# ROTHENBERGER

### **ROMAX AC ECO**





DE Bedienungsanleitung EN Instructions for use

FR Instruction d'utilisation

ES Instrucciones de uso

IT Istruzioni d'uso

NL Gebruiksaanwijzing PT Instruções de serviço

DA Brugsanvisning

SV Bruksanvisning

NO Bruksanvisning

FI Käyttöohje

PL Instrukcja obslugi

CZ Návod k používání

TR Kullanim kilavuzu

HU Kezelési útmutató
SL Navodilo za uporabo

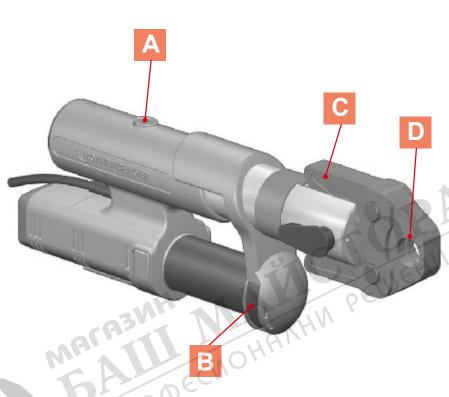
**В** Инструкция за експлоатация

EL Οδηγίες χρήσεως

**RU** Инструкция по использованию



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Art. no.: 15705 ROMAX AC ECO Basic Set, 230V, Typ C
Art. no.: 015705Z ROMAX AC ECO Basic Set, 230V, Typ J
Art. no.: 15706 ROMAX AC ECO Basic Set, 110V, Typ A

### A Emergency-Off

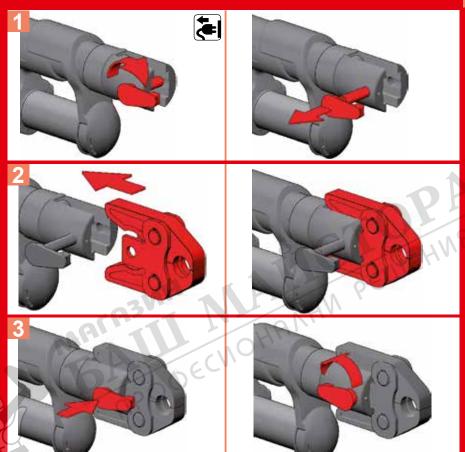
### **B** ON-Switch





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## **Insert Press Jaw C**

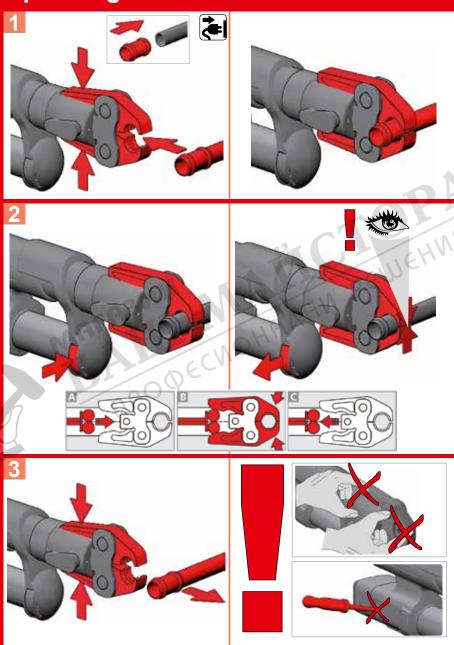


## **Various Positions D**



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### **D** Operating



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	Markings in this document:  Danger!	16h.
	Markings in this document:	
	Danger!	

### Markings in this document:



### Danger!

This sign warns against the danger of personal injuries.



#### Caution!

This sign warns against the danger of property damage and damage to the envi-



**Call for action** 

#### Safety Notes

#### 1.1 Intended use

The ROMAX® AC ECO is designed exclusively for the use of pressing jaws manufactured by ROTHENBERGER or that have been declared suitable by ROTHENBERGER, for example the products available from MAPRESS, Viega, Geberit, Uponor, etc.

The device and the press jaws are designed exclusively for crimp fittings, for which the corresponding pressing jaws have been designed. Any other or additional use shall be deemed improper.

ROTHENBERGER cannot accept any liability for the resultant consequences and damage, nor for the use of pressing jaws from other manufacturers, nor for damage caused by these pressing jaws.

Proper usage also includes compliance with the operating manual, compliance with the inspection and servicing conditions and adherence to all the relevant safety regulations.

The ROMAX® AC ECO is a handheld electric machine and must not be used for stationary applications.

This device may only be used correctly as described.

#### 1.2 General Power Tool Safety Warnings



#### WARNING!

Read all safety warnings and all instructions.

Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

- 1) Work area safety
- a) Keep work area clean and well lit. Cluttered and dark areas invite accidents.
- b) Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.
- 2) Electrical safety
- a) Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- b) Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock
- d) Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- e) When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.
- f) If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.
- 3) Personal safety
- a) Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, al-

- **cohol or medication.** A moment of in attention while operating power tools may result in serious personal injury.
- b) Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c) Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- d) Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- e) **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- f) Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- g) If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of these devices can reduce dust related hazards.
- 4) Power tool use and care
- a) Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
- b) **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- c) Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d) Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- e) Maintain power tools. Check for misalignment or binding of moving parts, breakage
  of parts and any other condition that may affect the power tools operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly
  maintained power tools.
- f) Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g) Use the power tool, accessories and tool bits etc., in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.
- 5) Service

Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

#### 1.3 Special safety instructions

The term press jaw also includes main Jaw, press ring and press chain.

Never hold your fingers or other body parts in the working area of the cylinder or the pressing laws.

Disconnect the plug from the socket before carrying out any work on the machine.

If the device is so badly damaged that electric cables or drive parts are exposed, disconnect the mains plug immediately and contact your service outlet. Unauthorised repair work may result in the user suffering major injuries or even death.

Only personnel trained in how to use the device may make crimp pipe joints using the ROMAX® AC ECO.



The machine may only be used with a press jaw inserted into it. The press jaw must be in perfect technical condition.

Only start the machine if it is in perfect working order.

Servicing and repair work may only be carried out by workshops authorised by ROTHEN-BERGER.

Use only suitable press jaw and press fitting systems that have been approved by ROTHEN-BERGER Werkzeuge GmbH.

After you have inserted the press jaw check that the bolt is securely locked.

In the event of problems during the pressing process, press the EMERGENCY STOP button.

Check that the pipe joint is secure after you have completed the pressing process.

Imperfect pipe joints must be compressed again using a new fitting.

Follow the installation instructions supplied by the fitting and pipe manufacturers.

Assure by pressing leaky press fittings, that no humidity respectivily lotic water reaches into the inside of the machine!

After finishing the work, check the installation with appropriate testing equipment and assure. that it is leakproof!

#### Technical Data

Technical Data				
Voltage	~ 230 V (110 V)			
Rated power consumption	280 W			
Motor speed	14 000 min <sup>-1</sup>			
Maximum piston force	max. 34 kN			
Pressing time (according to nominal size)	14 000 min <sup>-1</sup> max. 34 kN ca. 6-8 s 410x80x170 mm			
Dimensions (LxWxH)	410x80x170 mm			
Weight	ca. 4,5 kg			
Working range (system- dependent)	Ø 12 – 110 mm			
Application temperature range	0 – 40 °C			
Protection class	II / 🖸			
Protection type	IP 20			
Operating mode	S3			
Noise pressure level (L <sub>pA</sub> )	93 dB (A) ¦ K <sub>pA</sub> 3 dB (A)			
Sound power level (L <sub>WA</sub> )	106 dB (A) ¦ K <sub>WA</sub> 3 dB (A)			
The noise level during operation can exceed	85 dB (A). Wear hearing protection!			
Measured values determined in accordance				
Vibration total value	≤ $2.5 \text{ m/s}^2 \text{ K} = 1.5 \text{m/s}^2$			

The vibration level given in this information sheet has been measured in accordance with a standardised test given in EN 60745 and may be used to compare one tool with another. It may be used for a preliminary assessment of exposure.



The declared vibration emission level represents the main applications of the tool. However if the tool is used for different applications, with different accessories or insertion tools or is poorly maintained, the vibration emission may differ. This may significantly increase the exposure level over the total working period.

An estimation of the level of exposure to vibration should also take into account the times when the tool is switched off or when it is running but not actually doing the job. This may significantly reduce the exposure level over the total working period. Identify additional safety measures to protect the operator from the effects of vibration such as: maintain the tool and the accessories, keep the hands warm, organisation of work patterns.

#### **Function of the Unit**

#### Mains connection

Connect only to single-phase alternating current and only to the mains voltage specified on the rating plate. The machine may also be connected to sockets without an earth contact since it complies with protection class II.

#### **EMERGENCY STOP button**

If there is any danger to personnel or the machine during the pressing process, press the EMERGENCY STOP button immediately and release the ON switch. The valve will open and the piston will return to its initial position.

#### To switch on

Press one of the two ON buttons until the pressing process has been completed.

#### 3.4 To insert the press jaw

Disconnect the mains plug!

- Open the bolt.
- → Insert the appropriate press jaw for the job in hand.
- → Lock the bolt.

After changing the crimping law it is essential to ensure that once engaged, the crimping law matches the profile being moulded and the nominal width of the fitting being moulded. A visual inspection must be carried out in order to determine that the crimping jaw is fully closed at the end of the moulding cycle.

#### 3.5 To turn the press jaw

The press jaw can be turned through 270° depending on the application.

#### 3.6 Operation

Use only system-compatible press fittings and press jaws designed for them. The nominal size of the press jaw must be identical with the nominal size of the press fitting.



When inserting the pipe / press fitting system, there is a risk of crush injuries for the fingers or other body parts near the press jaw!

- Push the press fitting on to the pipe. Pull the press jaw apart and insert the pipe with the press fitting at rightangles.
- There must be no foreign bodies between the press contour and the fitting. If you fail to ensure this, the pressing process will not produce a perfect joint!
- Press one of the two ON buttons until the press cycle has finished, then release the ON but-
- → Push the press jaw apart and take the machine off the joint.

Do not start the machine while the piston retracts or the emergency shutdown is pressed!

#### **Care and Maintenance**

Disconnect the plug from the socket before carrying out any work on the machine!

Check that the press jaws are fully functional. Damaged press jaws must not be used and must be sent to an authorized ROTHENBERGER repair shop.

Check that the press jaw and drive rolls move freely.

Check the bolt for signs of damage at regular intervals. Have damaged bolts replaced by an authorized ROTHENBERGER repair shop.

Clean and grease the drive rolls, the bolt and press jaws when you have finished work.

Use only high quality pressing or ball bearing grease.

The pressing contour must be kept free of grease.

All other servicing, maintenance and repair work must be carried out by an authorized ROTHENBERGER repair shop.

If the seal is damaged the warranty will be null and void.

After 10.000 pressing cycles or 1 year have the machine serviced by an authorized ROTHEN-BERGER workshop.

Electro-hydraulic machine does not exceed 3 hours in a -5° C storage.

Send the machine to the workshop in the carry case only.

#### 5 Accessories

Accessory Name	ROTHENBERGER Part Number
ROMAX AC ECO, M15-22-28 mm	15750
ROMAX AC ECO, SV15-22-28 mm	15740
ROMAX AC ECO, U16-20-25 mm	15760
ROMAX AC ECO, G16-20-26 mm	15765
ROMAX AC ECO, TH16-20-26 mm	15730
Plastic case for ROMAX Pressliner	F81664
ROMAX AC ECO Basic machine 230V	015705P
Additional accessories and spare parts	www.rothenberger.com

#### 6 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 RoService+ online:

Phone: + 49 (0) 61 95 / 800 – 8200 Fax: + 49 (0) 61 95 / 800 – 7491 Email: service@rothenberger.com

www.rothenberger.com

#### 7 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.

ANHM