

Ultrasonic generators

# **RDG Series**





# RINCO ultrasonic generators



# **ULTRASONIC GENERATORS –**EVERYTHING UNDER CONTROL, ALWAYS

With RINCO ultrasonic generators, you always have everything under control – from managing your manual units or the ultrasonic welding machine, through to triggering the ultrasound in an automation line or special machine. The generators are intuitive to operate and easy to install. They have a space-saving design, feature all the standard interfaces and can be used in almost all areas of application.

RINCO manufactures ultrasonic generators in 7 product series:

XDG2 SERIES
ADG SERIES
AGM PRO SERIES
AGM2 SERIES
SDG SERIES and
RDG SERIES

Our **ECOLINE generator** is the perfect solution for carrying out simple applications and textile welding.

Would you like a tailor-made solution for your specific requirements? Contact us and we will be happy to advise you.



# COME AND DISCOVER THE OUTSTANDING QUALITY OF RINCO PRODUCTS FOR YOURSELF

We are proud that our efforts to achieve perfection have been recognised by official bodies. The ISO certifications awarded to us prove that Swiss values such as reliability and precision are important roots from which our corporate culture has grown. We will always offer consistently high quality and the very best service.









#### CE

All RINCO machines are **CE-compliant** and therefore meet high European standards.

# **RELIABILITY**

RINCO generators operate very **reliably**, are practically maintenance-free and have a **long service life**.



# **AFTER-SALES SERVICE**

We help our customers out with **technical support** even after they have made a purchase.



# **RDG SERIES** – Professional simplicity



Generators from the RDG series are compatible with lots of special actuators, cutters and hand units.

Their **simple programming** and lack of maintenance requirements set them apart. What's more, they feature a **robust housing** and are **very reliable**.

RDG

KHZ	Operating frequency:	20 kHz, 30 kHz, 35 kHz, 40 kHz, 70 kHz
W	Output power:	2000 W, 1500 W, 1000 W, 900 W, 800 W, 750 W, 500 W, 400 W, 200 W, 100 W
A	Amplitude:	40–100%, can be alte <mark>red in increments of 10%</mark>
KG	Weight:	9.5 kg
4	Voltage:	230 V AC



# **COMPATIBLE DEVICES**



Compatible with:

Lots of special actuators

Cutters Hand units











**OSCILLATOR UNIT** 

# **MULTIRACK - USE SEVERAL MODULES SIMULTANEOUSLY**

In the multirack, several generator modules can be installed and operated at the same time. This saves on space and allows for a well-organised way of working. It holds up to five modules and offers an array of possibilities.



#### MULTIRACK

Unused spaces can be covered with blanking plates.

# **FIELDS OF APPLICATION**



**AUTOMOTIVE** 



HIGH-TECH



**PACKAGING** 



FOOD



**NON-WOVEN & TEXTILE** 



MEDICAL



HOUSEHOLD



COSMETICS

WELDING CUTTING PUNCHING RIVETING **EMBOSSING** BEADING INSERTING **DIE-SINKING** SEALING





# **RDG SERIES** – Professional simplicity

# **FEATURES**

#### SIMPLE INTEGRATION

The generator communicates about status or error messages via the system's own **PLC**.

#### SIMPLE HANDLING

The generator is easy to programme and operate.



# **POWER OVERLOAD**

In the event of a power overload, the welding process is cancelled to protect the generator and the oscillator unit. A built-in fan also ensures that air is cooled in a controlled manner.



# **QUALITY CONTROL**

An **external part counter** guarantees process reliability.





# **FUNCTIONS**

## **TEST FUNCTION**

The TEST button on the generator can be used to trigger the ultrasound in order to check the oscillator unit is working correctly. This function helps you to find the ideal starting frequency for the ultrasonic process after the oscillator unit has been changed.

# **ADJUSTABLE AMPLITUDE**

You can change the value for the internal and external amplitude to between **40 and 100%** in 10% increments so as to achieve the best possible welding or cutting result. An LED bar indicates the power in real time during the welding process.

#### **READING STATUS**

Thanks to the LEDs on the user interface, you can always see the current status of the connected hand unit.

#### **SLOW CONTROL RATE**

This function **gently augments the oscillations** of large and complex horns.

# **WELDING MODE**

The RDG series can be operated in continuous mode.



Continuous

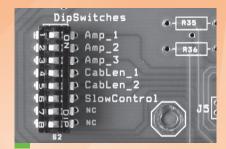
# **STOP FUNCTION**

A digital input can be used to activate the function that stops the ultrasonic process.

You can find other features as well as options and accessories for the RDG-series ultrasonic welding generators at the end of this brochure.

## **DIP SWITCHES**

You can use the DIP switches inside the generator slide-in module to set the amplitudes, cable length and slow control rate.



#### **DIP SWITCHES**

Compact setting function inside the generator





# **COMPARISON TABLE**



								ultrasonics
		XDG2 / SCU2	ADG	AGM Pro	AGM2	SDG	RDG	Ecoline
		motion	4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6		and a subject to the subject tof the subject to the subject to the subject to the subject to the	6 min	S TINO	France 1
	Compatible devices	Electrical Motion2 series VEM2 series	Standard series VST series Several actuators SFC20	Several cutters and special actuators	Several cutters and special actuators	Easy series VEA series ABW35 Several special actuators Cutters Hand units	Lots of special actuators Cutters Hand units	HC35 hand cutter HT35 hand tacker HG35 hand gun HW35 hand welding unit
KHZ	Frequency (kHz)	20, 35	20, 30, 35, 70	20, 30, 35, 40, 70	20, 30, 35, 40, 70	20, 30, 35, 40, 70	20, 30, 35, 40, 70	35
	Output power (W)	3000, 2000, 900	3000, 2000, 1500, 1000, 900, 600, 400, 100	3000, 2000, 1500, 1000, 900, 800, 750, 500, 400, 100	3000, 2000, 1500, 1000, 900, 800, 750, 500, 400, 100	2000, 1500, 1000, 900, 800, 750, 500, 400, 200, 100	2000, 1500, 1000, 900, 800, 750, 500, 400, 200, 100	400
	Dimensions W x D x H (mm)	363 x 374 x 352	205 x 340 x 345	128 x 148 x 307	95 x 231 x 393	148 × 424 × 282	148 x 424 x 282	191 x 282 x 102
KG	Weight	16 + 9 kg	16 kg (ADG 70: 12.5 kg)	4 kg	3 kg	9.5 kg	9.5 kg	3.4 kg
NARRAWTY 2	2-year guarantee	3 years	<b>✓</b>	✓	<b>✓</b>	4	<b>✓</b>	<b>✓</b>
~	Air cooling	✓	✓	✓	✓	✓	✓	✓
Ą	Amplitude adjustment	40–100%, 1% increments/external	40–100%, 1% increments/external	15–100%, 1% increments/external	15–100%, 1% increments/external	15–100%, 1% increments/external	40–100%, 10% increments/external	40–100%, 10% increments
<b>E</b>	Audit trail	✓						
•	Calibration	Force, amplitude	Amplitude, power	Amplitude, power	Amplitude, power	Amplitude, power	Amplitude, power	Amplitude, power
ISO6	Cleanroom, ISO class 6	✓	<b>✓</b>					
$\wedge$	Constant amplitude	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>1</b>	<b>✓</b>	<b>V</b>
1	Time mode	✓	✓	✓	✓	✓		
W/S	Energy mode	<b>✓</b>	<b>/</b>	<b>✓</b>	<b>/</b>	<b>/</b>		
ONFRENTIAL RELATIVE	Travel mode	✓	<b>✓</b>					
	Continuous mode			<b>✓</b>	✓	1	✓	✓
<b>₩</b>	Contact breaker (mode)	✓	<b>✓</b>	<b>✓</b>	<b>✓</b>	✓		
	Multi Melt Control (mode)	<b>✓</b>						
<b>♣</b>	Trigger point	Time, travel, force, off, external signal, travel absolute & force	Time, travel, pressure, off, external signal			On, off, time, start		
	Data transmission	✓	1	<b>✓</b>	<b>✓</b>	<b>✓</b>		
	Database	✓	<b>✓</b>	<b>✓</b>	<b>✓</b>			
	Associated software			Web application	Web application			
∃ DGT ∃	Digital technology	✓	✓	✓	✓	✓	<b>✓</b>	✓
DEEN	Multilingual	✓	<b>✓</b>	<b>✓</b>	English	<b>✓</b>		
<b>*</b>	Protection against power overload	✓	<b>✓</b>	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>	✓
	Protection against overheating	✓	<b>1</b>	✓	<b>✓</b>	✓	<b>✓</b>	<b>√</b>
0 0 3	Part counter	✓	<b>✓</b>			External	External	
51	Plug and play						<b>✓</b>	✓
P <sub>y</sub>	Remote access	Internal, external		Internal, external	Internal, external			
	Softstart, softstop for complex horns	1	✓	✓	<b>✓</b>	✓	<b>✓</b>	
	Touch display	✓		<b>✓</b>				
Ω	User administration	Individual per user	<b>✓</b>	✓	✓	✓		

# **ULTRASONIC GENERATORS**

# **OPTIONS AND ACCESSORIES**



	XDG2 / SCU2	ADG	AGM Pro	AGM2	SDG	RDG	Ecoline
	moTron	A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	or ment	agent a second and	6 min	Grind.	Table 1 Table
RS232 cable	✓	✓					
RJ45 connection cable	<b>✓</b>		<b>✓</b>	<b>✓</b>			
Safety relay		✓					
Contact breaker with power supply unit		✓					
Contact breaker RS housing					✓	✓	
Mains filter			<b>✓</b>	<b>✓</b>			
SDG trigger box					✓		
Tool case for 35 kHz hand units					✓	<b>✓</b>	<b>✓</b>
HC35 spanner set					✓	✓	✓
Communication modules	PROFINET		<b>✓</b>	<b>✓</b>			
HF switch box for hand units					✓	✓	
HF switch box					<b>✓</b>	<b>✓</b>	<b>/</b>

# RS232 cable



For exporting data.

# **RJ45** connection cable



For integrating Ethernet.

Safety relay



To convert an automated machine into a standard machine.

Contact breaker with power supply unit



Contact breaker equipment ADG generators.

**Contact breaker RS** housing



Contact breaker equipment for RDG and SDG generators.

# Mains filter



For special machines.

# SDG trigger box



For activating the trigger.

# Tool case for 35 kHz hand units



Lightweight and practical carrying case for tools.

# HC35 spanner set



Lightweight and practical carrying case for the spanner set.

# **Communication modules**



6 certified interchangeable fieldbus modules:

- EtherNet/IP
- PROFIBUS
- PROFINET
- EtherCAT DeviceNet
- CANopen

# Device switch box for hand units



For easily switching from one hand unit to another hand unit with the same generator.

# **HF** switch box



For distributing an HF signal from a single generator to multiple oscillator units.



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rincoultrasonics.de

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rinco-france.com

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rincoultrasonics.es

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