3.50
Cd _h T _j = +2 °C	1.0	1.0
P _d h T _j = +7°C	4.3 kW	3.0 kW
COP T _j = +7°C	6.37	4.61
Cd _h T _j = +7 °C	1.0	1.0
P _d h T _j = 12°C	6.6 kW	3.7 kW
COP T _j = 12°C	8.13	6.16
Cd _h T _j = +12 °C	1.0	1.0
P _d h T _j = T _{biv}	8.1 kW	8.3 kW
COP T _j = T _{biv}	2.86	2.05
P _d h T _j = T _{OL} or P _d h T _j = T _{designh} if T _{OL} < T _{designh}	8.1 kW	8.3 kW
COP T _j = T _{OL} or COP T _j = T _{designh} if T _{OL} < T _{designh}	2.86	2.05
WT _{OL}	35 °C	55 °C
P _{off}	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	0.0 kW	0.0 kW
Annual energy consumption Q _{he}	3440 kWh	4871 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
P _{designc}	8.5 kW	
SEER	5.41	
P _d c T _j = 35°C	8.62 kW	
EER T _j = 35°C	3.01	
P _d c T _j = 30°C	6.68 kW	
EER T _j = 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
Annual energy consumption Qce	943 kWh