

CX47

Compact Excavator



ENGINE

Model..... Yanmar 4TNE88-EYBC
Cylinders..... 4
Bore/Stroke 3.46" x 3.54"
(88 x 90 mm)
Displacement 133.5 in³ (2180 cc)
Fuel injection..... Direct
Fuel injection pump..... Electronic
Fuel..... Diesel
Fuel filter... Full flow, paper element
Cooling Liquid
Horsepower per SAE J1349
Net... 36.5 hp (27.2 kW) @ 1400 rpm
Maximum torque @ 1400 rpm
Net 108.5 lb-ft (147.1 N·m)

BOOM/ARM

Boom

Swing 73° left/58° right
Length..... 9'6" (2.89 m)
Boom w/arm cylinder
& plumbing 485 lb (220 kg)

Arm

Length..... 4'10" (1.47 m)
Bare arm 255 lb (115.7 kg)
Bucket cylinder linkage
& plumbing 65 lb (29.5 kg)
Total weight..... 320 lb (145.2 kg)

UNDERCARRIAGE

Number of rollers
Top, each track..... 1
Bottom, each track..... 4
Gradeability 58% (30°)

HYDRAULICS

Pumps (2)..... Variable displacement
axial piston pump

Capacity –
Maximum..... 2 x 13.8 gpm
(2 x 52.4 L/min)

System relief pressure –
Standard 3270 psi (29.4 MPa)

Pumps (1) Fixed displacement
gear pump

Capacity –
Maximum..... 10.6 gpm
(40.3 L/min)

Pilot control hydraulic system –
Pump (1)..... Gear pump
Maximum capacity 2.96 gpm
(11.2 L/min)

Relief pressure.... 500 psi (3.4 MPa)

Control valves —

10 spool
Pilot control for left/right track
travel, boom, arm, bucket & swing
Manual control for breaker &
backfill blade

Swing –

Motor (1) Fixed displacement
axial piston design

Speed 0-9.5 rpm

Brake Spring applied,
hydraulically released

with dual cushion relief

Tail swing radius.... 3'3" (991 mm)

Tail swing overhang .. 0'0" (0 mm)

Travel –

Motor (2) Two-speed
axial piston design

Final drive Planetary gear
reduction

Travel Speeds –

Forward/Reverse

Low 1.6 mph (2.6 km/h)

High..... 2.9 mph (4.7 km/h)

HYDRAULIC CYLINDERS

Boom cylinders (1) – Canopy unit
Bore diameter..... 3.94" (100 mm)
Rod diameter 2.17" (55 mm)
Stroke 26.93" (684 mm)

Boom cylinders (1) – Cab unit
Bore diameter..... 3.94" (100 mm)
Rod diameter 2.17" (55 mm)
Stroke 25.75" (654 mm)

Arm cylinder (2) –
Bore diameter..... 3.54" (90 mm)
Rod diameter 1.97" (50 mm)
Stroke 28.35" (720 mm)

Bucket cylinder (1) –
Bore diameter..... 2.95" (75 mm)
Rod diameter 1.57" (40 mm)
Stroke 21.50" (546 mm)

ELECTRICAL

Voltage 12 volts,
negative ground

Alternator..... 40 amp

Batteries (1) 12V .. Low-maintenance

SERVICE CAPACITIES

Hydraulic tank

Refill capacity..... 13 gal (48 L)

Total system 17 gal (63 L)

Engine

w/filter change 1.5 gal (5.8 L)

Fuel..... 13.2 gal (50 L)

Radiator 0.5 gal (1.8 L)

OPERATING WEIGHT

With 165 lb (75 kg) operator, 435 lb
(197 kg) bucket, full fuel and standard
equipment 10,428 lb (4730.1 kg)

LIFT CAPACITIES

Canopy model — 4'10" (1.47 m) Arm *Lift capacities calculated using 15.7" (400 mm) shoes, 104 lb (47 kg) bucket, blade up.*

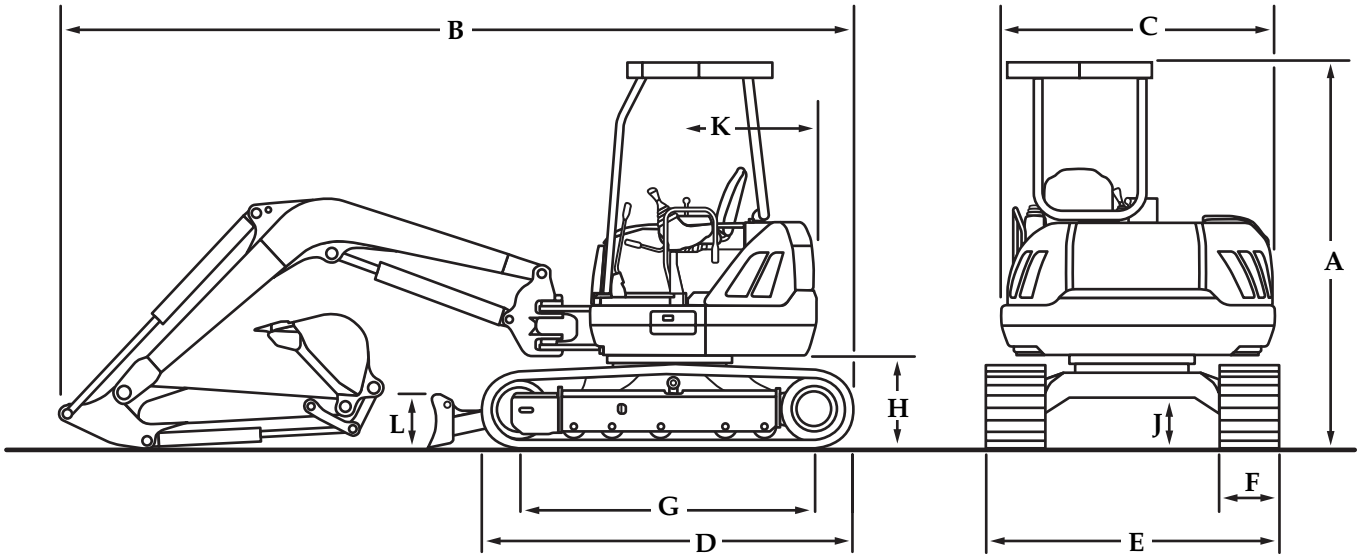
Load (Lift Point) Height	5' (1.5 m)		7.5' (2.3 m)		10' (3.0 m)		12.5" (3.8 m)		15.0" (4.6 m)	
	END	SIDE	END	SIDE	END	SIDE	END	SIDE	END	SIDE
+12.5' (3.8 m)							1,780 lb* (800 kg)	1,780 lb* (800 kg)		
+10' (3.0 m)							1,890 lb* (860 kg)	1,780 lb (800 kg)	1,490 lb (670 kg)	1,250 lb (570 kg)
+7.5' (2.3 m)					2,570 lb* (1160 kg)	2,490 lb (1130 kg)	2,010 lb (910 kg)	1,700 lb (770 kg)	1,450 lb (660 kg)	1,220 lb (550 kg)
+5' (1.52 m)			4,430 lb (2010 kg)	3,540 lb (1600 kg)	2,750 lb (1250 kg)	2,280 lb (1030 kg)	1,910 lb (860 kg)	1,590 lb (720 kg)	1,400 lb (630 kg)	1,170 lb (530 kg)
+2.5' (0.8 m)			4,110 lb (1860 kg)	3,240 lb (1470 kg)	2,570 lb (1160 kg)	2,100 lb (950 kg)	1,810 lb (820 kg)	1,500 lb (680 kg)	1,350 lb (610 kg)	1,120 lb (500 kg)
Ground Level	3,500 lb* (1590 kg)	3,500 lb* (1590 kg)	4,060 lb (1840 kg)	3,210 lb (1450 kg)	2,470 lb (1120 kg)	2,010 lb (910 kg)	1,740 lb (790 kg)	1,440 lb (650 kg)	1,310 lb (590 kg)	1,080 lb (490 kg)
-2.5' (-0.8 m)	5,260 lb* (2380 kg)	5,260 lb* (2380 kg)	4,090 lb (1850 kg)	3,230 lb (1460 kg)	2,450 lb (1110 kg)	1,990 lb (900 kg)	1,720 lb (780 kg)	1,410 lb (640 kg)	1,300 lb (590 kg)	1,070 lb (480 kg)
-5' (-1.52 m)	7,180 lb* (3250 kg)	7,180 lb* (3250 kg)	4,170 lb (1890 kg)	3,300 lb (1490 kg)	2,480 lb (1120 kg)	2,020 lb (910 kg)	1,740 lb (780 kg)	1,430 lb (650 kg)		
-7.5' (-2.3 m)	8,450 lb* (3830 kg)	7,950 lb (3600 kg)	4,310 lb (1950 kg)	3,430 lb (1550 kg)	2,580 lb (1170 kg)	2,110 lb (950 kg)				

* Rated loads are hydraulic limits rather than tipping load limits.

Cab model — 4'10" (1.47 m) Arm *Lift capacities calculated using 15.7" (400 mm) shoes, 104 lb (47 kg) bucket, blade up.*

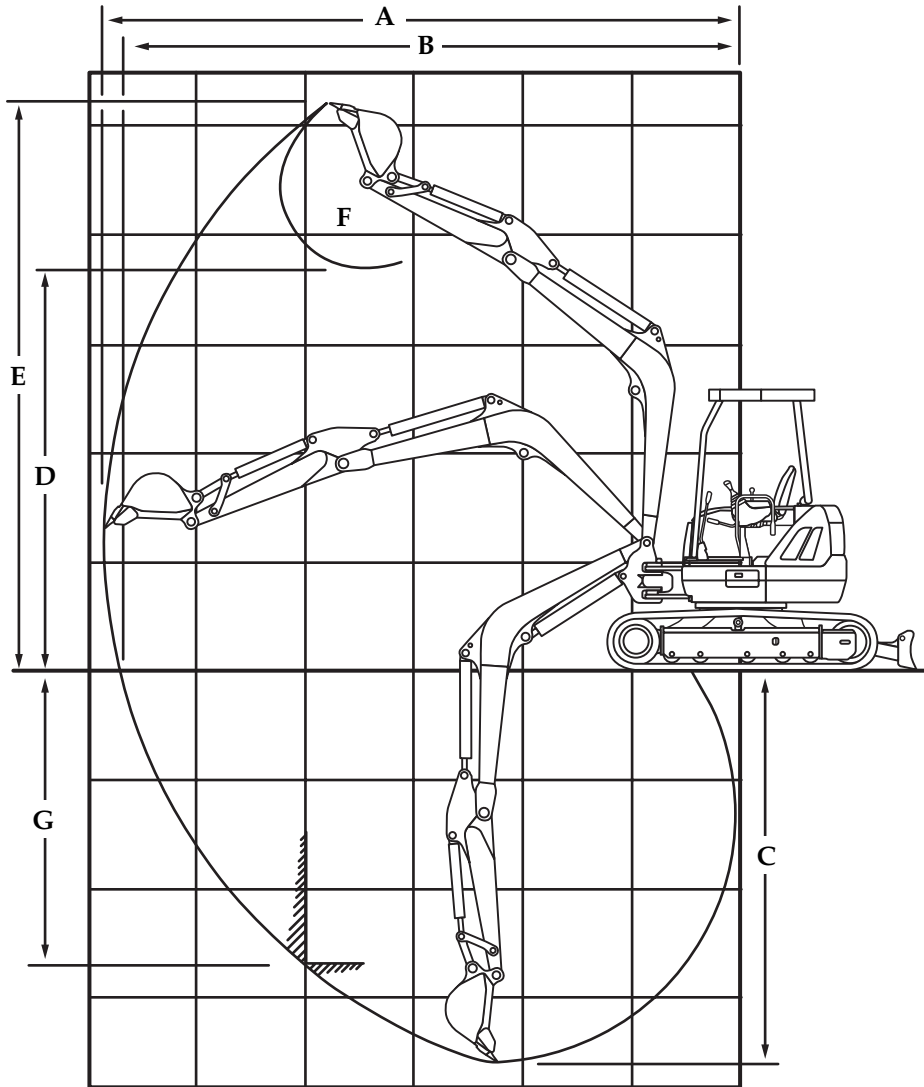
Load (Lift Point) Height	5' (1.5 m)		7.5' (2.3 m)		10' (3.0 m)		12.5" (3.8 m)		15.0" (4.6 m)	
	END	SIDE	END	SIDE	END	SIDE	END	SIDE	END	SIDE
+12.5' (3.8 m)							1,780 lb* (800 kg)	1,780 lb* (800 kg)		
+10' (3.0 m)							1,890 lb* (860 kg)	1,820 lb (830 kg)	1,540 lb (690 kg)	1,300 lb (580 kg)
+7.5' (2.3 m)					2,570 lb* (1160 kg)	2,560 lb (1160 kg)	2,080 lb (940 kg)	1,750 lb (790 kg)	1,500 lb (680 kg)	1,260 lb (570 kg)
+5' (1.52 m)			4,570 lb (2070 kg)	3,640 lb (1650 kg)	2,840 lb (1280 kg)	2,350 lb (1060 kg)	1,970 lb (890 kg)	1,650 lb (740 kg)	1,450 lb (650 kg)	1,210 lb (550 kg)
+2.5' (0.8 m)			4,240 lb (1920 kg)	3,350 lb (1520 kg)	2,650 lb (1200 kg)	2,170 lb (980 kg)	1,870 lb (840 kg)	1,550 lb (700 kg)	1,390 lb (630 kg)	1,160 lb (520 kg)
Ground Level	3,500 lb* (1590 kg)	3,500 lb* (1590 kg)	4,200 lb (1900 kg)	3,310 lb (1500 kg)	2,560 lb (1160 kg)	2,080 lb (940 kg)	1,800 lb (810 kg)	1,490 lb (670 kg)	1,360 lb (610 kg)	1,120 lb (500 kg)
-2.5' (-0.8 m)	5,260 lb* (2380 kg)	5,260 lb* (2380 kg)	4,230 lb (1910 kg)	3,340 lb (1510 kg)	2,540 lb (1150 kg)	2,060 lb (930 kg)	1,780 lb (800 kg)	1,460 lb (660 kg)	1,350 lb (610 kg)	1,120 lb (500 kg)
-5' (-1.52 m)	7,180 lb* (3250 kg)	7,180 lb* (3250 kg)	4,300 lb (1950 kg)	3,410 lb (1540 kg)	2,570 lb (1160 kg)	2,090 lb (950 kg)	1,800 lb (810 kg)	1,480 lb (670 kg)		
-7.5' (-2.3 m)	8,450 lb* (3830 kg)	8,180 lb (3710 kg)	4,450 lb (2010 kg)	3,540 lb (1600 kg)	2,660 lb (1200 kg)	2,180 lb (990 kg)				

* Rated loads are hydraulic limits rather than tipping load limits.



DIMENSIONS

A. Overall height	
— Canopy.....	8'6" (2.60 m)
— Cab.....	8'10" (2.69 m)
B. Overall length	17'5" (5.30 m)
C. Width of upperstructure	6'0" (1.84 m)
D. Track overall length	6'6" (1.97 m)
E. Track overall width w/9.8" (250 mm) shoes	6'5" (1.96 m)
F. Track shoe width	15.8" (400 mm)
G. Center to center (idler to sprocket)	5'3" (1.61 m)
H. Upperstructure ground clearance	2'11" (885 mm)
J. Minimum ground clearance	13.4" (340 mm)
K. Tail swing radius	3'3" (991 mm)
L. Backfill blade height.....	2'0" (620 mm)
Working weight	10,428 lb (4730.1 kg)
Ground pressure	3.9 psi (32 kPa)
Boom swing.....	Left 73°/Right 58°
Tail swing overhang	0'0" (0 m)



PERFORMANCE SPECS

A. Maximum dig radius.....	19'3" (5.87 m)
B. Dig radius at groundline	18'9" (5.71 m)
C. Maximum dig depth	11'11" (3.63 m)
D. Dump height	12'1" (3.68 m)
E. Overall reach height	16'7" (5.05 m)
F. Bucket rotation	N/A
G. Vertical straight wall dig depth	5'6" (1.68 m)
Arm digging force	4,721 lb (2141.4 kg)
Bucket digging force	8,747 lb (3967.6 kg)

N/A Specification not available

STANDARD EQUIPMENT

OPERATOR'S COMPARTMENT

ROPS/FOPS four post canopy
 Operator's controls:
 Pilot operated hand controls and foot pedals
 Control pattern selector valve (SAE or tractor loader backhoe)
 Display includes:
 Engine oil pressure, water temperature lamp, air filter lamp, water separator detection lamp, low fuel warning lamp, battery charge lamp, glow plug indicator lamp, water temperature gauge, fuel gauge and hourmeter
 Adjustable seat with seat belt
 Arm rests

ENGINE

Yanmar 4TNE88-EYBC diesel
 Federal emission certified
 4 Cycle
 Water cooled
 Direct injection
 One touch decelerator
 Engine access under rear hood
 Dry type air cleaner
 Glow plug starting aid

ELECTRICAL

12 volt electrical starting system
 Heavy-duty battery
 Horn

HYDRAULICS

Auxiliary hydraulics (single/bi-directional) and plumbing to arm
 Large hydraulic oil cooler
 Control pattern selector valve (SAE or tractor loader backhoe)

TRACK DRIVE

Rubber tracks
 Automatic 2 speed travel
 Fully hydrostatic drive system
 Sealed and lubricated track rollers
 Track tension adjustment (grease type)
 Disc type parking brake (auto release and apply)

UPPER STRUCTURE

Zero tail swing
 Swing lock
 Swing brake
 Swing shock valve

OTHER

Swing boom (73° left/58° right)
 Hydraulic backfill blade

OPTIONAL EQUIPMENT

OPERATOR'S COMPARTMENT

Cab with heater

OTHER

Travel alarm

BUCKETS

Width	SAE Heaped Capacity	Weight
12" (305 mm).....	3.0 ft ³ (0.085 m ³)	314 lb (142 kg)
18" (457 mm).....	4.5 ft ³ (0.127 m ³)	362 lb (164 kg)
24" (610 mm).....	6.3 ft ³ (0.178 m ³)	435 lb (197 kg)
36" (914 mm).....	9.8 ft ³ (0.277 m ³)	525 lb (238 kg)

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NOTE: All specifications are stated in accordance with SAE Standards or Recommended Practices, where applicable.

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Replaces Form No. - None



IMPORTANT: Case, LLC reserves the right to change these specifications without notice and without incurring any obligation relating to such change. Case, LLC does not warrant the safety or reliability of attachments from other manufacturers.

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CX47 Page 6 of 6

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