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

#### **Login**

| Summary of          | ECL-PAC-10-12                                    | Reg. No.                        | ICIM-PDC-000143 |  |  |
|---------------------|--|---------------------------------|-----------------|--|--|
| Certificate Holder  | Certificate Holder                               |                                 |                 |  |  |
| Name                | ECL Nexus  |                                 |                 |  |  |
| Address             | 13, Boulevard Pereire                            | 13, Boulevard Pereire Zip 75017 |                 |  |  |
| City                | Paris  | Country                         | France          |  |  |
| Certification Body  | ICIM S.p.A.                                      |                                 |                 |  |  |
| Subtype title       | ECL-PAC-10-12                                    |                                 |                 |  |  |
| Heat Pump Type      | Outdoor Air/Water                                |                                 |                 |  |  |
| Refrigerant         | R32  |                                 |                 |  |  |
| Mass of Refrigerant | 2.5 kg   |                                 |                 |  |  |
| Certification Date  | 20.05.2022                                       |                                 |                 |  |  |
| Testing basis       | HP KEYMARK certification scheme rules rev. no. 7 |                                 |                 |  |  |



# Model: ECLPAC12X.ST; ECLPAC12X.KA

| Configure model                     |                            |  |
|-------------------------------------|----------------------------|--|
| Model name                          | ECLPAC12X.ST; ECLPAC12X.KA |  |
| Application                         | Heating (medium temp)      |  |
| Units                               | Outdoor                    |  |
| Climate Zone                        | n/a                        |  |
| Reversibility                       | Yes                        |  |
| Cooling mode application (optional) | +7°C/12°C                  |  |

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

### Cooling

| EN 14511-2       |         |  |
|------------------|---------|--|
| +7°C/+12°C       |         |  |
| El input         | 2.79 kW |  |
| Cooling capacity | 8.51    |  |
| EER              | 3.05    |  |

### EN 14825

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This information was generated by the HP KEYMARK database on 23 Jun 2022 +7°C/+12°C **Pdesignc** 8.51 kW **SEER** 4.43  $Pdc Tj = 35^{\circ}C$ 8.51 kW 3.05 EER Tj = 35°C  $Pdc Tj = 30^{\circ}C$ 6.28 kW EER Tj = 30°C 4.03 1.000 Cdc  $Pdc Tj = 25^{\circ}C$ 3.98 kW 4.58 EER Tj = 25°C Cdc 0.978  $Pdc Tj = 20^{\circ}C$ 4.23 kW 6.32 EER Tj = 20°C Cdc 0.972 Poff 22 W PTO 0 W **PSB** 28 W

### Heating

Annual energy consumption Qce

**PCK** 

0 W

1153 kWh



| EN 14511-2  |                 |                    |
|-------------|-----------------|--------------------|
|             | Low temperature | Medium temperature |
| Heat output | 11.80 kW        | 11.37 kW           |
| El input    | 2.73 kW         | 4.10 kW            |
| СОР         | 4.32            | 2.78               |

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

## **Average Climate**

| EN 12102-1                |                 |                    |  |
|---------------------------|-----------------|--------------------|--|
|                           | Low temperature | Medium temperature |  |
| Sound power level outdoor | 62 dB(A)        | 62 dB(A)           |  |

| EN 14825   |                 |                    |
|------------|-----------------|--------------------|
|            | Low temperature | Medium temperature |
| $\eta_{S}$ | 176 %           | 131 %              |
| Prated     | 10.00 kW        | 10.00 kW           |





| SCOP  | 4.47    | 3.36    |
|---|---------|---------|
|   |         |         |
| Tbiv  | -7 °C   | -7 °C   |
| TOL   | -20 °C  | -15 °C  |
| Pdh Tj = -7°C                                       | 8.90 kW | 8.50 kW |
| COP Tj = -7°C                                       | 2.88    | 2.08    |
| Cdh Tj = -7 °C                                      | 1.000   | 1.000   |
| Pdh Tj = +2°C                                       | 5.40 kW | 5.20 kW |
| COP Tj = +2°C                                       | 4.31    | 3.35    |
| Cdh Tj = +2 °C                                      | 1.000   | 1.000   |
| Pdh Tj = $+7^{\circ}$ C                             | 4.30 kW | 4.20 kW |
| $COPTj = +7^{\circ}C$                               | 5.82    | 4.24    |
| Cdh Tj = +7 °C                                      | 0.974   | 0.981   |
| Pdh Tj = 12°C                                       | 4.90 kW | 4.80 kW |
| COP Tj = 12°C                                       | 7.81    | 5.31    |
| Cdh Tj = +12 °C                                     | 0.969   | 0.979   |
| Pdh Tj = Tbiv                                       | 8.90 kW | 8.50 kW |
| COP Tj = Tbiv                                       | 2.88    | 2.08    |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 8.80 kW | 8.70 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.64    | 1.96    |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh |         |         |
| WTOL  | 60 °C   | 60 °C   |



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| Poff                                       | 19 W     | 19 W     |
|--|----------|----------|
| РТО  | 22 W     | 22 W     |
| PSB  | 19 W     | 19 W     |
| PCK  | 0 W      | o w      |
| Supplementary Heater: Type of energy input | n/a      | n/a      |
| Supplementary Heater: PSUP                 | 1.20 kW  | 1.30 kW  |
| Annual energy consumption Qhe              | 4630 kWh | 5941 kWh |



# Model: ECLPAC10X.ST; ECLPAC10X.KA

| Configure model                     |                            |  |
|-------------------------------------|----------------------------|--|
| Model name                          | ECLPAC10X.ST; ECLPAC10X.KA |  |
| Application                         | Heating (medium temp)      |  |
| Units                               | Outdoor                    |  |
| Climate Zone                        | n/a                        |  |
| Reversibility                       | Yes                        |  |
| Cooling mode application (optional) | +7°C/12°C                  |  |

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

## Cooling

| EN 14511-2       |         |  |  |
|------------------|---------|--|--|
| +7°C/+12°C       |         |  |  |
| El input         | 2.39 kW |  |  |
| Cooling capacity | 7.53    |  |  |
| EER              | 3.15    |  |  |

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|                               | +7°C/+12°C |
|-------------------------------|------------|
| Pdesignc                      | 7.53 kW    |
| SEER                          | 4.34       |
| Pdc Tj = 35°C                 | 7.53 kW    |
| EER Tj = 35°C                 | 3.15       |
| Pdc Tj = 30°C                 | 5.49 kW    |
| EER Tj = 30°C                 | 3.92       |
| Cdc                           | 0.986      |
| Pdc Tj = 25°C                 | 3.56 kW    |
| EER Tj = 25°C                 | 4.46       |
| Cdc                           | 0.976      |
| Pdc Tj = 20°C                 | 4.35 kW    |
| EER Tj = 20°C                 | 6.36       |
| Cdc                           | 0.972      |
| Poff                          | 22 W       |
| РТО                           | o w        |
| PSB                           | 28 W       |
| PCK                           | o w        |
| Annual energy consumption Qce | 1040 kWh   |

## Heating



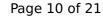
| EN 14511-2  |                 |                    |
|-------------|-----------------|--------------------|
|             | Low temperature | Medium temperature |
| Heat output | 10.10 kW        | 9.73 kW            |
| El input    | 2.28 kW         | 3.50 kW            |
| СОР         | 4.43            | 2.78               |

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

## **Average Climate**

| EN 12102-1                |                 |                    |
|---------------------------|-----------------|--------------------|
|                           | Low temperature | Medium temperature |
| Sound power level outdoor | 62 dB(A)        | 62 dB(A)           |

| EN 14825   |                 |                    |
|------------|-----------------|--------------------|
|            | Low temperature | Medium temperature |
| $\eta_{S}$ | 178 %           | 135 %              |
| Prated     | 9.00 kW         | 9.00 kW            |





|   |         | KK database on 23 jun 2022 |
|---|---------|----------------------------|
| SCOP  | 4.53    | 3.45                       |
| Tbiv  | -7 °C   | -7 °C                      |
| TOL   | -20 °C  | -15 °C                     |
| Pdh Tj = -7°C                                       | 8.30 kW | 8.10 kW                    |
| COP Tj = -7°C                                       | 2.93    | 2.13                       |
| Cdh Tj = -7 °C                                      | 1.000   | 1.000                      |
| Pdh Tj = +2°C                                       | 5.30 kW | 5.20 kW                    |
| COP Tj = +2°C                                       | 4.32    | 3.41                       |
| Cdh Tj = +2 °C                                      | 1.000   | 1.000                      |
| Pdh Tj = +7°C                                       | 4.20 kW | 4.10 kW                    |
| $COP Tj = +7^{\circ}C$                              | 6.01    | 4.30                       |
| Cdh Tj = +7 °C                                      | 0.973   | 0.980                      |
| Pdh Tj = 12°C                                       | 4.90 kW | 4.80 kW                    |
| COP Tj = 12°C                                       | 8.08    | 6.36                       |
| Cdh Tj = +12 °C                                     | 0.969   | 0.975                      |
| Pdh Tj = Tbiv                                       | 8.30 kW | 8.10 kW                    |
| COP Tj = Tbiv                                       | 2.93    | 2.13                       |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 8.30 kW | 8.10 kW                    |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.71    | 1.96                       |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh |         |                            |
| WTOL  | 60 °C   | 60 °C                      |
| WTOL  | 60 °C   | 60 °C                      |



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| Poff                                       | 19 W     | 19 W     |
|--|----------|----------|
| РТО  | 22 W     | 22 W     |
| PSB  | 19 W     | 19 W     |
| PCK  | 0 W      | o w      |
| Supplementary Heater: Type of energy input | n/a      | n/a      |
| Supplementary Heater: PSUP                 | 0.70 kW  | 0.90 kW  |
| Annual energy consumption Qhe              | 4293 kWh | 5462 kWh |



# Model: ECLPAC10T.ST; ECLPAC10T.KA

| Configure model                     |                            |  |
|-------------------------------------|----------------------------|--|
| Model name                          | ECLPAC10T.ST; ECLPAC10T.KA |  |
| Application                         | Heating (medium temp)      |  |
| Units                               | Outdoor                    |  |
| Climate Zone                        | n/a                        |  |
| Reversibility                       | Yes                        |  |
| Cooling mode application (optional) | +7°C/12°C                  |  |

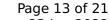
| General Data |             |  |
|--------------|-------------|--|
| Power supply | 3x400V 50Hz |  |

### Cooling

| EN 14511-2       |         |  |  |
|------------------|---------|--|--|
| +7°C/+12°C       |         |  |  |
| El input         | 2.39 kW |  |  |
| Cooling capacity | 7.53    |  |  |
| EER              | 3.15    |  |  |

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|                               | +7°C/+12°C |
|-------------------------------|------------|
| Pdesignc                      | 7.53 kW    |
| SEER                          | 4.34       |
| Pdc Tj = 35°C                 | 7.53 kW    |
| EER Tj = 35°C                 | 3.15       |
| Pdc Tj = 30°C                 | 5.49 kW    |
| EER Tj = 30°C                 | 3.92       |
| Cdc                           | 0.986      |
| Pdc Tj = 25°C                 | 3.56 kW    |
| EER Tj = 25°C                 | 4.46       |
| Cdc                           | 0.976      |
| Pdc Tj = 20°C                 | 4.35 kW    |
| EER Tj = 20°C                 | 6.36       |
| Cdc                           | 0.972      |
| Poff                          | 22 W       |
| РТО                           | o w        |
| PSB                           | 28 W       |
| PCK                           | o w        |
| Annual energy consumption Qce | 1040 kWh   |

## Heating



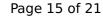
| EN 14511-2  |                 |                    |
|-------------|-----------------|--------------------|
|             | Low temperature | Medium temperature |
| Heat output | 10.10 kW        | 9.73 kW            |
| El input    | 2.28 kW         | 3.50 kW            |
| СОР         | 4.43            | 2.78               |

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

## **Average Climate**

| EN 12102-1                |                 |                    |  |
|---------------------------|-----------------|--------------------|--|
|                           | Low temperature | Medium temperature |  |
| Sound power level outdoor | 62 dB(A)        | 62 dB(A)           |  |

| EN 14825   |                 |                    |
|------------|-----------------|--------------------|
|            | Low temperature | Medium temperature |
| $\eta_{s}$ | 178 %           | 135 %              |
| Prated     | 9.00 kW         | 9.00 kW            |





|   |         | KK database on 23 jun 2022 |
|---|---------|----------------------------|
| SCOP  | 4.53    | 3.45                       |
| Tbiv  | -7 °C   | -7 °C                      |
| TOL   | -20 °C  | -15 °C                     |
| Pdh Tj = -7°C                                       | 8.30 kW | 8.10 kW                    |
| COP Tj = -7°C                                       | 2.93    | 2.13                       |
| Cdh Tj = -7 °C                                      | 1.000   | 1.000                      |
| Pdh Tj = +2°C                                       | 5.30 kW | 5.20 kW                    |
| COP Tj = +2°C                                       | 4.32    | 3.41                       |
| Cdh Tj = +2 °C                                      | 1.000   | 1.000                      |
| Pdh Tj = +7°C                                       | 4.20 kW | 4.10 kW                    |
| $COP Tj = +7^{\circ}C$                              | 6.01    | 4.30                       |
| Cdh Tj = +7 °C                                      | 0.973   | 0.980                      |
| Pdh Tj = 12°C                                       | 4.90 kW | 4.80 kW                    |
| COP Tj = 12°C                                       | 8.08    | 6.36                       |
| Cdh Tj = +12 °C                                     | 0.969   | 0.975                      |
| Pdh Tj = Tbiv                                       | 8.30 kW | 8.10 kW                    |
| COP Tj = Tbiv                                       | 2.93    | 2.13                       |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 8.30 kW | 8.10 kW                    |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.71    | 1.96                       |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh |         |                            |
| WTOL  | 60 °C   | 60 °C                      |
| WTOL  | 60 °C   | 60 °C                      |



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| Poff                                       | 19 W     | 19 W     |
|--|----------|----------|
| РТО  | 22 W     | 22 W     |
| PSB  | 19 W     | 19 W     |
| PCK  | 0 W      | o w      |
| Supplementary Heater: Type of energy input | n/a      | n/a      |
| Supplementary Heater: PSUP                 | 0.70 kW  | 0.90 kW  |
| Annual energy consumption Qhe              | 4293 kWh | 5462 kWh |



# Model: ECLPAC12T.ST; ECLPAC12T.KA

| Configure model                     |                            |  |  |
|-------------------------------------|----------------------------|--|--|
| Model name                          | ECLPAC12T.ST; ECLPAC12T.KA |  |  |
| Application                         | Heating (medium temp)      |  |  |
| Units                               | Outdoor                    |  |  |
| Climate Zone                        | n/a                        |  |  |
| Reversibility                       | Yes                        |  |  |
| Cooling mode application (optional) | +7°C/12°C                  |  |  |

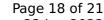
| General Data |             |  |
|--------------|-------------|--|
| Power supply | 3x400V 50Hz |  |

### Cooling

| EN 14511-2       |         |  |  |
|------------------|---------|--|--|
| +7°C/+12°C       |         |  |  |
| El input         | 2.79 kW |  |  |
| Cooling capacity | 8.51    |  |  |
| EER              | 3.05    |  |  |

### EN 14825

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|                               | +7°C/+12°C |
|-------------------------------|------------|
| Pdesignc                      | 8.51 kW    |
| SEER                          | 4.43       |
| Pdc Tj = 35°C                 | 8.51 kW    |
| EER Tj = 35°C                 | 3.05       |
| Pdc Tj = 30°C                 | 6.28 kW    |
| EER Tj = 30°C                 | 4.03       |
| Cdc                           | 0.988      |
| Pdc Tj = 25°C                 | 3.98 kW    |
| EER Tj = 25°C                 | 4.58       |
| Cdc                           | 0.978      |
| Pdc Tj = 20°C                 | 4.23 kW    |
| EER Tj = 20°C                 | 6.32       |
| Cdc                           | 0.972      |
| Poff                          | 22 W       |
| РТО                           | o w        |
| PSB                           | 28 W       |
| PCK                           | o w        |
| Annual energy consumption Qce | 1153 kWh   |

## Heating



| EN 14511-2  |                 |                    |
|-------------|-----------------|--------------------|
|             | Low temperature | Medium temperature |
| Heat output | 11.80 kW        | 11.37 kW           |
| El input    | 2.73 kW         | 4.10 kW            |
| СОР         | 4.32            | 2.78               |

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

## **Average Climate**

| EN 12102-1                |                 |                    |  |  |
|---------------------------|-----------------|--------------------|--|--|
|                           | Low temperature | Medium temperature |  |  |
| Sound power level outdoor | 62 dB(A)        | 62 dB(A)           |  |  |

| EN 14825   |                 |                    |  |  |
|------------|-----------------|--------------------|--|--|
|            | Low temperature | Medium temperature |  |  |
| $\eta_{s}$ | 176 %           | 131 %              |  |  |
| Prated     | 10.00 kW        | 10.00 kW           |  |  |





| SCOP  | 4.47    | 3.36    |
|---|---------|---------|
| 3001  | 4.47    | 3.30    |
| Tbiv  | -7 °C   | -7 °C   |
| TOL   | -20 °C  | -15 °C  |
| Pdh Tj = $-7^{\circ}$ C                             | 8.90 kW | 8.50 kW |
| COP Tj = $-7^{\circ}$ C                             | 2.88    | 2.08    |
| Cdh Tj = -7 °C                                      | 1.000   | 1.000   |
| Pdh Tj = +2°C                                       | 5.40 kW | 5.20 kW |
| COP Tj = +2°C                                       | 4.31    | 3.35    |
| Cdh Tj = +2 °C                                      | 1.000   | 1.000   |
| Pdh Tj = $+7^{\circ}$ C                             | 4.30 kW | 4.20 kW |
| $COPTj = +7^{\circ}C$                               | 5.82    | 4.24    |
| Cdh Tj = +7 °C                                      | 0.974   | 0.981   |
| Pdh Tj = 12°C                                       | 4.90 kW | 4.80 kW |
| COP Tj = 12°C                                       | 7.81    | 5.31    |
| Cdh Tj = +12 °C                                     | 0.969   | 0.979   |
| Pdh Tj = Tbiv                                       | 8.90 kW | 8.50 kW |
| COP Tj = Tbiv                                       | 2.88    | 2.08    |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 8.80 kW | 8.70 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.64    | 1.96    |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh |         |         |
| WTOL  | 60 °C   | 60 °C   |



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| Poff                                       | 19 W     | 19 W     |
|--|----------|----------|
| PTO  | 22 W     | 22 W     |
| PSB  | 19 W     | 19 W     |
| PCK  | 0 W      | 0 W      |
| Supplementary Heater: Type of energy input | n/a      | n/a      |
| Supplementary Heater: PSUP                 | 1.20 kW  | 1.30 kW  |
| Annual energy consumption Qhe              | 4630 kWh | 5941 kWh |