



EN

# BATTERY Lawn mower DAC 3324e





## Content

1. Introduction .....	3
2. Safety instructions .....	4
3. General presentation of the machine .....	9
4. Technical data .....	10
5. Assembly .....	12
6 . Maintenance and storage .....	17
7. Troubleshooting .....	20
8 . Declarations of conformity .....	21



## 1. INTRODUCTION

Dear Client!

Thank you for your decision to purchase a RURIS product and for your trust in our company! RURIS has been on the market since 1993 and during all this time it has become a strong brand, which has built its reputation by keeping promises, but also by continuous investments aimed at helping customers with reliable, efficient and quality solutions.

We are confident that you will appreciate our product and enjoy its performance for a long time. RURIS does not offer its customers only machines, but complete solutions. An important element in the relationship with the customer is advice both before and after the sale, as RURIS customers have at their disposal a whole network of partner stores and service points.

To enjoy the purchased product, please read the user manual carefully . By following the instructions, you will be guaranteed a long use.

The RURIS company is continuously working on the development of its products and therefore reserves the right to modify, among other things, their form, appearance and performance, without having the obligation to communicate this in advance.

Thank you once again for choosing RURIS products!

Information and customer support:

Phone: **0351.820.105**

e-mail: **[info@ruris.ro](mailto:info@ruris.ro)**



## 2. SAFETY INSTRUCTIONS

Your lawnmower has been built to be used in accordance with the rules of safe use outlined in this manual. As with any type of power equipment, any error or carelessness on the part of the operator can result in personal injury.

ALWAYS READ THESE INSTRUCTIONS BEFORE USE

### THE PRODUCT

The sound intensity level for the operator may exceed the value stated on the machine. Thus, hearing protection measures are necessary.

### Warning

- Vibration emissions during the actual use of the electric machine may differ from the total value declared depending on the way the machine is used.
- The need to identify safety measures for the protection of the operator is based on an estimate of exposure under actual conditions of use (taking into account all parts of the operating cycle, such as the time when the machine is stopped and idling, in addition to of the start time).

### Careful:

1. This machine **MUST NOT** be used by children and people with reduced physical, sensory or mental capabilities or lack of experience or knowledge. Local regulations may restrict operator age. Do not let children play with the machine.
2. If the charger's power cable is damaged, it must be replaced in an authorized RURIS service to avoid any danger.

### Safety instructions

### IMPORTANT

READ THE MANUAL CAREFULLY BEFORE USE.

KEEP FOR FUTURE REFERENCE.

Safe Operating Precautions for Electric Battery Powered Lawn Mowers

### training

- a) Read the instructions carefully. Familiarize yourself with the commands and proper use of the device.
- b) Never allow children or persons unfamiliar with the instructions to use the lawnmower. Local regulations may restrict operator age.



c) Never use the device while there are people, especially children, or animals inside proximity.

d) The operator or user is responsible for accidents or risks to which third parties or their goods are subjected.

### **Battery / charger**



When charging the battery, the charger and the battery must be left throughout the charging period in a room where there are no products that could be combustible, so in the event of a short circuit or a malfunction of the charger or battery, they are protected and cannot endanger no one. For safety, the room must be constructed of non-combustible materials, such as concrete walls and floors.

It is forbidden to store the battery in places that are not specially arranged. The storage must be safe, without the danger of the stored objects falling and short-circuiting the battery.



It is forbidden to store on top of or near other batteries or objects that could come into contact with the battery and damage it or even put it in a short circuit.

It is forbidden to store metallic objects or any other object that has electrical conductivity near the battery or at a distance of less than 50 cm.

It is forbidden to charge the battery without being supervised during the entire charging period by the user.

It is forbidden to store the equipment with a used or damaged battery. If you notice damage to the battery case, the battery must be isolated in an area that cannot endanger the room or the battery and must be handed over immediately to the seller where it was purchased.

Start-up and use are done only after observing the safety conditions specified in the user manual.

Battery storage is done only after the battery is completely discharged and cannot be started



Recharge only with the charger specified by the manufacturer. A charger that is not compatible with the battery can damage it.

Use the lawnmower only with an original battery. Using any other type of battery may cause a fire.

Battery cells may develop a small amount of fluid loss under extreme conditions of use or temperature. If the outer seal is broken and the liquid gets on the skin:

- Use soap and water to wash off immediately. Neutralize with lemon juice, vinegar or other mild acid.
- If leakage gets into eyes, flush with water and seek medical attention.

### **Preparation**

- a) Always wear appropriate protective equipment while using the machine.**
- b) Carefully inspect the area of use of the machine and remove all objects that could be projected by the machine.**
- c) Before use, always visually inspect the machine to ensure that the blades, blade bolts and cutting assembly are not worn or damaged. Replace worn or damaged blades and bolts to ensure balance. Replace damaged or unreadable labels.**
- d) Before use, check the power supply and charger extension cord for damage or wear. If the power cord becomes damaged during use, unplug it immediately. DO NOT TOUCH THE POWER CORD BEFORE UNPLUGGING IT.**

### **functioning**

- a) Use the lawnmower only during the day or in good artificial light conditions;**
- b) Avoid using the machine when the grass is wet;**
- c) Always maintain a stable position on slopes;**
- d) Walk, do not run when using the machine;**
- e) Mow the grass to the side of a slope and not up and down it.**
- f) We recommend that you pay particular attention when changing direction on slopes;**



- g) Do not mow the grass on excessively steep slopes;**
- h) We recommend paying particular attention when pulling the car towards you;**
- i) Do not tilt the machine when transporting it.**
- j) Never use the machine with defective guards or without safety devices, de  
example without the debris collector mounted on the position.**
- k) Carefully start the engine, following the instructions and keeping your feet away  
from the blade(s);**
- l) Do not tilt the lawnmower when using it**
- m) Do not start the car when you are in front of the exhaust port.**
- n) Do not place hands or feet near or under rotating components**
- o) Do not transport the machine while the power is on.**
- p) Switch off the machine and the battery. Make sure all moving parts are completely  
stopped:**
  - Whenever you leave the machine**
  - Before removing blockages or unblocking the grass discharge channel**
    - Before checking, cleaning or any intervention on the machine**
  - After hitting a foreign object. Check the machine for damage and carry out  
necessary repairs before restarting and using the machine;**
- q) If the machine starts to vibrate abnormally, check it immediately:**
  - check for damage**
  - replace or repair any damaged components**
  - check and tighten any loose parts**



**Never operate the machine with defective guards or without safety devices, for example without the debris collector in place.**

**Start the engine carefully, following the instructions and keeping your feet away from the rotating parts.**

### Symbols on the machine

The technical label on the car may show some symbols. This is important information about the product or instructions on its use.

	Read the manual.
	Wear protective footwear.
	Wear hearing protection.
	Wear hand protection equipment.
	Careful! Danger.
	Careful! Debris may be ejected from the outlet.
	Careful! The blades continue to rotate after the engine has been stopped.
	Remove the key from the car before servicing
	Turn off the machine when you leave the machine.
	Do not work on steep slopes.



	Beware of sharp blades.
	Do not expose to rain.
	Before maintenance, remove the battery.
	Keep children at least 10 m away from the work area

### 3. GENERAL PRESENTATION OF THE MACHINE

1. Start lever.
2. Top handle.
3. Upper handle tightening lever.
4. Lower handle.
5. Collector bag.
6. Lower handle tightening lever.
7. Battery cover.
8. Accumulator.
9. Charger.
10. Cutting height adjustment lever.





The images are informative, the supplier reserves the right to make structural and functional changes to the machine presented in this manual.

The battery benefits from the "α UP-Innovation RURIS" function. This function helps the battery when it reaches the critical discharge threshold. Ruris came up with an innovation in the system of cells inside the battery, through which the battery can be recharged after a long period of time in which it has been discharged. Thus, RURIS users can enjoy the reliability and innovation of RURIS. After storage, charging is recommended at an interval of 6 months - 1 year.

## 4. TECHNICAL DATA

<b>Engine type</b>	Electric, brushless
<b>Battery</b>	Li-Ion 20 V 4 Ah
<b>I carry batteries</b>	1
<b>Working height</b>	25-75 mm
<b>Working width</b>	330 mm
<b>displacement</b>	Manual
<b>Functions</b>	Collection, throwing back, mulching
<b>Speed</b>	3200rpm
<b>Maximum recommended work surface</b>	300 sqm
<b>HOUSING</b>	Plastic
<b>Collector bag volume</b>	30 l

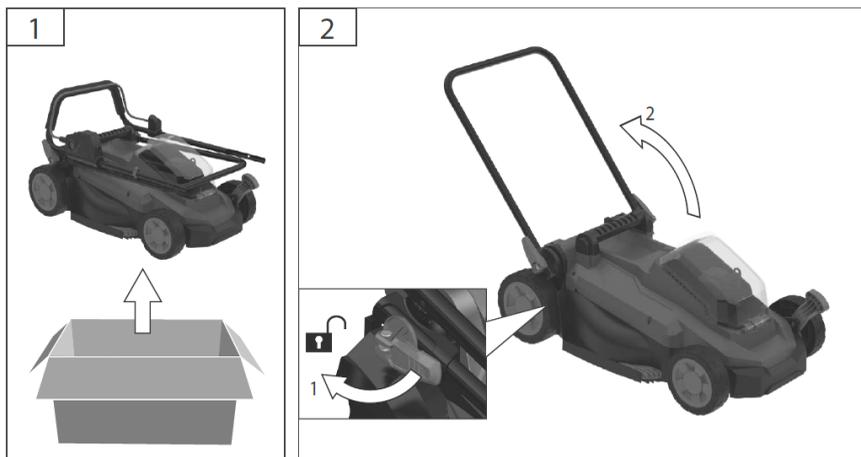


<b>Handle vibrations</b>	0.63m/s <sup>2</sup> , K=1.5 m/s <sup>2</sup>
<b>Diameter of female wheels</b>	5.5" (13.75cm)
<b>Rear wheel diameter</b>	6.5" (35.75 cm)
<b>Total power</b>	P <sub>w</sub> = 80Wh
<b>Weight</b>	10.38 kg

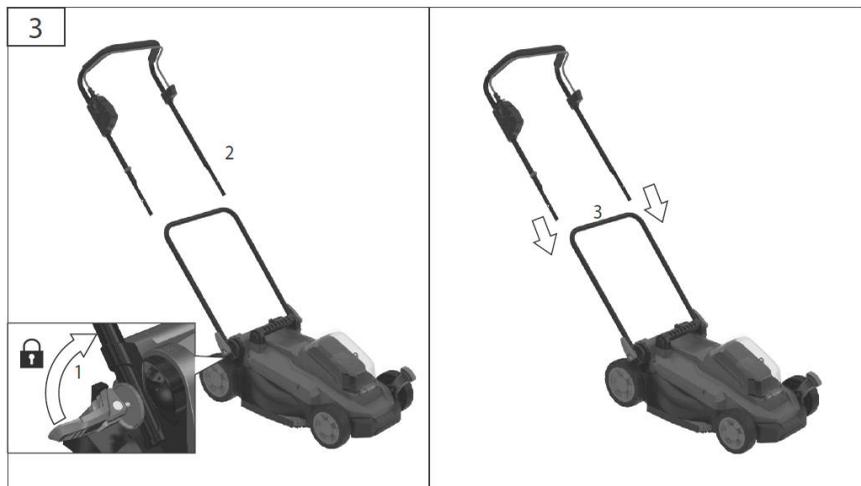


## 5. ASSEMBLY

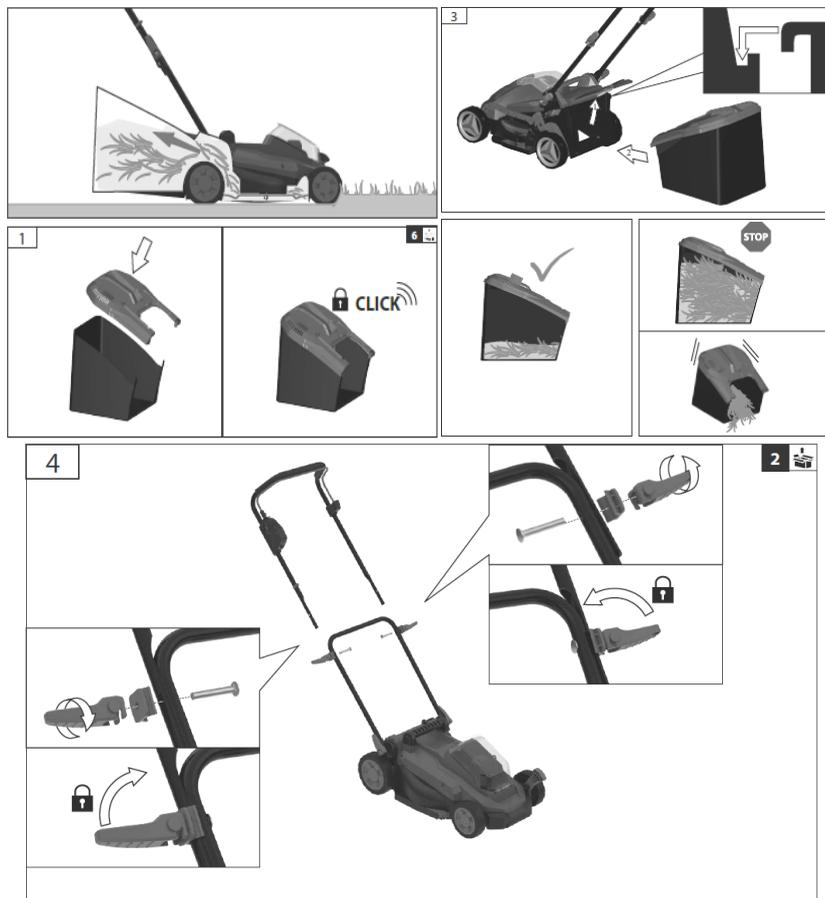
Take the machine out of the box, unlock the lower handle and fold it into the desired position.



Lock the lower handle then slide the upper handle over it.



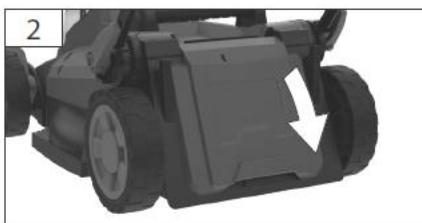
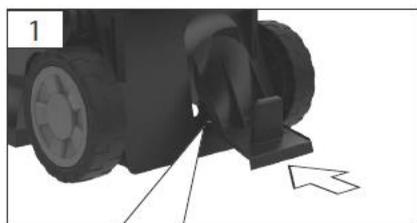
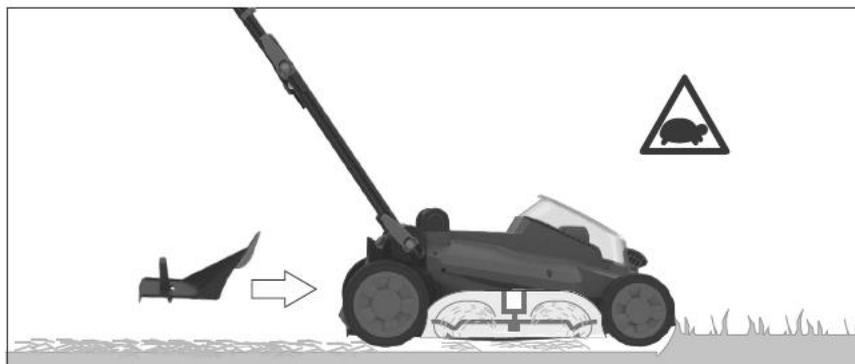
Attach the top handle to the bottom handle using the screws provided.



Assemble the collection bag then connect it to the lawnmower.

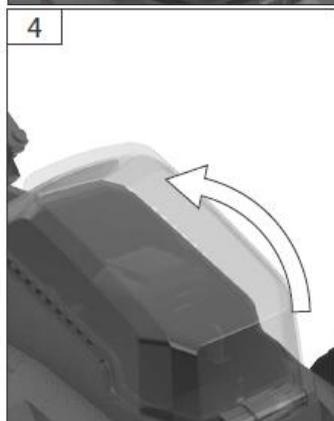
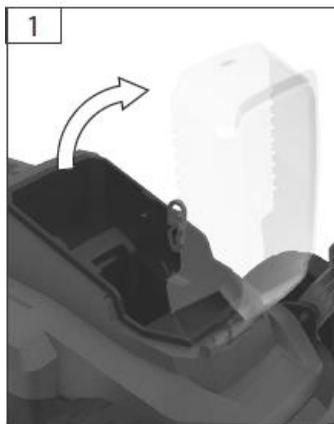
## Use without collection bag

The outlet hole is blocked with a cover to activate the mulching function. Lift the rear flap of the car, then fix the cover to block the exhaust port, then release the flap of the car.



### Connecting the battery

Before connecting the battery to the lawnmower, make sure it is charged. Open the battery compartment cover, then remove the ignition key. Insert the charged battery into the lawnmower compartment until it clicks into place, insert the ignition key into the battery compartment, then close the battery compartment cover.



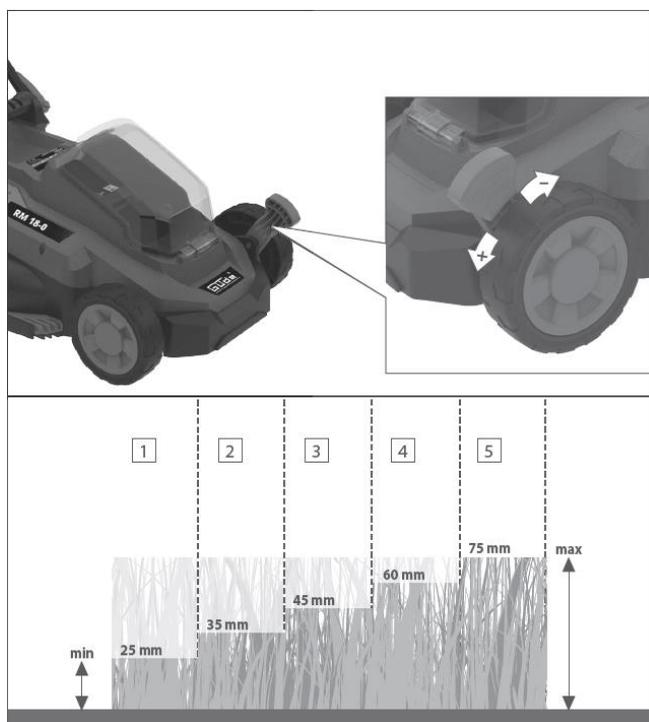


## CUTTING HEIGHT ADJUSTMENT

**NOTE:** Your machine is shipped with the cutting height in the low position. Adjust the cutting height as follows.

The height adjustment lever is located at the front of the machine. To adjust the cutting height, move forward or backward one step.

**NOTE:** For uneven or unstable terrain, move the cutting height to a higher position.

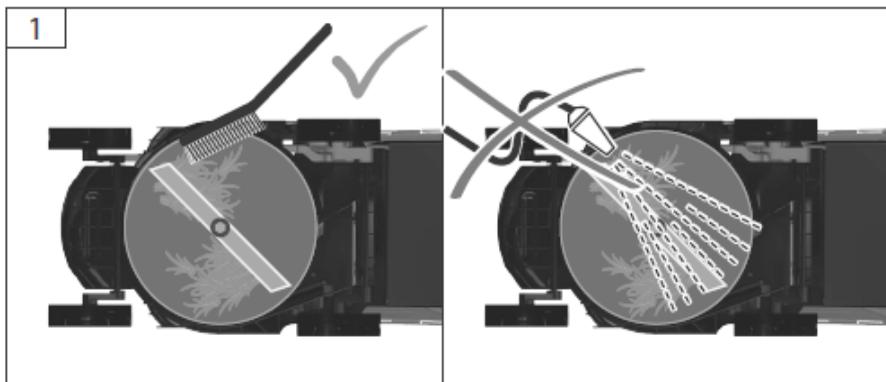




## 6 . MAINTENANCE AND STORAGE

### Blade maintenance

Periodically clean the blade of grass and dirt. Clean the blade using a soft brush, do not use a water jet



At the beginning of the gardening season, carefully examine the blade. If it is very dull, sharpen it or replace it.

If the blade is damaged or worn, replace it with a new one.

Warning! Observe the following safety measures:

Stop the machine, disconnect the battery and wait for the blade to come to a complete stop before performing any operation.

Careful! Use heavy-duty protective gloves when servicing or replacing the blade.

Use only a designated replacement blade.

Do not remove the blade without a good reason



### To replace the blade

Turn the car on its side. Hold the blade (C) with one hand.

Use a wrench (A) to loosen and remove the blade screw (B). Replace the blade.

Tighten the nut securely.

Checks and safety measures:

a) Keep all nuts and bolts tight to ensure the machine is in good working order.

b) Check the grass collector frequently for signs of wear or

deterioration.

c) In the case of multi-blade machines, be aware that a spinning blade can cause turning another blade.

d) While making adjustments to the machine, we recommend that you take great care to prevent your fingers from getting caught between the rotating blades and the fixed parts of the machine.

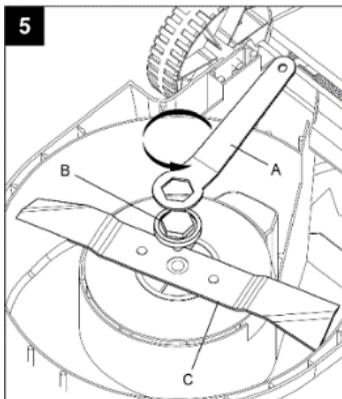
e) Always allow the machine to cool before storing.

f) When performing blade maintenance, remember that even though the power source is turned off, the blades may continue to move.

g) For safety reasons, replace worn or defective parts; Use only original spare parts and accessories.

h) Use only the replacement blade, blade pin and rotor designated for this product. i) Grease the wheel connectors.

j) Store the machine in a dry and clean area. Do not store it near corrosive material or heating sources (central, stoves).



Do not dispose of electrical equipment, industrial electronics and components in household waste! Information on WEEE. Considering the



**provisions of OUG 195/2005 - regarding environmental protection and O.U.G. 5/2015. Consumers should consider the following indications**

**for the delivery of electrical waste, specified below:**

**- Consumers have the obligation not to dispose of waste electrical and electronic equipment (WEEE) as unsorted municipal waste and to collect this WEEE separately.**

**- The collection of these named wastes (WEEE) will be carried out through the Public Collection Service within each county and through collection centers organized by economic operators authorized for the collection of WEEE. Information provided by the Environmental Fund Administration [www.afm.ro](http://www.afm.ro) or the journal of the European Union.**

**- Consumers can hand in WEEE free of charge at the previously specified collection points.**

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## 7. TROUBLESHOOTING

Problem	Possible cause	FIX
The engine does not work	The battery is discharged.	Charge the battery.
	The safety button is defective.	Take the car to a authorized RURIS service center
	Faulty engine.	Take the car to a authorized RURIS service center.
	The security key is not inserted.	Enter the security key.
Engine power decreases	The battery is discharged.	Charge the battery.
	The battery is not inserted correctly.	Insert the battery correctly.
	The battery is defective.	Replace with a new battery of the same type.
Reduced performance.	The battery is discharged.	Charge the battery.
	The grass is too tall.	Adjust the cutting height
Strong vibrations.	The blade is not mounted correctly.	Check the blade.
	The blade is blocked by a foreign object.	Unlock the blade.
	The blade is damaged.	Replace the blade.
Inadequate grass grip.	The collection bag is full.	Empty the bag.
	The outlet is blocked.	Clean the hole.
	The cutting height is not set correctly.	Adjust the cutting height.
The lawn is mowed unevenly.	The blade is blunt.	Sharpen or replace the blade.
	The grass is too tall.	Adjust the cutting height.



## 8 . DECLARATIONS OF CONFORMITY

### DECLARATION OF CONFORMITY CE



**Manufacturer:** SC RURIS IMPEX SRL

Blvd. Decebal, no. 111, Administrative Building, Craiova, Dolj, Romania

Goal. 0351 464 632, www.ruris.ro, info@ruris.ro

Authorized representative: Eng. Stroe Marius Catalin – General Manager

Authorized person for the technical file: Eng.Alexandru Radoi – Production Design Director

**Description of the machine:** The **battery-operated electric lawnmower** is a machine used for the area of grass lawns, having applicability for all surfaces around the house.

Serial number: from XX DAC 3324e 0001 to XX DAC 3324e 9999 (Where xx represents the last two digits of the year of manufacture)

**Product:** lawn mower on battery

**Model:** DAC

**Motor :** Electric, brushless

**Working width:** 330 mm

**Type:** 3324e

**Total power :** Pw= 80Wh

**Travel:** Manual We, SC

*RURIS IMPEX SRL Craiova, producer, in compliance with HG 1029/2008 - regarding the conditions for the introduction of cars on the market, Directive 2006/42/EC - safety and security requirements, Standard EN ISO 12100:2010 - Cars. Security, Directive 2000/14/EC amended by Directive 2005/88/EC , HG 1756/2006 - on limiting the level of noise emissions in the environment, Directive 2014/30/EU on electromagnetic compatibility (HG 487/2016 on electromagnetic compatibility, updated 2019), Directive 2011/65/EU of June 8, 2011 regarding restrictions on the use of certain hazardous substances in electrical and electronic equipment amended by Directive 2011/65/EU Annex 2, we have certified the conformity of the product with the specified standards and declare that it complies with the main safety and security requirements, does not endanger life, health, work safety and does not have a negative impact on the environment.*

The undersigned Stroe Catalin, the manufacturer's representative, declares on his own responsibility that the product is in accordance with the following European standards and directives:

- **SR EN ISO 12100:2011/ EN ISO 12100:2011** - Machine safety. Basic concepts, general design principles. Basic terminology, methodology. Technical principles
- **SR EN SR EN 60335-1:2012/A2:2019/ EN 60335-1:2010/AMD2:2016** - Electrical appliances for household use and similar purposes. Security. Part 2-1: General requirements
- **SR EN 60335-1:2012/A13:2018/ EN 60335-1:2012/A13:2017**- Electrical appliances for household use and similar purposes. Security. Part 1: General prescriptions
- **SR EN 60335-1:2012/A11:2015/ EN 60335-1:2012/A11:2014**- Electrical appliances for household use and similar purposes. Security. Part 1: General prescriptions
- **SR EN 60384-14:2014/EN 60384-14:2014**- Fixed capacitors used in electronic equipment. Part 14: Intermediate specification. Fixed anti-interference capacitors for connecting to the power supply
- **SR EN 60335-2-77:2011/ EN 60335-2-77:2010**- Electrical appliances for household use and similar purposes. Security. Part 2-77: Particular requirements for pedestrian-operated electric lawn mowers
- **SR EN 60335-2-29:2005/ EN 60335-2-29:2004**- Electrical appliances for household use and similar purposes. Security. Part 2-29: Particular requirements for battery chargers



- **SR EN IEC 61058-1:2018/ EN IEC 61058-1:2018**- Switches for appliances. Part 1: General prescriptions
  - **SR EN 62133-2:2017/ IEC 62133-2:2017**- Alkaline accumulators and other accumulators with non-acid electrolyte - Safety requirements for sealed portable accumulators and for batteries made of them, intended for use in portable applications. Part 2: Lithium systems
  - **SR EN 55014-1:2017/ A11:2020 / EN 55014-1:2017/A11:2020**- Electromagnetic compatibility. Requirements for household appliances, power tools and similar appliances. Part 1: Issue
  - **SR EN 55014-2:2015/ EN 55014-2:2015** – Electromagnetic compatibility. Requirements for household appliances, power tools and similar appliances. Part 2: Immunity. Product family standard
  - **SR EN 61000-4-2:2009/IEC 61000-4-2:2008** - Electromagnetic compatibility (EMC). Part 4-2: Test and measurement techniques. Electrostatic discharge immunity test
  - **SR EN 62233:2008/ EN 62233:2008** – Methods for measuring the electromagnetic fields of household electrical appliances and similar purposes regarding human exposure
  - **SR EN ISO 3744:2011** - Acoustics. Determination of sound power levels emitted by noise sources using sound pressure
- Directive 2000/14/EC** ( amended through Directive 2005/88/EC) – Noise emissions in the environment outer
- Directive 2006/42/EC** - regarding cars - the introduction of cars to the market
- Direction 2014/30/EU** - regarding compatibility electromagnetics (HG 487/2016 regarding compatibility electromagnetics , updated 2019 ) ;
- DIRECTIVE 2011/65/EU** of June 8 , 2011 regarding usage restrictions \_ A CERTAIN substance dangerously in the equipment ELECTRICAL and ELECTRONIC fined through Directive 2011/65/EU Annex 2

Manufacturer's brand and name: ZSI Co. Ltd

**Other Standards or specifications used:**

- **SR EN ISO 9001** - Quality Management System
- **SR EN ISO 14001** - Environmental Management System
- **ISO 45001:2018** - Occupational Health and Safety Management System.

**Note: the technical documentation is owned by the manufacturer.**

Clarification: This declaration is in accordance with the original.

Validity period: 10 years from the date of approval.

Place and date of issuance: **Craiova, 05.01.2023**

Year of application of the CE marking: **2023**

No. reg: **10/05.01.2023**

**Authorized person and signature:**

Ing. Stroe Marius Catalin  
Director General of  
SC RURIS IMPEX SRL



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**Model:** DAC

**Type:** 3324e

**Motor :** Electric, brushless

**Total power :** Pw= 80Wh

**Working width:** 330 mm

**Travel:** Manual

Measured sound power level: **87.6 dB(A)** Guaranteed sound power level: **90 dB(A)**

Power level \_ acoustics is certified by TUV Sud through Report no. 70.403.21.148.19 from 29.09.2022 in compliance with provisions Directive 2000/14/CE and SR EN ISO 3744: 2011

*We, SC RURIS IMPEX SRL Craiova, producer, in compliance with HG 1029/2008 - regarding the conditions for the introduction of cars on the market, **Directive 2006/42/EC** - safety and security requirements, Standard EN ISO 12100:2010 - Cars. Security, **Directive 2000/14/EC amended by Directive 2005/88/EC**, HG 1756/2006 - on limiting the level of noise emissions in the environment, **Directive 2014/35/EU**, HG 409/2016 - on low voltage equipment, **Directive 2014/30/EU** on electromagnetic compatibility (HG 487/2016 on electromagnetic compatibility, updated 2019), **DIRECTIVE 2011/65/EU** of June 8, 2011 on restrictions on the use of certain hazardous substances in electrical and electronic equipment amended by Directive 2011/65/EU Anxa 2, we certified the conformity of the product with the specified standards and declare that it complies with the main safety and security requirements, does not endanger life, health, work safety and has no negative impact on the environment.*

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SC RURIS IMPEX SRL