

| Summary of                 | split mid temperature 5 7 9 kW                        | Reg. No. | 011-1W0252  |  |
|----------------------------|---|----------|-------------|--|
| Certificate Holder         |   |          |             |  |
| Name                       | LG Electronics Inc.                                   |          |             |  |
| Address                    | 84, Wanam-ro, seongsan-gu                             | Zip      | 51554       |  |
| City                       | Changwon-si   | Country  | South Korea |  |
| Certification Body         | DIN CERTCO Gesellschaft für Konformitätsbewertung mbH |          |             |  |
| Name of testing laboratory | TÜV Rheinland Energy GmbH                             |          |             |  |
| Subtype title              | split mid temperature 5 7 9 kW                        |          |             |  |
| Heat Pump Type             | Outdoor Air/Water                                     |          |             |  |
| Refrigerant                | R410a   |          |             |  |
| Mass Of Refrigerant        | 1.8 kg  |          |             |  |
| Certification Date         | 31.07.2019  |          |             |  |



# Model: HU091 U43 / HN1616 NK3

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

### Heating

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

| EN 14511-2             |                 |                    |
|------------------------|-----------------|--------------------|
|                        | Low temperature | Medium temperature |
| Heat output            | 9.17 kW         | 7.56 kW            |
| El input               | 2.04 kW         | 2.74 kW            |
| СОР                    | 4.49            | 2.76               |
| Indoor water flow rate | 1.54 m³/h       | 0.82 m³/h          |

#### Average Climate



| EN 12102-1                |                 |                    |
|---------------------------|-----------------|--------------------|
|                           | Low temperature | Medium temperature |
| Sound power level indoor  | 44 dB(A)        | 44 dB(A)           |
| Sound power level outdoor | 65 dB(A)        | 65 dB(A)           |

| EN 14825      |                 |                    |
|---------------|-----------------|--------------------|
|               | Low temperature | Medium temperature |
| $\eta_{s}$    | 171 %           | 126 %              |
| Prated        | 7.00 kW         | 6.00 kW            |
| SCOP          | 4.55            | 3.29               |
| Tbiv          | -7 °C           | -10 °C             |
| TOL           | -15 °C          | -15 °C             |
| Pdh Tj = -7°C | 5.80 kW         | 5.00 kW            |
| COP Tj = -7°C | 2.55            | 2.05               |
| Cdh           | 0.90            | 0.90               |
| Pdh Tj = +2°C | 3.50 kW         | 3.00 kW            |
| COP Tj = +2°C | 3.90            | 3.00               |
| Cdh           | 0.90            | 0.90               |
| Pdh Tj = +7°C | 2.40 kW         | 1.90 kW            |
| COP Tj = +7°C | 7.00            | 4.40               |
| Cdh           | 0.90            | 0.90               |

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| Pdh Tj = 12°C                              | 2.50 kW  | 2.40 kW  |
|--|----------|----------|
| COP Tj = 12°C                              | 9.87     | 7.10     |
| Cdh  | 0.90     | 0.90     |
| Pdh Tj = Tbiv                              | 5.80 kW  | 5.60 kW  |
| COP Tj = Tbiv                              | 2.55     | 1.80     |
| Pdh Tj = TOL                               | 5.60 kW  | 5.60 kW  |
| COP Tj = TOL                               | 1.90     | 1.80     |
| Cdh  | 0.90     | 0.90     |
| WTOL                                       | 57 °C    | 57 °C    |
| Poff                                       | 9 W      | 9 W      |
| РТО  | 16 W     | 16 W     |
| PSB  | 9 W      | 9 W      |
| PCK  | 20 W     | 20 W     |
| Supplementary Heater: Type of energy input | electric | electric |
| Supplementary Heater: PSUP                 | 1.40 kW  | 0.40 kW  |
| Annual energy consumption Qhe              | 3093 kWh | 3581 kWh |



# Model: HU071 U43 / HN1616 NK3

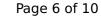
| General Data |             |
|--------------|-------------|
| Power supply | 1x230V 50Hz |

### Average Climate

| EN 12102-1                |                 |                    |  |
|---------------------------|-----------------|--------------------|--|
|                           | Low temperature | Medium temperature |  |
| Sound power level indoor  | 44 dB(A)        | 44 dB(A)           |  |
| Sound power level outdoor | 65 dB(A)        | 65 dB(A)           |  |

| EN 14825               |                 |                    |
|------------------------|-----------------|--------------------|
|                        | Low temperature | Medium temperature |
| $\eta_{s}$             | 175 %           | 126 %              |
| Prated                 | 6.00 kW         | 6.00 kW            |
| SCOP                   | 4.65            | 3.29               |
| Tbiv                   | -10 °C          | -10 °C             |
| TOL                    | -15 °C          | -15 °C             |
| Pdh Tj = -7°C          | 5.30 kW         | 5.00 kW            |
| $COP Tj = -7^{\circ}C$ | 2.75            | 2.05               |
| Cdh                    | 0.90            | 0.90               |
| Pdh Tj = +2°C          | 3.20 kW         | 3.00 kW            |
| $COP Tj = +2^{\circ}C$ | 4.03            | 3.00               |

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|--|--------------------------|--|
| Cdh  | 0.90                     | 0.90   |
| Pdh Tj = $+7^{\circ}$ C                    | 2.40 kW                  | 1.90 kW  |
| $COP Tj = +7^{\circ}C$                     | 6.90                     | 4.40   |
| Cdh  | 0.90                     | 0.90   |
| Pdh Tj = 12°C                              | 2.60 kW                  | 2.40 kW  |
| COP Tj = 12°C                              | 9.60                     | 7.10   |
| Cdh  | 0.90                     | 0.90   |
| Pdh Tj = Tbiv                              | 6.00 kW                  | 5.60 kW  |
| COP Tj = Tbiv                              | 1.90                     | 1.80   |
| Pdh Tj = TOL                               | 6.00 kW                  | 5.60 kW  |
| COP Tj = TOL                               | 1.90                     | 1.80   |
| Cdh  | 0.90                     | 0.90   |
| WTOL                                       | 57 °C                    | 57 °C  |
| Poff                                       | 9 W                      | 9 W  |
| РТО  | 16 W                     | 16 W   |
| PSB  | 9 W                      | 9 W  |
| PCK  | 20 W                     | 20 W   |
| Supplementary Heater: Type of energy input | N/A                      | electric   |
| Supplementary Heater: PSUP                 | 0.00 kW                  | 0.40 kW  |
| Annual energy consumption Qhe              | 2783 kWh                 | 3581 kWh   |
|  |                          |  |

# Heating



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

| EN 14511-2             |                 |                    |
|------------------------|-----------------|--------------------|
|                        | Low temperature | Medium temperature |
| Heat output            | 7.16 kW         | 7.56 kW            |
| El input               | 1.48 kW         | 2.74 kW            |
| СОР                    | 4.83            | 2.76               |
| Indoor water flow rate | 1.19 m³/h       | 0.82 m³/h          |



# Model: HU051 U43 / HN1616 NK3

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

### Average Climate

| EN 14825         |                 |                    |
|------------------|-----------------|--------------------|
|                  | Low temperature | Medium temperature |
| $\eta_{s}$       | 178 %           | 126 %              |
| Prated           | 6.00 kW         | 6.00 kW            |
| SCOP             | 4.52            | 3.23               |
| Tbiv             | -10 °C          | -10 °C             |
| TOL              | -15 °C          | -15 °C             |
| Pdh Tj = -7°C    | 4.87 kW         | 4.95 kW            |
| COP Tj = $-7$ °C | 3.00            | 2.05               |
| Cdh              | 0.90            | 0.90               |
| Pdh Tj = $+2$ °C | 2.96 kW         | 3.02 kW            |
| COP Tj = +2°C    | 4.10            | 3.00               |
| Cdh              | 0.90            | 0.90               |
| Pdh Tj = +7°C    | 2.39 kW         | 1.94 kW            |
| COP Tj = +7°C    | 6.75            | 4.40               |
| Cdh              | 0.90            | 0.90               |
| Pdh Tj = 12°C    | 2.54 kW         | 2.37 kW            |

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| COP Tj = 12°C                              | 9.40     | 7.10     |
|--|----------|----------|
| Cdh  | 0.90     | 0.90     |
| Pdh Tj = Tbiv                              | 5.50 kW  | 5.60 kW  |
| COP Tj = Tbiv                              | 1.90     | 1.80     |
| Pdh Tj = TOL                               | 5.50 kW  | 5.60 kW  |
| COP Tj = TOL                               | 1.90     | 1.80     |
| Cdh  | 0.90     | 0.90     |
| WTOL                                       | 57 °C    | 57 °C    |
| Poff                                       | 9 W      | 9 W      |
| РТО  | 16 W     | 16 W     |
| PSB  | 9 W      | 9 W      |
| PCK  | 20 W     | 20 W     |
| Supplementary Heater: Type of energy input | electric | electric |
| Supplementary Heater: PSUP                 | 0.50 kW  | 0.40 kW  |
| Annual energy consumption Qhe              | 2512 kWh | 3581 kWh |

| EN 12102-1                |                 |                    |
|---------------------------|-----------------|--------------------|
|                           | Low temperature | Medium temperature |
| Sound power level indoor  | 44 dB(A)        | 44 dB(A)           |
| Sound power level outdoor | 65 dB(A)        | 65 dB(A)           |

#### Heating



 $$\operatorname{\textit{Page}}\ 10$$  of 10 This information was generated by the HP KEYMARK database on 17 Dec 2020

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

| EN 14511-2             |                 |                    |
|------------------------|-----------------|--------------------|
|                        | Low temperature | Medium temperature |
| Heat output            | 5.20 kW         | 7.56 kW            |
| El input               | 1.03 kW         | 2.74 kW            |
| СОР                    | 5.04            | 2.76               |
| Indoor water flow rate | 0.85 m³/h       | 0.82 m³/h          |