



THE FIRST **100%**
ELECTRIC SUPER
COMPACT TRACTOR



Carino[®]
ELECTRIC TRACTOR

 **MADE** *in* **TUSCANY**

DeMorino



Vehicle and Implements Fully Electric

Operate 100% with electricity.



No more Emissions in the Atmosphere

Eliminate the cost of fuel.



Noise Relief in Sensitive Areas

Reduce decibels noticeably.



Green Power and Solar Recharging

Utilize 11 kW of real power.

Ecological Spirit



Many public and private organizations are looking for quiet, zero emission machines for the maintenance of parks, gardens, green areas, etc. in residential areas, near hospitals and retirement homes, on golf courses, sports grounds, camping sites, cemeteries, zoos, etc. **CARINO®** is the

answer. **CARINO®** does not pollute the atmosphere and reduces noise pollution to a minimum. This revolutionary super compact tractor, which is the result of years of development and testing, is now reality.

The End of Emissions into the Atmosphere



CARINO® is the first multi-purpose, 100% electric, super compact tractor on the market: the combination of an electric drive unit with different implements means that it can be used in many applications such as cutting tall grass, mulching or

preparing a perfect English lawn. No matter what it is used for it does so with zero emissions to the atmosphere. Thanks to the efforts of our engineers, it is energy efficient enough to operate for a good part of the day on one charge. With **CARINO®**, nothing is impossible.

Energy and Functionality



The story of the **RINO®** Electric, the big brother of the **CARINO®**: in 2010, our search for a power unit, which would give the perfect balance between performance and autonomy, led us to design a universal platform with a hybrid power system. The first prototypes were ready in 2012 and during their development the hybrid system was replaced

by an all-electric power unit. This revolutionized the traditional way of thinking and led to the **RINO®**, the world's first multifunctional, all-electric vehicle. There are a host of electrically powered implements that can be mounted on the **RINO®** and the AMIS system assures that the implements are automatically recognized and operated.



**A style,
a function,
an icon.**

DelMorino

Casino
ELECTRIC

Research and Design



The **CARINO®** is simple to operate and simple to maintain. The operator's position is comfortable and secure with all the controls in easy reach.

He or she can see all around the work area and also follow the work being done. The components are easy to access for inspection and/or replacement.



CARINO® is an electric drive unit with lithium-ion batteries which can be equipped with a finishing mower or a horizontal flail mower. The 48V lithium-ion battery pack powers both the motor of the

drive unit and the implement motor. The direct drive of the **CARINO®** has none of the drawbacks of a hydraulic transmission and no need for fossil fuels.

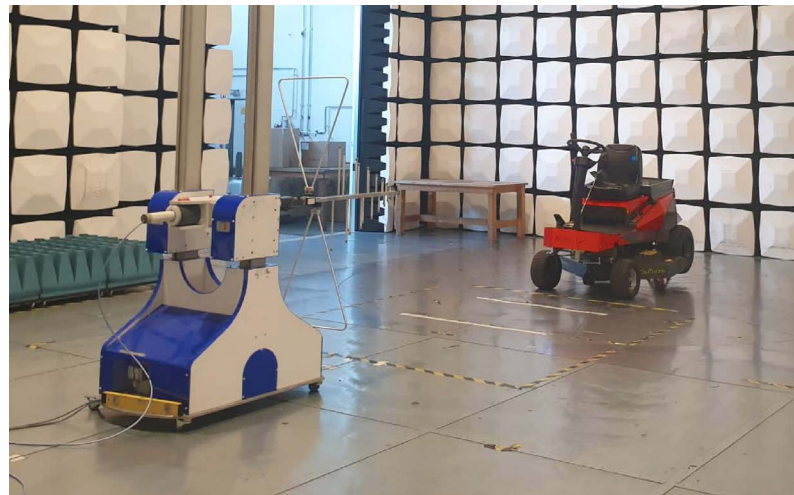


Working height adjustable from 2 to 10 cm (finish mower) or 3 to 12cm (flail mower).

Recharging the battery is far less costly than buying fuel. The **CARINO®** also significantly reduces noise emissions and does not produce any emissions as



Interchangeable battery pack.



Complies with the latest European Safety and Electromagnetic compatibility regulations.

vehicles powered by fossil fuels do. This improves the working conditions for the operator and the quality of the environment where he is working.



CARINO® with flail mower

CARINO® provides a unique user experience. A comfortable driving position with 360° view, conveniently located controls, a low noise level so that the operator doesn't need ear protection, rear

drive wheels and front steering wheels for a tight turning radius, and centrally mounted implements (finish mower or flail mower) giving the operator an optimal view of what he is cutting.

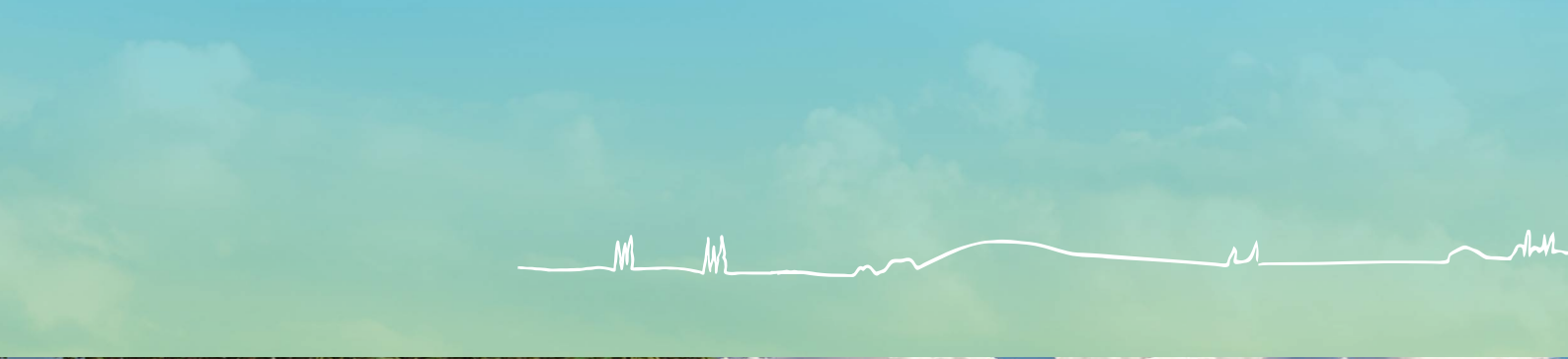
Dynamic Driving



CARINO® with finish mower

The controls and the operational display of the **CARINO®** is designed to be user-friendly and functional. The fwd-rev switch is conveniently located near the steering wheel. The information to be shown on the display can be selected by the

operator. The cutting height can be selected with a spring-loaded lever to the right of the operator's seat. The implement's motor stops in less than 3 seconds as required by safety regulations.



The lever to the right of the driver's seat is easy to reach while seated so that the cutting height can be adjusted to adapt to the type of grass and

terrain. **CARINO®** is able to cut tall grass, mulch or create a finish cut for the perfect English lawn.

Ease of Operation



The tight turning radius makes it possible to work in narrow places and the compact size of the

CARINO® means that it can be transported by smaller vehicles.

Technical data

Frame	Full frame made of Domex steel.															
Power supply	Fully electric 100% (traction electric motor power (W) 2,500, rpm 3,000)															
Power	Total installed: 11 kWh.															
Autonomy	Working up to 4h Traveling up to 20h															
Recharging	Domestic version A (10A - 230V): 6h Domestic version B (16A - 230V): 3h Industrial version C (32A - 230V / 10A - 400V 3 Ph): 2h															
Power Train	Rear.															
Max Speed	7 km/h.															
Dimensions	<table border="1"> <tr> <td>Front width</td> <td>mm</td> <td>950</td> </tr> <tr> <td>Rear width</td> <td>mm</td> <td>1023</td> </tr> <tr> <td>Length (including finish mower)</td> <td>mm</td> <td>1187</td> </tr> <tr> <td>Length</td> <td>mm</td> <td>1932</td> </tr> <tr> <td>Height</td> <td>mm</td> <td>1352</td> </tr> </table>	Front width	mm	950	Rear width	mm	1023	Length (including finish mower)	mm	1187	Length	mm	1932	Height	mm	1352
Front width	mm	950														
Rear width	mm	1023														
Length (including finish mower)	mm	1187														
Length	mm	1932														
Height	mm	1352														
Weight (including finish mower)	390 Kg															
Tire sizes	Front: 13.6.50 x 6" (150 mm) Rear: 18.9.50 x 8" (235 mm)															
Driving	Large platform without obstacles. Operators seat with longitudinal, height and spring adjustment, sensor for operator presence.															
Lifter	Mechanical, spring assisted lever. Capacity to lift up to 200 kg.															
Accessori disponibili	Flail mower, Finishing mower, Brush, Watering or disinfecting tank, Roll Bar, Working lights.															

11
kW/h

Nominal battery capacity.

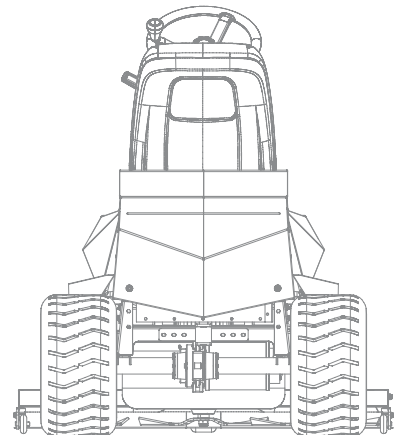
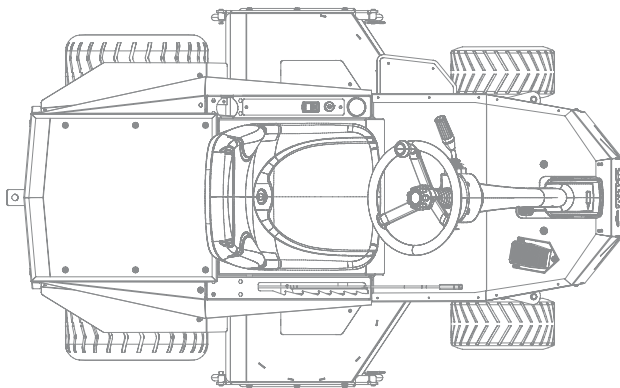
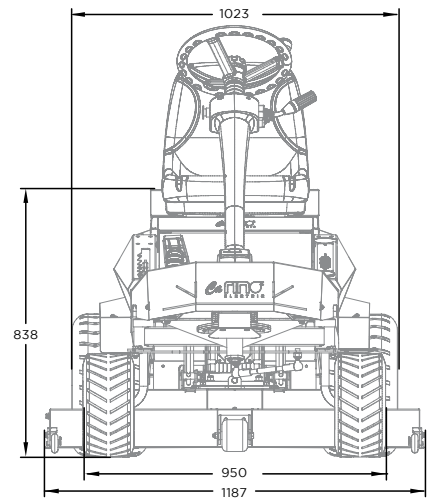
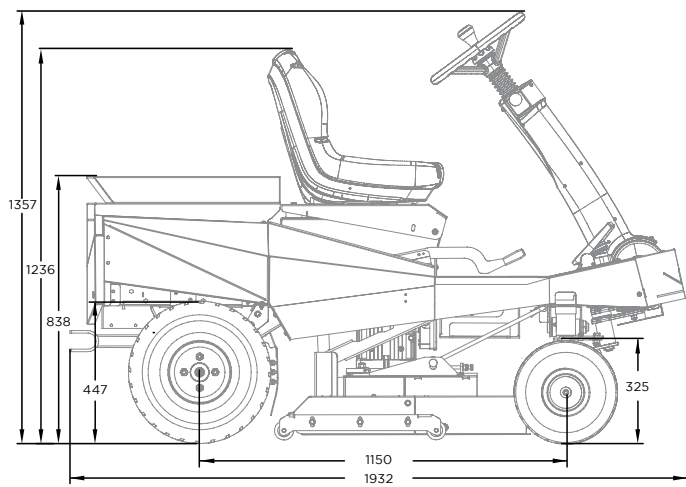
7
km/h

Transfer speed that
CARINO® is able to
sustain in road traffic.

15%

Maximum incline that
can be overcome on dry
ground.

Dimensions



rino[®] Carino[®]

Patented internationally by
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Caprese Michelangelo - 52033 - Arezzo

rinoelectric.com

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