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### This information was generated by the HP KEYMARK database on 23 Jun 2022

#### <u>Login</u>

| Summary of          | DAIKIN ALTHERMA 3 H HT ECH2O 14-18kW (300L)               | Reg. No.           | 011-1W0524 |
|---------------------|---|--------------------|------------|
| Certificate Holder  | Certificate Holder  |                    |            |
| Name                | DAIKIN Europe N.V.  | DAIKIN Europe N.V. |            |
| Address             | Zandvoordestraat 300                                      | Zip                | B-8400     |
| City                | Oostende  | Country            | Belgium    |
| Certification Body  | ody DIN CERTCO Gesellschaft für Konformitätsbewertung mbH |                    |            |
| Subtype title       | DAIKIN ALTHERMA 3 H HT ECH2O 14-18kW (300L)               |                    |            |
| Heat Pump Type      | Outdoor Air/Water   |                    |            |
| Refrigerant         | R32   |                    |            |
| Mass of Refrigerant | 4.2 kg  |                    |            |
| Certification Date  | 24.03.2022  |                    |            |
| Testing basis       | ng basis HP KEYMARK certification scheme rules rev. 9     |                    |            |



## **Model: EPRA14DV3 / ETSH16P30E**

| Configure model                     |                          |
|-------------------------------------|--------------------------|
| Model name                          | EPRA14DV3 / ETSH16P30E   |
| Application                         | Heating + DHW + low temp |
| Units                               | Indoor + Outdoor         |
| Climate Zone                        | n/a                      |
| Reversibility                       | No                       |
| Cooling mode application (optional) | n/a                      |

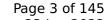
| General Data |             |  |
|--------------|-------------|--|
| Power supply | 1x230V 50Hz |  |

### Heating

| EN 14511-2  |                 |                    |
|-------------|-----------------|--------------------|
|             | Low temperature | Medium temperature |
| Heat output | 5.69 kW         | 7.24 kW            |
| El input    | 1.22 kW         | 2.41 kW            |
| СОР         | 4.67            | 3.01               |

| EN 14511-4                                 |        |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure              | passed |
| Defrost test                               | passed |
| Starting and operating test                | passed |

# Cooling





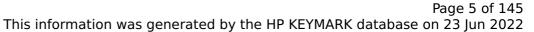
| EN 14511-2       |            |
|------------------|------------|
|                  | +7°C/+12°C |
| El input         | 2.56 kW    |
| Cooling capacity | 6.90       |
| EER              | 2.7        |

### EN 14825





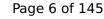
|                               | +7°C/+12°C |
|-------------------------------|------------|
| Pdesignc                      | 6.9 kW     |
| SEER                          | 3.99       |
| Pdc Tj = 35°C                 | 6.90 kW    |
| EER Tj = 35°C                 | 2.70       |
| Pdc Tj = 30°C                 | 5.23 kW    |
| EER Tj = 30°C                 | 3.65       |
| Cdc                           | 0.99       |
| Pdc Tj = 25°C                 | 5.05 kW    |
| EER Tj = 25°C                 | 4.58       |
| Cdc                           | 0.98       |
| Pdc Tj = 20°C                 | 4.94 kW    |
| EER Tj = 20°C                 | 5.41       |
| Cdc                           | 0.98       |
| Poff                          | 21 W       |
| PTO                           | 41 W       |
| PSB                           | 21 W       |
| PCK                           | o w        |
| Annual energy consumption Qce | 1038 kWh   |





| EN 12102-1                |                 |                    |
|---------------------------|-----------------|--------------------|
|                           | Low temperature | Medium temperature |
| Sound power level indoor  | 45.6 dB(A)      | 45.6 dB(A)         |
| Sound power level outdoor | 54.0 dB(A)      | 54.0 dB(A)         |

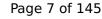
| EN 14825       |                 |                    |
|----------------|-----------------|--------------------|
|                | Low temperature | Medium temperature |
| $\eta_{s}$     | 177 %           | 140 %              |
| Prated         | 12.5 kW         | 12.5 kW            |
| SCOP           | 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 | 1.00            | 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        |
| РТО   | 41 W        | 41 W        |
| PSB   | 21 W        | 21 W        |
| PCK   | o w         | o 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    |

Domestic Hot Water (DHW)





| EN 16147                        |            |
|---------------------------------|------------|
| Declared load profile           | L          |
| Efficiency ηDHW                 | 124 %      |
| СОР                             | 2.86       |
| Heating up time                 | 1:25 h:min |
| Standby power input             | 57.4 W     |
| Reference hot water temperature | 47.0 °C    |
| Mixed water at 40°C             | 193.0      |



## **Model: EPRA14DW1 / ETSH16P30E**

| Configure model                     |                          |  |
|-------------------------------------|--------------------------|--|
| Model name                          | EPRA14DW1 / ETSH16P30E   |  |
| Application                         | Heating + DHW + low temp |  |
| Units                               | Indoor + Outdoor         |  |
| Climate Zone                        | n/a                      |  |
| Reversibility                       | No                       |  |
| Cooling mode application (optional) | n/a                      |  |

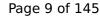
| General Data |             |  |
|--------------|-------------|--|
| Power supply | 3x400V 50Hz |  |

## Heating

| EN 14511-2  |                 |                    |
|-------------|-----------------|--------------------|
|             | Low temperature | Medium temperature |
| Heat output | 5.90 kW         | 7.24 kW            |
| El input    | 1.23 kW         | 2.47 kW            |
| СОР         | 4.79            | 2.93               |

| EN 14511-4                                 |        |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure              | passed |
| Defrost test                               | passed |
| Starting and operating test                | passed |

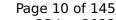
# Cooling





| EN 14511-2       |         |  |  |
|------------------|---------|--|--|
| +7°C/+12°C       |         |  |  |
| El input         | 2.56 kW |  |  |
| Cooling capacity | 6.90    |  |  |
| EER              | 2.7     |  |  |

### EN 14825





|                               | +7°C/+12°C |
|-------------------------------|------------|
| Pdesignc                      | 6.9 kW     |
| SEER                          | 3.87       |
| Pdc Tj = 35°C                 | 6.90 kW    |
| EER Tj = 35°C                 | 2.70       |
| Pdc Tj = 30°C                 | 5.23 kW    |
| EER Tj = 30°C                 | 3.65       |
| Cdc                           | 0.98       |
| Pdc Tj = 25°C                 | 5.05 kW    |
| EER Tj = 25°C                 | 4.58       |
| Cdc                           | 0.97       |
| Pdc Tj = 20°C                 | 4.94 kW    |
| EER Tj = 20°C                 | 5.41       |
| Cdc                           | 0.97       |
| Poff                          | 31 W       |
| РТО                           | 33 W       |
| PSB                           | 42 W       |
| PCK                           | o w        |
| Annual energy consumption Qce | 1069 kWh   |



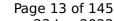
| EN 12102-1                |                 |                    |
|---------------------------|-----------------|--------------------|
|                           | Low temperature | Medium temperature |
| Sound power level indoor  | 45.6 dB(A)      | 45.6 dB(A)         |
| Sound power level outdoor | 54.0 dB(A)      | 54.0 dB(A)         |

| EN 14825                |                 |                    |
|-------------------------|-----------------|--------------------|
|                         | 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          | 1.00            | 1.0                |
| Pdh Tj = $+2^{\circ}$ 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 = $+7^{\circ}$ C | 6.2 kW          | 6.5 kW             |
| COP Tj = +7°C           | 5.95            | 4.54               |
| Cdh Tj = +7 °C          | 1.0             | 1.0                |

|                              |                      | Page 12 of 145             |
|------------------------------|----------------------|----------------------------|
| This information was general | ted by the HP KEYMAI | RK database on 23 Jun 2022 |
|                              |                      |                            |

| 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        |
| РТО   | 33 W        | 33 W        |
| PSB   | 42 W        | 42 W        |
| PCK   | o 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    |
|   |             |             |

Domestic Hot Water (DHW)





| EN 16147                        |            |
|---------------------------------|------------|
| Declared load profile           | L          |
| Efficiency ηDHW                 | 124 %      |
| СОР                             | 2.85       |
| Heating up time                 | 1:25 h:min |
| Standby power input             | 57.7 W     |
| Reference hot water temperature | 47.0 °C    |
| Mixed water at 40°C             | 193.0      |



# **Model: EPRA14DV3 / ETSHB16P30E**

| Configure model                     |                          |  |
|-------------------------------------|--------------------------|--|
| Model name                          | EPRA14DV3 / ETSHB16P30E  |  |
| Application                         | Heating + DHW + low temp |  |
| Units                               | Indoor + Outdoor         |  |
| Climate Zone                        | n/a                      |  |
| Reversibility                       | No                       |  |
| Cooling mode application (optional) | n/a                      |  |

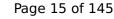
| General Data |             |  |
|--------------|-------------|--|
| Power supply | 1x230V 50Hz |  |

### Heating

| EN 14511-2  |                 |                    |
|-------------|-----------------|--------------------|
|             | Low temperature | Medium temperature |
| Heat output | 5.69 kW         | 7.24 kW            |
| El input    | 1.22 kW         | 2.41 kW            |
| СОР         | 4.67            | 3.01               |

| EN 14511-4                                 |        |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure              | passed |
| Defrost test                               | passed |
| Starting and operating test                | passed |

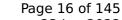
# Cooling





| EN 14511-2       |         |  |
|------------------|---------|--|
| +7°C/+12°C       |         |  |
| El input         | 2.56 kW |  |
| Cooling capacity | 6.90    |  |
| EER              | 2.7     |  |

### EN 14825





| This information was generated by the Hill Re | +7°C/+12°C |
|---|------------|
| Pdesignc                                      | 6.9 kW     |
| SEER  | 3.99       |
| Pdc Tj = 35°C                                 | 6.90 kW    |
| EER Tj = 35°C                                 | 2.70       |
| Pdc Tj = 30°C                                 | 5.23 kW    |
| EER Tj = 30°C                                 | 3.65       |
| Cdc   | 0.99       |
| Pdc Tj = 25°C                                 | 5.05 kW    |
| EER Tj = 25°C                                 | 4.58       |
| Cdc   | 0.98       |
| Pdc Tj = 20°C                                 | 4.94 kW    |
| EER Tj = 20°C                                 | 5.41       |
| Cdc   | 0.98       |
| Poff  | 21 W       |
| РТО   | 41 W       |
| PSB   | 21 W       |
| PCK   | o w        |
| Annual energy consumption Qce                 | 1038 kWh   |



| EN 12102-1                |                 |                    |
|---------------------------|-----------------|--------------------|
|                           | Low temperature | Medium temperature |
| Sound power level indoor  | 45.6 dB(A)      | 45.6 dB(A)         |
| Sound power level outdoor | 54.0 dB(A)      | 54.0 dB(A)         |

| EN 14825                |                 |                    |  |
|-------------------------|-----------------|--------------------|--|
|                         | 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          | 1.00            | 1.0                |  |
| Pdh Tj = $+2^{\circ}$ 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 = $+7^{\circ}$ C | 5.7 kW          | 6.9 kW             |  |
| $COP Tj = +7^{\circ}C$  | 5.84            | 4.44               |  |
| Cdh Tj = +7 °C          | 1.0             | 1.0                |  |

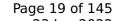


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### This information was generated by the HP KEYMARK database on 23 Jun 2022

|   |             | ·           |
|---|-------------|-------------|
| 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        |
| РТО   | 41 W        | 41 W        |
| PSB   | 21 W        | 21 W        |
| PCK   | o w         | o 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    |

Domestic Hot Water (DHW)





| EN 16147                        |            |  |
|---------------------------------|------------|--|
| Declared load profile           | L          |  |
| Efficiency ηDHW                 | 124 %      |  |
| СОР                             | 2.86       |  |
| Heating up time                 | 1:25 h:min |  |
| Standby power input             | 57.4 W     |  |
| Reference hot water temperature | 47.0 °C    |  |
| Mixed water at 40°C             | 193.0      |  |



## Model: EPRA14DW1 / ETSHB16P30E

| Configure model                     |                          |  |
|-------------------------------------|--------------------------|--|
| Model name                          | EPRA14DW1 / ETSHB16P30E  |  |
| Application                         | Heating + DHW + low temp |  |
| Units                               | Indoor + Outdoor         |  |
| Climate Zone                        | n/a                      |  |
| Reversibility                       | No                       |  |
| Cooling mode application (optional) | n/a                      |  |

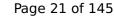
| General Data |             |  |
|--------------|-------------|--|
| Power supply | 3x400V 50Hz |  |

### Heating

| EN 14511-2  |                 |                    |
|-------------|-----------------|--------------------|
|             | Low temperature | Medium temperature |
| Heat output | 5.90 kW         | 7.24 kW            |
| El input    | 1.23 kW         | 2.47 kW            |
| СОР         | 4.79            | 2.93               |

| EN 14511-4                                 |        |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure              | passed |
| Defrost test                               | passed |
| Starting and operating test                | passed |

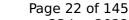
# Cooling





| EN 14511-2       |         |  |  |
|------------------|---------|--|--|
| +7°C/+12°C       |         |  |  |
| El input         | 2.56 kW |  |  |
| Cooling capacity | 6.90    |  |  |
| EER              | 2.7     |  |  |

### EN 14825





|                               | +7°C/+12°C |
|-------------------------------|------------|
| Pdesignc                      | 6.9 kW     |
| SEER                          | 3.87       |
| Pdc Tj = 35°C                 | 6.90 kW    |
| EER Tj = 35°C                 | 2.70       |
| Pdc Tj = 30°C                 | 5.23 kW    |
| EER Tj = 30°C                 | 3.65       |
| Cdc                           | 0.98       |
| Pdc Tj = 25°C                 | 5.05 kW    |
| EER Tj = 25°C                 | 4.58       |
| Cdc                           | 0.97       |
| Pdc Tj = 20°C                 | 4.94 kW    |
| EER Tj = 20°C                 | 5.41       |
| Cdc                           | 0.97       |
| Poff                          | 31 W       |
| РТО                           | 33 W       |
| PSB                           | 42 W       |
| PCK                           | o w        |
| Annual energy consumption Qce | 1069 kWh   |



| EN 12102-1                |                 |                    |
|---------------------------|-----------------|--------------------|
|                           | Low temperature | Medium temperature |
| Sound power level indoor  | 45.6 dB(A)      | 45.6 dB(A)         |
| Sound power level outdoor | 54.0 dB(A)      | 54.0 dB(A)         |

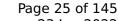
| EN 14825                |                 |                    |
|-------------------------|-----------------|--------------------|
|                         | Low temperature | Medium temperature |
| $\eta_{s}$              | 186 %           | 140 %              |
| Prated                  | 12.5 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          | 1.00            | 1.0                |
| Pdh Tj = $+2^{\circ}$ 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 = $+7^{\circ}$ C | 6.2 kW          | 6.5 kW             |
| COP Tj = +7°C           | 5.95            | 4.54               |
| Cdh Tj = +7 °C          | 1.0             | 1.0                |

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|   | · · · · · · · · · · · · · · · · · · · |             |
|---|---------------------------------------|-------------|
| 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        |
| РТО   | 33 W                                  | 33 W        |
| PSB   | 42 W                                  | 42 W        |
| PCK   | o w                                   | o 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    |
|   |                                       |             |

Domestic Hot Water (DHW)

CEN heat pump KEYMARK





| EN 16147                        |            |  |
|---------------------------------|------------|--|
| Declared load profile           | L          |  |
| Efficiency ηDHW                 | 124 %      |  |
| СОР                             | 2.85       |  |
| Heating up time                 | 1:25 h:min |  |
| Standby power input             | 57.7 W     |  |
| Reference hot water temperature | 47.0 °C    |  |
| Mixed water at 40°C             | 193.0      |  |

# Model: EPRA14DV3 / ETSX16P30E

| Configure model                     |                          |  |
|-------------------------------------|--------------------------|--|
| Model name                          | EPRA14DV3 / ETSX16P30E   |  |
| Application                         | Heating + DHW + low temp |  |
| Units                               | Indoor + Outdoor         |  |
| Climate Zone                        | n/a                      |  |
| Reversibility                       | Yes                      |  |
| Cooling mode application (optional) | +7°C/12°C                |  |

| General Data |             |  |
|--------------|-------------|--|
| Power supply | 1x230V 50Hz |  |

### Heating

| EN 14511-2  |                 |                    |
|-------------|-----------------|--------------------|
|             | Low temperature | Medium temperature |
| Heat output | 5.69 kW         | 7.24 kW            |
| El input    | 1.22 kW         | 2.41 kW            |
| СОР         | 4.67            | 3.01               |

| EN 14511-4                                 |        |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure              | passed |
| Defrost test                               | passed |
| Starting and operating test                | passed |

# Cooling





| EN 14511-2       |         |  |  |
|------------------|---------|--|--|
| +7°C/+12°C       |         |  |  |
| El input         | 2.56 kW |  |  |
| Cooling capacity | 6.90    |  |  |
| EER              | 2.7     |  |  |

### EN 14825





|                               | +7°C/+12°C |
|-------------------------------|------------|
| Pdesignc                      | 6.9 kW     |
| SEER                          | 3.99       |
| Pdc Tj = 35°C                 | 6.90 kW    |
| EER Tj = 35°C                 | 2.70       |
| Pdc Tj = 30°C                 | 5.23 kW    |
| EER Tj = 30°C                 | 3.65       |
| Cdc                           | 0.99       |
| Pdc Tj = 25°C                 | 5.05 kW    |
| EER Tj = 25°C                 | 4.58       |
| Cdc                           | 0.98       |
| Pdc Tj = 20°C                 | 4.94 kW    |
| EER Tj = 20°C                 | 5.41       |
| Cdc                           | 0.98       |
| Poff                          | 21 W       |
| РТО                           | 41 W       |
| PSB                           | 21 W       |
| PCK                           | o w        |
| Annual energy consumption Qce | 1038 kWh   |



| EN 12102-1                |                 |                    |
|---------------------------|-----------------|--------------------|
|                           | Low temperature | Medium temperature |
| Sound power level indoor  | 45.6 dB(A)      | 45.6 dB(A)         |
| Sound power level outdoor | 54.0 dB(A)      | 54.0 dB(A)         |

| EN 14825       |                 |                    |
|----------------|-----------------|--------------------|
|                | 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 | 1.00            | 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                |

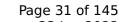


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### This information was generated by the HP KEYMARK database on 23 Jun 2022

|   |             | ·           |
|---|-------------|-------------|
| 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        |
| РТО   | 41 W        | 41 W        |
| PSB   | 21 W        | 21 W        |
| PCK   | o 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    |

Domestic Hot Water (DHW)





| EN 16147                        |            |
|---------------------------------|------------|
| Declared load profile           | L          |
| Efficiency ηDHW                 | 124 %      |
| СОР                             | 2.86       |
| Heating up time                 | 1:25 h:min |
| Standby power input             | 57.4 W     |
| Reference hot water temperature | 47.0 °C    |
| Mixed water at 40°C             | 193.0 l    |



## **Model: EPRA14DW1 / ETSX16P30E**

| Configure model                     |                          |  |
|-------------------------------------|--------------------------|--|
| Model name                          | EPRA14DW1 / ETSX16P30E   |  |
| Application                         | Heating + DHW + low temp |  |
| Units                               | Indoor + Outdoor         |  |
| Climate Zone                        | n/a                      |  |
| Reversibility                       | Yes                      |  |
| Cooling mode application (optional) | +7°C/12°C                |  |

| General Data             |  |  |
|--------------------------|--|--|
| Power supply 3x400V 50Hz |  |  |

### Heating

| EN 14511-2                         |         |         |  |
|------------------------------------|---------|---------|--|
| Low temperature Medium temperature |         |         |  |
| Heat output                        | 5.90 kW | 7.24 kW |  |
| El input                           | 1.23 kW | 2.47 kW |  |
| СОР                                | 4.79    | 2.93    |  |

| EN 14511-4                                 |        |
|--|--------|
| Shutting off the heat transfer medium flow | naccod |
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure              | passed |
| Defrost test                               | passed |
| Starting and operating test                | passed |

# Cooling

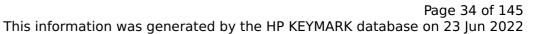


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This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 14511-2       |         |  |
|------------------|---------|--|
| +7°C/+12°C       |         |  |
| El input         | 2.56 kW |  |
| Cooling capacity | 6.90    |  |
| EER              | 2.7     |  |

| EN | 14825 | 5 |
|----|-------|---|
|----|-------|---|





|                               | +7°C/+12°C |
|-------------------------------|------------|
| Pdesignc                      | 6.9 kW     |
| SEER                          | 3.87       |
| Pdc Tj = 35°C                 | 6.90 kW    |
| EER Tj = 35°C                 | 2.70       |
| Pdc Tj = 30°C                 | 5.23 kW    |
| EER Tj = 30°C                 | 3.65       |
| Cdc                           | 0.98       |
| Pdc Tj = 25°C                 | 5.05 kW    |
| EER Tj = 25°C                 | 4.58       |
| Cdc                           | 0.97       |
| Pdc Tj = 20°C                 | 4.94 kW    |
| EER Tj = 20°C                 | 5.41       |
| Cdc                           | 0.97       |
| Poff                          | 31 W       |
| PTO                           | 33 W       |
| PSB                           | 42 W       |
| PCK                           | o w        |
| Annual energy consumption Qce | 1069 kWh   |



| EN 12102-1                |                 |                    |
|---------------------------|-----------------|--------------------|
|                           | Low temperature | Medium temperature |
| Sound power level indoor  | 45.6 dB(A)      | 45.6 dB(A)         |
| Sound power level outdoor | 54.0 dB(A)      | 54.0 dB(A)         |

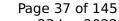
| EN 14825                |                 |                    |  |
|-------------------------|-----------------|--------------------|--|
|                         | Low temperature | Medium temperature |  |
| $\eta_{s}$              | 190 %           | 142 %              |  |
| Prated                  | 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          | 1.00            | 1.0                |  |
| Pdh Tj = $+2^{\circ}$ 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 = $+7^{\circ}$ C | 6.2 kW          | 6.5 kW             |  |
| COP Tj = +7°C           | 5.95            | 4.54               |  |
| Cdh Tj = +7 °C          | 1.0             | 1.0                |  |

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### This information was generated by the HP KEYMARK database on 23 Jun 2022

| 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        |
| РТО   | 33 W        | 33 W        |
| PSB   | 42 W        | 42 W        |
| PCK   | o 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    |
|   |             |             |

Domestic Hot Water (DHW)





| EN 16147                        |            |  |
|---------------------------------|------------|--|
| Declared load profile           | L          |  |
| Efficiency ηDHW                 | 124 %      |  |
| СОР                             | 2.85       |  |
| Heating up time                 | 1:25 h:min |  |
| Standby power input             | 57.7 W     |  |
| Reference hot water temperature | 47.0 °C    |  |
| Mixed water at 40°C             | 193.0      |  |



## **Model: EPRA14DV3 / ETSXB16P30E**

| Configure model                     |                          |  |
|-------------------------------------|--------------------------|--|
| Model name                          | EPRA14DV3 / ETSXB16P30E  |  |
| Application                         | Heating + DHW + low temp |  |
| Units                               | Indoor + Outdoor         |  |
| Climate Zone                        | n/a                      |  |
| Reversibility                       | Yes                      |  |
| Cooling mode application (optional) | +7°C/12°C                |  |

| General Data |             |  |
|--------------|-------------|--|
| Power supply | 1x230V 50Hz |  |

### Heating

| EN 14511-2  |                 |                    |
|-------------|-----------------|--------------------|
|             | Low temperature | Medium temperature |
| Heat output | 5.69 kW         | 7.24 kW            |
| El input    | 1.22 kW         | 2.41 kW            |
| СОР         | 4.67            | 3.01               |

| EN 14511-4                                 |        |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure              | passed |
| Defrost test                               | passed |
| Starting and operating test                | passed |

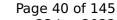
# Cooling





| EN 14511-2       |            |
|------------------|------------|
|                  | +7°C/+12°C |
| El input         | 2.56 kW    |
| Cooling capacity | 6.90       |
| EER              | 2.7        |

|                  | +7°C/+12°C |  |
|------------------|------------|--|
| El input         | 2.56 kW    |  |
| Cooling capacity | 6.90       |  |
| EER              | 2.7        |  |
|                  |            |  |
| EN 14825         |            |  |
|                  |            |  |
|                  |            |  |
|                  |            |  |





| This information was generated by the Hill Re | +7°C/+12°C |
|---|------------|
| Pdesignc                                      | 6.9 kW     |
| SEER  | 3.99       |
| Pdc Tj = 35°C                                 | 6.90 kW    |
| EER Tj = 35°C                                 | 2.70       |
| Pdc Tj = 30°C                                 | 5.23 kW    |
| EER Tj = 30°C                                 | 3.65       |
| Cdc   | 0.99       |
| Pdc Tj = 25°C                                 | 5.05 kW    |
| EER Tj = 25°C                                 | 4.58       |
| Cdc   | 0.98       |
| Pdc Tj = 20°C                                 | 4.94 kW    |
| EER Tj = 20°C                                 | 5.41       |
| Cdc   | 0.98       |
| Poff  | 21 W       |
| РТО   | 41 W       |
| PSB   | 21 W       |
| PCK   | o w        |
| Annual energy consumption Qce                 | 1038 kWh   |



| EN 12102-1                |                 |                    |
|---------------------------|-----------------|--------------------|
|                           | Low temperature | Medium temperature |
| Sound power level indoor  | 45.6 dB(A)      | 45.6 dB(A)         |
| Sound power level outdoor | 54.0 dB(A)      | 54.0 dB(A)         |

| EN 14825         |                 |                    |
|------------------|-----------------|--------------------|
|                  | 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   | 1.00            | 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                |

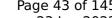


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### This information was generated by the HP KEYMARK database on 23 Jun 2022

|   |             | ·           |
|---|-------------|-------------|
| 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        |
| РТО   | 41 W        | 41 W        |
| PSB   | 21 W        | 21 W        |
| PCK   | o 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    |

Domestic Hot Water (DHW)





 $$\operatorname{\textit{Page}}\xspace$  43 of 145 This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 16147                        |            |  |
|---------------------------------|------------|--|
| Declared load profile           | L          |  |
| Efficiency ηDHW                 | 124 %      |  |
| СОР                             | 2.86       |  |
| Heating up time                 | 1:25 h:min |  |
| Standby power input             | 57.4 W     |  |
| Reference hot water temperature | 47.0 °C    |  |
| Mixed water at 40°C             | 193.0      |  |

## Model: EPRA14DW1 / ETSXB16P30E

| Configure model                     |                          |  |
|-------------------------------------|--------------------------|--|
| Model name                          | EPRA14DW1 / ETSXB16P30E  |  |
| Application                         | Heating + DHW + low temp |  |
| Units                               | Indoor + Outdoor         |  |
| Climate Zone                        | n/a                      |  |
| Reversibility                       | Yes                      |  |
| Cooling mode application (optional) | +7°C/12°C                |  |

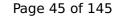
| General Data |             |  |
|--------------|-------------|--|
| Power supply | 3x400V 50Hz |  |

### Heating

| EN 14511-2  |                 |                    |  |
|-------------|-----------------|--------------------|--|
|             | Low temperature | Medium temperature |  |
| Heat output | 5.90 kW         | 7.24 kW            |  |
| El input    | 1.23 kW         | 2.47 kW            |  |
| СОР         | 4.79            | 2.93               |  |

| EN 14511-4                                 |        |  |
|--|--------|--|
| Shutting off the heat transfer medium flow | passed |  |
| Complete power supply failure              | passed |  |
| Defrost test                               | passed |  |
| Starting and operating test                | passed |  |

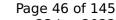
# Cooling





| EN 14511-2       |         |  |  |
|------------------|---------|--|--|
| +7°C/+12°C       |         |  |  |
| El input         | 2.56 kW |  |  |
| Cooling capacity | 6.90    |  |  |
| EER              | 2.7     |  |  |

#### EN 14825





|                               | +7°C/+12°C |
|-------------------------------|------------|
| Pdesignc                      | 6.9 kW     |
| SEER                          | 3.87       |
| Pdc Tj = 35°C                 | 6.90 kW    |
| EER Tj = 35°C                 | 2.70       |
| Pdc Tj = 30°C                 | 5.23 kW    |
| EER Tj = 30°C                 | 3.65       |
| Cdc                           | 0.98       |
| Pdc Tj = 25°C                 | 5.05 kW    |
| EER Tj = 25°C                 | 4.58       |
| Cdc                           | 0.97       |
| Pdc Tj = 20°C                 | 4.94 kW    |
| EER Tj = 20°C                 | 5.41       |
| Cdc                           | 0.97       |
| Poff                          | 31 W       |
| РТО                           | 33 W       |
| PSB                           | 42 W       |
| PCK                           | o w        |
| Annual energy consumption Qce | 1069 kWh   |



| EN 12102-1                |                 |                    |
|---------------------------|-----------------|--------------------|
|                           | Low temperature | Medium temperature |
| Sound power level indoor  | 45.6 dB(A)      | 45.6 dB(A)         |
| Sound power level outdoor | 54.0 dB(A)      | 54.0 dB(A)         |

| EN 14825       |                 |                    |
|----------------|-----------------|--------------------|
|                | 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 | 1.00            | 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                |

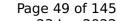


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### This information was generated by the HP KEYMARK database on 23 Jun 2022

| 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        |
| РТО   | 33 W        | 33 W        |
| PSB   | 42 W        | 42 W        |
| PCK   | 0 W         | o 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    |

Domestic Hot Water (DHW)





| EN 16147                        |            |  |
|---------------------------------|------------|--|
| Declared load profile           | L          |  |
| Efficiency ηDHW                 | 124 %      |  |
| СОР                             | 2.85       |  |
| Heating up time                 | 1:25 h:min |  |
| Standby power input             | 57.7 W     |  |
| Reference hot water temperature | 47.0 °C    |  |
| Mixed water at 40°C             | 193.0      |  |



# Model: EPRA16DV3 / ETSH16P30E

| Configure model                     |                          |  |
|-------------------------------------|--------------------------|--|
| Model name                          | EPRA16DV3 / ETSH16P30E   |  |
| Application                         | Heating + DHW + low temp |  |
| Units                               | Indoor + Outdoor         |  |
| Climate Zone                        | n/a                      |  |
| Reversibility                       | No                       |  |
| Cooling mode application (optional) | n/a                      |  |

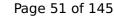
| General Data |             |  |
|--------------|-------------|--|
| Power supply | 1x230V 50Hz |  |

### Heating

| EN 14511-2  |                 |                    |
|-------------|-----------------|--------------------|
|             | Low temperature | Medium temperature |
| Heat output | 9.00 kW         | 7.24 kW            |
| El input    | 1.80 kW         | 2.41 kW            |
| СОР         | 5.00            | 3.01               |

| EN 14511-4                                 |        |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure              | passed |
| Defrost test                               | passed |
| Starting and operating test                | passed |

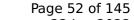
# Cooling





| EN 14511-2       |            |
|------------------|------------|
|                  | +7°C/+12°C |
| El input         | 2.93 kW    |
| Cooling capacity | 7.88       |
| EER              | 2.69       |

#### EN 14825





|                               | +7°C/+12°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                           | 0.99       |
| Pdc Tj = 25°C                 | 5.09 kW    |
| EER Tj = 25°C                 | 4.63       |
| Cdc                           | 0.98       |
| Pdc Tj = 20°C                 | 5.13 kW    |
| EER Tj = 20°C                 | 5.61       |
| Cdc                           | 0.98       |
| Poff                          | 21 W       |
| РТО                           | 41 W       |
| PSB                           | 21 W       |
| PCK                           | o w        |
| Annual energy consumption Qce | 1158 kWh   |



| EN 12102-1                |                 |                    |
|---------------------------|-----------------|--------------------|
|                           | Low temperature | Medium temperature |
| Sound power level indoor  | 45.6 dB(A)      | 45.6 dB(A)         |
| Sound power level outdoor | 54.0 dB(A)      | 54.0 dB(A)         |

| EN 14825                |                 |                    |  |
|-------------------------|-----------------|--------------------|--|
|                         | 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          | 1.00            | 1.0                |  |
| Pdh Tj = $+2^{\circ}$ 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 = $+7^{\circ}$ C | 5.7 kW          | 6.9 kW             |  |
| $COP Tj = +7^{\circ}C$  | 5.84            | 4.44               |  |
| Cdh Tj = +7 °C          | 1.0             | 1.0                |  |

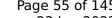


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### This information was generated by the HP KEYMARK database on 23 Jun 2022

| 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        |
| РТО   | 41 W        | 41 W        |
| PSB   | 21 W        | 21 W        |
| PCK   | o w         | o 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    |

Domestic Hot Water (DHW)





 $$\operatorname{\textit{Page}}\xspace$  55 of 145 This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 16147                        |            |  |
|---------------------------------|------------|--|
| Declared load profile           | L          |  |
| Efficiency ηDHW                 | 124 %      |  |
| СОР                             | 2.86       |  |
| Heating up time                 | 1:25 h:min |  |
| Standby power input             | 57.4 W     |  |
| Reference hot water temperature | 47.0 °C    |  |
| Mixed water at 40°C             | 193.0      |  |



## **Model: EPRA16DW1 / ETSH16P30E**

| Configure model                     |                          |  |
|-------------------------------------|--------------------------|--|
| Model name                          | EPRA16DW1 / ETSH16P30E   |  |
| Application                         | Heating + DHW + low temp |  |
| Units                               | Indoor + Outdoor         |  |
| Climate Zone                        | n/a                      |  |
| Reversibility                       | No                       |  |
| Cooling mode application (optional) | n/a                      |  |

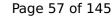
| General Data |             |  |
|--------------|-------------|--|
| Power supply | 3x400V 50Hz |  |

### Heating

| EN 14511-2  |                 |                    |
|-------------|-----------------|--------------------|
|             | Low temperature | Medium temperature |
| Heat output | 9.00 kW         | 7.24 kW            |
| El input    | 1.80 kW         | 2.47 kW            |
| СОР         | 5.00            | 2.93               |

| EN 14511-4                                 |        |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure              | passed |
| Defrost test                               | passed |
| Starting and operating test                | passed |

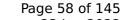
# Cooling





| EN 14511-2       |         |
|------------------|---------|
| +7°C/+12°C       |         |
| El input         | 2.93 kW |
| Cooling capacity | 7.88    |
| EER              | 2.69    |

#### EN 14825



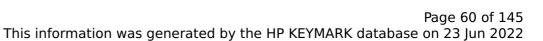


|                               | +7°C/+12°C |
|-------------------------------|------------|
| Pdesignc                      | 7.9 kW     |
| SEER                          | 3.98       |
| Pdc Tj = 35°C                 | 7.88 kW    |
| EER Tj = 35°C                 | 2.69       |
| Pdc Tj = 30°C                 | 5.92 kW    |
| EER Tj = 30°C                 | 3.69       |
| Cdc                           | 0.98       |
| Pdc Tj = 25°C                 | 5.09 kW    |
| EER Tj = 25°C                 | 4.63       |
| Cdc                           | 0.97       |
| Pdc Tj = 20°C                 | 5.13 kW    |
| EER Tj = 20°C                 | 5.61       |
| Cdc                           | 0.97       |
| Poff                          | 31 W       |
| PTO                           | 33 W       |
| PSB                           | 42 W       |
| PCK                           | o w        |
| Annual energy consumption Qce | 1188 kWh   |



| EN 12102-1                |                 |                    |
|---------------------------|-----------------|--------------------|
|                           | Low temperature | Medium temperature |
| Sound power level indoor  | 45.6 dB(A)      | 45.6 dB(A)         |
| Sound power level outdoor | 54.0 dB(A)      | 54.0 dB(A)         |

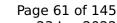
| EN 14825       |                 |                    |
|----------------|-----------------|--------------------|
|                | Low temperature | Medium temperature |
| $\eta_{s}$     | 186 %           | 140 %              |
| Prated         | 12.5 kW         | 12.5 kW            |
| SCOP           | 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 | 1.00            | 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                |



| CEN heat pump<br>KEYMARK |
|--------------------------|
|                          |

| 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        |
| РТО   | 33 W        | 33 W        |
| PSB   | 42 W        | 42 W        |
| PCK   | o w         | o 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    |

Domestic Hot Water (DHW)





| EN 16147                        |            |  |
|---------------------------------|------------|--|
| Declared load profile           | L          |  |
| Efficiency ηDHW                 | 124 %      |  |
| СОР                             | 2.85       |  |
| Heating up time                 | 1:25 h:min |  |
| Standby power input             | 57.7 W     |  |
| Reference hot water temperature | 47.0 °C    |  |
| Mixed water at 40°C             | 193.0      |  |



## **Model: EPRA16DV3 / ETSHB16P30E**

| Configure model                     |                          |  |
|-------------------------------------|--------------------------|--|
| Model name                          | EPRA16DV3 / ETSHB16P30E  |  |
| Application                         | Heating + DHW + low temp |  |
| Units                               | Indoor + Outdoor         |  |
| Climate Zone                        | n/a                      |  |
| Reversibility                       | No                       |  |
| Cooling mode application (optional) | n/a                      |  |

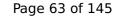
| General Data |             |  |
|--------------|-------------|--|
| Power supply | 1x230V 50Hz |  |

### Heating

| EN 14511-2                         |         |         |  |
|------------------------------------|---------|---------|--|
| Low temperature Medium temperature |         |         |  |
| Heat output                        | 9.00 kW | 7.24 kW |  |
| El input                           | 1.80 kW | 2.41 kW |  |
| СОР                                | 5.00    | 3.01    |  |

| EN 14511-4                                 |        |  |
|--|--------|--|
| Shutting off the heat transfer medium flow | passed |  |
| Complete power supply failure              | passed |  |
| Defrost test                               | passed |  |
| Starting and operating test                | passed |  |

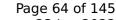
# Cooling





| EN 14511-2       |         |  |
|------------------|---------|--|
| +7°C/+12°C       |         |  |
| El input         | 2.93 kW |  |
| Cooling capacity | 7.88    |  |
| EER              | 2.69    |  |

#### EN 14825

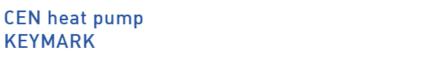




|                               | +7°C/+12°C |
|-------------------------------|------------|
| Pdesignc                      | 7.9 kW     |
| SEER                          | 4.08       |
| Pdc Tj = 35°C                 | 7.88 kW    |
| EER Tj = 35°C                 | 2.69       |
| Pdc Tj = 30°C                 | 5.92 kW    |
| EER Tj = 30°C                 | 3.69       |
| Cdc                           | 0.99       |
| Pdc Tj = 25°C                 | 5.09 kW    |
| EER Tj = 25°C                 | 4.63       |
| Cdc                           | 0.98       |
| Pdc Tj = 20°C                 | 5.13 kW    |
| EER Tj = 20°C                 | 5.61       |
| Cdc                           | 0.98       |
| Poff                          | 21 W       |
| РТО                           | 41 W       |
| PSB                           | 21 W       |
| PCK                           | o w        |
| Annual energy consumption Qce | 1158 kWh   |

| EN 12102-1                |                 |                    |
|---------------------------|-----------------|--------------------|
|                           | Low temperature | Medium temperature |
| Sound power level indoor  | 45.6 dB(A)      | 45.6 dB(A)         |
| Sound power level outdoor | 54.0 dB(A)      | 54.0 dB(A)         |

| EN 14825                       |         |         |  |  |
|--------------------------------|---------|---------|--|--|
| Low temperature Medium tempera |         |         |  |  |
| $\eta_{s}$                     | 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                 | 1.00    | 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     |  |  |

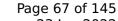


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This information was generated by the HP KEYMARK database on 23 Jun 2022

|   | <u> </u>    | · · · · · · · · · · · · · · · · · · · |
|---|-------------|---------------------------------------|
| 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                                  |
| РТО   | 41 W        | 41 W                                  |
| PSB   | 21 W        | 21 W                                  |
| PCK   | o 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                              |
|   |             |                                       |

Domestic Hot Water (DHW)





| EN 16147                        |            |  |
|---------------------------------|------------|--|
| Declared load profile           | L          |  |
| Efficiency ηDHW                 | 124 %      |  |
| СОР                             | 2.86       |  |
| Heating up time                 | 1:25 h:min |  |
| Standby power input             | 57.4 W     |  |
| Reference hot water temperature | 47.0 °C    |  |
| Mixed water at 40°C             | 193.0 l    |  |



# Model: EPRA16DW1 / ETSHB16P30E

| Configure model                      |                  |  |
|--------------------------------------|------------------|--|
| Model name EPRA16DW1 / ETSHB16P30E   |                  |  |
| Application Heating + DHW + low temp |                  |  |
| Units                                | Indoor + Outdoor |  |
| Climate Zone                         | n/a              |  |
| Reversibility                        | No               |  |
| Cooling mode application (optional)  | n/a              |  |

| General Data |             |  |
|--------------|-------------|--|
| Power supply | 3x400V 50Hz |  |

### Heating

| EN 14511-2                         |         |         |  |
|------------------------------------|---------|---------|--|
| Low temperature Medium temperature |         |         |  |
| Heat output                        | 9.00 kW | 7.24 kW |  |
| El input                           | 1.80 kW | 2.47 kW |  |
| СОР                                | 5.00    | 2.93    |  |

| EN 14511-4                                 |        |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure              | passed |
| Defrost test                               | passed |
| Starting and operating test                | passed |

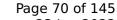
# Cooling





| EN 14511-2       |         |  |  |
|------------------|---------|--|--|
| +7°C/+12°C       |         |  |  |
| El input         | 2.93 kW |  |  |
| Cooling capacity | 7.88    |  |  |
| EER              | 2.69    |  |  |

#### EN 14825





| This information was generated by the Hill RE | +7°C/+12°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   | 0.98       |
| Pdc Tj = 25°C                                 | 5.09 kW    |
| EER Tj = 25°C                                 | 4.63       |
| Cdc   | 0.97       |
| Pdc Tj = 20°C                                 | 5.13 kW    |
| EER Tj = 20°C                                 | 5.61       |
| Cdc   | 0.97       |
| Poff  | 31 W       |
| РТО   | 33 W       |
| PSB   | 42 W       |
| PCK   | o w        |
| Annual energy consumption Qce                 | 1188 kWh   |



| EN 12102-1                |                 |                    |
|---------------------------|-----------------|--------------------|
|                           | Low temperature | Medium temperature |
| Sound power level indoor  | 45.6 dB(A)      | 45.6 dB(A)         |
| Sound power level outdoor | 54.0 dB(A)      | 54.0 dB(A)         |

| EN 14825       |                 |                    |  |
|----------------|-----------------|--------------------|--|
|                | 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 | 1.00            | 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                |  |

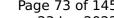


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### This information was generated by the HP KEYMARK database on 23 Jun 2022

| 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        |
| РТО   | 33 W        | 33 W        |
| PSB   | 42 W        | 42 W        |
| PCK   | o w         | o 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    |

Domestic Hot Water (DHW)





 $$\operatorname{\textit{Page}}\xspace$  73 of 145 This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 16147                        |            |  |
|---------------------------------|------------|--|
| Declared load profile           | L          |  |
| Efficiency ηDHW                 | 124 %      |  |
| СОР                             | 2.85       |  |
| Heating up time                 | 1:25 h:min |  |
| Standby power input             | 57.7 W     |  |
| Reference hot water temperature | 47.0 °C    |  |
| Mixed water at 40°C             | 193.0      |  |

## Model: EPRA16DV3 / ETSX16P30E

| Configure model                     |                          |  |
|-------------------------------------|--------------------------|--|
| Model name                          | EPRA16DV3 / ETSX16P30E   |  |
| Application                         | Heating + DHW + low temp |  |
| Units                               | Indoor + Outdoor         |  |
| Climate Zone                        | n/a                      |  |
| Reversibility                       | Yes                      |  |
| Cooling mode application (optional) | +7°C/12°C                |  |

| General Data |             |  |
|--------------|-------------|--|
| Power supply | 1x230V 50Hz |  |

## Heating

| EN 14511-2  |                 |                    |
|-------------|-----------------|--------------------|
|             | Low temperature | Medium temperature |
| Heat output | 9.00 kW         | 7.24 kW            |
| El input    | 1.80 kW         | 2.41 kW            |
| СОР         | 5.00            | 3.01               |

| EN 14511-4                                 |        |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure              | passed |
| Defrost test                               | passed |
| Starting and operating test                | passed |

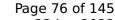
# Cooling





| EN 14511-2       |         |  |
|------------------|---------|--|
| +7°C/+12°C       |         |  |
| El input         | 2.93 kW |  |
| Cooling capacity | 7.88    |  |
| EER              | 2.69    |  |

#### EN 14825





|                               | +7°C/+12°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                           | 0.99       |
| Pdc Tj = 25°C                 | 5.09 kW    |
| EER Tj = 25°C                 | 4.63       |
| Cdc                           | 0.98       |
| Pdc Tj = 20°C                 | 5.13 kW    |
| EER Tj = 20°C                 | 5.61       |
| Cdc                           | 0.98       |
| Poff                          | 21 W       |
| РТО                           | 41 W       |
| PSB                           | 21 W       |
| PCK                           | o w        |
| Annual energy consumption Qce | 1158 kWh   |



| EN 12102-1                |                 |                    |
|---------------------------|-----------------|--------------------|
|                           | Low temperature | Medium temperature |
| Sound power level indoor  | 45.6 dB(A)      | 45.6 dB(A)         |
| Sound power level outdoor | 54.0 dB(A)      | 54.0 dB(A)         |

| EN 14825       |                 |                    |
|----------------|-----------------|--------------------|
|                | 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 | 1.00            | 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                |

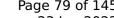


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### This information was generated by the HP KEYMARK database on 23 Jun 2022

| 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        |
| РТО   | 41 W        | 41 W        |
| PSB   | 21 W        | 21 W        |
| PCK   | o w         | o 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    |

Domestic Hot Water (DHW)





 $$\operatorname{\textit{Page}}$  79 of 145 This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 16147                        |            |  |
|---------------------------------|------------|--|
| Declared load profile           | L          |  |
| Efficiency ηDHW                 | 124 %      |  |
| СОР                             | 2.86       |  |
| Heating up time                 | 1:25 h:min |  |
| Standby power input             | 57.4 W     |  |
| Reference hot water temperature | 47.0 °C    |  |
| Mixed water at 40°C             | 193.0      |  |

## **Model: EPRA16DW1 / ETSX16P30E**

| Configure model                     |                          |  |  |
|-------------------------------------|--------------------------|--|--|
| Model name                          | EPRA16DW1 / ETSX16P30E   |  |  |
| Application                         | Heating + DHW + low temp |  |  |
| Units                               | Indoor + Outdoor         |  |  |
| Climate Zone                        | n/a                      |  |  |
| Reversibility                       | Yes                      |  |  |
| Cooling mode application (optional) | +7°C/12°C                |  |  |

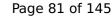
|              | General Data |  |
|--------------|--------------|--|
| Power supply | 3x400V 50Hz  |  |

## Heating

| EN 14511-2                         |         |         |  |
|------------------------------------|---------|---------|--|
| Low temperature Medium temperature |         |         |  |
| Heat output                        | 9.00 kW | 7.24 kW |  |
| El input                           | 1.80 kW | 2.47 kW |  |
| СОР                                | 5.00    | 2.93    |  |

| EN 14511-4                                 |        |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure              | passed |
| Defrost test                               | passed |
| Starting and operating test                | passed |

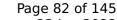
# Cooling





| EN 14511-2       |         |  |
|------------------|---------|--|
| +7°C/+12°C       |         |  |
| El input         | 2.93 kW |  |
| Cooling capacity | 7.88    |  |
| EER              | 2.69    |  |

#### EN 14825



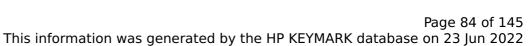


|                               | +7°C/+12°C |
|-------------------------------|------------|
| Pdesignc                      | 7.9 kW     |
| SEER                          | 3.98       |
| Pdc Tj = 35°C                 | 7.88 kW    |
| EER Tj = 35°C                 | 2.69       |
| Pdc Tj = 30°C                 | 5.92 kW    |
| EER Tj = 30°C                 | 3.69       |
| Cdc                           | 0.98       |
| Pdc Tj = 25°C                 | 5.09 kW    |
| EER Tj = 25°C                 | 4.63       |
| Cdc                           | 0.97       |
| Pdc Tj = 20°C                 | 5.13 kW    |
| EER Tj = 20°C                 | 5.61       |
| Cdc                           | 0.97       |
| Poff                          | 31 W       |
| PTO                           | 33 W       |
| PSB                           | 42 W       |
| PCK                           | o w        |
| Annual energy consumption Qce | 1188 kWh   |



| EN 12102-1                |                 |                    |
|---------------------------|-----------------|--------------------|
|                           | Low temperature | Medium temperature |
| Sound power level indoor  | 45.6 dB(A)      | 45.6 dB(A)         |
| Sound power level outdoor | 54.0 dB(A)      | 54.0 dB(A)         |

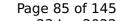
| EN 14825       |                 |                    |
|----------------|-----------------|--------------------|
|                | Low temperature | Medium temperature |
| $\eta_{s}$     | 190 %           | 142 %              |
| Prated         | 12.5 kW         | 12.5 kW            |
| SCOP           | 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 | 1.00            | 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        |
| РТО   | 33 W        | 33 W        |
| PSB   | 42 W        | 42 W        |
| PCK   | o 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    |
|   |             |             |

## Domestic Hot Water (DHW)

CEN heat pump KEYMARK





| EN 16147                        |            |  |
|---------------------------------|------------|--|
| Declared load profile           | L          |  |
| Efficiency ηDHW                 | 124 %      |  |
| СОР                             | 2.85       |  |
| Heating up time                 | 1:25 h:min |  |
| Standby power input             | 57.7 W     |  |
| Reference hot water temperature | 47.0 °C    |  |
| Mixed water at 40°C             | 193.0 l    |  |



# **Model: EPRA16DV3 / ETSXB16P30E**

| Configure model                     |                          |  |
|-------------------------------------|--------------------------|--|
| Model name                          | EPRA16DV3 / ETSXB16P30E  |  |
| Application                         | Heating + DHW + low temp |  |
| Units                               | Indoor + Outdoor         |  |
| Climate Zone                        | n/a                      |  |
| Reversibility                       | Yes                      |  |
| Cooling mode application (optional) | +7°C/12°C                |  |

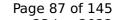
| General Data             |  |  |
|--------------------------|--|--|
| Power supply 1x230V 50Hz |  |  |

## Heating

| EN 14511-2  |                 |                    |
|-------------|-----------------|--------------------|
|             | Low temperature | Medium temperature |
| Heat output | 9.00 kW         | 7.24 kW            |
| El input    | 1.80 kW         | 2.41 kW            |
| СОР         | 5.00            | 3.01               |

| EN 14511-4                                 |        |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure              | passed |
| Defrost test                               | passed |
| Starting and operating test                | passed |

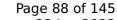
# Cooling





| EN 14511-2       |         |
|------------------|---------|
| +7°C/+12°C       |         |
| El input         | 2.93 kW |
| Cooling capacity | 7.88    |
| EER              | 2.69    |

#### EN 14825





| This information was generated by the Hill Re | +7°C/+12°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   | 0.99       |
| Pdc Tj = 25°C                                 | 5.09 kW    |
| EER Tj = 25°C                                 | 4.63       |
| Cdc   | 0.98       |
| Pdc Tj = 20°C                                 | 5.13 kW    |
| EER Tj = 20°C                                 | 5.61       |
| Cdc   | 0.98       |
| Poff  | 21 W       |
| РТО   | 41 W       |
| PSB   | 21 W       |
| PCK   | o w        |
| Annual energy consumption Qce                 | 1158 kWh   |



| EN 12102-1                |                 |                    |
|---------------------------|-----------------|--------------------|
|                           | Low temperature | Medium temperature |
| Sound power level indoor  | 45.6 dB(A)      | 45.6 dB(A)         |
| Sound power level outdoor | 54.0 dB(A)      | 54.0 dB(A)         |

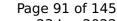
| EN 14825         |                 |                    |
|------------------|-----------------|--------------------|
|                  | Low temperature | Medium temperature |
| $\eta_{s}$       | 180 %           | 142 %              |
| Prated           | 12.5 kW         | 12.5 kW            |
| 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   | 1.00            | 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        |
| РТО   | 41 W        | 41 W        |
| PSB   | 21 W        | 21 W        |
| PCK   | o w         | o 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    |

Domestic Hot Water (DHW)





| EN 16147                        |            |  |
|---------------------------------|------------|--|
| Declared load profile           | L          |  |
| Efficiency ηDHW                 | 124 %      |  |
| СОР                             | 2.86       |  |
| Heating up time                 | 1:25 h:min |  |
| Standby power input             | 57.4 W     |  |
| Reference hot water temperature | 47.0 °C    |  |
| Mixed water at 40°C             | 193.0      |  |



# Model: EPRA16DW1 / ETSXB16P30E

| Configure model                     |                          |  |  |
|-------------------------------------|--------------------------|--|--|
| Model name                          | EPRA16DW1 / ETSXB16P30E  |  |  |
| Application                         | Heating + DHW + low temp |  |  |
| Units                               | Indoor + Outdoor         |  |  |
| Climate Zone                        | n/a                      |  |  |
| Reversibility                       | Yes                      |  |  |
| Cooling mode application (optional) | +7°C/12°C                |  |  |

| General Data |             |  |
|--------------|-------------|--|
| Power supply | 3x400V 50Hz |  |

## Heating

| EN 14511-2  |                 |                    |
|-------------|-----------------|--------------------|
|             | Low temperature | Medium temperature |
| Heat output | 9.00 kW         | 7.24 kW            |
| El input    | 1.80 kW         | 2.47 kW            |
| СОР         | 5.00            | 2.93               |

| EN 14511-4                                 |        |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure              | passed |
| Defrost test                               | passed |
| Starting and operating test                | passed |

# Cooling





| EN 14511-2       |         |
|------------------|---------|
| +7°C/+12°C       |         |
| El input         | 2.93 kW |
| Cooling capacity | 7.88    |
| EER              | 2.69    |

#### EN 14825



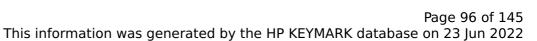


|                               | +7°C/+12°C |
|-------------------------------|------------|
| Pdesignc                      | 7.9 kW     |
| SEER                          | 3.98       |
| Pdc Tj = 35°C                 | 7.88 kW    |
| EER Tj = 35°C                 | 2.69       |
| Pdc Tj = 30°C                 | 5.92 kW    |
| EER Tj = 30°C                 | 3.69       |
| Cdc                           | 0.98       |
| Pdc Tj = 25°C                 | 5.09 kW    |
| EER Tj = 25°C                 | 4.63       |
| Cdc                           | 0.97       |
| Pdc Tj = 20°C                 | 5.13 kW    |
| EER Tj = 20°C                 | 5.61       |
| Cdc                           | 0.97       |
| Poff                          | 31 W       |
| РТО                           | 33 W       |
| PSB                           | 42 W       |
| PCK                           | o w        |
| Annual energy consumption Qce | 1188 kWh   |



| EN 12102-1                |                 |                    |
|---------------------------|-----------------|--------------------|
|                           | Low temperature | Medium temperature |
| Sound power level indoor  | 45.6 dB(A)      | 45.6 dB(A)         |
| Sound power level outdoor | 54.0 dB(A)      | 54.0 dB(A)         |

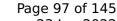
| EN 14825                |                 |                    |
|-------------------------|-----------------|--------------------|
|                         | Low temperature | Medium temperature |
| $\eta_{s}$              | 190 %           | 142 %              |
| Prated                  | 12.5 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          | 1.00            | 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 = $+7^{\circ}$ 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        |
| РТО   | 33 W        | 33 W        |
| PSB   | 42 W        | 42 W        |
| PCK   | o 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    |

## Domestic Hot Water (DHW)

CEN heat pump KEYMARK





| EN 16147                        |            |
|---------------------------------|------------|
| Declared load profile           | L          |
| Efficiency ηDHW                 | 124 %      |
| СОР                             | 2.85       |
| Heating up time                 | 1:25 h:min |
| Standby power input             | 57.7 W     |
| Reference hot water temperature | 47.0 °C    |
| Mixed water at 40°C             | 193.0 l    |

## **Model: EPRA18DV3 / ETSH16P30E**

| Configure model                     |                          |  |  |
|-------------------------------------|--------------------------|--|--|
| Model name   EPRA18DV3 / ETSH16P30E |                          |  |  |
| Application                         | Heating + DHW + low temp |  |  |
| Units                               | Indoor + Outdoor         |  |  |
| Climate Zone                        | n/a                      |  |  |
| Reversibility                       | No                       |  |  |
| Cooling mode application (optional) | n/a                      |  |  |

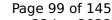
| General Data |             |  |
|--------------|-------------|--|
| Power supply | 1x230V 50Hz |  |

## Heating

| EN 14511-2                         |         |         |  |
|------------------------------------|---------|---------|--|
| Low temperature Medium temperature |         |         |  |
| Heat output                        | 9.00 kW | 7.24 kW |  |
| El input                           | 1.80 kW | 2.41 kW |  |
| СОР                                | 5.00    | 3.01    |  |

| EN 14511-4                                 |        |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure              | passed |
| Defrost test                               | passed |
| Starting and operating test                | passed |

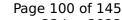
# Cooling





| EN 14511-2       |         |  |  |
|------------------|---------|--|--|
| +7°C/+12°C       |         |  |  |
| El input         | 3.31 kW |  |  |
| Cooling capacity | 8.86    |  |  |
| EER              | 2.68    |  |  |

#### EN 14825





|                               | +7°C/+12°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                           | 0.99       |
| Pdc Tj = 25°C                 | 5.12 kW    |
| EER Tj = 25°C                 | 4.68       |
| Cdc                           | 0.98       |
| Pdc Tj = 20°C                 | 5.31 kW    |
| EER Tj = 20°C                 | 5.81       |
| Cdc                           | 0.98       |
| Poff                          | 21 W       |
| PTO                           | 41 W       |
| PSB                           | 21 W       |
| PCK                           | o w        |
| Annual energy consumption Qce | 1266 kWh   |

| EN 12102-1                |                 |                    |
|---------------------------|-----------------|--------------------|
|                           | Low temperature | Medium temperature |
| Sound power level indoor  | 45.6 dB(A)      | 45.6 dB(A)         |
| Sound power level outdoor | 54.0 dB(A)      | 54.0 dB(A)         |

| EN 14825         |                 |                    |
|------------------|-----------------|--------------------|
|                  | 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             | 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                |

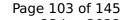


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### This information was generated by the HP KEYMARK database on 23 Jun 2022

| 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        |
| РТО   | 41 W        | 41 W        |
| PSB   | 21 W        | 21 W        |
| PCK   | o w         | o 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    |

Domestic Hot Water (DHW)





| EN 16147                        |            |  |
|---------------------------------|------------|--|
| Declared load profile           | L          |  |
| Efficiency ηDHW                 | 124 %      |  |
| СОР                             | 2.86       |  |
| Heating up time                 | 1:25 h:min |  |
| Standby power input             | 57.4 W     |  |
| Reference hot water temperature | 47.0 °C    |  |
| Mixed water at 40°C             | 193.0      |  |



## **Model: EPRA18DW1 / ETSH16P30E**

| Configure model                     |                          |  |
|-------------------------------------|--------------------------|--|
| Model name                          | EPRA18DW1 / ETSH16P30E   |  |
| Application                         | Heating + DHW + low temp |  |
| Units                               | Indoor + Outdoor         |  |
| Climate Zone                        | n/a                      |  |
| Reversibility                       | No                       |  |
| Cooling mode application (optional) | n/a                      |  |

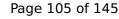
| General Data |             |  |
|--------------|-------------|--|
| Power supply | 3x400V 50Hz |  |

## Heating

| EN 14511-2                         |         |         |  |
|------------------------------------|---------|---------|--|
| Low temperature Medium temperature |         |         |  |
| Heat output                        | 9.00 kW | 7.24 kW |  |
| El input                           | 1.80 kW | 2.47 kW |  |
| СОР                                | 5.00    | 2.93    |  |

| EN 14511-4                                 |        |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure              | passed |
| Defrost test                               | passed |
| Starting and operating test                | passed |

# Cooling





| EN 14511-2       |         |  |
|------------------|---------|--|
| +7°C/+12°C       |         |  |
| El input         | 3.31 kW |  |
| Cooling capacity | 8.86    |  |
| EER              | 2.68    |  |

#### EN 14825





|                               | +7°C/+12°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                           | 0.98       |
| Pdc Tj = 25°C                 | 5.12 kW    |
| EER Tj = 25°C                 | 4.68       |
| Cdc                           | 0.97       |
| Pdc Tj = 20°C                 | 5.31 kW    |
| EER Tj = 20°C                 | 5.81       |
| Cdc                           | 0.97       |
| Poff                          | 31 W       |
| PTO                           | 33 W       |
| PSB                           | 42 W       |
| PCK                           | o w        |
| Annual energy consumption Qce | 1296 kWh   |

| EN 12102-1                |                 |                    |
|---------------------------|-----------------|--------------------|
|                           | Low temperature | Medium temperature |
| Sound power level indoor  | 45.6 dB(A)      | 45.6 dB(A)         |
| Sound power level outdoor | 54.0 dB(A)      | 54.0 dB(A)         |

| EN 14825                |                 |                    |
|-------------------------|-----------------|--------------------|
|                         | 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            |
| $COP Tj = -7^{\circ}C$  | 2.97            | 2.43               |
| Cdh Tj = -7 °C          | 1.0             | 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 = $+7^{\circ}$ C | 6.2 kW          | 6.5 kW             |
| COP Tj = +7°C           | 5.95            | 4.54               |
| Cdh Tj = +7 °C          | 1.0             | 1.0                |

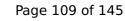


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### This information was generated by the HP KEYMARK database on 23 Jun 2022

| 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        |
| РТО   | 33 W        | 33 W        |
| PSB   | 42 W        | 42 W        |
| PCK   | o w         | o 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    |

Domestic Hot Water (DHW)





| EN 16147                        |            |
|---------------------------------|------------|
| Declared load profile           | L          |
| Efficiency ηDHW                 | 124 %      |
| СОР                             | 2.85       |
| Heating up time                 | 1:25 h:min |
| Standby power input             | 57.7 W     |
| Reference hot water temperature | 47.0 °C    |
| Mixed water at 40°C             | 193.0      |



# **Model: EPRA18DV3 / ETSHB16P30E**

| Configure model                     |                          |  |
|-------------------------------------|--------------------------|--|
| Model name EPRA18DV3 / ETSHB16P30E  |                          |  |
| Application                         | Heating + DHW + low temp |  |
| Units                               | Indoor + Outdoor         |  |
| Climate Zone                        | n/a                      |  |
| Reversibility                       | No                       |  |
| Cooling mode application (optional) | n/a                      |  |

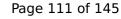
| General Data |             |  |
|--------------|-------------|--|
| Power supply | 1x230V 50Hz |  |

### Heating

| EN 14511-2                         |         |         |
|------------------------------------|---------|---------|
| Low temperature Medium temperature |         |         |
| Heat output                        | 9.00 kW | 7.24 kW |
| El input                           | 1.80 kW | 2.41 kW |
| СОР                                | 5.00    | 3.01    |

| EN 14511-4                                 |        |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure              | passed |
| Defrost test                               | passed |
| Starting and operating test                | passed |

# Cooling

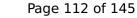




| EN 14511-2       |         |
|------------------|---------|
| +7°C/+12°C       |         |
| El input         | 3.31 kW |
| Cooling capacity | 8.86    |
| EER              | 2.68    |

#### EN 14825

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| This information was generated by the Hill Re | +7°C/+12°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   | 0.99       |
| Pdc Tj = 25°C                                 | 5.12 kW    |
| EER Tj = 25°C                                 | 4.68       |
| Cdc   | 0.98       |
| Pdc Tj = 20°C                                 | 5.31 kW    |
| EER Tj = 20°C                                 | 5.81       |
| Cdc   | 0.98       |
| Poff  | 21 W       |
| РТО   | 41 W       |
| PSB   | 21 W       |
| PCK   | o w        |
| Annual energy consumption Qce                 | 1266 kWh   |



| EN 12102-1                |                 |                    |
|---------------------------|-----------------|--------------------|
|                           | Low temperature | Medium temperature |
| Sound power level indoor  | 45.6 dB(A)      | 45.6 dB(A)         |
| Sound power level outdoor | 54.0 dB(A)      | 54.0 dB(A)         |

| EN 14825                |                 |                    |
|-------------------------|-----------------|--------------------|
|                         | 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             | 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 = $+7^{\circ}$ C | 5.7 kW          | 6.9 kW             |
| COP Tj = +7°C           | 5.84            | 4.44               |
| Cdh Tj = +7 °C          | 1.0             | 1.0                |

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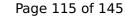


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#### This information was generated by the HP KEYMARK database on 23 Jun 2022

| 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        |
| РТО   | 41 W        | 41 W        |
| PSB   | 21 W        | 21 W        |
| PCK   | o 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    |

Domestic Hot Water (DHW)





| EN 16147                        |            |
|---------------------------------|------------|
| Declared load profile           | L          |
| Efficiency ηDHW                 | 124 %      |
| СОР                             | 2.86       |
| Heating up time                 | 1:25 h:min |
| Standby power input             | 57.4 W     |
| Reference hot water temperature | 47.0 °C    |
| Mixed water at 40°C             | 193.0 l    |



# Model: EPRA18DW1 / ETSHB16P30E

| Configure model                     |                          |  |
|-------------------------------------|--------------------------|--|
| Model name                          | EPRA18DW1 / ETSHB16P30E  |  |
| Application                         | Heating + DHW + low temp |  |
| Units                               | Indoor + Outdoor         |  |
| Climate Zone                        | n/a                      |  |
| Reversibility                       | No                       |  |
| Cooling mode application (optional) | n/a                      |  |

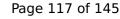
| General Data |             |  |
|--------------|-------------|--|
| Power supply | 3x400V 50Hz |  |

### Heating

| EN 14511-2                         |         |         |  |
|------------------------------------|---------|---------|--|
| Low temperature Medium temperature |         |         |  |
| Heat output                        | 9.00 kW | 7.24 kW |  |
| El input                           | 1.80 kW | 2.47 kW |  |
| СОР                                | 5.00    | 2.93    |  |

| EN 14511-4                                 |        |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure              | passed |
| Defrost test                               | passed |
| Starting and operating test                | passed |

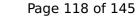
# Cooling





| EN 14511-2       |         |  |
|------------------|---------|--|
| +7°C/+12°C       |         |  |
| El input         | 3.31 kW |  |
| Cooling capacity | 8.86    |  |
| EER              | 2.68    |  |

#### EN 14825





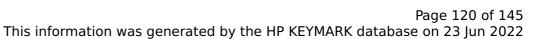
| This information was generated by the Hill Re | +7°C/+12°C |
|---|------------|
| Pdesignc                                      | 8.8 kW     |
| SEER  | 4.07       |
| Pdc Tj = 35°C                                 | 8.86 kW    |
| EER Tj = 35°C                                 | 2.68       |
| Pdc Tj = 30°C                                 | 6.61 kW    |
| EER Tj = 30°C                                 | 3.72       |
| Cdc   | 0.98       |
| Pdc Tj = 25°C                                 | 5.12 kW    |
| EER Tj = 25°C                                 | 4.68       |
| Cdc   | 0.97       |
| Pdc Tj = 20°C                                 | 5.31 kW    |
| EER Tj = 20°C                                 | 5.81       |
| Cdc   | 0.97       |
| Poff  | 31 W       |
| РТО   | 33 W       |
| PSB   | 42 W       |
| PCK   | o w        |
| Annual energy consumption Qce                 | 1296 kWh   |



| EN 12102-1                |                 |                    |
|---------------------------|-----------------|--------------------|
|                           | Low temperature | Medium temperature |
| Sound power level indoor  | 45.6 dB(A)      | 45.6 dB(A)         |
| Sound power level outdoor | 54.0 dB(A)      | 54.0 dB(A)         |

| EN 14825                |                 |                    |
|-------------------------|-----------------|--------------------|
|                         | 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             | 1.0                |
| Pdh Tj = $+2^{\circ}$ 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 = $+7^{\circ}$ C | 6.2 kW          | 6.5 kW             |
| COP Tj = +7°C           | 5.95            | 4.54               |
| Cdh Tj = +7 °C          | 1.0             | 1.0                |

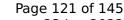
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| 5.6 kW      | 5.2 kW   |
|-------------|--|
| 7.07        | 5.97   |
| 1.0         | 1.0  |
| 10.7 kW     | 12.5 kW  |
| 2.97        | 2.12   |
| 12.1 kW     | 12.5 kW  |
| 2.88        | 2.12   |
| 35 °C       | 55 °C  |
| 31 W        | 31 W   |
| 33 W        | 33 W   |
| 42 W        | 42 W   |
| 0 W         | 0 W  |
| Electricity | Electricity  |
| 0.4 kW      | 0.0 kW   |
| 5479 kWh    | 7236 kWh   |
|             | 7.07  1.0  10.7 kW  2.97  12.1 kW  2.88  35 °C  31 W  33 W  42 W  0 W  Electricity  0.4 kW |

Domestic Hot Water (DHW)





| EN 16147                        |            |  |
|---------------------------------|------------|--|
| Declared load profile           | L          |  |
| Efficiency ηDHW                 | 124 %      |  |
| СОР                             | 2.85       |  |
| Heating up time                 | 1:25 h:min |  |
| Standby power input             | 57.7 W     |  |
| Reference hot water temperature | 47.0 °C    |  |
| Mixed water at 40°C             | 193.0      |  |



# **Model: EPRA18DV3 / ETSX16P30E**

| Configure model                     |                          |  |
|-------------------------------------|--------------------------|--|
| Model name                          | EPRA18DV3 / ETSX16P30E   |  |
| Application                         | Heating + DHW + low temp |  |
| Units                               | Indoor + Outdoor         |  |
| Climate Zone                        | n/a                      |  |
| Reversibility                       | Yes                      |  |
| Cooling mode application (optional) | +7°C/12°C                |  |

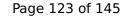
| General Data             |  |  |  |
|--------------------------|--|--|--|
| Power supply 1x230V 50Hz |  |  |  |

### Heating

| EN 14511-2                         |         |         |  |
|------------------------------------|---------|---------|--|
| Low temperature Medium temperature |         |         |  |
| Heat output                        | 9.00 kW | 7.24 kW |  |
| El input                           | 1.80 kW | 2.41 kW |  |
| СОР                                | 5.00    | 3.01    |  |

| EN 14511-4                                 |        |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure              | passed |
| Defrost test                               | passed |
| Starting and operating test                | passed |

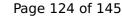
# Cooling





| EN 14511-2       |            |
|------------------|------------|
|                  | +7°C/+12°C |
| El input         | 3.31 kW    |
| Cooling capacity | 8.86       |
| EER              | 2.68       |

#### EN 14825





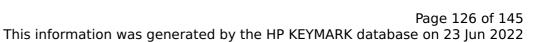
|                               | +7°C/+12°C |
|-------------------------------|------------|
| Pdesignc                      | 8.8 kW     |
| SEER                          | 4.17       |
| Pdc Tj = 35°C                 | 8.86 kW    |
| EER Tj = 35°C                 | 2.68       |
| Pdc Tj = 30°C                 | 6.61 kW    |
| EER Tj = 30°C                 | 3.72       |
| Cdc                           | 0.99       |
| Pdc Tj = 25°C                 | 5.12 kW    |
| EER Tj = 25°C                 | 4.68       |
| Cdc                           | 0.98       |
| Pdc Tj = 20°C                 | 5.31 kW    |
| EER Tj = 20°C                 | 5.81       |
| Cdc                           | 0.98       |
| Poff                          | 21 W       |
| PTO                           | 41 W       |
| PSB                           | 21 W       |
| PCK                           | o w        |
| Annual energy consumption Qce | 1266 kWh   |



| EN 12102-1                |                 |                    |
|---------------------------|-----------------|--------------------|
|                           | Low temperature | Medium temperature |
| Sound power level indoor  | 45.6 dB(A)      | 45.6 dB(A)         |
| Sound power level outdoor | 54.0 dB(A)      | 54.0 dB(A)         |

| EN 14825       |                 |                    |
|----------------|-----------------|--------------------|
|                | 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             | 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                |

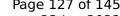
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| Pdh Tj = 12°C                                       | 6.0 kW      | 6.2 kW      |
|---|-------------|-------------|
| COP Tj = 12°C                                       | 7.40        | 5.72        |
| Cdh Tj = +12 °C                                     | 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        |
| РТО   | 41 W        | 41 W        |
| PSB   | 21 W        | 21 W        |
| PCK   | o 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    |

Domestic Hot Water (DHW)





# $$\operatorname{\textit{Page}}\xspace$ 127 of 145 This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 16147                        |            |  |
|---------------------------------|------------|--|
| Declared load profile           | L          |  |
| Efficiency ηDHW                 | 124 %      |  |
| СОР                             | 2.86       |  |
| Heating up time                 | 1:25 h:min |  |
| Standby power input             | 57.4 W     |  |
| Reference hot water temperature | 47.0 °C    |  |
| Mixed water at 40°C             | 193.0      |  |



# **Model: EPRA18DW1 / ETSX16P30E**

| Configure model                     |                          |  |
|-------------------------------------|--------------------------|--|
| Model name                          | EPRA18DW1 / ETSX16P30E   |  |
| Application                         | Heating + DHW + low temp |  |
| Units                               | Indoor + Outdoor         |  |
| Climate Zone                        | n/a                      |  |
| Reversibility                       | Yes                      |  |
| Cooling mode application (optional) | +7°C/12°C                |  |

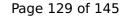
| General Data |             |  |
|--------------|-------------|--|
| Power supply | 3x400V 50Hz |  |

### Heating

| EN 14511-2  |                 |                    |
|-------------|-----------------|--------------------|
|             | Low temperature | Medium temperature |
| Heat output | 9.00 kW         | 7.24 kW            |
| El input    | 1.80 kW         | 2.47 kW            |
| СОР         | 5.00            | 2.93               |

| EN 14511-4                                 |        |
|--|--------|
| Shutting off the heat transfer medium flow | naccod |
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure              | passed |
| Defrost test                               | passed |
| Starting and operating test                | passed |

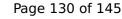
# Cooling





| EN 14511-2       |            |
|------------------|------------|
|                  | +7°C/+12°C |
| El input         | 3.31 kW    |
| Cooling capacity | 8.86       |
| EER              | 2.68       |

#### EN 14825





|                               | +7°C/+12°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                           | 0.98       |
| Pdc Tj = 25°C                 | 5.12 kW    |
| EER Tj = 25°C                 | 4.68       |
| Cdc                           | 0.97       |
| Pdc Tj = 20°C                 | 5.31 kW    |
| EER Tj = 20°C                 | 5.81       |
| Cdc                           | 0.97       |
| Poff                          | 31 W       |
| PTO                           | 33 W       |
| PSB                           | 42 W       |
| PCK                           | o w        |
| Annual energy consumption Qce | 1296 kWh   |



| EN 12102-1                |                 |                    |
|---------------------------|-----------------|--------------------|
|                           | Low temperature | Medium temperature |
| Sound power level indoor  | 45.6 dB(A)      | 45.6 dB(A)         |
| Sound power level outdoor | 54.0 dB(A)      | 54.0 dB(A)         |

| EN 14825       |                 |                    |
|----------------|-----------------|--------------------|
|                | 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             | 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                |

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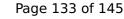


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#### This information was generated by the HP KEYMARK database on 23 Jun 2022

|   |             | · · · · · · · · · · · · · · · · · · · |
|---|-------------|---------------------------------------|
| 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                                  |
| РТО   | 33 W        | 33 W                                  |
| PSB   | 42 W        | 42 W                                  |
| PCK   | o w         | o 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                              |

Domestic Hot Water (DHW)





| EN 16147                        |            |  |
|---------------------------------|------------|--|
| Declared load profile           | L          |  |
| Efficiency ηDHW                 | 124 %      |  |
| СОР                             | 2.85       |  |
| Heating up time                 | 1:25 h:min |  |
| Standby power input             | 57.7 W     |  |
| Reference hot water temperature | 47.0 °C    |  |
| Mixed water at 40°C             | 193.0      |  |



# **Model: EPRA18DV3 / ETSXB16P30E**

| Configure model                     |                          |  |
|-------------------------------------|--------------------------|--|
| Model name EPRA18DV3 / ETSXB16P30E  |                          |  |
| Application                         | Heating + DHW + low temp |  |
| Units                               | Indoor + Outdoor         |  |
| Climate Zone                        | n/a                      |  |
| Reversibility                       | Yes                      |  |
| Cooling mode application (optional) | +7°C/12°C                |  |

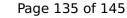
| General Data             |  |  |
|--------------------------|--|--|
| Power supply 1x230V 50Hz |  |  |

### Heating

| EN 14511-2                         |         |         |  |
|------------------------------------|---------|---------|--|
| Low temperature Medium temperature |         |         |  |
| Heat output                        | 9.00 kW | 7.24 kW |  |
| El input                           | 1.80 kW | 2.41 kW |  |
| СОР                                | 5.00    | 3.01    |  |

| EN 14511-4                                 |        |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure              | passed |
| Defrost test                               | passed |
| Starting and operating test                | passed |

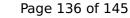
# Cooling





| EN 14511-2       |         |  |
|------------------|---------|--|
| +7°C/+12°C       |         |  |
| El input         | 3.31 kW |  |
| Cooling capacity | 8.86    |  |
| EER              | 2.68    |  |

#### EN 14825





| This information was generated by the Hill Re | +7°C/+12°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   | 0.99       |
| Pdc Tj = 25°C                                 | 5.12 kW    |
| EER Tj = 25°C                                 | 4.68       |
| Cdc   | 0.98       |
| Pdc Tj = 20°C                                 | 5.31 kW    |
| EER Tj = 20°C                                 | 5.81       |
| Cdc   | 0.98       |
| Poff  | 21 W       |
| РТО   | 41 W       |
| PSB   | 21 W       |
| PCK   | o w        |
| Annual energy consumption Qce                 | 1266 kWh   |

| EN 12102-1                |                 |                    |
|---------------------------|-----------------|--------------------|
|                           | Low temperature | Medium temperature |
| Sound power level indoor  | 45.6 dB(A)      | 45.6 dB(A)         |
| Sound power level outdoor | 54.0 dB(A)      | 54.0 dB(A)         |

| EN 14825       |                 |                    |
|----------------|-----------------|--------------------|
|                | 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             | 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                |

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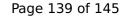


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#### This information was generated by the HP KEYMARK database on 23 Jun 2022

| 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        |
| РТО   | 41 W        | 41 W        |
| PSB   | 21 W        | 21 W        |
| PCK   | o w         | o 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    |

Domestic Hot Water (DHW)





| EN 16147                        |            |  |
|---------------------------------|------------|--|
| Declared load profile           | L          |  |
| Efficiency ηDHW                 | 124 %      |  |
| СОР                             | 2.86       |  |
| Heating up time                 | 1:25 h:min |  |
| Standby power input             | 57.4 W     |  |
| Reference hot water temperature | 47.0 °C    |  |
| Mixed water at 40°C             | 193.0      |  |

# Model: EPRA18DW1 / ETSXB16P30E

| Configure model                     |                          |  |
|-------------------------------------|--------------------------|--|
| Model name                          | EPRA18DW1 / ETSXB16P30E  |  |
| Application                         | Heating + DHW + low temp |  |
| Units                               | Indoor + Outdoor         |  |
| Climate Zone                        | n/a                      |  |
| Reversibility                       | Yes                      |  |
| Cooling mode application (optional) | +7°C/12°C                |  |

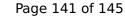
| General Data             |  |  |
|--------------------------|--|--|
| Power supply 3x400V 50Hz |  |  |

### Heating

| EN 14511-2                         |         |         |  |
|------------------------------------|---------|---------|--|
| Low temperature Medium temperature |         |         |  |
| Heat output                        | 9.00 kW | 7.24 kW |  |
| El input                           | 1.80 kW | 2.47 kW |  |
| СОР                                | 5.00    | 2.93    |  |

| EN 14511-4                                 |        |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure              | passed |
| Defrost test                               | passed |
| Starting and operating test                | passed |

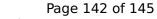
# Cooling





| EN 14511-2       |         |  |  |
|------------------|---------|--|--|
| +7°C/+12°C       |         |  |  |
| El input         | 3.31 kW |  |  |
| Cooling capacity | 8.86    |  |  |
| EER              | 2.68    |  |  |

#### EN 14825





|                               | +7°C/+12°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                           | 0.98       |
| Pdc Tj = 25°C                 | 5.12 kW    |
| EER Tj = 25°C                 | 4.68       |
| Cdc                           | 0.97       |
| Pdc Tj = 20°C                 | 5.31 kW    |
| EER Tj = 20°C                 | 5.81       |
| Cdc                           | 0.97       |
| Poff                          | 31 W       |
| РТО                           | 33 W       |
| PSB                           | 42 W       |
| PCK                           | o w        |
| Annual energy consumption Qce | 1296 kWh   |

| EN 12102-1                |                 |                    |
|---------------------------|-----------------|--------------------|
|                           | Low temperature | Medium temperature |
| Sound power level indoor  | 45.6 dB(A)      | 45.6 dB(A)         |
| Sound power level outdoor | 54.0 dB(A)      | 54.0 dB(A)         |

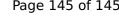
| EN 14825       |                 |                    |
|----------------|-----------------|--------------------|
|                | Low temperature | Medium temperature |
| $\eta_{s}$     | 190 %           | 142 %              |
| Prated         | 12.5 kW         | 12.5 kW            |
| SCOP           | 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             | 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                |

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|   |             | · · · · · · · · · · · · · · · · · · · |
|---|-------------|---------------------------------------|
| 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                                  |
| РТО   | 33 W        | 33 W                                  |
| PSB   | 42 W        | 42 W                                  |
| PCK   | o w         | o 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                              |

### Domestic Hot Water (DHW)





# $$\operatorname{\textit{Page}}\ 145$$ of 145 This information was generated by the HP KEYMARK database on 23 Jun 2022

| EN 16147                        |            |
|---------------------------------|------------|
| Declared load profile           | L          |
| Efficiency ηDHW                 | 124 %      |
| СОР                             | 2.85       |
| Heating up time                 | 1:25 h:min |
| Standby power input             | 57.7 W     |
| Reference hot water temperature | 47.0 °C    |
| Mixed water at 40°C             | 193.0 l    |