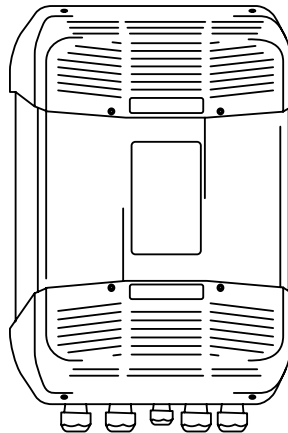


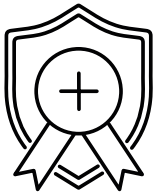


# quick guide xtender xtm



swiss made power





See more about our warranty conditions  
on our website [studer-innotec.com/studer-care](https://www.studer-innotec.com/studer-care)

designed and manufactured  
by studer in Switzerland



## Introduction

### **EN** Congratulations!

You are about to install and use a high-end equipment that will play a central role in the energy management of your battery-based system. The xtender is a smart battery inverter/charger with advanced functions. This xtender has been designed, manufactured, assembled and tested in our factory in Switzerland.

### **FR** Félicitations !

Vous vous préparez à installer et à utiliser un appareil haute-gamme qui jouera un rôle central dans la gestion d'énergie de votre système avec stockage. L'xtender est un onduleur / chargeur de batterie intelligent doté de fonctions avancées. Ce xtender a été conçu, fabriqué, assemblé et testé dans notre usine en Suisse.

### **DE** Herzlichen Glückwunsch!

Wir freuen uns, dass Sie sich für eines High-Tech-Gerät entschieden haben, welches bei der Energie-management Ihrer Anlage entscheidende Rolle spielen wird. Der xtender ist ein intelligenter Wechselrichter / Batterielader mit erweiterten Funktionen. Dieser xtender wurde in unserem Werk in der Schweiz entwickelt, hergestellt, montiert und getestet.

### **ES** ¡Enhorabuena!

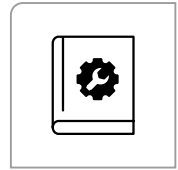
Está a punto de instalar y de utilizar un equipo de alta gama que desempeñará una función esencial en la gestión de energía de su sistema con almacenamiento. El xtender es un inversor / cargador de batería inteligente con funciones avanzadas. Este xtender ha sido diseñado, fabricado, ensamblado y probado en nuestra fábrica en Suiza.

# General Information

## EN Exclusion of liability

Studer disclaims all responsibility and liability for damage, costs or losses resulting from an installation that does not comply with the instructions, a faulty operation or inadequate maintenance. The use of studer equipment is in any case under the responsibility of the customer.

Read carefully the safety and operation instructions / Installation must be entrusted to qualified personnel / Check the user manual online / Need help?



## FR Exclusion de la responsabilité

Studer décline toute responsabilité pour les dommages, les coûts ou les pertes résultant d'une installation non conforme aux prescriptions, d'un fonctionnement défectueux, ou d'un entretien déficient. L'utilisation des appareils studer relève dans tous les cas de la responsabilité du client.

Lisez attentivement les instructions de sécurité et d'utilisation / L'installation doit être confiée à du personnel qualifié / Consultez le manuel d'utilisation en ligne / Besoin d'aide ?



## DE Haftungsausschluss

Studer übernimmt keinerlei Verantwortung und Haftung für Schäden, Kosten oder Verluste, die sich aus unsachgemäßer Installation, unsachgemäßem Betrieb sowie fehlerhafter Wartung ergeben oder in irgendeiner Art und Weise damit zusammenhängen. Der Einsatz und Betrieb der studer-Geräte obliegt in jedem Fall der Verantwortung des Kunden.

Lesen Sie die Sicherheits- und Betriebsanweisungen sorgfältig durch / Die Installation muss qualifiziertem Personal anvertraut werden / Überprüfen Sie die Bedienungsanleitung online / Brauchen Sie Hilfe?



## ES Exclusión de responsabilidad

Studer declina cualquier responsabilidad por los daños, costes o pérdidas resultantes de una instalación no conforme con las recomendaciones, de un funcionamiento defectuoso o de un mantenimiento deficiente. El uso de equipos de studer es en cualquier caso responsabilidad del cliente.

Lea atentamente las instrucciones de seguridad y funcionamiento / La instalación debe confiarse a personal cualificado / Consulte el manual de usuario en línea / ¿Necesitas ayuda?

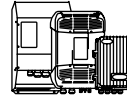


Compatible with:



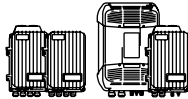
**rcc 02/03**

Configuration, display, datalogger



**xtender**

Battery inverter/charger



**vario**

Solar charge controller



**xcom CAN**

Communication with lithium BMS



**bsp**

Advanced battery processor (lead-acid)



**xcom 232i/CAN/485i**

Communication bridges (openstuder)



**xcom LAN/GSM**

Remote monitoring (Portal & App)



**rcm 10**

Remote control module

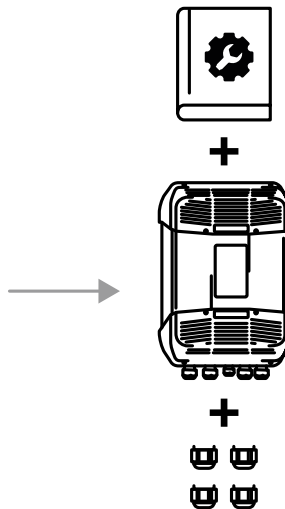
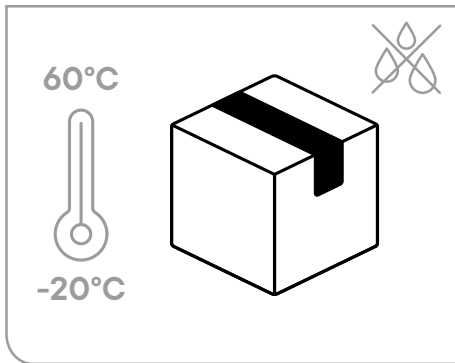


**bts 01**

Temperature sensor

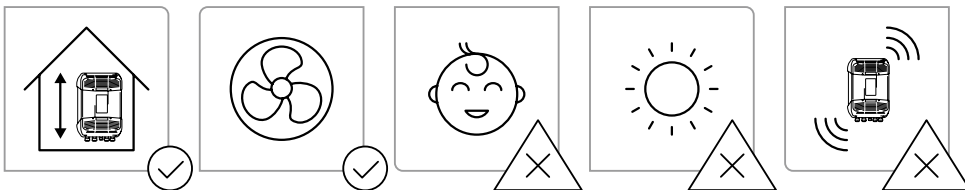
# Mounting and installation

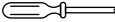


## Storage and content



## Mounting place

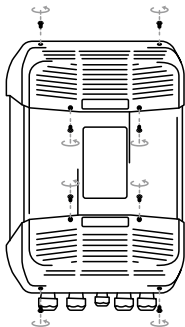
The batteries should only be installed by qualified personnel.



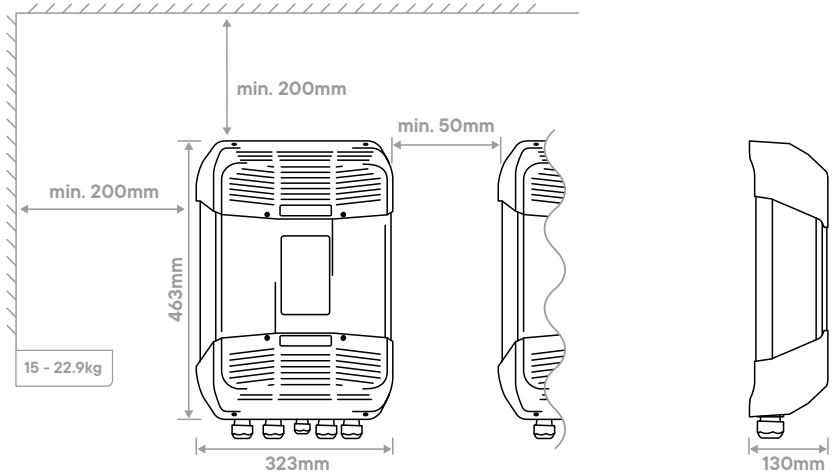
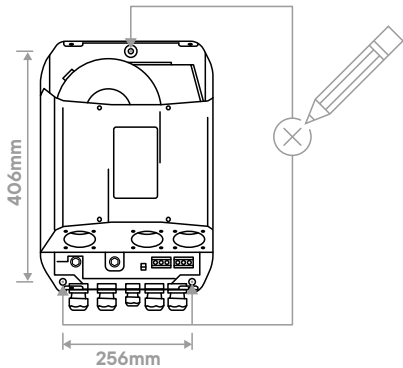
+ T10  3x  + 

## Fixing and dimensions

1

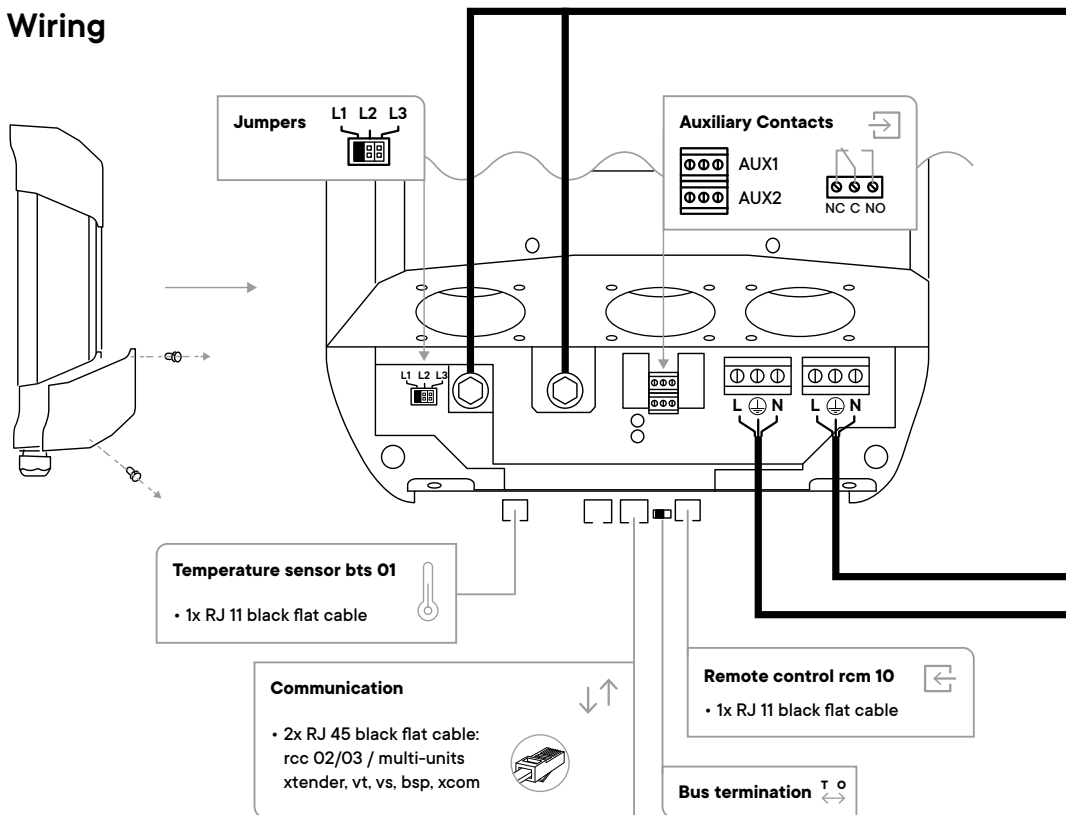


2



3

# Wiring



**EN** The device must be installed in accordance with local standards and regulations in force.

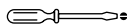
**FR** L'appareil doit être installé conformément aux normes et réglementations locales en vigueur.

**DE** Das Gerät muss gemäß den geltenden örtlichen Normen und Vorschriften installiert werden.

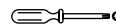
**ES** El dispositivo debe instalarse de acuerdo con las normas y regulaciones locales vigentes.



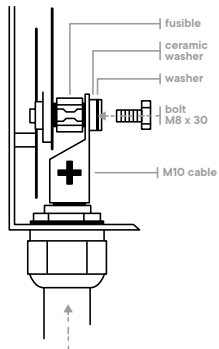
M8



T10



### \*Bat+ connection (provided)



### Battery connection

- 70mm<sup>2</sup> cable M8, 10Nm **xtm 1500-12** **xtm 2000-12** **xtm 3500-24**
- 50mm<sup>2</sup> cable M8, 10Nm **xtm 2400-24** **xtm 4000-48**
- 35mm<sup>2</sup> cable M8, 10Nm **xtm 2600-48**



BAT+, M8



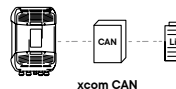
BAT-, M10

Protection device (battery side)\*

- 150A **xtm 2600-48** / 200A **xtm 2400-24** **xtm 4000-48**
- 250A **xtm 1500-12** / 300A **xtm 2000-12** **xtm 3500-24**

\*Internal fuse provided on bat+, recommended external fuse

### Lithium batteries communication BMS CAN



xcom CAN



### AC in connection

- Up to 3x10mm<sup>2</sup> cable, 1.6Nm

Protection device AC

50Aac, circuit breaker type B

Overvoltage protection, SPD

### AC out connection

- Up to 3x10mm<sup>2</sup> cable, 1.6Nm

Protection device to protect cables

Up to 56Aac, circuit breaker type B

Protection device to protect people

Up to 56Aac, RCCB/RCD, check earth scheme

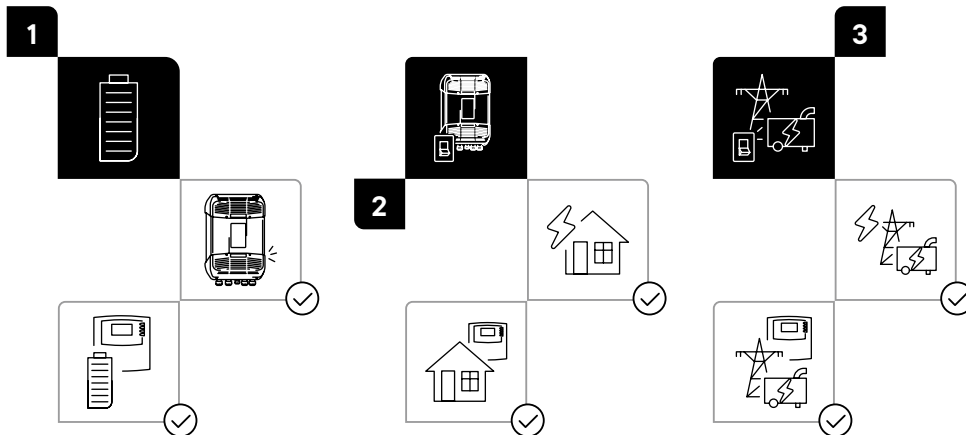
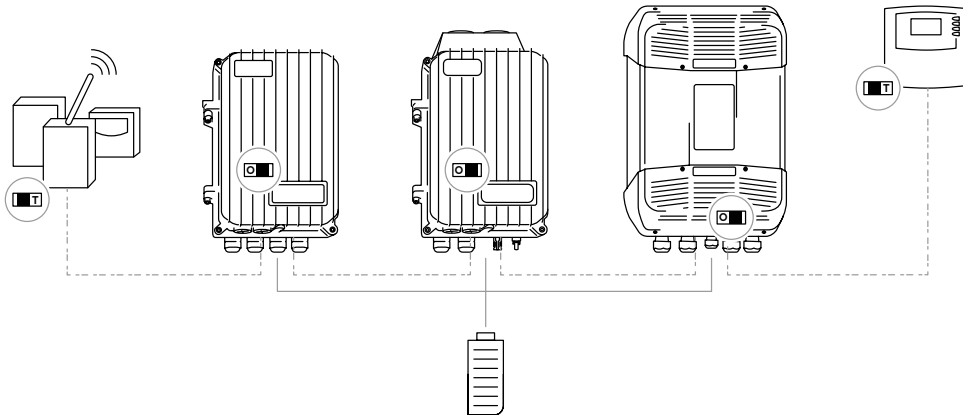
Overvoltage protection, SPD



\* Check xcom CAN manual

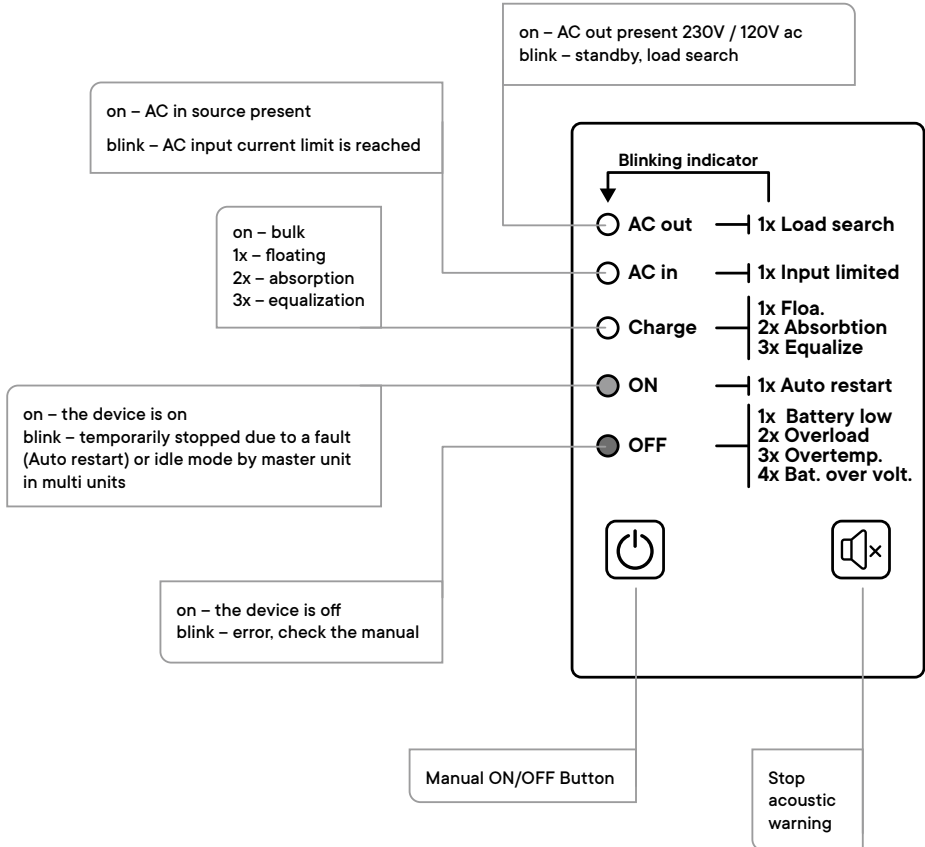
# Multi units and power up

Up to 9 Xtenders in the same communication bus



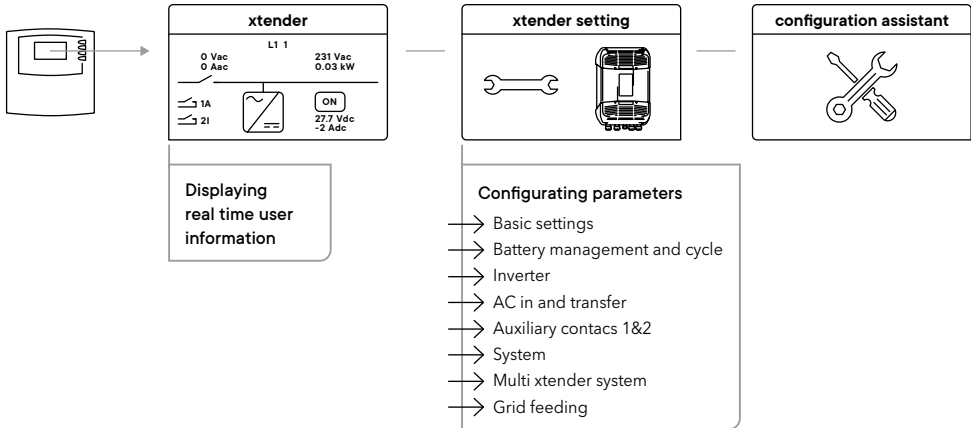
# Display

## Display system

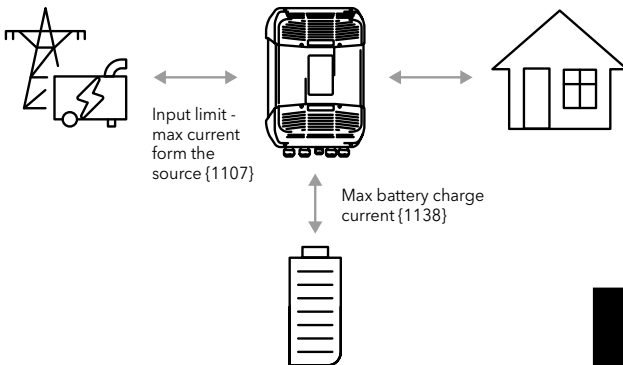


# Configuring the xtender

rcc 02/03



## Basic settings



### Lead-acid

- Configure charge profile according to manufacturer

### Lithium (comm BMS, xcom CAN)

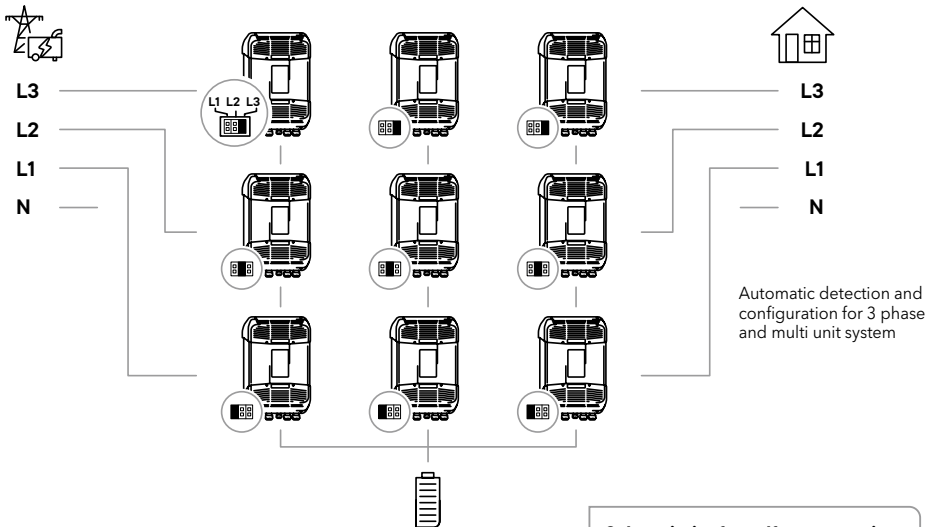
- Check compatibility list and xcom CAN manual

### Others: NiCd, NiFe, Redoxflow, saltwater, etc.

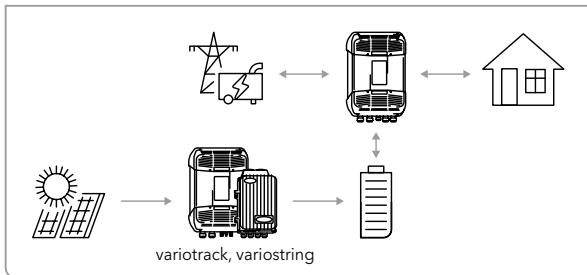
- Check battery manufacturer

# Multi units

## 3 phase and parallel combination

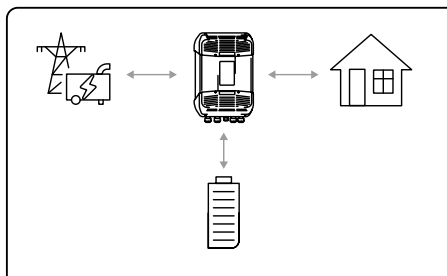


**Solar priority for self consumption**  
In combination with a vario



Automatic start  
generator & self  
consumption  
configuration  
See user manual

# Technical data



IP 20  
Protection Class I  
**CE**

	xm 1500-12	xm 2000-12	xm 2400-24	xm 2600-48	xm 3500-24	xm 4000-48
Batt nominal voltage	12Vdc	12Vdc	24Vdc	48Vdc	24Vdc	48Vdc
Batt charge current	70A dc	100A dc	55A dc	30A dc	90A dc	50A dc
Batt min-max voltage	9.5-17Vdc	9.5-17Vdc	19-34Vdc	38-68Vdc	19-34Vdc	38-68Vdc

AC input voltage	230V (150-265V) *120V (50-140V)
AC input max current	50A

Continous Power	1500VA	2000VA	2000VA	2000VA	3000VA	3500VA
Power 30min	1500VA	2000VA	2400VA	2600VA	3500VA	4000VA
Power 5sec	3.4kVA	4.8kVA	6kVA	6.5kVA	9kVA	10.5kVA
AC output voltage	230V (150-245V) / *120V (50-140V)					
AC output frequency	45-65Hz (configurable)					
AC output max current	56A					

\* Version - 01  
120Vac/60Hz version

**RoHS**  
COMPLIANT **Pb**  
Pb-Free



## Maintenance and recycling

### **EN** Maintenance and recycling

Except for the periodic check of the connections (tightening, general condition), the xtender does not require any particular maintenance. To dispose of this product, please use the service for the collection of electrical waste and observe all obligations in force in the place of purchase.

### **FR** Entretien et recyclage

À l'exception du contrôle périodique des branchements (serrage, état général), le xtender ne nécessite pas d'entretien particulier. Pour vous débarrasser de ce produit, veuillez utiliser les services de collecte des déchets électriques et observer toutes les obligations en vigueur selon le lieu d'achat.

### **DE** Wartung und Recycling

Abgesehen von der regelmäßigen Kontrolle der Anschlüsse (Fixierung, allgemeiner Zustand) bedarf der xtender keinerlei besonderer Wartungsarbeiten. Beachten Sie bei der Entsorgung dieses Gerätes die geltenden örtlichen Vorschriften und nutzen Sie die Sammeldienste/-stellen für Elektro-/Elektronik-Altgeräte.

### **ES** Mantenimiento y reciclaje

A excepción del control periódico de las conexiones (apriete, estado general), el xtender no requiere un mantenimiento particular. Para la eliminación del producto, acuda a los servicios de recogida de residuos eléctricos y cumpla todas las obligaciones vigentes en el lugar de compra.

Serial Number:

Installed by:

Date:

Signature:

Call our specialists **+41 27 205 60 80**  
or visit **[studer-innotec.com/support](http://studer-innotec.com/support)**

Studer Innotec SA  
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1950 Sion, Switzerland

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