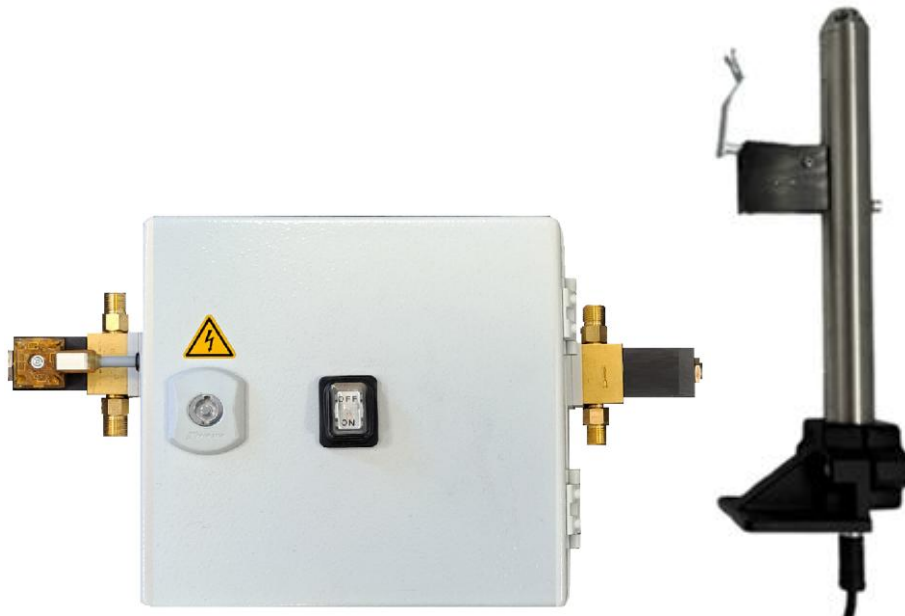


Operating Instructions

Electric Gas Saver



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1 Introduction

1.1 Models

Product name:	Electric gas saver
Model numbers:	71608141 - ELECTRIC GAS SAVER 2-CHANNEL - 24V 71608142 - ELECTRIC GAS SAVER 2-CHANNEL - 230V 71608143 - ELECTRIC GAS SAVER 3-CHANNEL - 24V 71608144 - ELECTRIC GAS SAVER 3-CHANNEL - 230V
	<i>(Variants and GRIBOX versions are marked separately)</i>

1.2 Manufacturer details

Name:	MESSER Cutting Systems GmbH
Address:	Otto-Hahn-Str. 2–4, 64823 Groß-Umstadt
Email:	info@messer-cutting.com
Telephone:	+49 6078 787 0

1.3 Target audience

These operating instructions are intended for the following people:

Installation staff, operators and maintenance staff

1.4 Life cycles

The electric gas saver goes through the following life cycles:

Transport	Installation	Operation	Maintenance	Dismantling	Disposal
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2 Safety

2.1 Intended use

The electric gas saver is designed to cut off the supply of various gases as soon as they are no longer required for the task at hand, and to restore the supply as soon as work resumes. The gases are released by removing the burner from the mounting bracket. At the same time, ignition is initiated for a short period, enabling the gas mixture flowing from the burner to be ignited. The gas supply is cut off again as soon as the burner is placed back into the mounting bracket.

2.2 Foreseeable misuse

The electric gas saver must not be used for any purpose other than its intended one. The following foreseeable misuse is not permitted:

- Carrying out modifications or repairs yourself.
- Only approved types of gas may be used.
- The switching function of the mounting bracket must be operated exclusively with the burner.

- No objects must be inserted into the ignition ports of the ignition column.

2.3 Symbols and Notes

This manual uses symbols, signal words and notes to warn of hazards and ensure safe operation. The symbols are shown and explained below.



DANGER

This signal word indicates an imminent danger.
Failure to observe this warning may result in serious or fatal injury.



WARNING

This signal word indicates an imminent danger.
Failure to observe this warning may result in serious injury.



CAUTION

This signal word indicates an imminent danger.
Failure to observe this warning may result in minor injuries.



NOTE

This symbol indicates an imminent danger.
Failure to observe this may result in damage to property.

2.4 Safety instructions

Read and follow the instructions in this operating manual to ensure the safe operation of the electric gas saver. Do not carry out any modifications or repairs yourself.

2.5 Warning labels on the electric gas saver

The following warning labels are affixed to the electric gas saver:



High voltage

Warning: dangerous voltage

2.6 Personal protective equipment



Safety goggles

Wear safety goggles.



Hearing protection

Wear hearing protection.

2.7 Special safety instructions

2.7.1 Transport, installation, commissioning

Transport only in the original packaging. Connection must only be carried out by qualified personnel. When commissioning, check all gas-carrying connections for leaks.

2.7.2 Operation

The electric gas saver must only be operated by trained personnel.

2.7.3 Cleaning, Servicing and Maintenance

Before carrying out any cleaning, maintenance or servicing work, disconnect the mains plug and depressurise the gas connections.

2.7.4 Decommissioning, dismantling, disposal

When taking the unit out of service and dismantling it, unplug the mains plug and depressurise the gas connections. The old unit must be handed over to a waste disposal company in accordance with local regulations.

2.8 What to do in an emergency

Unplug the appliance and shut off the gas supply.

2.9 Operator's duty of care

To ensure safe operation, the operator of the electric gas saver must fulfil the following obligations:

- Regular cleaning and maintenance
- Prevent contamination of the work area
- Carry out safety briefings
- Conduct training sessions

2.10 User's duty of care

To ensure safe operation, the user of the electric gas saver must fulfil the following obligations:

- Read and follow the operating instructions
- Keep the workplace clean
- Wear the necessary protective equipment
- Attend training courses

2.11 Deadlines for periodic inspections

Inspection	Interval	To be inspected by
Leak-tightness of hoses and gas-carrying connections	Before each commissioning	Operator / User
Integrity of - cables and plugs - Control box - Solenoid valves - Hoses and connections - Ignition column and fittings	Before each commissioning	Operator / User
Function of the solenoid valves and the ignition column	Each time the system is started up	Operator / User

Smooth operation of the hooking-in device	Before each start-up	Operator / User
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3 Product description

3.1 General functions of the electric gas saver

- A – Standby: The main switch of the electric gas saver is switched on.
The burner is positioned in the designated mounting bracket.
The lever switch is engaged; the gas supply is cut off (solenoid valves closed); the ignition is off.
- B – Operation: The main switch of the electric gas saver is switched on.
The burner is removed from the mounting bracket – the lever switch is released; the ignition is switched on for a few seconds and the flame can be lit at the ignition head of the ignition column, as the gas supply is simultaneously released (solenoid valves are opened).
- The gas supply remains open until the burner is placed back into the mounting bracket (standby mode).

3.2 Components

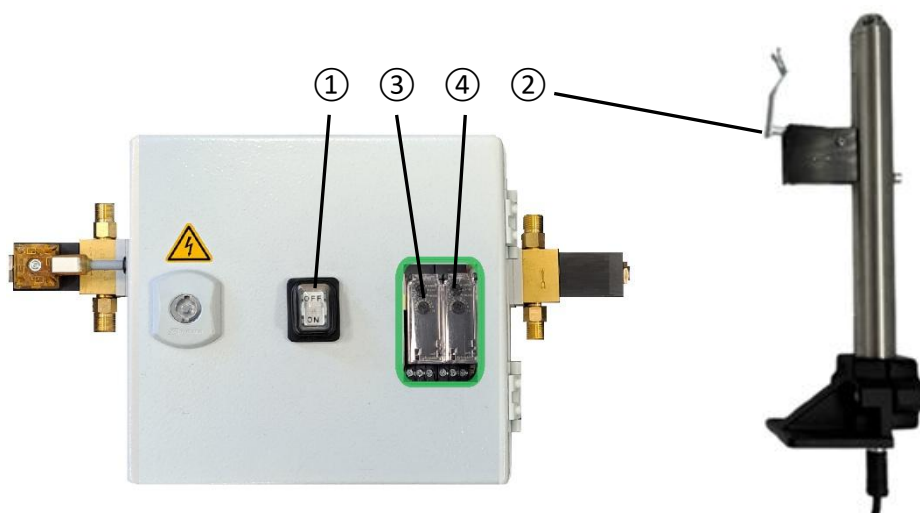
The electric gas saver comprises the following main components:

- Ignition column with mounting bracket
- Control box with solenoid valves
- Connecting pipe between the control box and the ignition column
- Mounting base for ignition column
- Power supply unit (230V version only)

3.3 Control components and their functions

The electric fuel-saving device has the following controls:

- Main switch – for switching on and off ①
- Mounting bracket with lever switch ②
(Switches between standby and active modes)
- Adjustment potentiometer (in the box) for residual flow time ③
 - For 2-channel: post-flow time for oxygen
 - For 3-channel: Post-flow time for oxygen and shielding gas
- Adjustment potentiometer (in the box) for ignition duration ④



3.4 Technical data

3.4.1 Type plate

The type plate is located on the control box.

ELECTRIC GAS SAVER 2-CHANNEL max. 2.5 bar 24V/DC 60W Messer Cutting Systems GmbH Otto-Hahn-Str. 2-4 64823 Groß-Umstadt year of manufacture: 202x Pt.No.: 716.08141 Serial No.: yymm/No.	ELECTRIC GAS SAVER 3-CHANNEL max. 2.5 bar 24V/DC 60W Messer Cutting Systems GmbH Otto-Hahn-Str. 2-4 64823 Groß-Umstadt year of manufacture: 202x Pt.No.: 716.08143 Serial No.: yymm/No.
Abbildung 1: Nameplate	

h Weight and dimensions

h Weight and dimensions

3.4.2 Weights and dimensions

Parameter	Values and units
Weight	Control box: 4.8 kg Ignition column: 1.1 kg (Power supply unit: 0.7 kg)
Dimensions	See sketch for dimensions. All dimensions in mm

3.4.3 Electrical

Parameter	Value and unit	
Voltage (control box)	24 V DC 60 watts	1 n.o. 2 n.o. 3 + 4 - M12-m
Power supply (Accessory 71608145)	Input: 230 V AC – 60 watts Output: 24V/AC – max. 60W	

3.4.4 Gas connections

Parameter	Value and unit	
Oxidising gas (oxygen or compressed air)	G1/4" RH-m / Max. 2.5 bar	
Combustion gas (A P M Y E H)	G3/8" LH-m / Max. 2.5 bar (except acetylene: max. 1.5 bar)	
Shielding gas (argon / argon-CO ₂)	G1/4" RH-m / Max. 2.5 bar	

4 Transport, packaging and storage

4.1 Requirements for personnel carrying out the work

Transport and storage must only be carried out by trained personnel.

4.2 Packaging

The electric gas saver is supplied in packaging. The packaging is made of cardboard.

Dispose of the packaging in accordance with the waste disposal regulations applicable in your country.

4.3 Storage

The electric gas saver must only be stored indoors on a level and stable surface. Furthermore, the following specifications must be met.

Parameter	Unit	Value
Max. humidity	[%]	40
Max. temperature	[°C]	40
Min. temperature	[°C]	5

5 Installation and assembly

5.1 Requirements for installation personnel

Installation and assembly must only be carried out by trained specialist staff.

5.2 Requirements for the installation site

The electric gas saver must only be operated in enclosed spaces with adequate ventilation. Furthermore, the following specifications must be met.

Parameter	Unit	Value
Max. humidity	[%]	40
Max. temperature	[°C]	40

Min. temperature	[°C]	5
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5.3 Assembly

1. Secure the ignition column to the workbench.
Use the supplied mounting base with screws suitable for the surface.
2. Permanently secure the control box in a suitable location using screws appropriate for the surface.
Ensure that the length of the cable supplied is sufficient.
3. Connect the gas supply to the marked solenoid valves. Local and statutory regulations must be observed.

6 Commissioning

6.1 Requirements for the personnel carrying out the work

Commissioning must only be carried out by trained specialist personnel.

6.2 Switching on/off



Before operating the main switch, ensure that the burner is positioned in the mounting bracket to prevent gas from escaping.

Do not switch off the main switch until the burner is securely positioned in the mounting bracket and no gas is escaping. The flame must be extinguished.

7 Operation

7.1 Requirements for operating personnel

Operation must only be carried out by trained specialist personnel.

7.2 Guidelines for safe operation



The electric gas saver must only be switched on when the burner is positioned in the mounting bracket. The switch on the mounting bracket must only be activated by fitting the burner into the bracket.

7.3 Controls

7.3.1 Main switch

The main switch is used to switch on the electric gas saver.

7.3.2 Mounting bracket

Removing the burner from the mounting bracket changes the operating status of the electric gas saver from standby to operational mode.

Placing the burner in the mounting bracket changes the operating mode of the electric gas saver from operational mode to standby.

8 Maintenance and servicing

8.1 Requirements for personnel carrying out the work

Maintenance and servicing must only be carried out by trained specialist personnel.

8.2 Maintenance schedule

The components of the electric gas saver are maintenance-free.

However, please note the points listed under 2.11.

Keep all components of the electric gas saver clean. Regular cleaning helps to ensure a long service life!

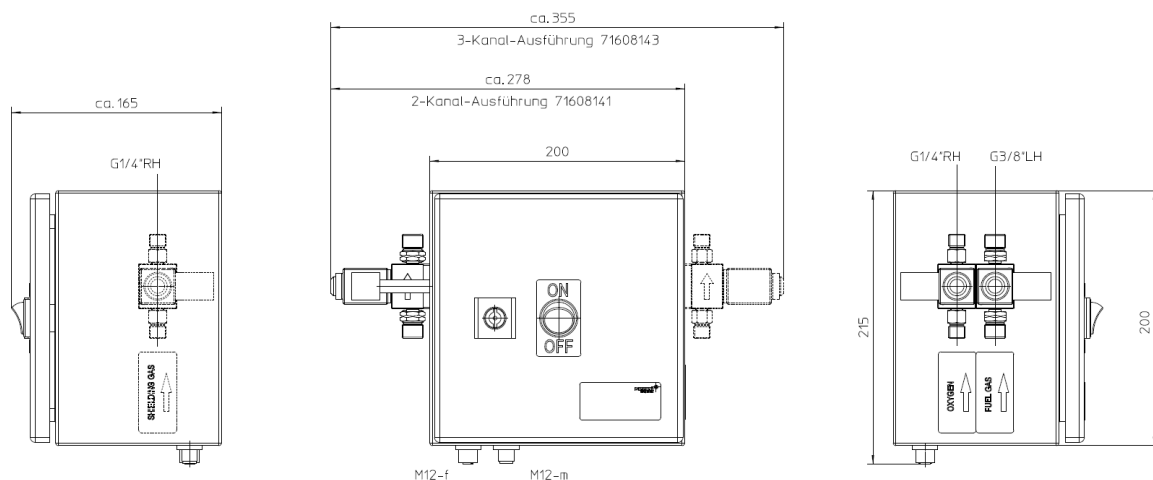
9 Spare parts list

Component	Part number
Connection cable 2m → control box Ignition column	G10000880
Ignition column Complete with mounting base	71656185
Ignition column mounting base Ø30mm	77071736
Power supply 230V/AC → 24V/DC-60W	71608145

10 Decommissioning/Dismantling/Disposal

Before decommissioning and dismantling, disconnect the mains plug. Depressurise all gas pipes. The old appliance must be handed over to a waste disposal contractor in accordance with local regulations.

11 Plans and technical drawings



12 Declaration of Conformity

EC Declaration of Conformity

In accordance with Annex II, Section 11 A of Directive 2006/42/EC (Machinery Directive)
of Directive 2014/35/EU (Low Voltage Directive)

Messer Cutting Systems GmbH & Co. KG
Otto-Hahn-Straße 2–4
64823 Groß-Umstadt

We hereby declare that the product
Electric Gas Saver

complies with the following relevant provisions:

Directive 2006/42/EC of 29 June 2006 (Machinery Directive)

Directive 2014/35/EU of 26 February 2014 (Low Voltage Directive)

Harmonised standards applied, in particular

DIN EN ISO 12100:2011

Safety of machinery

EN 60 204-1

Electrical equipment of machines

General requirements for electromagnetic compatibility (EMC)

Tests	Standards
Emission:	
Conducted emission	IEC 61000-6-3:2020
Radiated emission	IEC 61000-6-3:2020
Interference immunity:	
Electrostatic discharge	IEC 61000-6-2:2016
Electromagnetic field	IEC 61000-6-2:2016
Electrical Fast Transient (Burst)	IEC 61000-6-2:2016
Surge immunity	IEC 61000-6-2:2016
Conducted disturbances, induced by RF-fields	IEC 61000-6-2:2016
Magnetic field (power-frequency)	IEC 61000-6-2:2016
Power supply drop, short interruptions	IEC 61000-6-2:2016
Low frequency phenomena:	
Harmonic current	IEC 61000-3-2:2018 + A1:2020 + A2:2024
Flicker in power supply	IEC 61000-3-3:2013 + A1:2017 + A2:2021

Messer Cutting Systems GmbH & Co. KG

i.A. 

24.06.2026, i.A. Paul Schmagold

This declaration certifies compliance with the directives mentioned.

The safety instructions in the product documentation supplied must be observed.