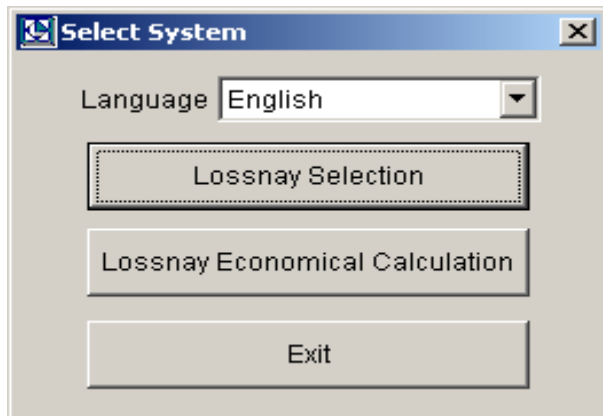


Lossnay Selection & Lossnay Economical calculation

1.What is Lossnay Selection & Lossnay Economical calculation

This program can be used to select the best model based on the relationship between the heat exchange ratio and static loss characteristics for processed air volume performance of each Lossnay model and calculate the heat recovery effect and economy. Once the program has been started, the menu shown below will appear. Select the program to be started from this menu.



Lossnay Selection

Lossnay selection candidates are displayed based on required air volume and static pressure. The amount of recovered heat and outdoor air load can be calculated based on indoor and outdoor conditions.

Lossnay Economical Calculation

The outdoor air load, amount of heat recovered and savings are calculated. The economical efficiency can also be displayed in graph form.

"When the ""Lossnay selection & Economical calculation"" has been started, use this program for switching the display to the language of your country.

Enter the suitable words or phrases corresponding to those in the original language. (The default is English.) (Use abbreviations if there are many characters in your language. Some of the characters may not be displayed properly when ""Lossnay selection & Economical calculation"" is displayed.)

Click [Convert] and the conversion to your language will be made. The program will then end.

Start the ""Lossnay selection & Economical calculation"" and the next time the program is started, it will be in the converted language."

Language convert

Help

Language name Font

Original Language	New Language
Lossnay Selection	Lossnay Selection
Lossnay Economical Calculation	Lossnay Economical Calculation
Exit	Exit
Room Conditions	Room Conditions
Indoor Condition	Indoor Condition
Outdoor Condition	Outdoor Condition
Airflow per person	Airflow per person
Number of persons	Number of persons
Total supply air	Total supply air
Supply air (SA)	Supply air (SA)
Lossnay	Lossnay
Sensible heat exchanger	Sensible heat exchanger
Conventional ventilator	Conventional ventilator
Dry bulb temperature	Dry bulb temperature

Enter the words in your lanugage.
Then click "convert".

Convert Cancel

2. Main window

Before to use

The price setting must be made before using the economical calculation function. If this setting is not made, the economical calculation will not be performed properly. To make the setting, click [Option] - [Price]. Refer to "Price" for details about making this setting.

1. Enter the indoor conditions. (d)
2. Enter the outdoor conditions. (b)
3. Enter the air conditioning operation time for heating and cooling. (e)

Enter the time used per day.

Enter the number of days used per month.

Enter the number of months used per year.

4. Enter the energy cost and COP. (f)

Enter the energy cost per kWh

5. Enter the external static pressure. (c)

6. Select the Lossnay models. (a)

If this is started from "Lossnay Selection", the Lossnay unit, air speed and number of units that have been specified will automatically be selected.

Select the air volume.

Select the number of Lossnay units to be used.

7. Comparison of outdoor air load and heat recovery for Lossnay, sensible heat exchanger and conventional ventilator based on the conditions entered. (g)

Displays a graph of the outdoor air load for the Lossnay, sensible heat exchanger and conventional ventilator during heating and cooling. The white portion shows the amount of recovered heat.

To understand what the different settings mean, just click on the part you are interested in.

MITSUBISHI ELECTRIC CORPORATION Lossnay Economical Calculation

File Option Help

Lossnay Economical Calculation

Selection

Power Supply: 220V 50Hz
 Selected Models: LGH-100RXS-E
 Air volume: Extra High
 Units: 1

Outdoor Condition

	Heating (Winter)	Cooling (Summer)
Temperature (°C)	20	35
Relative humidity (%)	80	70
Enthalpy (kJ/kg)	-18.8	99.6

Indoor Condition

Supply Air: (m³/h) 1133
 Supply Static Pressure: (Pa) 100

	Heating (Winter)	Cooling (Summer)
Temperature (°C)	20	26
Relative humidity (%)	50	50
Enthalpy (kJ/kg)	38.6	52.9

Operation Time: hour/day 10, day/month 25, month/year 4

Energy cost: 3
 COP: 2

Supply air (SA)

	Heating (Winter)	Cooling (Summer)
Dry bulb temperature (°C)	11.3	28.3
Relative humidity (%)	50.1	63.3
Enthalpy (kJ/kg)	21.8	67.5
Temp. Efficiency (%)	78.2	74.6
Enthalpy Efficiency (%)	70.8	68.6

Outdoor(Supply) air load

	Heating (Winter)	Cooling (Summer)
Lossnay (kW)	6.36	5.51
Sensible heat exchanger (kW)	9.82	14.96
Conventional ventilator (kW)	21.72	17.62
Lossnay Total heat recovered (kW)	15.36	12.11
Outdoor air ratio (%)	29	31

Outdoor air load Heating(Winter)

Conventional ventilator: 21.72
 Sensible heat exchanger: 9.82 (Recovered: 11.9)
 Lossnay: 6.36 (Recovered: 15.36)

Outdoor air load Cooling(Summer)

Conventional ventilator: 17.62
 Sensible heat exchanger: 14.96 (Recovered: 2.66)
 Lossnay: 5.51 (Recovered: 12.11)

This calculated value is an approximate value, which may vary depending on the environment of actual use of the device.

Pay Back Lossnay Selection Print Specification

3. Pay Back window

Comparison of cost for Lossnay, sensible heat exchanger and conventional ventilator based on the conditions entered.

This graph shows that in comparison to a conventional ventilator, since there is heat recovery when a Lossnay is used, the number of years at the intersecting point on the graph will be the same, after which the use of the Lossnay will be more economical.

If the sensible heat exchanger is checked in the "Price" window, the comparison will be with a sensible heat exchanger.

The picture below is a copy of the Economical calculation payback window.

* Prices are just samples

To understand what the different settings mean, just click on the part you are interested in.

