

YT

TERBERG
SPECIAL VEHICLES

YT203-EV

FULLY ELECTRIC YARD / TERMINAL TRACTOR



BATTERY PACK COMBINATIONS UP TO 222 KWH

MOTOR PERFORMANCE SIMILAR TO DIESEL • SUITABLE FOR COLD AND WARM CLIMATES
INCREASED CAPACITY FOR A LONGER RANGE • VERY LOW MAINTENANCE COST

ADVANTAGES OF TERBERG ELECTRIC TRACTORS

- Motor performance comparable to that of a tractor with a diesel engine
- The Thermal Management System (TMS) controls the temperature of the batteries, enabling worldwide use at high and low temperatures (-30° up to +50°C) *
- Wide choice of battery capacities up to 222 kWh
- Comprehensive warranty
- Low maintenance costs
- Zero emissions at the point of use
- Low noise level, low vibrations
- Universal charging connector to CCS2.0 automotive standard

* Additional measures may be required in extreme temperatures.



- Batteries and complete vehicle comply with CE-R100 rev. 2
- One-pedal drive for optimum operator convenience and maximum energy recuperation
- Highly experienced in developing electric tractors (since 2014)
- Decades of experience in developing terminal tractors (since 1973)



ADDITIONAL ADVANTAGES OF THE NEW YT PLATFORM

Good visibility
and less reflection

Minimum vibrations
due to the new
improved mirror arms

Plenty of room
for accessories
and storage

Ergonomic and efficient
fingertip controls next
to the seat

Terberg Electronic
Architecture 2.0. Future
ready for software
updates over the air

High comfort due
to new, improved
cabin suspension



Bumper removable in 3 parts.
Easy to service/repair

Ergonomic low
entry step

Hot-dip anti-corrosion galvanized
chassis, bumper and panels

MODULAR AND MULTIFUNCTIONAL

Terberg developed the new generation electric drive as a multifunctional, modular concept. This makes it easy to apply this EV system in a range of vehicles. Depending on a vehicle's application, Terberg can easily change components such as the traction motor, hydraulic pump or energy source, with minimal effort and redevelopment.

LOW MAINTENANCE COSTS

The electric drive has fewer moving parts compared to a diesel engine and the previous EV generation. This contributes to the lower maintenance costs. The multifunctional design of the tractor and the EV system gives mechanics good access to components. All this helps to reduce downtime for maintenance.



CHOICE OF BATTERY CAPACITIES

High duty cycle applications will benefit from a battery with a higher capacity, resulting in a longer range. Customers with lower duty cycle operations and more opportunities to charge the vehicle during the day can opt for a smaller battery pack, at a lower price.

CERTIFIED BATTERIES AND VEHICLE

The new battery and complete vehicle comply with the ECE-R100 rev. 2 regulation. This regulation is a key European requirement for the approval of electric vehicles. The tests cover aspects such as resistance to vibration, acceleration, impact, thermal loads, fire and short-circuits, and electrical safety.

SUITABLE FOR WARM AND COLD CLIMATES

The Thermal Management System (TMS) controls the temperature of the batteries, which therefore can be used at any ambient temperature between -30° and +50°C *. This makes the Terberg YT203-EV suitable for use anywhere in the world!

HIGH PERFORMANCE

The new electric motor in the YT203-EV has a performance similar to a tractor with a diesel engine with low noise and vibrations. Additionally, the electric motor avoids CO₂ and NO_x emissions at the point of use.

REGENERATIVE BRAKING

The new EV drive has a comprehensive regenerative braking system. Instead of being wasted, the braking energy is fed back to the batteries. The regenerative braking function is controlled by the accelerator pedal, so the driver can drive and brake with one pedal. Higher axle loads result in more regenerative braking.





YT203-EV SPECIFICATIONS

Driveline: 4 x 2

GCW 65t-105t (depending on axle ratio and operating conditions)

Battery pack combination options up to 222 kWh

Charger connector complies with CCS2.0 automotive standard

Batteries + complete vehicle comply with ECE-R100 rev. 2

Suitable for worldwide operation
-30° up to +50°C *

Traction motor: ZF CeTrax

Regenerative braking

Front axle capacity: 11 t @20 km/h

Rear axle capacity: 38 t @20 km/h

5th wheel: Terberg cast steel plate 2"

5th wheel capacity: 36t

5th wheel lifting capacity: up to 36t

Lowest 5th wheel height: 935 mm

Forward-facing seat

Left and right-hand drive available

Terberg Connect tractor telematics

* Additional measures may be required in extreme temperatures.

UNIVERSAL CHARGING SYSTEM

The YT203-EV uses DC chargers and can be charged at standard charging stations. The new, universal charging connector complies with the CCS2.0 automotive standard. This means the vehicles can be charged using any charger with a CCS2.0 connection and the appropriate specifications. Customers can use a universal charging infrastructure for Terberg and other vehicles.



SERVICE AND TRAINING

The Terberg Academy provides a range of theoretical and hands-on training courses to ensure the proper use and maintenance of fully-electric vehicles. When working on EV systems it is necessary to comply with local regulations. Of course, Terberg or your local Terberg distributor can take care of all maintenance of your EVs, to save you an investment in equipment and training.





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WHITEPAPER NEXT GEN ELECTRIC TRACTORS

THE ADVANTAGES OF TERBERG ELECTRIC VEHICLES

- Motor performance comparable to that of a motor with a diesel engine
- 1000 Thermal Management System enables operation at high ambient temperatures >30° up to >40°C*
- Wide choice of battery capacities: 76 kWh, 148 kWh and 222 kWh (175kW-410)
- Comprehensive warranty
- Low maintenance costs
- Low emissions in the point of use
- Low noise level, low vibration
- Standard charging connector as IEC61851 automotive standard
- Batteries and complete vehicle comply with CEI EN 50634-1 as a requirement
- They qualify for optimum operator convenience and maximum energy recuperation
- They qualify for environmental grants
- Highly experienced in developing electric tractors since 2016
- Available of experience in developing terminal tractors since 1975.

MODULAR AND MULTIFUNCTIONAL

Terberg developed the next generation electric drive as a multifunctional, modular concept. This makes it easy to equip the EV system in a range of vehicles. Depending on a vehicle application, Terberg can easily change components such as the traction motor, hydraulic pump or energy source, without re-engineering. This has allowed the likes of Terberg to develop products more efficiently, using state-of-the-art technology. The improvement of a single component can benefit several vehicle types.

LOW MAINTENANCE COSTS

The electric drive has lower running costs than a diesel engine and the previous EV generation. This contributes to the lower maintenance costs. The multifunctional design of the tractor and the EV system, gives maximum good access to components such as the cooling system (airflow is forced) over and the motor. All this helps to reduce downtime for maintenance.

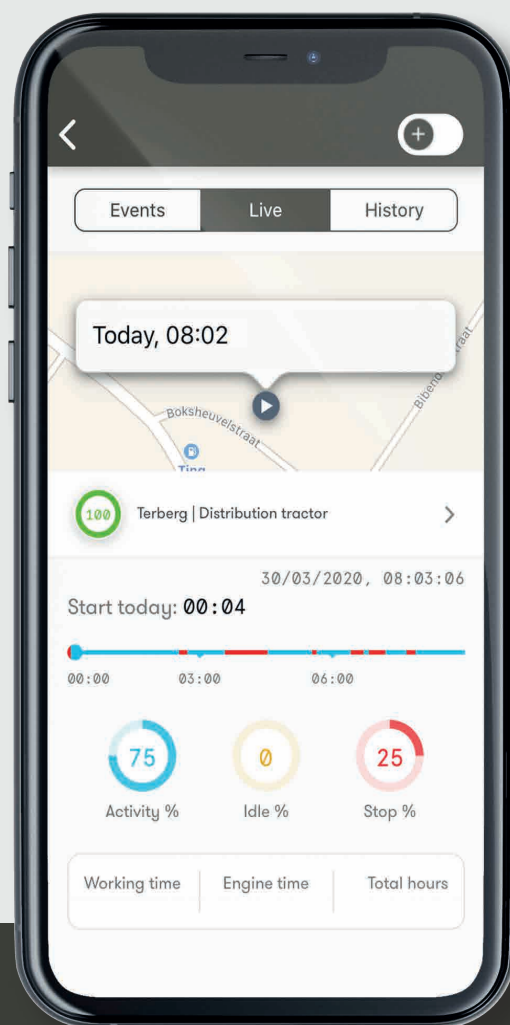
CHOICE OF BATTERY CAPACITIES

Terberg uses lithium-ion batteries in all its electric vehicles. We can determine the optimum battery configuration for every customer. Depending on the intended operation. For the 175kW-410 you have a choice of battery capacities: 76 kWh, 148 kWh and 222 kWh.

High duty cycle applications will benefit from a battery with a higher capacity, resulting in a longer range. Customers with lower duty cycle operations and more operations to charge the vehicle during the day can opt for a smaller battery pack, at a lower price. The choice of large and small battery packs also enables customers who prefer a short recharge to get a sufficient range.

TERBERG CONNECT TELEMATICS SYSTEM

The YT203-EV is supplied as standard with the Terberg Connect telematics system. This provides remote monitoring of the status and performance of each vehicle; including the charge cycle, remaining battery capacity and any faults. This constantly updated information makes it possible to charge each vehicle at the right time, and to resolve problems remotely or on site.



TERBERG SPECIAL VEHICLES

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