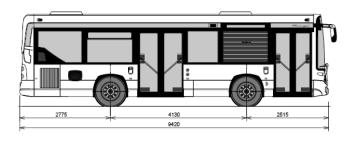
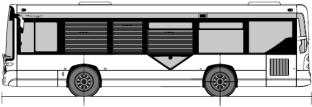
HEULIEZBUS

2 Access doors

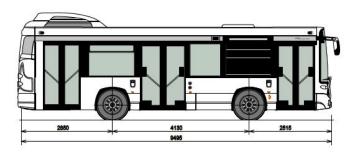








3 Access doors





Version for France Technical data sheet May 2010

WEIGHTS

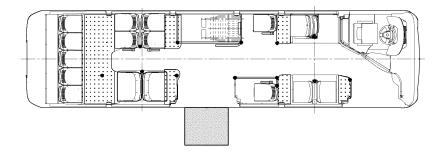
Gross kerb weight	according to equipments
G.V.W. max permitted weignt	17 900 kg
on front axle	
on rear axle	10 800 kg

DIMENSIONS

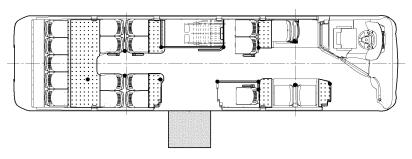
Overall length	or 9,495 m
Front overhang	
Wheelbase	
Overall width	. 2.330 m
Total height, full load	5 / 3,265 m
Inside headroom	. 2.395 m
1 st step-height	
front door	0.320 m
centre & rear door	0.330 m
Width of front / centre / rear doors 1000 / 1200	/ 1 000 mm
Floor height	0.340 m
Ground clearance, under skirt	
Front/rear tracking1.950	m/1.818 m
Inner Turning radius	6. 570 m
Outer Turning radius	8.220 n
Angle of attack / escape	8°/7,2



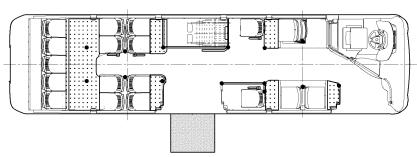
2 Access doors



16 seats + driver + "wheelchair" space + 55 standees

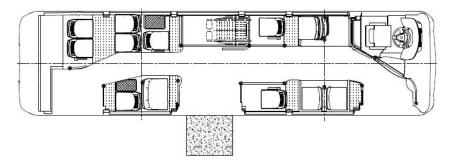


19 seats + driver + "wheelchair" space + 46 standees



18 seats + driver + "wheelchair + 49 standees

3 Access doors



12 seats + driver + "wheelchair" space + 58 standee

For alternative layouts, please contact us

CHASSIS AND STRUCTURE

Self-supporting integral structure. Anti-corrosion treatment of chassis by cataphoretic immersion. Body structure consisting in 5 panels (front/rear/left/right/top) made of welded stainless steel sections and sheet panels. Assembling of the 5 panels to the chassis by bolting. 12mm thick plywood floor, protected by phenolic resins on both sides and wax containing resins on ground side.

OPTIONS:

. Fire detector in engine	. Fire detector and extinguisher
compartment.	in engine compartment.

PAINT & DECORATION

Exterior paint: polyurethane lacquer finish (white, RAL 9010), without customising.

OPTIONS:

Custom finish.	. Lettering and adhesives.

EXTERIOR EQUIPMENT

Left and right rear-view mirrors. Integrated flag holders. Wheel nut quards on front wheels.

OPTIONS:

	. Motor driven and self de- frosting rear-view mirrors controlled from driving position
. Fender skirt	. Front and rear wheel caps

EXTERIOR TRIM

Composite front and rear ends, roof and side panels. Bonded assembly. Gravel resistant protected wheel arches. Composite front and rear bumpers in 3 parts at front end and in 2 parts at rear end.

GLAZING

TSA tinted Panoramic laminated glass windscreen bonded on front face. Tinted rear window. Bonded side windows: right-hand side: 3 fixed single-panel windows and 1 tilting window / left-hand side: 4 fixed single panel windows, 1 tilting window. Driver's window: sliding type in front part. TSA tinted glass all round.

OPTIONS:

Sliding type side windows. 1 lower window on platform. Heat-reflecting side windows. Glazed roof: Lumi'Bus ®	. Heat-reflecting windscreen Left-hand side : 2 tilting and 3 fixed side windows.
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ACCESS AND DOORS

2 inward swing doors. 2-leaf doors are air-driven. Both leaves of front door are double glazed. Brakes applied by opening of the central door. Manual access ramp on the central door. Buzzer on doors.

OPTIONS:

. Floor mounted BIRCHER step- on sensors on front and/or rear	. Brakes applied by opening of the front door.
doors Safety by photo-cells on doors.	. Self service.. Door opening by passengers.
. Passenger counting system on LCD screen.	Electrical access ramp . Center sliding doors. 3rd inward swing door.

INTERIOR TRIM

High wear resistant floor covering up to plinths top. Laminated roof and side panels. Thermo-formed wheel arches. Polyester ceiling arches.

DRIVER'S COMPARTMENT

Adjustable steering wheel (height and angle). Air-suspended driver's seat with adjustment control on right-hand side. VDV instrument panel with warning lamps and control display panel. Pivoting door, wall behind the driver with a glazed upper part. Interior rear-view mirrors. Left side and front sun visor. Driver's individual light, luggage box.

INTERIOR FINISHES

Front destination indicator with full opening door. TSA tinted glazed partitions on doors. 4 loudspeakers. 5 « emergency exit » hammers. Fire extinguisher location close to the driving position. 5 « stop requested » push buttons with acoustic warning. « wheelchair » space with padding and sensitive « stop requested » push button with acoustic warning.

OPTIONS:

. Padding on platform.	. Fire extinguisher.
. Additional « stop requested »	. Interior information frames.
switches.	. First-aid box (empty).
. Video surveillance.	. Driver loudspeaker.

HEATING - COOLING

Front heating/de-frosting unit used for driver's compartment (air from outside or re-circulated air). 4-speed control (power: 17 500 W). 1-off passenger heater (forced air, 8 140 W) with 2 speeds controlled from the dashboard. Insulated roof.

OPTIONS:

OPTIONS:	
. Motor driven roof hatches	. Additional heater in passenger
. Hand actuated roof hatches	compartment
. Passenger and driver's	. Autonomous pre-heater
compartment air conditioning	. Heat-reflecting glazed roof
-	hatches, motor-driven

SEATS LAYOUTS

4 seats dedicated to people with reduced mobility. Epoxy stanchions and handrails. Grey epoxy-painted seat legs.

OPTIONS:

. Multi-branch stanchion on	. For passenger seats options
central platform.	(anti-vandalism upholstered,
. Stainless steel stanchions and	or other seat models etc) please
handrails.	contact us.

DESTINATION AND INFORMATION EQUIPMENT

Preparation for front or lateral electronic destination indicator. 1-off illuminated « stop requested » sign box at the front. Preparation for illuminated strip display behind the driver. Preparation for acoustic and visual information.

OPTIONS:

. Line stops map (single or	. Additional illuminated « stop
double sided) near the ceiling.	requested » sign boxes.
. Lateral destination indicator flush mounted with side window top.	Front destination indicator. Line number display at rear window. Acoustic and visual information of destination.

ELECTRICAL EQUIPMENT

24 V nominal voltage. 2-off 12 V 185 A/h maintenance-free batteries mounted on a sliding support located in an outside compartment at the vehicle front left-hand side. Battery re-loading and engine start FENWICK socket. 2-off 90 A alternators with 2 access doors, 3-off 90 A alternators with 3 access doors. Thermal circuit-breakers. Front lights: parking lights, dipped headlights, driving lights hinge fitted and turning lights. Rear lights: parking lights, stop lights, fog lights, reverse lights and turning lights. 3-speed electrical windscreen wipers with intermittent speed controller. Electrical windscreen washer with wiper mounted nozzles. Passenger compartment lighted by fluorescent overhead lights (staggered lighting possible). Door step lighting at door opening. Lighting of driver's compartment, paying position and steps. Engine compartment lighting. Electricity-saving system for intensive use whilst engine is off. Electrical cabinet located in the lower section of the wall behind the driver's seat. Diagnosis system on board (1st level).

OPTIONS:

OI TIONS.	
. Front fog lights . 3 rd stop light	. Complete radio equipment
. Flashing/stop indicators on the top of rear end Atmosphere lightings.	. Monoring gong for pedestrian zone .Average fuel consumption on dashboard

DRIVE LINE ENGINE

Engine position	rear left, in-line
Make	IVECO
Type	F4A
Cycle	4-stroke, diesel
Bore	102 mm
Stroke	120 mm
Number of cylinders	6
	upright, in line
Cubic capacity	
Compression volumetric	
	exhaust turbocharger
3.011000	with intercooler
Cooling system (2 doors)	.liquid circuit with thermostat, radiator
200g 0,0.0 (= 000.0)	hydraulic-driven cooling fan, steel pipes
	and silicon flexibles.
Cooling system (3 doors)	
Cooming System (o decis)	hydraulic-driven cooling fan, steel pipes
	and silicon flexibles.
Air filter	dry
Fuel (common rail)	
	oil circulation under
Lubiication	pressure
	single cartridge oil
	filter
Max autaut (2 doors)	
Max. Output (2 doors)	at 2 500 rpm
May autaut (2 dagra)	at 2 500 fpm
Max. output (3 doors)	
May targue	at 2 500 rpm
Max. torque	680 Nm at
Figure 1 manuary	1 200 rpm
Fiscal power	
Sound proofing	noise shield and
	encapsulation
	of engine
	compartment
Emergency stop / sound	alarm engine running
	Air + gearbox
	+engine water/oil
	+alternator failure

OPTIONS:

- . 194 kW (265 HP) engine (2 doors)
- . Diesel pre-heater.
- . E.E.V. version with particle filter.
- . Exhaust pipe in high or low position with 3 access doors.

Exhaust pipe..... in low position

GEARBOX

ALLISON T280R automatic gearbox: 4 forward gears, 1 reverse gear. Automatic gear change or from dashboard push buttons, built-in retarder, "YOKE" type propelling shaft.

	1 st	2nd	3rd	4th
Gear Ratios	3.49	1.86	1.41	1

OPTIONS:

6 forward gears

	1st	2nd	3rd	4th	5 th	6th
Gear Ratios	3.49	1.86	1.41	1	0.75	0.65

FRONT AXLE

Front independant wheels.

REAR AXLE

ZF AV 132-90 $^{\circ}$ double-reduction axle. Reducers ratio in hubs : 1/3,2. Axle torque : 6.20

SUSPENSION

Constant height air suspension. 2 air bellows at the front, 4 air bellows at the rear. Constant floor height controlled by electrical levelling valves. Suspension high-position for driving over obstacles. Kneeling and raising system (60 mm stroke) on vehicle right-hand side, controlled from the driving position.

STEERING

Hydraulic power assisted steering. ZF 8098 steering box.

COMPRESSED AIR

Pressure: 12 bars. 630 cm3 twin-cylinder air compressor with a 760 l/mn flow rate. Driven by sprockets and cooled by the engine circuit. Polyamide and stainless steel piping, quick fittings. Singletower air dryer. Manual bleeding on the air tanks. Cyclone air cleaner.

OPTIONS:

. Manual bleeding, offset

BRAKES

Service brakes: air-controlled disc brakes at the front and at the rear. Gear box built-in hydraulic retarder coupled to the service brakes. Pneumatic parking brake actuated by lack of air, spring chamber on rear wheels. Door brake: manually controlled temporary stop operating on the rear braking circuit. Parking brake and door brake controlled via separate circuits. Emergency braking operated by parking brake. ABS braking system.

OPTIONS:

. ASR.

+probe on cooling liquid

Tank

FUEL TANK

Capacity: 160 litres + 16,5 litres of AdBlue additive with 2 access doors. Capacity: 200 litres + 19 litres of AdBlue additive with 3 access. Tank filling spouts on vehicle rear right hand side. Fuel filling speed, without discharge, of about 80 l/mn.

WHEELS AND TYRES

275/70 R 22.5 tyres at the front and 315/60 R 22.5 tyres at the rear. 455/45 R 22.5 tyres at the rear with 3 access doors.

OPTIONS:

. Rear towing eye bolts. . Lose spare wheel or rim.	. Standard vehicle accessories kit 435/45 R 22.5 or 455/45 R 22.5 tyres at the rear.
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PERFORMANCES

Maximum speed: 88 km/h. Speed limiter with 6 forward gears gear box.

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