KOMATSU®

830E-AC

MAXIMUM GVW
385848 kg 850,650 lb

GROSS HORSEPOWER
1865 kW 2,500 HP

ELECTRIC DRIVE TRUCK

Photo may include optional equipment.
**ENGINE**

- **Make and model**: Komatsu SDA16V160
- **Fuel**: Diesel
- **Number of cylinders**: 16
- **Operating cycle**: 4 cycle
- **Rated brake power**: 1865 kW @ 1900 rpm
- **Flywheel power**: 1761 kW
- **Weight (wet)**: 9608 kg, 21,182 lb

**ELECTRIC DRIVE**

- AC/DC CURRENT
  - **Alternator**: G.E. GTA-41
  - **Dual impeller in-line blower**: 255 m³/min 9,000 cfm
  - **Control**: Torque control system
  - **Motor gear box**: 38 L
  - **Motor gear ratio**: 31.875:1
  - **Speed (maximum)**: 64 kph, 40 mph

- **Rated brake power**: 2,360 HP @ 1900 rpm
- **Flywheel power**: 2,360 HP
- **Weight**: 830E-AC

**TIRES AND RIMS**

- **Rock service, tubeless, tires (bias ply or radial)**: 40.00R57
- **Standard five (5) piece rim**: 29 '' x 57'' x 6''
- **Typical tire weight**: 21081 kg, 46,476 lbs

**FRAME**

- **Advanced technology, full butt-welded box-sectional ladder-type frame**
  - **Plate material**: 482.6 mPa, 70,000 psi
  - **Casting material**: 620.5 mPa, 90,000 psi
  - **Rail width**: 305 mm, 12''
  - **Rail depth (minimum)**: 864 mm, 34''
  - **Top and bottom plate thickness**: 32 mm, 1.25''
  - **Side plate thickness**: 16 mm, 0.62''
  - **Drive axle mounting**: Pin and spherical bushing
  - **Drive axle alignment**: Swing link between frame and axle

**BODY**

- **All-welded steel flat floor body with horizontal bolsters and full canopy**
- **Typical tire weight**: 21081 kg, 46,476 lbs

**CAB**

- **Advanced Operator Environment with integral 4-post ROPS/FOPS**
- **Level 2**, (SAE J1040/ISO 3449) adjustable air suspension seat w/lumbar support and arm rests, passenger seat, maximum R-value insulation, tilt and telescoping steering wheel, electric windshield wipers w/washer, tinted glass, power windows, Komatsu Payload Weighing System, 55,000 Btu/hr heater and defroster, 21,600 Btu/hr air conditioning (HFC - 134A refrigerant).

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**FRONT WHEEL BRAKING SYSTEM**

- **Three calipers on a 1213 mm 47.75'' O.D. disc**
- **Two 635 mm 25'' O.D. discs per side**
- **Emergency brakes**: Automatically applied prior to hydraulic system pressure dropping below level required to meet secondary stopping requirements.

**SUSPENSION**

- **L&M radiator assembly, split-flow, with deareation-type top tank**
- **Radiator frontal area**: 6.24 m², 67.2 ft²

**COOLING SYSTEM**

- **L&M radiator assembly, split-flow, with deareation-type top tank**
- **Radiator frontal area**: 6.24 m², 67.2 ft²

**SERVICE CAPACITIES**

- **Cooling system**: 568 L, 150 U.S. gal
- **Crankcase**: 280 L, 74 U.S. gal
- **Motor gear box**: 38 L, 10 U.S. gal
- **Fuel**: 4542 L, 1200 U.S. gal

- **Includes lube oil filters**
**ELECTRICAL SYSTEM**

- **Alternator**: 24 volt, 140 amp
- **Lighting**: 24 volt
- **Cranking motors**: two/24 volt

**WEIGHT DISTRIBUTION**

<table>
<thead>
<tr>
<th>Empty Vehicle Weight</th>
<th>kg</th>
<th>lb</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front axle</td>
<td>81279</td>
<td>179,190</td>
<td>50</td>
</tr>
<tr>
<td>Rear axle</td>
<td>82921</td>
<td>182,810</td>
<td>50</td>
</tr>
<tr>
<td>Total EVW</td>
<td>164200</td>
<td>362,000</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gross Vehicle Weight (Nominal)</th>
<th>kg</th>
<th>lb</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front axle</td>
<td>127330</td>
<td>280,715</td>
<td>33</td>
</tr>
<tr>
<td>Rear axle</td>
<td>255519</td>
<td>569,936</td>
<td>67</td>
</tr>
<tr>
<td>Total</td>
<td>385084</td>
<td>850,650</td>
<td></td>
</tr>
<tr>
<td>Nominal Payload*</td>
<td>221648</td>
<td>488,650</td>
<td></td>
</tr>
</tbody>
</table>

*Nominal payload is as defined within Komatsu America Corporation’s payload policy documentation. In general, the nominal payload must be adjusted for the specific vehicle configuration and site application. The figures above are provided for basic product description purposes. Please contact your Komatsu Corp. distributor for specific application requirements.

**HYDRAULIC SYSTEM**

- **Steering**: Accumulator-assisted twin cylinders provide constant rate steering. Emergency steering automatically supplied by accumulator.
- **Turning circle diameter (SAE)**: 28.4 m 93 ft
- **Reservoir**: 901 L 238 U.S. gal
- **Filtration**: In-line replaceable elements
- **Suction**: Single, full-flow, 100 mesh
- **Hoist and steering**: Dual, in-line, high-pressure.
- **Brake component cabinet**: Above-deck, easily accessible with diagnostic test connections.
- **Hoist times**: Two 3-stage dual-acting outboard cylinders, internal cushion valve, over-center damping.
  - Power-up loaded: 21 sec
  - Power-down: 16 sec
  - Float-down empty: 17 sec

**Pumps**

- **Hoist**: Tandem gear-type pump with output of 851 lpm 225 gpm@1900 rpm and 17240 kPa 2,500 psi
- **Steering and brake**: Pressure compensating piston pump with output of 246 lpm 65 gpm @ 1900 rpm and 18961 kPa 2,750 psi

**System relief pressures**

- **Hoist**: 17240 kPa 2,500 psi
- **Steering and Brake**: 27580 kPa 4,000 psi

Quick disconnects standard for powering disabled truck and for system diagnostics.

**DIMENSIONS**

All dimensions are with 147 m³ 193 yd³ body.

<table>
<thead>
<tr>
<th>Body</th>
<th>Struck</th>
<th>2:1 Heap</th>
<th>Loading Height*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>117 m³ 153 yd³</td>
<td>147 m³ 193 yd³</td>
<td>6.71 m 22'</td>
</tr>
</tbody>
</table>

* Exact load may vary due to tire make, type and inflation pressure.
STANDARD EQUIPMENT

- Air cleaners, Donaldson SSG with dust evacuators
- Air conditioner HFC 134a
- Alternator (24 volt/140A)
- Auto lubrication system – 90 lbs.
- Batteries (4 x 8D, 1450 CCA 12 volt)
- Battery charging receptacle, 24 V
- Battery overcenter device
- Battery up cable
- Body up cable
- Body down indicator/body up buzzer
- Body overcenter device
- Brakes: Front: Wheel speed disc; Rear: dual disc armature speed
- Electric start
- Filters, high pressure hydraulic
- Gate valves on hydraulic tank
- Komatsu IGBT control cabinet
- Komatsu Payload Weighing System-PLM III
- Mirrors, LH flat and RH rectangular convex
- Mud flaps
- Muffled exhaust, deck-mounted
- On-board load box
- Quick disconnects (steering and hoist)
- Radiator sight gauge
- Release power module unit (radiator, engine, alternator, blower)
- Retard grids, continuous rated, 14 element
- Retard speed control
- Reverse retarding
- Rock ejectors
- Thermostatic Fan Clutch
- Fast-Fill Fuel System (in-tank)
- Service Center (radiator, engine, hydraulics)

OPERATOR ENVIRONMENT AND CONTROL:

- All-hydraulic service brakes with emergency auto apply
- Battery disconnect switch
- Body up cable
- Brake lock and drive system interlock
- Circuit breakers, 24 volt
- Diagonal staircase across grill
- Dynamic retarding with continuous rated grids
- Engine shutdown at ground level
- Hoist interlock
- Horns (electric, center of steering wheel)
- Integral roll-over protection ROPS/FOPS Level 2
- Maintenance & power lock-out
- Parking brake with warning light and speed application protection
- Power steering w/auto emergency steering
- Protective deck rails
- Pump drive guard
- Radiator fan guard
- Seat belts 76 mm 3" wide retractable
- Skid-resistant coating on walkways

STANDARD HIGH VISIBILITY DELUXE CAB:

Instrumentation

- Alarm System warning lights (red)
  - Accumulator pre-charge
  - Coolant low level w/alarm
  - Coolant high temperature w/alarm
  - Electric drive system cooling blower w/alarm
  - Electric system fault w/alarm
  - Engine coolant temperature gauge
  - Hydraulic oil level w/alarm
  - Hydraulic oil temperature w/alarm
  - Low engine oil pressure w/alarm
  - Low brake pressure w/alarm
  - Motorized wheel temperature stop engine w/alarm
  - Steering pressure w/alarm

- Air cleaner vacuum indicators
- Air conditioner HFC 134a
- AM/FM cassette radio, CD player
- Blower pressure indicator light
- Digital tachometer and speedometer
- Dome light
- Engine hourmeter
- Engine shutdown
- Floor mat
- Fuel gauge in cab and on tank
- Fuel low level warning
- Gauges (backlighted)
- Headlight switch
- Heater and defroster (heavy-duty)
- Heater switch

- High beam selector and indicator
- Indicator lights (amber):
  - 5-minute idler timer
  - Auto lube alarm
  - Check engine w/alarm
  - Circuit breaker tripped
  - Dynamic retarding
  - Dump body up
  - Hydraulic oil filter
  - Low fuel level
  - Manual back-up lights
  - Park brakes applied
  - Retard speed control
  - Service brakes
  - Starter circuit

- Insulation (Max R-Value)
- Oil pressure gauge (engine)
- Operator seat, adjustable w/air suspension, lumbar support and arm rests
- Panel lighting (adjustable)
- Passenger seat
- Power windows
- Pressurized cab air system
- RS232 port–PLM III
- Starter key switch
- Steering system warning light and buzzer
- Sunvisor (adjustable)
- Tilt and telescoping steering wheel
- Komtrax Plus
- Windshield (tinted)
- Windshield wipers and washer (electric)

LIGHTING:

- Back-up lights (2)
- Brake and retard lights on top of cab
- Clearance lights
- Control cabinet service light
- Dynamic retarding, rear (2)
- Headlights—(4) halogen
- Ladder lights
- Manual back-up light, switch and indicator
- Service light in rear axle
- Stop and tail lights (2)
- Turn signals
- Under-hood service lights

(Optional equipment may change operating weight).

- Additional high-mounted headlights
- Arctic protection package (suspensions, anti-freeze/lube below -40° C)
- Back-up lights, deck-mounted
- Body liners*
- Eliminator, Centinel, Reserve
- Fire extinguisher 9 kg 20 lb
- Fog lights
- Hot starts (engine oil, coolant, hydraulic tank)
- Hubometer
- Mufflers between frame rails
- Pivot exhaust (heated body)
- PLM Scoreboard Display (RH and LH)
- Pressure fueling remote LH
- Radiator shutters
- Special language decals
- Tires 46/90R57

*Available factory installed or non-installed. All other options and accessories listed are available factory installed only.

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