Kangoo Plug-In Hybrid

VEHICLE SPECIFICATIONS

Weights
Design Curb Weight: 3140 lbs
Vehicle Test Weight: 3621 lbs
GVWR: 4140 lbs
GAWR F/R: 1960/2290 lbs
Payload: 519 lbs
Performance Goal: 400 lbs

Engine
Output: 15 HP @ 5000 RPM
Configuration: 2 Cylinder In-line
Displacement: 0.5L
Fuel Tank Capacity: 2.6 gal

Electric Drive System
Battery Manufacturer: Saft
Battery Type: Ni-Cd
Number of Modules: 22
Nominal Module Voltage: 6V
Nominal System Voltage: 132V
Nominal Pack Capacity: 25 kWh
Measured Useable Capacity: 9.55 kWhrs

Charge System:
Input Voltages: 190-240 VAC 50/60 Hz
Required Breaker Currents: 15-Ampere
Charger Power Output: 3.3 kW
Charger Plug Type: Marechal
Charger Efficiency*: 0.81

TEST
1. Vehicle soaked at ambient temperature while off for a minimum of 12 hours prior to testing.
2. Tests were ran with on-board gasoline powered generator on while measuring generator output voltage and current.
3. Calculated average fuel economy value.
4. AC energy based on measured charger efficiency.
5. Power blend is the percent of energy delivered by the gasoline generator followed by the percent of energy delivered by the battery storage system.
6. Charger efficiency is based on measured AC energy input required to re-charge the batteries after a known DC energy output has been expended.

VEHICLE TEST RESULTS

Battery Only:
Acceleration 0-60 MPH
Time: 57.8 seconds
Acceleration 1/4 Mile
Time: 27.7 seconds
Acceleration 1 Mile
Maximum Speed: 62.2 MPH

Battery & Generator:
Acceleration 0-60 MPH
Time: 54.3 seconds
Acceleration 1/4 Mile
Time: 28.3 seconds
Acceleration 1 Mile
Maximum Speed: 65.0 MPH

Brake Test @ 60 MPH
Distance Required: 164.8 ft

Constant Speed Range
Test @ 45 MPH
Range Achieved: 43.5 mi
DC Energy: 9.55 kWh
AC Energy: 0.271 kWh/mi

Energy Economy Full Electric
Cold Start Urban:
AC kWh Consumed*: 0.268 kWh/mi

Energy/Fuel Economy with Gasoline Generator Assist
Cold Start Urban:
AC kWh Consumed*: 0.268 kWh/mi

Power Blend (G/E): 49.4%/50.6%
Fuel Economy: 42.3 MPG

Power Blend (G/E): 73.6%/26.4%
Fuel Economy: 40.9 MPG

Electric Drive System

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Number of Modules: 22
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Nominal System Voltage: 132V
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Charger System:
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Charger Efficiency*: 0.81

This vehicle meets all HEV America Minimum Requirements listed on back of this sheet
Values in red indicate the Performance Goal was not met. All Power and Energy Values are DC unless otherwise specified.

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