

**VITODENS 111-W**

B1LF-19, B1LF-19-M, B1LF-25, B1LF-25-M, B1LF-32, B1LF-32-M

The product data specified meets the requirements of EU Regulations 811/2013 and 813/2013.

| Product data                                        | Symbol      | Unit | B1LF-19 | B1LF-25 | B1LF-32 | B1LF-25 | B1LF-32 | B1LF-25-M | B1LF-19-M | B1LF-25-M | B1LF-32-M |
|-----------------------------------------------------|-------------|------|---------|---------|---------|---------|---------|-----------|-----------|-----------|-----------|
| Average temperature application for central heating |             |      | yes     | yes     | yes     | yes     | yes     | yes       | yes       | yes       | yes       |
| Declared load profile                               |             |      | XL      | XL      | XL      | L       | L       | L         | XL        | XL        | XL        |
| reference energy                                    | $Q_{ref}$   | kWh  | -       | -       | -       | -       | -       | -         | -         | -         | -         |
| Seasonal space heating energy efficiency            |             |      | A       | A       | A       | A       | A       | A         | A         | A         | A         |
| Water heating energy efficiency classes             |             |      | A       | A       | A       | B       | A       | B         | A         | A         | A         |
| Rated heat output                                   | $P_{rated}$ | kW   | 18      | 23      | 29      | 23      | 29      | 23        | 18        | 23        | 29        |
| Annual energy consumption                           | $Q_{HE}$    | kWh  | 8807    | 11073   | 13759   | 11073   | 13759   | 12056     | 9800      | 12056     | 14742     |
| Annual electricity consumption                      | AEC         | kWh  | 81      | 67      | 71      | 43      | 50,4    | 43        | 81        | 67        | 71        |
| Annual fuel consumption                             | AFC         | kWh  | 5315    | 5377    | 5348    | 3339    | 3278    | 3339      | 5315      | 5377      | 5348      |
| Seasonal space heating energy efficiency            | $\eta_s$    | %    | 93      | 94      | 94      | 94      | 94      | 94        | 93        | 94        | 94        |
| Water heating energy efficiency                     | $\eta_{wh}$ | %    | 80      | 80      | 80      | 74      | 75      | 74        | 80        | 80        | 80        |
| sound power level indoors                           | $L_{WA}$    | dB   | 46      | 47      | 51      | 47      | 51      | 47        | 46        | 47        | 51        |
| able to work only during off-peak hours             |             |      | no      | no      | no      | no      | no      | no        | no        | no        | no        |

**For all special precautions to be taken during assembly, installation or maintenance of the space heater, see the service and installation instructions.**

| Model                     | Symbol | Unit | B1LF-19 | B1LF-25 | B1LF-32 | B1LF-25 | B1LF-32 | B1LF-25-M | B1LF-19-M | B1LF-25-M | B1LF-32-M |
|---------------------------|--------|------|---------|---------|---------|---------|---------|-----------|-----------|-----------|-----------|
| Condensing boiler         |        |      | yes     | yes     | yes     | yes     | yes     | yes       | yes       | yes       | yes       |
| Low-temperature boiler    |        |      | no      | no      | no      | no      | no      | no        | no        | no        | no        |
| B1 boiler                 |        |      | no      | no      | no      | no      | no      | no        | no        | no        | no        |
| Cogeneration space heater |        |      | no      |         |         |         |         |           |           |           |           |
| Combination heater        |        |      | yes     |         |         |         |         |           |           |           |           |

| Rated heat output / Seasonal space heating energy efficiency               | Symbol   | Unit | B1LF-19 | B1LF-25 | B1LF-32 | B1LF-25 | B1LF-32 | B1LF-25-M | B1LF-19-M | B1LF-25-M | B1LF-32-M |
|----------------------------------------------------------------------------|----------|------|---------|---------|---------|---------|---------|-----------|-----------|-----------|-----------|
| Useful heat output at rated heat output and high-temperature regime        | $P_4$    | kW   | 17,5    | 23      | 29,3    | 23      | 29,3    | 23        | 17,5      | 23        | 29,3      |
| Useful heat output at 30 % of rated heat output and low-temperature regime | $P_1$    | kW   | 5,8     | 7,7     | 9,8     | 7,7     | 9,8     | 7,7       | 5,8       | 7,7       | 9,8       |
| Useful efficiency at rated heat output and high-temperature regime         | $\eta_4$ | %    | 88,4    | 88,4    | 88,1    | 88,4    | 88,1    | 88,4      | 88,4      | 88,4      | 88,1      |



**VITODENS 111-W**

B1LF-19, B1LF-19-M, B1LF-25, B1LF-25-M, B1LF-32, B1LF-32-M

The product data specified meets the requirements of EU Regulations 811/2013 and 813/2013.

| Rated heat output / Seasonal space heating energy efficiency              | Symbol   | Unit | B1LF-19 | B1LF-25 | B1LF-32 | B1LF-25 | B1LF-32 | B1LF-25-M | B1LF-19-M | B1LF-25-M | B1LF-32-M |
|---------------------------------------------------------------------------|----------|------|---------|---------|---------|---------|---------|-----------|-----------|-----------|-----------|
| Useful efficiency at 30 % of rated heat output and low-temperature regime | $\eta_1$ | %    | 97,9    | 98,8    | 98,7    | 98,8    | 98,7    | 98,8      | 97,9      | 98,8      | 98,7      |

| Auxiliary electricity consumption                 | Symbol     | Unit | B1LF-19 | B1LF-25 | B1LF-32 | B1LF-25 | B1LF-32 | B1LF-25-M | B1LF-19-M | B1LF-25-M | B1LF-32-M |
|---------------------------------------------------|------------|------|---------|---------|---------|---------|---------|-----------|-----------|-----------|-----------|
| Auxiliary electricity consumption at full load    | $el_{max}$ | kW   | 0,017   | 0,018   | 0,021   | 0,018   | 0,021   | 0,018     | 0,017     | 0,018     | 0,021     |
| Auxiliary electricity consumption at part load    | $el_{min}$ | kW   | 0,014   | 0,015   | 0,016   | 0,015   | 0,016   | 0,015     | 0,014     | 0,015     | 0,016     |
| Auxiliary electricity consumption in standby mode | $P_{SB}$   | kW   | 0,0038  | 0,0038  | 0,0038  | 0,0038  | 0,0038  | 0,0038    | 0,0038    | 0,0038    | 0,0038    |

| Other details                     | Symbol     | Unit   | B1LF-19 | B1LF-25 | B1LF-32 | B1LF-25 | B1LF-32 | B1LF-25-M | B1LF-19-M | B1LF-25-M | B1LF-32-M |
|-----------------------------------|------------|--------|---------|---------|---------|---------|---------|-----------|-----------|-----------|-----------|
| Standby heat loss                 | $P_{stby}$ | kW     | 0,0763  | 0,0763  | 0,0763  | 0,0763  | 0,0763  | 0,0763    | 0,0763    | 0,0763    | 0,0763    |
| Ignition burner power consumption | $P_{ign}$  | kW     | -       | -       | -       | -       | -       | -         | -         | -         | -         |
| Emissions of nitrogen oxides      | $NO_x$     | mg/kWh | 21      | 23      | 25      | 23      | 25      | 23        | 21        | 23        | 25        |

| Hot Water Preparation         | Symbol     | Unit | B1LF-19 | B1LF-25 | B1LF-32 | B1LF-25 | B1LF-32 | B1LF-25-M | B1LF-19-M | B1LF-25-M | B1LF-32-M |
|-------------------------------|------------|------|---------|---------|---------|---------|---------|-----------|-----------|-----------|-----------|
| Daily electricity consumption | $Q_{elec}$ | kWh  | 0,37    | 0,3     | 0,32    | 0,203   | 0,237   | 0,203     | 0,37      | 0,3       | 0,32      |
| Daily fuel consumption        | $Q_{fuel}$ | kWh  | 24,2    | 24,4    | 24,3    | 16,3    | 16      | 16,3      | 24,2      | 24,4      | 24,3      |

The product data specified meets the requirements of EU Regulations 811/2013.

| Criterion                                                                                                                          | Energy efficiency category, temperature controller | Contribution, central heating energy efficiency |
|------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|-------------------------------------------------|
| • Room thermostat which switches the heat source on/off                                                                            | 1                                                  | 1 %                                             |
| • Weather-compensated control<br>• Modulating heat source                                                                          | 2                                                  | 2 %                                             |
| • Weather-compensated control<br>• Non-modulating heat source                                                                      | 3                                                  | 1,5 %                                           |
| • Room thermostat with TPI (Time Proportional Integral) properties<br>• Non-modulating heat source                                 | 4                                                  | 2 %                                             |
| • Modulating room thermostat<br>• Modulating heat source                                                                           | 5                                                  | 3 %                                             |
| • Weather compensation, control unit<br>• Modulating heat source<br>• Room temperature sensor in conjunction with room hook-up     | 6                                                  | 4 %                                             |
| • Weather compensation, control unit<br>• Non-modulating heat source<br>• Room temperature sensor in conjunction with room hook-up | 7                                                  | 3,5 %                                           |
| • Individual room control with min. 3 room temperature sensors<br>• Modulating heat source                                         | 8                                                  | 5 %                                             |