

ZAXIS Electric series

HITACHI

Reliable solutions

ZAXIS
ELECTRIC
55 U



Powering a sustainable future



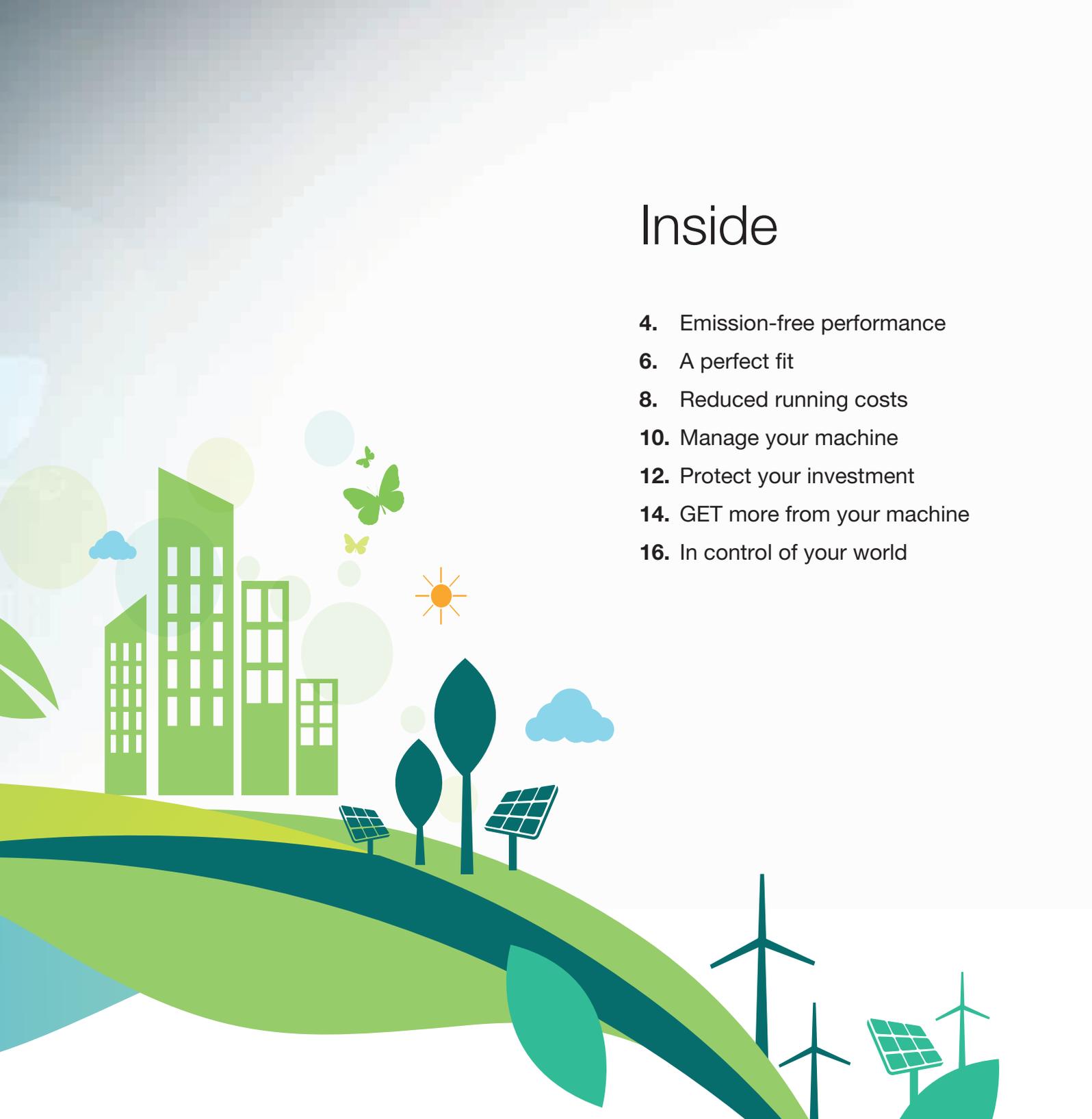
In response to the growing demand for electric equipment to work on low or zero-emission job sites, Hitachi presents its new five-tonne battery-powered excavator. The ZX55U-6EB is the first Hitachi-branded model in this class, and follows on from the success of the eight-tonne ZE85 electric excavator*. It draws on the company's rich heritage as an electrical company, and its experience and expertise

in producing wired ultra-large excavators to mines around the world.

The new compact model will help you to work quietly and productively, operate effortlessly in small spaces, and perform efficiently with fewer maintenance requirements and less downtime than conventional diesel models.

Inside

- 4. Emission-free performance
- 6. A perfect fit
- 8. Reduced running costs
- 10. Manage your machine
- 12. Protect your investment
- 14. GET more from your machine
- 16. In control of your world



With the ZX55U-6EB, we take one step further on the road to zero emissions – an irreversible path that must lead to sustainable, low-carbon societies. And it underlines our commitment to minimising the environmental impact of our equipment and creating a sustainable future for all.

* The ZE85 was developed by EAC (European Application Center GmbH), now known as Kenki Technology Group GmbH (KTEG), a joint venture between Hitachi Construction Machinery Co., Ltd and Kiesel Technology GmbH.



Emission-free performance

Our industry is changing, and quickly, as it moves towards zero-emission job sites. Your construction equipment not only has to be compliant with tougher environmental legislations, but also capable of performing productively to get the job done.

You can work continuously throughout the day with the new ZX55U-6EB, with a combination of battery-powered operation, using 39kWh lithium-ion batteries, and wired operation while charging from a CEE 400VAC 3-phase power source. The secure connection of the cable during wired operation is monitored by the rear camera for additional safety and peace of mind.

Low-noise operation

You can also work more quietly and with greater flexibility too. Reduced external sound levels enable the machine to operate extensively in residential urban areas with minimal noise disturbance to surrounding homes and businesses.

The noise within the cab is also reduced, providing operators with a comfortable working environment, in which air conditioning is included as standard.

Rated power	33 kW
Operating weight	5,330 kg
Battery capacity	39.4 kWh
Onboard charger output	22 kW
Charging inlet	CEE 400VAC 3-phase
Bucket ISO heaped	0.14 m ³
Sound level in cab (according to ISO 6396)	LpA 70 dB(A)
External sound level (according to ISO 6395 and EU Directive 2000/14/EC)	LwA 91 dB(A)





A perfect fit

You shouldn't have to compromise on machine size to comply with zero-emission regulations. With the new ZX55U-6EB, you don't have to. Inheriting the short tail swing of the diesel-powered ZX55U-6 model, it operates with exceptional manoeuvrability in confined areas.

Due to its compact size and zero-emission performance, the new model can work on a broad range of projects and locations, including urban construction, residential building, and waste material handling. Such versatility will boost utilisation and rental rates, helping to boost profitability for your business.

Overall length	5,520 mm
Overall width	2,000 mm
Overall height	2,530 mm
Rear-end swing radius (battery/wired)	1,360/1,860 mm

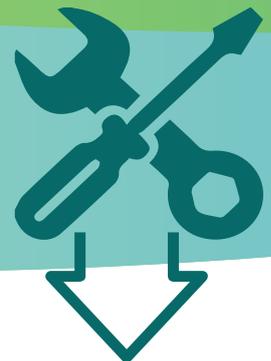


Reduced running costs

Look forward to lower service and maintenance costs, and minimal downtime, with the new ZX55U-6EB. Compared to a diesel engine, electric batteries have fewer consumable parts requiring regular replacement. Without the use of engine oil, for example, servicing at every regular intervals of 500 hours is simply not required.

With fewer serviceable components, you'll spend less time on daily inspections, and more time on the job at hand.

Battery-powered excavators such as the ZX55U-6EB are also proven to be more reliable. This brings you maximum uptime and ultimate peace of mind to ensure your projects are completed successfully on schedule.







Manage your machine

Hitachi offers a wide range of after-sales services to help you feel in total control of your fleet and workload. These initiatives give you access to vital data and tools to manage your machine.

Remote monitoring systems Owner's Site and ConSite send operational data daily via GPRS or satellite from your excavator to www.globaleservice.com. This includes: ratios of operating hours to enhance efficiency; battery state

of charge; and machine location for planning purposes. ConSite summarises the information in a monthly email.

The ConSite Pocket App sends you real-time alerts for issues arising with your machine. You'll receive recommendations on what to do and step-by-step help guides. The app also enables you to see the location of your fleet.



Protect your investment

If your machine will be working in severe conditions, or you want to minimise repair costs, you can take advantage of a unique extended warranty programme called HELP (Hitachi Extended Life Program) and comprehensive service contracts. These can help to optimise performance, reduce downtime and ensure a higher resale value.

We apply the same technological expertise to our wide range of high-quality parts as we do our machines. As a result, you can minimise unscheduled downtime and ensure maximum availability.

The parts range includes Hitachi Genuine Parts, Performance Parts, filters, undercarriages, and remanufactured

components. We also offer ground engaging tools and buckets, which have been manufactured to the same exacting standards.

As your business grows, you may need to extend your fleet to meet the demands of new contracts. Why not try before you buy with the Hitachi Premium Rental programme? This gives you immediate access to the latest Hitachi models for a period of one month to a year.

Along with the reliability, quality and service you would expect from the Hitachi brand, Hitachi Premium Rental offers flexible contracts and fixed costs that make it easier for you to budget.







GET more from your machine

Designed to work in perfect harmony with your machine, Hitachi buckets and ground engaging tools (GET) will increase your profit by maximising productivity and uptime. Manufactured to the same high standards as all Hitachi construction equipment, they offer unrivalled reliability and exceptional performance.

Buckets

You can increase the versatility of your excavator by choosing the right bucket for the job. For loading light materials or heavy-duty work, Hitachi buckets can be customised to meet your needs. You have a wide range of options to choose

from – including digging buckets and ditch-cleaning buckets in GD and HD versions, with different capacities and widths – and quick coupler connections such as CW, pin grabber and S-coupling are also available.

Ground engaging tools

You can enhance the digging power and productivity of your excavator with Hitachi GET. Quick and safe to install and replace, they fit precisely to your attachments and can be tailored to suit the task. Using Hitachi GET can reduce your maintenance costs and downtime, lower energy consumption and enhance the overall performance of your machine.



In control of your world

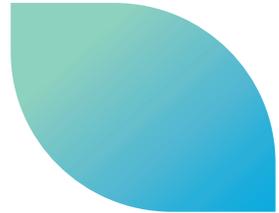
When you take delivery of a Hitachi machine, you become part of the latest generation of a global family. With a 50-year heritage in designing hydraulic excavators, and a reputation as the industry's leading mining machine manufacturer, the Hitachi network will give you access to a range of exceptional construction equipment.

Hitachi excavators, wheel loaders, rigid dump trucks and special application machines incorporate advanced

technology and pioneering expertise. Made at state-of-the-art facilities, they are built to the highest standards. You'll also benefit from market-leading services and initiatives, such as Premium Rental and Premium Used, which have been created to enhance your experience as a Hitachi customer.

Whatever vision you wish to create, Hitachi has the product, people, solutions and services you need to make it become a reality – and empower you to take control of your world.





SPECIFICATIONS

ELECTRICAL SYSTEM	
Battery Type	Lithium-ion
Charging Time	1.25 hours
Battery Voltage	400 V
Battery Capacity (full package)	39.4 kWh
	112.6 Ah
Indicative Runtime (depending on application)	2 hours
Auxiliary Battery Voltage	12 V
Auxiliary Battery Capacity	24 Ah

ELECTRICAL MOTOR	
Motor	GVM210-150G
Rated power ISO 14396 : 2002	33.0 kW at 2 400 min ⁻¹
Motor torque (peak)	258 Nm
Motor torque (continuous)	122 Nm
Operating mode max. / Eco mode	2 200 r/min
Operating mode max. / Power mode	2 400 r/min

HYDRAULIC SYSTEM				
Hydraulic Pumps				
Main pumps	1 variable displacement axial piston pump			
Maximum oil flow	1 x 120 L/min			
Pilot pump	1 gear pump			
Maximum oil flow	12.0 L/min			
Hydraulic Motors				
Travel	2 variable displacement axial piston motors			
Swing	1 axial piston motor			
Relief Valve Settings				
Implement circuit	24.5 MPa (250 kgf/cm ²)			
Swing circuit	18.3 MPa (187 kgf/cm ²)			
Travel circuit	24.5 MPa (250 kgf/cm ²)			
Pilot circuit	5.9 MPa (60.2 kgf/cm ²)			
Hydraulic Cylinders				
	Quantity	Bore	Rod diameter	Stroke
Boom	1	95 mm	55 mm	699 mm
Arm	1	80 mm	50 mm	731 mm
Bucket	1	75 mm	45 mm	551 mm
Blade	1	105 mm	50 mm	140 mm
Boom swing	1	90 mm	50 mm	666 mm

UPPER STRUCTURE	
Revolving Frame	
D-section frame for resistance to deformation.	
Swing Device	
Axial piston motor with planetary reduction gear is bathed in oil. Swing circle is single-row. Swing parking brake is spring-set/hydraulic-released disc type.	
Swing speed	9.0 min ⁻¹ (rpm)
Swing torque	8.6 kNm (877 kgfm)
Operator's Cab	
Independent spacious cab, 1 049 mm wide by 1 611 mm high, conforming to ISO* Standards. Reinforced glass windows on 4 sides for visibility. Front windows (upper and lower) can be opened. Reclining seat. * International Organization for Standardization	

UNDERCARRIAGE	
Tracks	
Tractor-type undercarriage. Welded track frame using selected materials. Side frame welded to track frame.	
Numbers of Rollers and Shoes on Each Side	
Upper rollers	1
Lower rollers	4
Travel Device	
Each track driven by 2-speed axial piston motor. Parking brake is spring-set/hydraulic-released disc type. Automatic transmission system: High-Low.	
Travel speeds	High : 0 to 4.2 km/h
	Low : 0 to 2.5 km/h
Maximum traction force	38.3 kN (3 905 kgf)
Gradeability	58 % (30 degree) continuous

SERVICE REFILL CAPACITIES	
Motor coolant	4.1 L
Travel device (each side)	0.9 L
Hydraulic system	66.0 L
Hydraulic oil tank	42.0 L

ENVIRONMENT	
Sounds Level	
Sound level in cab according to ISO 6396 : 2008	LpA 70 dB(A)
External sound level according to ISO 6395 : 2008 and EU Directive 2000/14/EC	LwA 91 dB(A)

WEIGHTS AND GROUND PRESSURE

Operating Weight and Ground Pressure

			ZX55U-6EB	
Shoe type	Shoe width (mm)	Arm length (m)	kg	kPa (kgf/cm ²)
Rubber shoe	400	1.69	5 330	29 (0.30)

Including 0.14 m³ (ISO 7451 : 2007), bucket weight (115 kg).

BUCKET AND ARM DIGGING FORCE

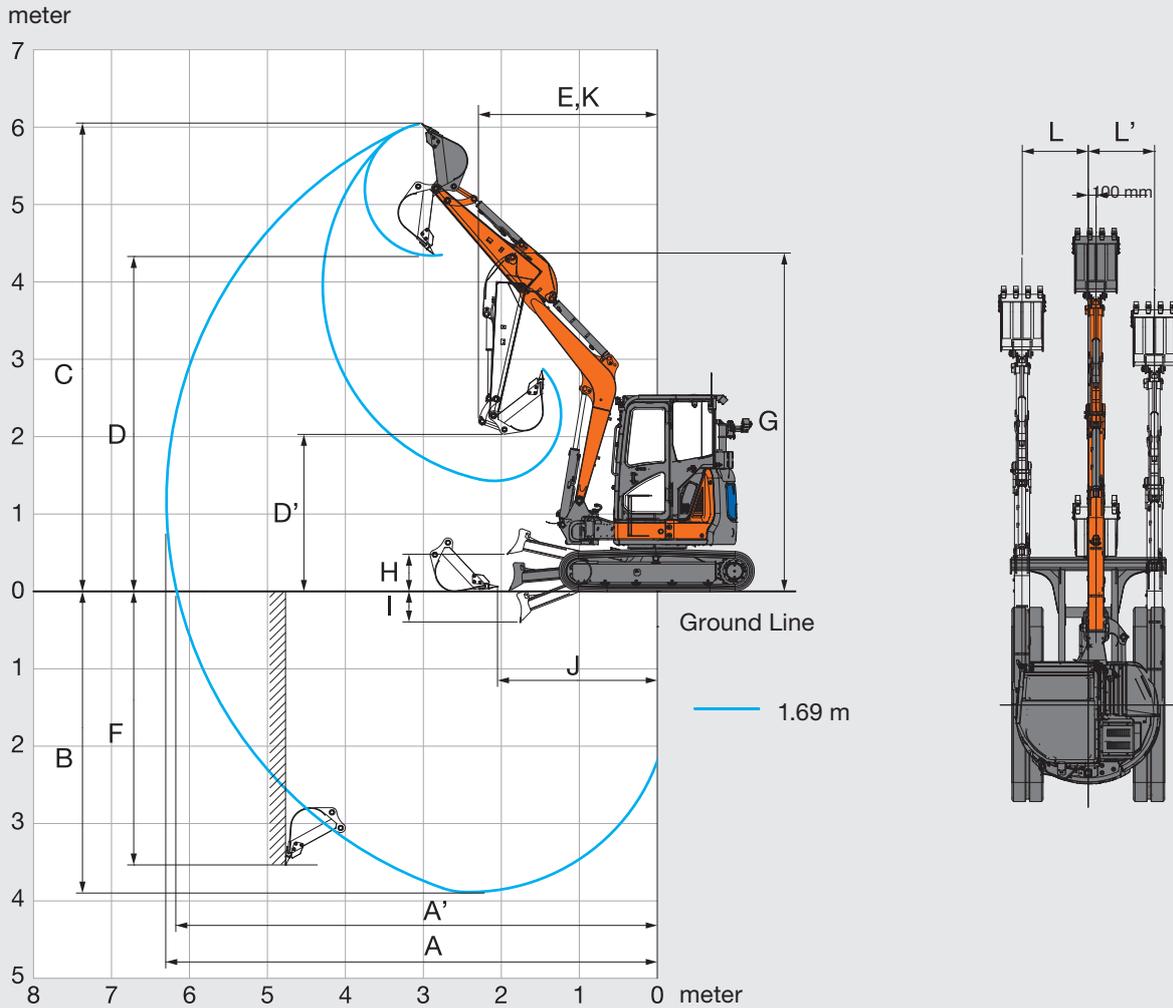
Unit: kN(kgf)

		ZX55U-6EB
Arm length		1.69 m
Bucket digging force* ISO 6015 : 2006		36.9 (3 760)
Bucket digging force SAE : PCSA		32.1 (3 270)
Arm crowd force* ISO 6015 : 2006		21.0 (2 140)
Arm crowd force SAE : PCSA		20.1 (2 050)

* At power boost

SPECIFICATIONS

WORKING RANGES

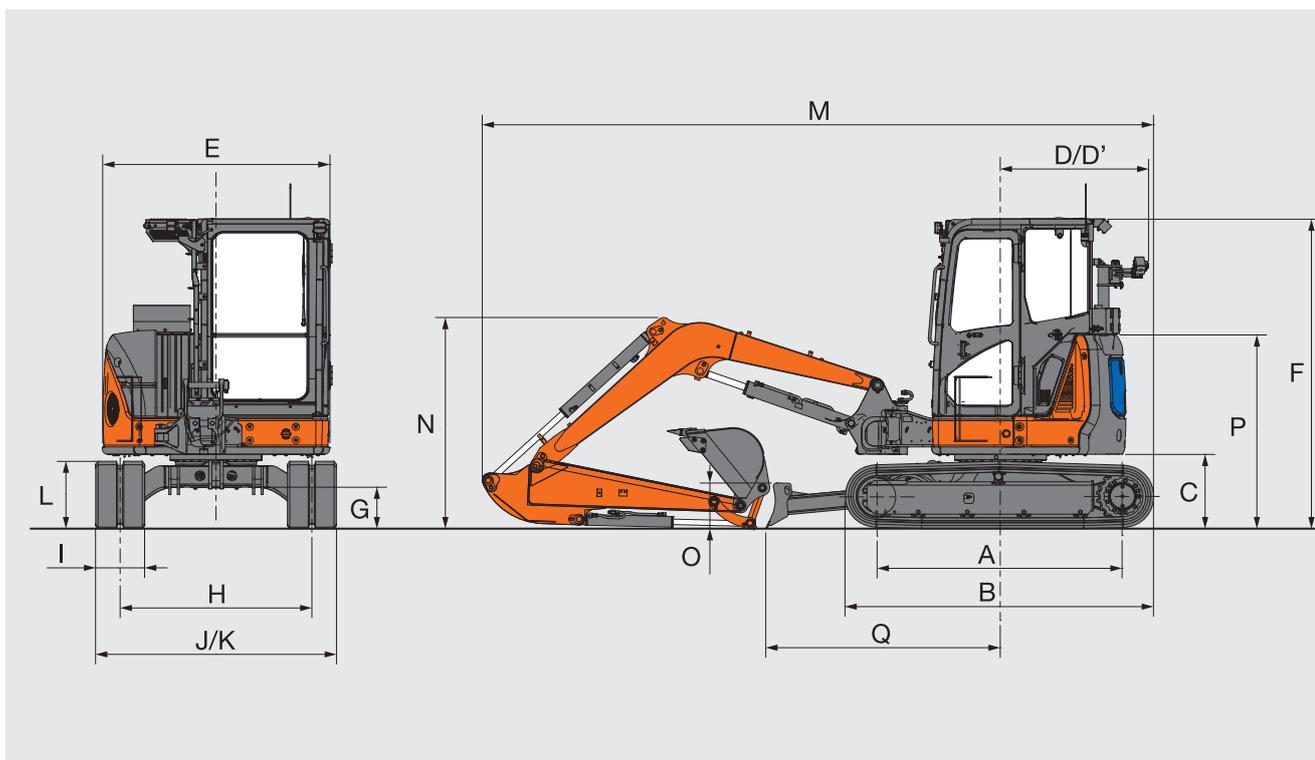


Unit: mm

	ZX55U-6EB
Arm length	1.69 m
A Max. digging reach	6 260
A' Max. digging reach (on ground)	6 130
B Max. digging depth	3 830
C Max. cutting height	6 000
D Max. dumping height	4 310
D' Min. dumping height	1 430
E Min. swing radius	2 300
F Max. vertical wall digging depth	3 140
G Front height at Min. swing radius	4 380
H Blade bottom highest position above ground	480
I Blade bottom lowest position above ground	395
J Min. level crowding distance	1 880
K Working radius at Min. swing radius (Max. boom-swing angle)	1 810
L/L' Offset distance (Max. boom-swing angle)	690 / 850
Max. boom-swing angle (deg.)	80 / 60

Excluding track shoe lug

DIMENSIONS



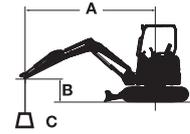
Unit: mm

	ZX55U-6EB
A Distance between tumblers	2 000
B Undercarriage length	2 500
*C Counterweight clearance	610
D Rear-end swing radius; when the pole is retracted	1 360
D Rear-end swing radius; when the pole slides (maximum rear-end)	1 860
D' Rear end length; when the pole is retracted	1 360
D' Rear end length; when the pole slides (maximum rear-end)	1 860
E Overall width of upperstructure	1 850
F Overall height of cab	2 530
*G Min. ground clearance	340
H Track gauge	1 600
I Track shoe width	400
J Undercarriage width	2 000
K Overall width (Blade width)	2 000
L Track height	550
M Overall length with Arm 1.69 m	5 520
*N Overall height of boom with Arm 1.69 m	1 880
O Blade height	375
P Battery cover-height	1 590
Q Distance between the front end of blade and the axis of rotation	1 910

Excluding track shoe lug

MACHINE CAPACITIES

- Notes:
1. Ratings are based on ISO 10567 : 2007.
 2. Machine capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.
 3. The load point is the center-line of the bucket pivot mounting pin on the arm.
 4. *Indicates load limited by hydraulic capacity.
 5. 0 m = Ground.



- A: Load radius
B: Load point height
C: Machine capacity

To determine lifting capacities, apply "Rating over-side or 360 degrees" machine capacities from table with "Blade above Ground" and deduct weight of installed attachment and quick hitch.

ZX55U-6EB CAB VERSION, BLADE ABOVE GROUND

Rating over-front Rating over-side or 360 degrees Unit : 1 000 kg

Conditions	Load point height m	Load radius										At max. reach		
		1.0 m		2.0 m		3.0 m		4.0 m		5.0 m				meter
Boom 2.85 m Arm 1.69 m Rubber shoe 400 mm	4.0							*0.99	0.96			*0.78	*0.78	4.40
	3.0							*1.03	0.95	0.79	0.66	*0.72	0.66	5.03
	2.0					*1.61	1.42	1.10	0.92	0.78	0.65	0.70	0.59	5.34
	1.0					1.61	1.32	1.05	0.88	0.76	0.64	0.68	0.57	5.41
	0 (Ground)					1.56	1.27	1.02	0.85	0.75	0.62	0.70	0.58	5.26
	-1.0	*1.81	*1.81	*2.28	*2.28	1.56	1.26	1.01	0.84			0.78	0.65	4.84
	-2.0	*2.82	*2.82	*3.25	2.49	1.58	1.28	1.03	0.86			1.01	0.84	4.07

ZX55U-6EB CAB VERSION, BLADE ABOVE GROUND

Rating over-front Rating over-side or 360 degrees Unit : 1 000 kg

Conditions	Load point height m	Load radius										At max. reach		
		1.0 m		2.0 m		3.0 m		4.0 m		5.0 m				meter
Boom 2.85 m Arm 1.69 m Rubber shoe 400 mm	4.0							*0.99	0.96			*0.78	*0.78	4.40
	3.0							*1.03	0.95	*0.80	0.66	*0.72	0.66	5.03
	2.0					*1.61	1.42	1.24	0.92	*1.09	0.65	*0.72	0.59	5.34
	1.0					*2.26	1.32	*1.49	0.88	*1.18	0.64	*0.76	0.57	5.41
	0 (Ground)					*2.52	1.27	*1.64	0.85	*1.23	0.62	*0.87	0.58	5.26
	-1.0	*1.81	*1.81	*2.28	*2.28	*2.42	1.26	*1.62	0.84			*1.08	0.65	4.84
	-2.0	*2.82	*2.82	*3.25	2.49	*1.96	1.28	*1.23	0.86			*1.18	0.84	4.07

EQUIPMENT

● : Standard equipment

HYDRAULIC SYSTEM	ZX55U-6EB
Boom anti-drift valve	●
Hydraulic pilot type control levers	●
Pilot filter	●
Suction filter	●
Swing parking brake	●
Travel parking brake	●
Two-speed travel system	●
Valve for extra piping	●

ELECTRIC CONTROL SYSTEM	ZX55U-6EB
12V auxiliary battery	●
400V AC charging	●
400V lithium-ion battery	●

CAB	ZX55U-6EB
Air conditioner*	●
AM/FM radio	●
Anti-slip plate	●
Armrest	●
Defroster	●
Drink holder	●
Electric horn	●
Floor mat	●
Retractable seat belt	●
ROPS/OPG cab	●
Spare power supply 12V (inside)	●
Spare power supply 12V (outside)	●
Suspension seat with reclining (fabric)	●
Window washer	●
Wiper	●

LIGHTS	ZX55U-6EB
3 working LED lights (Boom x 1, cab roof front x 2)	●

UPPER STRUCTURE	ZX55U-6EB
Acoustic working indicator	●
Battery disconnect switch	●
Charging cable support	●
Operating beacon	●
Operation light	●
Rear camera for cable confirmation	●

UNDERCARRIAGE	ZX55U-6EB
400 mm rubber shoe	●

FRONT ATTACHMENTS	ZX55U-6EB
Extra piping	●
HN bushing	●
Hose rupture valve for arm	●
Hose rupture valve for boom	●
1.69 m arm	●

Standard and optional equipment may vary by country, so please consult your Hitachi dealer for details.

* Contains fluorinated greenhouse gases, Refrigerant type: HFC-134a, GWP: 1430, Amount: 0.65 kg, CO₂e: 0.93 ton.

Prior to operating this machine, including satellite communication system, in a country other than a country of its intended use, it may be necessary to make modifications to it so that it complies with the local regulatory standards (including safety standards) and legal requirements of that particular country. Please do not export or operate this machine outside the country of its intended use until such compliance has been confirmed. Please contact your Hitachi dealer in case of questions about compliance.

These specifications are subject to change without notice. Illustrations and photos show the standard models, and may or may not include optional equipment, accessories, and all standard equipment with some differences in colour and features. Before use, read and understand the Operator's Manual for proper operation.