EURO 5

chassis $4 \times 2$
HD42.44


## DIMENSIONS (MM)

| $\mathbf{X}$ | $\mathbf{K}$ | $\left.\mathbf{M} \max \mathbf{*}^{*}\right)$ | $\mathbf{S}$ | $\mathbf{H}$ |  | TURNING DIAMETER <br> (wall to wall) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | unloaded | loaded |  |
| 3800 | 6775 | 4450 | 1450 | 1155 | 1110 | 16700 |
| 4200 | 7575 | 5250 | 1850 | 1155 | 1110 | 18000 |
| 4600 | 8375 | 6050 | 2250 | 1155 | 1110 | 19500 |
| 5100 | 8875 | 6550 | 2250 | 1155 | 1110 |  |

${ }^{(*)}$ M max.: indicative value to be confirmed by bodybuilder.
(Tyres 315/80R22.5)

## WEIGHTS (KG)

| $\mathbf{X}$ | Distribution net weight(*) |  |  | Max technical weight |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | First axle | Rear axles | Net Weight | First axle | Rear axles | Gross <br> Vehicle <br> Weight | Gross <br> Combinatio <br> n Weight |
|  | 5050 | 2390 | 7440 | 8000 <br> $9000(1)$ | 13000 | $22000(2)$ | 55000 |
| 4200 | 5045 | 2440 | 7485 |  |  |  |  |
| 4600 | 5055 | 2515 | 7570 |  |  |  |  |
| 5100 | 5090 | 2530 | 7620 |  |  |  |  |

${ }^{(*)}$ Net weight including driver with tanks filled to at least $90 \%$, equipped with standard equipment according to the manufacturer's specifications and, if fitted, the mass of the bodywork, spare wheels and tool box.
(I) With tyres on front axles 385/65R22.5 or 325/95R24 and reinforced springs (OPT).

Higher speeds are allowed with load reductions subject to Astra technical office approval.
Other tyres available, subject to Astra technical office approval.

## ENGINES

CURSOR 13 turbo intercooler diesel injection/cycle with electronic unit injection pumps. 6 in-line cylinders. Single block head, four valves per cylinder, light alloy pistons. Total displacement: 12.882 cm 3 . Bore for stroke: $135 \times 150 \mathrm{~mm}$.Water cooling. Dry air filter with safety cartridge. Vertical muffler. Emissions according to Euro 5 regulation norms SCR (Selective Catalytic Reduction) system composed of catalytic muffler, AdBlue-tank, injection and control system.

Max.power(EEC)
Max.torque(EEC)
Turbine

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324 KW (440 HP) @ 1900 rpm
2200 Nm (224 kgm)@ 1000-1440 rpm
VGT(Variable Geometry Turbocharger)
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## GEARBOX

Manual ZF I6S2220TO Ecosplit 4 technology gearbox with servoshift, 16 synchronised forward speeds +2 reverse:

## On request:

ZFI6S2320TD - ZFI6AS2630TO

|  |  | Speed [kph] calculated at maximum power rpm |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Gears / Gear ratios |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Gearbox model | Rear axle ratio | Ist | 2nd | 3rd | 4th | 5th | 6th | 7th | 8th | 9th | I 0th | IIth | I 2th | I3th | 14th | I5th | 16th | rev. Ist | rev. <br> 2nd |
| I6AS 2630 TO |  | 14.12 | 11.68 | 9.54 | 7.89 | 6.52 | 5.39 | 4.57 | 3.78 | 3.09 | 2.56 | 2.09 | 1.73 | 1.43 | 1.18 | I | . 83 | 13.07 | 10.81 |
|  | 4.227 | 6.27 | 7.58 | 9.28 | 11.22 | 13.58 | 16.42 | 19.37 | 23.42 | 28.65 | 34.58 | 42.35 | 51.16 | 61.90 | 75.01 | 88.51 | 106.64* | 6.77 | 8.19 |
| 16S 2220 TO |  | 13.8 | 11.54 | 9.49 | 7.93 | 6.53 | 5.46 | 4.57 | 3.82 | 3.02 | 2.53 | 2.08 | 1.74 | 1.43 | 1.2 | 1.00 | . 84 | 12.92 | 10.8 |
|  | 4.227 | 6.41 | 7.67 | 9.33 | 11.16 | 13.55 | 16.21 | 19.37 | 23.17 | 29.31 | 34.99 | 42.55 | 50.87 | 61.90 | 73.76 | 88.51 | 105.37* | 6.85 | 8.20 |



## CLUTCH

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

## On request:

Ceramic clutch 17".


## AXLES

## FRONT

Steering, hot moulding in high tensile steel.

## REAR

Driving axle with double reduction: central with bevel gear, final by planetary gear in wheel hubs. Cross-axle differential lock.
On request: Rear-axle ratio I:3.793; I:4.229; I:5.009; I:5.558; I:6.095; I:6.588.

## SUSPENSIONS

## FRONT

Ist axle, parabolic springs, 4 leaves $24 \times 90 \mathrm{~mm}$, with hydraulic shock absorbers. Standard stabilizer bar.

## On request:

Reinforced parabolic springs, 5 leaves $24 \times 90 \mathrm{~mm}$ (mandatory with 9 t version).

## REAR

Parabolic springs, 4 leaves $24 \times 90 \mathrm{~mm}+$ I leaf $50 \times 90 \mathrm{~mm}$, with hydraulic shock absorbers. Standard stabilizer bar.

## CHASSIS

Special steel with high tensile strength limit, two flat and parallel side members (width 820 mm .), C section ( $320 \times 70 \times 8 \mathrm{~mm}$ ), cross members bolted to the frame. R.B.M. (Rail Bending Moment): 143.149 Nm ( 14.597 Kgm .). Steel front bumpers with headlamp protection grids, front manoeuvring hook, rear underrun bar, steel fuel tank capacity 300 litres.

## TYRES

FRONT: 3I5/80R22.5 156/I50 K Single tubeless
REAR: 3I5/80R22.5 I56/I50 K Twin tubeless
Spare wheel on the chassis.
Other Possible combinations:
I3 R22.5 I56/I50K
385/65 R22.5 160J $\left(^{*}\right)+3$ I5/80 R22.5 $156 /$ I50K
325/95R24 162/I60K (*)
(*) Mandatory with 9t front axle load.
Other tyres available, subject to the Astra technical office approval

## BRAKES

Front and rear drum brakes, Duo-Duplex with automatic slack adjuster. ABS + EBL system.
Service brake: Pedal controlled air brake, acting on all wheels.
Solo vehicles: two independent circuits, one for Ist axle, one for 2nd axle.
Towing vehicles: three independent circuits, one for Ist axle, one for 2nd axle and another for the trailer.
Emergency brake: Integrated in service brake.
Parking brake: Mechanical spring-type with pneumatic control acting on 2nd axle wheels.
IVECO BRAKE TURBO engine brake: braking power 255 kW ( 347 HP ).

## On request:

Ist axle immobiliser system.
OFF/ROAD button for excluding ABS for speed 15 kph .

## ELECTRICAL SYSTEM

Alternator generator $90 \mathrm{~A}-28 \mathrm{~V}(2520 \mathrm{~W})$.
Accumulators: 2 in series, 180 Ah.
Starter motor 24 V 5.5 kW .
Mechanically controlled electrical circuit breaker.

CAB
Standard white short cab built in galvanized pressed steel with hydraulic tilting up to $60^{\circ}$. 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.

