

GREEN'UP CHARGING STATIONS



LEGAL INFORMATION

Presentation pictures do not always include Personal Protective Equipment (PPE), but this is a legal and regulatory obligation that must be scrupulously respected.

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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SAFETY INSTRUCTIONS

General information

- Use only the products and accessories recommended by the Legrand Group in the catalogue, instructions, technical data sheets and all other documents provided by Legrand (hereinafter referred to as «the Documentation») in compliance with the installation rules.
- Improper installation and/or use may result in the risk of arcing in the enclosure, overheating or fire. The enclosures must be used under normal conditions, they must not be subjected to Voltage / Current / Temperature values other than those specified in the Documentation.
- Legrand declines all responsibility for any modification or repair of the equipment making up the enclosure that is not authorized by the Legrand Group, as well as any failure to comply with the rules and recommendations specified by Legrand in the Documentation. In addition, in the cases mentioned above, the warranty granted by Legrand will not be applicable.
- It is necessary to check that the characteristics of the products are appropriate for their environment and use during maintenance operations, and to refer to the Documentation. If you have any questions or require clarification, please contact Legrand Group.
- The installation, use and maintenance of the enclosures and their components 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.

- 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 may result in personal injury or damage to property.
- Depending on the maintenance operations to be carried out, partial or total power cuts of the enclosure concerned should be planned before any work.
- When performing operations that involve access to the inside of the enclosure, be aware of the risk of burns before touching any products or metal parts.
- Before turning the power back on, make sure that there are no foreign bodies and that all physical protections have been put back in place (e.g.: screens, covers, shields).

Any failure to strictly apply the procedures and to respect these recommendations, could lead to serious risk of accident, endangering people and property (in particular, without limitation, risk of burns, electric shocks, etc.).



The rules and recommendations in this document 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 its installation and use.

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 that require a very high level of safety (e.g., those in which the failure of a component may endanger human life or health).

The rules for storage, handling, installation and maintenance and the appropriate precautions and warnings must be strictly observed and applied.











PURPOSE OF MAINTENANCE

During use, your charging station may be exposed to a variety of factors, such as high or low temperature variations, power surges, ambient pollution (e.g., dust, humidity, animal droppings...), wear and tear (contactors...), etc.

It's also important to regularly update the firmware of your charging station using the EV Charge Application (which is free and works via Bluetooth) or the web pages of the optional communication kit (reference 0 590 56). This ensures that it can operate correctly with electric vehicles marketed after its initial commissioning.

Carrying out the various maintenance operations at the recommended intervals will ensure that the charging station operates under optimum conditions and maximizes its service life.

This guide concerns the Green'up Premium charging stations listed in the table below and available from January 2022:












IP44 / IK08 - Plastic							
	Charging mode	Power output (kW)	Number of charging points per charging station	Wall-mounted charging stations		Option Stand mounting	
				Single ⁽¹⁾	With built-in comm. kit and integrated RFiD reader		
	Mode 3 	Single-phase 3,7 - 4,6 kW	1	0 580 00	0 590 05	0 590 52	
		Single-phase 3,7 - 7,4 kW	1	0 580 01	0 590 06	0 590 52	
	Mode 2 and 3 	Single-phase 3,7 - 4,6 kW	1	0 580 30	0 590 70	0 590 52	
		Single-phase 3,7 - 7,4 kW	1	0 580 35	0 590 71	0 590 52	
	Mode 3 	Three-phase 11 - 22 kW	1	0 580 02	0 590 07	0 590 52	
IP55 / IK10 - Metal							
	Charging mode	Power output (kW)	Number of charging points per charging station	Charging stations + mounting kit		Options	
				Wall-mounted	On stand	Communication kit	RFiD reader
	Mode 2 and 3 	Single-phase 3,7 - 4,6 kW	1	0 580 41 + 0 590 53	0 580 41 + 0 590 54	0 590 56	0 590 59
			2	0 580 42 + 0 590 53	0 580 42 + 0 590 54	0 590 56	0 590 59
		Single-phase 3,7 - 7,4 kW	1	0 580 43 + 0 590 53	0 580 43 + 0 590 54	0 590 56	0 590 59
			2	0 580 44 + 0 590 53	0 580 44 + 0 590 54	0 590 56	0 590 59
	Mode 2 and 3 	Three-phase 11 - 22 kW	1	0 580 48 + 0 590 53	0 580 48 + 0 590 54	0 590 56	0 590 59
			2	0 580 49 + 0 590 53	0 580 49 + 0 590 54	0 590 56	0 590 59

[1] Can be fitted with a communication kit ref. 0 590 56

You can find further documentation as well as all the technical information of the products on:
www.legrand.com

PURPOSE OF MAINTENANCE

This guide also applies to the Green'up Premium charging stations below, available until the end of 2021:

		IP	IK	Charging mode	Power output (kW)	Number of charging points per charging station	Wall mounting	Stand mounting	Options ⁽¹⁾		Average charging time (in hours) depending on of vehicle and battery		
									Com-munication kit	RFID Reader (Works with communication kit ref. 0 590 56)	Battery capacity of vehicle		
											22/24 kW/h	30/32 kW/h	40 kW/h
SINGLE-PHASE CHARGING STATIONS - 230 V													
	Plastic	44	08	Mode 3 	3,7 / 4,6	1	0 590 00	0 590 00 + 0 590 52	0 590 56	-	6	8	10
					7,4	1	0 590 01	0 590 01 + 0 590 52	0 590 56	-	3,5	4,5	6
	Plastic	44	08	Mode 2 and 3 	3,7 / 4,6	1	0 590 30	0 590 30 + 0 590 52	0 590 56	-	6	8	10
					7,4	1	0 590 35	0 590 35 + 0 590 52	0 590 56	-	3	4,5	6
	Metal	55	10	Mode 2 and 3 	3,7 / 4,6	1	0 590 41 + 0 590 53	0 590 41 + 0 590 54	0 590 56	0 590 59 + 0 590 56	6	8	10
						2	0 590 42 + 0 590 53	0 590 42 + 0 590 54	0 590 56	0 590 59 + 0 590 56	6	8	10
		55	10		7,4	1	0 590 43 + 0 590 53	0 590 43 + 0 590 54	0 590 56	0 590 59 + 0 590 56	3	4,5	6
						2	0 590 44 + 0 590 53	0 590 44 + 0 590 54	0 590 56	0 590 59 + 0 590 56	3	4,5	6
THREE-PHASE CHARGING STATIONS - 400 V													
	Plastic	44	08	Mode 3 	22	1	0 590 02	0 590 02 + 0 590 52	0 590 56	-	1	1,5	2
	Metal	55	10	Mode 2 and 3 	22	1	0 590 48 + 0 590 53	0 590 48 + 0 590 54	0 590 56	0 590 59 + 0 590 56	1	1,5	2
						2	0 590 49 + 0 590 53	0 590 49 + 0 590 54	0 590 56	0 590 59 + 0 590 56	1	1,5	2

1: Works in conjunction with a charging station, to be ordered separately

MAINTENANCE SCHEDULE

PRELIMINARY

Before carrying out any maintenance operations, ensure that you have verified that your installation has not undergone any changes since the initial servicing of the charging station.

If this is not the case, check for any alterations to the protection circuits, the installation of a new upstream transformer, the introduction of new machinery in the vicinity, etc.

If there has been a change, it may be necessary to resize both the charging station and the installation. Please get in touch with your Legrand Group contact to verify that the conditions for using your equipment are still satisfied.

MAINTENANCE SCHEDULE

OPERATIONS	PERIODICITY	POWERED DOWN	IN SERVICE (OPERATING)
1/5 - GENERAL MAINTENANCE			
External cleaning (soap and water)	6 months ⁽¹⁾	X	
Make sure there are no foreign objects inside the charging station	Annual ⁽¹⁾	X	
Internal cleaning (dust removal by suction)	Annual ⁽¹⁾	X	
Integrity of ground connections	Annual ⁽¹⁾	X	
Visually check that there is no moisture inside and outside the charging station (condensation)	Annual ⁽¹⁾	X	
Check charging station integrity	Annual ⁽¹⁾		X
Touch up any scratches or spots of corrosion with special varnish	Annual ⁽¹⁾		X
Check the presence of information stickers	Annual ⁽¹⁾		X

MAINTENANCE SCHEDULE

OPERATIONS	PERIODICITY	POWERED DOWN	IN SERVICE (OPERATING)
2/5 - MECHANICAL INSPECTIONS			
Checking the correct operation of Outlets	Annual ⁽¹⁾		X
Check tightening torques: conductors, product power charging stations...	On implementation 2 months after implementation Following which annually	X	
Grease sockets (perfluorinated lubricant such as Lubrilog Fluolog MG 2)	Annual ⁽¹⁾	X	
Checking circuit board connections	Annual ⁽¹⁾	X	
Checking the connections on the rear of the display	Annual ⁽¹⁾	X	
T2 socket lock motor	Annual ⁽¹⁾	X	
3/5 - ELECTRICAL INSPECTIONS			
Checking the grounding of the charging charging station ⁽²⁾	On implementation		X
Visual inspection of cable integrity	Annual ⁽¹⁾		X
Measuring electrical values: simple and compound voltage, frequency... inputs/outputs	Annual ⁽¹⁾		X
4/5 - FUNCTIONAL INSPECTIONS			
Visual and functional inspection of auxiliaries. Use a load simulator	Annual ⁽¹⁾		X
T2 socket locking motor	Every 6 months ⁽¹⁾		X
Green'Up Access socket detection	Annual ⁽¹⁾		X
5/5 - MISCELLANEOUS			
Checking the charging station firmware version	Every 6 months ⁽¹⁾		X
Replacing contactors	No. of operations = 30,000 (or every 2 years)	X	

(1) To be modulated according to installation and usage conditions

(2) Some vehicles require a ground < 30 ohm

We strongly advise that you keep an up-to-date maintenance log for each charging station, indicating the following and maintenance operations which have been carried out. You'll find an example in the annex of this document (see page 14).

TROUBLESHOOTING

If you come across any issues using or implementing the charging stations, please refer to the table below. If the problem persists, or if it is not resolved using the table below, contact your Legrand Group.

FAULT	INDICATORS	POSSIBLE CAUSES	ACTIONS
Cable is connected but charging does not start (all mode 2 and 3 cables)	Scrolling white indicators	Programming Scheduled via external signal (contact on charging station)	Forcing the charge by pressing the «Stop» button on the charging station (if scheduled programming is enabled on the override input) It is not possible to force the charge in the case where the external signal is connected to the non-override input of the charging station. 1. Rewire the override input if you wish to force the load 2. Do not connect the external contact input if you don't want management through an external signal 3. Activate external signal to authorize (clock, key, ignition etc.)
		Time programming active via Application (EV Charge)	Returning to «Immediate Charging» mode on the EV Charge application
		The vehicle does not allow charging (vehicle not fully charged)	No action is possible if the vehicle is already almost fully charged - unplug your cable to stop the indicator from scrolling
		The vehicle does not allow charging (vehicle fully charged)	1. Plug and unplug the cable on the vehicle side or the charging station side. If the problem persists, contact your Legrand Group representative. 2. Check your electrical installation: - Neutral system TT or TN (IT system prohibited). - Earth loop measurement <30 ohms. - Neutral-to-earth voltage measurement <10V RMS. - Neutral-to-phase voltage measurement: should be between 195V and 265V.

TROUBLESHOOTING

FAULT	INDICATORS	POSSIBLE CAUSES	ACTIONS
Cable is connected but charging does not start. (all mode 2 and 3 cables)	White lights steady	The cable is improperly connected	Check the cable connection to the charging station and the vehicle (unplug and reconnect until the charging starts)
		Charging station locked at Startup	<ol style="list-style-type: none"> 1. Restart the charging station by power supply (5 min minimum for capacitor discharge) 2. Check that your charging station is the latest software version (update available via the EV Charge App) or on the www.legrand.com website (with communication kit)
The charging station isn't working (no cable connected)	All lights off	The charging station is not powered	Check the power supply upstream of the charging station (circuit breaker at the electrical panel)
		The station is faulty and has triggered the protection upstream	Try to identify the cause of the fault and contact your Legrand Group representative

FAULT	INDICATORS	POSSIBLE CAUSES	ACTIONS
Charging station does not work (no cable connected)	White and red lights steady	Intermittent error on the charging station	<ol style="list-style-type: none"> 1. Disconnect and perform a reset of the station (press the STOP button for 5 seconds or use the application) 2. Cut off power to the station until all lights on the electronic board are extinguished, then restore power
		Internal wiring or contactor fault	<ol style="list-style-type: none"> 1. Check the condition of cable connections and connectors 2. Check the condition of the contactors and replace them if necessary
Cable stuck in my charging station (Type 2 mode 3 side)		Locking motor blocked	<ol style="list-style-type: none"> 1. Stop the charging on the vehicle or charging station side (using the stop button or RFID badge) 2. Turn off and then turn on the main power supply to the charging station. If the issue continues, contact your Legrand Group representative
Mode 2 cable plugged in (Green'up Access socket) and charging does not start	White lights steady	Incorrect detection of the domestic socket	Unplug and then reconnect your mode 2 cable If the issue persists, contact your Legrand Group representative
Mode 2 cable unplugged (Green'up Access socket) and «charging in progress» displayed on the charging station	Scrolling green lights	Incorrect detection of the domestic socket	Unplug and then reconnect your mode 2 cable If the issue persists, contact your Legrand Group representative

TROUBLESHOOTING

SOFTWARE MALFUNCTION	POSSIBLE CAUSES	ACTIONS
Unable to register my product in the EV Charge Application with my Smartphone	Bluetooth and geolocation not activated	Enable your Bluetooth and geolocation
	Insufficient 3G/4G network	Register the charging station in an area with adequate 3G/4G network coverage
	My smartphone does not detect my charging station nearby	<ul style="list-style-type: none"> - Check that your 3G/4G network is adequate - Use a smartphone with at least Android 9 or iOS 8 - Ensure that the charging station's Bluetooth is active - Wait for at least one minute for your smartphone to detect the station - Turn off and then turn on your smartphone - Ensure that your environment is not disrupted (other smartphones near the station with Bluetooth enabled and paired outside the application) <p>If the problem continues, contact your Legrand Group representative</p>
Charging station registered but unable to connect	Customer account in use	<p>It is not possible to connect more than one person to the charging station at the same time</p> <p>If the problem persists, please contact your Legrand representative at the Legrand Group</p>

SOFTWARE MALFUNCTION	POSSIBLE CAUSES	ACTIONS
<p>I want to record a double charging station, and my Smartphone detects only one side</p>	<p>My Smartphone doesn't detect my nearby charging point</p>	<ul style="list-style-type: none"> - Make sure the charging station Bluetooth is active. - Disconnect and reconnect the main power supply of the charging station (at the electrical panel) - Make sure you're using a smartphone with at least with at least Android 9 or IOS 8 - Shut down and restart the EV application Charge If the problem persists, contact your Legrand representative at the Legrand Group
<p>The software update was interrupted during loading, and now my charging station is unusable</p>	<p>Connection problem between Smartphone and charging station (loss of Bluetooth communication)</p>	<ul style="list-style-type: none"> - Close the application - Wait for the return of solid red lights on the charging station - Restart the application and initiate the update process again <p>If the update is still impossible:</p> <ul style="list-style-type: none"> - Disconnect the power supply to the charging station for > 5 minutes (time for capacitors to discharge) - Reconnect the power to the charging station; the lights should be fixed in red only - Restart the application and initiate the update process again <p>If the problem persists, try with one or several other smartphones to confirm proper Bluetooth communication with the charging station</p> <p>If the problem persists, contact your Legrand representative at the Legrand Group</p>

MAINTENANCE

LOG






DATE OF COMMISSIONING		/ /	
MAINTENANCE		CONTROL	COMMENTS
After 2 months	Date / Visa		
After 1 year	Date / Visa		
After 2 years	Date / Visa		
After 3 years	Date / Visa		
After 4 years	Date / Visa		
After 5 years	Date / Visa		
After 6 years	Date / Visa		
After 7 years	Date / Visa		
After 8 years	Date / Visa		
After 9 years	Date / Visa		
After 10 years	Date / Visa		
After 11 years	Date / Visa		
After 12 years	Date / Visa		
After 13 years	Date / Visa		
After 14 years	Date / Visa		

Notes

[illegible]



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