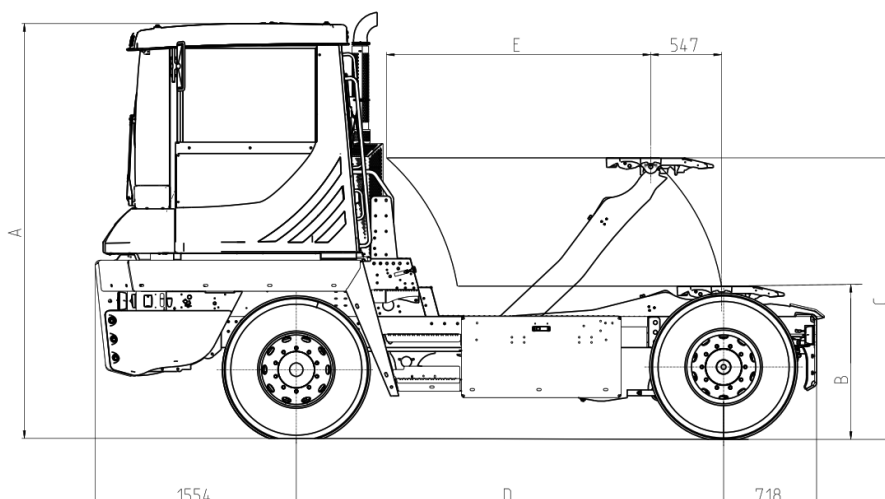
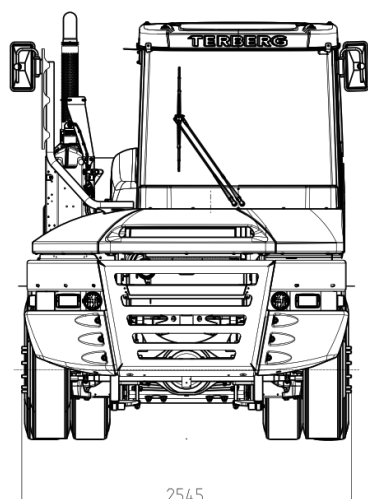


RT223, 4x4 Technical specification



Tyres	A ±15mm	B ±15mm	C ±15mm	Wheel base D	E (mm)
295/60R22.5	3107	962	2035	3200	2140
11R22.5	3170	1078	2098	3300	2240
295/80R22.5					
13R22.5	3208	1146	2136	3500	2440

ENGINE

Volvo TAD880VE (Stage V)

Six-cylinder four-stroke direct-injection diesel engine with turbo charging and intercooler.

Engine equipped with engine brake.

Engine equipped with Volvo Penta (AdBlue) system including DOC, DPF and SCR-catalyst.

Displacement:7,7 dm³

Output: 160 kW (218 hp) at 2200 rpm

Torque: 1050 Nm at 1000-1400 rpm

Acc. to ISO 3046

Volvo TAD881VE (Stage V)

Six-cylinder four-stroke direct-injection diesel engine with turbo charging and intercooler.

Engine equipped with engine brake.

Engine equipped with Volvo Penta (AdBlue) system including DOC, DPF and SCR-catalyst.

Displacement:7,7 dm³

Output: 185 kW (252 hp) at 2200 rpm

Torque: 1150 Nm at 1100-1500 rpm

Acc. to ISO 3046

Only for use outside EU/US/Canada:

Volvo TAD850VE (Tier 3/Stage 3A)

Six-cylinder four-stroke direct-injection diesel engine with turbo charging and intercooler.

Engine equipped with engine brake.

Engine equipped with normal silencer.

Displacement:7,7 dm³

Output: 160 kW (218 hp) at 2200 rpm

Torque: 1050 Nm at 1000-1400 rpm

Acc. to ISO 3046

Only for use inside US/Canada:

- Volvo TAD871VE-185kW (Tier 4f)

GEARBOX

ZF, type 6WG211

- Powershift transmission with standard Lock-Up clutch ensuring the lowest possible fuel consumption with 6 speeds forward and 3 gears reverse.

Gear ratio's	theoretical speed (km/h)
5.683F+5.041R	4+4(F+R)
3.702F	6 (F)
2.304F+2.044R	9+10 (F+R)
1.501F	14 (F)
0.963F+0.854R	22+24 (F+R)
0.627	33 (F)

(Tyre size 11R22.5, axle ratio 16.13)

TRANSFER CASE

Kessler, type W1000

Transfer case with permanent front-wheel drive and integrated pneumatically lockable longitudinal differential with 1/3 front, 2/3 rear torque split. Reduction ratio 1.371:1

FRONT AXLE

Kessler

Front axle with planetary wheel ends

Capacity 16.000 kg (20 km/h)*

Reduction ratio 16.3:1

Optional:

- Axle ratio 12.99:1 or 9.53:1

* Actual axle load capacity depending on tyre load rating.

REAR AXLE

Kessler D81PL478

Rear axle with planetary wheel ends

Capacity 38.000 kg (20 km/h)*

Reduction ratio 16.13:1

Differential lock : Automatic limited slip 25%

Optional:

- D81PL478 12.73:1 or 9.76:1
- D81PL477 16.36:1 or 13.2:1

* Actual axle load capacity depending on tyre load rating.

SUSPENSION

Front: Parabolic leaf springs in rubber mountings with 2 telescopic shock absorbers and additional rubber stops. Maintenance-free system.

Rear: Directly bolted to chassis frame.

Optional:

- Air suspension with rubber stops.

RIMS AND TYRES

Tyres: 11R22.5 (6 pieces)

Rims: 10 stud disc wheels 22.5 x 8.25

STEERING SYSTEM

Fully hydrostatic orbitrol steering system with priority valve and double acting steering cylinders.

Emergency steering property.

Steering wheel fully adjustable in height and angle.

Steering wheel diameter 350 mm

Turning circle over front bumper* (m)

Wheelbase [mm]	Driver side	Non driver side
3200	13.480	13.050
3300	13.750	13.320
3500	14.300	13.870

* Tyres 11R22.5

5th WHEEL

2" Terberg cast steel plate

Technical capacity 36.000 kg.

Lifting capacity 35.000 kg*.

Pneumatic unlocking of 5th wheel, operated from cabin.

Indicator light for positive locking inside the cabin.

Fully welded extremely strong and stable lifting frame construction.

All rotating points equipped with generously sized oscillating bearings.

Optional:

- 3,5" 5th wheel
- Cardanic mounted 5th wheel (with 2" or 3,5")

*Actual lifting capacity depending on tyre load ratings, vehicle speeds and 5th wheel height.

HYDRAULIC SYSTEM

Engine driven load sensing hydraulic pump for steering and lifting 5th wheel plate, directly mounted to gearbox, with priority valve for the steering system.

Hydraulic oil tank protected mounted inside the chassis frame.

Tank capacity 105 dm³.

Working pressure 230 bar.

2 heavy-duty hydraulic single stage, double acting lift rams.

CHASSIS

Heavy-duty, torsional stiff, fully welded construction.

Air reservoirs and fuel tank protected mounted inside the chassis, fully bolted access steps with anti-slip surface integrated in chassis.

Towing pin for 40 and 50 mm tow hitches at front and rear of chassis.

BRAKE SYSTEM

Full air brake system with split front and rear axle circuits.

Front axle with Simplex wedge-drum brake system.

Kessler D81PL478 rear axle with simplex wedge brake system.

Kessler D81PL477 rear axle with high capacity single jaw dry disc brake system.

All with auto slack adjusters.

Air reservoirs: 2 x 40 dm³, 1 x 30 dm³.

Total 110 dm³.

2 Line trailer brake system mounted on rear side of cabin, with yellow and red spiral hoses with gladhands.

Air dryer with integrated air pressure regulator.

Brake cylinders: Front axle diaphragm only. Spring brake cylinders on rear axle.

Brake pressure: 7,8 - 8,5 bar.

FUEL TANK

Capacity 200 dm³ and integrated with hydraulic tank.

COOLING SYSTEM

Fin and tube type radiator of heavy-duty construction mounted on rubber silent blocks with separate air to air transmission oil cooler and engine intercooler all mounted side by side.

EXHAUST

Silencer with vertical pipe. Exhaust system in critical area protected with steel grille.

ELECTRICAL SYSTEM

24 Volt negative earth.

Alternator :28V/110A

Batteries :2 x 12 Volt / 140 Ah

Starter motor :5.5 kW

Fuses and relays mounted in central electrical box. Can-Bus system allowing multiple options/flexibility and easy fault tracing. All wiring with code numbers and easy readable/visible mounted in easily accessible electrical box.

7 pin SAE socket at rear of cab for trailer connection (DIN ISO 1185).

LIGHTING

H4 headlights with dipped and main beam and direction indicators.

LED rear lights on rear of chassis, with direction indicators and brake lights.

5th wheel floodlight behind cabin.

Mounting for rotating beacon light.

Interior light in cabin with integrated spotlight.

CABIN

1 person - left-hand drive position.

With 180° swivelling seat.

Dimensions inside:

- width : 1520 mm
- length : 1670 mm
- height : 1660 mm

Cabin construction of overdimensioned strong steel profiles to comply to latest Rops/Fops regulations.

Cab comfortable mounted on 3 anti-vibration mounts.

Entrance to cab by rear sliding door with rubber mounted window pane.

Vertical electric sliding window at driver's side with "Comfort" control.

Cabin can be tilted with hydraulic hand pump to 73°

Large windows for excellent visibility.

All window panes safety glass and tinted. Front window pane layered with a total thickness of 6,76 mm.

Noise insulation exceeds international standards.

ISRI driver's seat with air suspension and fully adjustable, mounted on a 180° swivelling seat assembly for easy entrance/exit to/from driver's position. Swivelling seat assembly equipped with 2 brake pedals and 1 accelerator pedal.

Demister/heater with variable speed blower, recirculation system and all around demisting including 4 adjustable outlet louvers.

Side dashboard:

- Parking brake lever.
- Heater controls.
- Switches for:
 - * Ignition
 - * Wiper rear
 - * Differential lock transfer case
 - * Work light(s)
 - * Hazard lights
 - * Lighting
 - * Differential lock rear axle

Steering console:

- Steering wheel fully adjustable in height and angle.
- Combi switch for:
 - * Direction indicators
 - * Wiper front 2 speed
 - * High/low beam +headlights flasher
 - * Horn
- Gearbox selector
- Switches for:
 - * 5th wheel up/down
 - * 5th wheel unlocking
 - * Unlocking swivelling seat
 - * Electrically operated driver side window with "Comfort" control.
- Terberg Driver Information Module connected to the CAN-Bus system incorporating main indicator lights, gauges and vehicle information.