# LN VGHZ SERIES

R32 Single / MXZ, PUMY
R410A PUMY

Unlike conventional air conditioning systems, the LN Series don't lose heating capacity when it's cold outside. Original technologies ensure excellent heating performance under extremely low outdoor temperatures and an impressive guaranteed operating range.

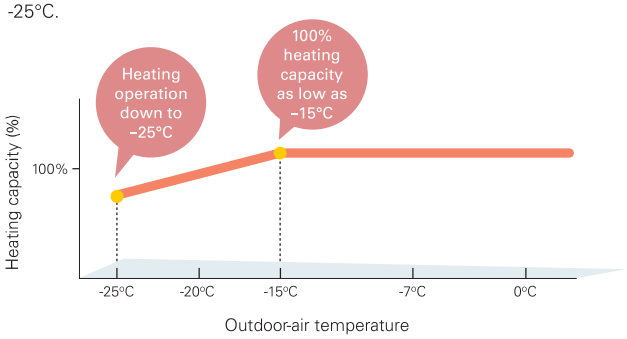




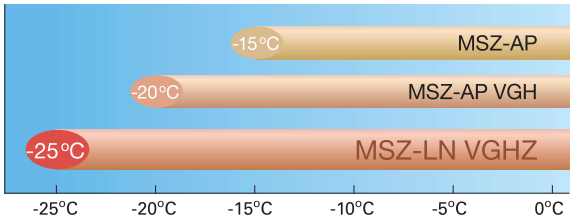

MSZ-LN25/35/50VG2(W)(V)(R)(B)

## Unparalleled Heating Performance

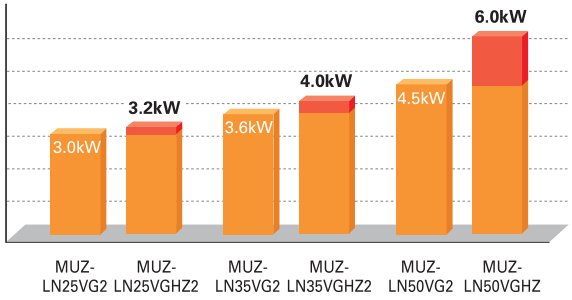
LN Series outdoor units are equipped with a high-output compressor that provides enhanced heating performance under low outdoor temperatures. The heating operation range is extended down to -25°C.




## Operating Range



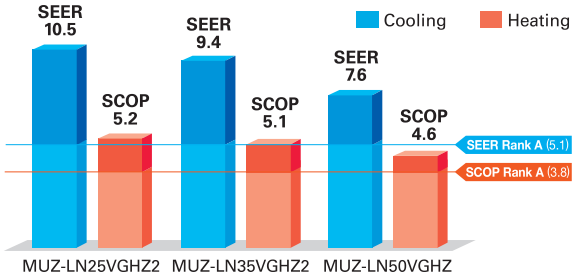

## Declared Capacity (at reference design temperature)




## High Energy Efficiency – Energy Rank of A+ or higher for All Models

DC Inverter

With indoor units that combine functionality, design and capacity and outdoor units equipped with a high-efficiency compressor, the MUZ-LN VGHZ simultaneously achieves high heating capacity and energy-saving performance.




## Freeze-prevention Heater Equipped as Standard

The Freeze-prevention heater restricts lowered capacity and operation shutdowns caused by the drain water freezing. This supports stable operation in low-temperature environments.

**Operation Guaranteed at Outside Temperature of –25°C**




Without Freeze-prevention heater

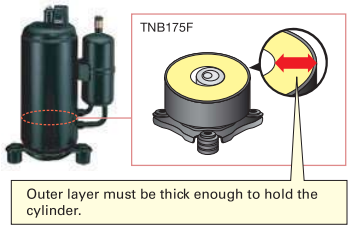



With Freeze-prevention heater

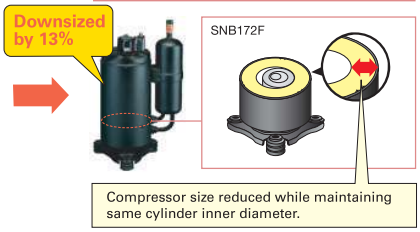
## Compact, Powerful Compressor

A special manufacturing technology, "Heat Caulking Fixing Method," has been introduced to reduce compressor size while maintaining a high compressor output. This technology enables the installation of a powerful compressor in compact MUZ outdoor units. As a result, excellent heating performance is achieved when operating in cold outdoor environments.

Compressor fixed using conventional method (Arc spot-welded method)




Compressor fixed using Heat Caulking Fixing Method



# MSZ-LN VGHZ SERIES

R32 | DC Inverter | Joint Lap | DC Fan Motor | PAM | Grooved Piping | 25 / 35 SEER A+++ | 25 / 35 SCOP A+++

## Indoor Unit / Remote Controller

GOOD DESIGN AWARD 2016 BEST 100

<Pearl White>



MSZ-LN25/35/50VG2V

<Ruby Red>



MSZ-LN25/35/50VG2R

<Natural White>



MSZ-LN25/35/50VG2W

<Onyx Black>



MSZ-LN25/35/50VG2B

## Outdoor Unit



MUZ-LN25/35VGHZ2



MUZ-LN50VGHZ2

3D i-see Sensor | AREA | HUMAN | Econo Cool | AUTO VANE | Plasma Quad Plus | Dual Barrier Coating | V Blocking Filter (Optional) | Double Vane | SWING | SWING | AUTO | Circulator Mode | Weekly Timer | i save

ACO | Auto Restart | Low Temp Cooling | Optional | Group Control (Optional) | M-NET connection (Optional) | Wi-Fi Interface | MXZ connection (25/35) | 10°C | Indoor | Night | Back Light Remote | Cleaning-free pipe route | Flare connection | Self Diagnosis | Failure Recall

| Type | | | | Inverter Heat Pump | | |
|---|---|---|---|---|---|---|
| Indoor Unit | | | | MSZ-LN25VG2(W)(V)(R)(B) | MSZ-LN35VG2(W)(V)(R)(B) | MSZ-LN50VG2(W)(V)(R)(B) |
| Outdoor Unit | | | | MUZ-LN25VGHZ2 | MUZ-LN35VGHZ2 | MUZ-LN50VGHZ2 |
| Refrigerant | | | | R32 (*1) | | |
| Power Supply | Source | | | Outdoor Power supply | | |
| | Outdoor (V/Phase/Hz) | | | 230/Single/50 | | |
| Cooling | Design Load | | kW | 2.5 | 3.5 | 5.0 |
| | Annual Electricity Consumption (*2) | | kWh/a | 83 | 130 | 230 |
| | SEER (*4) | | | 10.5 | 9.4 | 7.6 |
| | | Energy Efficiency Class | | A+++ | A+++ | A++ |
| | Capacity | Rated | kW | 2.5 | 3.5 | 5.0 |
| | | Min - Max | kW | 0.8 - 3.5 | 0.8 - 4.0 | 1.4 - 5.8 |
| | Total Input | Rated | kW | 0.485 | 0.820 | 1.380 |
| Heating (Average Season)(*5) | Design Load | | kW | 3.2 (–10°C) | 4.0 (–10°C) | 6.0 (–10°C) |
| | Declared Capacity | at reference design temperature | kW | 3.2 (–10°C) | 4.0 (–10°C) | 6.0 (–10°C) |
| | | at bivalent temperature | kW | 3.2 (–10°C) | 4.0 (–10°C) | 6.0 (–10°C) |
| | | at operation limit temperature | kW | 2.3 (–25°C) | 3.1 (–25°C) | 4.7 (–25°C) |
| | Back Up Heating Capacity | | kW | 0.0 (–10°C) | 0.0 (–10°C) | 0.0 (–10°C) |
| | Annual Electricity Consumption (*2) | | kWh/a | 861 | 1098 | 1826 |
| | SCOP (*4) | | | 5.2 | 5.1 | 4.6 |
| | | Energy Efficiency Class | | A+++ | A+++ | A++ |
| | Capacity | Rated | kW | 3.2 | 4.0 | 6.0 |
| | | Min - Max | kW | 0.8 - 6.3 | 0.9 - 6.6 | 1.8 - 8.7 |
| | Total Input | Rated | kW | 0.600 | 0.820 | 1.480 |
| Operating Current (max) | | | A | 9.9 | 10.5 | 15.2 |
| Indoor Unit | Input | Rated | kW | 0.027 | 0.027 | 0.034 |
| | Operating Current (max) | | A | 0.3 | 0.3 | 0.4 |
| | Dimensions | H × W × D | mm | 307 - 890 - 233 | 307 - 890 - 233 | 307 - 890 - 233 |
| | Weight | | kg | 15.5 | 15.5 | 15.5 |
| | Air Volume (SLo-Lo-Mid-Hi-SHi (*3)) | Cooling | $m^3$/min | 4.3 - 5.8 - 7.1 - 8.8 - 11.9 | 4.3 - 5.8 - 7.1 - 8.8 - 12.8 | 5.7 - 7.6 - 8.9 - 10.6 - 13.9 |
| | | Heating | $m^3$/min | 4.0 - 5.7 - 7.1 - 8.5 - 14.4 | 4.3 - 5.7 - 7.1 - 8.5 - 13.7 | 5.4 - 6.4 - 8.5 - 10.7 - 15.7 |
| | Sound Level (SPL) (SLo-Lo-Mid-Hi-SHi (*3)) | Cooling | dB(A) | 19 - 23 - 29 - 36 - 42 | 19 - 24 - 29 - 36 - 43 | 27 - 31 - 35 - 39 - 46 |
| | | Heating | dB(A) | 19 - 24 - 29 - 36 - 45 | 19 - 24 - 29 - 36 - 45 | 25 - 29 - 34 - 39 - 47 |
| | Sound Level (PWL) | | dB(A) | 58 | 58 | 60 |
| Outdoor Unit | Dimensions | H × W × D | mm | 550 - 800 - 285 | 550 - 800 - 285 | 880 - 840 - 330 |
| | Weight | | kg | 35 | 36 | 53 |
| | Air Volume | Cooling | $m^3$/min | 31.4 | 33.8 | 48.8 |
| | | Heating | $m^3$/min | 27.4 | 27.4 | 55.0 |
| | Sound Level (SPL) | Cooling | dB(A) | 46 | 49 | 51 |
| | | Heating | dB(A) | 49 | 50 | 54 |
| | Sound Level (PWL) | Cooling | dB(A) | 60 | 61 | 64 |
| | Operating Current (max) | | A | 9.6 | 10.2 | 14.8 |
| | Breaker Size | | A | 10 | 12 | 16 |
| Ext. Piping | Diameter | Liquid / Gas | mm | 6.35/9.52 | 6.35/9.52 | 6.35/9.52 |
| | Max. Length | Out-In | m | 20 | 20 | 30 |
| | Max. Height | Out-In | m | 12 | 12 | 15 |
| Guaranteed Operating Range [Outdoor] | | Cooling | °C | –10 ~ +46 | –10 ~ +46 | –10 ~ +46 |
| | | Heating | °C | –25 ~ +24 | –25 ~ +24 | –25 ~ +24 |

(*1) Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 550. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 550 times higher than 1 kg of $CO_2$, over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.
The GWP of R32 is 675 in the IPCC 4th Assessment Report.
(*2) Energy consumption based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located.
(*3) SHi: Super High
(*4) SEER, SCOP and other related description are based on COMMISSION DELEGATED REGULATION (EU) No.626/2011. The temperature conditions for calculating SCOP are based on "Average Season".
(*5) Please see page 53-55 for heating (warmer season/colder season) specifications.