

## Subtype DAIKIN ALTHERMA 3 H HT ECH2O 14-18kW (300L)

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 HT ECH2O 14-18kW (300L)
Registration number	011-1W0524
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	4.2 kg
Certification Date	24.03.2022
Testing basis	HP KEYMARK certification scheme rules rev. 14
Testing laboratory	Universität Stuttgart, Prüfstelle HLK am Institut für Gebäudeenergetik, Thermotechnik und Energiespeicherung (IGTE), DE

## Model EPRA14DV37 / ETSH(B)16P30E(7)

Model name	EPRA14DV37 / ETSH(B)16P30E(7)
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 $\eta_{DHW}$	126.1 %
COP	2.91
Heating up time	1:36 h:min
Standby power input	56.9 W
Reference hot water temperature	47 °C
Mixed water at 40°C	193 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	5.69 kW	7.24 kW
El input	1.22 kW	2.41 kW
COP	4.67	3.01

## EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	2.56 kW	
Cooling capacity	6.9	
EER	2.7	

## EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	45.6 dB(A)	45.6 dB(A)

Sound power level outdoor	54 dB(A)	54 dB(A)
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#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	177 %	140 %
Prated	12.5 kW	12.5 kW
SCOP	4.51	3.58
Tbiv	-7 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.1 kW	11.2 kW
COP Tj = -7°C	3.12	2.47
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	6.7 kW	6.9 kW
COP Tj = +2°C	4.44	3.56
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	5.7 kW	6.9 kW
COP Tj = +7°C	5.84	4.44
Cdh Tj = +7 °C	1	1
Pdh Tj = 12°C	6 kW	6.2 kW
COP Tj = 12°C	7.4	5.72
Cdh Tj = +12 °C	1	1
Pdh Tj = Tbiv	11.1 kW	12.2 kW
COP Tj = Tbiv	3.12	2.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.1 kW	12.2 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.76	2.19
WTOL	35 °C	55 °C
Poff	21 W	21 W
PTO	41 W	41 W
PSB	21 W	21 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.4 kW	0 kW
Annual energy consumption Qhe	5726 kWh	7211 kWh

#### EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	6.9 kW	
SEER	3.99	
Pdc Tj = 35°C	6.9 kW	
EER Tj = 35°C	2.7	
Pdc Tj = 30°C	5.23 kW	
EER Tj = 30°C	3.65	
Cdc Tj = 30 °C	0.99	

Pdc Tj = 25°C	5.05 kW
EER Tj = 25°C	4.58
Cdc Tj = 25 °C	0.98
Pdc Tj = 20°C	4.94 kW
EER Tj = 20°C	5.41
Cdc Tj = 20 °C	0.98
Poff	21 W
PTO	41 W
PSB	21 W
PCK	0 W
Annual energy consumption Qce	1038 kWh

## Model EPRA14DV37 / ETSX(B)16P30E(7)

Model name	EPRA14DV37 / ETSX(B)16P30E(7)
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 $\eta_{DHW}$	126.1 %
COP	2.91
Heating up time	1:36 h:min
Standby power input	56.9 W
Reference hot water temperature	47 °C
Mixed water at 40°C	193 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	5.69 kW	7.24 kW
El input	1.22 kW	2.41 kW
COP	4.67	3.01

## EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	2.56 kW	
Cooling capacity	6.9	
EER	2.7	

## EN 12102-1 | Average Climate

	Low temperature	Medium temperature
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Sound power level indoor	45.6 dB(A)	45.6 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	180 %	142 %
Prated	12.5 kW	12.5 kW
SCOP	4.57	3.62
Tbiv	-7 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.1 kW	11.2 kW
COP Tj = -7°C	3.12	2.47
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	6.7 kW	6.9 kW
COP Tj = +2°C	4.44	3.56
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	5.7 kW	6.9 kW
COP Tj = +7°C	5.84	4.44
Cdh Tj = +7 °C	1	1
Pdh Tj = 12°C	6 kW	6.2 kW
COP Tj = 12°C	7.4	5.72
Cdh Tj = +12 °C	1	1
Pdh Tj = Tbiv	11.1 kW	12.2 kW
COP Tj = Tbiv	3.12	2.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.1 kW	12.2 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.76	2.19
WTOL	35 °C	55 °C
Poff	21 W	21 W
PTO	41 W	41 W
PSB	21 W	21 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.4 kW	0 kW
Annual energy consumption Qhe	5649 kWh	7134 kWh

#### EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	6.9 kW	
SEER	3.99	
Pdc Tj = 35°C	6.9 kW	
EER Tj = 35°C	2.7	
Pdc Tj = 30°C	5.23 kW	
EER Tj = 30°C	3.65	

Cdc Tj = 30 °C	0.99
Pdc Tj = 25°C	5.05 kW
EER Tj = 25°C	4.58
Cdc Tj = 25 °C	0.98
Pdc Tj = 20°C	4.94 kW
EER Tj = 20°C	5.41
Cdc Tj = 20 °C	0.98
Poff	21 W
PTO	41 W
PSB	21 W
PCK	0 W
Annual energy consumption Qce	1038 kWh

## Model EPRA14DW17 / ETSH(B)16P30E(7)

Model name	EPRA14DW17 / ETSH(B)16P30E(7)
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 $\eta_{DHW}$	125.5 %
COP	2.89
Heating up time	1:36 h:min
Standby power input	57.2 W
Reference hot water temperature	47 °C
Mixed water at 40°C	193 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	5.9 kW	7.24 kW
El input	1.23 kW	2.47 kW
COP	4.79	2.93

## EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	2.56 kW	
Cooling capacity	6.9	
EER	2.7	

## EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	45.6 dB(A)	45.6 dB(A)



Sound power level outdoor	54 dB(A)	54 dB(A)
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#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	186 %	140 %
Prated	12.5 kW	12.5 kW
SCOP	4.71	3.57
Tbiv	-7 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.7 kW	11.1 kW
COP Tj = -7°C	2.97	2.43
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	6.9 kW	6.7 kW
COP Tj = +2°C	4.94	3.52
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	6.2 kW	6.5 kW
COP Tj = +7°C	5.95	4.54
Cdh Tj = +7 °C	1	1
Pdh Tj = 12°C	5.6 kW	5.2 kW
COP Tj = 12°C	7.07	5.97
Cdh Tj = +12 °C	1	1
Pdh Tj = Tbiv	10.7 kW	12.5 kW
COP Tj = Tbiv	2.97	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.1 kW	12.5 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.88	2.12
WTOL	35 °C	55 °C
Poff	31 W	31 W
PTO	33 W	33 W
PSB	42 W	42 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.4 kW	0 kW
Annual energy consumption Qhe	5479 kWh	7236 kWh

#### EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	6.9 kW	
SEER	3.87	
Pdc Tj = 35°C	6.9 kW	
EER Tj = 35°C	2.7	
Pdc Tj = 30°C	5.23 kW	
EER Tj = 30°C	3.65	
Cdc Tj = 30 °C	0.98	

Pdc Tj = 25°C	5.05 kW
EER Tj = 25°C	4.58
Cdc Tj = 25 °C	0.97
Pdc Tj = 20°C	4.94 kW
EER Tj = 20°C	5.41
Cdc Tj = 20 °C	0.97
Poff	31 W
PTO	33 W
PSB	42 W
PCK	0 W
Annual energy consumption Qce	1069 kWh

## Model EPRA14DW17 / ETSX(B)16P30E(7)

Model name	EPRA14DW17 / ETSX(B)16P30E(7)
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 $\eta_{DHW}$	125.5 %
COP	2.89
Heating up time	1:36 h:min
Standby power input	57.2 W
Reference hot water temperature	47 °C
Mixed water at 40°C	193 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	5.9 kW	7.24 kW
El input	1.23 kW	2.47 kW
COP	4.79	2.93

## EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	2.56 kW	
Cooling capacity	6.9	
EER	2.7	

## EN 12102-1 | Average Climate

	Low temperature	Medium temperature
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Sound power level indoor	45.6 dB(A)	45.6 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	190 %	142 %
Prated	12.5 kW	12.5 kW
SCOP	4.81	3.63
Tbiv	-7 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.7 kW	11.1 kW
COP Tj = -7°C	2.97	2.43
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	6.9 kW	6.7 kW
COP Tj = +2°C	4.94	3.52
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	6.2 kW	6.5 kW
COP Tj = +7°C	5.95	4.54
Cdh Tj = +7 °C	1	1
Pdh Tj = 12°C	5.6 kW	5.2 kW
COP Tj = 12°C	7.07	5.97
Cdh Tj = +12 °C	1	1
Pdh Tj = Tbiv	10.7 kW	12.5 kW
COP Tj = Tbiv	2.97	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.1 kW	12.5 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.88	2.12
WTOL	35 °C	55 °C
Poff	31 W	31 W
PTO	33 W	33 W
PSB	42 W	42 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.4 kW	0 kW
Annual energy consumption Qhe	5366 kWh	7122 kWh

#### EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	6.9 kW	
SEER	3.87	
Pdc Tj = 35°C	6.9 kW	
EER Tj = 35°C	2.7	
Pdc Tj = 30°C	5.23 kW	
EER Tj = 30°C	3.65	

Cdc Tj = 30 °C	0.98
Pdc Tj = 25°C	5.05 kW
EER Tj = 25°C	4.58
Cdc Tj = 25 °C	0.97
Pdc Tj = 20°C	4.94 kW
EER Tj = 20°C	5.41
Cdc Tj = 20 °C	0.97
Poff	31 W
PTO	33 W
PSB	42 W
PCK	0 W
Annual energy consumption Qce	1069 kWh

## Model EPRA16DV37 / ETSH(B)16P30E(7)

Model name	EPRA16DV37 / ETSH(B)16P30E(7)
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 $\eta_{DHW}$	126.1 %
COP	2.91
Heating up time	1:36 h:min
Standby power input	56.9 W
Reference hot water temperature	47 °C
Mixed water at 40°C	193 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	9 kW	7.24 kW
El input	1.8 kW	2.41 kW
COP	5	3.01

## EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	2.93 kW	
Cooling capacity	7.88	
EER	2.69	

## EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	45.6 dB(A)	45.6 dB(A)

Sound power level outdoor                      54 dB(A)                      54 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	177 %	140 %
Prated	12.5 kW	12.5 kW
SCOP	4.51	3.58
Tbiv	-7 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.1 kW	11.2 kW
COP Tj = -7°C	3.12	2.47
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	6.7 kW	6.9 kW
COP Tj = +2°C	4.44	3.56
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	5.7 kW	6.9 kW
COP Tj = +7°C	5.84	4.44
Cdh Tj = +7 °C	1	1
Pdh Tj = 12°C	6 kW	6.2 kW
COP Tj = 12°C	7.4	5.72
Cdh Tj = +12 °C	1	1
Pdh Tj = Tbiv	11.1 kW	12.2 kW
COP Tj = Tbiv	3.12	2.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.1 kW	12.2 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.76	2.19
WTOL	35 °C	55 °C
Poff	21 W	21 W
PTO	41 W	41 W
PSB	21 W	21 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.4 kW	0 kW
Annual energy consumption Qhe	5726 kWh	7211 kWh

#### EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	7.9 kW	
SEER	4.08	
Pdc Tj = 35°C	7.88 kW	
EER Tj = 35°C	2.69	
Pdc Tj = 30°C	5.92 kW	
EER Tj = 30°C	3.69	
Cdc Tj = 30 °C	0.99	

Pdc Tj = 25°C	5.09 kW
EER Tj = 25°C	4.63
Cdc Tj = 25 °C	0.98
Pdc Tj = 20°C	5.13 kW
EER Tj = 20°C	5.61
Cdc Tj = 20 °C	0.98
Poff	21 W
PTO	41 W
PSB	21 W
PCK	0 W
Annual energy consumption Qce	1158 kWh



## Model EPRA16DV37 / ETSX(B)16P30E(7)

Model name	EPRA16DV37 / ETSX(B)16P30E(7)
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 $\eta_{DHW}$	126.1 %
COP	2.91
Heating up time	1:36 h:min
Standby power input	56.9 W
Reference hot water temperature	47 °C
Mixed water at 40°C	193 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	9 kW	7.24 kW
El input	1.8 kW	2.41 kW
COP	5	3.01

## EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	2.93 kW	
Cooling capacity	7.88	
EER	2.69	

## EN 12102-1 | Average Climate

	Low temperature	Medium temperature
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Sound power level indoor	45.6 dB(A)	45.6 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	180 %	142 %
Prated	12.5 kW	12.5 kW
SCOP	4.57	3.62
Tbiv	-7 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.1 kW	11.2 kW
COP Tj = -7°C	3.12	2.47
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	6.7 kW	6.9 kW
COP Tj = +2°C	4.44	3.56
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	5.7 kW	6.9 kW
COP Tj = +7°C	5.84	4.44
Cdh Tj = +7 °C	1	1
Pdh Tj = 12°C	6 kW	6.2 kW
COP Tj = 12°C	7.4	5.72
Cdh Tj = +12 °C	1	1
Pdh Tj = Tbiv	11.1 kW	12.2 kW
COP Tj = Tbiv	3.12	2.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.1 kW	12.2 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.76	2.19
WTOL	35 °C	55 °C
Poff	21 W	21 W
PTO	41 W	41 W
PSB	21 W	21 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.4 kW	0 kW
Annual energy consumption Qhe	5649 kWh	7134 kWh

#### EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	7.9 kW	
SEER	4.08	
Pdc Tj = 35°C	7.88 kW	
EER Tj = 35°C	2.69	
Pdc Tj = 30°C	5.92 kW	
EER Tj = 30°C	3.69	

Cdc Tj = 30 °C	0.99
Pdc Tj = 25°C	5.09 kW
EER Tj = 25°C	4.63
Cdc Tj = 25 °C	0.98
Pdc Tj = 20°C	5.13 kW
EER Tj = 20°C	5.61
Cdc Tj = 20 °C	0.98
Poff	21 W
PTO	41 W
PSB	21 W
PCK	0 W
Annual energy consumption Qce	1158 kWh

## Model EPRA16DW17 / ETSH(B)16P30E(7)

Model name	EPRA16DW17 / ETSH(B)16P30E(7)
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 $\eta_{DHW}$	125.5 %
COP	2.89
Heating up time	1:36 h:min
Standby power input	57.2 W
Reference hot water temperature	47 °C
Mixed water at 40°C	193 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	9 kW	7.24 kW
El input	1.8 kW	2.47 kW
COP	5	2.93

## EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	2.93 kW	
Cooling capacity	7.88	
EER	2.69	

## EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	45.6 dB(A)	45.6 dB(A)

Sound power level outdoor                      54 dB(A)                      54 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	186 %	140 %
Prated	12.5 kW	12.5 kW
SCOP	4.71	3.57
Tbiv	-7 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.7 kW	11.1 kW
COP Tj = -7°C	2.97	2.43
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	6.9 kW	6.7 kW
COP Tj = +2°C	4.94	3.52
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	6.2 kW	6.5 kW
COP Tj = +7°C	5.95	4.54
Cdh Tj = +7 °C	1	1
Pdh Tj = 12°C	5.6 kW	5.2 kW
COP Tj = 12°C	7.07	5.97
Cdh Tj = +12 °C	1	1
Pdh Tj = Tbiv	10.7 kW	12.5 kW
COP Tj = Tbiv	2.97	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.1 kW	12.5 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.88	2.12
WTOL	35 °C	55 °C
Poff	31 W	31 W
PTO	33 W	33 W
PSB	42 W	42 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.4 kW	0 kW
Annual energy consumption Qhe	5479 kWh	7236 kWh

#### EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	7.9 kW	
SEER	3.98	
Pdc Tj = 35°C	7.88 kW	
EER Tj = 35°C	2.69	
Pdc Tj = 30°C	5.92 kW	
EER Tj = 30°C	3.69	
Cdc Tj = 30 °C	0.98	

Pdc Tj = 25°C	5.09 kW
EER Tj = 25°C	4.63
Cdc Tj = 25 °C	0.97
Pdc Tj = 20°C	5.13 kW
EER Tj = 20°C	5.61
Cdc Tj = 20 °C	0.97
Poff	31 W
PTO	33 W
PSB	42 W
PCK	0 W
Annual energy consumption Qce	1188 kWh

## Model EPRA16DW17 / ETSX(B)16P30E(7)

Model name	EPRA16DW17 / ETSX(B)16P30E(7)
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 $\eta_{DHW}$	125.5 %
COP	2.89
Heating up time	1:36 h:min
Standby power input	57.2 W
Reference hot water temperature	47 °C
Mixed water at 40°C	193 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	9 kW	7.24 kW
El input	1.8 kW	2.47 kW
COP	5	2.93

## EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	2.93 kW	
Cooling capacity	7.88	
EER	2.69	

## EN 12102-1 | Average Climate

	Low temperature	Medium temperature
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Sound power level indoor	45.6 dB(A)	45.6 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	190 %	142 %
Prated	12.5 kW	12.5 kW
SCOP	4.81	3.63
Tbiv	-7 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.7 kW	11.1 kW
COP Tj = -7°C	2.97	2.43
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	6.9 kW	6.7 kW
COP Tj = +2°C	4.94	3.52
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	6.2 kW	6.5 kW
COP Tj = +7°C	5.95	4.54
Cdh Tj = +7 °C	1	1
Pdh Tj = 12°C	5.6 kW	5.2 kW
COP Tj = 12°C	7.07	5.97
Cdh Tj = +12 °C	1	1
Pdh Tj = Tbiv	10.7 kW	12.5 kW
COP Tj = Tbiv	2.97	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.1 kW	12.5 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.88	2.12
WTOL	35 °C	55 °C
Poff	31 W	31 W
PTO	33 W	33 W
PSB	42 W	42 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.4 kW	0 kW
Annual energy consumption Qhe	5366 kWh	7122 kWh

#### EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	7.9 kW	
SEER	3.98	
Pdc Tj = 35°C	7.88 kW	
EER Tj = 35°C	2.69	
Pdc Tj = 30°C	5.92 kW	
EER Tj = 30°C	3.69	



Cdc Tj = 30 °C	0.98
Pdc Tj = 25°C	5.09 kW
EER Tj = 25°C	4.63
Cdc Tj = 25 °C	0.97
Pdc Tj = 20°C	5.13 kW
EER Tj = 20°C	5.61
Cdc Tj = 20 °C	0.97
Poff	31 W
PTO	33 W
PSB	42 W
PCK	0 W
Annual energy consumption Qce	1188 kWh

## Model EPRA18DV37 / ETSH(B)16P30E(7)

Model name	EPRA18DV37 / ETSH(B)16P30E(7)
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 $\eta_{DHW}$	126.1 %
COP	2.91
Heating up time	1:36 h:min
Standby power input	56.9 W
Reference hot water temperature	47 °C
Mixed water at 40°C	193 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	9 kW	7.24 kW
El input	1.8 kW	2.41 kW
COP	5	3.01

### EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	3.31 kW	
Cooling capacity	8.86	
EER	2.68	

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	45.6 dB(A)	45.6 dB(A)

Sound power level outdoor                      54 dB(A)                      54 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	177 %	140 %
Prated	12.5 kW	12.5 kW
SCOP	4.51	3.58
Tbiv	-7 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.1 kW	11.2 kW
COP Tj = -7°C	3.12	2.47
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	6.7 kW	6.9 kW
COP Tj = +2°C	4.44	3.56
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	5.7 kW	6.9 kW
COP Tj = +7°C	5.84	4.44
Cdh Tj = +7 °C	1	1
Pdh Tj = 12°C	6 kW	6.2 kW
COP Tj = 12°C	7.4	5.72
Cdh Tj = +12 °C	1	1
Pdh Tj = Tbiv	11.1 kW	12.2 kW
COP Tj = Tbiv	3.12	2.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.1 kW	12.2 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.76	2.19
WTOL	35 °C	55 °C
Poff	21 W	21 W
PTO	41 W	41 W
PSB	21 W	21 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.4 kW	0 kW
Annual energy consumption Qhe	5726 kWh	7211 kWh

#### EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	8.8 kW	
SEER	4.17	
Pdc Tj = 35°C	8.86 kW	
EER Tj = 35°C	2.68	
Pdc Tj = 30°C	6.61 kW	
EER Tj = 30°C	3.72	
Cdc Tj = 30 °C	0.99	

Pdc Tj = 25°C	5.12 kW
EER Tj = 25°C	4.68
Cdc Tj = 25 °C	0.98
Pdc Tj = 20°C	5.31 kW
EER Tj = 20°C	5.81
Cdc Tj = 20 °C	0.98
Poff	21 W
PTO	41 W
PSB	21 W
PCK	0 W
Annual energy consumption Qce	1266 kWh

## Model EPRA18DV37 / ETSX(B)16P30E(7)

Model name	EPRA18DV37 / ETSX(B)16P30E(7)
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 $\eta_{DHW}$	126.1 %
COP	2.91
Heating up time	1:36 h:min
Standby power input	56.9 W
Reference hot water temperature	47 °C
Mixed water at 40°C	193 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	9 kW	7.24 kW
El input	1.8 kW	2.41 kW
COP	5	3.01

## EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	3.31 kW	
Cooling capacity	8.86	
EER	2.68	

## EN 12102-1 | Average Climate

	Low temperature	Medium temperature
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Sound power level indoor	45.6 dB(A)	45.6 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	180 %	142 %
Prated	12.5 kW	12.5 kW
SCOP	4.57	3.62
Tbiv	-7 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.1 kW	11.2 kW
COP Tj = -7°C	3.12	2.47
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	6.7 kW	6.9 kW
COP Tj = +2°C	4.44	3.56
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	5.7 kW	6.9 kW
COP Tj = +7°C	5.84	4.44
Cdh Tj = +7 °C	1	1
Pdh Tj = 12°C	6 kW	6.2 kW
COP Tj = 12°C	7.4	5.72
Cdh Tj = +12 °C	1	1
Pdh Tj = Tbiv	11.1 kW	12.2 kW
COP Tj = Tbiv	3.12	2.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.1 kW	12.2 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.76	2.19
WTOL	35 °C	55 °C
Poff	21 W	21 W
PTO	41 W	41 W
PSB	21 W	21 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.4 kW	0 kW
Annual energy consumption Qhe	5649 kWh	7134 kWh

#### EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	8.8 kW	
SEER	4.17	
Pdc Tj = 35°C	8.86 kW	
EER Tj = 35°C	2.68	
Pdc Tj = 30°C	6.61 kW	
EER Tj = 30°C	3.72	

Cdc Tj = 30 °C	0.99
Pdc Tj = 25°C	5.12 kW
EER Tj = 25°C	4.68
Cdc Tj = 25 °C	0.98
Pdc Tj = 20°C	5.31 kW
EER Tj = 20°C	5.81
Cdc Tj = 20 °C	0.98
Poff	21 W
PTO	41 W
PSB	21 W
PCK	0 W
Annual energy consumption Qce	1266 kWh

## Model EPRA18DW17 / ETSH(B)16P30E(7)

Model name	EPRA18DW17 / ETSH(B)16P30E(7)
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 $\eta_{DHW}$	125.5 %
COP	2.89
Heating up time	1:36 h:min
Standby power input	57.2 W
Reference hot water temperature	47 °C
Mixed water at 40°C	193 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	9 kW	7.24 kW
El input	1.8 kW	2.47 kW
COP	5	2.93

### EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	3.31 kW	
Cooling capacity	8.86	
EER	2.68	

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	45.6 dB(A)	45.6 dB(A)



Sound power level outdoor                      54 dB(A)                      54 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	186 %	140 %
Prated	12.5 kW	12.5 kW
SCOP	4.71	3.57
Tbiv	-7 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.7 kW	11.1 kW
COP Tj = -7°C	2.97	2.43
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	6.9 kW	6.7 kW
COP Tj = +2°C	4.94	3.52
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	6.2 kW	6.5 kW
COP Tj = +7°C	5.95	4.54
Cdh Tj = +7 °C	1	1
Pdh Tj = 12°C	5.6 kW	5.2 kW
COP Tj = 12°C	7.07	5.97
Cdh Tj = +12 °C	1	1
Pdh Tj = Tbiv	10.7 kW	12.5 kW
COP Tj = Tbiv	2.97	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.1 kW	12.5 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.88	2.12
WTOL	35 °C	55 °C
Poff	31 W	31 W
PTO	33 W	33 W
PSB	42 W	42 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.4 kW	0 kW
Annual energy consumption Qhe	5479 kWh	7236 kWh

#### EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	8.8 kW	
SEER	4.07	
Pdc Tj = 35°C	8.86 kW	
EER Tj = 35°C	2.68	
Pdc Tj = 30°C	6.61 kW	
EER Tj = 30°C	3.72	
Cdc Tj = 30 °C	0.98	

Pdc Tj = 25°C	5.12 kW
EER Tj = 25°C	4.68
Cdc Tj = 25 °C	0.97
Pdc Tj = 20°C	5.31 kW
EER Tj = 20°C	5.81
Cdc Tj = 20 °C	0.97
Poff	31 W
PTO	33 W
PSB	42 W
PCK	0 W
Annual energy consumption Qce	1296 kWh

## Model EPRA18DW17 / ETSX(B)16P30E(7)

Model name	EPRA18DW17 / ETSX(B)16P30E(7)
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 $\eta_{DHW}$	125.5 %
COP	2.89
Heating up time	1:36 h:min
Standby power input	57.2 W
Reference hot water temperature	47 °C
Mixed water at 40°C	193 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	9 kW	7.24 kW
El input	1.8 kW	2.47 kW
COP	5	2.93

## EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	3.31 kW	
Cooling capacity	8.86	
EER	2.68	

## EN 12102-1 | Average Climate

	Low temperature	Medium temperature
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Sound power level indoor	45.6 dB(A)	45.6 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	190 %	142 %
Prated	12.5 kW	12.5 kW
SCOP	4.81	3.63
Tbiv	-7 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.7 kW	11.1 kW
COP Tj = -7°C	2.97	2.43
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	6.9 kW	6.7 kW
COP Tj = +2°C	4.94	3.52
Cdh Tj = +2 °C	1	1
Pdh Tj = +7°C	6.2 kW	6.5 kW
COP Tj = +7°C	5.95	4.54
Cdh Tj = +7 °C	1	1
Pdh Tj = 12°C	5.6 kW	5.2 kW
COP Tj = 12°C	7.07	5.97
Cdh Tj = +12 °C	1	1
Pdh Tj = Tbiv	10.7 kW	12.5 kW
COP Tj = Tbiv	2.97	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.1 kW	12.5 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.88	2.12
WTOL	35 °C	55 °C
Poff	31 W	31 W
PTO	33 W	33 W
PSB	42 W	42 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.4 kW	0 kW
Annual energy consumption Qhe	5366 kWh	7122 kWh

#### EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	8.8 kW	
SEER	4.07	
Pdc Tj = 35°C	8.86 kW	
EER Tj = 35°C	2.68	
Pdc Tj = 30°C	6.61 kW	
EER Tj = 30°C	3.72	

Cdc Tj = 30 °C	0.98
Pdc Tj = 25°C	5.12 kW
EER Tj = 25°C	4.68
Cdc Tj = 25 °C	0.97
Pdc Tj = 20°C	5.31 kW
EER Tj = 20°C	5.81
Cdc Tj = 20 °C	0.97
Poff	31 W
PTO	33 W
PSB	42 W
PCK	0 W
Annual energy consumption Qce	1296 kWh