



MELcalc

Project Information:

Energy calculations
Linköping LN35

Dealer:

The Brewery
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Summary

Energy/power consumption

| | |
|---|-----------|
| Energy for heating | 20000 kWh |
| Building's power req for heating at DOT | 6,3 kW |

After heatpump installation

| | |
|-------------------------------|----------------|
| 1 * MUZ-LN35 VGHZ | |
| Energy from heat pump totally | 13000 kWh/year |
| Auxiliary energy | 7000 kWh/year |
| Energy to purchase | 9762 kWh/year |
| Energy savings | 10238 kWh/year |

Installation

| | |
|-----------------------------|-----------------------|
| City | Linköping |
| Avg. outdoor temp | 6,7 °C |
| Dim. Outdoor Temp (DOT) | -16,6 °C |
| Room temp curr | 21,0 °C |
| Heating stops at | 20,0 °C |
| Specific energy consumption | 75 kWh/m ² |

Performance data

| | |
|---------------------------------------|----------------|
| Total energy production | 20000 kWh/year |
| Total Energy Consumption | 9762 kWh/year |
| Auxiliary energy for heating | 7000 kWh/year |
| Power coverage at DOT | 57,5 % |
| Energy coverage heat pump | 65,0 % |
| Yearly performance factor (heat pump) | 4,71 |
| Max heating power of HP at DOT | 3,6 kW |

Indata

Project Data

| | | |
|--------------|----------------|-------|
| Project name | Linköping LN35 | Notes |
| Building | | |
| Company | | |

Energy/power consumption

| | | | |
|------------------------|--------------------|------------------------------|---------------------------------|
| Net Energy Consumption | 20000 kWh | Calculation method | Known energy consumption |
| Room temp curr | 21,0 °C | Energy (efficiency) | <u>Net (gross)</u> |
| Selfheating | 1,0 K | Electricity ($\eta=100\%$) | 20000 (20000) kWh |
| Heated Area A(temp) | 130 m ² | | |

Installation

| | | | |
|-----------------|-------------------|-------------------------|-----------|
| Heatpump | 1 * MUZ-LN35 VGHZ | City | Linköping |
| Indoor unit | MSZ-LN35 VG | Dim. Outdoor Temp (DOT) | -16,6 °C |
| Area efficiency | 65 % | Avg. outdoor temp | 6,7 °C |
| Source | Ambient air | Degreehours | 116969 |
| Auxiliary power | 6,3 kW | | |

Calculation Results

Heating

| | |
|---|-----------------------|
| Building's energy req for heating | 20000 kWh |
| Building's power req for heating at DOT | 6,3 kW |
| Energy coverage heat pump for heating | 65,0 % |
| HP operation (heating) | 4587 h |
| Max heating power of HP at DOT | 3,6 kW |
| Power produced at DOT | 27,7 W/m ² |
| Power coverage at DOT | 57,5 % |
| Max electric power HP heating | 3,8 kW |
| Energy from heat pump for heating | 13000 kWh/year |

Energy Consumption

| | |
|--------------------------------------|-----------------------|
| Electricity to heat pump for heating | 2762 kWh/year |
| Auxiliary energy for heating | 7000 kWh/year |
| Total Energy Consumption | 9762 kWh/year |
| Specific energy consumption | 75 kWh/m ² |

Performance data

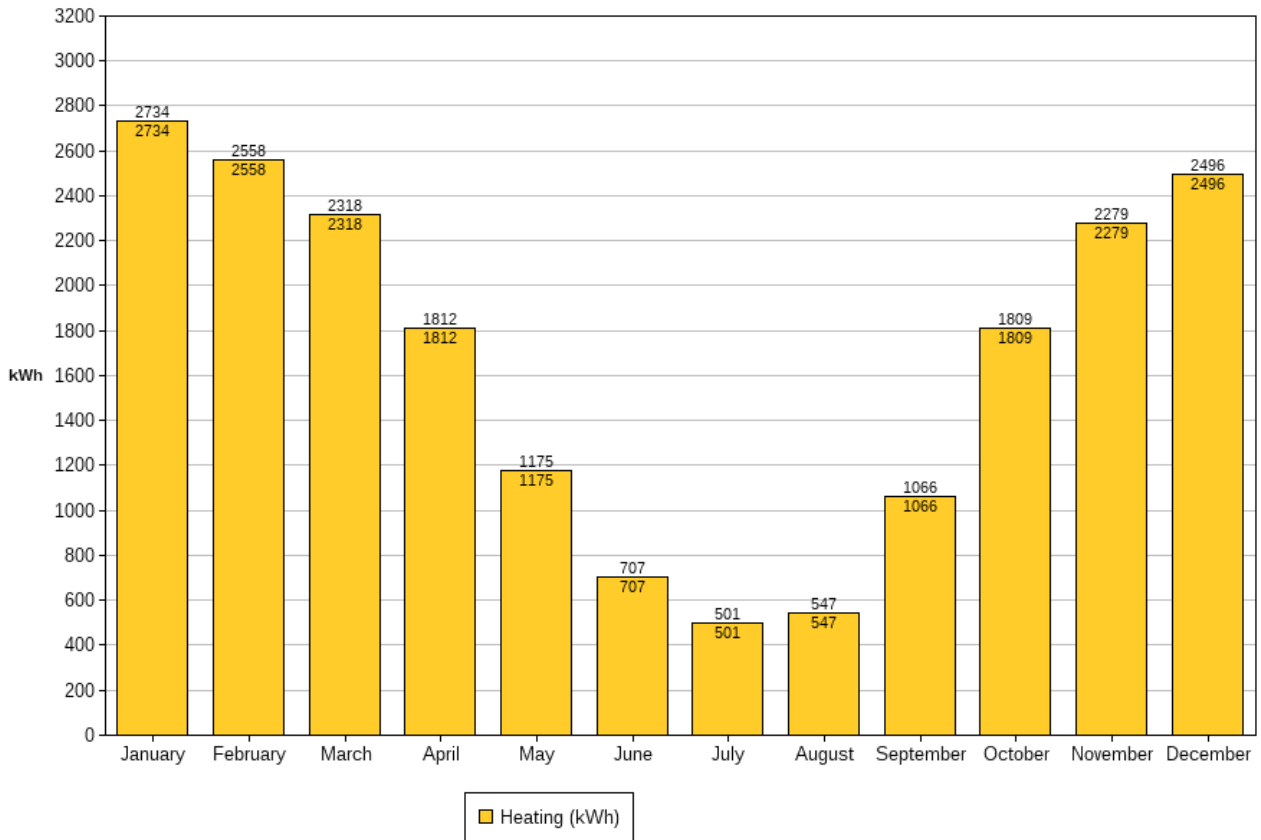
| | |
|---|------|
| Yearly performance factor heat pump (heating) | 4,71 |
| Yearly performance factor (HP + aux) | 2,05 |

Energy savings

| | |
|-----------------------------------|-----------------------|
| | 10238 kWh/year |
| Gross savings on purchased energy | 10238 kWh/year |

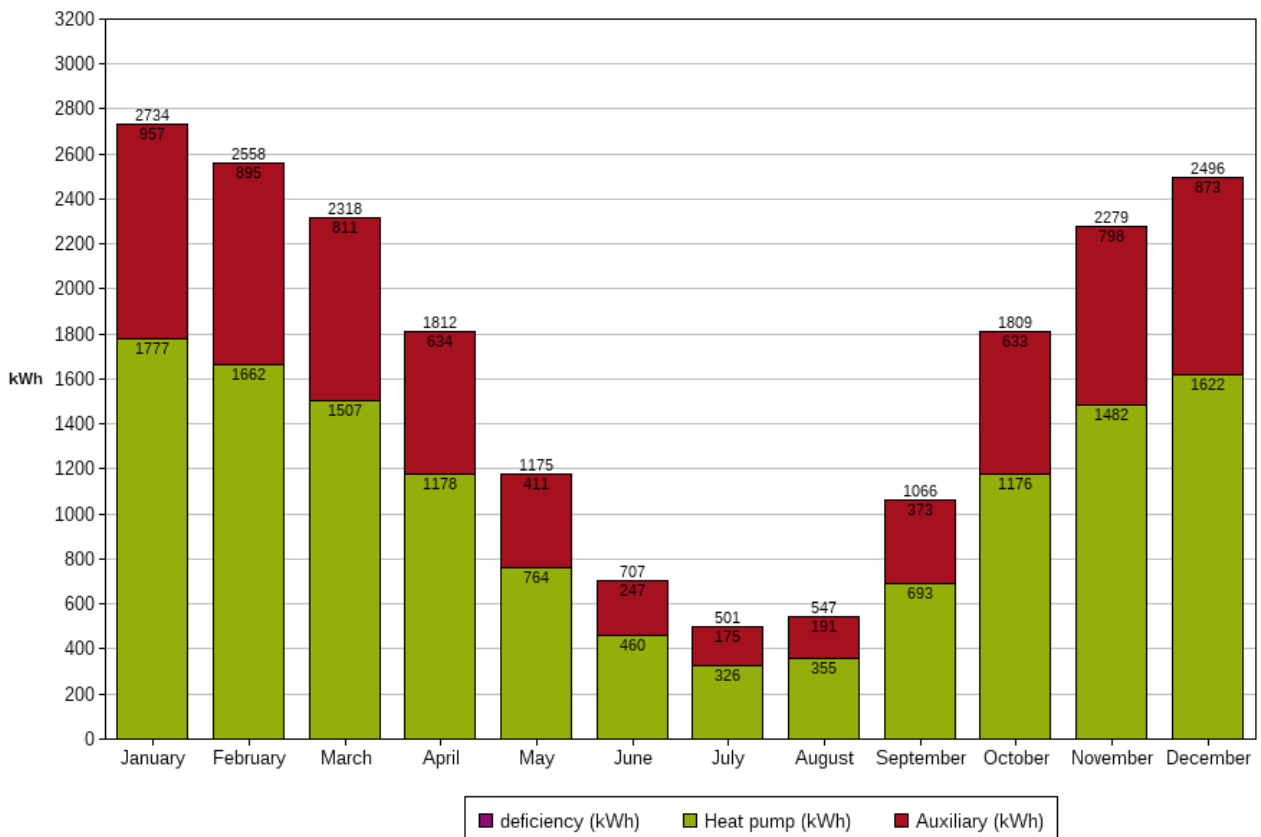
³ A minor energy deficiency of 0,00% with a duration of 14,0 hours was observed in the calculations. Our assessment is that this can be ignored.

Energy consumption/mon



Heating (kWh)

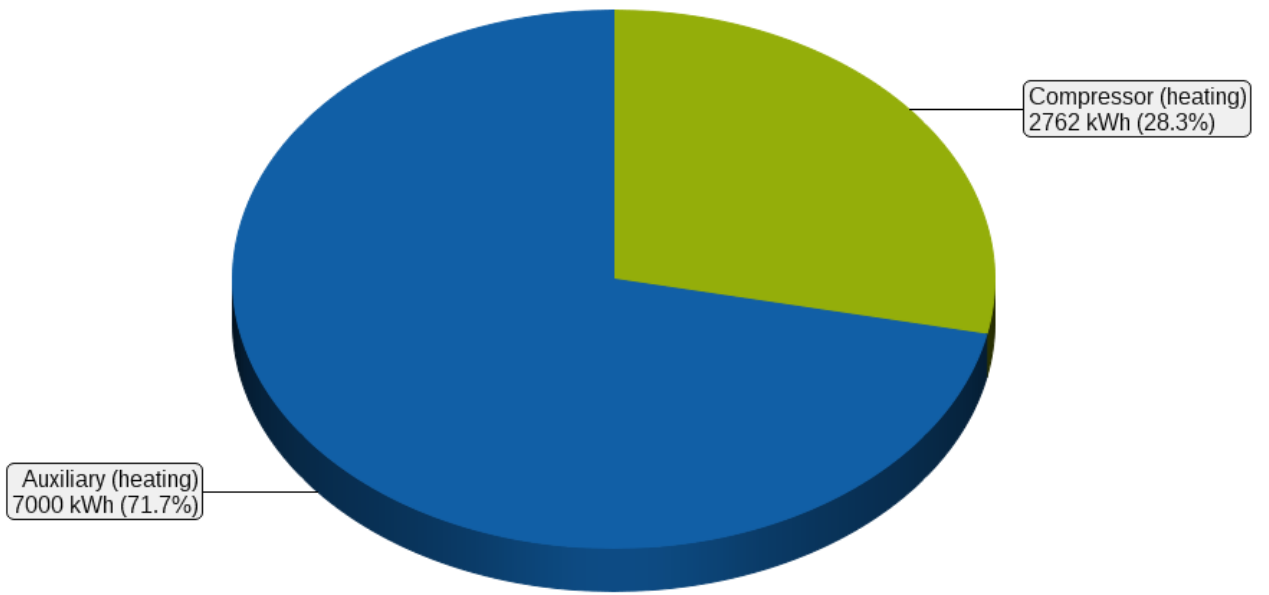
Energy production/mon



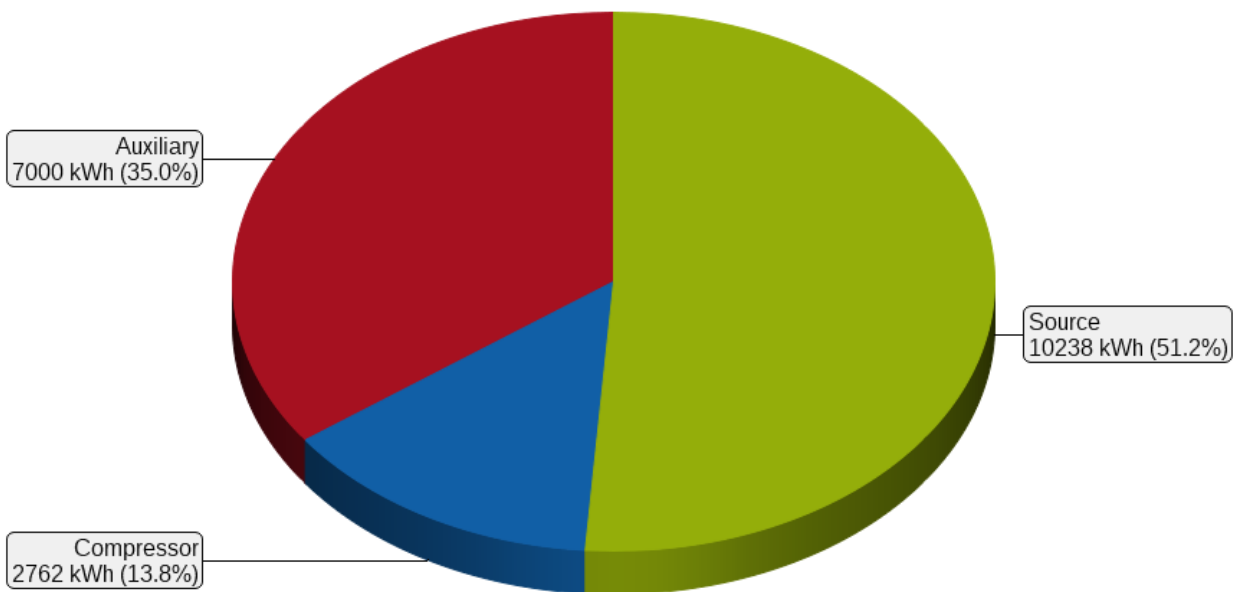
deficiency (kWh) Heat pump (kWh) Auxiliary (kWh)

The results from the calculation are estimates and should not be considered as a promise. Changes in climate, building construction and building usage will affect the results.

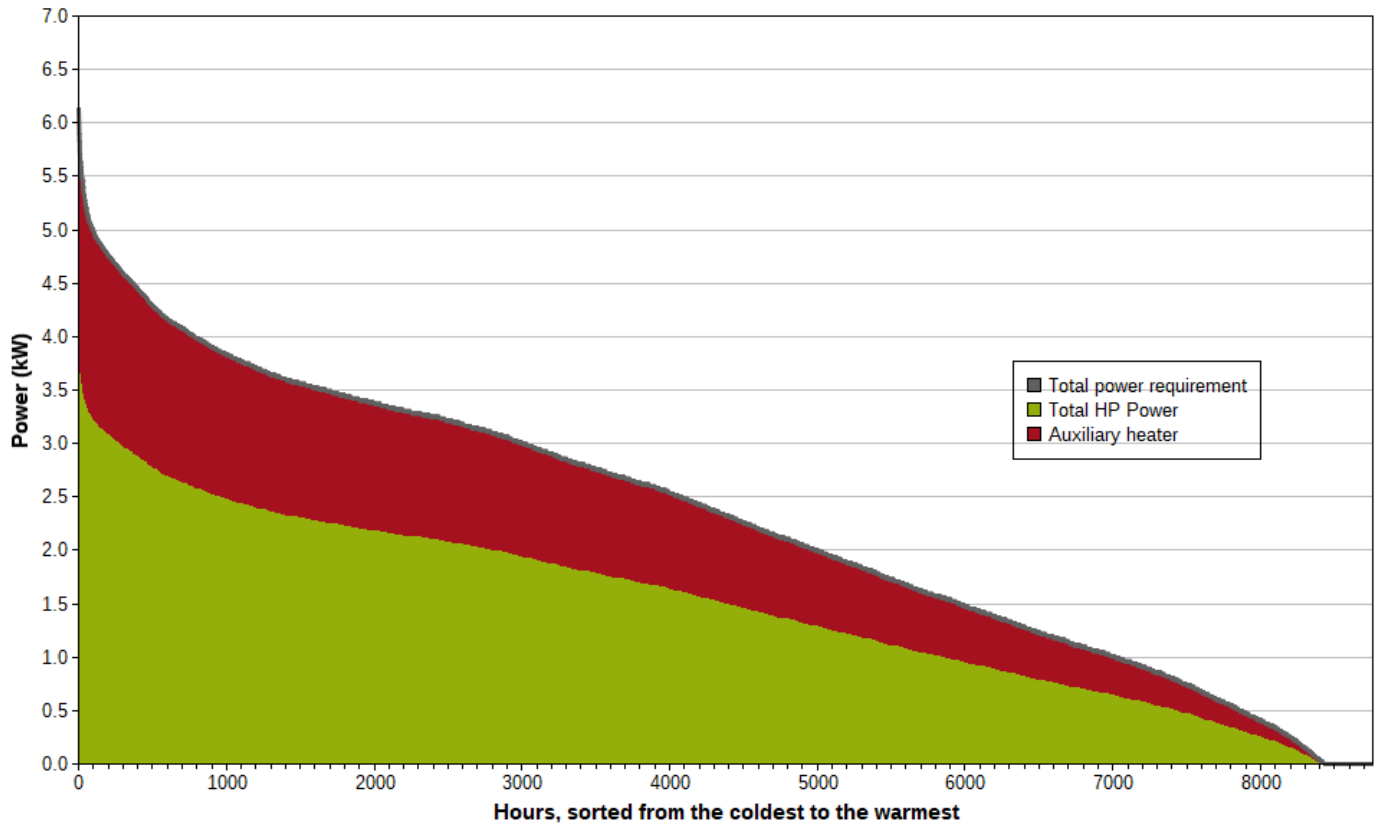
Electricity consumption



Energy production



Consecutive Graphs



Product information

| MSZ-LN | | | | | |
|-----------------------------|---|--------------|------------------------------|------------------------------|-------------------------------|
| INDOOR UNIT | | | MSZ-LN25VG | MSZ-LN35VG | MSZ-LN50VG |
| OUTDOOR UNIT | | | MUZ-LN25VGHZ | MUZ-LN35VGHZ | MUZ-LN50VGHZ |
| HEATING | Design load (P-Design) | kW | 3,2 | 4,0 | 6,0 |
| | Annual electricity consumption | kWh/a | 849 | 1082 | 1826 |
| | SCOP* | SCOP | A+++ / 5,2 | A+++ / 5,1 | A++ / 4,6 |
| | SCOP for cold climate | SCOP | A+ / 4,0 | A+ / 4,0 | A / 3,4 |
| | Heating capacity (Nominal) | kW | 3,2 | 4,0 | 6,0 |
| | Heating capacity (At -15°C) | kW | 3,2 | 4,0 | 6,0 |
| | Heating capacity (Min-Max) | kW | 1,0 - 6,3 | 1,0 - 6,6 | 1,8 - 8,7 |
| COOLING | Design load (P-Design) | kW | 2,5 | 3,5 | 5,0 |
| | Annual electricity consumption | kWh/a | 83 | 130 | 230 |
| | SEER | SEER | A+++ / 10,5 | A+++ / 9,4 | A++ / 7,6 |
| | Cooling capacity (Nominal) | kW | 2,5 | 3,5 | 5,0 |
| | Cooling capacity (Min-Max) | kW | 0,8 - 3,5 | 0,8 - 4,0 | 1,4 - 5,8 |
| | Dimensions (B x H x (I-See sensor) x D)*** | mm | 890 x 307(+34) x 233 | | |
| INDOOR UNIT | Weight | kg | 15,5 | 15,5 | 15,5 |
| | Air volume (Low- High) | m³ / 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) (Low - High) | 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 |
| | Dimensions(B x H x D) | mm | 800 x 550 x 285 | | 840 x 880 x 330 |
| OUTDOOR UNIT | Weight | kg | 35 | 36 | 55 |
| | Sound level - Heating (SPL) | dB(A) | 49 | 50 | 54 |
| | Sound level - Cooling (SPL) | dB(A) | 46 | 49 | 51 |
| | Recommended breaker size | A | 10 | 13 | 16 |
| | Guaranteed operation range (Heating / Cooling) | °C | -35 / -10 | -35 / -10 | -35 / -10 |
| | Pipe dimension (Liquid/ Gas) | inch | 1/4" - 3/8" | 1/4" - 3/8" | 1/4" - 3/8" |
| Max. piping length | m | 20 | 20 | 30 | |
| Max. Height different | m | 12 | 12 | 15 | |
| Electric data | V / Fas / Hz | 230 / 1 / 50 | 230 / 1 / 50 | 230 / 1 / 50 | |
| GWP / CO2 EQUIVALENT | | | | | |
| Refrigerant** | | | R32 | R32 | R32 |
| GWP | | | | 675 | 675 |
| Refrigerant charge | Weight | kg | 1,00 | 1,00 | 1,25 |
| | CO2-equivalent | ton | 0,68 | 0,68 | 0,85 |
| Max Refrigerant charge | Weight | kg | 0,26 | 0,26 | 0,26 |
| | CO2-equivalent | ton | 0,18 | 0,18 | 0,18 |

* SCOP Seasonal Coefficient of Performance. Annual efficiency-average climate zone.

** This product contains refrigerant type R32 with a GWP value of 675 (CO2 = 1kg) In case of intervention in the system, requirements according to the applicable F-gas regulation apply. This GWP value is based on Directive (EU) 517/2014 from the IPCC 4th edition.

*** Operating height 307 + 100mm.

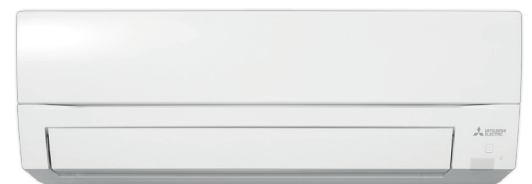


Product information

| MSZ-FT | | | | | |
|---|---|------------------------|-------------------------------|--------------------------------|--------------------------------|
| INDOOR UNIT | | MSZ-FT25VGK-SC | MSZ-FT35VGK-SC | MSZ-FT50VGK-SC | |
| OUTDOOR UNIT | | MUZ-FT25VGHZ-SC | MUZ-FT35VGHZ-SC | MUZ-FT50VGHZ-SC | |
| HEATING | Design load (P-Design) | kW | 3,2 | 4,0 | 5,0 |
| | Annual electricity consumption | kWh/a | 973 | 1216 | 1625 |
| | SCOP* | SCOP | A++/4,6 | A++/4,6 | A+/4,3 |
| | Heating capacity (Nominal) | kW | 3,2 | 4,0 | 5,0 |
| | Heating capacity (At -15°C) | kW | 3,6 | 4,4 | 5,0 |
| | Heating capacity (Min-Max) | kW | 0,9 - 6,2 | 0,9 - 6,6 | 0,9 - 7,8 |
| COOLING | Design load (P-Design) | kW | 2,5 | 3,5 | 5,0 |
| | Annual electricity consumption | kWh/a | 101 | 142 | 243 |
| | SEER | SEER | A+++/8,6 | A+++/8,6 | A++/7,2 |
| | Cooling capacity (Nominal) | kW | 2,5 | 3,5 | 5,0 |
| | Cooling capacity (Min-Max) | kW | 0,8 - 3,5 | 0,8 - 4,0 | 0,8 - 5,2 |
| INDOOR UNIT | Dimensions (B x H x D) | mm | 838 x 280 x 229 | | |
| | Weight | kg | 10 | 10 | 10 |
| | Air volume (Low- High) at heating operation | m³ / min | 3,9 - 6,3 - 9,0 - 12,0 - 13,2 | 3,9 - 6,9 - 10,2 - 13,5 - 14,7 | 5,5 - 8,4 - 11,4 - 14,4 - 15,5 |
| | Sound level (SPL) (Low - High) | dB(A) | 19 - 31 - 39 - 46 - 49 | 19 - 33 - 42 - 49 - 52 | 28 - 36 - 45 - 51 - 54 |
| | Sound level (PWL) | dB(A) | 60 | 60 | 60 |
| OUTDOOR UNIT | Dimensions (B x H x D) | mm | 800 x 714 x 285 | | |
| | Weight | kg | 34 | 40 | 40 |
| | Sound level - Heating / Cooling (SPL) | dB(A) | 49 / 46 | 52 / 49 | 54 / 51 |
| | Operating current (Max) | A | 9,6 | 13,5 | 13,5 |
| | Recommended breaker size | A | 10 | 16 | 16 |
| Guaranteed operation range (Heating / Cooling) | °C | -35 / -10 | -35 / -10 | -35 / -10 | |
| Operating current (Max) | A | 10,0 | 13,9 | 13,9 | |
| Pipe dimension (Liquid/ Gas) | inch | 1/4" / 3/8" | 1/4" / 3/8" | 1/4" / 3/8" | |
| Max. piping length | m | 20 | 30 | 30 | |
| Max. Height different | m | 12 | 15 | 15 | |
| Electric data | V / Fas /Hz | 230 / 1 /50 | 230 / 1 /50 | 230 / 1 /50 | |
| GWP / CO2 EQUIVALENT | | | | | |
| Refrigerant** | | | R32 | R32 | R32 |
| GWP | | | 675 | 675 | 675 |
| Refrigerant charge | Weight | kg | 0,85 | 0,95 | 0,95 |
| | CO2-equivalent | ton | 0,58 | 0,65 | 0,65 |
| Max Refrigerant charge | Weight | kg | 0,25 | 0,45 | 0,45 |
| | CO2-equivalent | ton | 0,17 | 0,31 | 0,31 |

* SCOP Seasonal Coefficient of Performance. Annual efficiency-average climate zone.

** This product contains refrigerant type R32 with a GWP value of 675 (CO2 = 1kg) In case of intervention in the system, requirements according to the applicable F-gas regulation apply. This GWP value is based on Directive (EU) 517/2014 from the IPCC 4th edition.



Product information

| MSZ-FH | | | | | |
|---|--------------------------------|-------------|------------------------------|------------------------------|-------------------------------|
| INDOOR UNIT | | | MSZ-FH25VE | MSZ-FH35VE | MSZ-FH50VE |
| OUTDOOR UNIT | | | MUZ-FH25VEHZ | MUZ-FH35VEHZ | MUZ-FH50VEHZ |
| HEATING | Design load (P-Design) | kW | 3,2 | 4,0 | 6,0 |
| | Annual electricity consumption | kWh/a | 924 | 1173 | 2006 |
| | SCOP* | SCOP | A++ / 4,9 | A++ / 4,8 | A+ / 4,2 |
| | Heating capacity (Nominal) | kW | 3,2 | 4,0 | 6,0 |
| | Heating capacity (At -15°C) | kW | 3,2 | 4,0 | 6,0 |
| | Heating capacity (Min-Max) | kW | 1,0 - 6,3 | 1,0 - 6,6 | 1,7 - 8,7 |
| COOLING | Design load (P-Design) | kW | 2,5 | 3,5 | 5,0 |
| | Annual electricity consumption | kWh/a | 96 | 138 | 244 |
| | SEER | SEER | A+++ / 9,1 | A+++ / 8,9 | A++ / 7,2 |
| | Cooling capacity (Nominal) | kW | 2,5 | 3,5 | 5,0 |
| | Cooling capacity (Min-Max) | kW | 0,8 - 3,5 | 0,8 - 4,0 | 1,9 - 6,0 |
| INDOOR UNIT | Dimensions (B x H x D) | mm | 925 x 305 (+17) x 234 | | |
| | Weight | kg | 13,5 | 13,5 | 13,5 |
| | Air volume (Low- High) | m³ / min | 4.0 - 4.7 - 6.4 - 9.2 - 13.2 | 4.0 - 4.7 - 6.4 - 9.2 - 13.2 | 5.7 - 7.2 - 9.0 - 11.2 - 14.6 |
| | Sound level (SPL) (Low - High) | dB(A) | 20 - 24 - 29 - 36 - 44 | 21 - 24 - 29 - 36 - 44 | 25 - 29 - 34 - 39 - 46 |
| | Sound level (PWL) | dB(A) | 58 | 58 | 60 |
| OUTDOOR UNIT | Dimensions (B x H x D) | mm | 800 x 550 x 285 | | 840 x 880 x 330 |
| | Weight | kg | 37 | 37 | 55 |
| | Sound level - Heating (SPL) | dB(A) | 49 | 50 | 54 |
| | Sound level - Cooling (SPL) | dB(A) | 46 | 49 | 51 |
| | Recommended breaker size | A | 10 | 13 | 16 |
| Guaranteed operation range (Heating / Cooling) | °C | -25 / -10 | -25 / -10 | -25 / -10 | |
| Pipe dimension (Liquid/ Gas) | inch | 1/4" / 3/8" | 1/4" / 3/8" | 1/4" / 1/2" | |
| Max. piping length | m | 20 | 20 | 30 | |
| Max. Height different | m | 12 | 12 | 15 | |
| Electric data | V / Fas / Hz | 230 / 50 | 230 / 50 | 230 / 50 | |
| GWP / CO2 EQUIVALENT | | | | | |
| Refrigerant** | | | R410A | R410A | R410A |
| GWP | | | 2088 | 2088 | 2088 |
| Refrigerant charge | Weight | kg | 1,15 | 1,15 | 1,55 |
| | CO2-equivalent | ton | 2,41 | 2,41 | 3,24 |
| Max Refrigerant charge | Weight | kg | 0,39 | 0,39 | 0,46 |
| | CO2-equivalent | ton | 0,82 | 0,82 | 0,97 |

* SCOP Seasonal Coefficient of Performance. Annual efficiency - what you can expect to receive again during the year.

** This product contains refrigerant type R410A with a GWP value of 2088 (CO2 = 1kg) In case of intervention in the system, requirements according to the applicable F-gas regulation apply.

This GWP value is based on Directive (EU) 517/2014 from the IPCC 4th edition.



Product information

| MSZ-AP | | | MSZ-AP25VGK | MSZ-AP35VGK | MSZ-AP42VG / VGK | MSZ-AP50VGK | MSZ-AP60VG | MSZ-AP71VG | |
|-----------------------------|--|--------------|------------------------|------------------------|-------------------------|------------------------|---------------------------------|----------------------------------|------------------|
| INDOOR UNIT | | | MSZ-AP25VGK | MSZ-AP35VGK | MSZ-AP42VG / VGK | MSZ-AP50VGK | MSZ-AP60VG | MSZ-AP71VG | |
| OUTDOOR UNIT | | | MUZ-AP25VGH | MUZ-AP35VGH | MUZ-AP42VGH | MUZ-AP50VGH | MUZ-AP60VGH | MUZ-AP71VGH | |
| HEATING | Design load (P-Design) | kW | 2,4 | 2,9 | 3,8 | 4,2 | 4,6 | 6,7 | |
| | Annual electricity consumption | kWh/a | 703 | 873 | 1134 | 1275 | 1398 | 2132 | |
| | SCOP* | SCOP | A++ / 4,7 | A++ / 4,6 | A++ / 4,6 | A++ / 4,6 | A++ / 4,6 | A+ / 4,4 | |
| | Heating capacity (Nominal) | kW | 3,2 | 4,0 | 5,4 | 5,8 | 3,7 | 5,4 | |
| | Heating capacity (At -15°C) | kW | 2,4 | 2,6 | 4,2 | 4,7 | 6,8 | 8,1 | |
| | Heating capacity (Min-Max) | kW | 1,0 - 4,1 | 1,3 - 4,6 | 1,3 - 6,0 | 1,4 - 7,3 | 2,0 - 8,6 | 2,2 - 10,3 | |
| COOLING | Design load (P-Design) | kW | 2,5 | 3,5 | 4,2 | 5,0 | 6,1 | 7,1 | |
| | Annual electricity consumption | kWh/a | 101 | 142 | 188 | 236 | 288 | 345 | |
| | SEER | SEER | A+++ / 8,6 | A+++ / 8,6 | A++ / 7,8 | A++ / 7,4 | A++ / 7,4 | A++ / 7,2 | |
| | Cooling capacity (Nominal) | kW | 2,5 | 3,5 | 4,2 | 5,0 | 6,1 | 7,1 | |
| | Cooling capacity (Min-Max) | kW | 0,9 - 3,4 | 1,1 - 3,8 | 0,9 - 4,5 | 1,4 - 5,4 | 1,4 - 7,3 | 2,0 - 8,7 | |
| | Dimensions (B x H x D) | mm | 798 x 299 x 219 | | | | | 1100 x 325 x 257 | 1100 x 325 x 257 |
| INDOOR UNIT | Weight | kg | 10,5 | 10,5 | 10,5 | 10,5 | 16 | 17 | |
| | Air volume (Low- High) | m³/min | 4,9-5,9-7,3-8,9-12,9 | 4,9-5,9-7,3-8,9-12,9 | 5,3-6,1-7,7-9,4-14,0 | 5,6-6,5-8,2-10,0-14,0 | 10,8 - 13,4 - 15, - 17,4 - 20,3 | 10,2 - 11,5 - 13,2 - 15,3 - 19,2 | |
| | Sound level (SPL) (Low - High) | dB(A) | 19 - 24 - 31 - 38 - 45 | 19 - 24 - 31 - 38 - 45 | 21 - 29 - 35 - 40 - 45 | 28 - 33 - 38 - 43 - 48 | 30 - 37 - 41 - 45 - 48 | 30 - 37 - 41 - 45 - 51 | |
| | Sound level (PWL) | dB(A) | 57 | 57 | 57 | 58 | 65 | 65 | |
| | Dimensions (B x H x D) | mm | 800 x 550 x 285 | | | 800 x 550 x 285 | 800 x 714 x 285 | 800 x 714 x 285 | 840 x 880 x 330 |
| | Weight | kg | 31 | 31 | 35 | 40 | 40 | 55 | |
| OUTDOOR UNIT | Sound level - Heating (SPL) | dB(A) | 48 / 47 | 50 / 49 | 51 / 50 | 52 / 52 | 57 / 56 | 55 / 56 | |
| | Sound level - Cooling (SPL) | dB(A) | 6,8 | 8,2 | 9,6 | 13,3 | 13,6 | 16 | |
| | Recommended breaker size | A | 10 | 10 | 13 | 16 | 16 | 20 | |
| | Guaranteed operation range (Heating / Cooling) | °C | -20 / -10 | -20 / -10 | -20 / -10 | -20 / -10 | -15 / -10 | -15 / -10 | |
| | Pipe dimension (Liquid/ Gas) | inch | 1/4" / 3/8" | 1/4" / 3/8" | 1/4" / 3/8" | 1/4" / 3/8" | 1/4" / 1/2" | 1/4" / 1/2" | |
| Max. piping length | m | 20 | 20 | 20 | 20 | 30 | 30 | | |
| Max. Height different | m | 12 | 12 | 12 | 12 | 15 | 15 | | |
| Electric data | V / Fas / Hz | 230 / 1 / 50 | 230 / 1 / 50 | 230 / 1 / 50 | 230 / 1 / 50 | 230 / 1 / 50 | 230 / 1 / 50 | | |
| GWP / CO2 EQUIVALENT | | | | | | | | | |
| Refrigerant** | | | R32 | R32 | R32 | R32 | R32 | R32 | |
| GWP | | | 675 | 675 | 675 | 675 | 675 | 675 | |
| Refrigerant charge | Weight | kg | 0,55 | 0,55 | 0,70 | 1,00 | 1,05 | 1,50 | |
| | CO2-equiv- valent | ton | 0,37 | 0,37 | 0,47 | 0,68 | 0,70 | 1,01 | |
| Max Refrigerant charge | Weight | kg | 0,26 | 0,26 | 0,26 | 0,26 | 0,30 | 0,30 | |
| | CO2-equiv- valent | ton | 0,18 | 0,18 | 0,18 | 0,18 | 0,20 | 0,20 | |

* SCOP Seasonal Coefficient of Performance. Annual efficiency-average climate zone.

** This product contains refrigerant type R32 with a GWP value of 675 (CO₂ = 1kg) In case of intervention in the system, requirements according to the applicable F-gas regulation apply. This GWP value is based on Directive (EU) 517/2014 from the IPCC 4th edition.



Product information

| MFZ-KJ | | | | |
|---|--------------------------------|----------------------|-----------------------------|-----------------------------|
| INDOOR UNIT | | MFZ-KJ25VE | MFZ-KJ35VE | |
| OUTDOOR UNIT | | MUFZ-KJ25VEHZ | MUFZ-KJ35VEHZ | |
| HEATING | Design load (P-Design) | kW | 3,5 | 3,6 |
| | Annual electricity consumption | kWh/a | 1104 | 1158 |
| | SCOP* | SCOP | A+ / 4,4 | A+ / 4,3 |
| | Heating capacity (Nominal) | kW | 3,4 | 4,3 |
| | Heating capacity (At -15°C) | kW | 3,4 | 4,3 |
| | Heating capacity (Min-Max) | kW | 1,2 - 5,1 | 1,2 - 5,8 |
| COOLING | Design load (P-Design) | kW | 2,5 | 3,5 |
| | Annual electricity consumption | kWh/a | 102 | 150 |
| | SEER | SEER | A+++ / 8,5 | A++ / 8,1 |
| | Cooling capacity (Nominal) | kW | 2,5 | 3,5 |
| | Cooling capacity (Min-Max) | kW | 0,5 - 3,4 | 0,5 - 3,7 |
| INDOOR UNIT | Dimensions (B x H x D) | mm | 750 x 600 x 215 | |
| | Weight | kg | 13,5 | 13,5 |
| | Air volume (Low- High) | m³ / min | 3,9 - 5,1 - 6,2 - 7,7 - 9,7 | 3,9 - 5,1 - 6,2 - 7,7 - 9,7 |
| | Sound level (SPL) (Low - High) | dB(A) | 19 - 25 - 30 - 35 - 41 | 19 - 25 - 30 - 35 - 41 |
| | Sound level (PWL) | dB(A) | 49 | 50 |
| OUTDOOR UNIT | Dimensions (B x H x D) | mm | 800 x 550 x 285 | |
| | Weight | kg | 37 | 37 |
| | Sound level - Heating (SPL) | dB(A) | 31,3 | 31,3 |
| | Sound level - Cooling (SPL) | dB(A) | 33,6 | 33,6 |
| | Recommended breaker size | A | 10 | 13 |
| Guaranteed operation range (Heating / Cooling) | °C | -25 / -10 | -25 / -10 | |
| Pipe dimension (Liquid/ Gas) | inch | 1/4" / 3/8" | 1/4" / 3/8" | |
| Max. piping length | m | 20 | 20 | |
| Max. Height different | m | 12 | 12 | |
| Electric data | V / Fas / Hz | 230 / 1 / 50 | 230 / 1 / 50 | |
| GWP / CO2 EQUIVALENT | | | | |
| Refrigerant** | | | R410A | R410A |
| GWP | | | 2088 | 2088 |
| Refrigerant charge | Weight | kg | 1,1 | 1,1 |
| | CO2-equivalent | ton | 2,30 | 2,30 |
| Max Refrigerant charge | Weight | kg | 0,39 | 0,39 |
| | CO2-equivalent | ton | 0,82 | 0,82 |

* SCOP Seasonal Coefficient of Performance. Annual efficiency - what you can expect to receive again during the year.

** This product contains refrigerant type R410A with a GWP value of 2088 (CO2 = 1kg) In case of intervention in the system, requirements according to the applicable F-gas regulation apply.

This GWP value is based on Directive (EU) 517/2014 from the IPCC 4th edition.

