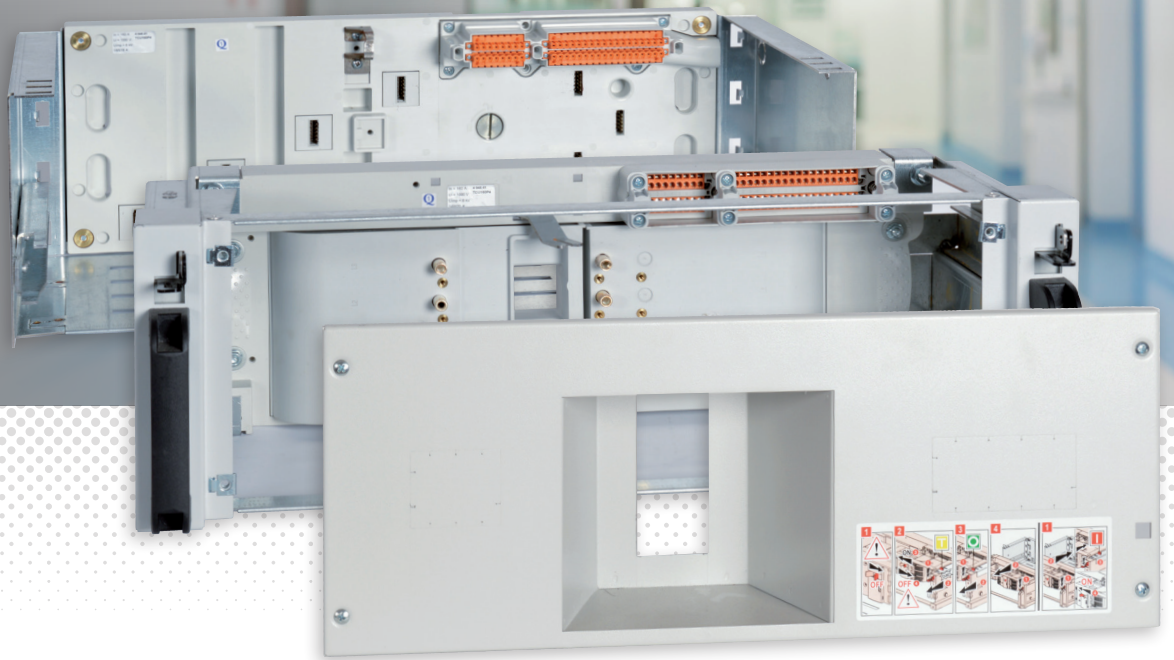


MAINTENANCE GUIDE

IS SYSTEMS

FOR XL³ ENCLOSURES



LEGAL INFORMATION

Particular attention must be paid on presentation pictures that do not include personal protective equipment (PPE). PPE are legal and regulatory obligations.

In accordance with its continuous improvement policy, Legrand reserves the right to change the specifications and illustrations without notice. All illustrations, descriptions and technical information included in this document are provided as indications and cannot be held against Legrand.

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INTRODUCTION

This IS System Maintenance Guide describes the maintenance requirements that should be strictly followed to maximize the performance and the life span of your IS system and to ensure the safety of your installation.

GENERAL INFORMATION

- The enclosures and their components must be installed in accordance with the installation rules described in the product manuals, instructions sheets and other documents provided by Legrand.
- Improper installation and use may result in enclosure arcing, overheating or fire.
- Any modification or repair, not authorized by the Legrand group, of the equipment composing the cabinet (except for the maintenance operations provided for in this maintenance guide), as well as any failure to comply with the rules established by Legrand in the documentation provided, cancels all Legrand responsibilities and guarantees.
- Use only the accessories recommended by the Legrand group in the general catalogue and in the product manuals, technical data sheets and other documents provided by Legrand.
- In order to ensure the highest levels of product performance at all times, our products are subject to change. Please check that the characteristics of the products are appropriate for their environment and use during maintenance operations, and refer to the corresponding documentation. If you have any questions or require clarification, please contact your Legrand Group contact person (see page 8 and the back of this guide).
- Installation, operation and maintenance of IS enclosures must be carried out by qualified, trained and authorized personnel, in accordance with the regulations in force in each country.

RISK OF ELECTRIC SHOCK, BURNS AND EXPLOSION

- The people working on the installation must have the appropriate electrical authorizations for the work to be carried out.
- Wear the PPE (Personal Protective Equipment) necessary to work on live products.
- Respect the safety rules related to electrical work.
- Improper electrical and mechanical use of equipment can be dangerous and risky and may result in personal injury or property damage.
- Ensure proper grounding of enclosures.
- Depending on the maintenance operations to be carried out, partial or total disconnection of the power supply to the cabinet in which the work is to be carried out must be planned before working on it.
- During operations that involve access to the interior of the cabinet, be aware of the risk of burns before touching the products and the metal parts.
- Before turning the power back on, check that there are no foreign bodies inside the cabinet and that all physical protections have been put back in place (e.g.: screens, covers, faceplates).

Any failure to strictly apply the procedures and to respect these recommendations, could lead to serious accidents, burns, electric shocks...



PURPOSE OF THE MAINTENANCE

During their use, the elements installed in your enclosure may be exposed to various wear and tear factors, such as high temperature, overvoltage, ambient pollution (e.g. dust, fumes), operating wear and tear (contacts, clamps), etc. These factors are likely to have a negative impact on your equipment, reduce its life span and/or alter its proper functioning.

Regular monitoring of the condition of the equipment in its operating environment is essential to prevent breakdowns or damage.

Carrying out the various maintenance operations at the recommended intervals is imperative in order to ensure that the electrical enclosures operate in optimal conditions, and will maximize their life span and preserve the safety of your installation.



The requirements and recommendations in this guide are based on our knowledge of the typical conditions of use of our products in the fields of application usually encountered. However, it is always the customer's responsibility to verify and validate that Legrand products are suitable for their installation.

The customer must ensure proper installation, maintenance and operation of the equipment to avoid any risk of injury to personnel or damage to property in the event of product failure, especially for applications requiring a very high level of safety (e.g. where the failure of a component may endanger the life or health of personnel).


The rules for storage, handling, installation, maintenance as well as adequate precautions and warnings must be strictly observed and applied.

MAINTENANCE PLAN

PREREQUISITE

Your installation must be maintained in accordance with the actions and the periodicity described in the following plan. Before carrying out the maintenance operations, make sure that your installation has not changed, in particular:

- Ventilation of the room
- Room temperature
- Degree of hygrometry
- Evolution and nature of the loads

 We strongly recommend that you keep an up-to-date maintenance log for each enclosure, indicating all verification and maintenance operations performed.

PREVENTIVE MAINTENANCE

General maintenance must be carried out with the cabinet switched off.

OPERATIONS	PERIODICITY*	1-2 LEGRAND LEVELS	3-4 LEGRAND LEVELS
1 - XL³ GENERAL MAINTENANCE			
Check that there are no foreign objects inside the cabinet	Annual	X	
Condition of faceplates and IP protections	Annual	X	
Cleaning (vacuum dusting)	Annual	X	
Cleaning of air vents and fans (when existing)	Annual	X	
Visually check for moisture and corrosion inside and outside the cabinet (condensation)	Annual	X	
Check the good general condition of the unit (knocks, shocks, deformations, burns, ...)	Annual	X	
Retouching of possible scratches or corrosion points with specific varnish	Annual	X	
Checking for the presence of information stickers	Annual	X	
2 - CHECKING THE ELECTRICAL CONNECTIONS			

* To be adjusted according to installation and usage conditions.

OPERATIONS	PERIODICITY*	1-2 LEGRAND LEVELS	3-4 LEGRAND LEVELS
Control of the tightening: conductors, power terminals of products	2 months after commissioning then annual	X	
Verification of tightening torques: Busbars, conductors, power terminals of products	Every 3 years		X
3 - CHECKS			
Thermographic control (sensitive points)	Annual	X	
Checking the continuity of the earthing connections and the protection circuit	Annual	X	
4 - MEASURES			
Insulation test (Megohmmeter 500 V DC)	In case of a fault or after modification of the cabinet		X
Temperature measurement	Annual	X	X
5 - IS SYSTEM CHECK			
Plugged-in / Draw-out (IS 223 & 233)	Annual	X	
Plugged-in / Test / Draw-out / Padlocking and position light (IS 333)	Annual	X	
Checking for possible arcing or overheating	Annual	X	
Checking the auxiliary contact terminal block (mobility, condition, lubrication and connections) (Grease Cat.No 9 803 09)	Annual	X	
Locking mechanism for drawer/mobile base with tripped circuit breaker (no load)	Annual	X	
Clamp contact pressure	Every 3 years		X
Checking the installation of the fixed part	Every 3 years		X
Checking the presence of grease on the mobile plate connections (grease Cat.No 9 803 09)	Annual	X	
Cleaning and greasing of the insertion contacts of the moving part of the IS bases (grease Cat.No 9 803 09)	Every 3 years		X
Checking the continuity of terminal block contacts	Annual		X
6 - ADVANCED MAINTENANCE		1-4 LEGRAND LEVELS	5 LEGRAND LEVEL
Replacement of the connection clamps between IS busbars and IS bases	Every 9 years		X
Replacement of the mobile part male connections	Every 9 years		X
Cleaning or replacement of IS bars (*)	Every 9 years		X

* To be adjusted according to installation and usage conditions.

IS BASE MAINTENANCE SERVICE

You wish to be accompanied in getting familiar with your installation, to carry out controls and normative maintenance, to set up preventive or curative actions...

Our services are adapted to your needs!

Feel free to call our experts to carry out maintenance operations while respecting the operating constraints of your installation.



1-2 LEGRAND LEVELS

■ Intervention description

A Legrand technician will check the IS bases on your installation, following detailed procedures and using the necessary support equipment (integrated, external or portable).

Examples of controls and interventions carried out:

- general maintenance,
- mechanical and electrical control,
- cleaning and greasing...



3-4 LEGRAND LEVELS

■ Intervention description

A specialized Legrand technician will check the IS bases on your installation, following detailed procedures and using specialized support equipment.

Examples of controls and interventions carried out:






- operation of the circuit breaker on its IS base,
- checking the state of the clamps and internal connections...



For more information, please visit our website



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