

ROTHENBERGER

ROWELD ROFUSE Sani 160 & 315

ROWELD ROFUSE
Sani 160 & 315



DE Bedienungsanleitung
EN Instructions for use
FR Instruction d'utilisation
IT Istruzioni d'uso
NL Gebruiksaanwijzing
DA Brugsanvisning
PL Instrukcja obsługi

HU Kezelési útmutató
RO Manualul de utilizare
ET Kasutusjuhend läbi
LT Naudojimo instrukcija
LV Lietošanas pamācība
RU Инструкция по использованию
AR دليل الاستخدام



rothenberger.com

Intro

EU-KONFORMITÄTSEKTLÄRUNG

Wir erklären in alleiniger Verantwortung, dass dieses Produkt mit den angegebenen Normen und Richtlinien übereinstimmt.

EU-DECLARATION OF CONFORMITY

We declare on our sole accountability that this product conforms to the standards and guidelines stated.

DECLARATION EU DE CONFORMITÉ

Nous déclarons sous notre propre responsabilité que ce produit est conforme aux normes et directives indiquées.

DICHIARAZIONE DI CONFORMITÀ EU

Dichiariamo su nostra unica responsabilità, che questo prodotto è conforme alle norme ed alle direttive indicate.

EU-KONFORMITEITSVERKLARING

Wij verklaren in eigen verantwoordelijkheid dat dit product overeenstemt met de van toepassing zijnde normen en richtlijnen.

EU-KONFORMITETSEKTLÆRING

Vi erklærer som eneansvarlig, at dette produkt er i overensstemmelse med anførte standarder, retningslinjer og direktiver.

DEKLARACJA ZGODNOŚCI EU

Oświadczamy z pełną odpowiedzialnością, że produkt ten odpowiada wymaganiom następujących norm i dokumentów normatywnych.

EU-AZONOSSÁGI NYILATKOZAT

Teljes felelősségünk tudatában kijelentjük, hogy jelen termék megfelel a következő szabványoknak vagy szabványossági dokumentumoknak.

DECLARAȚIE DE CONFORMITATE EU

Declarăm pe propria răspundere că acest produs este conform cu standardele și directivele enumerate.

ДЕКЛАРАЦИЯ О СООТВЕТСТВИИ СТАНДАРТАМ EU.

Мы заявляем что этот продукт соответствует следующим стандартам.

إعلان شخصي من المدير
تُعلن تحت مسؤليتنا الخاصة أن هذا المنتج
مُطابق مع المعايير والإرشادات المحددة.



ROWELD ROFUSE Sani 160 & 315:

2014/30/EU, 2014/35/EU, 2011/65/EU, EN 61000-6-2,
EN 61000-6-3, EN 61000-3-2, EN 61000-3-3,
EN 60335-1, EN 60335-2-45, EN 60529, ISO 12176-2

Herstellerunterschrift

Manufacturer/ authorized representative signature

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Intro

DEUTSCH - Originalbetriebsanleitung! Bedienungsanleitung bitte lesen und aufbewahren! Nicht wegwerfen! Bei Schäden durch Bedienungsfehler erlischt die Garantie! Technische Änderungen vorbehalten!	Seite 2
ENGLISH Please read and retain these directions for use. Do not throw them away! The warranty does not cover damage caused by incorrect use of the equipment! Subject to technical modifications!	Page 8
FRANÇAIS Lire attentivement le mode d'emploi et le ranger à un endroit sûr! Ne pas le jeter! La garantie est annulée lors de dommages dus à une manipulation erronée! Sous réserve de modifications techniques!	Page 14
ITALIANO Per favore leggere e conservare le istruzioni per l'uso! Non gettarle via! In caso di danni dovuti ad errori nell'uso, la garanzia si estingue! Ci si riservano modifiche tecniche!	Pagina 21
NEDERLANDS Lees de handleiding zorgvuldig door en bewaar haar goed! Niet weggoeien! Bij schade door bedieningsfouten komt de garantieverlening te vervallen! Technische wijzigingen voorbehouden!	Bladzijde 27
DANSK Læs betjeningsvejledningen, og gem den til senere brug! Smid den ikke ud! Skader, som måtte opstå som følge af betjeningsfejl, medfører, at garantien mister sin gyldighed! Ret til tekniske ændringer forbeholdes!	Side 33
POLSKI Instrukcję obsługi proszę przeczytać i zachować! Nie wyrzucać! Przy uszkodzeniach wynikających z błędów obsługi wygasa gwarancja! Zmiany techniczne zastrzeżone!	Strony 39
MAGYAR Kérjük, olvassa el és őrizze meg a kezelési utasítást! Ne dobja el! A helytelen kezelésből származó károsodások esetén megszűnik a jótállás! Műszaki változtatások fenntartva!	Oldaltól 45
ROMĂNESC Vă rugăm să citiți și să păstrați manualul de utilizare! Nu îl aruncați! În cazul deteriorărilor cauzate de erori de operare, garanția se pierde! Ne rezervăm dreptul de a efectua modificări tehnice!	Pagina 51
ESTU Palun lugege kasutusjuhend läbi ja hoidke alles! Ärge visake ära! Kä-sitsemisvigadest tingitud kahjustuste korral kaotab garantii kehtivuse! Õigus tehnilisteks muudatusteks reserveeritud!	Lehekülg 57
LIETUVOS Perskaitykite naudojimo instrukciją ir pasilikite ją! Neišmeskite! Garan-tija nebus taikoma gedimams, atsiradusiems dėl netinkamo naudojimo! Pasilieka teisė daryti techninius pakeitimus!	Pusla-pis 63
LATVIEŠU Lūdzu, izlasiet un uzglabājiet lietošanas instrukciju! Nemest prom! Ja ir bojājumi ekspluatācijas kļūdas dēļ, garantija zaudē spēku! Paturēt tehniskas izmaiņas!	Lappuse 69
РУССКИЙ Прочтите инструкцию по эксплуатации и сохраняйте её для дальнейшего использования! В случае поломки инструмента из-за несоблюдения инструкции клиент теряет право на обслуживание по гарантии! Возможны технические изменения!	Страница 75
العربية الرجاء قراءة الإرشادات والالتزام بها! ولا تتخلص من هذا الدليل! في حالة حدوث أضرار نتيجة لأخطاء في التشغيل، سيتم فقد الضمان! هذا الدليل خاضع للتغييرات الفنية!	82



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Markings in this document:



Markings in this document!

This sign warns against the danger of personal injuries.



Caution!

This sign warns against the danger of property damage and damage to the environment.



Call for action



1 Introduction

Dear Customer,

Thank you very much for purchasing our product. We are confident that it will meet your expectations. The ROWELD ROFUSE Sani 160 & 315 Electrofusion Welding Unit is designed exclusively for jointing PE discharge lines assembled with electrofusion fittings.

The product was manufactured and checked according to state-of-the-art technology and widely recognized safety regulations and is equipped with the appropriate safety features. Before shipment, it was checked for operation reliability and safety.

In the event of errors of handling or misuse, however, the following may be exposed to hazards

- the operator's health,
- the product and other hardware of the operator,
- the efficient work of the product.

All persons involved in the installation, operation, maintenance, and service of the product have to

- be properly qualified,
- operate the product only when observed,
- read carefully and conform to the User's Manual before working with the product.

Thank you.

2 Safety notes

This device is not intended for use by children and persons with physical, sensory or mental limitations or a lack of experience or knowledge. This device can be used by children aged 8 and above and by persons who have physical, sensory or mental limitations or a lack of experience or knowledge if a person responsible for their safety supervises them or has instructed them in the safe operation of the device and they understand the associated dangers. Otherwise, there is a danger of operating errors and injuries.

Supervise children during use, cleaning and maintenance. This will ensure that children do not play with the device.

The equipment must only be operated by qualified specialized staff!

2.1 Improper Use of the Welding and Power Supply Cables

Do not carry the product by one of its cables and do not pull the power cord to unplug the unit from the socket. Protect the cables against heat, oil, and cutting edges.

2.2 Securing the Fitting and the Joint

Use appropriate clamps to secure the fitting and the joint before welding. The welding unit is intended exclusively for indoor installation applications. Use for buried pipeline construction applications is prohibited.

2.3 Cleaning the Welding Unit

The product must not be sprayed with or immersed in water.

2.4 Opening the Unit



The cover of the product may be removed only by specialized staff of the company ROTHENBERGER or of a partner organization properly trained and approved by it!

2.5 Checking for Damage

Every time before operating the product, carefully check safety features or possibly existing parts with minor damage for intended and proper function work properly, that contact is fully established, and that the contact surfaces are clean. All parts have to be installed correctly and properly conform to all conditions in order for the operator to be sure that the product works as intended. Damaged safety features or functional parts should be properly repaired or replaced by a qualified organization/ service shop.

2.6 Mains Power Supply

Utility suppliers' wiring requirements, VDE provisions, occupational safety rules, DIN / CEN regulations, and national codes have to be respected.

Mains power fuse protection ROFUSE Sani 160 should be min. 10 A.

Mains power fuse protection ROFUSE Sani 315 should be min. 16 A.

The product has to be protected against rain and humidity.

3 Service

3.1 Maintenance and Repair

As the product is used in applications that are sensitive to safety considerations, it may be serviced and repaired only by the manufacturer or its duly authorized and trained partners. Thus, constantly high standards of operation quality and safety are maintained.

Failure to comply with this provision will dispense the manufacturer from any warranty and liability claims for the product, including any consequential damage.

When serviced, the unit is upgraded automatically to the technical specifications of the product at the moment it is serviced, and we grant a three-month functional warranty on the serviced unit.

We recommend having the product serviced at least every twelve months.

In Germany, do not neglect that the occupational safety check-up under rule BGV A3 is mandatory!

3.2 Transport, Storage, Shipment

The product is shipped in ROCASE. Store the product in the ROCASE dry and protected against humidity.

When shipped, the product should be placed into the ROCASE at any time.

4 Principle of Operation

The ROWELD ROFUSE Sani 160 & 315 welding unit allows using electrofusion fittings to join discharge lines routed indoors and made of PE, of the makes Geberit, Akatherm-Euro, Coes, Valsir, Waviduo, and Vulcathene-Euro.

The microprocessor-controlled unit

- controls and monitors the welding process in a fully automated fashion,
- determines welding duration depending on ambient temperature,
- Displays all of the information on a full graphic display.

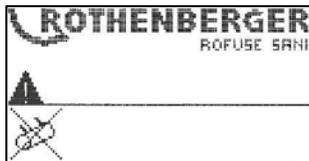
5 Operation

5.1 Turning the Welding Unit On

After connecting the power supply cord to 230 V mains power, turn the welding unit on at the On/Off switch. The electronics will immediately check all of the parameters and contacts for correctness and those that do not fit in the display (warnings) will be displayed as symbols.

The display will switch over to the welding mode if no errors are detected.

ROFUSE Sani 160:



ROFUSE Sani 315:



Symbols:



No fitting detected



Ambient temperature is too hot



Ambient temperature is too cold



Mains voltage or current is too low (during welding)



Mains voltage or current is too high (during welding)



No welding adapter attached



Mains frequency is not within the tolerances (40 - 70 Hz)



Power failure has caused a power loss



Stopped by an error



Prompt to press a button



OK

5.2 Connecting the Electrofusion Fitting



WARNING! Mains voltage is applied to the socket connector during operation. Please use a residual current circuit breaker.

Connect the connection terminals to the fitting and check for proper fit. The contact surfaces of the connection terminals and the fitting have to be clean. Dirty terminals may lead to improper welding and also to overheated and fused terminal plugs.

The welding mode screen will appear after the fitting makes contact and provided that no errors are present.



The welding time, the fitting type and the press the Start button prompt will be displayed.

Press the START button to start the welding process.

The welding time will finish (it depends on the ambient temperature) after approx. 80 secs.

For ROFUSE Sani 315:

Connect the welding adapter that you want to use to the socket on the welding cable. The welding adapter will be detected automatically. The compatible fitting types will be displayed on the screen.

A00 connector – fitting with diameter ranging from 32 – 160 mm; Manufacturers: Valsir, Akatherm, Eurofusion, Geberit, Waviduo, Coes.

A01 connector – fitting with diameter ranging from 200 – 315 mm; Manufacturers: Valsir, Akatherm, Eurofusion, Waviduo.

A02 connector – fitting with diameter ranging from 200 – 315 mm; Manufacturer: Geberit.

A04 connector – fitting with diameter ranging from 200 – 315 mm; Manufacturer: Coes.



5.3 Welding Process

The welding process is monitored for its entire duration, applying the welding parameters computed for the electrofusion fitting.

5.4 End of Welding

The welding process will have finished correctly when the display has counted down to 0. An acoustic signal will sound for one second.

The cooling time will then be counted up on the screen.

The Fitting OK symbol is displayed on the right of the screen.



5.5 Aborted Welding

The welding process can be stopped by: pressing the Stop button if:

- Mains voltage fluctuations are excessive
- Mains frequency fluctuations are excessive
- Welding current fluctuations are excessive
- Break in the power circuit
- Shorted coil in the fitting

The warning tone will sound continuously.

An error can only be acknowledged by pressing the STOP button.



5.6 Cooling Time

The cooling time as given in the fitting manufacturer's instructions has to be respected. Note that for that time the pipe/fitting joint which is still warm must not be subjected to an external force.

5.7 Returning to the Start of Welding

After welding is finished, disconnecting the welded fitting from the welding unit will cause the unit to return to the start of welding. An additional safety feature prevents a given electrofusion fitting from being welded twice inadvertently: after a properly completed or an aborted welding operation, the welding unit has to be disconnected from the fitting first, in order to be ready for the next welding.

5.8 Using the optional multi-adapter

The optionally available multi-adapter (Art-No: 1500003627) is a jumper cable for welding A00 electrofusion fitting connectors with nominal widths $\leq \text{Ø}110$ mm that enables two fittings to be processed simultaneously. The two electrofusion fittings that will be used must be of the same type and they must have the same characteristics. The fittings are to be connected in series with the multi-adapter.



6 Technical Data

	<u>ROFUSE Sani 160</u>	<u>ROFUSE Sani 315</u>
Welding range	40 - 160 mm	40 - 315 mm:
Output current.....	5 A controlled.....	11 A controlled
Nominal voltage.....	230V	230V
Voltage range	180V – 280V	180V – 280V
Frequency	40 - 70 Hz.....	40 - 70 Hz
Output.....	1200 W, 80% period of application	2500 W, 80% period of application
Protection class	IP 65.....	IP 65
Temperature range	-5°C to +60°C	-5°C to +60°C
Mains cable length.....	3 m with Schuko plug.....	3 m with Schuko plug
Welding cable length	3 m with A00 plug	2.5 m to connector plug
Housing dimensions (W x H x D)	140 x 220 x 80 mm	140 x 220 x 80 mm
Weight	1.8 kg	2.3 kg
Measurement tolerances:		
Temperature	±5%	±5%
Current.....	±2%	±2%

7 Customer service

The ROTHENBERGER service locations are available to help you (see listing in catalog or online) and replacement parts and service are also available through these same service locations. Order your accessories and spare parts from your specialist retailer or using RO SERVICE+ online: ☎ + 49 (0) 61 95/ 800 8200 📠 + 49 (0) 61 95/ 800 7491 ✉ service@rothenberger.com - www.rothenberger.com

8 Disposal

Components of the unit are recyclable material and should be put to recycling. For this purpose registered and certified recycling companies are available. For an environmental friendly disposal of the non-recyclable parts (e.g. electronic waste) please contact your local waste disposal authority.

For EU countries only:



Do not dispose electric tools with domestic waste. In accordance with the European Directive 2012/19/EU the disposal of electrical and electronic equipment and its implementation as national law, electric tools that are no longer serviceable must be collected separately and utilised for environmentally compatible recycling.