

U-match Selector 帮助文档

Ver. 1.0

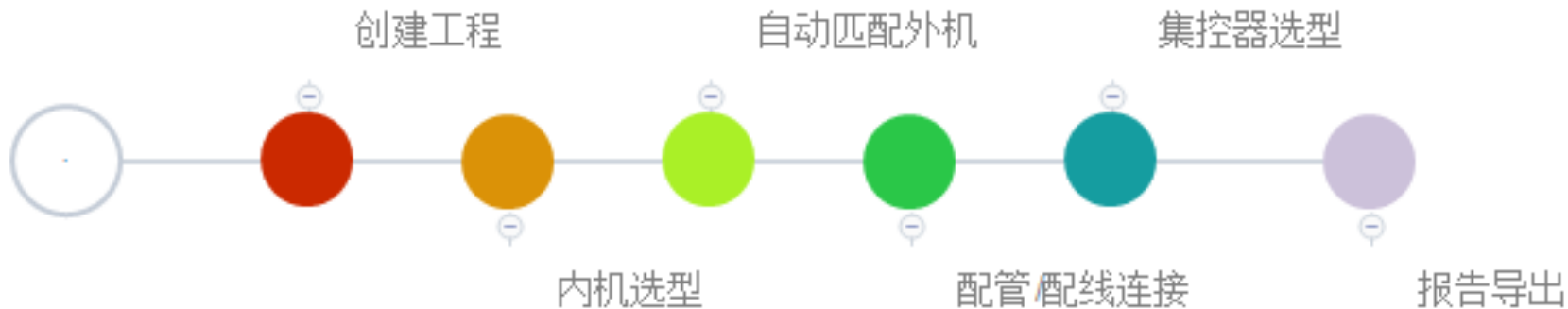
2023/5/17

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一、概述

格力新一代选型软件，经过对市场全面的调研分析，并结合多年的选型经验，深入钻研多联产品选型逻辑之间的关系，针对客户的痛点，全面优化选型流程，使其可以适用于不同的客户群体，便捷的操作中体现出专业选型的严谨，让客户每一次选型，都成为一次愉快的“旅行”。



二、选型

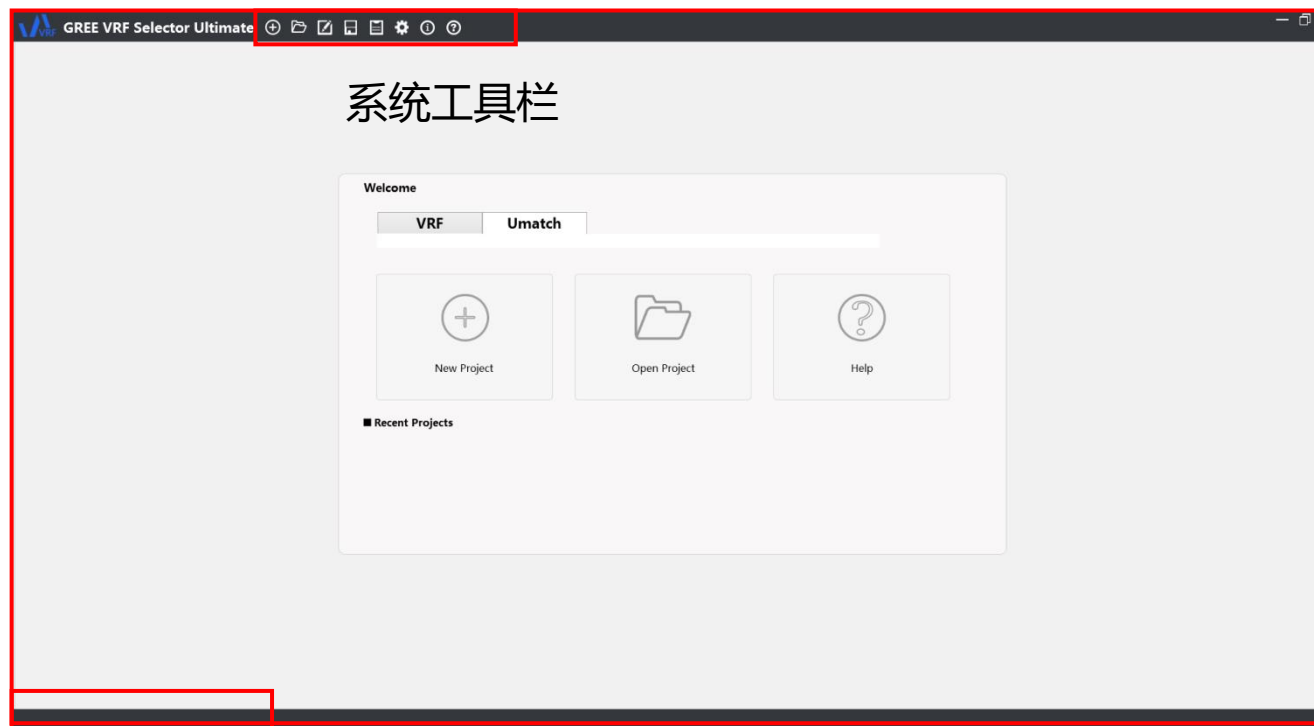
1.软件主界面

软件主窗体主要分为三个部分。

- 1、系统工具栏（包括工程的新建，保存，编辑以及系统级的设置）
- 2、主窗体页（软件内容的展示区域）
- 3、消息提示栏（显示系统消息提示）

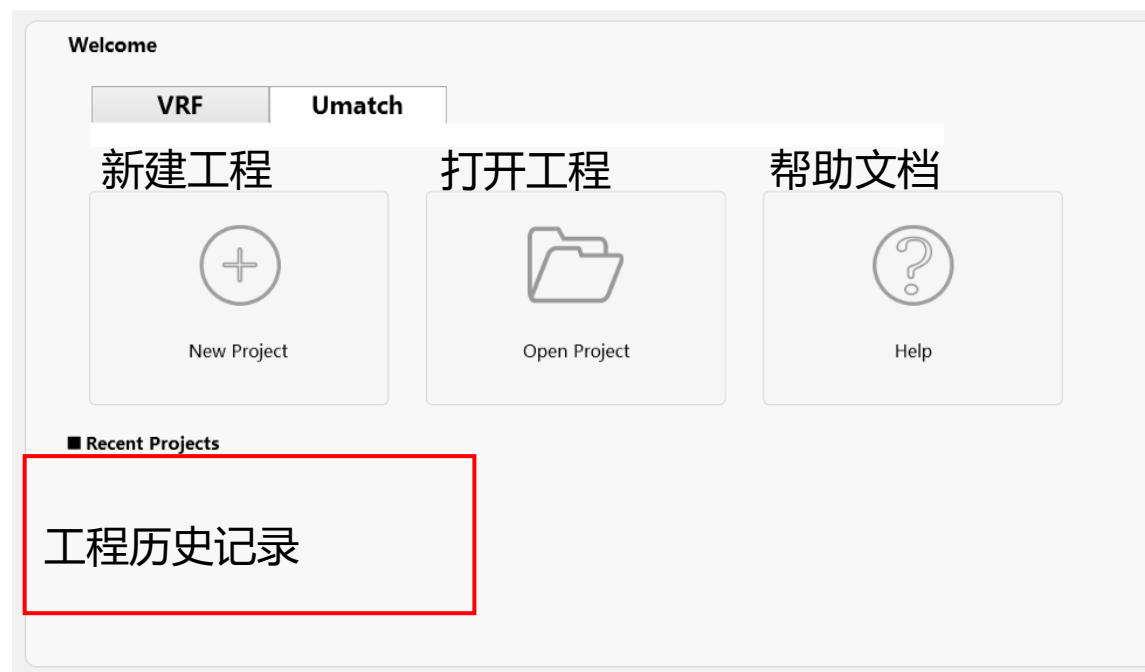
主窗体页

消息提示栏



1.1 欢迎界面

启动软件后，在主窗体中显示的是欢迎界面

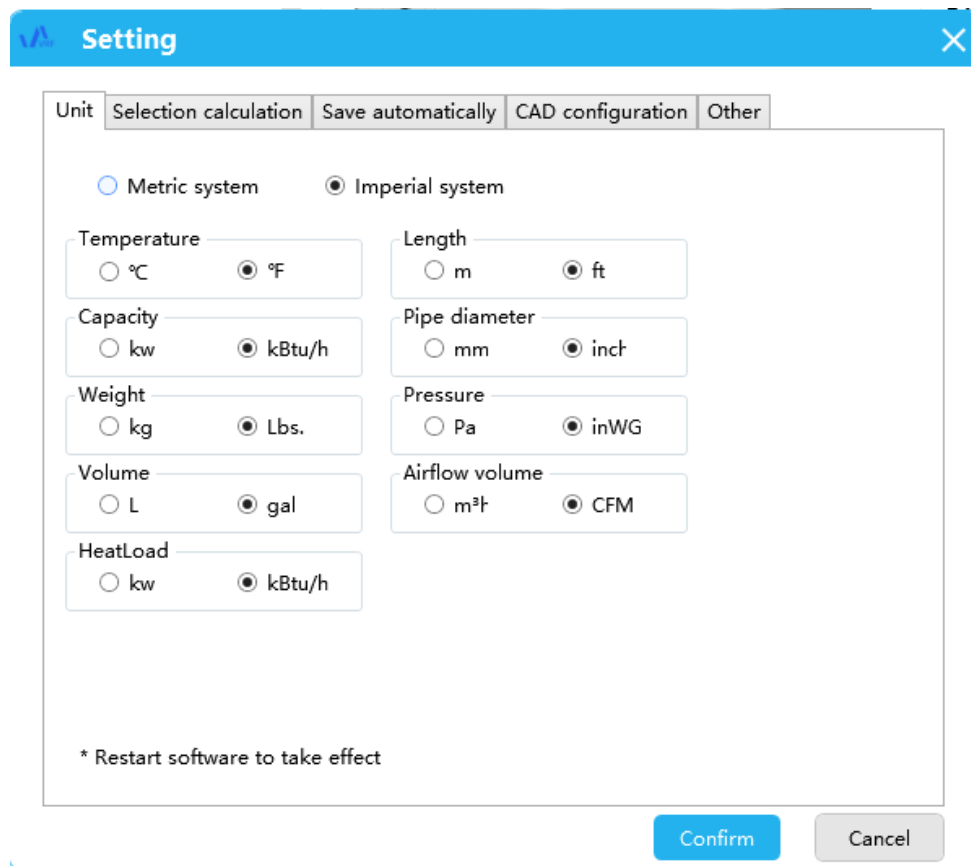


1.2 系统工具栏



1.3设置

1、单位设置（设置选型过程中运算的单位）



The image shows a 'Setting' dialog box with a blue header bar containing a logo and a close button. Below the header is a tabbed interface with five tabs: 'Unit', 'Selection calculation', 'Save automatically', 'CAD configuration', and 'Other'. The 'Unit' tab is active. Inside the 'Unit' tab, there are two radio buttons: 'Metric system' (unselected) and 'Imperial system' (selected). Below these are several groups of unit selection options, each with a label and two radio buttons. The groups are: Temperature (°C, °F), Capacity (kw, kBtu/h), Weight (kg, Lbs.), Volume (L, gal), HeatLoad (kw, kBtu/h), Length (m, ft), Pipe diameter (mm, inch), Pressure (Pa, inWG), and Airflow volume (m³/h, CFM). At the bottom of the dialog, there is a note: '* Restart software to take effect'. Two buttons, 'Confirm' and 'Cancel', are located at the bottom right of the dialog.

Setting

Unit Selection calculation Save automatically CAD configuration Other

☐ Metric system ☒ Imperial system

Temperature
☐ °C ☒ °F

Length
☐ m ☒ ft

Capacity
☐ kw ☒ kBtu/h

Pipe diameter
☐ mm ☒ inch

Weight
☐ kg ☒ Lbs.

Pressure
☐ Pa ☒ inWG

Volume
☐ L ☒ gal

Airflow volume
☐ m³/h ☒ CFM

HeatLoad
☐ kw ☒ kBtu/h

* Restart software to take effect

Confirm Cancel

1.3设置

2.选型计算（自动调整方式、允许误差、修正系数）

默认选型过程中
内外机同时调整

Setting

Unit

Selection calculation

Save automatically

CAD configuration

Other

Adjust the way ⓘ

☒ Adjust IDU and ODU at the same time

☐ Only adjust outdoor unit

Indoor unit tolerances allowed ⓘ

Cooling	-10%		20%	0%
Heating	-10%		20%	0%
Sensible Cooling	-10%		20%	0%

Indoor unit maximum simultaneous utilization rate ⓘ

Cooling	80%		100%	100%
Heating	80%		100%	100%

Select the modification item of the actual capacity of the unit ⓘ

Indoor unit

Cooling	<input checked="" type="checkbox"/> m	<input checked="" type="checkbox"/> b	
Heating	<input checked="" type="checkbox"/> m	<input checked="" type="checkbox"/> b	<input checked="" type="checkbox"/> c
Sensible Cooling	<input checked="" type="checkbox"/> m	<input checked="" type="checkbox"/> b	<input checked="" type="checkbox"/> n

Outdoor unit

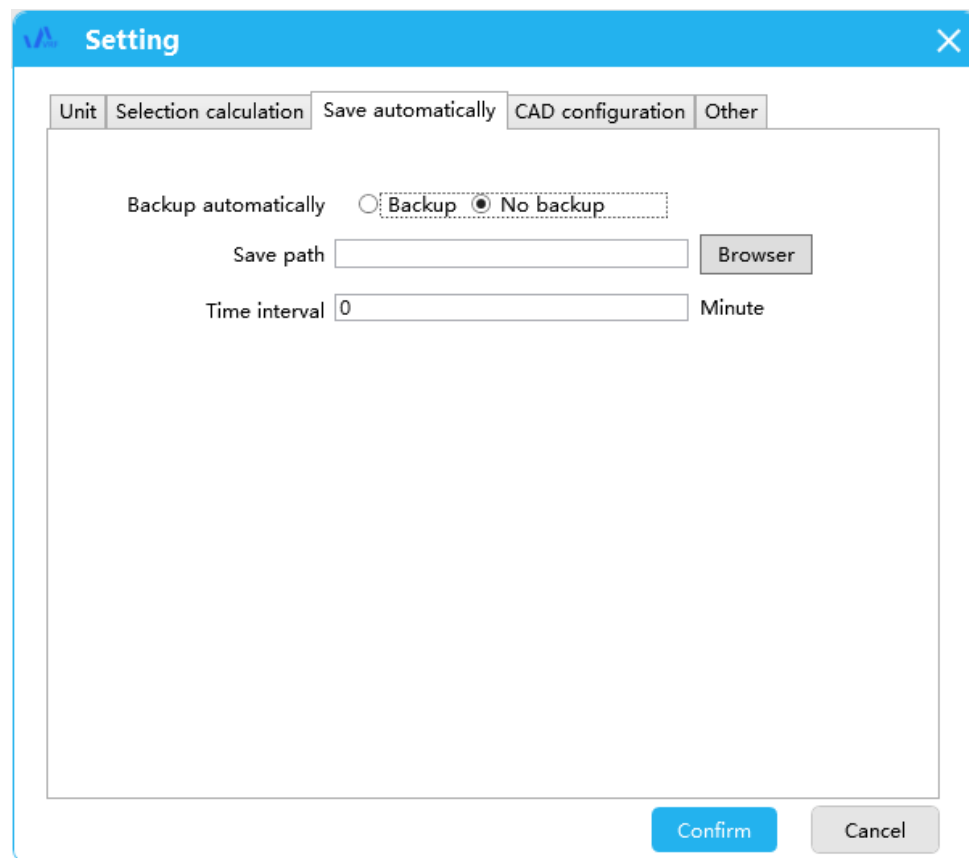
Cooling	<input checked="" type="checkbox"/> a	<input checked="" type="checkbox"/> b	
Heating	<input checked="" type="checkbox"/> a	<input checked="" type="checkbox"/> b	<input checked="" type="checkbox"/> c
Sensible Cooling	<input checked="" type="checkbox"/> a	<input checked="" type="checkbox"/> b	<input checked="" type="checkbox"/> n
Water Cooling	<input checked="" type="checkbox"/> d		
Heating	<input checked="" type="checkbox"/> d		

Confirm

Cancel

1.3设置

3.自动保存设置（设定自定保存的路径、周期）



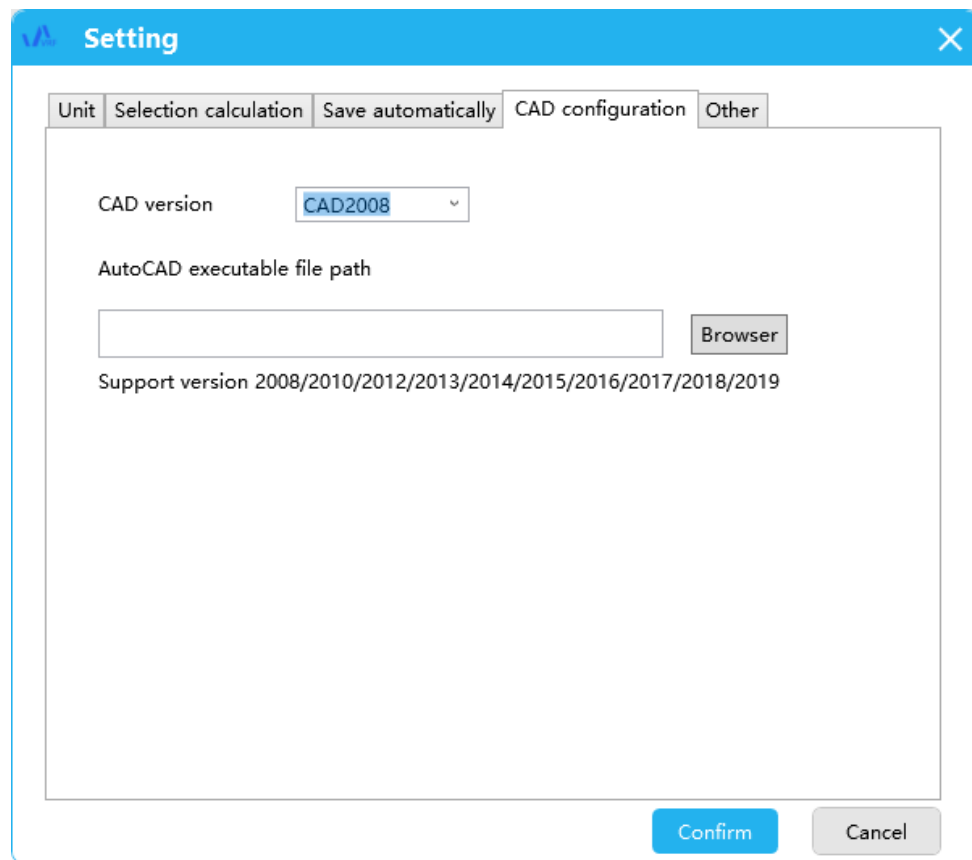
The image shows a software settings window titled "Setting" with a blue header bar and a close button (X) in the top right corner. The window contains five tabs: "Unit", "Selection calculation", "Save automatically", "CAD configuration", and "Other". The "Save automatically" tab is currently selected. Inside this tab, there are three main settings:

- Backup automatically:** A label followed by two radio buttons. The first is labeled "Backup" and is unselected. The second is labeled "No backup" and is selected (indicated by a filled circle).
- Save path:** A text input field followed by a "Browser" button.
- Time interval:** A text input field containing the number "0", followed by the word "Minute".

At the bottom right of the dialog, there are two buttons: "Confirm" (in blue) and "Cancel" (in grey).

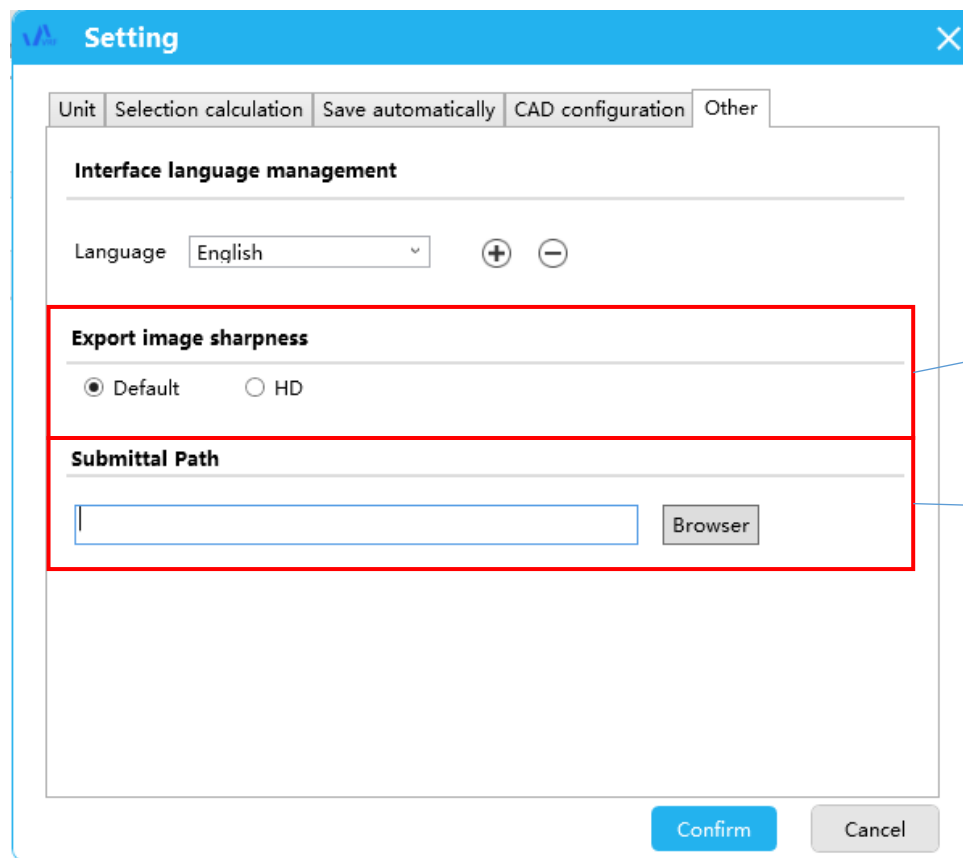
1.3设置

4.AutoCAD设置（AutoCAD版本、启动程序路径）



1.3 设置

5. 其他设置 (增删语言、高清图像、submittal)



高清图像导出设置

Submittal资源路径设置
(此功能暂开放北美区域)

2.工程建立

点击工具栏新建工程或者欢迎界面新建工程按钮，打开新建工程窗体

Project information

Project information

Area: North America Frequency: 50Hz 60Hz

Project Name: Address:

Date: 2021/9/4 Contract No.:

Client information

Name: Position:

Company: Address:

Tel: Fax:

☐ Save client information

Designer information

Name: Position:

Company: Address:

Tel: Fax:

☐ Save designer information

Remark:

Confirm Cancel

工程信息录入：

可以选择不同的区域，做到区域数据定制化

可以选择不同的电源规格

客户基本信息录入

设计者基本信息录入

信息录入完毕后，点击确认，进入内机选型界面

2.工程建立

附：选择北美地区后，点击确定时，可选择是否跳转，进入“超低温选型软件”

The image shows a software window titled "Project information" with a blue header bar. The window contains several sections for data entry:

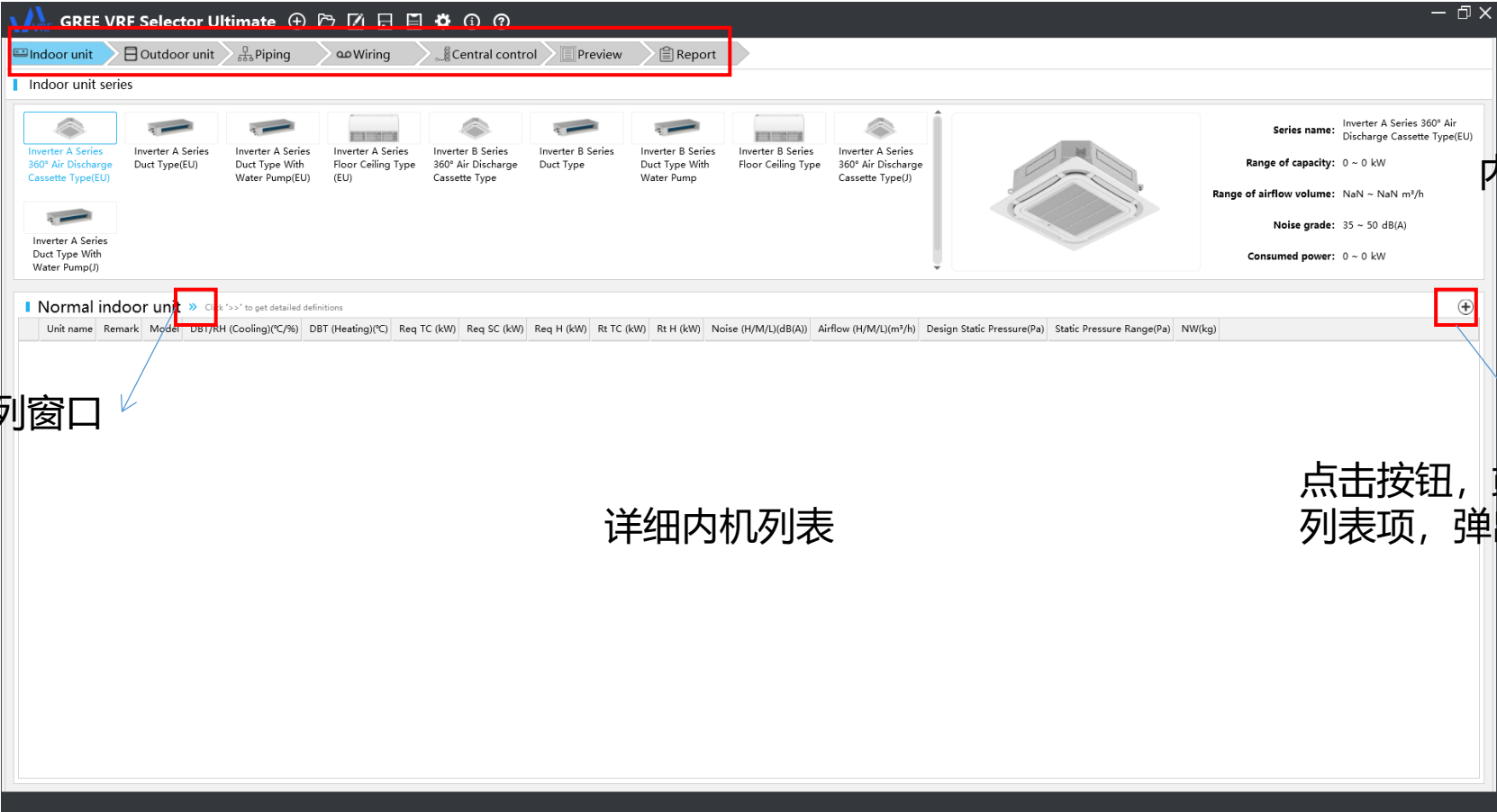
- Project information:** Includes a dropdown menu for "Area" (currently set to "North America"), a "Frequency" section with radio buttons for "50Hz" and "60Hz" (60Hz is selected), and input fields for "Project Name", "Address", "Date" (set to 2021/9/4), and "Contract No.".
- Client information:** Includes input fields for "Name", "Position", "Company", and "Tel".
- Designer information:** Includes input fields for "Name", "Company", "Address", "Tel", and "Fax". There is also a checkbox labeled "Save designer information".
- Remark:** A large text area at the bottom for additional notes.

A red rectangular box highlights the "Area" dropdown and the "Project Name" field. A smaller red rectangular box highlights a confirmation dialog box that appears over the "Client information" and "Designer information" sections. The dialog box contains the text: "The North American region is currently selected, is it entering the ultra-low temperature multi-online selection?" and has three buttons: "Yes", "No", and "Cancel". At the bottom of the main window, there are "Confirm" and "Cancel" buttons.

3.内机选型

内机选型界面布局

选型流程导航栏（注：添加内机前，其他界面被屏蔽）



内机系列列表

内机系列信息

点击蓝色箭头弹出参数列窗口

点击按钮，或者双击内机系列列表项，弹出添加内机窗口

详细内机列表

3.内机选型

详细参数列选择

Normal indoor unit >> Click ">>" to get detailed definitions											+
Unit name	Remark	Model	DBT/RH (Cooling)(°F/%)	DBT (Heating)(°F)	Req TC (kBtu/h)	Req SC (kBtu/h)	Req H (kBtu/h)	Rt TC (kBtu/h)	Rt H (kBtu/h)	Noise (H/M/L)(dB(A))	Airflow (H/M/L)(CFM)

Specification

×

Select the following options, it will be displayed in detailed list

☒ Unit name

User-defined unit name

☒ Remark

Unit information remarked by tl

☒ Model

Unit model

☒ DBT/RH (Cooling)(°F/%)

Cooling dry bulb temperature/r

☒ DBT (Heating)(°F)

Heating inddor dry bulb tempe

☒ Req TC (kBtu/h)

Total cooling load of user desig

☒ Req SC (kBtu/h)

Sensible cooling load of user d

☒ Req H (kBtu/h)

Heating load of user design de

☒ Rt TC (kBtu/h)

Rated total cooling capacity of

☒ Rt H (kBtu/h)

Rated heating capacity of air cc

☒ Noise (H/M/L)(dB(A))

Unit noise

1.通过勾选对应的参数选项，来调整内机选型界面中内机展示列表的数据列。

2.说明每个简写列名对应的参数信息

3.内机选型

添加内机窗口

U-Match Unit

Unit name: U-Match 1

Remark:

ODU Type: Heat pump ODU Power: 220~240V, 1Ph

IDU Type: Cassette IDU Series: Inverter A Series

☐ Manual selection

Design condition

Design condition

Cooling Indoor DBT: 27.00 °C WBT: 19.00 °C RH: 45.77 % Outdoor DBT: 35.00 °C

Heating Indoor DBT: 20.00 °C Outdoor DBT: 7.00 °C WBT: 6.00 °C RH: 85.36 %

Required Capacity

Total cooling: 0 kW Heating: 0 kW Static pressure: 0 Pa

Height Difference

0 m

Cancel Add

设定内机名称、备注、功能类型电源规格

点击蓝色箭头，或勾选选择框，
弹出手动选择窗口
(添加AHU-KIT时选择AHU类型，
添加之后不可变更)

工况设定

设计负荷
(根据不同的内机系列，
显示不同的设计负荷选型)

其他设定，相对外机落差
(例图示意内外机上下关系)

点击“添加”时，添加一台内机

普通内机

3.内机选型

自动推荐

U-Match Unit

Unit name

U-Match 1

Remark

ODU Type

Heat pump

ODU Power

220~240V,1Ph

IDU Type

Cassette

IDU Series

Inverter A Serie

☐ Manual selection

Design condition

Cooling

Indoor

DBT

27.00

°C

WBT

19.00

°C

RH

45.77

%

Outdoor

DBT

35.00

°C

Heating

Indoor

DBT

20.00

°C

Outdoor

DBT

7.00

°C

WBT

6.00

°C

RH

85.36

%

Required Capacity

Total cooling

0

kW

Heating

0

kW

Static pressure

0

Pa

Height Difference

0

m

Cancel

Add

Normal indoor unit [Click ">>" to get detailed definitions](#)

Unit name	Remark	Model	DBT/RH (Cooling)(°C/%)	DBT (Heating)(°C)	Req TC (kW)	Req SC (kW)	Req H (kW)	Rt TC (kW)	Rt H (kW)	Noise (H/M/L)(dB(A))	Airflow (H/M/L)(m³/h)	Design Static Pressure(Pa)	Static Pressure Range(Pa)	NW(kg)
U-Match 1		GUD35T1/A-S	27 / 45.77	20	0	0	0	3.5	4	35/33/29	- / - / -	0	0	16.5
U-Match 2		GUD35T1/B-S	27 / 45.77	20	0	0	0	3.5	4	35/33/29	- / - / -	0	0	16.5
U-Match 3		GUD18T1/A-S(J)	27 / 45.77	20	0	0	0	5.28	5.8	35/33/31	- / - / -	0	0	9.53

- (全自动)
- 1.每次点击add按钮，就会自动根据选择的内机系列，输入的工况、设计负荷来自动选择内机，并添加到内机展示列表
 - 2.内机会在后续选项中自动调整
 - 3.若无机型满足要求，则会提示原因
- (半自动)
- 点击蓝色箭头后，会弹出手动选型窗体，不勾选手动选型框时：
- 1.双击特定型号内机时，将该机型额定功率设定为设计负荷；点击添加时，推荐满足负荷要求的机型，并添加到内机展示列表
 - 2.内机在后续选型中会自动调整

3.内机选型

手动选择

U-Match Unit

Unit name

U-Match 4

Remark

ODU Type

Heat pump

ODU Power

220~240V,1Ph

IDU Type

Cassette

IDU Series

Inverter A Serie

☒ Manual selection

»

Model

Design condition

Cooling

Indoor

DBT

27.00

°C

WBT

19.00

°C

RH

45.77

%

Outdoor

DBT

35.00

°C

Heating

Indoor

DBT

20.00

°C

Outdoor

DBT

7.00

°C

WBT

6.00

°C

RH

85.36

%

Required Capacity

Total cooling

0

kW

Heating

0

kW

Static pressure

0

Pa

Height Difference

0

m

Indoor

Outdoor

Indoor

Outdoor

Indoor

Outdoor

Cancel

Add

Indoor unit series

Inverter A Series

360° Air Discharge

Cassette Type(EU)

Inverter B Series

360° Air Discharge

Cassette Type

Inverter A Series

360° Air Discharge

Cassette Type(J)

Indoor unit list

Model	Rt TC (kW)	Rt H (kW)	NW(kg)	Noise (H/M/L)(dB(A))
GUD35T1/A-S	3.5	4	16.5	35/33/29
GUD50T1/A-S	5.3	5.8	21	35/33/31
GUD50T1/A1-S	5	5.6	16.5	41/39/35
GUD71T1/A-S	7.1	7.8	21	38/36/34
GUD85T1/A-S	8.5	8.8	21	46/42/38
GUD100T1/A-S	10.5	11.5	23	41/39/38
GUD125T1/A-S	12.1	13.5	23	46/43/39
GUD140T1/A-S	13.4	15.5	25	48/45/41

(纯手动)
在勾选手动选型窗口后，会弹出手动选型窗体

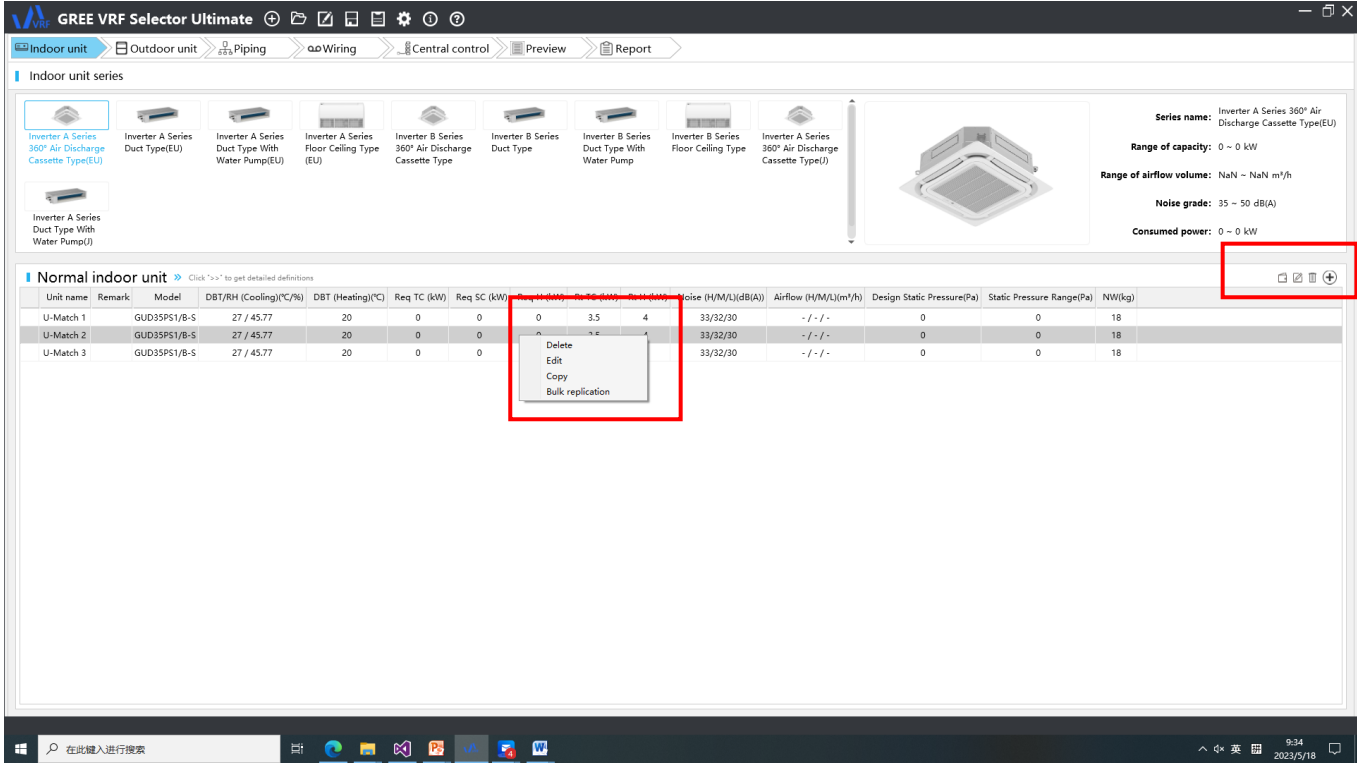
1.双击特定型号内机时，若当前输入负荷为“0”，则设定设计负荷，若当前负荷不为“0”，则不改变设计负荷；Model会显示客户选择的具体内机，点击添加时，内机展示列表中添加此机型

2.内机在后续选型中不会调整

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3.内机选型

内机列表操作



单击列表某一内机，表头出现三个图标

右击列表某一内机，出现操作菜单

三个图标对应操作菜单三项：

Delete：可以删除对应的内机

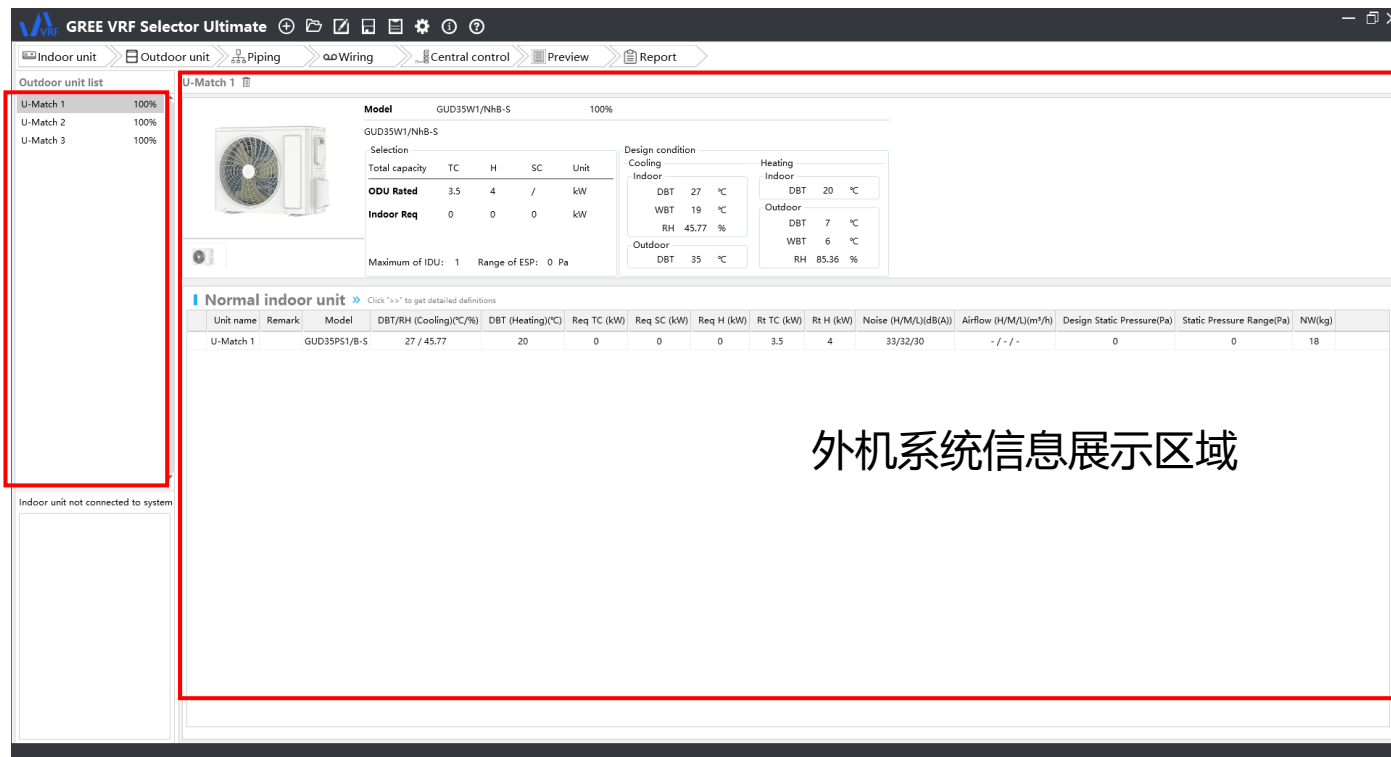
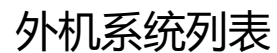
Edit：可以编辑对应的内机

Copy：复制对应的内机

4.外机选型

外机选型界面布局

内机选型完毕后，点击选型过程导航栏中的外机，进入外机选型界面



外机系统信息展示区域

5.配管连接

配管界面（以热泵系统为例）

配管操作工具栏

图例

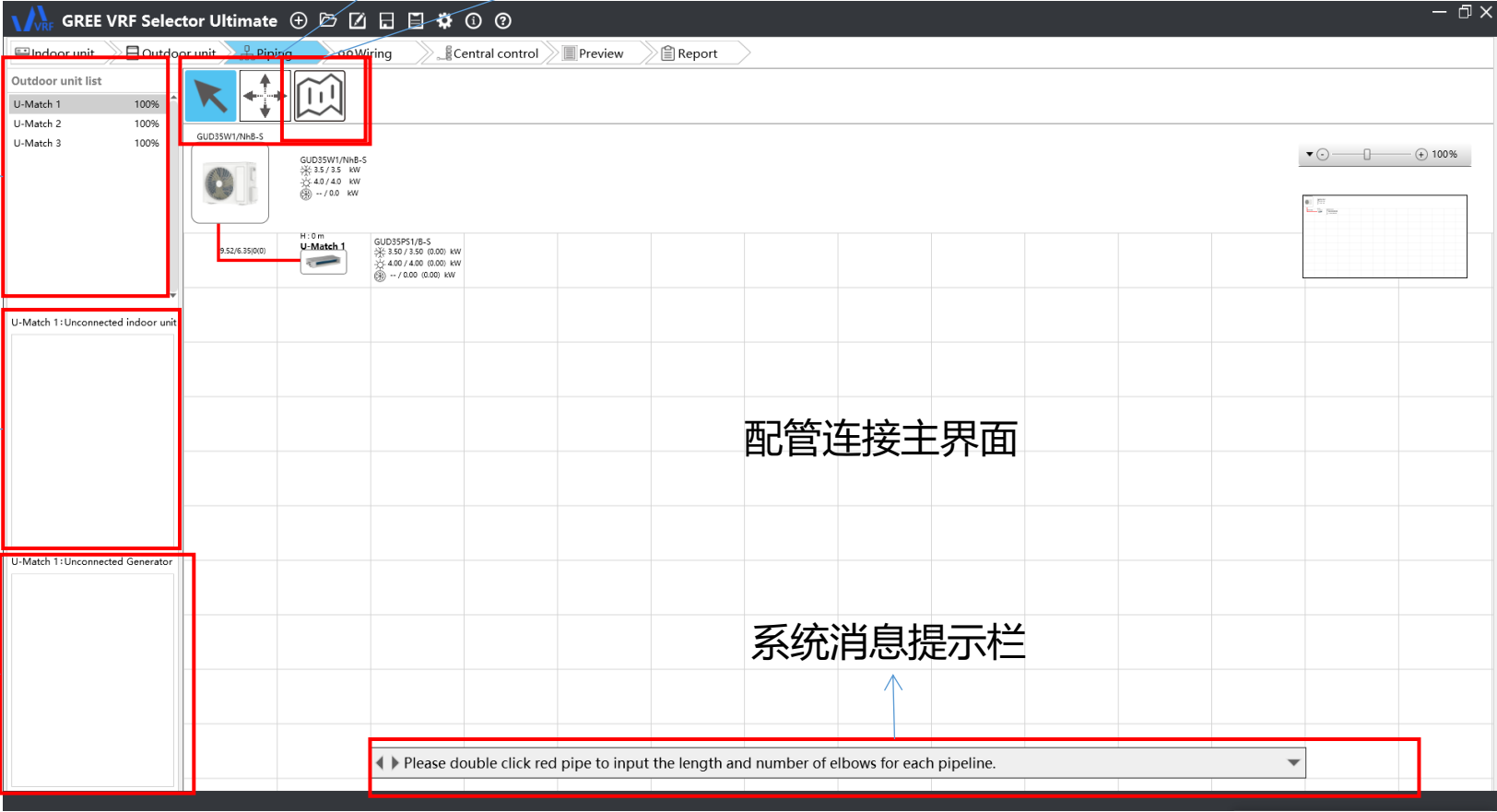
外机系统列表

未接入配管连接的内机列表

未接入配管连接的热水发生器列表

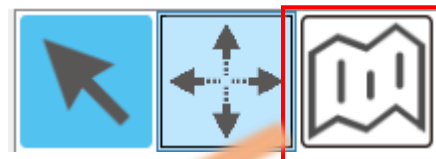
配管连接主界面

系统消息提示栏



5.配管连接

配管图例



Legend

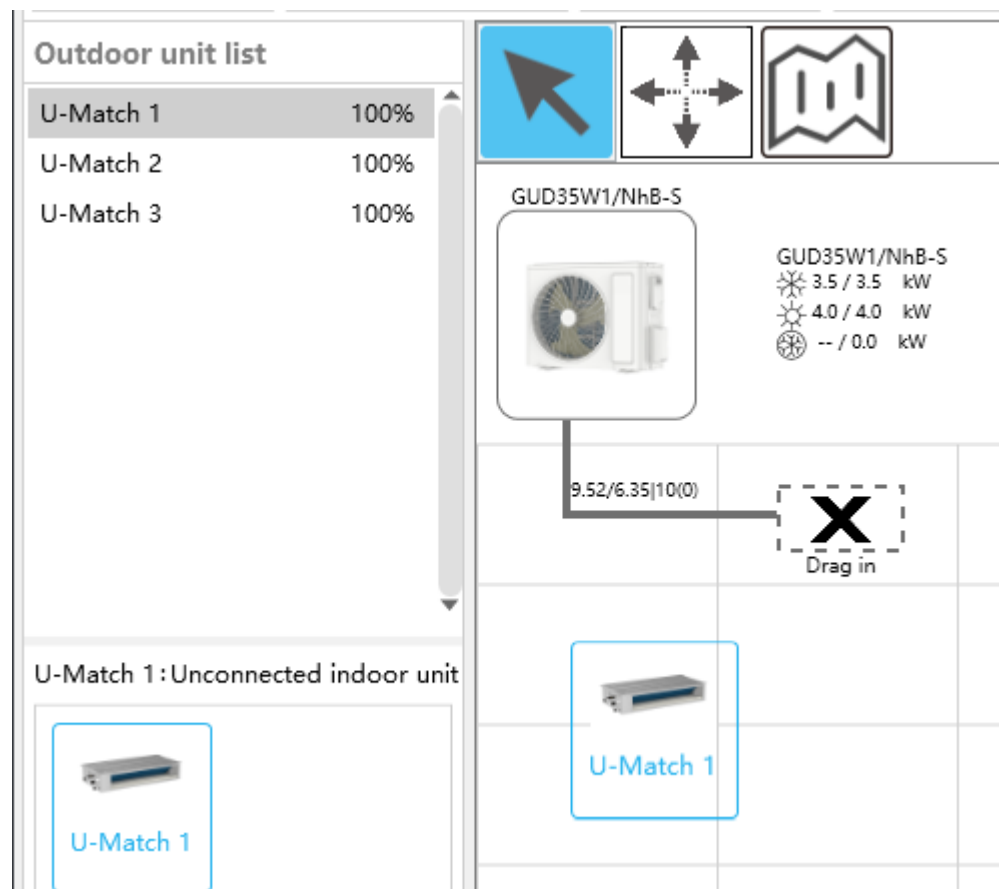
Item	Explain
1	Branch Name : Branch Model
2	Gas pipe /The pipe diameter of Liquid
3	The length of pipe(Elbow quantity)
4	H:Drop from ODU
5	Unit name
6	Unit model
7	Cooling Rated Capacity /Actual Capacity
8	Heating Rated Capacity /Actual Capacity
9	Sensible Cooling -- /Actual Capacity(l
10	Branch
11	Indoor unit
12	Connecting pipe
13	An unconnected branch

点击图例按钮，弹出图例
信息窗口

5.配管连接

配管连接流程→拖动内机

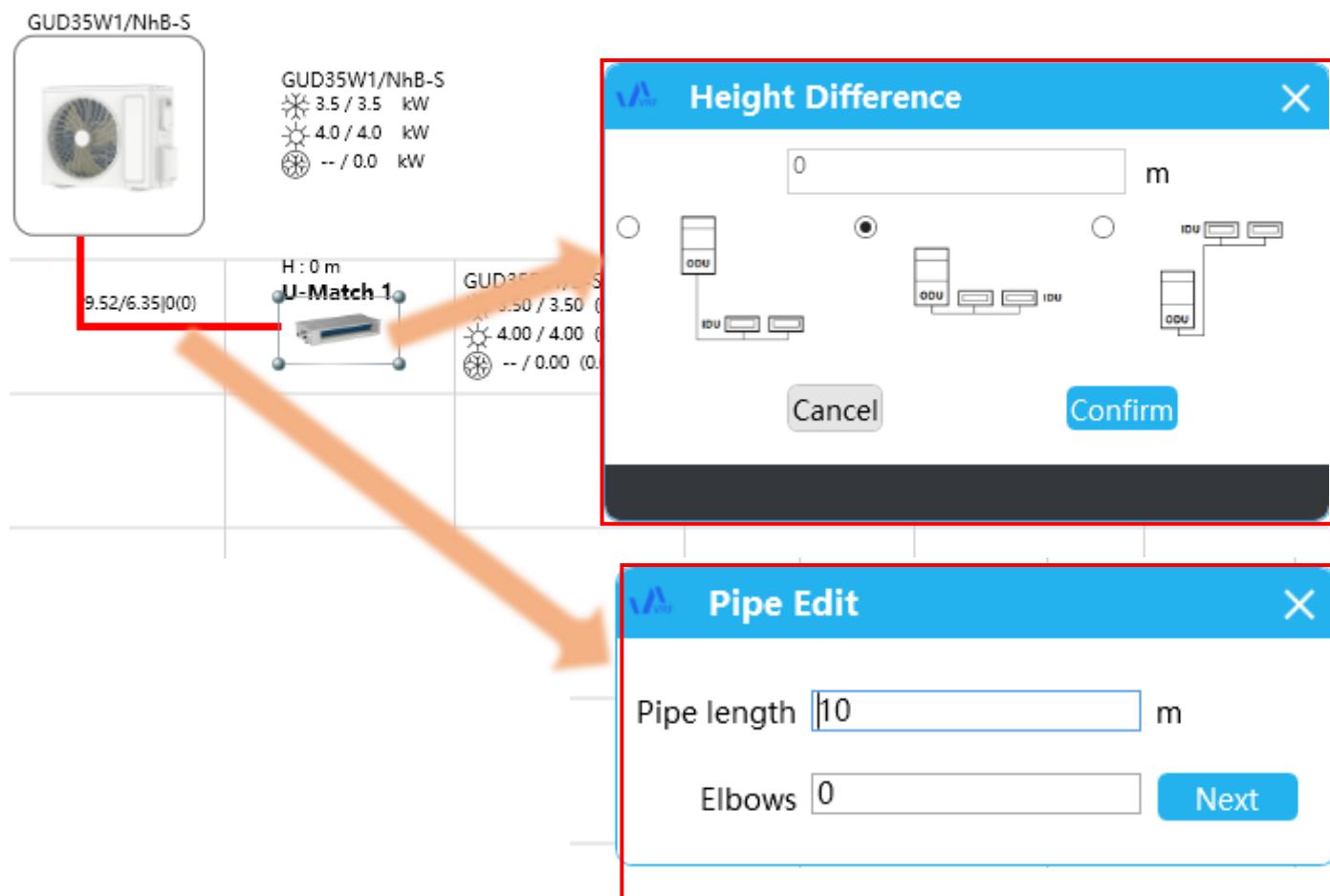
单台内机拖动



鼠标左键点击内机图标，按住不放拖动至配管主界面

5.配管连接

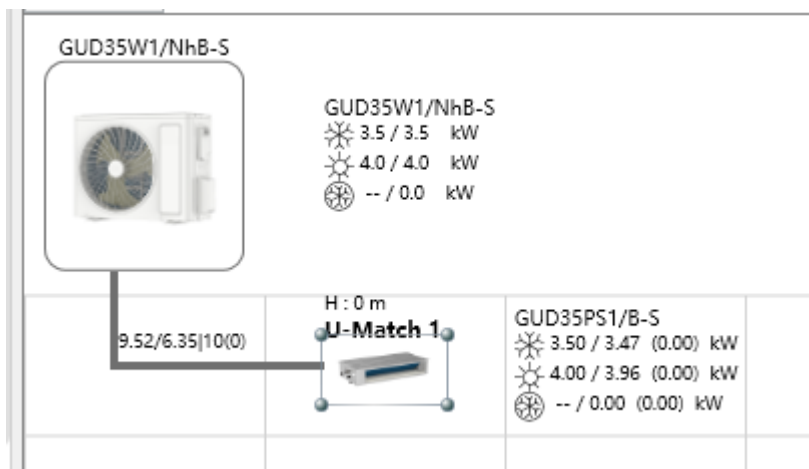
管长与落差设置



配管页面双击内机/蓄热模块，或配管，图片会弹出设置窗口，可以进行落差/管长设置。

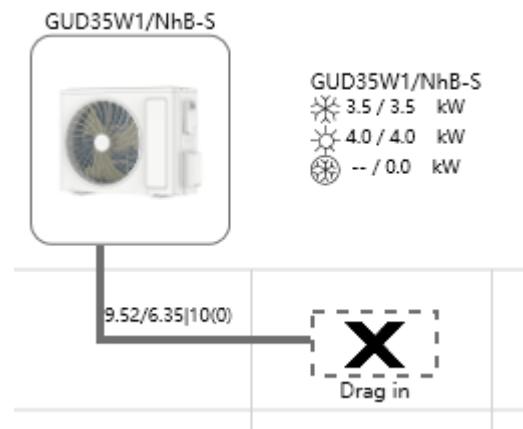
5.配管连接

配管连接编辑→删除



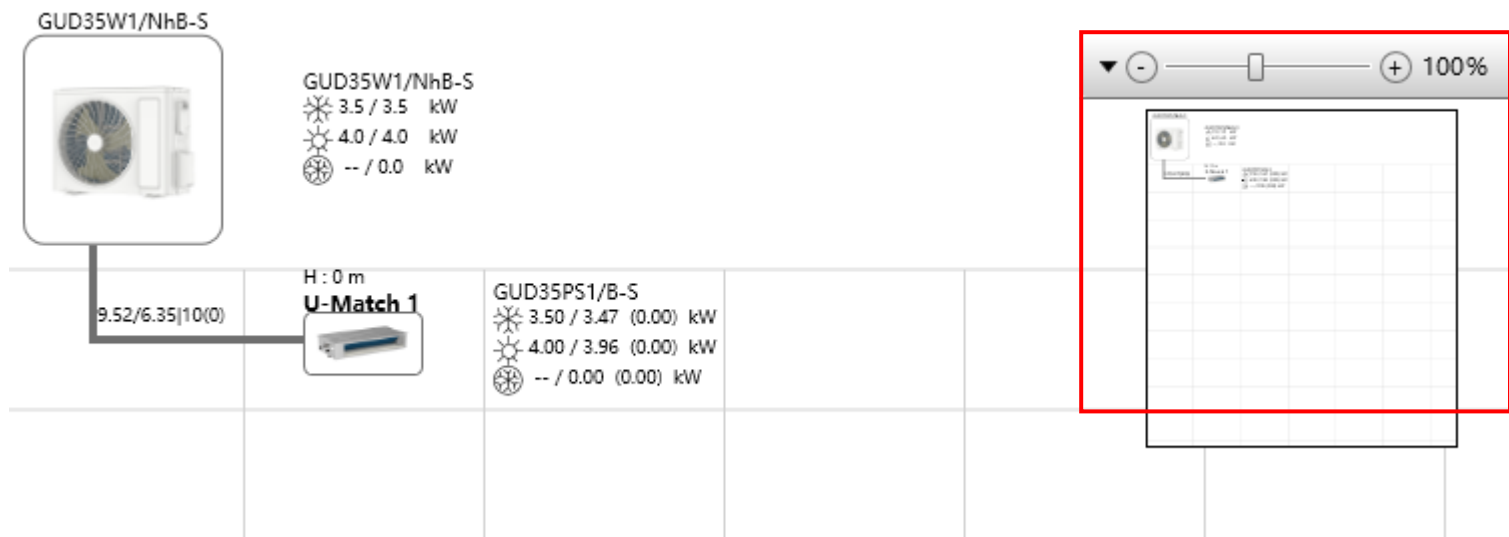
框选或者单选完毕所有的设备后，点击键盘“Delete”键

会将框选的设备删除，如果框选的设备中包含内机，内机就会被放置在未连接的内机列表中



5.配管连接

配管连接编辑→缩放



如果界面中无法全部展示配管连接树，通过鼠标滑动方框，来调整显示局部区域。

在配管连接的界面右上角有一个缩略图展示窗体，可以通过调整滑动块进行缩放比例调整。

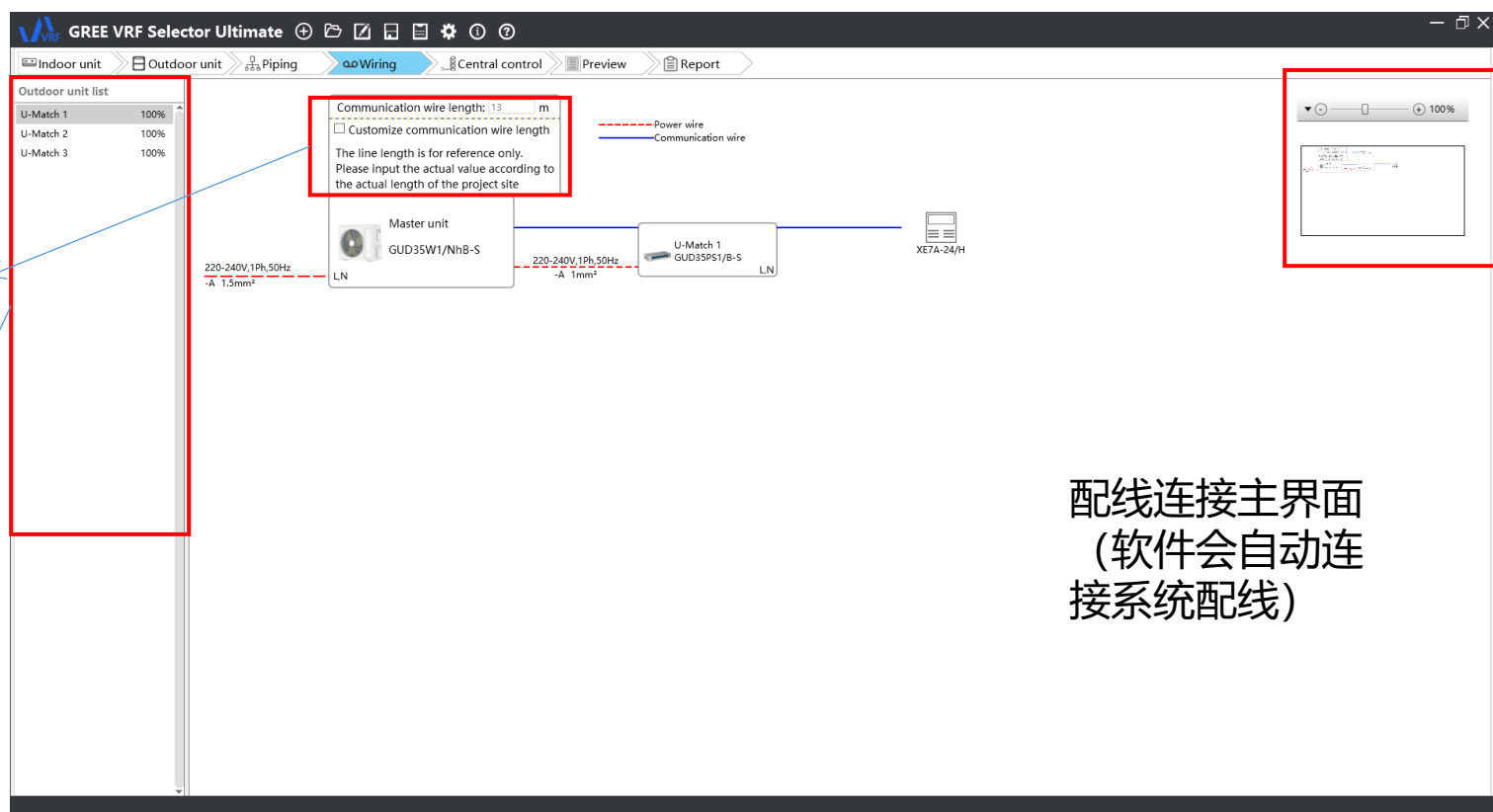
6.配线连接

配线连接界面

配管界面连接完毕后，点击导航栏，切换至配线界面

自定义通讯线长：
1.不勾选时，自动计算推荐线长
2.勾选时，自定义输入通讯线长

系统列表



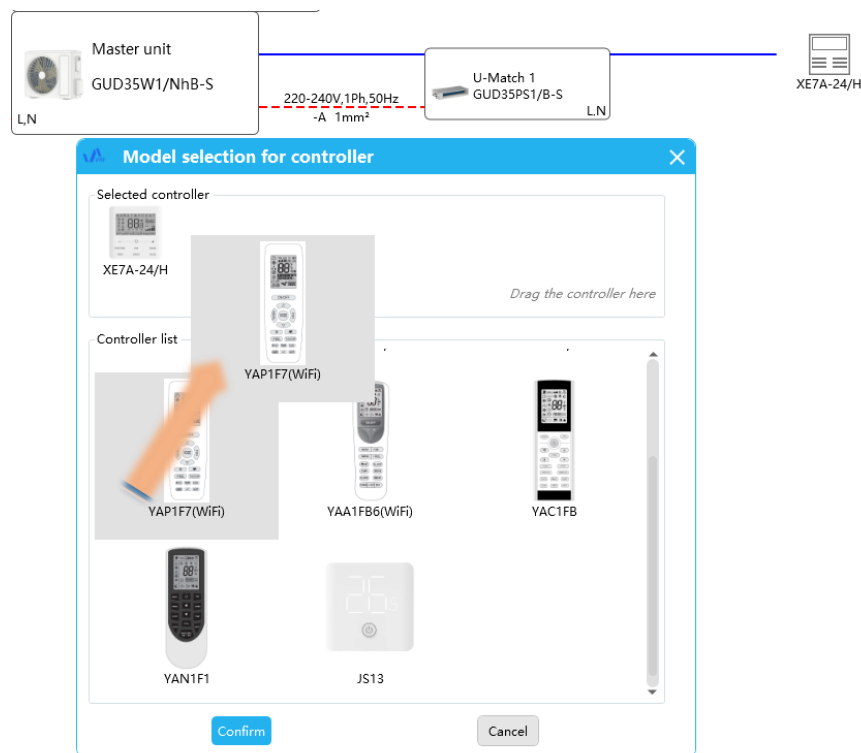
视图概览

配线连接主界面
(软件会自动连接系统配线)

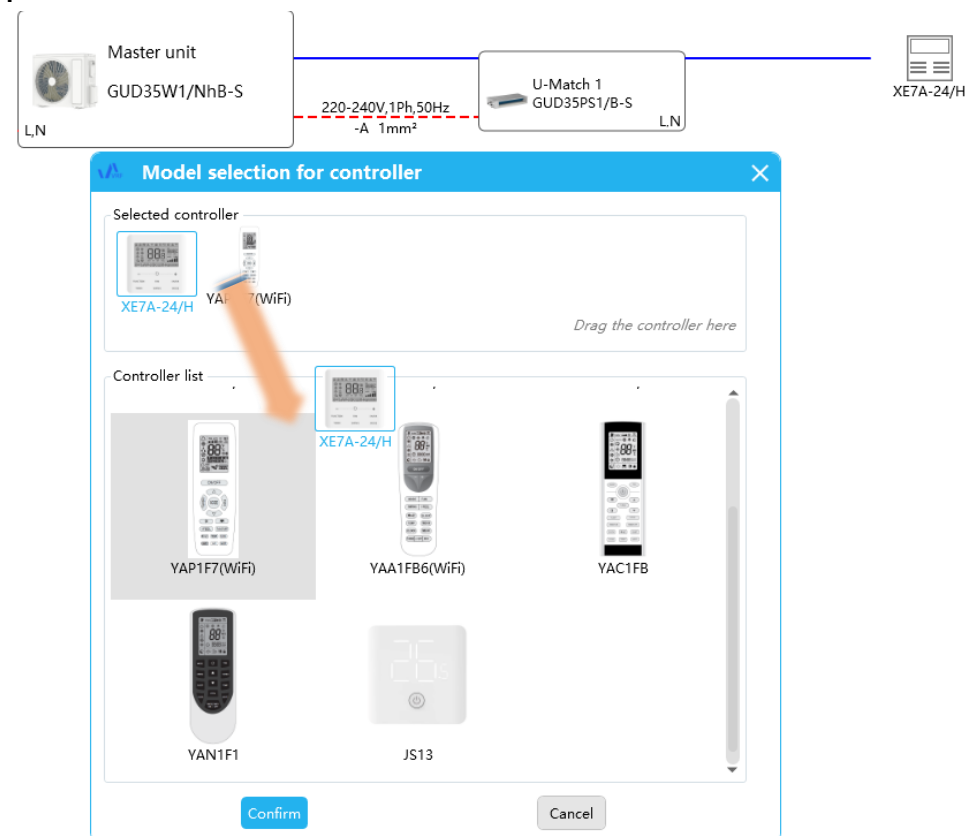
6.配线连接

控制器的选择

双击内机图片或控制器图片，弹出控制器编辑窗口



选择要添加的控制器，拖动到已选择的控制器框内，完成添加控制器



已添加的控制器，点击拖动到下方，完成移除控制器

7.集中控制器选型

集中控制器选型界面

添加分组按钮

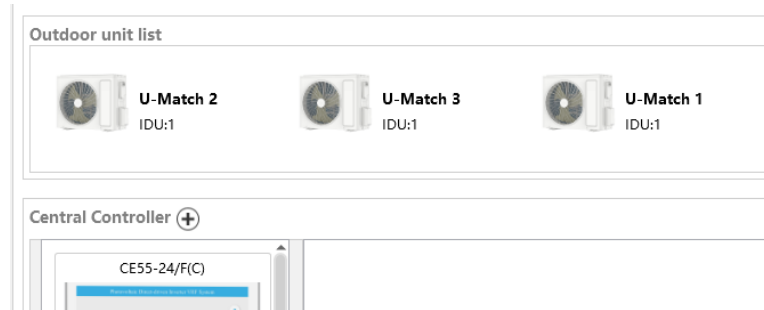
集中控制器列表

外机系统列表

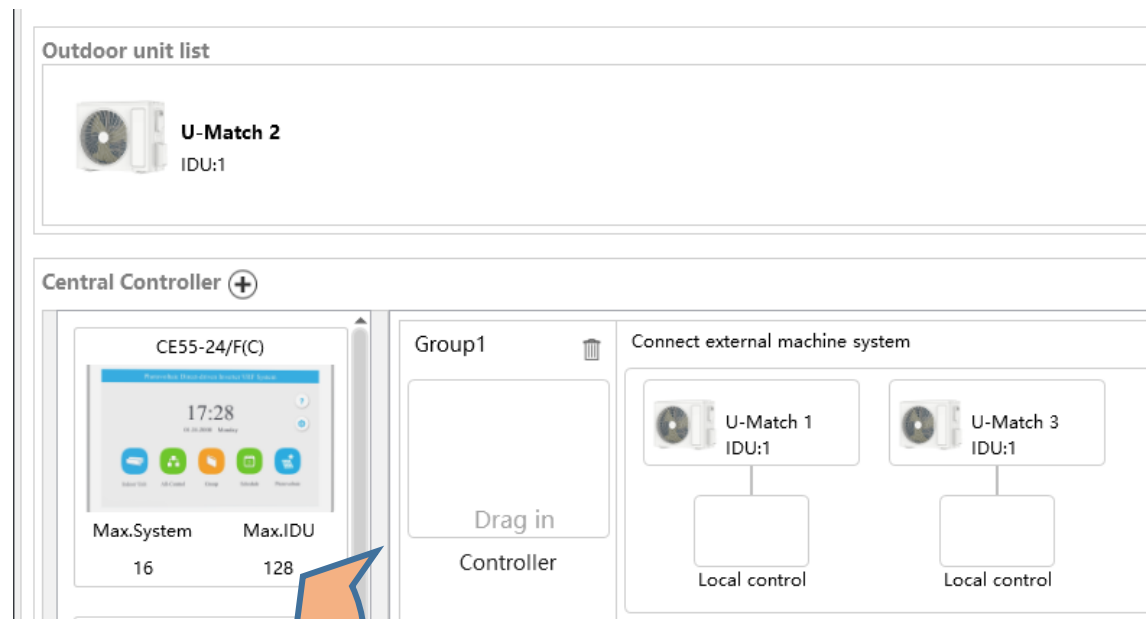
全局性开启配线图

7.集中控制器选型

添加分组



点击添加分组按钮，就会在分组展示区添加一个新的分组



拖动外机系统到连接外机单元框内

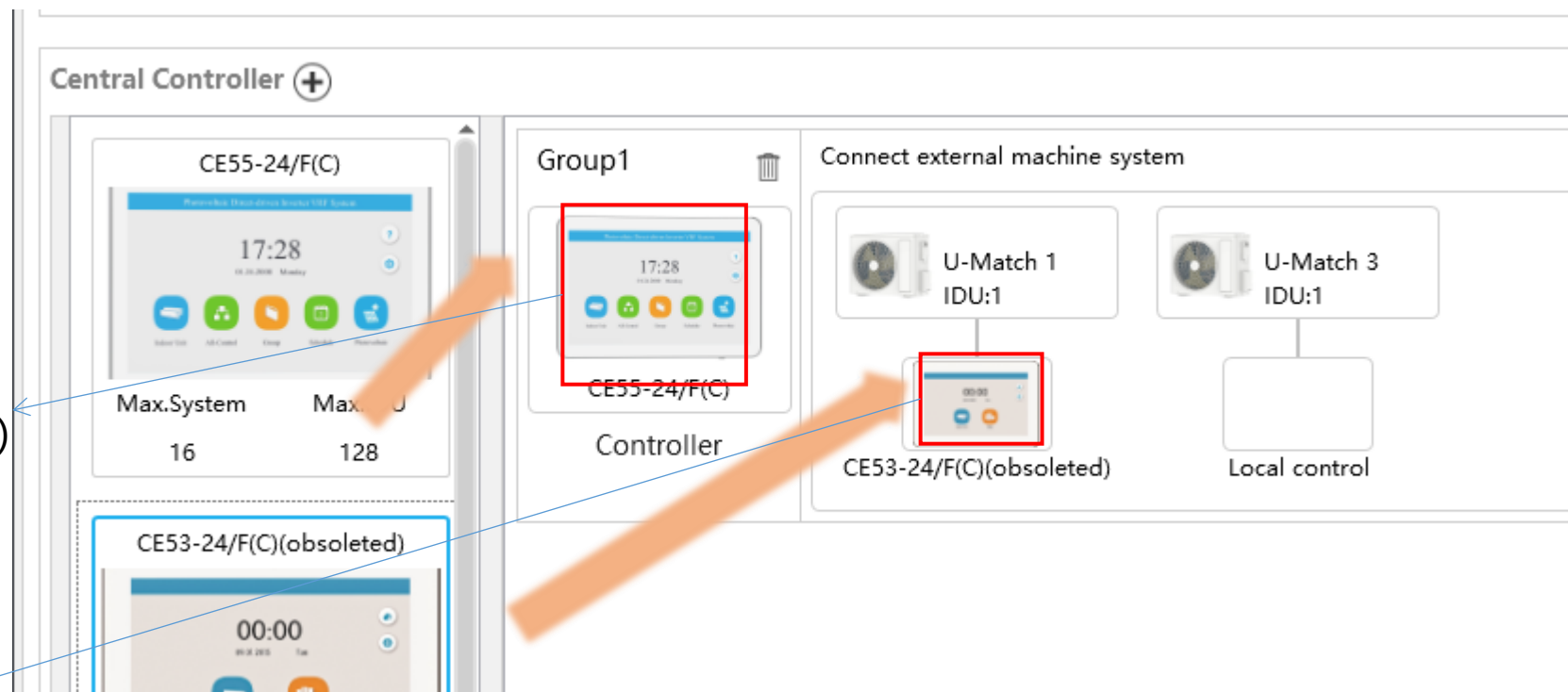
7.集中控制器选型

添加集中控制器

拖动集中控制器可以放置在两个位置

全局控制器
(对组内所有的系统进行控制)

本地控制器
(对单独的系统进行控制)

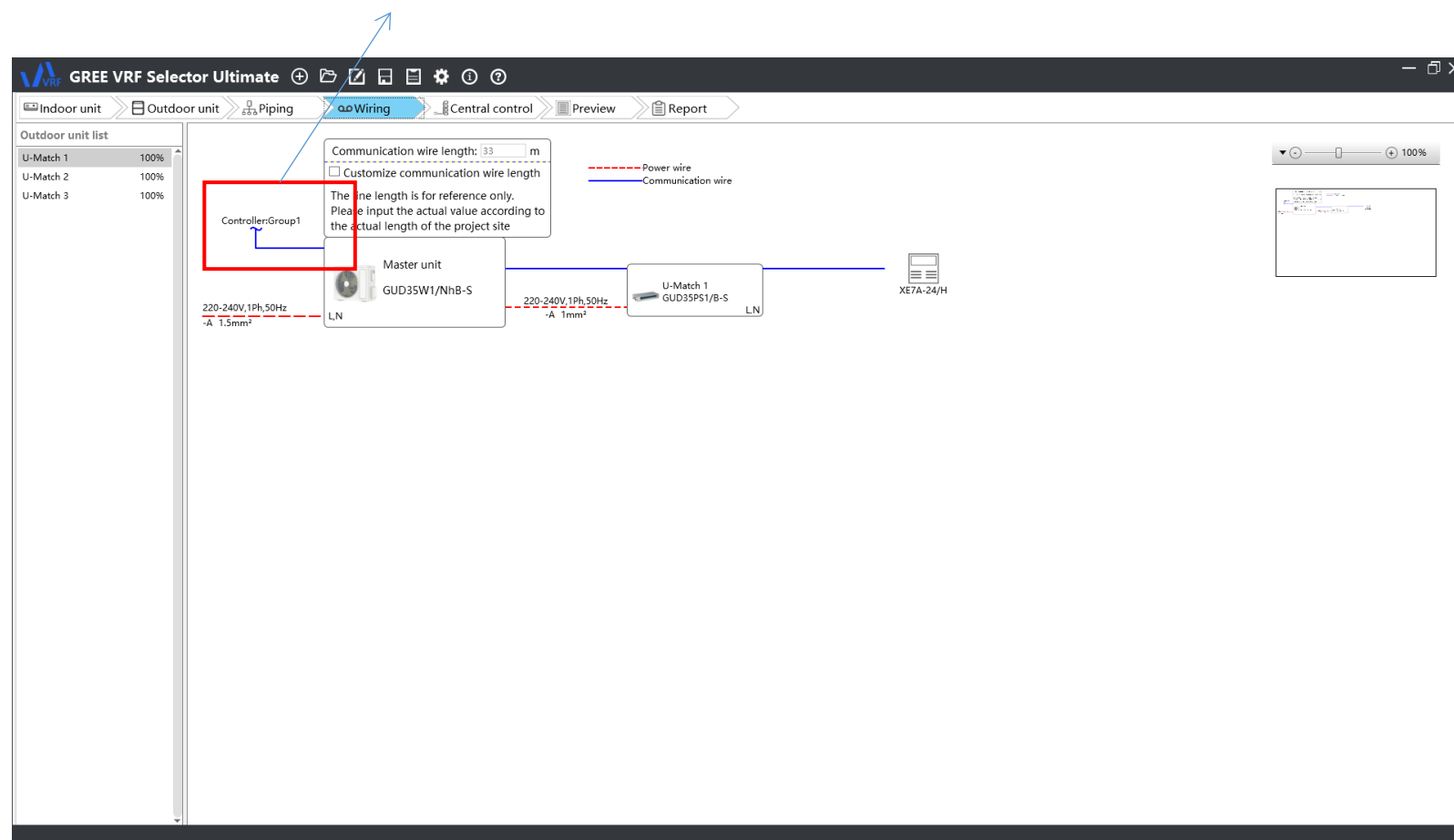


7.集中控制器选型

配线的变化

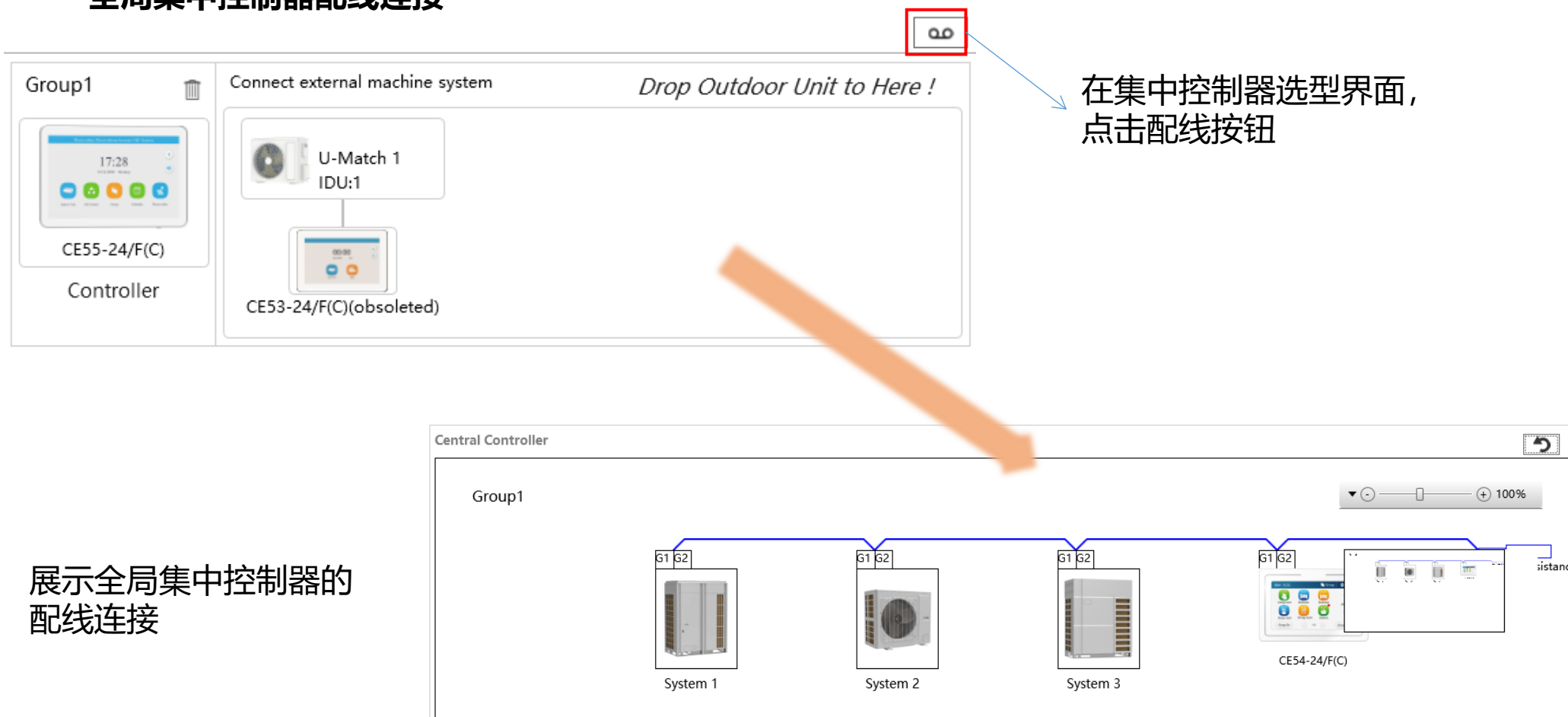
当集中控制器选型完毕后，通过导航栏切换回配线界面，软件会自动将集中控制器的配线连接到系统内部。

全局集中控制器



7.集中控制器选型

全局集中控制器配线连接



展示全局集中控制器的
配线连接

8.报表导出

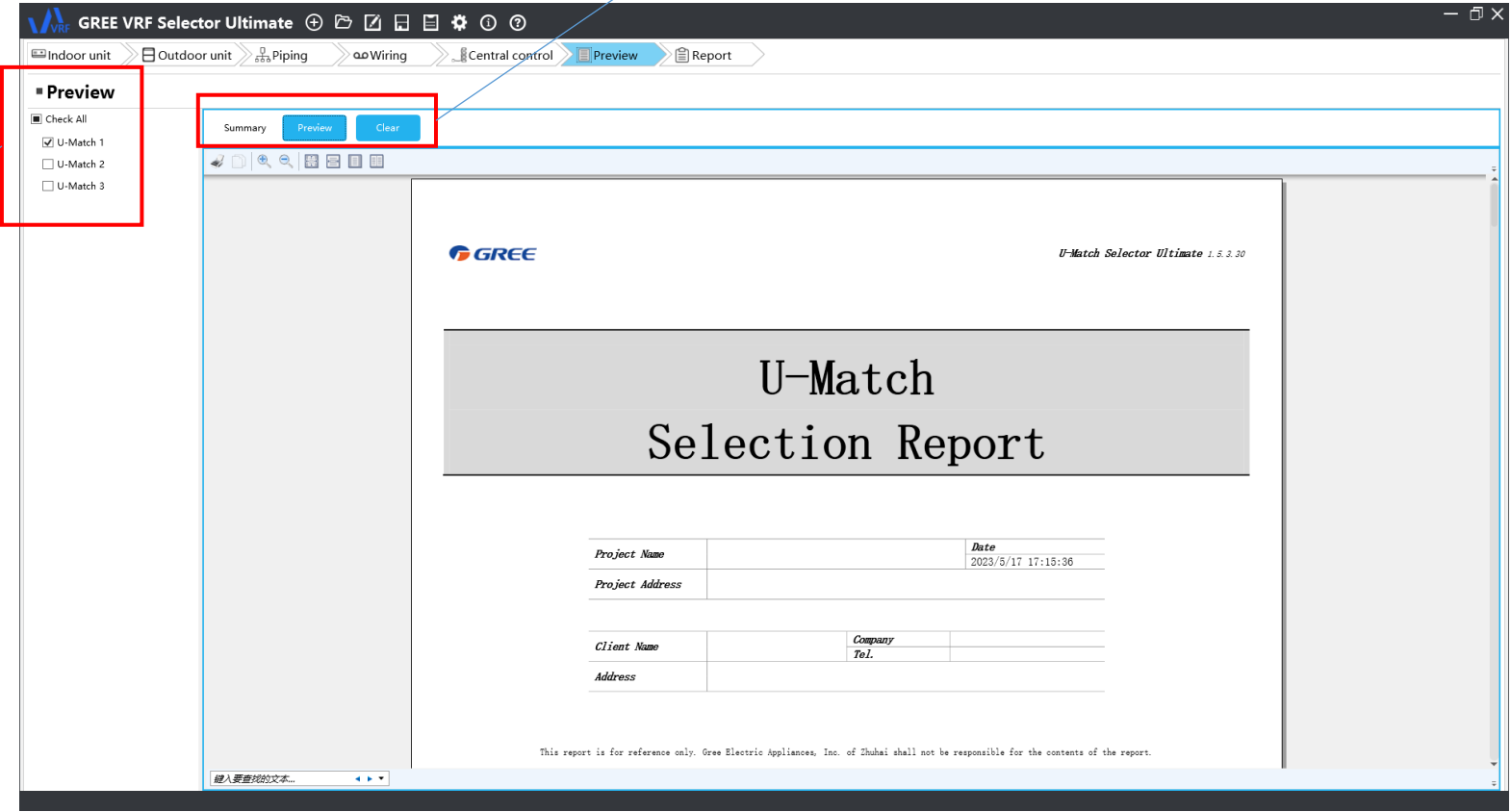
报表预览

点击预览，显示预览报告

点击清除，清空预览报告

系统列表

(勾选需要预览报表的系统)



8. 报表导出

报表导出界面

系统列表
(勾选需要导出报表的系统)

选择导出配管、配线连接图

导出Submittal
(此功能暂开放北美区域)

选择导出路径

输入导出文件的名称

选择导出文件：
1.概要文件
2.参数表
3.CAD工程图

Report

- ☐ Check All
- ☐ U-Match 1
- ☐ U-Match 2
- ☐ U-Match 3

Path

Name

Report forms information

Summary ☐ (.doc) ☐ (.xls)

Parameter ☐ (.doc) ☐ (.xls)

CAD

System ☐ (.dwg)

Picture Output

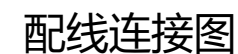
Piping Image ☐ (.jpg)

Wiring Image ☐ (.jpg)

系统报告、参数表、配管连接图、配线连接图

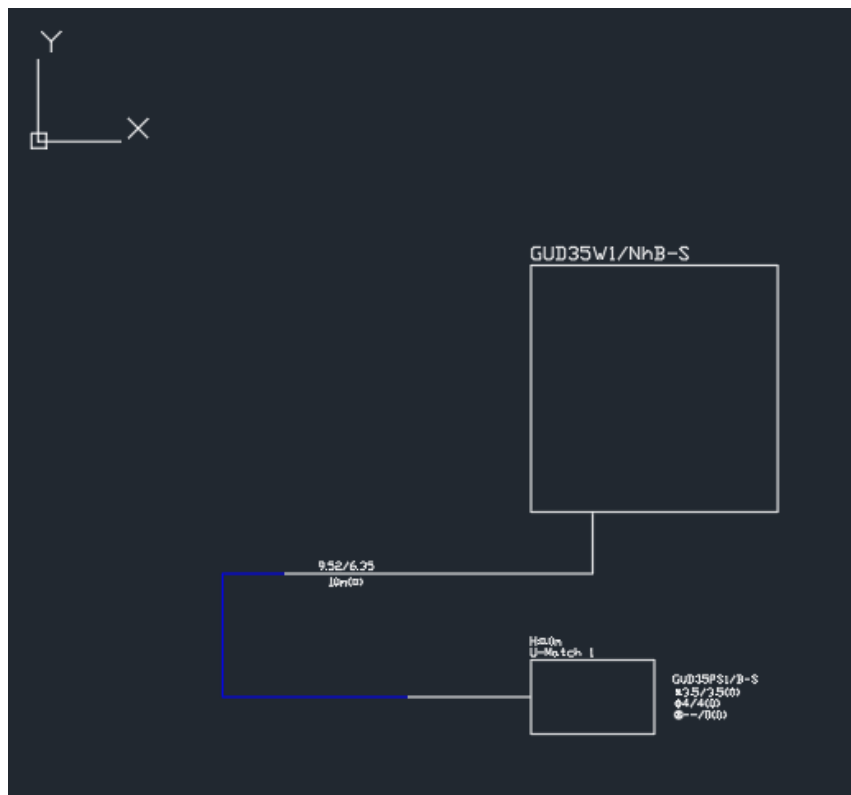
系统报告

参数表

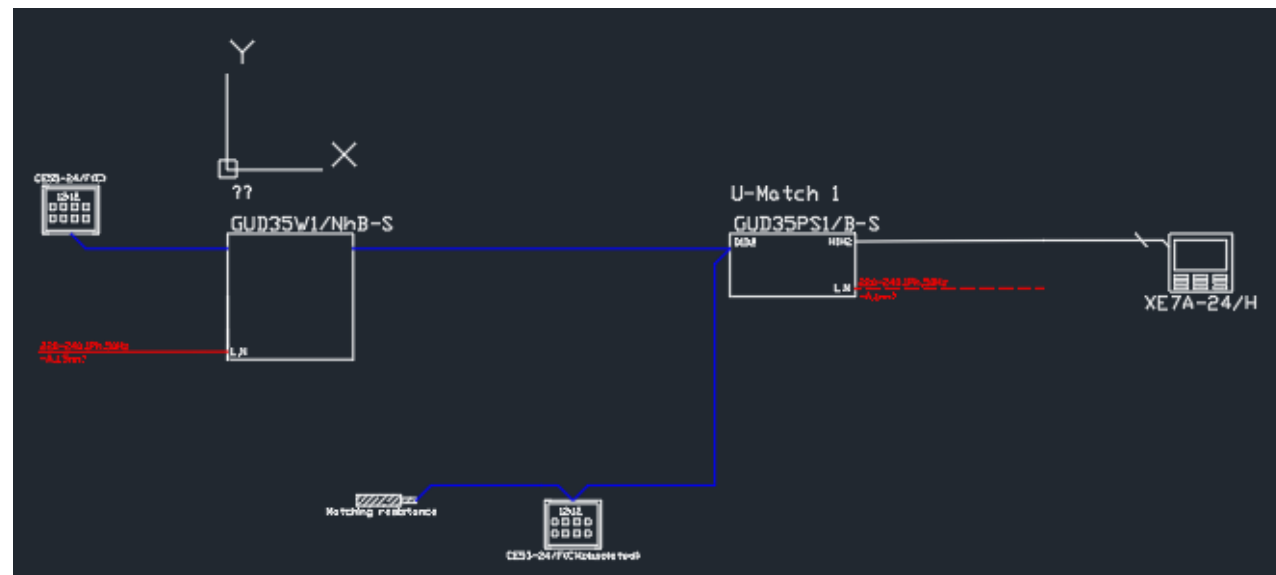


8.报表导出

CAD工程图



配管工程图



配线工程图