

# KOMATSU

## PC210LCE-11

Proof of concept model



Photos may include optional equipment.

Hydraulic excavator

**Electric**

**Motor power**  
123 kW / 165 HP @ 2000 min<sup>-1</sup>

**Operating weight**  
24400 kg

**Bucket capacity**  
0.50 - 0.93 m<sup>3</sup>

# PC210LCE-11



For operators, surrounding people and environment

# Zero- emission battery-driven hydraulic excavator was born with environmentally friendly



## Eco-friendly battery and electric motor

- Emits no exhaust gas and provides clean work environment
- Low machine noise and surrounding noise
- Zero CO<sub>2</sub> emissions on site
- Operator is less fatigued since there is no engine vibration
- High-capacity lithium-ion batteries for long operating time

## Safe and comfortable working environment

- ROPS cab (Complying with ISO 12117-2)
- Lock lever auto lock function
- LED lights as standard

## Information and Communication Technology (ICT)

- KomVision is mounted as standard

Motor power

**123 kW / 165 HP @ 2000 min<sup>-1</sup>**

Operating weight

**24400 kg**

Bucket capacity

**0.50 - 0.93 m<sup>3</sup>**

## Eco-friendly battery and electric motor

### Operates with battery power and with zero emissions for the people and work environment

No exhaust gas is emitted and work environment is kept clean thanks to the battery drive. Gentle to the surrounding workers and plants and widely applicable to various jobsites such as indoor work, pipe laying work, work in urban areas, etc.



### Machine noise and surrounding noise are greatly reduced because of low-noise electric motor

No engine noise occurs since an electric motor is used as the power source. The operator can easily communicate with the surrounding workers and work safely and accurately.

### Zero CO<sub>2</sub> emissions

Contributes to environmental load reduction with zero CO<sub>2</sub> emissions during operation.

### Comfortable work environment is provided because of low heat generation in the machine body

The operator can work comfortably since surroundings of the machine and operator's cab are not heated by heat of engine.

### The operator is less fatigued since the machine body is not vibrated by engine

Vibrations traveling to the operator are greatly reduced since no engine is mounted. The operator is less stressed or fatigued during operation and can work comfortably.

### Two working modes selected by production or electric power consumption

The operator can easily select "P mode" for powerful and productive operation or "E mode" for low electric power consumption operation on the monitor panel according to the current work.

### Auto-decelerator installed as standard

Equipped with the auto-decelerator, which automatically decreases the motor speed several seconds after the work equipment is set in neutral. Reduce power consumption.

### Compliance with charging standard CCS Type-2 spreading in EU

CCS Type-2 is adopted as the charging standard which has spread widely in Europe. Since this machine supports chargers of 3-phase AC 400 V input and 40 kW output, it is applicable to various jobsites.



### Well balanced high work performance and long operation period

Components of Komatsu with proven results are combined with newly adopted electric components to optimize the whole system, and high-capacity lithium-ion batteries are used for long operating time. This machine offers customers work performance that matches that of conventional 20 t hydraulic excavators, while retaining the popular functions of the -11 series.



## Safe and comfortable working environment

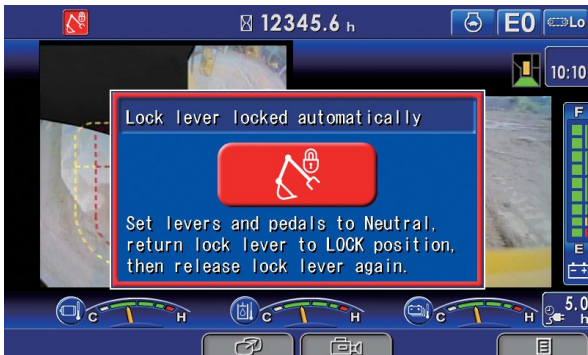
### ROPS cab (ISO 12117-2)

The machine is equipped with a ROPS cab that conforms to ISO 12117-2 for excavators as standard equipment. The ROPS cab has high shock-absorption performance, featuring excellent durability and impact strength. It also satisfies the requirements of OPG top guard level 1 (ISO 10262) for falling objects. Combined with the retractable seat belt, the ROPS cab protects the operator in case of tipping over and against falling objects.



### Lock lever auto lock function

If the work equipment lever is not in the neutral position when the hydraulic lock lever is released, the equipment is automatically stopped. The auto stop state is shown on the monitor screen.



## Safety equipment

### Motor shutdown secondary switch

Motor stop switch added for abnormal use.

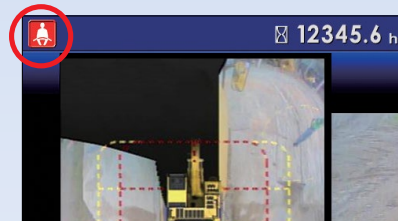


### Lock lever

Locks the hydraulic pressure to prevent unintentional movement.

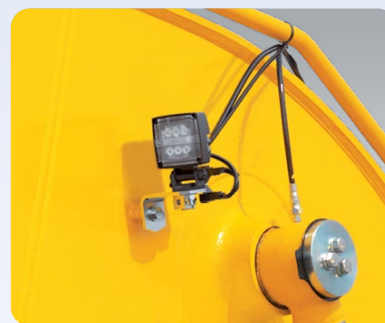


### Seat belt caution indicator



### LED lights

LED lights are equipped on the boom, machine right front and cab top. The visibility under low light environment is improved, and work at night with ease.



Seat belt retractable

Emergency escape hammer

Tempered & tinted glass

Large side-view mirrors

Sidewise mirrors

Travel alarm

# ICT

## New monitor panel interface design

An updated large high resolution LCD (Liquid Crystal Display) color monitor enables accurate and smooth work. The interface has been redesigned to display key machine information in a new user friendly interface.

The interface has a function that enables the main screen mode to be switched, thus enabling the optimum screen information for the particular work situation to be displayed.



### Indicators

- |   |                                     |
|---|-------------------------------------|
| 1 Auto-decelerator                              | 9 Hydraulic oil temperature gauge   |
| 2 Working mode                                  | 10 Main battery temperature gauge   |
| 3 Travel speed                                  | 11 Main battery discharge indicator |
| 4 Camera display                                | 12 Expected operating time          |
| 5 Service meter                                 | 13 Guidance icon                    |
| 6 Camera switch display                         | 14 Function switches                |
| 7 Clock   |                                     |
| 8 Power electronics component temperature gauge |                                     |

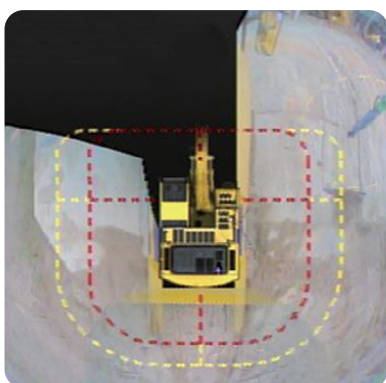
### Basic operation switches

- |                         |                 |
|-------------------------|-----------------|
| 1 Auto-decelerator      | 4 Buzzer cancel |
| 2 Working mode selector | 5 Wiper         |
| 3 Travel speed selector | 6 Window washer |



## KomVision

The surroundings of the machine can be displayed on the monitor by using 4 cameras installed at the sides and rear of the machine. Press the switch F4 to select the image of the right, left and rear side view of the machine.



KomVision monitor display



Left side



Rear



Right side

## Visual user menu

Pressing the F6 key on the main screen displays the user menu screen. The menus are grouped for each function, and use easy-to-understand icons which enable the machine to be operated intuitively.

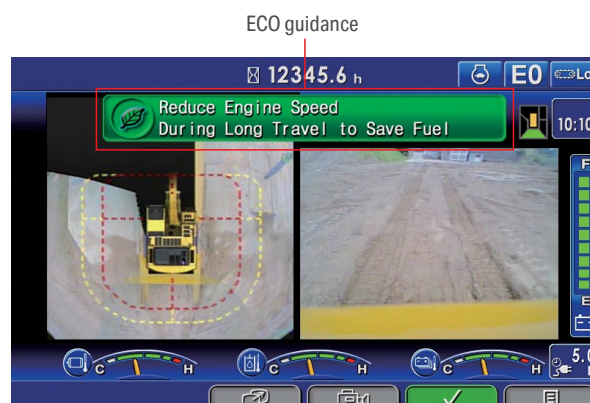


- 1 Energy saving guidance
- 2 Machine settings
- 3 Maintenance
- 4 Monitor setting
- 5 Mail check

## Support efficiency improvement

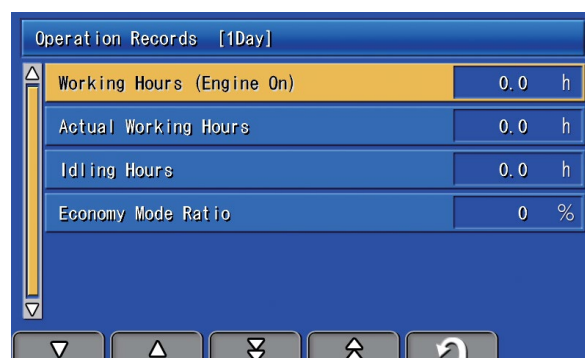
### • ECO guidance

While the machine is operating, ECO guidance pops up on the monitor screen to notify the operator of the status of the machine in real time.

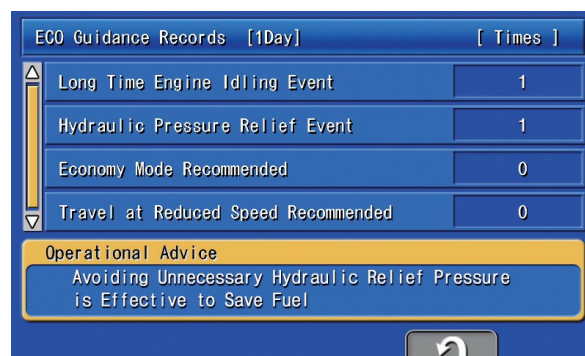


### • Operation record and ECO guidance record

The ECO guidance menu enables the operator to check the operation record and ECO guidance record from the ECO guidance menu, using a single touch, thus can be used for operation improvement.



Operation record



ECO guidance record

# Specifications

## Motor

Type	3 phase AC permanent magnet motor
Motor power (Net)	123 kW / 165 HP
Rated rpm	2000 min <sup>-1</sup>

## Electrical system

Battery type	Lithium-ion
Battery voltage	660 V
Battery capacity	451 kWh

## Hydraulics

Type	HydrauMind (Hydraulic Mechanical Intelligence New Design) system, closed-center system with load sensing valves and pressure compensated valves	
Number of selectable working modes	6	
Main pump:		
Type	Variable displacement piston type	
Pumps for	Boom, arm, bucket, swing, and travel circuits	
Maximum flow	475 L/min	
Supply for control circuit	Self-reducing valve	
Hydraulic motors:		
Travel	2 x axial piston motors with parking brake	
Swing	1 x axial piston motor with swing holding brake	
Relief valve setting:		
Implement circuits	37.3 MPa 380 kgf/cm <sup>2</sup>	
Travel circuit	37.3 MPa 380 kgf/cm <sup>2</sup>	
Swing circuit	28.9 MPa 295 kgf/cm <sup>2</sup>	
Pilot circuit	3.2 MPa 33 kgf/cm <sup>2</sup>	
Hydraulic cylinders: (Number of cylinders – bore x stroke x rod diameter)		
Boom	2–130 mm x 1334 mm x 90 mm	
Arm	1–135 mm x 1490 mm x 95 mm	
Bucket	1–115 mm x 1120 mm x 80 mm	

## Drives and brakes

Steering control	Two levers with pedals	
Drive method	Hydrostatic	
Maximum drawbar pull	202 kN 20600 kgf	
Gradeability	70%, 35°	
Maximum travel speed: High	5.5 km/h	
(Auto-shift) Mid	4.1 km/h	
(Auto-shift) Low	3.0 km/h	
Service brake	Hydraulic lock	
Parking brake	Mechanical disc brake	

## Swing system

Drive method	Hydrostatic	
Swing reduction	Planetary gear	
Swing circle lubrication	Grease-bathed	
Service brake	Hydraulic lock	
Holding brake / Swing lock	Mechanical disc brake	
Swing speed	12.4 min <sup>-1</sup>	

## Undercarriage

Center frame	X-frame	
Track frame	Box-section	
Seal of track	Sealed track	
Track adjuster	Hydraulic	
Number of shoes (each side)	49	
Number of carrier rollers	2 each side	
Number of track rollers (each side)	9	

## Coolant and lubricant capacity (Refill)

Coolant	30.7 L	
Final drive, each side	5.0 L	
Swing drive	6.5 L	
Hydraulic tank	132 L	

## Operating weight (Approximate)

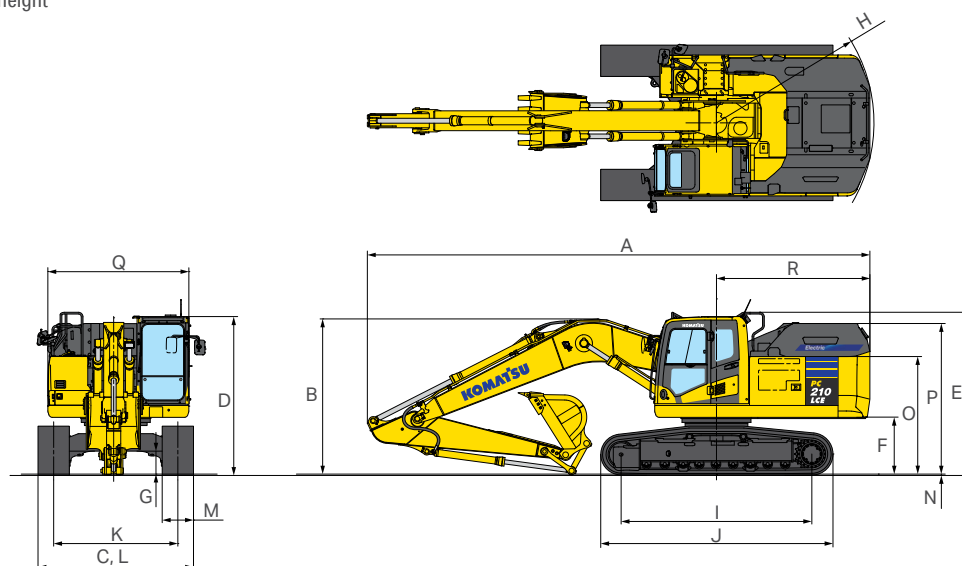
Operating weight including 5700 mm one-piece boom, 2925 mm arm, heaped 0.80 m<sup>3</sup> bucket, rated capacity of lubricants, coolant, full fuel tank, operator, and standard equipment.

Fixed gauge		
Shoes	Operating weight	Ground pressure
600 mm	24400 kg	58 kPa 0.59 kgf/cm <sup>2</sup>

## Machine dimensions

<b>Arm length</b>	<b>2925 mm</b>
A Overall length	9660 mm
B Overall height (to top of boom)	2970 mm
C Overall width	2980 mm
D Overall height (to top of cab)*	3045 mm
E Overall height (to top of handrail)*	3130 mm
F Ground clearance, counterweight	1090 mm
G Ground clearance (minimum)	440 mm
H Tail swing radius	3020 mm
I Track length on ground	3655 mm
J Track length	4450 mm
K Track gauge	2380 mm
L Width of crawler	2980 mm
M Shoe width	600 mm
N Grouser height	26 mm
O Machine cab height	2250 mm
P Machine height to top of battery cover	2885 mm
Q Machine upper width	2700 mm
R Distance, swing center to rear end	2945 mm

\* : Including grouser height



## Backhoe bucket, arm, and boom combination

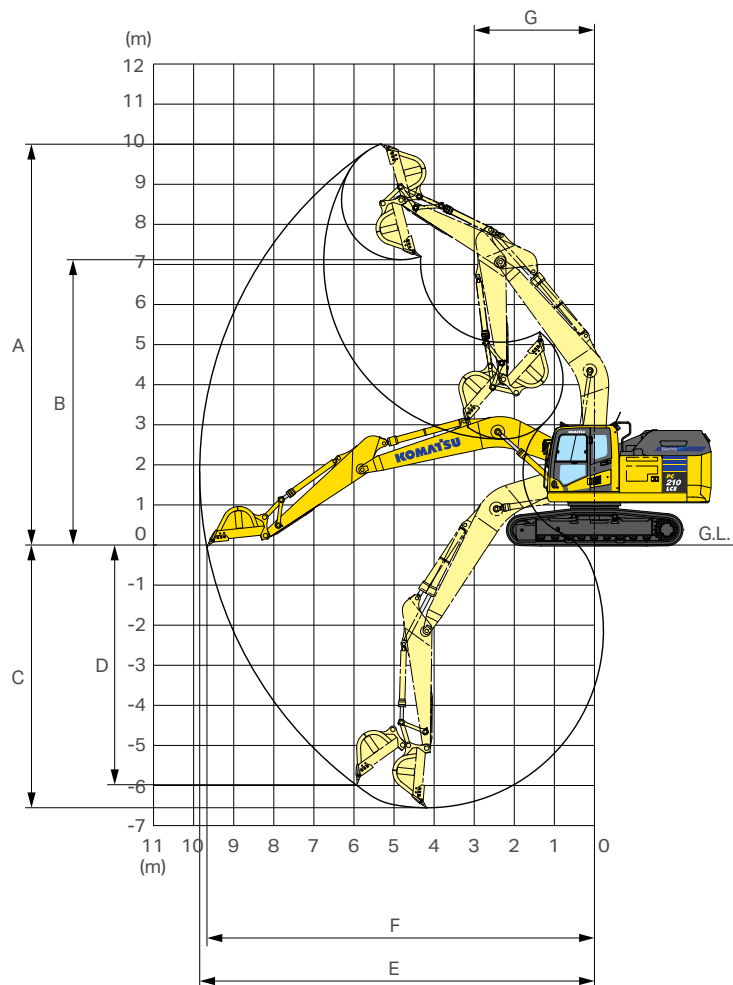
Bucket capacity (Heaped)	Width		Weight	Number of teeth	Arm length
	Without side cutters	With side cutters	With side cutters		2.93 m
0.50 m <sup>3</sup>	750 mm	875 mm	478 kg	3	○
0.80 m <sup>3</sup>	1045 mm	1170 mm	635 kg	5	○
0.93 m <sup>3</sup>	1200 mm	1325 mm	696 kg	5	●

○ : General purpose use, density up to 1.8 t/m<sup>3</sup> ● : Light duty work, density up to 1.2 t/m<sup>3</sup>

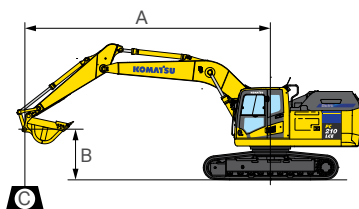
# Specifications

## Machine dimensions

<b>Arm Length</b>		<b>2925 mm</b>
A	Max. digging height	10000 mm
B	Max. dumping height	7110 mm
C	Max. digging depth	6620 mm
D	Max. vertical wall digging depth	5980 mm
E	Max. digging reach	9875 mm
F	Max. digging reach at ground level	9700 mm
G	Min. swing radius	3040 mm
SAE J 1179 Rating	Bucket digging force at power max.	132 kN 13500 kgf
	Arm crowd force at power max.	103 kN 10500 kgf
ISO 6015 Rating	Bucket digging force at power max.	149 kN 15200 kgf
	Arm crowd force at power max.	108 kN 11000 kgf



## Lifting capacity with lifting mode



- A: Reach from swing center
  - B: Bucket hook height
  - C: Lifting capacity
  - Cf: Rating over front
  - Cs: Rating over side
  - ⊗: Rating at maximum reach
- Conditions:  
• 5700 mm one-piece boom

PC210LCE-11 Arm: 2925 mm Bucket: 0.80 m<sup>3</sup> heaped Shoe: 600 mm triple grouser

B	A	⊗ MAX		7.5 m		6.0 m		4.5 m		3.0 m		1.5 m	
		Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs
7.5 m		*2850 kg	*2850 kg			*4050 kg	*4050 kg						
6.0 m		*2750 kg	*2750 kg	*3050 kg	*3050 kg	*4250 kg	*4250 kg						
4.5 m		*2750 kg	*2750 kg	*4550 kg	3450 kg	*4850 kg	*4850 kg	*5500 kg	*5500 kg				
3.0 m		*2900 kg	2650 kg	*5050 kg	3350 kg	*5850 kg	4850 kg	*7700 kg	7600 kg	*11550 kg	*11550 kg		
1.5 m		*3200 kg	2550 kg	5100 kg	3200 kg	*6900 kg	4550 kg	*9750 kg	7100 kg	*6800 kg	*6800 kg		
0.0 m		*3700 kg	2600 kg	5000 kg	3050 kg	7150 kg	4350 kg	*10750 kg	6750 kg	*5200 kg	*5200 kg		
-1.5 m		*4600 kg	2800 kg	4950 kg	3000 kg	7000 kg	4250 kg	*10900 kg	6600 kg	*9300 kg	*9300 kg	*5150 kg	*5150 kg
-3.0 m		5500 kg	3350 kg			7050 kg	4250 kg	*10500 kg	6650 kg	*14800 kg	13400 kg	*9750 kg	*9750 kg
-4.5 m		*6650 kg	4750 kg					*9050 kg	6850 kg	*12900 kg	*12900 kg		

\*: Load is limited by hydraulic capacity rather than tipping. Ratings are based on SAE J 1097.  
Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load.

## Standard equipment

### Hydraulic system

+2 attachment piping	●
3 speed travel with auto shift	●
Attachment control	●
Auto-decelerator	●
Automatic swing brake	●
Automatic travel speed selector	●
Boom & arm energy regeneration circuit	●
Boom holding valve	●
Swing lock switch	●
Swing motor reverse prevention valve	●
Working mode selection system	●

### Safety equipment

Battery disconnect switch	●
Emergency escape cab rear window	●
Emergency escape hammer	●
Large side-view mirrors (L.H. and R.H.)	●
LED lights	●
Lock lever	●
Motor shutdown secondary switch	●
Rear reflector	●
ROPS cab (ISO 12117-2)	●
Seat belt retractable	●
Sidewise mirrors	●
Travel alarm	●

### Operator environment

Ashtray / cigarette lighter	●
Automatic air conditioner	●
Cup holder	●
Defroster	●
Drink box	●
Foot rest	●
Large multi-lingual high resolution LCD monitor	●
Luggage box	●
Magazine box	●
Multifunction audio	●
Pressurized cab	●
Remote intermittent wiper with windshield washer	●
Room lights	●
Suspension seat	●
Travel pedal	●
USB port for charging	●
Washable floor mat	●

### Others

Hydraulic filter	●
KOMTRAX	●
KomVision	●
Quick-jointed pilot hose	●
Work equipment lubrication time interval extension bush	●

● Standard equipment





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## For more information:

Australia - Ph: 1300 566 287 | Web: [komatsu.com.au](https://www.komatsu.com.au)

New Zealand - Ph: 0800 566 2878 | Web: [komatsu.co.nz](https://www.komatsu.co.nz)

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