

# **Cat**<sup>®</sup> 299D2

# **COMPACT TRACK LOADER**

#### FEATURES:

The Cat<sup>®</sup> 299D2 Compact Track Loader, with its vertical lift design, delivers extended reach and lift height for quick and easy truck loading. Its standard, suspended undercarriage system provides superior traction, flotation, stability and speed to work in a wide range of applications and underfoot conditions. The 299D2 features the following:

- Industry leading sealed and pressurized cab option provides a cleaner and quieter operating environment with excellent Work Tool visibility.
- Available high-back, heated, air ride seat with seat mounted adjustable joystick controls makes Cat Compact Track Loaders the industry leader in operator comfort.
- High performance power train provides maximum performance and production capability through the Electronic Torque Management system, standard two speed travel and an electronic hand/foot throttle with decel pedal capability.
- High Flow XPS hydraulic system is available for applications that demand maximum hydraulic work tool performance.

- Electronically controlled Cat C3.8 engine provides high horsepower and torque while meeting U.S. EPA Tier 4 Final/EU Stage IV emission standards.
- Cat "Intelligent Leveling" system (ILEV) provides industry leading technology, integration and optional features such as dual direction self level, work tool return to dig and work tool positioner.
- Standard fully independent torsion axle suspension combined with the optional Speed Sensitive Ride Control system improves operation on rough terrain, enabling better load retention, increased productivity and greater operator comfort.
- Maximize machine capability and control with the standard Advanced Display providing on-screen adjustments for implement response, hystat response, and creep control, multi-language functionality with customizable layouts, security system, and rearview camera.
- **Ground level access** to all daily service and routine maintenance points helps reduce machine downtime for greater productivity.
- Broad range of performance matched Cat Work Tools make the Cat Compact Track Loader the most versatile machine on the job site.

# **Specifications**

#### Engine

Engino			
Engine Model	Cat C3.8 DIT	Cat C3.8 DIT (turbo)	
Gross Power SAE J1995	73 kW	98 hp	
Net Power SAE 1349	71 kW	95 hp	
Net Power ISO 9249	71 kW	95 hp	
Peak Torque at 1,500 rpm SAE J1995	334 N⋅m	246 lbf-ft	
Displacement	3.8 L	232 in <sup>3</sup>	
Stroke	120 mm	4.7 in	
Bore	100 mm	3.9 in	
Weights*			
Operating Weight	5114 kg	11,275 lb	
Power Train			
Travel Speed (Forward or Reverse):			
One Speed	8.4 km/h	5.2 mph	
Two Speed	13.5 km/h	8.4 mph	

\*Operating Weight, Operating Specifications and Dimensions all based on 75 kg (165 lb) operator, all fluids, two speed, 1981 mm (78 in) dirt bucket, 400 mm (15.7 in) tracks, dual flange front idler/single flange rear idler, standard flow hydraulics, enclosed cab with glass door, side windows, heater, mechanical suspension seat, advanced display, 880 CCA battery, no optional counterweights and manual quick coupler (unless otherwise noted).

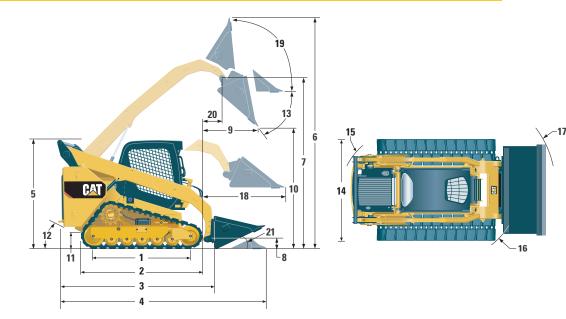
## **Hydraulic System**

Hydraulic Flow – Standard:		
Loader Hydraulic Pressure	23 000 kPa	3,335 psi
Loader Hydraulic Flow	86 L/min	23 gal/min
Hydraulic Power (calculated)	33 kW	44 hp
Hydraulic Flow – High Flow XPS:		
Maximum Loader Hydraulic Pressure	28 000 kPa	4,061 psi
Maximum Loader Hydraulic Flow	121 L/min	32 gal/min
Hydraulic Power (calculated)	57 kW	76 hp
Operating Specifications*		
Rated Operating Capacity:		
35% Tipping Load	1451 kg	3,200 lb

35% Tipping Load	1451 kg	3,200 lb
50% Tipping Load	2087 kg	4,600 lb
Rated Operating Capacity		
with Optional Counterweight	2204 kg	4,860 lb
Tipping Load	4173 kg	9,200 lb
Breakout Force, Tilt Cylinder	3298 kg	7,270 lb
Breakout Force, Lift Cylinder	2795 kg	6,162 lb
Ground Contact Area (400 mm/15.7 in track)	1.41 m <sup>2</sup>	2,184 in <sup>2</sup>
Ground Contact Area (450 mm/17.7 in track)	1.59 m²	2,463 in <sup>2</sup>
Ground Pressure (400 mm/15.7 in track)	35.6 kPa	5.2 psi
Ground Pressure (450 mm/17.7 in track)	31.5 kPa	4.6 psi



# **299D2 Compact Track Loader**



#### **Dimensions\***

1 Length of Track on Ground	1767 mm	69.6 in
2 Overall Length of Track	2270 mm	89.4 in
3 Length without Bucket	3189 mm	125.5 in
4 Length with Bucket on Ground	3931 mm	154.7 in
5 Height to Top of Cab	2125 mm	83.6 in
6 Maximum Overall Height	4032 mm	158.7 in
7 Bucket Pin Height at Maximum Lift	3208 mm	126.3 in
8 Bucket Pin Height at Carry Position	180 mm	7.1 in
9 Reach at Maximum Lift and Dump	852 mm	33.6 in
10 Clearance at Maximum Lift and Dump	2399 mm	94.5 in
11 Ground Clearance	245 mm	9.6 in

#### Cab

ROPS	ISO 3471:2008
FOPS	ISO 3449:2005 Level I
FOPS Level II	ISO 3449:2005 Level II

#### **Service Refill Capacities**

Cooling System	16 L	4.1 gal	
Diesel Exhaust Fluid (DEF) Tank	19 L	5 gal	
Engine Crankcase	13 L	3.5 gal	
Fuel Tank	122 L	32.2 gal	
Hydraulic System	55 L	14.5 gal	
Hydraulic Tank	39 L	10.3 gal	

12 Departure Angle	339	)
13 Maximum Dump Angle	54°	
14 Vehicle Width (400 mm/15.7 in tracks)	1931 mm	76.0 in
Vehicle Width (450 mm/17.7 in tracks)	1981 mm	78.0 in
15 Turning Radius from Center – Machine Rear	1881 mm	74.0 in
<b>16</b> Turning Radius from Center – Coupler	1476 mm	58.1 in
17 Turning Radius from Center – Bucket (racked)	2314 mm	91.1 in
18 Maximum Reach with Arms Parallel to Ground	1319 mm	51.9 in
19 Rack Back Angle at Maximum Height	81°	)
20 Bucket Pin Reach at Maximum Lift	493 mm	19.4 in
21 Roll Back Angle	25°	,

#### **Noise Level**

Inside Cab**	83 dB(A)
Outside Cab***	104 dB(A)

• Cab and Rollover Protective Structures (ROPS) are standard in North America and Europe.

\*\*The declared dynamic operator sound pressure levels per ISO 6396:2008. The measurements were conducted with the cab doors and windows closed and at 70% of the maximum engine cooling fan speed. The sound level may vary at different engine cooling fan speeds.

\*\*\*The labeled sound power level for the CE marked configurations when measured according to the test procedure and conditions specified in 2000/14/EC.

#### **Air Conditioning System**

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 0.81 kg of refrigerant which has a  $CO_2$  equivalent of 1.158 metric tonnes.

## MANDATORY EQUIPMENT

- Hydraulics, Standard or High Flow XPS
- Quick Coupler, Mechanical or Powered
- Seat Belt, 50 mm (2 in) or 75 mm (3 in)
- Steel Imbed Rubber Track 400 mm (15.7 in) or 450 mm (17.7 in)
- Dual Flange Front Idler/Single Flange Rear Idler or Triple Flange Front/Rear Idlers

#### PERFORMANCE PACKAGE (must select one of the following)

- Performance Package H1: Standard Flow (No Self Level)
- Performance Package H2: Standard Flow, Dual Direction Electronic Self Level (Raise and Lower, Electronic Snubbing (Raise and Lower)
- Performance Package H3: High Flow XPS, Dual Direction Electronic Self Level (Raise and Lower), Electronic Snubbing (Raise and Lower)

### **STANDARD EQUIPMENT**

#### ELECTRICAL

- 12 volt Electrical System
- 100 ampere Alternator
- Ignition Key Start/Stop Switch
- Lights: Gauge Backlighting, Two Rear Tail Lights, Two Rear Halogen Working Lights, Two Adjustable Front Halogen Lights, Dome Light
- Backup Alarm
- Heavy Duty Battery, 880 CCA

#### **OPERATOR ENVIRONMENT**

- Gauges: Fuel Level, DEF Level, Hour Meter
- Operator Warning System Indicators: Air Filter Restriction, Alternator Output, Armrest Raised/Operator Out of Seat, Engine Coolant Temperature, Engine Oil Pressure, Air Inlet Heater Activation, Hydraulic Filter Restriction, Hydraulic Oil Temperature, Park Brake Engaged, Engine Emission System
- Adjustable Vinyl Seat
- Fold In Ergonomic Contoured Armrest
- Control Interlock System, when operator leaves seat or armrest raised: Hydraulic System Disables, Hydrostatic Transmission Disables, Parking Brake Engages
- ROPS Cab, Open, Tilt Up
- FOPS, Level I
- Top and Rear Windows
- Floor Mat
- Interior Rearview Mirror
- 12 volt Electric Socket
- Horn
- Hand (Dial) Throttle, Electronic
- Adjustable Joystick Controls
- Advanced Display: Full Color, 127 mm (5 in) LCD Screen, Advanced Multi-operator Security System, On-screen Adjustments for Implement Response, Hystat Drive Response, and Creep Control
- Storage Compartment with Netting

#### COMFORT PACKAGE (must select one of the following)

- Open ROPS (C0): Static Seat (No Foot Throttle, Headliner, Heater or Door)
- Open ROPS (C1): Foot Throttle, Headliner, Cup Holder, and choice of Seat (Mechanical Suspension or High Back, Heated, Air Ride Seat) (No Heater or Door)
- Enclosed ROPS with Heater (C2): Foot Throttle, Headliner, Heater and Defroster, Side Windows, Cup Holder, Radio Ready, choice of Seat (Mechanical Suspension or High Back, Heated, Air Ride Seat) and Door (Glass or Polycarbonate)
- Enclosed ROPS with A/C (C3): C2 + Air Conditioner

#### **POWER TRAIN**

- Cat C3.8, Turbo Diesel Engine, Meeting Tier 4 Final/Stage IV Emission Standards
- Air Cleaner, Dual Element, Radial Seal
- S·O·S<sup>™</sup> Sampling Valve, Hydraulic Oil
- Filters, Cartridge-type, Hydraulic
- Filters, Cartridge-type, Fuel and Water Separator
- Radiator/Hydraulic Oil Cooler (side-by-side)
- Spring Applied, Hydraulically Released, Wet Multi Disc Parking Brakes
- Hydrostatic Transmission, Two Speed Travel
- Suspension Independent Torsion Axles (4)

#### OTHER

- Engine Enclosure, Lockable
- Extended Life Antifreeze, -37° C (-34° F)
- Machine Tie Down Points (6)
- Support, Lift Arm
- Hydraulic Oil Level Sight Gauge
- Radiator Coolant Level Sight Gauge
- Radiator, Expansion Bottle
- Cat ToughGuard<sup>™</sup> Hose
- Auxiliary, Hydraulics, Continuous Flow
- Heavy Duty, Flat Faced Quick Disconnects with Integrated Pressure Release
- Split D-Ring to Route Work Tool Hoses Along Side of Left Lift Arm
- Electrical Outlet, Beacon
- Belly Pan Cleanout
- Variable Speed Demand Fan
- Product Link<sup>™</sup> PL240, Cellular

## **OPTIONAL ATTACHMENTS**

- External Counterweights
- Beacon, Rotating
- Engine Block Heater 120V
- Oil, Hydraulic, Cold Operation
- Paint, Custom
- Heavy Duty Battery, 880 CCA, with Battery Disconnect
- Heavy Duty Battery, 1,000 CCA, with Battery Disconnect
- Product Link PL641, Cellular

- Variable Speed Demand Fan with Reversing Functionality
- Speed Sensitive Ride Control
- Advanced Display: Rearview Camera Included
- Work Tool Return to Dig and Work Tool Positioner
- Bluetooth Radio with Microphone (AM/FM/Weather Band Receiver with USB and Auxiliary Input Jack)
- Full Steel Track (Sealed and Lubricated SALT) with Triple Grouser Shoes; One Speed Travel Only

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