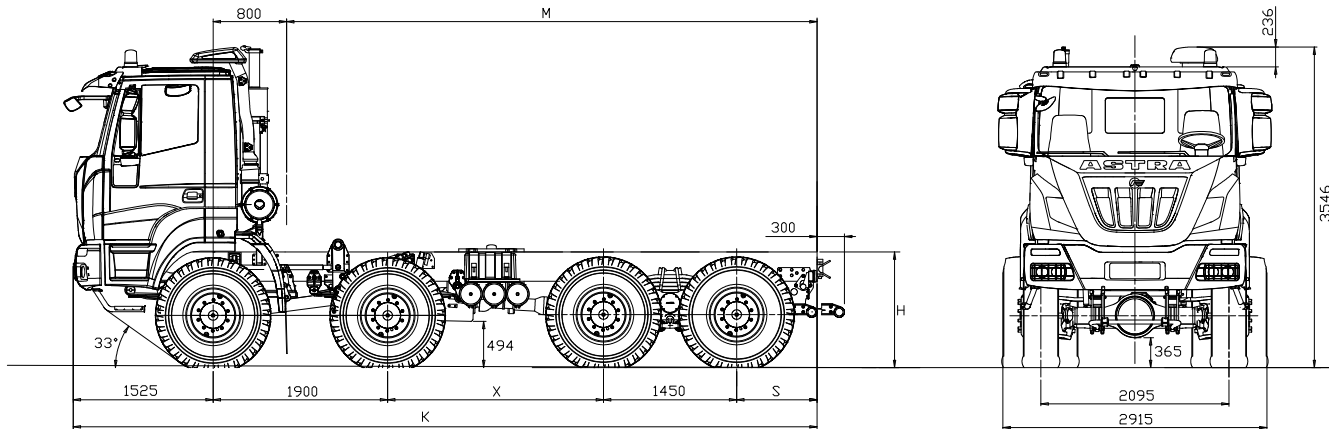




## chassis-cab 8x6 HHD86.48 11t



Std configuration with tyres 14.00 R20

To be equipped with 24m3 body. Thickness bottom 10 mm (HB450), sides 8 mm (HB400).

Cabin protection ROPS&FOPS

### DIMENSIONS (MM)

X	K	M max (*)	S	H	
				empty	loaded
2850	8925	6615	1200	1275	1205
3100	9175	6850	1200	1275	1205

(\*) M max.: indicative value to be confirmed by bodybuilder.

### WEIGHTS (KG)

WHEELBASE	Kerbweight (*)	Max technical weight			
		1st + 2nd axle	3rd + 4th axle	GVW	GCW
2850	13800	22000	40000 (1)	60000 (1)	104000
3100	13830		42000 (2)	65000 (2)	

(\*) Net weight is intended for vehicles in running conditions (driver, 100% of liquids, 90% of fuel) and in basic configuration without optionals and must always be verified during final testing.

(1) With tyres 14.00 R20, reinforced springs std and speed limited to 70 Km/h.

(2) With tyres 14.00 R20, reinforced springs std and max speed limited to 40 Km/h. Overload condition. Limited usage, according to Payload Management Guidelines.

The data shown are indicative and non-binding. Payload and vehicle dimension data must always be verified during final testing. Do not use the drawing in the present sheet to design the equipment. Astra reserves the right to make any changes at any time and without notice.





## ENGINES

**FPT CURSOR 13** turbo intercooler euro 3 diesel injection/cycle with electronic unit injection pumps. Single block head, four valves per cylinder, light alloy pistons. Total displacement: 12.882 cm<sup>3</sup>. Bore for stroke: 135 x 150 mm. 6 in-line cylinders. Water cooling. Dry air filter with safety cartridge. Vertical muffler.

Max.power(EEC) 354 KW (480 HP) @ 1900 rpm  
Max.torque(EEC) 2200 Nm (224 kgm) @ 1000 - 1440 rpm  
Turbine VGT

397 KW (540 HP) @ 1900 rpm  
2350 Nm (239 kgm) @ 1000 - 1690 rpm  
VGT



## GEARBOX

Automated **ZF ASTRONIC 16AS263 ITO** Ecosplit 4 technology gearbox with servoshift, 16 synchronised forward speeds + 2 reverse with hydraulic Intarder.

**In alternative:**

Fully automatic **ALLISON HD4700** with hydraulic Retarder.



## CLUTCH

Single dry plate, diameter 17". Pull type engagement with diaphragm spring. Hydro-pneumatic power steering engagement control, with driven disc wear recovery slave cylinder.



## TRANSFER BOX

Mechanical with two ratios. Helical spur gears, mounted on three shafts, engaged with each other. Lockable differential by pneumatic control from driver seat. Air-oil cooler. Transmission ratio 1:0,913 - 1:1,407. Front/rear torque distribution ratio 1:2,6.



## AXLES

### FRONT

1st reinforced axle driving and steering, with double reduction.  
2nd reinforced axle in high tensile pressed steel, steering, not driving. Max payload per axle: 11 ton.  
Cross-axle differential lock.

### REAR

Two driving reinforced axles in tandem, with double reduction.  
Interaxle and cross-axle differential lock. Tandem linked to the chassis by reaction rods with silentblocks. Available rear-axle ratios: 1:6,18 - 1:7,21.



## SUSPENSIONS

### FRONT

Reinforced parabolic springs, 4 leaves 26x90 mm, with hydraulic shock absorbers. Stabilizer bar on 1st and 2nd axle.

### REAR

Reinforced parabolic springs, swivelling on central pin: 5 leaves 40x100 mm. Stabilizer bar on 3rd and 4th axle.



## CHASSIS

Special steel with high tensile strength limit, two flat and parallel side members (width 820 mm.), C section (320x90x10+6mm), cross members bolted to the frame. R.B.M. (Rail Bending Moment): 300.120 Nm. Steel front bumpers with headlamp protection grids, front maneuvering hook, rear underrun bar, rubber mud-guard 2nd axle, steel fuel tank capacity 300 litres.



## TYRES

**FRONT:** 14.00 R20 Single tubeless

**REAR:** 14.00 R20 Twin tubeless

Spare wheel on the chassis.

The installation of other tyres is subject to approval by Astra technical office.



## BRAKES

Front disc brakes and rear Z-cam "duo duplex" wedge type with automatic slack adjuster. ABS + EBL.

**Service brake:** Pneumatic with pedal control, acting on all wheels.

Solo vehicles, two independent circuits, one for 1st and 2nd axle, one for 3rd and 4th axle. Anti-lock braking system.

**Towing vehicles,** three independent circuits, one for 1st and 2nd axle, one for 3rd and 4th axle and another for the trailer. Anti-lock braking system.

**Emergency brake:** Integrated in service brake.

**Parking brake:** Manual spring-type with pneumatic control acting on 3rd and 4th axle wheels.

**ENGINE BRAKE** decompression type with butterfly valve and variable geometry turbine effect.



## STEERING

ZF 8099 quadrilateral power steering on front axle wheels with variable ratio 1:22.2/1:26.2 with auxiliary cylinder. Circuit with main hydraulic pump on engine and emergency pump on gearbox. Steering rods with self-lubricating joints. Height and inclination pneumatic adjustable steering column..



## CAB

Standard white short cab built in galvanized pressed steel with hydraulic tilting up to 60°. Cab suspension with 4 helicoidal springs with coaxial shock absorbers and integrated dampers, anti-roll bar and end-of-stroke pads. Tinted electric door windows. Mechanical rear view mirrors, wide angle mirrors and front view mirror. Internal panels completely washable and fireproof. Compressed air quick coupling for cab cleaning. 4-speed ventilation and heating system with air recirculation system. Air suspended 3-way adjustable driver seat with seat belts. Mechanical passenger seat with seat belts.



## PAYLOAD MANAGEMENT GUIDELINES

To maximize Productivity and insure Durability, the vehicle can operate with higher GVW than target 62 ton, reducing the speed, according to the following table:

GVW	62 [ton] (max Payload)	62 – 65 [ton] (10% overload)	65 – 69 [ton] (20% overload)	higher than 69 [ton]
% di use	50 % (*)	40%	10%	NEVER
max speed [km/h]	70	40	15	0