

MAIN DIMENSIONS (mm)	M 240 NU	M 240 LU
Maximum length	10.790 mm	11.960 mm
Maximum width	2.500 mm	2.500 mm
Maximum height	3.060 mm	3.060 mm
Minimum height from ground	150 mm	150 mm
Wheelbase	5.150 mm	6.320 mm
Front overhang	2.560 mm	2.560 mm
Rear overhang	3.080 mm	3.080 mm
Turning diameter	14.900 mm	17.880 mm
Floor height from ground: 1 st , 2 nd and 3 rd door	360 mm	360 mm
Threshold height: front and central rear	330 mm 350 mm	330 mm 350 mm
Corridor width: front rear	~ 840 mm ~ 600 mm	~ 840 mm ~ 600 mm

WEIGHTS	M 240 NU	M 240 LU
Dry weight with driver	12.300 Kg	12.500 Kg
Maximum weight allowed	19.000 Kg	19.000 Kg

PASSENGER CAPACITY (std.)	M 240 NU		M 240 LU	
Seating places	18	16	22	20
Standing places	73	70	74	75
Wheelchair	-	1	-	1
Total (with driver)	92	88	97	97

ELECTRIC MOTORS

N. 2 traction motors SIEMENS 67 KW (continuous power), 150 KW (peak power), flanged upright on the rear axle.

N. 1 auxiliary motor SIEMENS 20 KW for power steering and air compressor driving.

Water cooled.

DIESEL POWER UNIT

► Diesel Engine	DAIMLER CHRYSLER OM 904 LA turbocharged intercooler EURO 3
► Position	transversal in the rear overhang diesel cycle direct injection 4 stroke BOSCH PLD single pumping unit system electronically controlled
► Total displacement	4.249 cm ³ , 4 cylinders in line, 3 valves per cylinder
► Maximum power	130 kw at 2200 rpm
► Cooling system	water
► Alternator	SIEMENS synchronous three phase coupled to the diesel engine by over gears, maximum power 155 KW, maximum torque 450 Nm, voltage 650 V

ELECTRICAL TRACTION SYSTEM

Nominal voltage 650 V

Traction battery: n. 3 kit Nickel Sodium ZEBRA ZC5 air cooled, located on the roof structure. Battery charger integrated – total capacity 96 A/h – voltage 372/670 V – total energy stored 53,4 kW/h – maximum current 336 A

Operation and control by IGBT inverter frequency controlled, managed by a SIEMENS control unit connected to: BMU (batteries), ECU (diesel engine), MPX (multiplex system)

Diagnostic: on board diagnostic system with black box (off-board through GSM)

Inverter: n. 2 double power inverter SIEMENS IGBT liquid cooled

FRONT AXLE STEERING

Independent front axle MERITOR-STREPARAVA. Power steering ZF 8098 driven by auxiliary electric motor
Steering wheel adjustable in inclination and height

REAR AXLE

Inverted portal type axle MERITOR ULFA with electric motors flanged upright on the rear axle
Maximum load 12.000kg

STRUCTURE

Bodywork made of high resistance steel profiles electrically welded, forming with chassis, sides and roof an integrated structure (self-bearing monocoque). Wheel housings are made of high resistance steel sheet, integrated in the body structure.

SUSPENSIONS

Fully pneumatic with Pirelli air springs.

Front:

- n. 2 air springs
- n. 4 hydraulic shock absorbers

Rear:

- n. 4 air springs
- n. 4 hydraulic shock absorbers
- Rear antiroll bar

The suspension trim is provided by automatic sensors through an electronic control unit (ECAS). Side kneeling system (70mm) with vehicle stop with doors opened. Chassis rising and lowering device.

BRAKES

Service brakes

Front and rear disc brakes pneumatically activated with automatic adjustment of the back lash with independent circuits and ABS/ASR.

Emergency brake

Obtained by sectioning of the service brake.

Parking brake

Mechanic pneumatically activated on the rear axle.

Retarder

The traction motors during the deceleration allow the vehicle slowing down with energy recover which goes to the battery recharge

PNEUMATIC SYSTEM

MATTEI electric air compressor, liquid cooled WABCO mono chamber air dryer with anti frozen device and automatic condensate drainage system. n. 6 aluminium air tanks 198 litres in total, with centralized condensate drainage system manually operated.

- press-block plug for air refilling from outside.
- Brass and polyamides piping.

ELECTRICAL SYSTEM

Multiplex type 24 V with 6 electronic units I/O + graphic display as Master unit
n. 2 batteries maintenance free 12 V 220 Ah
Battery recharge through DC/DC converter

DOORS

Double doors swinging inside pneumatically activated with safety antitrap device (safety border).

WINDOWS

Curved front windscreen with safety glass. side windows glued to the structure with upper part sliding horizontally.

PERFORMANCES

Maximum speed 73 Km/h
Maximum grade >16%

FUEL TANK

310 litres

NO LUBRICATING POINTS

Ball bearings are UNI-BEARING lubricated for-life.

WHEELS AND TYRES

Traction twin tyres on the rear. Direction single tyres on the front 275/70 R 22,5; rims ISO 7,5"x22,5". M connection.

MAIN OPTIONS

Passengers air conditioning
Heating systems with fan blowers
Wheel chair ramp with dedicated area
Roof safety vents
Onboard GSM-GPS unit for remote diagnostic

