LAMPO (PURE BATTERY EV): SPECIFICATIONS

Unique features
Four wheels drive designed in order to allow the maximum regeneration and to ensure more driving safety
Intelligent charging system: the user can configure the charging parameters: earliest charging time/last charging stop, max. charging yield and charging status to be achieved by the end of charging
External charging status LED
Integrated charging cable
Range estimator: GPS based device calculating different parameters like the remaining range (considering elevations etc) and the notification of the closest public charging stations

Performances and consumption
Max. speed (km/h): ca. 200
Acceleration (sec., 0-100 km/h): ca. 5
WtW emissions (g CO_2): 0
Range (km): 200
Energy consumption (Wh/km): 150
Cost of energy (CHF/100km): approx 2.40

Motorization
Electric vehicle (2 electric motors and Li-ion batteries), single gear gearbox

Electric motor
Type: Brusa HSM 6.17.12 Hybridsynchron with transaxle gearbox associated with a Brusa DMC524 inverter
Quantity: 2, one on front axle, one on rear axle
Max Power kW (HP): 200 (268)
Max torque (Nm): 440 (from 0 to 5'000 rpm)
Cooling: water

Batteries
Type: Brusa EVB1 Li battery packs based on prismatic Kokam cells (Li-ion with polymeric electrolyte)
Quantity: 2
Total rated energy (kWh): 32
Characteristics of each battery pack:
Rated energy (kWh): 16
Capacity 0.5C (Ah): 40
Open circuit voltage (V): 400
Max continuous discharge current (A): 200
Max peak discharge current (A): 400
Max charging current (A): 80
Number of cells: 108
Weight (kg): 140
Full charge at 32A (h): 7
Cooling: water
Estimated life time @ 80% DOD (cycles/km): >800 / >160'000

Battery chargers (on board)
Type: Brusa NLG513
Quantity: 2
Power (kW): 2x3.3
Cooling: air

DC/DC converter for the on board devices
Type: Brusa BSC624-12V

Vehicle structure
Tubular steel chassis, composite material body

Dimension & weight
Seats: 2
Length (mm): 4'315
Width (mm):1'865
Height (mm):1'203
Wheelbase (mm):2'415
Weight (empty, kg): 1'380
Weight (full load, kg): 1'650
Tires: 245/45 R18

Safety equipment
ABS
EDS
Airbag (driver and passenger seat)
Rigid occupant safety cell
Front and rear crumple zones
Side impact door beams
Seatbelt pretensioners
Integrated headrests
Vehicle theft-deterrent
Emergency stop button
Pedestrian arrows

Interior equipment
Multifunction touch screen for the control of the car functions
Driving style settings
Sport steering wheel
Electrically heated and cooled seats (Peltier effect)
Electric heating
Cruise control
Power windows
Electric rear view mirrors
Central locking system
Electric brake button on steering wheel
GPS based range estimator
Intelligent charging system
GPS navigation system

Exterior equipment
Double-insulated black soft top
LED tail lights
Aerodynamic shaped back wheels cover

Price
Single prototype, not for sale

Public charging station "E-totem"
Developed in 1995 for Mendrisio's VEL-1 project. Over 100 built and installed since then.
Access and payment trough Park&Charge system.
Features: 3 nomo-phase plugs for parallel charging of 3 vehicles.
Mono-phase plug allowed: domestic (10A-2kW), european (16-3kW) or accelerated (32A-7kW)
Includes: "Plug & play" basement, polyethilen body, zinc-coated steel frame, side protection arches, parking sign.

Remote photovoltaic plant
Type: photovoltaic laminate by United Solar Ovonic, amorphous silicon cells
Surface (m2): 260
Rated power (kW): 16
Energy per year (kWh/year): 16'800

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