







Refrigeration Expert XP /10



Remote monitoring and maintenance for small shops, restaurants, warehouses

Compact yet powerful

Ready to use

Intuitive

Secure



Flexible

Accessible

Sustainable





Step by step guide



1 Plan

the installation and collect configuration information before starting.

2 Install

Refrigeration
Expert XP in a
control panel
together with
accessories.
Connect power
supply, serial line
and network.

3 Power

Refrigeration
Expert XP.
Connect your PC
with the USB
cable and
access the user
interface with a
browser.

4 First login

Refrigeration
Expert XP.
Optionally
upgrade
software.
Configure
"admin" user,
owner of the
system.

5 System

configuration Networking, messaging, users and localization

6 Plant

configuration Equipment, controllers, alarm management and reporting





1 Plan | Collect information



Check

Where to install Refrigeration Expert XP and accessories Do I need a panel? Do I need a 24V power supply?

Ethernet connectivity settings

SMTP server settings for email delivery

Plan the controller models and serial addresses. Serial address will determine the ordering in the equipment list.

Users and recipients email addresses for notification and scheduled reports

Check availability of Refrigeration Expert XP software upgrade

Collect

Accessories: panel, power supply, UPS, modem/router

IP address, Network mask, Gateway IP, primary and secondary DNS

Server authentication, address, port, account name and password, sender email address, server security

List of controller models, serial addresses, description and relevant resources to be recorded

List of user's email, names and roles; list of email addresses for notification and report recipients

Upgrade file (.raucb) from www.eliwell.com > Software centre





1 Plan | Where to install



Independent installation





In an existing control panel





Sizethe panel according to the required accessories



Refrigeration Expert XP 4 DIN



Power Supply 24V 15W 1 DIN



Alarm Module TelevisOut 4 DIN



Router Ethernet LAN-WAN



Router 4G, WiFi, Ethernet LAN-WAN



24V UPS



UPS Battery





1 Plan | Parts available from Eliwell





ABLM1A24006

Schneider Electric POWER SUPPLY 24V 0.6A MODULAR



RXB01000E0000

Refrigeration Expert XP /10



TAMOD602RS700

TelevisOut 100-240Vac



SAM4GW000AA00

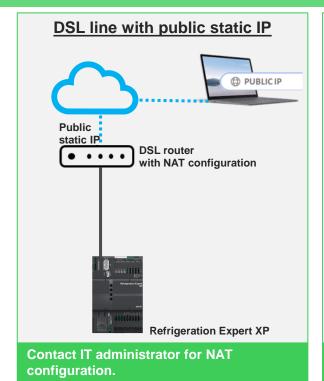
Teltonika
ROUTER 4G LTE W/ANT PSU RUT 200
Including power supply and antennas

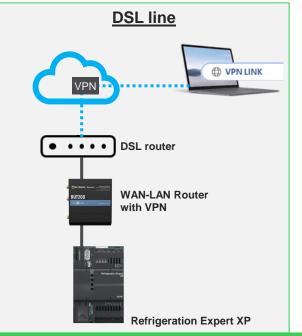


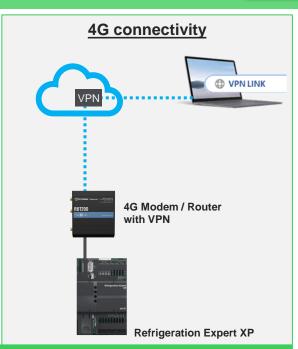


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1 Plan | Internet connectivity and remote access







Router and VPN Service are not included in Refrigeration Expert XP.

Contact Eliwell Refrigeration Expert Centre for recommended solution and support.

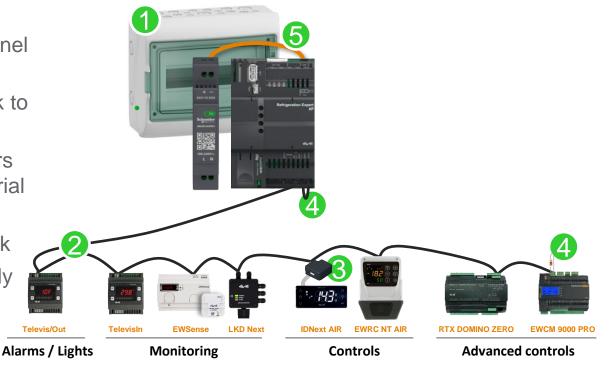




2 Install | Refrigeration Expert XP and accessories



- 1. Install in a convenient DIN panel
- Connect the twisted shielded cable controller serial network to the RS-485 port
- Use BusAdapter for controllers not provided with RS-485 serial port
- 4. Terminate the RS-485 network
- 5. Connect the 24V power supply







3 Power | Refrigeration Expert XP and connect with your PC



- 1. Power Refrigeration Expert XP
- 2. Wait a minute for the system to boot
- 3. Connect your PC with the mini USB cable provided
- 4. Open thje web browser and type https://192.168.254.254 in the address bar
- 5. In few seconds the login page loads







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4 First Login | Set the «admin» user password

Refrigeration Expert XP «admin» user is a special user that impersonate the owner and administrator of the equipment and the data contained in it:

- can operate on all system and connectivity settings
- mange all other users and create new ones
- manage backup protection key and perform system restore
- can manage software upgrades
- cannot be removed or disabled
- can reset its own password with a secure procedure and only having physical access to Refrigeration Expert XP device

"admin" user is not intended for normal operativity of the system therefore all functionalities and configuration panels related to the controllers and equipment are not available for this account.





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4 First Login | Set the «admin» user password

- 1. Select the user interface language for this session
- 2. Log-in with User name: «admin»; password: «EW_RefrigerationExpert»
- 3. Enter a new valid password for the «admin» user and Save it
- 4. You are now in the SYSTEM configuration menù

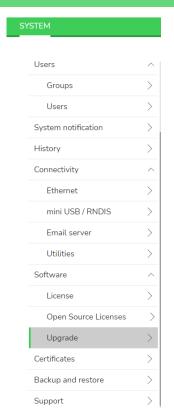




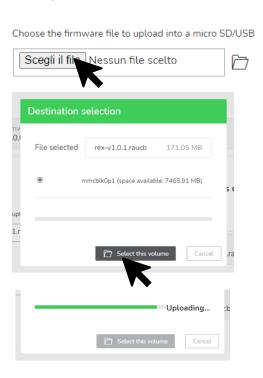


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4 First login | Software upgrade (2 of 4)

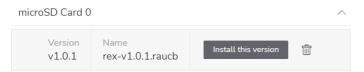


File upload



- Go to Software > Upgrade menù
- Upload the upgrade file received from Eliwell (.raucb file type)
- Select the destination volume: mmcblk0p1
- If correctly uploaded, the file will be listed as follows:

Available firmware files detected in micro SD/USB

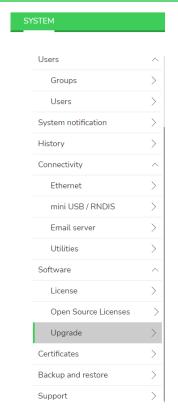


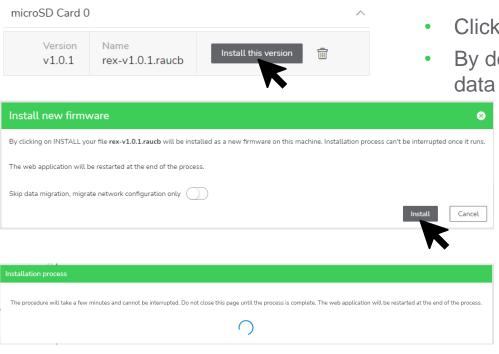




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4 First Login | Software upgrade (3 of 4)





- Click on «Instal this version»
- By default all settings and data are maintained

If you want to perform a clean install removing all data and settings, switch-on the slider

keep

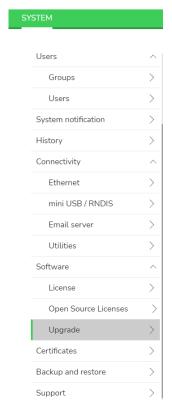
delete

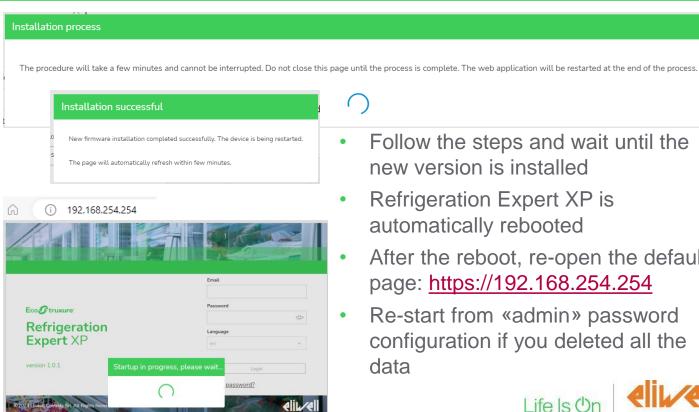
Then proceed with «Install»



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4 First Login | Software upgrade (4 of 4)





- Follow the steps and wait until the new version is installed
- Refrigeration Expert XP is automatically rebooted
- After the reboot, re-open the default page: https://192.168.254.254
- Re-start from «admin» password configuration if you deleted all the data





5 Site configuration | Walk through the key settings



Information

Site name



Localization

- System language for scheduled reports
- Date format



Ethernet

Connectivity settings



Date and time

- Time zone
- Clock settings



Users

 Create Administrator user to complete the site configuration



Backup and restore

 Mandatory key for backup protection



System notification

 Email recipient for critical notification



Email server

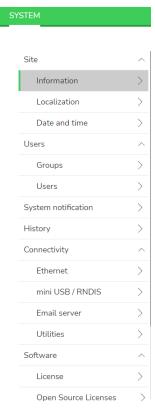
 SMTP server for reports and notification email





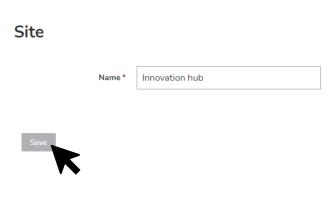
5 Site configuration | Information : set Site Name





Type and Save the Site Name that will be used to identify this installation.

All other fields are optional and can be filled anytime later.

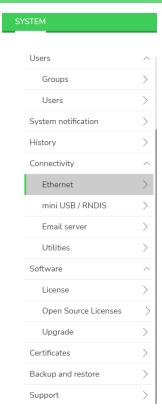






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5 System configuration | Ethernet : configure Ethernet connectivity



Configure network and internet connectivity with a static IP address; otherwise choose DHCP if the IP address is automatically assigned from the router.

The factory setting is for static IP

IP Address: 192.168.1.3

Subnet Mask: 255.255.255.0

Gateway: 192.168.1.1

Ethernet ports

If DHCP is enabled, network parameters are not editable

DHCP

IP Address settings

IP Address 192.168.0.10

Subnet Mask 255.255.255.0

Gateway 192.168.0.1

DNS 1 8.8.8.8

ONS 2 8.8.4.4

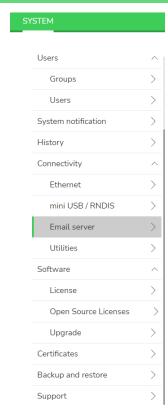


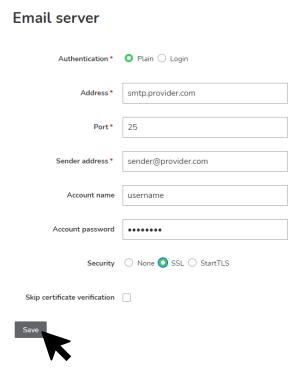






5 System configuration | Configure SMTP server for email notification and reports





Configure the SMTP email server settings. Email server is needed to deliver email notification and scheduled reports.

You can immediately test the functionality by sending a test email to your email address.

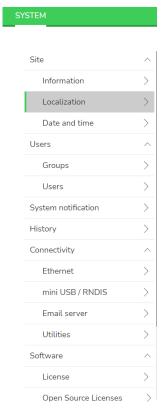
Test utility	
Address *	recipient@company.com
E-mail test	







5 System configuration | Set language and date format for reports and notification



Configure the system language and the date format that will be used in scheduled reports and to compose email messages delivered by the system.

Note that all user defined text (names and descriptions typed during the configuration) are not translated by the system.

Localization

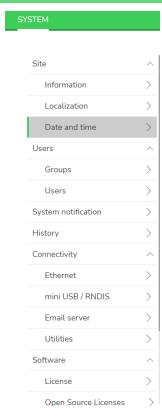
System language *	en	*
Date format*	DD/MM/YYYY HH:mm	-
Save		

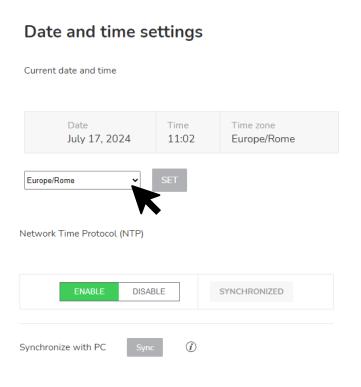




5 System configuration | Set the correct Time Zone







Configure the time zone. All data recorded by Refrigeration Expert XP in this site will be reported according to this time zone.

By default the clock is automatically updated connecting to an internet NTP server.

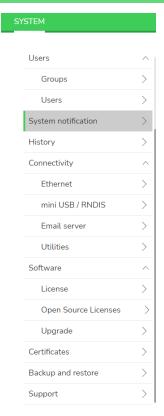
If internet connectivity is not available for Refrigeration Expert XP, disable the NTP server and synchronize the clock periodically with your PC using «Sync» button.







5 System configuration | Set the recipient for critical alarms from the system



Enter a recipient for critical alerts about this installation.

In case Refrigeration Expert XP identifies a critical situation, for example the microSD card is removed, or the internal memory is corrupted, a notification message is sent to this email recipient.

System notification

Enter a recipient who will receive critical system notifications, regardless of the alarm categories configuration. Notifications are sent once a day. Requires email settings to be configured.

Email address recipient@company.com

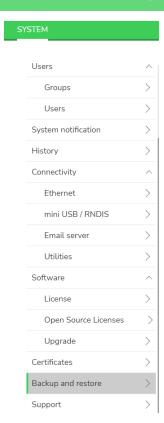
E-mail test Save





5 System configuration | Set the backup protection key





Backup and restore

Press the "Configure key" button to set a new key to protect future backups generated by this system. Without a configured key it's not allowed to generate a backup.

Copy the generated key. This key is necessary to restore the backups files generated from now on by this system.



Backup functionality enable to completely clone a device.

When restoring a backup file, the destination device will be an exact copy of the backup one, except for Ethernet setting and the «admin» password that are not replaced.

Backup and restore functionality enable to create a copy of all configuration and data. As this may contain personal data, backup files are encrypted with the Backup key.

It is mandatory to configure the backup key to enable backup functionality for this system.

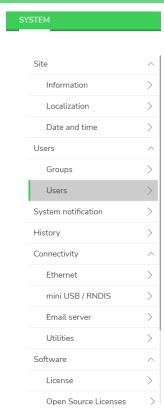
You must know the backup key to restore a backup file in the same device or a new one.

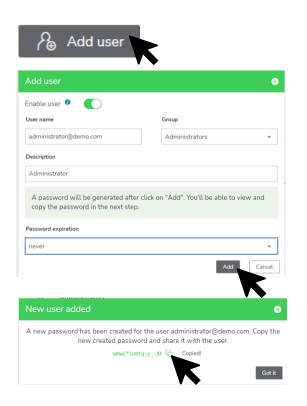




5 System configuration | Create an Administrator user







Create a user in the «Administrators» group.

Administrators can operate any System setting and configure equipment, alarms and other users.

Username must be an email address.

When the user is added, you will get a temporary password that must be copied and used at first login for the new user.







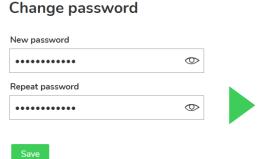
6 Plant configuration | Login as Administrator user

Log-out as «admin» user and log-in with the newly created Administrator user.

Change the temporary password with a personal one

Welcome to Refrigeration Expert XP!







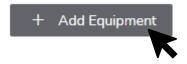




6 Plant configuration | Add Equipment (1 of 3)



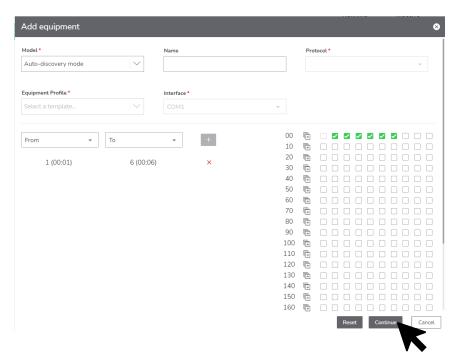
Click on Add Equipment



 Select the addresses to scan for controller presence and click Continue

By default Refrigeration Expert propose controllers Autodiscovery functionality that require the controllers are connected, powered and correctly configured with a valid serial address.

As an alternative, you can add a known model of controller by choosing the Model from the list.





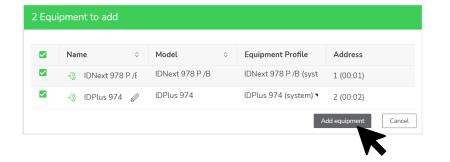


6 Plant configuration | Add Equipment (2 of 3)



When all the controllers are detected click on Continue

Searching connected equipment... Name Address → IDNext 978 P/B 1 (00:01) → IDPlus 974 2 (00:02) \bigcirc 3 (00:03) \bigcirc 4 (00:04) \bigcirc 5 (00:05) \bigcirc 6 (00:06) Stop and Continue Cancel From the summary you can edit the Name or just go ahead and Add the equipment



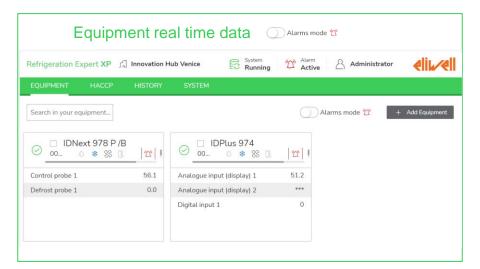


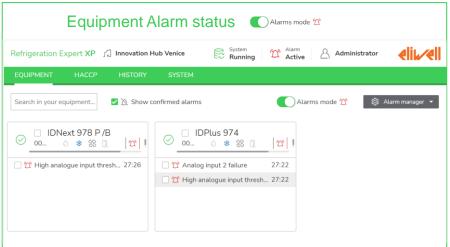




6 Plant configuration | Add Equipment (3 of 3)

Equipment are successfully added; data and alarm collection is already active thanks to Eliwell default configuration that you can easily modify in the next steps.





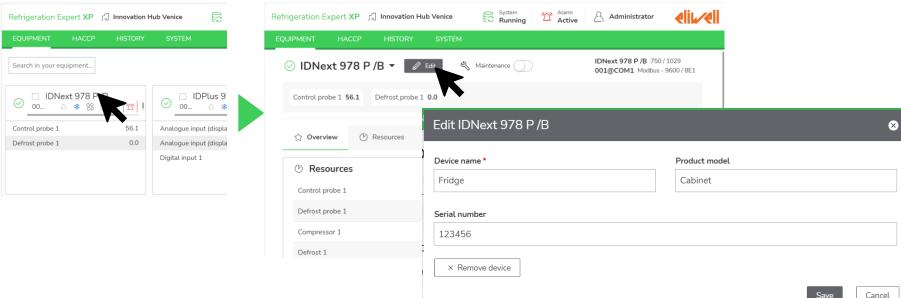






6 Plant configuration | Fine tune resources to display, datalog and chart (1 of 6)

Click on a card to enter the Equipment details and Edit name and features



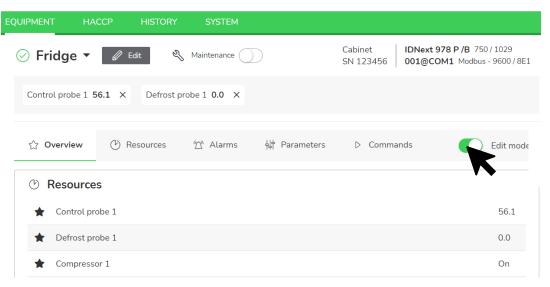






6 Plant configuration | Fine tune resources to display, datalog and chart (2 of 6)

Enable Edit mode for all type of resources



Overview

You can remove resources from the Overview page by clicking on the star in each row



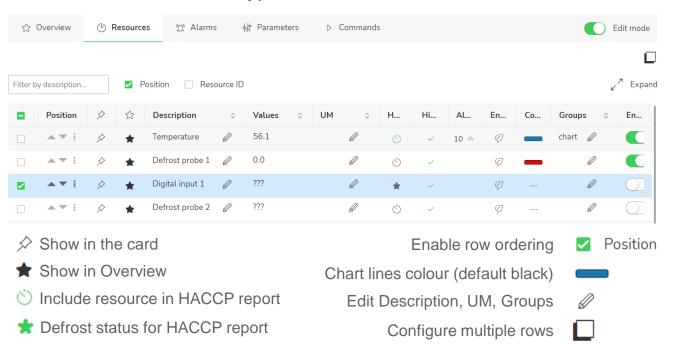






6 Plant configuration | Fine tune resources to display, datalog and chart (3 of 6)

Enable Edit mode for all type of resources



Resources

You can act on all columns.

Only Enabled resources



will be recorde, visible and used by the system

Row order will be used in all views

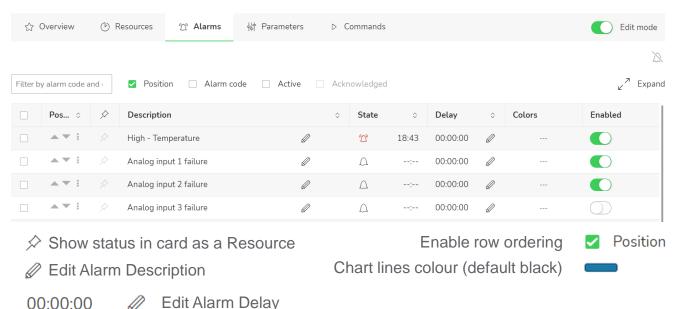






6 Plant configuration | Fine tune resources to display, datalog and chart (4 of 6)

Enable Edit mode for all type of resources



Alarms

You can act on all columns.

Only Enabled resources



will be visible and used by the system.

Row order will be used in all views





♣ Parameters

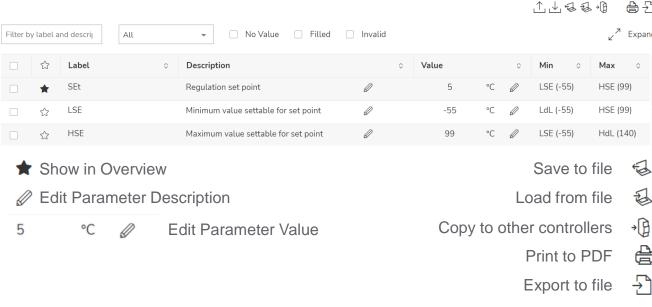


6 Plant configuration | Fine tune resources to display, datalog and chart (5 of 6)

Commands

Enable Edit mode for all type of resources

M Alarms



Parameters

Edit mode

Operate anytime on parameter values.

Save current parameter map as default to easily re-configure a replacement controller

- ↑ Save default map





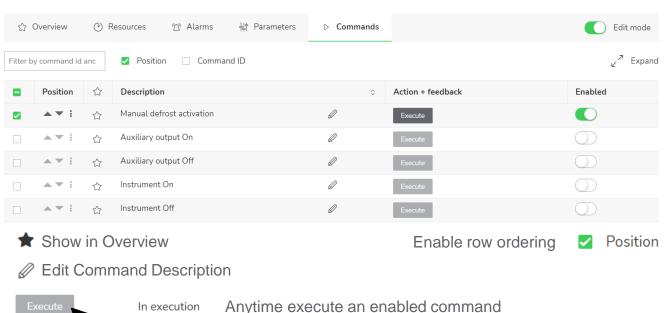
♦ Overview

(1) Resources



6 Plant configuration | Fine tune resources to display, datalog and chart (6 of 6)

Enable Edit mode for all type of resources



Commands

You can act on all columns.

Only Enabled resources



will be visible and used by the system.

Row order will be used in all views



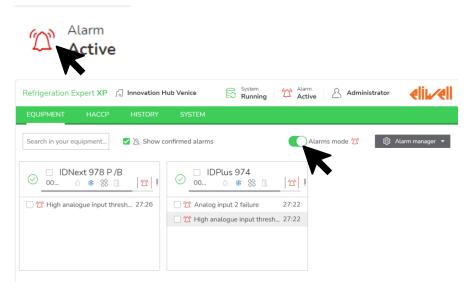


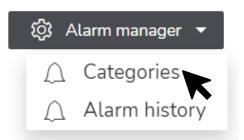


6 Plant configuration | Alarm categories and alarm notification (1 of 2)

Alarm Categories and notification configuration are accessible when displaying EQUIUPMENT in Alarm mode. As a shortcut click on the Alarm bell in the status bar.

From the Alarm manager button click then on Categories



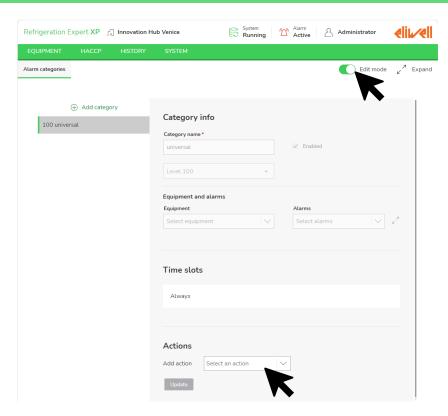






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6 Plant configuration | Alarm categories and alarm notification (2 of 2)



Refrigeration Expert XP offer un "universal" category that catches all alarms, anytime.

Enter Edit mode to modify

Configure the Actions to perform when an alarm occurs or ends. Options are emails and digital output of TelevisOut modules configured in the system.

Add Category to prioritize actions for specific alarms or time slots





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6 Plant configuration | HACCP dashboard

Enter HACCP to display today 24h HACCP and browse for previous days



Generate a PDF report on the fly

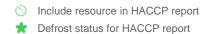






You already marked temperatures and defrost status for the HACCP dashboard and report by editing Equipment / Resources





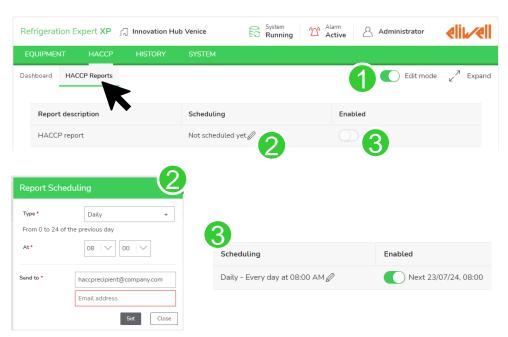




6 Plant configuration | Schedule HACCP report



Schedule a daily, weekly or monthly HACCP report directly to your inbox



HACCP Reports

- Enter Edit mode
- Edit the schedule, setting one or more recipients
- 3. Enable the schedule

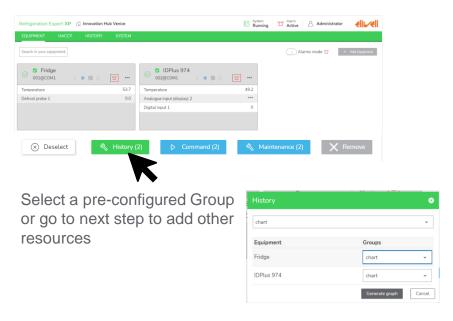


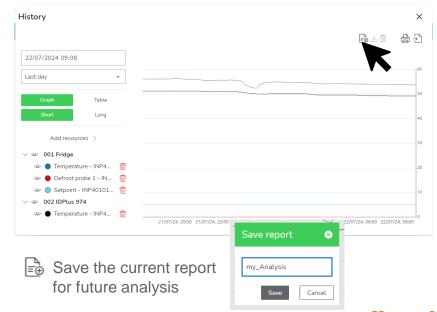




6 Plant configuration | Quick reusable charts and historical data tables

Select one or more equipment cards and click on History in the multiple equipment tools





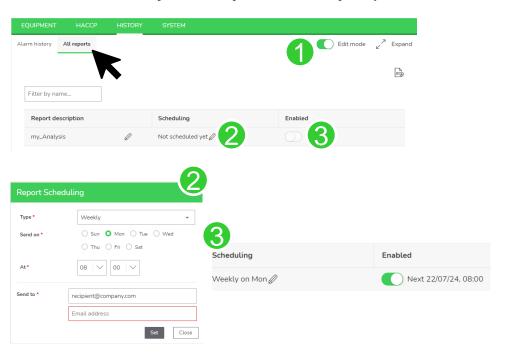




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6 Plant configuration | Schedule an historical data report or chart

Schedule a daily, weekly or monthly report or chart directly to your inbox



HISTORY / All reports

- Enter Edit mode
- Edit the schedule, setting one or more recipients
- 3. Enable the schedule





Link utili



Scansiona il QR Code con la APP myEliwell per accedere alla guida on line









