

Subtype DAIKIN ALTHERMA 3 H MT F 08-12KW (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 H MT F 08-12KW (500L)
Registration number	011-1W0502
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 EPRA08EV3 / ETS(B)12P50E**

Model name	EPRA08EV3 / ETS(B)12P50E
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	128 %
COP	3.10
Heating up time	3:13 h:min
Standby power input	32.7 W
Reference hot water temperature	44.5 °C
Mixed water at 40°C	246.0 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	2.15 kW	
Cooling capacity	6.81	
EER	3.17	

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	47.3 dB(A)	47.3 dB(A)

Sound power level outdoor	53.0 dB(A)	53.0 dB(A)
---------------------------	------------	------------

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	184 %	134 %
P <sub>rated</sub>	8.3 kW	8.5 kW
SCOP	4.69	3.41
T <sub>biv</sub>	-7 °C	-7 °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	3.10	2.21
C <sub>dh</sub> T <sub>j</sub> = -7 °C	1.0	1.0
P <sub>dh</sub> T <sub>j</sub> = +2°C	4.4 kW	4.6 kW
COP T <sub>j</sub> = +2°C	4.76	3.37
C <sub>dh</sub> T <sub>j</sub> = +2 °C	1.0	1.0
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.3 kW	3.0 kW
COP T <sub>j</sub> = +7°C	6.14	4.48
C <sub>dh</sub> T <sub>j</sub> = +7 °C	1.0	1.0
P <sub>dh</sub> T <sub>j</sub> = 12°C	6.6 kW	3.7 kW
COP T <sub>j</sub> = 12°C	7.84	5.98
C <sub>dh</sub> T <sub>j</sub> = +12 °C	1.0	1.0
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	7.5 kW	7.6 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.10	2.21
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>	6.92 kW	6.96 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	2.80	1.93
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	1.38 kW	1.54 kW
Annual energy consumption Q <sub>he</sub>	3659 kWh	5142 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	6.5 kW	
SEER	5.38	
P <sub>dc</sub> T <sub>j</sub> = 35°C	6.81 kW	
EER T <sub>j</sub> = 35°C	3.17	
P <sub>dc</sub> T <sub>j</sub> = 30°C	5.00 kW	
EER T <sub>j</sub> = 30°C	4.37	
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.98	

Pdc Tj = 25°C	3.01 kW
EER Tj = 25°C	6.58
Cdc Tj = 25 °C	0.94
Pdc Tj = 20°C	2.57 kW
EER Tj = 20°C	8.00
Cdc Tj = 20 °C	0.91
Poff	25 W
PTO	3 W
PSB	25 W
PCK	0 W
Annual energy consumption Qce	725 kWh

**Model EPRA08EW1 / ETSH(B)12P50E**

Model name	EPRA08EW1 / ETSH(B)12P50E
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	131 %
COP	3.17
Heating up time	4:13 h:min
Standby power input	32.1 W
Reference hot water temperature	44.5 °C
Mixed water at 40°C	246.0 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	2.08 kW	
Cooling capacity	6.81	
EER	3.28	

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	47.3 dB(A)	47.3 dB(A)

Sound power level outdoor	53.0 dB(A)	53.0 dB(A)
---------------------------	------------	------------

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	190 %	138 %
Prated	8.3 kW	8.5 kW
SCOP	4.81	3.52
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.5 kW	7.6 kW
COP Tj = -7°C	3.20	2.30
Cdh Tj = -7 °C	1.0	1.0
Pdh Tj = +2°C	4.4 kW	4.6 kW
COP Tj = +2°C	4.93	3.50
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	4.3 kW	3.0 kW
COP Tj = +7°C	6.37	4.61
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	6.6 kW	3.7 kW
COP Tj = 12°C	8.13	6.16
Cdh Tj = +12 °C	1.0	1.0
Pdh Tj = Tbiv	7.5 kW	7.6 kW
COP Tj = Tbiv	3.20	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.92 kW	6.96 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.01
WTOL	35 °C	55 °C
Poff	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	1.38 kW	1.54 kW
Annual energy consumption Qhe	3561 kWh	4993 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
Pdesignc	6.5 kW	
SEER	5.41	
Pdc Tj = 35°C	6.81 kW	
EER Tj = 35°C	3.28	
Pdc Tj = 30°C	5.00 kW	
EER Tj = 30°C	4.52	
Cdc Tj = 30 °C	0.97	

Pdc Tj = 25°C	3.01 kW
EER Tj = 25°C	6.66
Cdc Tj = 25 °C	0.94
Pdc Tj = 20°C	2.57 kW
EER Tj = 20°C	7.98
Cdc Tj = 20 °C	0.91
Poff	31 W
PTO	0 W
PSB	31 W
PCK	0 W
Annual energy consumption Qce	719 kWh

**Model EPRA10EV3 / ETS(B)12P50E**

Model name	EPRA10EV3 / ETS(B)12P50E
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	128 %
COP	3.10
Heating up time	5:13 h:min
Standby power input	32.7 W
Reference hot water temperature	44.5 °C
Mixed water at 40°C	246.0 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	2.66 kW	
Cooling capacity	7.97	
EER	3.00	

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	47.3 dB(A)	47.3 dB(A)

Sound power level outdoor	53.0 dB(A)	53.0 dB(A)
---------------------------	------------	------------

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	186 %	134 %
Prated	8.3 kW	8.5 kW
SCOP	4.71	3.43
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.5 kW	7.6 kW
COP Tj = -7°C	3.10	2.21
Cdh Tj = -7 °C	1.0	1.0
Pdh Tj = +2°C	4.4 kW	4.6 kW
COP Tj = +2°C	4.76	3.37
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	4.3 kW	3.0 kW
COP Tj = +7°C	6.14	4.48
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	6.6 kW	3.7 kW
COP Tj = 12°C	7.84	5.98
Cdh Tj = +12 °C	1.0	1.0
Pdh Tj = Tbiv	8.1 kW	8.3 kW
COP Tj = Tbiv	2.77	1.97
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.14 kW	8.31 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.77	1.97
WTOL	35 °C	55 °C
Poff	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 Qhe	3637 kWh	5120 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
Pdesignc	7.5 kW	
SEER	5.34	
Pdc Tj = 35°C	7.97 kW	
EER Tj = 35°C	3.00	
Pdc Tj = 30°C	5.76 kW	
EER Tj = 30°C	4.28	
Cdc Tj = 30 °C	0.98	

Pdc Tj = 25°C	3.63 kW
EER Tj = 25°C	6.31
Cdc Tj = 25 °C	0.95
Pdc Tj = 20°C	2.63 kW
EER Tj = 20°C	8.37
Cdc Tj = 20 °C	0.91
Poff	25 W
PTO	3 W
PSB	25 W
PCK	0 W
Annual energy consumption Qce	843 kWh

**Model EPRA10EW1 / ETS(B)12P50E**

Model name	EPRA10EW1 / ETS(B)12P50E
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	131 %
COP	3.17
Heating up time	6:13 h:min
Standby power input	32.1 W
Reference hot water temperature	44.5 °C
Mixed water at 40°C	246.0 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	2.57 kW	
Cooling capacity	7.97	
EER	3.10	

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	47.3 dB(A)	47.3 dB(A)

Sound power level outdoor	53.0 dB(A)	53.0 dB(A)
---------------------------	------------	------------

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	191 %	138 %
P <sub>rated</sub>	8.3 kW	8.5 kW
SCOP	4.84	3.53
T <sub>biv</sub>	-10 °C	-10 °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	3.20	2.30
C <sub>dh</sub> T <sub>j</sub> = -7 °C	1.0	1.0
P <sub>dh</sub> T <sub>j</sub> = +2°C	4.4 kW	4.6 kW
COP T <sub>j</sub> = +2°C	4.93	3.50
C <sub>dh</sub> T <sub>j</sub> = +2 °C	1.0	1.0
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.3 kW	3.0 kW
COP T <sub>j</sub> = +7°C	6.37	4.61
C <sub>dh</sub> T <sub>j</sub> = +7 °C	1.0	1.0
P <sub>dh</sub> T <sub>j</sub> = 12°C	6.6 kW	3.7 kW
COP T <sub>j</sub> = 12°C	8.13	6.16
C <sub>dh</sub> T <sub>j</sub> = +12 °C	1.0	1.0
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	8.1 kW	8.3 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.86	2.05
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>	8.14 kW	8.31 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	2.05
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	0.0 kW	0.0 kW
Annual energy consumption Q <sub>he</sub>	3539 kWh	4970 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	7.5 kW	
SEER	5.41	
P <sub>dc</sub> T <sub>j</sub> = 35°C	7.97 kW	
EER T <sub>j</sub> = 35°C	3.10	
P <sub>dc</sub> T <sub>j</sub> = 30°C	5.76 kW	
EER T <sub>j</sub> = 30°C	4.43	
C <sub>dc</sub> T <sub>j</sub> = 30 °C	0.98	

Pdc Tj = 25°C	3.63 kW
EER Tj = 25°C	6.47
Cdc Tj = 25 °C	0.95
Pdc Tj = 20°C	2.63 kW
EER Tj = 20°C	8.35
Cdc Tj = 20 °C	0.91
Poff	31 W
PTO	0 W
PSB	31 W
PCK	0 W
Annual energy consumption Qce	831 kWh

**Model EPRA12EV3 / ETS(B)12P50E**

Model name	EPRA12EV3 / ETS(B)12P50E
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	128 %
COP	3.10
Heating up time	7:13 h:min
Standby power input	32.7 W
Reference hot water temperature	44.5 °C
Mixed water at 40°C	246.0 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	47.3 dB(A)	47.3 dB(A)

Sound power level outdoor	53.0 dB(A)	53.0 dB(A)
---------------------------	------------	------------

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	186 %	134 %
P <sub>rated</sub>	8.3 kW	8.5 kW
SCOP	4.71	3.43
T <sub>biv</sub>	-10 °C	-10 °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	3.10	2.21
C <sub>dh</sub> T <sub>j</sub> = -7 °C	1.0	1.0
P <sub>dh</sub> T <sub>j</sub> = +2°C	4.4 kW	4.6 kW
COP T <sub>j</sub> = +2°C	4.76	3.37
C <sub>dh</sub> T <sub>j</sub> = +2 °C	1.0	1.0
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.3 kW	3.0 kW
COP T <sub>j</sub> = +7°C	6.14	4.48
C <sub>dh</sub> T <sub>j</sub> = +7 °C	1.0	1.0
P <sub>dh</sub> T <sub>j</sub> = 12°C	6.6 kW	3.7 kW
COP T <sub>j</sub> = 12°C	7.84	5.98
C <sub>dh</sub> T <sub>j</sub> = +12 °C	1.0	1.0
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	8.1 kW	8.3 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.77	1.97
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>	8.14 kW	8.31 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	1.97
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	0.0 kW	0.0 kW
Annual energy consumption Q <sub>he</sub>	3637 kWh	5120 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
Annual energy consumption Qce	961 kWh

**Model EPRA12EW1 / ETSH(B)12P50E**

Model name	EPRA12EW1 / ETSH(B)12P50E
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	131 %
COP	3.17
Heating up time	8:13 h:min
Standby power input	32.1 W
Reference hot water temperature	44.5 °C
Mixed water at 40°C	246.0 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	47.3 dB(A)	47.3 dB(A)

Sound power level outdoor	53.0 dB(A)	53.0 dB(A)
---------------------------	------------	------------

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	191 %	138 %
P <sub>rated</sub>	8.3 kW	8.5 kW
SCOP	4.84	3.53
T <sub>biv</sub>	-10 °C	-10 °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	3.20	2.30
C <sub>dh</sub> T <sub>j</sub> = -7 °C	1.0	1.0
P <sub>dh</sub> T <sub>j</sub> = +2°C	4.4 kW	4.6 kW
COP T <sub>j</sub> = +2°C	4.93	3.50
C <sub>dh</sub> T <sub>j</sub> = +2 °C	1.0	1.0
P <sub>dh</sub> T <sub>j</sub> = +7°C	4.3 kW	3.0 kW
COP T <sub>j</sub> = +7°C	6.37	4.61
C <sub>dh</sub> T <sub>j</sub> = +7 °C	1.0	1.0
P <sub>dh</sub> T <sub>j</sub> = 12°C	6.6 kW	3.7 kW
COP T <sub>j</sub> = 12°C	8.13	6.16
C <sub>dh</sub> T <sub>j</sub> = +12 °C	1.0	1.0
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	8.1 kW	8.3 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.86	2.05
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>	8.14 kW	8.31 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	2.05
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	0.0 kW	0.0 kW
Annual energy consumption Q <sub>he</sub>	3539 kWh	4970 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
Annual energy consumption Qce	943 kWh

**Model EPRA08EV3 / ETSX(B)12P50E**

Model name	EPRA08EV3 / ETSX(B)12P50E
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	128 %
COP	3.10
Heating up time	9:13 h:min
Standby power input	32.7 W
Reference hot water temperature	44.5 °C
Mixed water at 40°C	246.0 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	2.15 kW	
Cooling capacity	6.81	
EER	3.17	

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature

Sound power level indoor	47.3 dB(A)	47.3 dB(A)
Sound power level outdoor	53.0 dB(A)	53.0 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	189 %	136 %
P <sub>rated</sub>	8.3 kW	8.5 kW
SCOP	4.79	3.47
T <sub>biv</sub>	-7 °C	-7 °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	3.10	2.21
Cd <sub>h</sub> T <sub>j</sub> = -7 °C	1.0	1.0
P <sub>dh T<sub>j</sub></sub> = +2°C	4.4 kW	4.6 kW
COP T <sub>j</sub> = +2°C	4.76	3.37
Cd <sub>h</sub> T <sub>j</sub> = +2 °C	1.0	1.0
P <sub>dh T<sub>j</sub></sub> = +7°C	4.3 kW	3.0 kW
COP T <sub>j</sub> = +7°C	6.14	4.48
Cd <sub>h</sub> T <sub>j</sub> = +7 °C	1.0	1.0
P <sub>dh T<sub>j</sub></sub> = 12°C	6.6 kW	3.7 kW
COP T <sub>j</sub> = 12°C	7.84	5.98
Cd <sub>h</sub> T <sub>j</sub> = +12 °C	1.0	1.0
P <sub>dh T<sub>j</sub></sub> = T <sub>biv</sub>	7.5 kW	7.6 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.10	2.21
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>	6.92 kW	6.96 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>	2.80	1.93
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	1.38 kW	1.54 kW
Annual energy consumption Q <sub>he</sub>	3582 kWh	5065 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	6.5 kW	
SEER	5.38	
P <sub>dc T<sub>j</sub></sub> = 35°C	6.81 kW	
EER T <sub>j</sub> = 35°C	3.17	
P <sub>dc T<sub>j</sub></sub> = 30°C	5.00 kW	
EER T <sub>j</sub> = 30°C	4.37	

Cdc Tj = 30 °C	0.98
Pdc Tj = 25°C	3.01 kW
EER Tj = 25°C	6.58
Cdc Tj = 25 °C	0.94
Pdc Tj = 20°C	2.57 kW
EER Tj = 20°C	8.00
Cdc Tj = 20 °C	0.91
Poff	25 W
PTO	3 W
PSB	25 W
PCK	0 W
Annual energy consumption Qce	725 kWh

**Model EPRA08EW1 / ETSX(B)12P50E**

Model name	EPRA08EW1 / ETSX(B)12P50E
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	131 %
COP	3.17
Heating up time	10:13 h:min
Standby power input	32.1 W
Reference hot water temperature	44.5 °C
Mixed water at 40°C	246.0 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	2.08 kW	
Cooling capacity	6.81	
EER	3.28	

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
--	-----------------	--------------------

Sound power level indoor	47.3 dB(A)	47.3 dB(A)
Sound power level outdoor	53.0 dB(A)	53.0 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	195 %	141 %
P <sub>rated</sub>	8.3 kW	8.5 kW
SCOP	4.95	3.59
T <sub>biv</sub>	-7 °C	-7 °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	3.20	2.30
Cd <sub>h</sub> T <sub>j</sub> = -7 °C	1.0	1.0
P <sub>dh T<sub>j</sub></sub> = +2°C	4.4 kW	4.6 kW
COP T <sub>j</sub> = +2°C	4.93	3.50
Cd <sub>h</sub> T <sub>j</sub> = +2 °C	1.0	1.0
P <sub>dh T<sub>j</sub></sub> = +7°C	4.3 kW	3.0 kW
COP T <sub>j</sub> = +7°C	6.37	4.61
Cd <sub>h</sub> T <sub>j</sub> = +7 °C	1.0	1.0
P <sub>dh T<sub>j</sub></sub> = 12°C	6.6 kW	3.7 kW
COP T <sub>j</sub> = 12°C	8.13	6.16
Cd <sub>h</sub> T <sub>j</sub> = +12 °C	1.0	1.0
P <sub>dh T<sub>j</sub></sub> = T <sub>biv</sub>	7.5 kW	7.6 kW
COP T <sub>j</sub> = T <sub>biv</sub>	3.20	2.30
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>	6.92 kW	6.96 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>	2.90	2.01
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	1.38 kW	1.54 kW
Annual energy consumption Q <sub>he</sub>	3462 kWh	4894 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	6.5 kW	
SEER	5.41	
P <sub>dc T<sub>j</sub></sub> = 35°C	6.81 kW	
EER T <sub>j</sub> = 35°C	3.28	
P <sub>dc T<sub>j</sub></sub> = 30°C	5.00 kW	
EER T <sub>j</sub> = 30°C	4.52	

Cdc Tj = 30 °C	0.97
Pdc Tj = 25°C	3.01 kW
EER Tj = 25°C	6.66
Cdc Tj = 25 °C	0.94
Pdc Tj = 20°C	2.57 kW
EER Tj = 20°C	7.98
Cdc Tj = 20 °C	0.91
Poff	31 W
PTO	0 W
PSB	31 W
PCK	0 W
Annual energy consumption Qce	719 kWh

**Model EPRA10EV3 / ETSX(B)12P50E**

Model name	EPRA10EV3 / ETSX(B)12P50E
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	128 %
COP	3.10
Heating up time	11:13 h:min
Standby power input	32.7 W
Reference hot water temperature	44.5 °C
Mixed water at 40°C	246.0 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	2.66 kW	
Cooling capacity	7.97	
EER	3.00	

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
--	-----------------	--------------------

Sound power level indoor	47.3 dB(A)	47.3 dB(A)
Sound power level outdoor	53.0 dB(A)	53.0 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	190 %	136 %
P <sub>rated</sub>	8.3 kW	8.5 kW
SCOP	4.82	3.48
T <sub>biv</sub>	-10 °C	-10 °C
T <sub>OL</sub>	-10 °C	-10 °C
P <sub>d</sub> h T <sub>j</sub> = -7°C	7.5 kW	7.6 kW
COP T <sub>j</sub> = -7°C	3.10	2.21
Cd <sub>h</sub> T <sub>j</sub> = -7 °C	1.0	1.0
P <sub>d</sub> h T <sub>j</sub> = +2°C	4.4 kW	4.6 kW
COP T <sub>j</sub> = +2°C	4.76	3.37
Cd <sub>h</sub> T <sub>j</sub> = +2 °C	1.0	1.0
P <sub>d</sub> h T <sub>j</sub> = +7°C	4.3 kW	3.0 kW
COP T <sub>j</sub> = +7°C	6.14	4.48
Cd <sub>h</sub> T <sub>j</sub> = +7 °C	1.0	1.0
P <sub>d</sub> h T <sub>j</sub> = 12°C	6.6 kW	3.7 kW
COP T <sub>j</sub> = 12°C	7.84	5.98
Cd <sub>h</sub> T <sub>j</sub> = +12 °C	1.0	1.0
P <sub>d</sub> h T <sub>j</sub> = T <sub>biv</sub>	8.1 kW	8.3 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.77	1.97
P <sub>d</sub> h T <sub>j</sub> = T <sub>OL</sub> or P <sub>d</sub> h T <sub>j</sub> = T <sub>designh</sub> if T <sub>OL</sub> < T <sub>designh</sub>	8.14 kW	8.31 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	1.97
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	0.0 kW	0.0 kW
Annual energy consumption Q <sub>he</sub>	3560 kWh	5043 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	7.5 kW	
SEER	5.34	
P <sub>d</sub> c T <sub>j</sub> = 35°C	7.97 kW	
EER T <sub>j</sub> = 35°C	3.00	
P <sub>d</sub> c T <sub>j</sub> = 30°C	5.76 kW	
EER T <sub>j</sub> = 30°C	4.28	

Cdc Tj = 30 °C	0.98
Pdc Tj = 25°C	3.63 kW
EER Tj = 25°C	6.31
Cdc Tj = 25 °C	0.95
Pdc Tj = 20°C	2.63 kW
EER Tj = 20°C	8.37
Cdc Tj = 20 °C	0.91
Poff	25 W
PTO	3 W
PSB	25 W
PCK	0 W
Annual energy consumption Qce	843 kWh

**Model EPRA10EW1 / ETSX(B)12P50E**

Model name	EPRA10EW1 / ETSX(B)12P50E
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	131 %
COP	3.17
Heating up time	12:13 h:min
Standby power input	32.1 W
Reference hot water temperature	44.5 °C
Mixed water at 40°C	246.0 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	2.57 kW	
Cooling capacity	7.97	
EER	3.10	

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
--	-----------------	--------------------

Sound power level indoor	47.3 dB(A)	47.3 dB(A)
Sound power level outdoor	53.0 dB(A)	53.0 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	196 %	141 %
P <sub>rated</sub>	8.30 kW	8.50 kW
SCOP	4.98	3.60
T <sub>biv</sub>	-10 °C	-10 °C
T <sub>OL</sub>	-10 °C	-10 °C
P <sub>dh T<sub>j</sub></sub> = -7°C	7.50 kW	7.60 kW
COP T <sub>j</sub> = -7°C	3.20	2.30
C <sub>dh T<sub>j</sub></sub> = -7 °C	1.000	1.000
P <sub>dh T<sub>j</sub></sub> = +2°C	4.40 kW	4.60 kW
COP T <sub>j</sub> = +2°C	4.93	3.50
C <sub>dh T<sub>j</sub></sub> = +2 °C	1.000	1.000
P <sub>dh T<sub>j</sub></sub> = +7°C	4.30 kW	3.00 kW
COP T <sub>j</sub> = +7°C	6.37	4.61
C <sub>dh T<sub>j</sub></sub> = +7 °C	1.000	1.000
P <sub>dh T<sub>j</sub></sub> = 12°C	6.60 kW	3.70 kW
COP T <sub>j</sub> = 12°C	8.13	6.16
C <sub>dh T<sub>j</sub></sub> = +12 °C	1.000	1.000
P <sub>dh T<sub>j</sub></sub> = T <sub>biv</sub>	8.10 kW	8.30 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.86	2.05
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>	8.14 kW	8.31 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	2.05
C <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>		
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	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	3440 kWh	4871 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	7.5 kW	
SEER	5.41	
P <sub>dc T<sub>j</sub></sub> = 35°C	7.97 kW	
EER T <sub>j</sub> = 35°C	3.10	
P <sub>dc T<sub>j</sub></sub> = 30°C	5.76 kW	

EER Tj = 30°C	4.43
Cdc Tj = 30 °C	0.98
Pdc Tj = 25°C	3.63 kW
EER Tj = 25°C	6.47
Cdc Tj = 25 °C	0.95
Pdc Tj = 20°C	2.63 kW
EER Tj = 20°C	8.35
Cdc Tj = 20 °C	0.91
Poff	31 W
PTO	0 W
PSB	31 W
PCK	0 W
Annual energy consumption Qce	831 kWh

**Model EPRA12EV3 / ETSX(B)12P50E**

Model name	EPRA12EV3 / ETSX(B)12P50E
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	128 %
COP	3.10
Heating up time	13:13 h:min
Standby power input	32.7 W
Reference hot water temperature	44.5 °C
Mixed water at 40°C	246.0 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	47.3 dB(A)	47.3 dB(A)
Sound power level outdoor	53.0 dB(A)	53.0 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	190 %	136 %
P <sub>rated</sub>	8.3 kW	8.5 kW
SCOP	4.82	3.48
T <sub>biv</sub>	-10 °C	-10 °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	3.10	2.21
Cd <sub>h</sub> T <sub>j</sub> = -7 °C	1.0	1.0
P <sub>dh T<sub>j</sub></sub> = +2°C	4.4 kW	4.6 kW
COP T <sub>j</sub> = +2°C	4.76	3.37
Cd <sub>h</sub> T <sub>j</sub> = +2 °C	1.0	1.0
P <sub>dh T<sub>j</sub></sub> = +7°C	4.3 kW	3.0 kW
COP T <sub>j</sub> = +7°C	6.14	4.48
Cd <sub>h</sub> T <sub>j</sub> = +7 °C	1.0	1.0
P <sub>dh T<sub>j</sub></sub> = 12°C	6.6 kW	3.7 kW
COP T <sub>j</sub> = 12°C	7.84	5.98
Cd <sub>h</sub> T <sub>j</sub> = +12 °C	1.0	1.0
P <sub>dh T<sub>j</sub></sub> = T <sub>biv</sub>	8.1 kW	8.3 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.77	1.97
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>	8.14 kW	8.31 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	1.97
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	0.0 kW	0.0 kW
Annual energy consumption Q <sub>he</sub>	3560 kWh	5043 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
Annual energy consumption Qce	961 kWh

**Model EPRA12EW1 / ETSX(B)12P50E**

Model name	EPRA12EW1 / ETSX(B)12P50E
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	131 %
COP	3.17
Heating up time	14:13 h:min
Standby power input	32.1 W
Reference hot water temperature	44.5 °C
Mixed water at 40°C	246.0 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	47.3 dB(A)	47.3 dB(A)
Sound power level outdoor	53.0 dB(A)	53.0 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	196 %	141 %
P <sub>rated</sub>	8.3 kW	8.5 kW
SCOP	4.98	3.60
T <sub>biv</sub>	-10 °C	-10 °C
T <sub>OL</sub>	-10 °C	-10 °C
P <sub>d</sub> h T <sub>j</sub> = -7°C	7.5 kW	7.6 kW
COP T <sub>j</sub> = -7°C	3.20	2.30
Cd <sub>h</sub> T <sub>j</sub> = -7 °C	1.0	1.0
P <sub>d</sub> h T <sub>j</sub> = +2°C	4.4 kW	4.6 kW
COP T <sub>j</sub> = +2°C	4.93	3.50
Cd <sub>h</sub> T <sub>j</sub> = +2 °C	1.0	1.0
P <sub>d</sub> h T <sub>j</sub> = +7°C	4.3 kW	3.0 kW
COP T <sub>j</sub> = +7°C	6.37	4.61
Cd <sub>h</sub> T <sub>j</sub> = +7 °C	1.0	1.0
P <sub>d</sub> h T <sub>j</sub> = 12°C	6.6 kW	3.7 kW
COP T <sub>j</sub> = 12°C	8.13	6.16
Cd <sub>h</sub> T <sub>j</sub> = +12 °C	1.0	1.0
P <sub>d</sub> h T <sub>j</sub> = T <sub>biv</sub>	8.1 kW	8.3 kW
COP T <sub>j</sub> = T <sub>biv</sub>	2.86	2.05
P <sub>d</sub> h T <sub>j</sub> = T <sub>OL</sub> or P <sub>d</sub> h T <sub>j</sub> = T <sub>designh</sub> if T <sub>OL</sub> < T <sub>designh</sub>	8.14 kW	8.31 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	2.05
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	0.0 kW	0.0 kW
Annual energy consumption Q <sub>he</sub>	3440 kWh	4871 kWh

**EN 14825 | Cooling**

	+7°C/+12°C	+18°C/+23°C
P <sub>designc</sub>	8.5 kW	
SEER	5.41	
P <sub>d</sub> c T <sub>j</sub> = 35°C	8.62 kW	
EER T <sub>j</sub> = 35°C	3.01	
P <sub>d</sub> c T <sub>j</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
Annual energy consumption Qce	943 kWh