

## Subtype DAIKIN ALTHERMA 3 H HT W/F 18KW (180L)

Certificate Holder	DAIKIN Europe N.V.
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City	Oostende
Country	BE
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	DAIKIN ALTHERMA 3 H HT W/F 18KW (180L)
Registration number	011-1W0361
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	4.2 kg
Certification Date	07.02.2020
Testing basis	HP KEYMARK certification scheme rules rev. 14
Testing laboratory	Danish Technological Institute (DTI), DK

## Model EPRA18DV37 / ETBH16E(6V/9W)7

Model name	EPRA18DV37 / ETBH16E(6V/9W)7
Application	Heating (medium 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 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	9.00 kW	7.24 kW
El input	1.80 kW	2.41 kW
COP	5.00	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	44 dB(A)	44 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	1.0	
Pdh Tj = +2°C	6.7 kW	6.9 kW
COP Tj = +2°C	4.44	3.56
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	5.7 kW	6.9 kW
COP Tj = +7°C	5.84	4.44
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	6.0 kW	6.2 kW
COP Tj = 12°C	7.40	5.72
Cdh Tj = +12 °C	1.0	1.0
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	0.0 kW
Annual energy consumption Qhe	5726 kWh	7211 kWh

#### EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	163 %	125 %
Tbiv	-15 °C	-18 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	8.0 kW	7.5 kW
COP Tj = -7°C	3.50	2.74
Cdh Tj = -7 °C	1.0	
Pdh Tj = +2°C	4.9 kW	5.8 kW
COP Tj = +2°C	5.07	3.67
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	5.3 kW	5.6 kW
COP Tj = +7°C	6.10	4.69
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	5.7 kW	6.2 kW
COP Tj = 12°C	7.03	6.12
Cdh Tj = +12 °C	1.0	
Pdh Tj = Tbiv	10.7 kW	11.0 kW
COP Tj = Tbiv	2.62	1.90

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
Annual energy consumption Qhe	7417 kWh	9654 kWh

#### EN 14825 | Warmer Climate

	Low temperature	Medium temperature
$\eta_s$	229 %	166 %
Tbiv	5 °C	5 °C
Pdh Tj = +2°C	9.8 kW	10.0 kW
COP Tj = +2°C	3.67	2.45
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	7.9 kW	9.0 kW
COP Tj = +7°C	5.60	3.78
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	6.1 kW	5.9 kW
COP Tj = 12°C	7.60	5.63
Cdh Tj = +12 °C	1.0	1.0
Pdh Tj = Tbiv	9.8 kW	11.1 kW
COP Tj = Tbiv	4.95	3.43
Poff	21 W	21 W
PTO	41 W	41 W
PSB	21 W	21 W
PCK	0 W	0 W
Annual energy consumption Qhe	2885 kWh	4463 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	1	
Pdc Tj = 25°C	5.12 kW	
EER Tj = 25°C	4.68	
Cdc Tj = 25 °C	1	
Pdc Tj = 20°C	5.31 kW	
EER Tj = 20°C	5.81	
Cdc Tj = 20 °C	1	
Poff	21 W	
PTO	41 W	
PSB	21 W	

PCK	0 W
Annual energy consumption Qce	1266 kWh

## Model EPRA18DW17 / ETBH16E(6V/9W)7

Model name	EPRA18DW17 / ETBH16E(6V/9W)7
Application	Heating (medium 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 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	9.00 kW	7.24 kW
El input	1.80 kW	2.47 kW
COP	5.00	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	44 dB(A)	44 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	1.0	
Pdh Tj = +2°C	6.9 kW	6.7 kW
COP Tj = +2°C	4.94	3.52
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	6.2 kW	6.5 kW
COP Tj = +7°C	5.95	4.54
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	5.6 kW	5.2 kW
COP Tj = 12°C	7.07	5.97
Cdh Tj = +12 °C	1.0	1.0
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	0.0 kW
Annual energy consumption Qhe	5479 kWh	7236 kWh

#### EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	163 %	125 %
Tbiv	-15 °C	-18 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	8.0 kW	7.5 kW
COP Tj = -7°C	3.50	2.74
Cdh Tj = -7 °C	1.0	
Pdh Tj = +2°C	4.9 kW	5.8 kW
COP Tj = +2°C	5.07	3.67
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	5.3 kW	5.6 kW
COP Tj = +7°C	6.10	4.69
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	5.7 kW	6.2 kW
COP Tj = 12°C	7.03	6.12
Cdh Tj = +12 °C	1.0	
Pdh Tj = Tbiv	10.7 kW	11.0 kW
COP Tj = Tbiv	2.62	1.90

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
Annual energy consumption Qhe	7425 kWh	9658 kWh

#### EN 14825 | Warmer Climate

	Low temperature	Medium temperature
$\eta_s$	220 %	166 %
Tbiv	5 °C	5 °C
Pdh Tj = +2°C	10.0 kW	11.4 kW
COP Tj = +2°C	3.51	2.62
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	8.3 kW	9.0 kW
COP Tj = +7°C	5.67	3.78
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	5.7 kW	5.9 kW
COP Tj = 12°C	7.04	5.63
Cdh Tj = +12 °C	1.0	1.0
Pdh Tj = Tbiv	9.8 kW	11.1 kW
COP Tj = Tbiv	4.96	3.43
Poff	31 W	31 W
PTO	33 W	33 W
PSB	42 W	42 W
PCK	0 W	0 W
Annual energy consumption Qhe	2992 kWh	4453 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	1	
Pdc Tj = 25°C	5.12 kW	
EER Tj = 25°C	4.68	
Cdc Tj = 25 °C	1	
Pdc Tj = 20°C	5.31 kW	
EER Tj = 20°C	5.81	
Cdc Tj = 20 °C	1	
Poff	31 W	
PTO	33 W	
PSB	42 W	



PCK	0 W
Annual energy consumption Qce	1296 kWh

## Model EPRA18DV37 / ETBX16E(6V/9W)7

Model name	EPRA18DV37 / ETBX16E(6V/9W)7
Application	Heating (medium 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 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	9.00 kW	7.24 kW
El input	1.80 kW	2.41 kW
COP	5.00	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	44 dB(A)	44 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	1.0	
Pdh Tj = +2°C	6.7 kW	6.9 kW
COP Tj = +2°C	4.44	3.56
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	5.7 kW	6.9 kW
COP Tj = +7°C	5.84	4.44
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	6.0 kW	6.2 kW
COP Tj = 12°C	7.40	5.72
Cdh Tj = +12 °C	1.0	1.0
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	0.0 kW
Annual energy consumption Qhe	5649 kWh	7134 kWh

#### EN 14825 | Colder Climate

	Low temperature	Medium temperature
$\eta_s$	164 %	125 %
Tbiv	-15 °C	-18 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	8.0 kW	7.5 kW
COP Tj = -7°C	3.50	2.74
Cdh Tj = -7 °C	1.0	
Pdh Tj = +2°C	4.9 kW	5.8 kW
COP Tj = +2°C	5.07	3.67
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	5.3 kW	5.6 kW
COP Tj = +7°C	6.10	4.69
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	5.7 kW	6.2 kW
COP Tj = 12°C	7.03	6.12
Cdh Tj = +12 °C	1.0	
Pdh Tj = Tbiv	10.7 kW	11.0 kW

COP Tj = Tbiv	2.62	1.90
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
Annual energy consumption Qhe	7370 kWh	9609 kWh

#### EN 14825 | Warmer Climate

	Low temperature	Medium temperature
$\eta_s$	236 %	169 %
Tbiv	5 °C	5 °C
Pdh Tj = +2°C	9.8 kW	10.0 kW
COP Tj = +2°C	3.67	2.45
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	7.9 kW	9.0 kW
COP Tj = +7°C	5.60	3.78
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	6.1 kW	5.9 kW
COP Tj = 12°C	7.60	5.63
Cdh Tj = +12 °C	1.0	1.0
Pdh Tj = Tbiv	9.8 kW	11.1 kW
COP Tj = Tbiv	4.95	3.43
Poff	21 W	21 W
PTO	41 W	41 W
PSB	21 W	21 W
PCK	0 W	0 W
Annual energy consumption Qhe	2792 kWh	4371 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	1	
Pdc Tj = 25°C	5.12 kW	
EER Tj = 25°C	4.68	
Cdc Tj = 25 °C	1	
Pdc Tj = 20°C	5.31 kW	
EER Tj = 20°C	5.81	
Cdc Tj = 20 °C	1	
Poff	21 W	
PTO	41 W	

PSB	21 W
PCK	0 W
Annual energy consumption Qce	1266 kWh

## Model EPRA18DW17 / ETBX16E(6V/9W)7

Model name	EPRA18DW17 / ETBX16E(6V/9W)7
Application	Heating (medium 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 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	9.00 kW	7.24 kW
El input	1.80 kW	2.47 kW
COP	5.00	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	44 dB(A)	44 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	1.0	
Pdh Tj = +2°C	6.9 kW	6.7 kW
COP Tj = +2°C	4.94	3.52
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	6.2 kW	6.5 kW
COP Tj = +7°C	5.95	4.54
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	5.6 kW	5.2 kW
COP Tj = 12°C	7.07	5.97
Cdh Tj = +12 °C	1.0	1.0
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	0.0 kW
Annual energy consumption Qhe	5366 kWh	7122 kWh

#### EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	165 %	126 %
Tbiv	-15 °C	-18 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	8.0 kW	7.5 kW
COP Tj = -7°C	3.50	2.74
Cdh Tj = -7 °C	1.0	
Pdh Tj = +2°C	4.9 kW	5.8 kW
COP Tj = +2°C	5.07	3.67
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	5.3 kW	5.6 kW
COP Tj = +7°C	6.10	4.69
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	5.7 kW	6.2 kW
COP Tj = 12°C	7.03	6.12
Cdh Tj = +12 °C	1.0	
Pdh Tj = Tbiv	10.7 kW	11.0 kW

COP Tj = Tbiv	2.62	1.90
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
Annual energy consumption Qhe	7356 kWh	9589 kWh

#### EN 14825 | Warmer Climate

	Low temperature	Medium temperature
$\eta_s$	231 %	172 %
Tbiv	5 °C	5 °C
Pdh Tj = +2°C	10.0 kW	11.4 kW
COP Tj = +2°C	3.51	2.62
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	8.3 kW	9.0 kW
COP Tj = +7°C	5.67	3.78
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	5.7 kW	5.9 kW
COP Tj = 12°C	7.04	5.63
Cdh Tj = +12 °C	1.0	1.0
Pdh Tj = Tbiv	9.8 kW	11.1 kW
COP Tj = Tbiv	4.96	3.43
Poff	31 W	31 W
PTO	33 W	33 W
PSB	42 W	42 W
PCK	0 W	0 W
Annual energy consumption Qhe	2855 kWh	4316 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	1	
Pdc Tj = 25°C	5.12 kW	
EER Tj = 25°C	4.68	
Cdc Tj = 25 °C	1	
Pdc Tj = 20°C	5.31 kW	
EER Tj = 20°C	5.81	
Cdc Tj = 20 °C	1	
Poff	31 W	
PTO	33 W	



PSB	42 W
PCK	0 W
Annual energy consumption Qce	1296 kWh

## Model EPRA18DV37 / ETVH16S18E(6V/9W)7

Model name	EPRA18DV37 / ETVH16S18E(6V/9W)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 $\eta_{DHW}$	110 %
COP	2.62
Heating up time	1:06 h:min
Standby power input	34.2 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	240 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	9.00 kW	7.24 kW
El input	1.80 kW	2.41 kW
COP	5.00	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	44 dB(A)	44 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	1.0	
Pdh Tj = +2°C	6.7 kW	6.9 kW
COP Tj = +2°C	4.44	3.56
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	5.7 kW	6.9 kW
COP Tj = +7°C	5.84	4.44
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	6.0 kW	6.2 kW
COP Tj = 12°C	7.40	5.72
Cdh Tj = +12 °C	1.0	1.0
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	0.0 kW
Annual energy consumption Qhe	5726 kWh	7211 kWh

#### EN 14825 | Colder Climate

	Low temperature	Medium temperature
$\eta_s$	163 %	125 %
Tbiv	-15 °C	-18 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	8.0 kW	7.5 kW
COP Tj = -7°C	3.50	2.74
Cdh Tj = -7 °C	1.0	
Pdh Tj = +2°C	4.9 kW	5.8 kW

COP Tj = +2°C	5.07	3.67
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	5.3 kW	5.6 kW
COP Tj = +7°C	6.10	4.69
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	5.7 kW	6.2 kW
COP Tj = 12°C	7.03	6.12
Cdh Tj = +12 °C	1.0	
Pdh Tj = Tbiv	10.7 kW	11.0 kW
COP Tj = Tbiv	2.62	1.90
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
Annual energy consumption Qhe	7417 kWh	9654 kWh

#### EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	229 %	166 %
Tbiv	5 °C	5 °C
Pdh Tj = +2°C	9.8 kW	10.0 kW
COP Tj = +2°C	3.67	2.45
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	7.9 kW	9.0 kW
COP Tj = +7°C	5.60	3.78
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	6.1 kW	5.9 kW
COP Tj = 12°C	7.60	5.63
Cdh Tj = +12 °C	1.0	1.0
Pdh Tj = Tbiv	9.8 kW	11.1 kW
COP Tj = Tbiv	4.95	3.43
Poff	21 W	21 W
PTO	41 W	41 W
PSB	21 W	21 W
PCK	0 W	0 W
Annual energy consumption Qhe	2885 kWh	4463 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	1
Pdc Tj = 25°C	5.12 kW
EER Tj = 25°C	4.68
Cdc Tj = 25 °C	1
Pdc Tj = 20°C	5.31 kW
EER Tj = 20°C	5.81
Cdc Tj = 20 °C	1
Poff	21 W
PTO	41 W
PSB	21 W
PCK	0 W
Annual energy consumption Qce	1266 kWh

## Model EPRA18DW17 / ETVH16S18E(6V/9W)7

Model name	EPRA18DW17 / ETVH16S18E(6V/9W)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 $\eta_{DHW}$	106 %
COP	2.51
Heating up time	1:06 h:min
Standby power input	42.9 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	240 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	9.00 kW	7.24 kW
El input	1.80 kW	2.47 kW
COP	5.00	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	44 dB(A)	44 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	1.0	
Pdh Tj = +2°C	6.9 kW	6.7 kW
COP Tj = +2°C	4.94	3.52
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	6.2 kW	6.5 kW
COP Tj = +7°C	5.95	4.54
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	5.6 kW	5.2 kW
COP Tj = 12°C	7.07	5.97
Cdh Tj = +12 °C	1.0	1.0
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	0.0 kW
Annual energy consumption Qhe	5479 kWh	7236 kWh

#### EN 14825 | Colder Climate

	Low temperature	Medium temperature
$\eta_s$	163 %	125 %
Tbiv	-15 °C	-18 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	8.0 kW	7.5 kW
COP Tj = -7°C	3.50	2.74
Cdh Tj = -7 °C	1.0	
Pdh Tj = +2°C	4.9 kW	5.8 kW

COP Tj = +2°C	5.07	3.67
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	5.3 kW	5.6 kW
COP Tj = +7°C	6.10	4.69
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	5.7 kW	6.2 kW
COP Tj = 12°C	7.03	6.12
Cdh Tj = +12 °C	1.0	
Pdh Tj = Tbiv	10.7 kW	11.0 kW
COP Tj = Tbiv	2.62	1.90
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
Annual energy consumption Qhe	7425 kWh	9658 kWh

#### EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	220 %	166 %
Tbiv	5 °C	5 °C
Pdh Tj = +2°C	10.0 kW	11.4 kW
COP Tj = +2°C	3.51	2.62
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	8.3 kW	9.0 kW
COP Tj = +7°C	5.67	3.78
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	5.7 kW	5.9 kW
COP Tj = 12°C	7.04	5.63
Cdh Tj = +12 °C	1.0	1.0
Pdh Tj = Tbiv	9.8 kW	11.1 kW
COP Tj = Tbiv	4.96	3.43
Poff	31 W	31 W
PTO	33 W	33 W
PSB	42 W	42 W
PCK	0 W	0 W
Annual energy consumption Qhe	2992 kWh	4453 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	1
Pdc Tj = 25°C	5.12 kW
EER Tj = 25°C	4.68
Cdc Tj = 25 °C	1
Pdc Tj = 20°C	5.31 kW
EER Tj = 20°C	5.81
Cdc Tj = 20 °C	1
Poff	31 W
PTO	33 W
PSB	42 W
PCK	0 W
Annual energy consumption Qce	1296 kWh

## Model EPRA18DV37 / ETVH16SU18E6V7

Model name	EPRA18DV37 / ETVH16SU18E6V7
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 $\eta_{DHW}$	110 %
COP	2.62
Heating up time	1:06 h:min
Standby power input	34.2 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	240 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	9.00 kW	7.24 kW
El input	1.80 kW	2.41 kW
COP	5.00	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	44 dB(A)	44 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	1.0	
Pdh Tj = +2°C	6.7 kW	6.9 kW
COP Tj = +2°C	4.44	3.56
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	5.7 kW	6.9 kW
COP Tj = +7°C	5.84	4.44
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	6.0 kW	6.2 kW
COP Tj = 12°C	7.40	5.72
Cdh Tj = +12 °C	1.0	1.0
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	0.0 kW
Annual energy consumption Qhe	5726 kWh	7211 kWh

#### EN 14825 | Colder Climate

	Low temperature	Medium temperature
$\eta_s$	163 %	125 %
Tbiv	-15 °C	-18 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	8.0 kW	7.5 kW
COP Tj = -7°C	3.50	2.74
Cdh Tj = -7 °C	1.0	
Pdh Tj = +2°C	4.9 kW	5.8 kW

COP Tj = +2°C	5.07	3.67
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	5.3 kW	5.6 kW
COP Tj = +7°C	6.10	4.69
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	5.7 kW	6.2 kW
COP Tj = 12°C	7.03	6.12
Cdh Tj = +12 °C	1.0	
Pdh Tj = Tbiv	10.7 kW	11.0 kW
COP Tj = Tbiv	2.62	1.90
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
Annual energy consumption Qhe	7417 kWh	9654 kWh

#### EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	229 %	166 %
Tbiv	5 °C	5 °C
Pdh Tj = +2°C	9.8 kW	10.0 kW
COP Tj = +2°C	3.67	2.45
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	7.9 kW	9.0 kW
COP Tj = +7°C	5.60	3.78
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	6.1 kW	5.9 kW
COP Tj = 12°C	7.60	5.63
Cdh Tj = +12 °C	1.0	1.0
Pdh Tj = Tbiv	9.8 kW	11.1 kW
COP Tj = Tbiv	4.95	3.43
Poff	21 W	21 W
PTO	41 W	41 W
PSB	21 W	21 W
PCK	0 W	0 W
Annual energy consumption Qhe	2885 kWh	4463 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	1
Pdc Tj = 25°C	5.12 kW
EER Tj = 25°C	4.68
Cdc Tj = 25 °C	1
Pdc Tj = 20°C	5.31 kW
EER Tj = 20°C	5.81
Cdc Tj = 20 °C	1
Poff	21 W
PTO	41 W
PSB	21 W
PCK	0 W
Annual energy consumption Qce	1266 kWh

## Model EPRA18DW17 / ETVH16SU18E6V7

Model name	EPRA18DW17 / ETVH16SU18E6V7
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 $\eta_{DHW}$	106 %
COP	2.51
Heating up time	1:06 h:min
Standby power input	42.9 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	240 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	9.00 kW	7.24 kW
El input	1.80 kW	2.47 kW
COP	5.00	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	44 dB(A)	44 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	1.0	
Pdh Tj = +2°C	6.9 kW	6.7 kW
COP Tj = +2°C	4.94	3.52
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	6.2 kW	6.5 kW
COP Tj = +7°C	5.95	4.54
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	5.6 kW	5.2 kW
COP Tj = 12°C	7.07	5.97
Cdh Tj = +12 °C	1.0	1.0
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	0.0 kW
Annual energy consumption Qhe	5479 kWh	7236 kWh

#### EN 14825 | Colder Climate

	Low temperature	Medium temperature
$\eta_s$	163 %	125 %
Tbiv	-15 °C	-18 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	8.0 kW	7.5 kW
COP Tj = -7°C	3.50	2.74
Cdh Tj = -7 °C	1.0	
Pdh Tj = +2°C	4.9 kW	5.8 kW

COP Tj = +2°C	5.07	3.67
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	5.3 kW	5.6 kW
COP Tj = +7°C	6.10	4.69
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	5.7 kW	6.2 kW
COP Tj = 12°C	7.03	6.12
Cdh Tj = +12 °C	1.0	
Pdh Tj = Tbiv	10.7 kW	11.0 kW
COP Tj = Tbiv	2.62	1.90
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
Annual energy consumption Qhe	7425 kWh	9658 kWh

#### EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	220 %	166 %
Tbiv	5 °C	5 °C
Pdh Tj = +2°C	10.0 kW	11.4 kW
COP Tj = +2°C	3.51	2.62
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	8.3 kW	9.0 kW
COP Tj = +7°C	5.67	3.78
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	5.7 kW	5.9 kW
COP Tj = 12°C	7.04	5.63
Cdh Tj = +12 °C	1.0	1.0
Pdh Tj = Tbiv	9.8 kW	11.1 kW
COP Tj = Tbiv	4.96	3.43
Poff	31 W	31 W
PTO	33 W	33 W
PSB	42 W	42 W
PCK	0 W	0 W
Annual energy consumption Qhe	2992 kWh	4453 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	1
Pdc Tj = 25°C	5.12 kW
EER Tj = 25°C	4.68
Cdc Tj = 25 °C	1
Pdc Tj = 20°C	5.31 kW
EER Tj = 20°C	5.81
Cdc Tj = 20 °C	1
Poff	31 W
PTO	33 W
PSB	42 W
PCK	0 W
Annual energy consumption Qce	1296 kWh

## Model EPRA18DV37 / ETVX16S18E(6V/9W)7

Model name	EPRA18DV37 / ETVX16S18E(6V/9W)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 $\eta_{DHW}$	110 %
COP	2.62
Heating up time	1:06 h:min
Standby power input	34.2 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	240 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	9.00 kW	7.24 kW
El input	1.80 kW	2.41 kW
COP	5.00	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	44 dB(A)	44 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	1.0	
Pdh Tj = +2°C	6.7 kW	6.9 kW
COP Tj = +2°C	4.44	3.56
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	5.7 kW	6.9 kW
COP Tj = +7°C	5.84	4.44
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	6.0 kW	6.2 kW
COP Tj = 12°C	7.40	5.72
Cdh Tj = +12 °C	1.0	1.0
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	0.0 kW
Annual energy consumption Qhe	5649 kWh	7134 kWh

#### EN 14825 | Colder Climate

	Low temperature	Medium temperature
$\eta_s$	164 %	125 %
Tbiv	-15 °C	-18 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	8.0 kW	7.5 kW
COP Tj = -7°C	3.50	2.74
Cdh Tj = -7 °C	1.0	

Pdh Tj = +2°C	4.9 kW	5.8 kW
COP Tj = +2°C	5.07	3.67
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	5.3 kW	5.6 kW
COP Tj = +7°C	6.10	4.69
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	5.7 kW	6.2 kW
COP Tj = 12°C	7.03	6.12
Cdh Tj = +12 °C	1.0	
Pdh Tj = Tbiv	10.7 kW	11.0 kW
COP Tj = Tbiv	2.62	1.90
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
Annual energy consumption Qhe	7370 kWh	9609 kWh

#### EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	236 %	169 %
Tbiv	5 °C	5 °C
Pdh Tj = +2°C	9.8 kW	10.0 kW
COP Tj = +2°C	3.67	2.45
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	7.9 kW	9.0 kW
COP Tj = +7°C	5.60	3.78
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	6.1 kW	5.9 kW
COP Tj = 12°C	7.60	5.63
Cdh Tj = +12 °C	1.0	1.0
Pdh Tj = Tbiv	9.8 kW	11.1 kW
COP Tj = Tbiv	4.95	3.43
Poff	21 W	21 W
PTO	41 W	41 W
PSB	21 W	21 W
PCK	0 W	0 W
Annual energy consumption Qhe	2792 kWh	4371 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	1
Pdc Tj = 25°C	5.12 kW
EER Tj = 25°C	4.68
Cdc Tj = 25 °C	1
Pdc Tj = 20°C	5.31 kW
EER Tj = 20°C	5.81
Cdc Tj = 20 °C	1
Poff	21 W
PTO	41 W
PSB	21 W
PCK	0 W
Annual energy consumption Qce	1266 kWh

## Model EPRA18DW17 / ETVX16S18E(6V/9W)7

Model name	EPRA18DW17 / ETVX16S18E(6V/9W)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 $\eta_{DHW}$	106 %
COP	2.51
Heating up time	1:06 h:min
Standby power input	42.9 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	240 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	9.00 kW	7.24 kW
El input	1.80 kW	2.47 kW
COP	5.00	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	44 dB(A)	44 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	1.0	
Pdh Tj = +2°C	6.9 kW	6.7 kW
COP Tj = +2°C	4.94	3.52
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	6.2 kW	6.5 kW
COP Tj = +7°C	5.95	4.54
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	5.6 kW	5.2 kW
COP Tj = 12°C	7.07	5.97
Cdh Tj = +12 °C	1.0	1.0
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	0.0 kW
Annual energy consumption Qhe	5366 kWh	7122 kWh

#### EN 14825 | Colder Climate

	Low temperature	Medium temperature
$\eta_s$	165 %	126 %
Tbiv	-15 °C	-18 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	8.0 kW	7.5 kW
COP Tj = -7°C	3.50	2.74
Cdh Tj = -7 °C	1.0	

Pdh Tj = +2°C	4.9 kW	5.8 kW
COP Tj = +2°C	5.07	3.67
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	5.3 kW	5.6 kW
COP Tj = +7°C	6.10	4.69
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	5.7 kW	6.2 kW
COP Tj = 12°C	7.03	6.12
Cdh Tj = +12 °C	1.0	
Pdh Tj = Tbiv	10.7 kW	11.0 kW
COP Tj = Tbiv	2.62	1.90
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
Annual energy consumption Qhe	7356 kWh	9589 kWh

#### EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	231 %	172 %
Tbiv	5 °C	5 °C
Pdh Tj = +2°C	10.0 kW	11.4 kW
COP Tj = +2°C	3.51	2.62
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	8.3 kW	9.0 kW
COP Tj = +7°C	5.67	3.78
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	5.7 kW	5.9 kW
COP Tj = 12°C	7.04	5.63
Cdh Tj = +12 °C	1.0	1.0
Pdh Tj = Tbiv	9.8 kW	11.1 kW
COP Tj = Tbiv	4.96	3.43
Poff	31 W	31 W
PTO	33 W	33 W
PSB	42 W	42 W
PCK	0 W	0 W
Annual energy consumption Qhe	2855 kWh	4316 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	1
Pdc Tj = 25°C	5.12 kW
EER Tj = 25°C	4.68
Cdc Tj = 25 °C	1
Pdc Tj = 20°C	5.31 kW
EER Tj = 20°C	5.81
Cdc Tj = 20 °C	1
Poff	31 W
PTO	33 W
PSB	42 W
PCK	0 W
Annual energy consumption Qce	1296 kWh

## Model EPRA18DV37 / ETVZ16S18E(6V/9W)7

Model name	EPRA18DV37 / ETVZ16S18E(6V/9W)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 $\eta_{DHW}$	110 %
COP	2.62
Heating up time	1:06 h:min
Standby power input	34.2 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	240 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	9.00 kW	7.24 kW
El input	1.80 kW	2.41 kW
COP	5.00	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	44 dB(A)	44 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	1.0	
Pdh Tj = +2°C	6.7 kW	6.9 kW
COP Tj = +2°C	4.44	3.56
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	5.7 kW	6.9 kW
COP Tj = +7°C	5.84	4.44
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	6.0 kW	6.2 kW
COP Tj = 12°C	7.40	5.72
Cdh Tj = +12 °C	1.0	1.0
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	0.0 kW
Annual energy consumption Qhe	5726 kWh	7211 kWh

#### EN 14825 | Colder Climate

	Low temperature	Medium temperature
$\eta_s$	163 %	125 %
Tbiv	-15 °C	-18 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	8.0 kW	7.5 kW
COP Tj = -7°C	3.50	2.74
Cdh Tj = -7 °C	1.0	
Pdh Tj = +2°C	4.9 kW	5.8 kW

COP Tj = +2°C	5.07	3.67
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	5.3 kW	5.6 kW
COP Tj = +7°C	6.10	4.69
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	5.7 kW	6.2 kW
COP Tj = 12°C	7.03	6.12
Cdh Tj = +12 °C	1.0	
Pdh Tj = Tbiv	10.7 kW	11.0 kW
COP Tj = Tbiv	2.62	1.90
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
Annual energy consumption Qhe	7417 kWh	9654 kWh

#### EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	229 %	166 %
Tbiv	5 °C	5 °C
Pdh Tj = +2°C	9.8 kW	10.0 kW
COP Tj = +2°C	3.67	2.45
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	7.9 kW	9.0 kW
COP Tj = +7°C	5.60	3.78
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	6.1 kW	5.9 kW
COP Tj = 12°C	7.60	5.63
Cdh Tj = +12 °C	1.0	1.0
Pdh Tj = Tbiv	9.8 kW	11.1 kW
COP Tj = Tbiv	4.95	3.43
Poff	21 W	21 W
PTO	41 W	41 W
PSB	21 W	21 W
PCK	0 W	0 W
Annual energy consumption Qhe	2885 kWh	4463 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	1
Pdc Tj = 25°C	5.12 kW
EER Tj = 25°C	4.68
Cdc Tj = 25 °C	1
Pdc Tj = 20°C	5.31 kW
EER Tj = 20°C	5.81
Cdc Tj = 20 °C	1
Poff	21 W
PTO	41 W
PSB	21 W
PCK	0 W
Annual energy consumption Qce	1266 kWh

## Model EPRA18DW17 / ETVZ16S18E(6V/9W)7

Model name	EPRA18DW17 / ETVZ16S18E(6V/9W)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 $\eta_{DHW}$	106 %
COP	2.51
Heating up time	1:06 h:min
Standby power input	42.9 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	240 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	9.00 kW	7.24 kW
El input	1.80 kW	2.47 kW
COP	5.00	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	44 dB(A)	44 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	1.0	
Pdh Tj = +2°C	6.9 kW	6.7 kW
COP Tj = +2°C	4.94	3.52
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	6.2 kW	6.5 kW
COP Tj = +7°C	5.95	4.54
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	5.6 kW	5.2 kW
COP Tj = 12°C	7.07	5.97
Cdh Tj = +12 °C	1.0	1.0
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	0.0 kW
Annual energy consumption Qhe	5479 kWh	7236 kWh

#### EN 14825 | Colder Climate

	Low temperature	Medium temperature
$\eta_s$	163 %	125 %
Tbiv	-15 °C	-18 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	8.0 kW	7.5 kW
COP Tj = -7°C	3.50	2.74
Cdh Tj = -7 °C	1.0	
Pdh Tj = +2°C	4.9 kW	5.8 kW

COP Tj = +2°C	5.07	3.67
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	5.3 kW	5.6 kW
COP Tj = +7°C	6.10	4.69
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	5.7 kW	6.2 kW
COP Tj = 12°C	7.03	6.12
Cdh Tj = +12 °C	1.0	
Pdh Tj = Tbiv	10.7 kW	11.0 kW
COP Tj = Tbiv	2.62	1.90
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
Annual energy consumption Qhe	7425 kWh	9658 kWh

#### EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	220 %	166 %
Tbiv	5 °C	5 °C
Pdh Tj = +2°C	10.0 kW	11.4 kW
COP Tj = +2°C	3.51	2.62
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	8.3 kW	9.0 kW
COP Tj = +7°C	5.67	3.78
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	5.7 kW	5.9 kW
COP Tj = 12°C	7.04	5.63
Cdh Tj = +12 °C	1.0	1.0
Pdh Tj = Tbiv	9.8 kW	11.1 kW
COP Tj = Tbiv	4.96	3.43
Poff	31 W	31 W
PTO	33 W	33 W
PSB	42 W	42 W
PCK	0 W	0 W
Annual energy consumption Qhe	2992 kWh	4453 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	1
Pdc Tj = 25°C	5.12 kW
EER Tj = 25°C	4.68
Cdc Tj = 25 °C	1
Pdc Tj = 20°C	5.31 kW
EER Tj = 20°C	5.81
Cdc Tj = 20 °C	1
Poff	31 W
PTO	33 W
PSB	42 W
PCK	0 W
Annual energy consumption Qce	1296 kWh

## Model EPRA18DV37 / ETVH16S18E(6V/9W)7 + cooling kit

Model name	EPRA18DV37 / ETVH16S18E(6V/9W)7 + cooling kit
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C
Any additional heat sources	n/a

## General data

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

## Outdoor Air/Water

## EN 16147 | Average Climate

Declared load profile	L
Efficiency $\eta_{DHW}$	110 %
COP	2.62
Heating up time	1:06 h:min
Standby power input	34.2 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	240 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	9.00 kW	7.24 kW
El input	1.80 kW	2.41 kW
COP	5.00	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	44 dB(A)	44 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	1.0	
Pdh Tj = +2°C	6.7 kW	6.9 kW
COP Tj = +2°C	4.44	3.56
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	5.7 kW	6.9 kW
COP Tj = +7°C	5.84	4.44
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	6.0 kW	6.2 kW
COP Tj = 12°C	7.40	5.72
Cdh Tj = +12 °C	1.0	1.0
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	0.0 kW
Annual energy consumption Qhe	5649 kWh	7134 kWh

#### EN 14825 | Colder Climate

	Low temperature	Medium temperature
$\eta_s$	164 %	125 %
Tbiv	-15 °C	-18 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	8.0 kW	7.5 kW
COP Tj = -7°C	3.50	2.74
Cdh Tj = -7 °C	1.0	

Pdh Tj = +2°C	4.9 kW	5.8 kW
COP Tj = +2°C	5.07	3.67
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	5.3 kW	5.6 kW
COP Tj = +7°C	6.10	4.69
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	5.7 kW	6.2 kW
COP Tj = 12°C	7.03	6.12
Cdh Tj = +12 °C	1.0	
Pdh Tj = Tbiv	10.7 kW	11.0 kW
COP Tj = Tbiv	2.62	1.90
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
Annual energy consumption Qhe	7370 kWh	9609 kWh

#### EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	236 %	169 %
Tbiv	5 °C	5 °C
Pdh Tj = +2°C	9.8 kW	10.0 kW
COP Tj = +2°C	3.67	2.45
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	7.9 kW	9.0 kW
COP Tj = +7°C	5.60	3.78
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	6.1 kW	5.9 kW
COP Tj = 12°C	7.60	5.63
Cdh Tj = +12 °C	1.0	1.0
Pdh Tj = Tbiv	9.8 kW	11.1 kW
COP Tj = Tbiv	4.95	3.43
Poff	21 W	21 W
PTO	41 W	41 W
PSB	21 W	21 W
PCK	0 W	0 W
Annual energy consumption Qhe	2792 kWh	4371 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	1
Pdc Tj = 25°C	5.12 kW
EER Tj = 25°C	4.68
Cdc Tj = 25 °C	1
Pdc Tj = 20°C	5.31 kW
EER Tj = 20°C	5.81
Cdc Tj = 20 °C	1
Poff	21 W
PTO	41 W
PSB	21 W
PCK	0 W
Annual energy consumption Qce	1266 kWh

## Model EPRA18DW17 / ETVH16S18E(6V/9W)7 + cooling kit

Model name	EPRA18DW17 / ETVH16S18E(6V/9W)7 + 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 $\eta_{DHW}$	106 %
COP	2.51
Heating up time	1:06 h:min
Standby power input	42.9 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	240 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	9.00 kW	7.24 kW
El input	1.80 kW	2.47 kW
COP	5.00	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	44 dB(A)	44 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	1.0	
Pdh Tj = +2°C	6.9 kW	6.7 kW
COP Tj = +2°C	4.94	3.52
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	6.2 kW	6.5 kW
COP Tj = +7°C	5.95	4.54
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	5.6 kW	5.2 kW
COP Tj = 12°C	7.07	5.97
Cdh Tj = +12 °C	1.0	1.0
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	0.0 kW
Annual energy consumption Qhe	5366 kWh	7122 kWh

#### EN 14825 | Colder Climate

	Low temperature	Medium temperature
$\eta_s$	165 %	126 %
Tbiv	-15 °C	-18 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	8.0 kW	7.5 kW
COP Tj = -7°C	3.50	2.74
Cdh Tj = -7 °C	1.0	

Pdh Tj = +2°C	4.9 kW	5.8 kW
COP Tj = +2°C	5.07	3.67
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	5.3 kW	5.6 kW
COP Tj = +7°C	6.10	4.69
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	5.7 kW	6.2 kW
COP Tj = 12°C	7.03	6.12
Cdh Tj = +12 °C	1.0	
Pdh Tj = Tbiv	10.7 kW	11.0 kW
COP Tj = Tbiv	2.62	1.90
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
Annual energy consumption Qhe	7356 kWh	9589 kWh

#### EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	231 %	172 %
Tbiv	5 °C	5 °C
Pdh Tj = +2°C	10.0 kW	11.4 kW
COP Tj = +2°C	3.51	2.62
Cdh Tj = +2 °C	1.0	1.0
Pdh Tj = +7°C	8.3 kW	9.0 kW
COP Tj = +7°C	5.67	3.78
Cdh Tj = +7 °C	1.0	1.0
Pdh Tj = 12°C	5.7 kW	5.9 kW
COP Tj = 12°C	7.04	5.63
Cdh Tj = +12 °C	1.0	1.0
Pdh Tj = Tbiv	9.8 kW	11.1 kW
COP Tj = Tbiv	4.96	3.43
Poff	31 W	31 W
PTO	33 W	33 W
PSB	42 W	42 W
PCK	0 W	0 W
Annual energy consumption Qhe	2855 kWh	4316 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	1
Pdc Tj = 25°C	5.12 kW
EER Tj = 25°C	4.68
Cdc Tj = 25 °C	1
Pdc Tj = 20°C	5.31 kW
EER Tj = 20°C	5.81
Cdc Tj = 20 °C	1
Poff	31 W
PTO	33 W
PSB	42 W
PCK	0 W
Annual energy consumption Qce	1296 kWh