For those applications and situations where you prefer an electric drive truck, Caterpillar now offers the 795F AC.

The Cat® AC drive system provides customers with the best retarding, braking and control in the industry. Designed and manufactured by Caterpillar, the 795F AC is the first AC electric drive truck that is single sourced from one manufacturer, and supported by the best dealer network in the industry.

**High Performance Engine**
The Cat C175-16 engine provides customers with the perfect balance between power, robust design and economy.

**Focus on Safety**
Wide access stairways, standard object detection, industry leading dynamic retarding, four corner wet disc brakes and traction control with automatic front brake assist inspire operator confidence.

**Enhanced Serviceability**
Modular components, grouped service locations and additional ground accessible maintenance points translate into more time on the haul road.

**Reliable AC Electric Drive System**
The Cat AC electric drive power train is 100% Caterpillar designed, integrated and supported.

**Comfortable Cab**
Operators find that the spacious and quiet cab offers excellent visibility with intuitive, easy to learn controls.

**Mechanical Drive Legacy**
Using many components from the 797F, the 795F AC provides increased durability.

**Truck Body Options**
Cat truck bodies are designed for optimal performance and reliability.
## Engine

<table>
<thead>
<tr>
<th>Engine Model</th>
<th>Cat C175-16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Power – SAE J1995</td>
<td></td>
</tr>
<tr>
<td>Standard</td>
<td>2535 kW, 3,400 hp</td>
</tr>
<tr>
<td>Optional</td>
<td>2312 kW, 3,100 hp</td>
</tr>
<tr>
<td>Rated Speed</td>
<td>1,800 rpm</td>
</tr>
<tr>
<td>Net Power – SAE J1349</td>
<td>2460 kW, 3,299 hp</td>
</tr>
<tr>
<td>Emissions Rating</td>
<td>Fuel Optimized/Optional U.S. Environmental Protection Agency Tier 2 Standard Equivalent</td>
</tr>
<tr>
<td>Bore</td>
<td>175 mm, 6.9 in</td>
</tr>
<tr>
<td>Stroke</td>
<td>220 mm, 8.7 in</td>
</tr>
<tr>
<td>Displacement</td>
<td>85 L, 5,187 in³</td>
</tr>
</tbody>
</table>

- Contact local Caterpillar Mining Representative for more information.

## Weights – Approximate

| Target Gross Machine Weight (TGMW) | 576,072 kg / 1,270,000 lb |
| Chassis Weight                    | 200,159 kg / 441,275 lb  |
| Trolley Attachment                | 4638 kg / 10,225 lb     |
| Body Weight Range                 | 37,023–53,760 kg / 81,622–118,369 lb |

- GMW based on 59/80 R63 tires.
- GMW depends on tire selection. Consult your tire manufacturer for maximum loaded top speed.
- Chassis weight with 100% fuel, hoist, body mounting group, rims and tires.
- Body weight varies depending on how body is equipped.

## Final Drives

| Total Reduction Ratio | 35:1 |

## AC Drive System

| Generator/Alternator         | Brushless, remote mounted, dual bearing |
| Controls                     | IGBT Inverter Technology, air cooled, pressurized cabinet with filtration |
| Wheel Motor                  | Rear axle mounted Cat AC induction |
| Cooling System               | Variable speed, hydraulic cooling system |

## Suspension

| Effective Cylinder Stroke – Front | 293 mm / 11.5 in |
| Effective Cylinder Stroke – Rear  | 141 mm / 5.6 in |
| Rear Axle Oscillation            | ±4.8° |

## Body Hoists

| Pump Flow – High Idle | 935 L/min / 247 gal/min |
| Relief Valve Setting – Raise | 24,500 kPa / 3,553 psi |
| Body Raise Time – High Idle  | 19 Seconds |
| Body Lower Time – Float     | 20 Seconds |
| Body Power Down – High Idle  | 17.5 Seconds |

- Twin, two-stage hydraulic cylinders mounted inside main frame; double-acting cylinders in second stage.
- Power raise in both stages; power down in second stage.
- Automatic body-lower modulation reduces impact on frame.

## Operating Specifications

| Nominal Rated Payload       | 333 tonnes / 367 tons |
| Nominal Rated Payload Range | 314–346 tonnes / 345–380 tons |
| Top Speed – Loaded          | 64 km/h / 40 mph |
| Steer Angle                 | 34 degrees |
| Turning Diameter – Front    | 34 m / 112 ft |
| Turning Circle Clearance Diameter | 38.7 m / 127 ft |

- For 59/80 R63 tires.
- Refer to the Cat Mining Truck 10/10/20 Overload Policy (AEXQ0250) for maximum gross machine weight limitations.
- Nominal Rated Payload assumes no debris and varies with machine configuration.
- An average payload target of 105% of Nominal Rated Payload can be approved based on review of the specific application and machine configuration. Contact your local Cat dealer for details.
795F AC Trolley Mining Truck Specifications

Braking System

Oil Cooled Brakes – Retarding Capable at All Speeds
Outside Diameter 1067 mm 42 in
Brake Surface – Front 132 258.4 cm² 20,500.09 in²
Brake Surface – Rear 198 388 cm² 30,750.2 in²
Standards ISO 3450:1996

Electric Retarding
Radial Grid Design with Brushless AC Fan Motor 4750 kW (6,370 hp) rated power
Dynamic Retarding Power 4750 kW 6,370 hp
Blended Four Corner Retarding Standard

Weight Distributions – Approximate

Front Axle – Empty 49%
Rear Axle – Empty 51%
Front Axle – Loaded 50%
Rear Axle – Loaded 50%

Capacity – MSD II – 100% Fill Factor

Struck 121.5-211 m³ 159-276 yd³
Heaped (ISO 6483:1980) 181-252 m³ 237-330 yd³

• Contact your local Cat dealer for body recommendations.

Tires

• 59/80 R63 (Standard)
• 56/80 R63 (Optional)
• Productive capabilities of the 795F AC truck are such that, under certain job conditions, TKPH (TMPH) capabilities could be exceeded, and, therefore, limit production.
• Caterpillar recommends the customer evaluate all job conditions and consult the tire manufacturer for proper tire selection.

ROPS

ROPS Standards
• ROPS (Rollover Protective Structure) for cab offered by Caterpillar meets ISO 3471:2008 ROPS criteria.
• FOPS (Falling Objects Protective Structure) meets ISO 3449:2005 Level II FOPS criteria.

Sound

Sound Standards
• The operator sound pressure level measured according to work cycle procedures specified in ISO 6394:2008 and ISO 6396:2008 is 76 dB(A) for cab offered by Caterpillar when properly installed and maintained and tested with doors and windows closed.
• Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/windows open) for extended periods or in a noisy environment.

Steering

Steering Standards ISO 5010:2007
• Target Gross Machine Weight is 576 072 kg (1,270,000 lb).
## 795F AC Trolley Mining Truck Specifications

### Dimensions

All dimensions are approximate. Shown with 220 m³ (288 yd³) MSD II Body.

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Height to Top of ROPS</td>
<td>6327 mm</td>
<td>20 ft 9 in</td>
</tr>
<tr>
<td>2</td>
<td>Overall Length with Trolley Down</td>
<td>16 296 mm</td>
<td>53 ft 6 in</td>
</tr>
<tr>
<td>3</td>
<td>Wheelbase</td>
<td>6725 mm</td>
<td>22 ft 1 in</td>
</tr>
<tr>
<td>4</td>
<td>Rear Axle to Tail</td>
<td>4411 mm</td>
<td>14 ft 6 in</td>
</tr>
<tr>
<td>5</td>
<td>Ground Clearance</td>
<td>750 mm</td>
<td>2 ft 6 in</td>
</tr>
<tr>
<td>6</td>
<td>Dump Clearance</td>
<td>1664 mm</td>
<td>5 ft 6 in</td>
</tr>
<tr>
<td>7</td>
<td>Loading Height – Empty</td>
<td>7040 mm</td>
<td>23 ft 2 in</td>
</tr>
<tr>
<td>8</td>
<td>Overall Height – Body Raised</td>
<td>15 445 mm</td>
<td>50 ft 8 in</td>
</tr>
<tr>
<td>9</td>
<td>Centerline Front Tire Width</td>
<td>6235 mm</td>
<td>20 ft 6 in</td>
</tr>
<tr>
<td>10</td>
<td>Engine Guard Clearance</td>
<td>1208 mm</td>
<td>4 ft 0 in</td>
</tr>
<tr>
<td>11</td>
<td>Overall Canopy Width</td>
<td>9449 mm</td>
<td>31 ft 0 in</td>
</tr>
<tr>
<td>12</td>
<td>Outside Body Width</td>
<td>8970 mm</td>
<td>29 ft 5 in</td>
</tr>
<tr>
<td>13</td>
<td>Inside Body Width</td>
<td>7856 mm</td>
<td>25 ft 9 in</td>
</tr>
<tr>
<td>14</td>
<td>Front Canopy Height</td>
<td>8105 mm</td>
<td>26 ft 1 in</td>
</tr>
<tr>
<td>15</td>
<td>Rear Axle Clearance</td>
<td>1016 mm</td>
<td>3 ft 4 in</td>
</tr>
<tr>
<td>16</td>
<td>Centerline Rear Dual Tire Width</td>
<td>5675 mm</td>
<td>18 ft 8 in</td>
</tr>
<tr>
<td>17</td>
<td>Overall Tire Width</td>
<td>8966 mm</td>
<td>29 ft 6 in</td>
</tr>
<tr>
<td>18</td>
<td>Pantograph Resting Height</td>
<td>8249 mm</td>
<td>27 ft 1 in</td>
</tr>
<tr>
<td>19</td>
<td>Pantograph Nominal Working Height</td>
<td>10 049 mm</td>
<td>33 ft 0 in</td>
</tr>
<tr>
<td>19</td>
<td>Pantograph Lowest Working Height*</td>
<td>8649 mm</td>
<td>28 ft 5 in</td>
</tr>
<tr>
<td>19</td>
<td>Pantograph Highest Working Height*</td>
<td>10 299 mm</td>
<td>33 ft 9 in</td>
</tr>
<tr>
<td>20</td>
<td>Pantograph Center-to-Center of Carbon Brushes</td>
<td>3985 mm</td>
<td>13 ft 1 in</td>
</tr>
<tr>
<td>21</td>
<td>Overall Pantograph Width</td>
<td>7508 mm</td>
<td>24 ft 8 in</td>
</tr>
<tr>
<td>22</td>
<td>Left Pantograph Center to LH Fender</td>
<td>2055 mm</td>
<td>6 ft 9 in</td>
</tr>
<tr>
<td>23</td>
<td>Right Pantograph Center to RH Fender</td>
<td>1969 mm</td>
<td>6 ft 6 in</td>
</tr>
</tbody>
</table>

*Not pictured.
To determine gradeability performance: Read from gross weight down to the percent of total resistance. Total resistance equals actual percent grade plus 1% for each 10 kg/t (20 lb/ton) of rolling resistance. Usable rimpull will depend upon traction available and weight on drive wheels.

*At sea level, 30° C (86° F).
Trolley below 8 km/h (5 mph) is not allowed.
Contact factory for performance estimates based upon site specific temperatures and altitudes.
795F AC Standard Retarding – Continuous*

To determine retarding performance: Read from gross weight down to the percent effective grade. Effective grade equals actual % grade minus 1% for each 10 kg/t (20 lb/ton) of rolling resistance. The following charts are based on these conditions: 30° C (86° F) ambient temperature, at sea level, with 59/80 R63 tires.

*At sea level, 30° C (86° F).
Contact factory for performance estimates based upon site specific temperatures and altitudes.
### Standard Equipment

Standard equipment may vary. Consult your Cat dealer for details.

#### ELECTRICAL
- Alarm, Back-up
- Brushless Alternator, 150 ampere
- Batteries, 210-amp hour, low maintenance, 12-volt (2)
- Converter, 12-volt electrical
- Electrical System, 24-volt, 10, 15 and 20 amp
- Battery Charge Receptacle
- Lighting System
  - Directional Signals (front and rear LED)
  - Front Stair Access/Service Deck
- Stop/Tail Lights (LED)
- Engine Compartment
- VIMS™, Blue Light (LED)
- Headlights, with Lo-Hi Beam Selector

#### OPERATOR ENVIRONMENT
- Air Conditioner with Automatic Climate Control
- 12-volt DC Power Supply (3)
- Coat Hook
- Cup Holder
- Diagnostic Connection Port
- Dome Courtesy Light
- Map Lights (2)
- Entertainment Radio Ready
- 20 amp Switched/10 amp Memory Converter, Speakers and Wiring Harnesses
- Gauge/Indicators
- Gauge Panel:
  - Drive Train (system temperature)
  - Brake Oil Temperature
  - Engine Coolant Temperature
  - Fuel Level
  - Torque Converter Oil Temperature
  - Electric Engine Control Fault Indicator
  - Electric Hour Meter
  - Speedometer
  - Tachometer
- Heater/Defroster, 10 310 kCal (40,912 BTU)
- Hoist, Body Control (electric)
- Horn (2)
- Cat Detect (Radar and Camera) System
- Mirrors, Right and Left
- ROPS Cab, Insulated/Sound Suppressed

#### POWER TRAIN
- Cat C175-16 Tier 2 Emissions Engine
  - Air Cleaner with Pre Cleaner (4)
  - Air-to-Air Aftercooler (ATAAC)
  - Automatic Starter Protection
  - Ether Starting Aid (automatic)
  - Multi-Point Oil Pressure Sensing
  - Turbocharging (4)/Aftercooled
- Braking System
  - Automatic Retarder Control, Adjustable
  - Brake Release Motor (towing)
  - Engine Overspeed Protection
  - Extended Life Brake Disc Material
  - Oil-cooled, Multi-disc (front and rear)
- Service, Retarding, Parking, Secondary
- Park Brake Integrated with Gear Selector
- Secondary, Emergency
- Cat AC Drivetrain
  - IGBT controlled AC induction motors
  - AC generator
  - AC cooled radial grid
  - Body-up Reverse Neutralizer
  - Body-up Shift Inhibitor
  - Directional Shift Management
  - Neutral Coast Inhibitor
  - Neutral Start Switch
  - Programmable Top Speed
  - Reverse Shift Inhibitor
- Pre-lubrication/Engine
- Rear Axle Continuous Lubrication/Filtration

#### OTHER STANDARD EQUIPMENT
- Air Starter, Turbine
- Air System Dryer
- Automatic Lubrication System
- Aux “Buddy” Dumping Quick Connect
- Aux Steering Quick Connect (towing)
- Blended Retarding System
- Driveline Guards
- Exhaust
- Fuel Tank, 3596 L (950 gal)
- Fast Fill Fuel System
- Fuel Filter with Water Separator
- Ground Level Battery Lockout
- Ground Level Engine Shut-down
- Ground Level Engine Start Lockout
- Ground Level Machine Lockout
- Ground Level Transmission Lockout
- Ground Level VIMS Data Port
- Hi-speed Crankcase Oil Change
- Hydraulic Filters, 1,000 hour
- Payload Indicator Lights
- Reservoirs (2 separate)
  - Brake/Hoist, Steering/Fan
- Rock Ejectors
- Service Points, Ground Level
- Sight Level Gauges for Hydraulic/Engine Oil
- S·O·SS™ Sample Ports
- Supplemental Steering (automatic)
- Tie Down Eyes
- Tow Hooks and Pin (front)
  - Tow Pin (rear) (Empty truck only)
- Traction Control System
- Vandalism Protection Locks
- Vital Information Management System (VIMS)
  - Includes VIMS Payload Monitor with MAX Payload and Speed Manager

#### ANTIFREEZE
- Extended Life Coolant to –35° C (–30° F)
795F AC Trolley Mining Truck

Optional Equipment

Optional equipment may vary. Consult your Cat dealer for details.

- Access Platform, Rear Part of Chassis
- Additional Lighting
- Additional Retarding for Downhill Hauls
- Air Start, Turbine, TDI
- Antifreeze/Coolant Protects to –50° C (–58° F)

- Body
  - MSD II Body:
    - Body, MSD II, 181 m³ (237 yd³)
    - Body, MSD II, 220 m³ (288 yd³)
  - MSD II Body Attachments:
    - Extensions, 400 mm (~15 in) 206 m³ (270 yd³); Fits 181 m³ (237 yd³) body
    - Extensions, 395 mm (~15 in) 237 m³ (310 yd³); Fits 220 m³ (288 yd³) body
    - Extensions, 550 mm (~21 in) 248 m³ (324 yd³); Fits 220 m³ (288 yd³) body
    - Extensions, 675 mm (~26 in) 252 m³ (330 yd³); Fits 220 m³ (288 yd³) body
  - Films, Body
  - Gateless Coal Body:
    - Body, Gateless Coal, 352 m³ (460 yd³)
  - Gateless Coal Body Attachments:
    - Extensions, 440 mm (~17 in) 382 m³ (500 yd³)
    - Extensions, 875 mm (~34 in) 413 m³ (540 yd³)
    - Extensions, 1060 mm (~41 in) 428 m³ (560 yd³)

- Body Heat
- Body Mounting Groups
  - MSD II Body
  - Gateless Coal Body
- Brake Wear Indicator Gauge
- Cabin Air PreCleaner
- Camera Only Vision System
- Cat Comfort Air Suspension Trainer Seat
- Cat Comfort Heated Operator Seat
- Electric Powered Window, Right Side
- Electric Starting System
- Engine (High Altitude)*
- Engine Coolant and Oil Heater for Cold Weather Starts
- Engine Delay Shutdown Timer
- Filtration, Final Drive Oil Cooler
- External Digital Payload Display
- Fuel Tank (7192 L/1,900 gal)
- Gauge, Brake Wear Indicator
- Ground Access, Powered
- Ground Access, Fixed, Reversed
- Ground Access, Powered, Reversed
- Heated Mirrors, RH
- Heated Mirrors, LH
- High Intensity Discharge (HID) Lighting (front and rear)
- Horn, Air or Electric, LH or RH
- Instructions (ANSI or ISO)
- Language Monitors – English, Spanish, French, German, Italian, Portuguese, Dutch, Norwegian, Swedish, Estonian, Latin, Lithuanian, Slovakian, Slovenian, Greek, Roman, Russian, Polish, Czech, Hungarian, Icelandic, Finnish, Danish, Thai, Indonesian, Vietnamese, Malaysian, Chinese, Japanese, Korean, Croatian, Serbian, Mongolian, Hebrew, Turkish, Arabic
- Machine Access, Reversed
- Portable Fire Extinguisher
- Retractable Front Sun Visor
- Road Analysis Control (RAC)
- Seat, Full Size, Trainer
- Service Center, Pressurized System
- Service Center, Non-Pressurized System
- SL-V Grease Injectors
- Wheel Chocks
- Wheels, Wedge, 1041 mm (41 in)

*For certain markets only.

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com

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