



Rev. 05/2024

SERIES 3897 STOP LEAK

Electronic water leak detector.

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Electronic water leak detector.

+ Protection of one's own system from breakage and/or leakage

Prevention of damage due to water leakage

Avoid litigation following a leakage problem

Community benefits (saving water resources)

Consumption savings



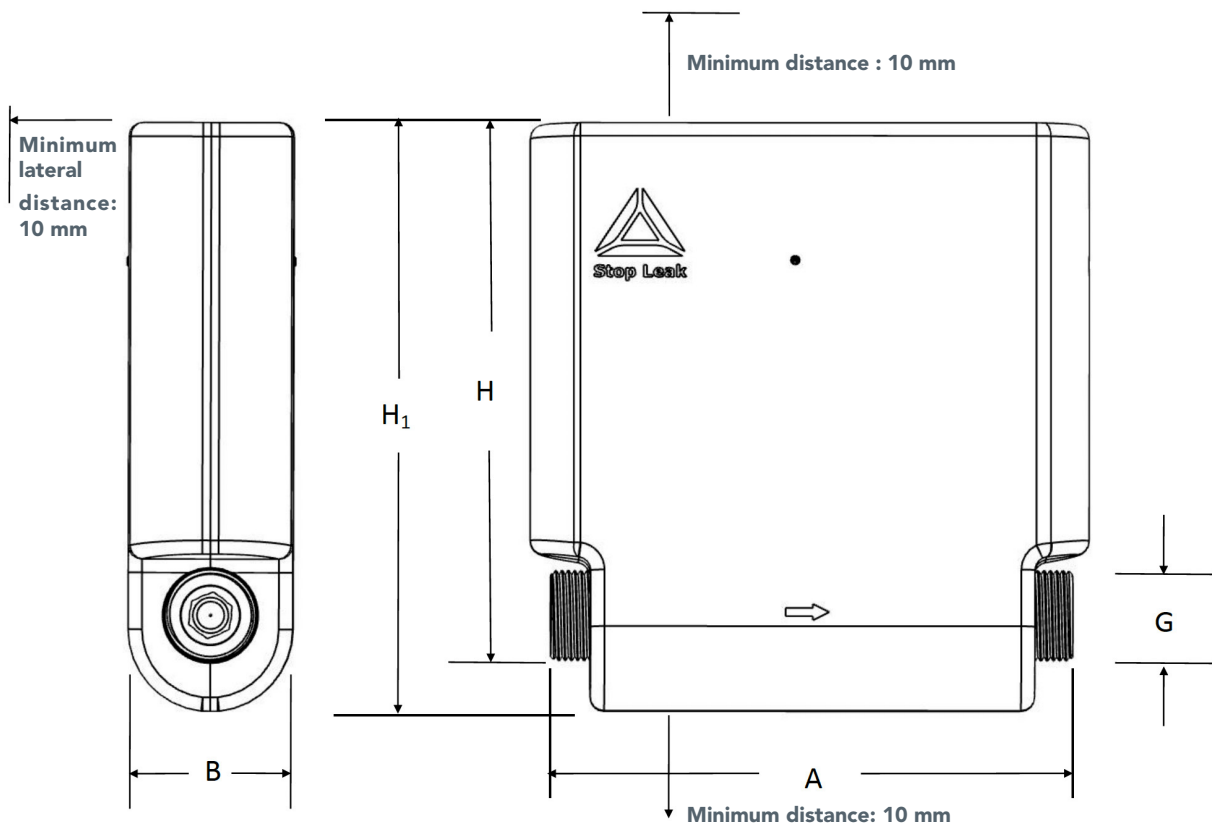
PRODUCTION RANGE

Code	Size	Description	Power supply	Sensitivity
3897.05.80	G 3/4"	Electronic system water leak detector with motorised shut-off valve	24 V ~ 50/60 Hz	0.2 l/h
3897.06.80	G 1"	Electronic system water leak detector with motorised shut-off valve	24 V ~ 50/60 Hz	0.2 l/h
3897.05.90	G 3/4"	Electronic system water leak detector with motorised shut-off valve and remote control	24 V ~ 50/60 Hz	0.2 l/h
3897.06.90	G 1"	Electronic system water leak detector with motorised shut-off valve and remote control	24 V ~ 50/60 Hz	0.2 l/h

ACCESSORIES

Code	Size	Description
3898.05.80	G 3/4"	Template with flat seals and gaskets supplied.
3898.06.80	G 1"	Template with flat seals and gaskets supplied.

DIMENSIONAL FEATURES



DIMENSIONAL FEATURES

Code	A (mm)	B(mm)	G(mm)	H (mm)	H ¹ (mm)
3897.05.80	183.5	60	G 3/4" UNI ISO 228 120	193.5	215
3897.06.80	191.5	60	G 1" UNI ISO 228 120	196.5	215
3897.05.90	183.5	60	G 3/4" UNI ISO 228 120	193.5	215
3897.06.90	191.5	60	G 1" UNI ISO 228 120	196.5	215

TECHNICAL FEATURES

Sensitivity:	0.2 l/h
(*) Reaction time (**) Trip thresholds	Programmable
Temperature Range:	-10 - +60°C
Protection:	IP40 (case), IP68 (sensor), IP54 (electronics) (***)
Power supply:	24 V \approx 50/60 Hz. (cod. 3897.xx.xx) 12V / 24V AC/DC (Adapter/Transformer 230V - 12V AC/DC not supplied)
Power Absorbed:	4 W
Transmission:	Bluetooth® Low Energy (BLE)

Note:

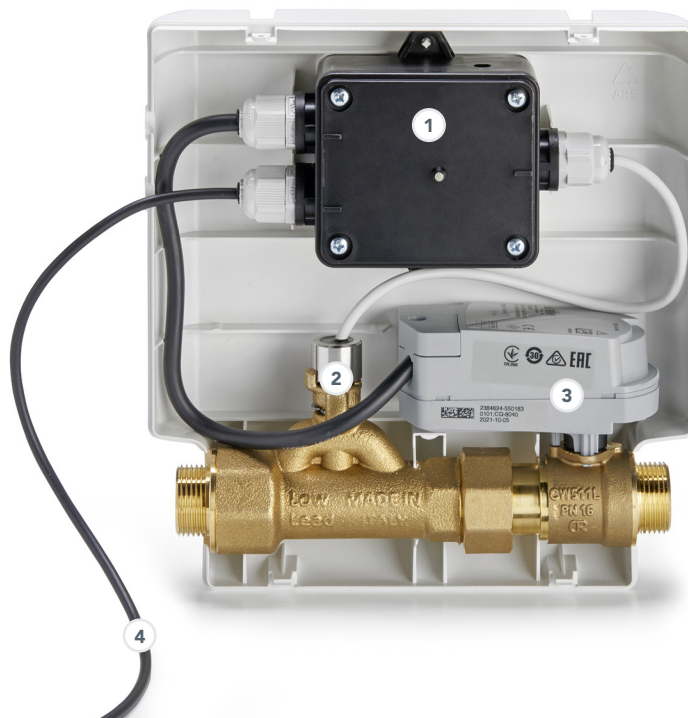
(*) Communication via BLE used for initial installation configuration and for device management with iOS and Android apps in "proximity" mode with a range of up to 30 m in the absence of shielding barriers.

(* *) Intended mode in the advanced settings section in the commissioning app. The device already has pre-set parameters in its factory settings that cover most typical residential installations.

(***)The first characteristic figure indicates that:

the enclosure provides protection of persons against access to hazardous parts by preventing or limiting the penetration of a body part or a tool held by a person into the enclosure; and at the same time the enclosure provides protection of the equipment against the penetration of solid foreign bodies. **5 - protection against access to hazardous parts by 1 mm² wire and protection against dust infiltration.** The second characteristic figure indicates the degree of protection of the enclosure against harmful effects on the equipment due to water penetrating the enclosure. **4 - protection against splashing water.**

COMPONENTS DESCRIPTION



1 Programmable controller:

It consists of the circuit board already wired to the leakage detection block and the shut-off unit.

3 Shut-off unit:

It consists of the motorised shut-off valve

2 Leak detection block with flow sensor:

It consists of the leak detection sensor and the housing in which it is mounted

4 Remote Control

Allows monitoring of Stop Leak status, valve reset and alarm reset.

INFORMATION AND WARNINGS

SYMBOLS KEY

The symbols below, with their associated wording, indicate the potential risk arising from failure to comply with the requirement to which they have been combined:



Warning

Warns that the failure to comply with the requirement entails a risk of damage to the equipment constituting the stop leak device.



Danger Risk of electric shock

Warns that there is a risk of electric shock if not observed.



Danger

Warns that failure to comply with the requirement entails a risk of harm to persons, animals and/or property.

WARNINGS BEFORE INSTALLATION



Danger

Before using the system, read the warnings in this manual carefully, as they provide important information on safe installation, operation and maintenance.

Use of the system for purposes other than those specified is not allowed.

Keep this manual in a safe place for further reference, especially when ordering spare parts.



Warning

Stop Leak is powered by the building's electrical system.

Check that the operating conditions of your system (voltage and power) are within the required functional limits for the Stop Leak device.



Warning

Ensure that the power supply is adequately protected and use the SELV (double-insulated) transformer. Before installation, make sure that the electrical system, if any, has been carried out in a workmanlike manner by requesting the "Declaration of Conformity" and the relevant mandatory attachments.

GENERAL WARNINGS FOR SAFE USE



Danger Risk of electric shock

Improper installation can cause damage to people, animals or property.

The manufacturer is not liable for damage caused by installation errors, non-compliance with these instructions and improper use of the system and individual components.

Also note the following:



Danger

- If the degree of protection does not allow it, do not get the equipment wet and do not install it unprotected, in humid environments or near jets, splashes of water or other liquids.
- Packaging parts (plastic bags, styrofoam, etc.) must not be left within the reach of children.
- Children, unauthorised persons, persons in altered state or not capable of understanding possible hazards must not be allowed to operate the command and control equipment or to handle the entire device.
- Always consult the following manual before any maintenance work.
- However, use all protective measures necessary to reduce the possibility of injury.



Danger



Warning

Any work on the electrical circuit, regarding routine or extraordinary maintenance operations, must be carried out by professionally specialised personnel authorised according to Italian Ministerial Decree 37/2008.



Danger

Risk of electric shock

Refrain from conducting work yourself.

It is strongly recommended to follow the maintenance instructions for the best operation of the system and, if parts of the system have to be replaced, to use the original spare parts supplied by the manufacturer.

Before carrying out any cleaning and maintenance work, make sure that:



Danger

- The power supply is switched off by the thermomagnetic circuit breaker located on the power supply line of the Stop Leak.
- It is very dangerous to operate the system without any component, especially if this is a safety guard or mechanical and/or electrical safety device.
- Under no circumstances should the system be started up by unqualified personnel during maintenance operations, without it being ascertained that maintenance operations have been completed.

In the event of a fault or malfunction of the equipment, switch off the power supply from the line protection circuit breaker.



Danger

Do not tamper with the system's equipment.

For reactivation and/or repair, contact the company that issued the declaration of conformity, or alternatively contact your local electrical installer if there are no warranty claims.

PRE-INSTALLATION PROCEDURES

- 1- Ensure that a suitable **filter is fitted before the water control components.**
- 2- Use a **water hammer** prevention device, if necessary, if the installation design envisages a constant anomalous outflow, e.g. when filling a swimming pool, etc.
- 3- Before starting installation, close the water supply valve.
- 4- Install ball valves on **both** sides of the StopLeak assembly.
- 5- Use a wall bracket to secure pipes and valves.
- 6- **Flush** all new pipes before installation and check/clean the filter.
- 7- Check the tightness of the fittings before reopening the water supply valve.
- 8- Check the connections of the new installation for leaks.
- 9- Check the availability of the wireless connection.
- 10- Start the procedure using the device search **APP** after having activated the Bluetooth mode of the smartphone used (refer to the manufacturer's manual).
- 11- Pair the device and start the procedure for learning the operating states (**CLOSED (Purple LED)=NO WATER PASSAGE / OPEN (Blue)=WATER PASSAGE**) following the steps suggested by the commissioning APP.

NOTE:

The device already has factory-set parameters that cover most typical installations in a residential environment

INSTALLATION



STOP LEAK can be installed in a **Horizontal** and **Vertical** position



NOTE: DO NOT INSTALL UPSIDE DOWN!

OPERATING LOGIC

Stop Leak, like the circuit breaker for the electrical circuit (main switch), intervenes to prevent damage to your home. The Stop Leak technology is able to determine whether a normal water withdrawal or abnormal consumption is taking place within the system. The operating logic of the system is as follows:

If for longer than a certain, user-settable interval, there is a flow above a pre-set intervention threshold at different levels:

- Microleaks
- Normal flows
- Abnormal flows

The device intervenes by interrupting the water flow and notifies the status.

Status	Description	Interface
Configuration	<ul style="list-style-type: none"> • Status of the system on first absolute start-up. • The required action is to perform the learning operations to configure the device. • Perform learning operations to allow the device to process the data. 	
OK	<ul style="list-style-type: none"> • It represents the normal operating condition of the device. The 'OK' notification on the app is equivalent to the status of a green or flashing green LED on the device. From this app window, it will only be possible to access the settings menu. 	
Warning - Attention (Flashing yellow)	<p>In the Warning state, it is possible to:</p> <ul style="list-style-type: none"> • Access the settings. • Cancel any device intervention. (LOCK) • The warning status will cease when normal operation (OK + green LED) is restored. 	

Status and Colour	Description	Interface
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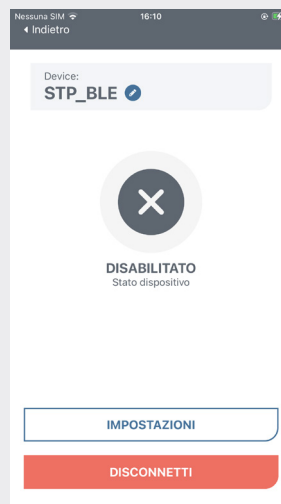
Leak
(Fixed yellow and red LED on App)

- Once the necessary maintenance has been carried out and the cause or causes of the leak have been identified, the alarm can be reset, thus restoring normal operation of the device.



Disabled

- The Disabled status is the state in which the device has been deactivated or the decision has been made to close the shut-off valve; no notification of the system status is provided.



Fault

- This status indicates a potential failure of the physical device without, however, specifying which one (please refer to the app manual and the fault table). From this page, only the settings can be accessed and the operating algorithm is interrupted until the cause of the fault is eliminated.



If the STOP LEAK is integrated into a high-level home automation system, the latter acts as master and notifies (mail, messaging, phone calls, etc.) the device's intervention. STOP LEAK has a voltage output (see wiring diagrams on pages 12 to 16) which can be used for this purpose. For each of these thresholds, it is then possible via the app (see section on settings) to change the device's tripping times and to temporarily exclude the device if the cause of the leakage is known and to avoid the continuous signalling of the fault or the continuous closing of the valve.

Even in the remote control version it is possible to exclude the intervention of the device directly from the latter.

DEVICE STATUS



BLUE LED:
Flashing light for learning the **OPENING** state.



PURPLE LED:
Flashing light for learning the **CLOSURE** state.



GREEN LED:
Flashing light first start-up, water flowing.
Steady light, system monitoring **ACTIVE**, water does not pass.



RED LED:
Steady light, the sensor is disconnected or faulty.
Flashing light, the leakage detection box or valve has been tampered with or moved manually.



YELLOW LED:
Steady light, a **LEAK has been detected!**
Flashing light, system fault.

PROGRAMMING AND APP SETTINGS

Diagnostica avanzata	
Deviazione stato aperto	0
Media stato leak	11451
Deviazione stato leak	65535
Media normalizzata	68
Time 1	0
Time 2	0
Time 3	0
Stato ML	3
Learning	1
Stato allarme	0
Stato del led	2
Allarme del sensore	0

Stop Leak can be used and its operation monitored by means of a configuration and programming app that can be downloaded from the most important Stores (Android and IOS) in its basic models (3897-XX-80), plus a further model (3897-XX-90) with remote control, which not only monitors its status but also shuts off the flow of water via the dedicated control, resets alarms and temporarily disables the device.

Configuration of the App is guided and very simple: at first access, the device must be taught two thresholds, one corresponding to the situation where water is passing through and the other corresponding to the situation where no water is passing through.

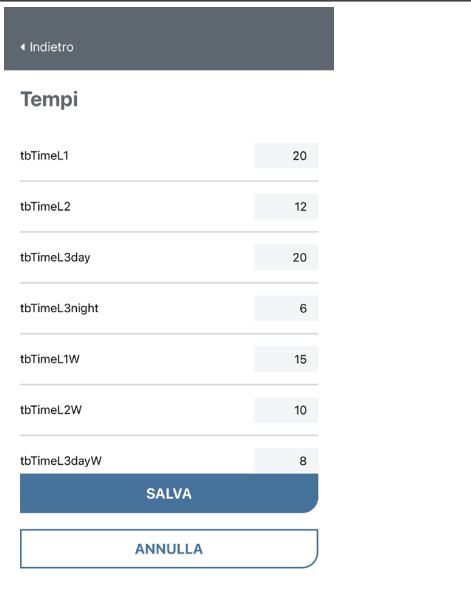
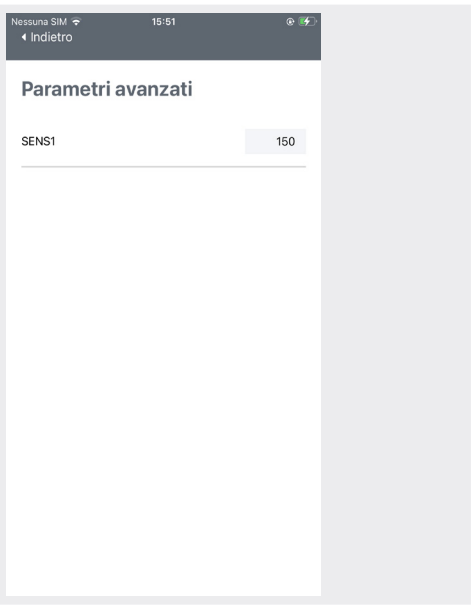
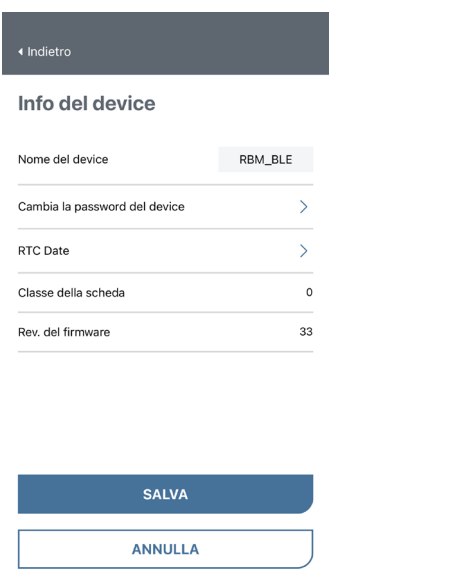
This last learning step is made even easier if a manual shut-off valve is installed immediately downstream of the Stop Leak (ball valve not supplied), which avoids acquiring a false closed state during the learning phase in the event that there is a leak in the system prior to the device being installed.

The algorithm underlying the operation of the Stop Leak allows the device to discriminate between normal and abnormal withdrawals, thanks to its logic of continuous self-learning of usage habits.

FROM THE STATUS PAGE, WHICH WILL SHOW THE CURRENT STATUS OF THE SYSTEM, VARIOUS SETTINGS CAN BE CHANGED:

Description	Interface
Time Change	<ul style="list-style-type: none"> Change of activation times for day mode (normal) and night mode (reduced times used to signal malfunctions).
Holiday Mode	<ul style="list-style-type: none"> Activates/deactivates holiday mode (night mode also during the day).
Device activation/deactivation	<ul style="list-style-type: none"> Allows you to activate the device, and have normal operation, or deactivate it and have no notification.
Valve control	<ul style="list-style-type: none"> It forces the valve to close, thus preventing the passage of water.
Language Change	<ul style="list-style-type: none"> Allows changing the language from the system language.

In addition to the basic settings, it is also possible to access the advanced settings, recommended for **skilled users or installers**, to modify the parameters with which the algorithm operates:

Setting	Description	App Interface
<p>Times</p>	<ul style="list-style-type: none"> Allows you to change after how long (minutes) the device changes its state. 	
<p>Advanced parameters</p>	<ul style="list-style-type: none"> Changes the values of the Algorithm's operating thresholds. 	
<p>Device Information</p>	<ul style="list-style-type: none"> Changes device access name and password. 	

Diagnostics

- Allows untranslated diagnostic data from the device.

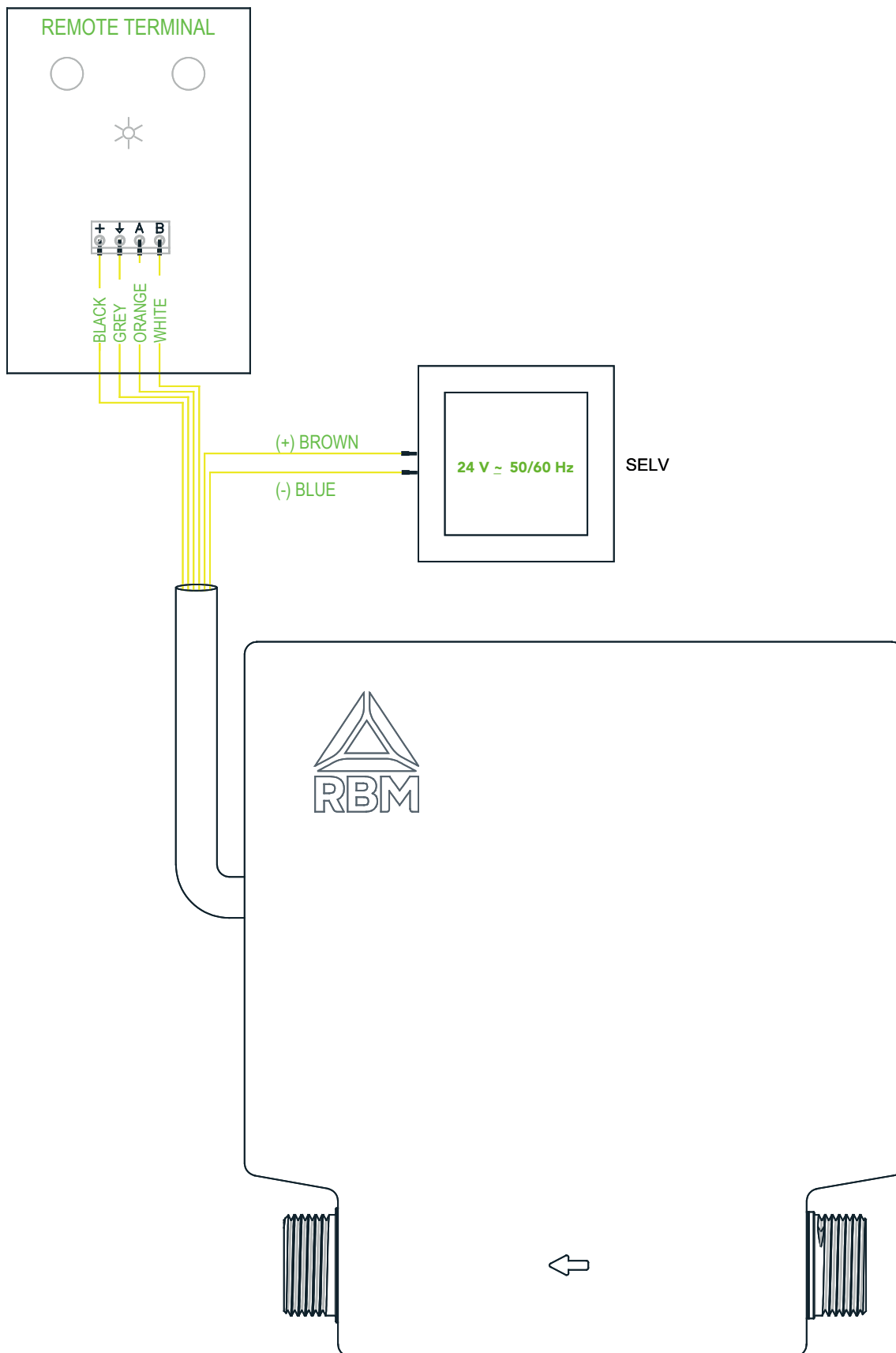
← Indietro

Diagnostica avanzata

Valore raw del sensore	13297
Media stato chiuso	13116
Deviazione stato chiuso	52678
Media stato aperto	10029
Deviazione stato aperto	536
Media stato leak	12742
Deviazione stato leak	65535
Media normalizzata	121
Time 1	0
Time 2	0
Time 3	0
Stato ML	1

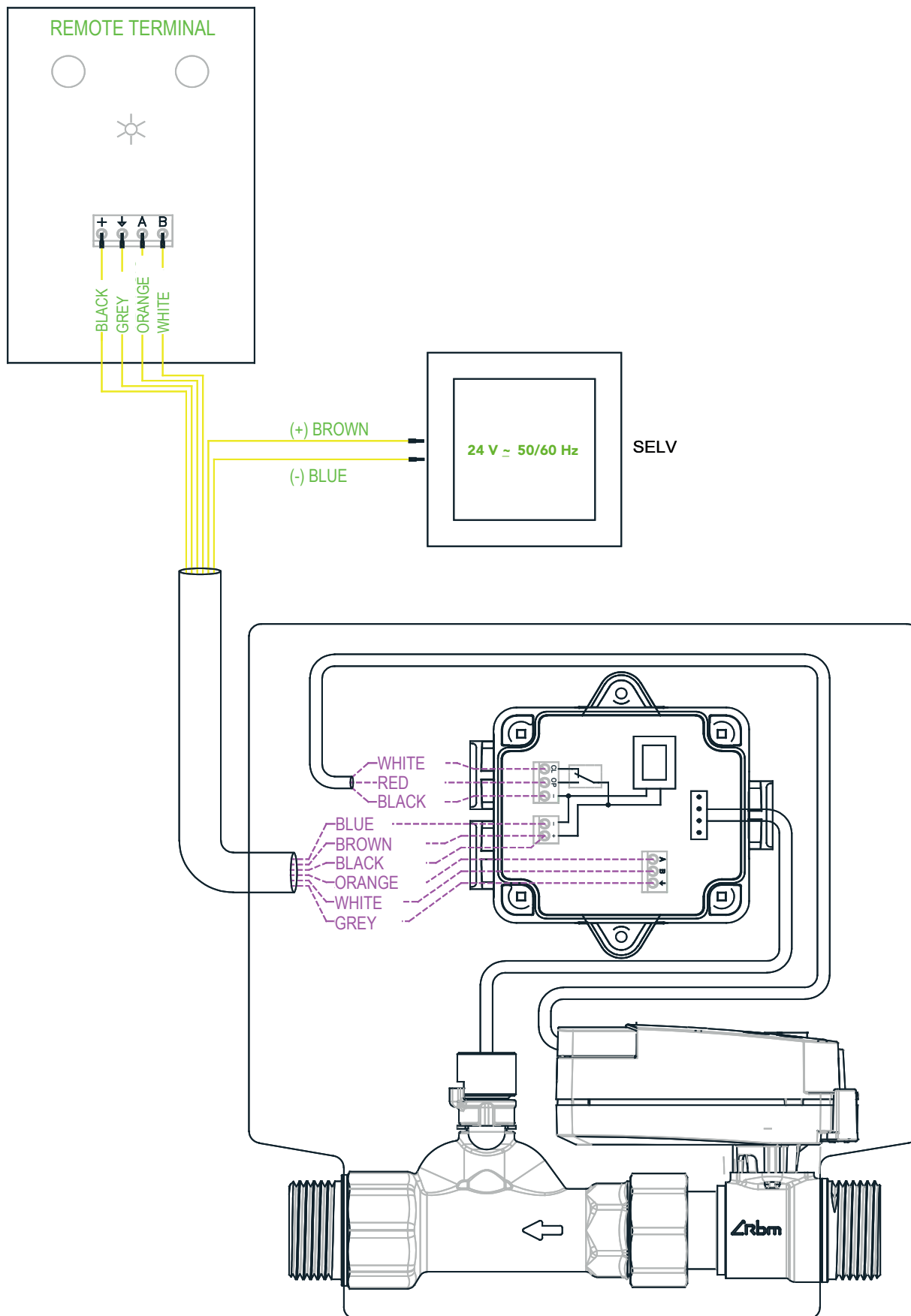
WIRING DIAGRAMS

Installation and maintenance must be carried out by qualified personnel:

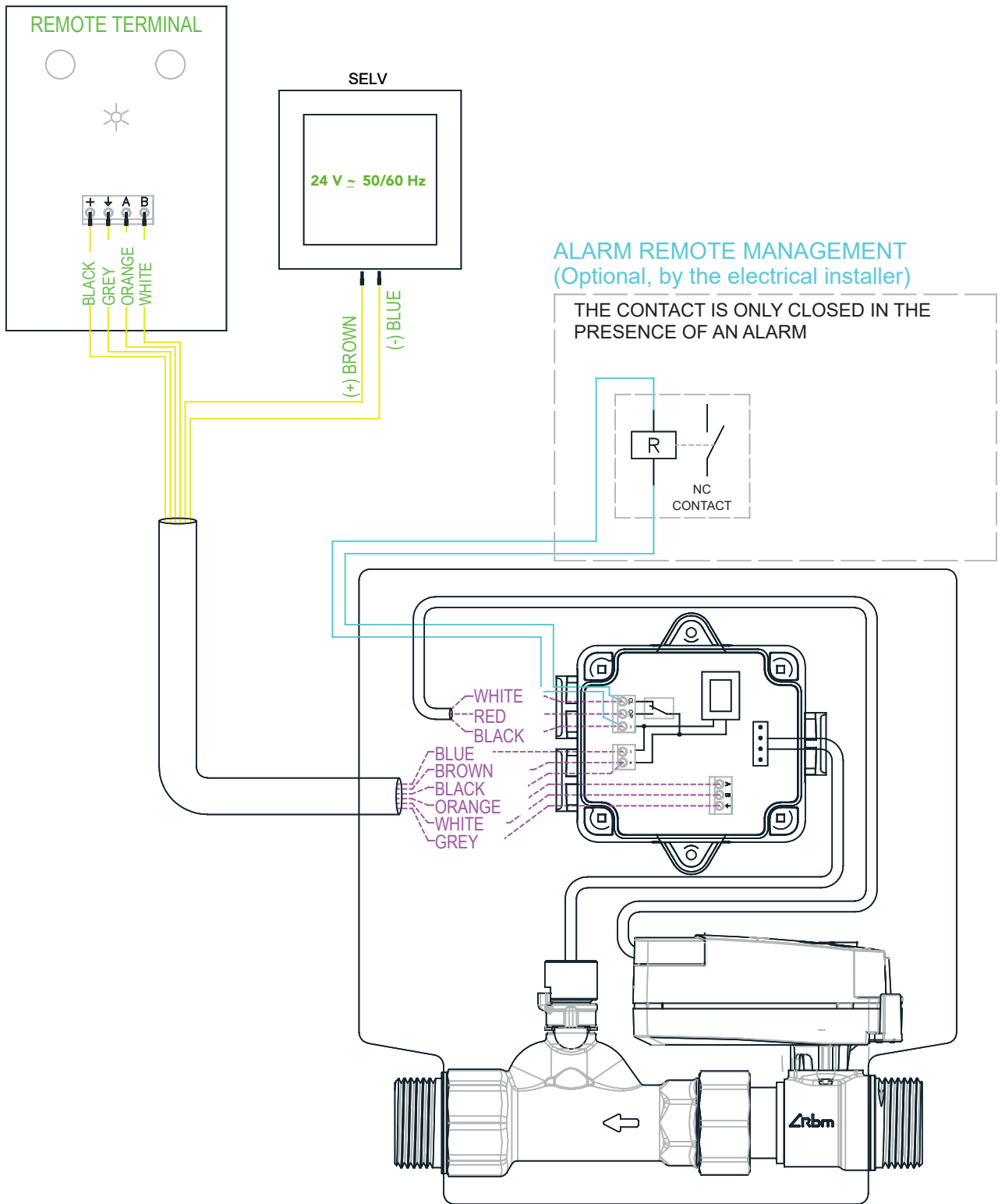


PLEASE NOTE

Device operation, alarm signalling and valve movement are dependent on the presence of power supply to the system.

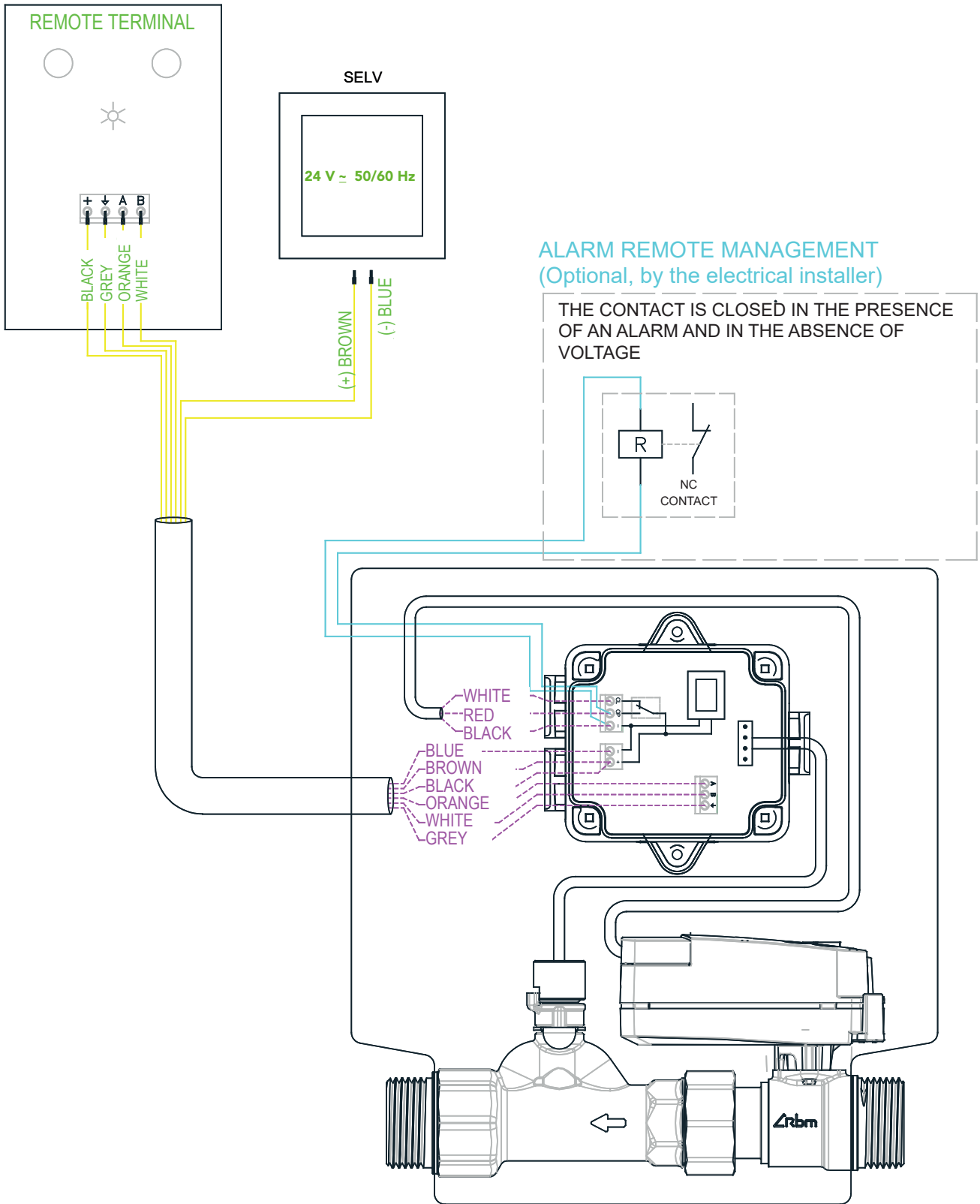


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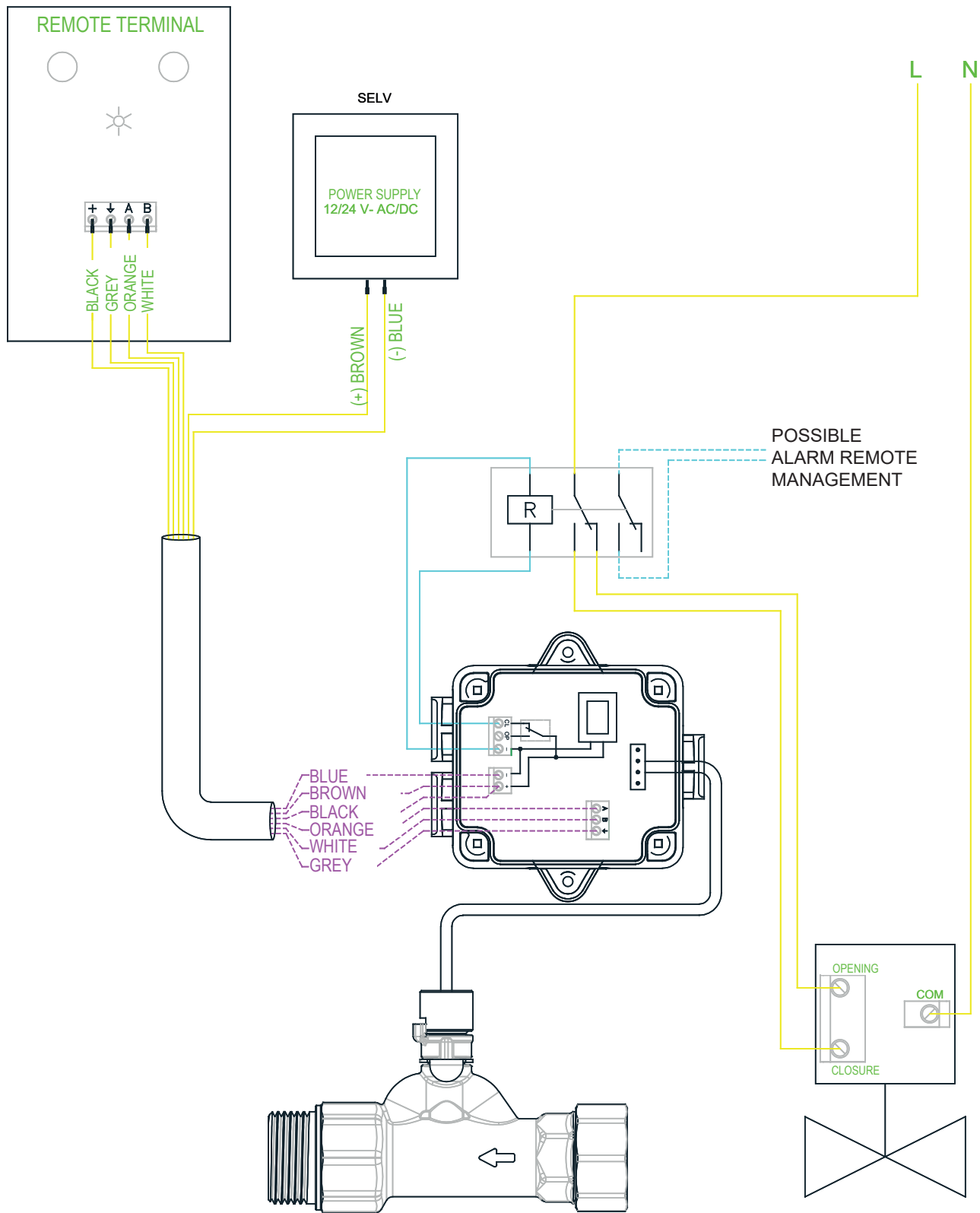
PLEASE NOTE

Device operation, alarm signalling and valve movement are dependent on the presence of power supply to the system.



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Device operation, alarm signalling and valve movement are dependent on the presence of power supply to the system.

WIRING DIAGRAM WITHOUT RBM VALVE:



PLEASE NOTE.

Device operation, alarm signalling and valve movement are dependent on the presence of power supply to the system.

DISPOSAL

For the polymer: CER170411
For electrical equipment: CER160216



WEEE Waste Electrical and Electronic Equipment

Italian Legislative Decree 25 July 2005, no.151 "Implementation of Directives 2002/95/EC, 2002/96/EC and 2003/108/EC and subsequent amendments and integrations concerning the reduction of the use of hazardous substances in electrical and electronic equipment, as well as waste disposal".

The crossed-out wheeled bin symbol on the equipment, or on its packaging, indicates that the product, at the end of its useful life, must be collected separately from other waste and taken to separate collection centres. The cost for separate disposal of this end-of-life equipment was originally paid for by the manufacturer.

organised and managed by the manufacturer.

The user who wishes to dispose of the equipment included in this system should, therefore, take it to an authorised centre for separate collection.

Appropriate separate collection for subsequent recycling, treatment and environmentally sound disposal of discarded equipment contributes to avoiding any negative effects on the environment and health while promoting the reuse and/or recycling of the materials the equipment is made of.

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