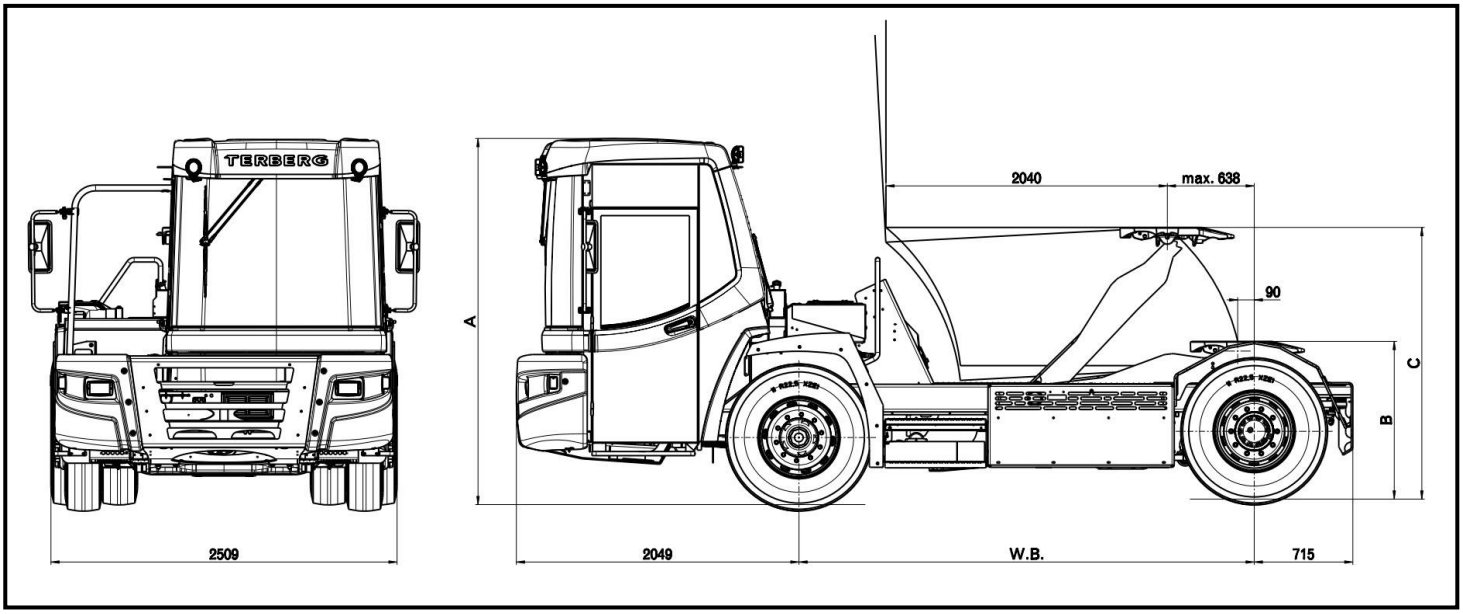
DT223LE, 4x2

Technical specification



ENGINE

Cummins QSB6.7-225 (Tier 4f/Stage 4)
Six-cylinder four stroke direct injection diesel engine with variable geometry turbo charging and intercooler.
Engine equipped with engine brake.
Engine equipped with Cummins (AdBlue) system including DOC and SCR-catalyst.
Displacement: .....6,7 dm^3
Bore: ..... 107 mm
Stroke: ..... 124 mm
Compression ratio: ..... 17,2 : 1
Output:..... 168 kW (228 hp) at 2000 rpm
Torque: ..... 949 Nm at 1500 rpm
Acc. to ECE R120

GEARBOX

Allison, type 3000
Automatic shift transmission with 4 gears forward, 1 gear reverse and torque converter equipped with Lock-Up clutch. Including std. F/R shift protection.

Gear ratio's	*theoretical speed (2200rpm) [km/h]*	
3.487	13	(F1)
1.864	24	(F2)
1.409	32	(F3)
1.00	45*	(F4)
5.027	9	(R)

* Note: speed is 37km/h@1820 engine rpm
(Tyre size 11R22.5, axle ratio 9.49:1)

FRONT AXLE

Volvo
Non-driven steering axle
Capacity 11.000 kg (20 km/h)*
* Actual axle load capacity depending on tyre load rating.

REAR AXLE

Terberg TTA type 70-11
Capacity 30.000 kg (at 20 km/h)*
Hub reduction axle with total reduction ratio 9.49:1

Optional:
- TTA 70-01 11.98:1
- D81PL478 9.76:1, 12.73:1 or 16.13:1
- D81 PL477 13.2:1 or 16.36:1

* Actual axle load capacity depending on tyre load rating.

SUSPENSION

Front: Parabolic leaf springs in rubber mountings with 2 telescopic shock absorbers.
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

Tyres	A	B	C
295/60R22.5	2577	939 (27T)	1884 (27T)
		1055 (31T)	1891 (31T)
11R22.5/ 295/80R22.5	2647	1091 (27T)	1949 (27T)
		1120 (31T)	1956 (31T)
315/80R22.5	2658	1133 (27T)	1962 (27T)
		1133 (31T)	1969 (31T)

STEERING SYSTEM

Fully hydrostatic orbitrol steering system with priority valve and double acting steering cylinder.
Emergency steering property.
Steering wheel diameter 350 mm
Turning circle over front bumper (m)
WB 3300 14,2
WB 3500 14,7

5th WHEEL

Terberg 2" cast steel plate
Technical capacity 36.000 kg.
Lifting capacity 31.000 kg*.
Automatic locking of jaw system. Pneumatic unlocking of 5th wheel, operated from cabin.
Indicator light for positive locking inside the cabin.

Optional:
* 27.000 kg* lifting capacity (for ultra low 5th wheel height)
* Actual lifting capacity depending on tyre load ratings and 5th wheel height.

CHASSIS

Welded construction of rolled steel channels 200x100x10 mm.
Air reservoirs, exhaust system and fuel tank protected mounted to the chassis.
Large side access steps with anti-slip surface integrated in chassis.

Towing pin attachment at front and rear of chassis.

HYDRAULIC SYSTEM

Engine driven hydraulic pump for steering and lifting 5th wheel plate, directly mounted to the engine, with priority valve for the steering system.
Hydraulic oil tank protected mounted to the chassis frame. Tank capacity 50 dm^3.
Hydraulic valve electrically operated from inside the cab to lift/lower/hold the 5th wheel. Working pressure 250 bar.
2 heavy-duty hydraulic double stage lift rams.

BRAKE SYSTEM

Full air brake system with split front- and rear-axle and parking brake circuits. Parking brake working on rear axle.
Brake systems:
Volvo front axle: Z-cam.
TTA rear axle: S-cam.
Kessler D81PL478 drum brake rear axle: simplex wedge brake
Kessler D81PL477 disc brake rear axle: single jaw disc brake
All axles equipped with auto slack adjusters.
Brake pressure: 7,8 – 8,5 bar.
Air reservoirs: 2 x 54 dm^3 and 1 x 37,5 dm^3 with standard air dryer.
2 Line trailer brake system mounted on rear-top of engine hood, with yellow and red spiral hoses with gladhands with cut-off taps.
Special feature is the optimal and ergonomic access to the gladhands and taps is ensured by their position in combination with the low access and spacious steps an LH and RH side ensure.

FUEL TANK

Capacity 200 dm^3 and integrated with hydraulic tank.

COOLING SYSTEM

Plate and bar 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

Cummins T4: Cummins DOC + SCR Catalysts/silencers with horizontal outlet.
Catalysts/silencers protected mounted on the left hand side.

ELECTRICAL SYSTEM

24 Volt negative earth.
Alternator : 28V/95A (Cummins T4)
Batteries : 2 x 12 Volt / 140 Ah
Output starter : 4,8 kW (Cummins T4)
PCB with fuses and relays mounted in central electrical box.
Full Can-Bus system allowing multiple options/flexibility and easy fault tracing.

Wiring with code numbers and easy readable/visible/accessible mounted in central electrical box.
7 pin SAE socket at rear-top of engine hood for trailer connection (DIN ISO 1185).

LIGHTING

H4 head lights with dipped and main beam and direction indicators.
LED rear lights on rear of chassis, with direction indicators and brake lights.
5th wheel flood light behind cabin.
LED Interior light in cabin.
Mounting for rotating beacon light.

CABIN

1 person left-hand or right-hand drive position.
Forward facing driver's position.
Low entry cab (only 2 steps) through generously sized outboard and full height inboard door for safe and effortless entrance/exit to/from the driver's position from both sides.

Dimensions outside:

- width : 1520 mm
- length : 1600 mm
- height : 2100 mm

Cabin construction of overdimensioned strong steel profiles to comply to latest Rops/Fops regulations and equipped with generous amount of noise insulation.

Cab mounted on 2 anti-vibration mounts at the front and 2 pneumatic suspension/shock absorber units at the rear.

Vertical electrically operated sliding window at driver's side.
Large windows with excellent visibility.
All window panes tinted hardened safety glass except front window which is layered.

Cabin can be tilted with hydraulic hand pump to 45° for easy access to the engine from the front. Engine cover can be easily tilted to 65° to allow easy access to rear of engine.

Isri driver's seat with air suspension and fully adjustable ensuring most ergonomic working position.

Central dashboard:

- 12-button multi-function Can-bus control panel.
- Optional radio position.
- Demister/heater controls with variable speed blower control.

Steering column/dashboard:

Fully adjustable steering column/dashboard assembly equipped with:

- Combi switch for:
  - Direction indicators
  - High/Low beam
  - Horn
- Gearshift/Parking brake lever.
- 5th wheel raise-lower lever.
- Multifunctional full colour CAN-Bus display (DIM) with following functionality:
  Constantly displays vehicle speed , brake pressure circuit 1+2, diesel and AdBlue level and engine rpm.
  Critical values/messages will be actively shown to the driver supported by buzzer where needed.
  With easy possibility to read out running hrs, as well as the following analogue values (all with optical signal and buzzer on critical levels):
  - *High temperature gearbox*
  - *Low oil pressure engine*
  - *High temperature engine*
  - *Low voltage*

  Indicator lights are integrated in the display. It has also integrated diagnostic and vehicle history info which can be easily shown on the screen and downloaded via USB.

Upper dashboard:

- 2 generously sized storage compartments.
- 2 optional radio positions.
- Strong mounting provisions for RDT equipment.

Optionals:

- Mechanically suspended co-driver seat with 2-point seat belt.
- 610x610mm emergency roof exit hatch.
- Air conditioning system with optional ECC (Electronic Climate Control).