

HITACHI

Reliable solutions

ZE85

THE GREEN MACHINE



Operating Weight - 8,700kg
Onboard Charging Power - 44kW
Engine Rated Power - 40kW

ZE85

THE GREEN MACHINE

ZECOM (Zero-Emission Construction Machinery) excavators are Hitachi crawler models fitted with battery-driven electric drive-trains. They are emission-free and extremely quiet, making them ideal for indoor operation, residential environments or areas where the usage of combustion engines is legally restricted. ZECOM excavators are equipped with high-quality battery systems that allow for rapid charging, and ensure longevity, thermal conditioning and machine reliability.



Specifications*

Engine power | 40 kW
Onboard charging power | 44 kW
CCS2 rapid charging
Charging duration CEE63 | 105 min
Charging duration CCS2 | 45 min
Runtime | 4 h
Weight | approx. 8,700 kg

*with maximum configuration

CUSTOMER BENEFITS

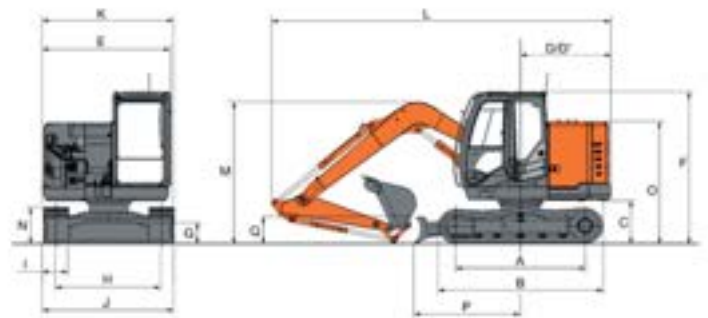
- › Emission-free & efficient
- › Ready for rapid charging: enables high productivity.
- › Quality: all components are tested under site conditions and ensure the highest possible availability.
- › Powerful: the electrical drive is more than a match for diesel engines.
- › Reduced maintenance: the electric motors are maintenance-free.
- › Available: The battery system is both cooled and heated to ensure maximum performance and durability.
- › Intuitive and user-friendly: the controls provide a comprehensive overview of the machine's status.

ZE85

FOR A CLEAN JOB-SITE

Based on the Hitachi ZX85US, the ZE85 offers a run time of four hours in its maximum configuration by which the capacity requirements can be customised with several built-in battery modules. The charging time can be reduced to 35 - 45 minutes when using a CCS2 interface of up to 150 kW to charge the battery system. This means it can be charged during break times on the job site.

In addition, to ensure continuous operation, it is also possible to charge the machine with 400 V CEE grid during break times as well as during operation. The ZE85 offers the same high levels of performance and operator comfort as the ZX85US. The cab is air-conditioned and the intuitive controls provide a complete overview of the machine's status. Just like the ZX85US base machine the ZE85 is suitable to use a 0.28 m³ bucket (ISO heaped) as well as tools for the 8-9 to class.



Dimension	Title	ZX85US-6	ZE85
A	Distance between tumblers	2,290 mm	→
B	Undercarriage length	2,920 mm	→
C	Counterweight clearance	730 mm	→
D / D'	Rear-end swing radius / Rear-end length	1,290 mm	1,600 mm
E	Overall width of upperstructure	2,260 mm	→
F	Overall height of cab	2,690 mm	→
G	Min. ground clearance	360 mm	→
H	Track gauge	1,870 mm	→
I	Track shoe width	450 mm	→
J	Undercarriage width	2,320 mm	→
K	Overall width	2,320 mm	→
L	Overall length with 2.12 m arm	6,370 mm	6,680 mm
M	Overall height of boom with 2.12 m arm	2,830 mm	→
N	Track height	650 mm	→
O	(Engine) cover-height	1,850 mm	2,100 mm
P	Horizontal distance to blade	1,890 mm	→
Q	Blade height	480 mm	→

	Engine Power	Battery Capacity	On-Board Charging Power	On-Board Charging Duration	CCS2 Rapid Charging	CCS2 Charging Duration	Runtime	Weight
Maximum configuration	40 kW	100 kW	44 kW	1.7 h	available	45 min	4 h	ca. 8,700 kg
Half charging capacity	↓	↓	22 kW	3.5 h	↓	↓	↓	↓
Half battery capacity	↓	50 kW	↓	1.7 h	↓	↓	2 h	↓

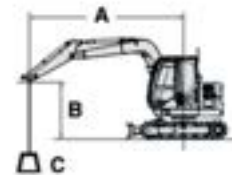
ZE85

MACHINE CAPACITIES

Notes:

1. Ratings are based on ISO 10567.
2. Lifting 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

To determine the lifting capacities, apply "Rating over side or 360 degrees" machine capacities from the table with "blade above ground" and deduct the weight of the installed attachment and the quick coupler.

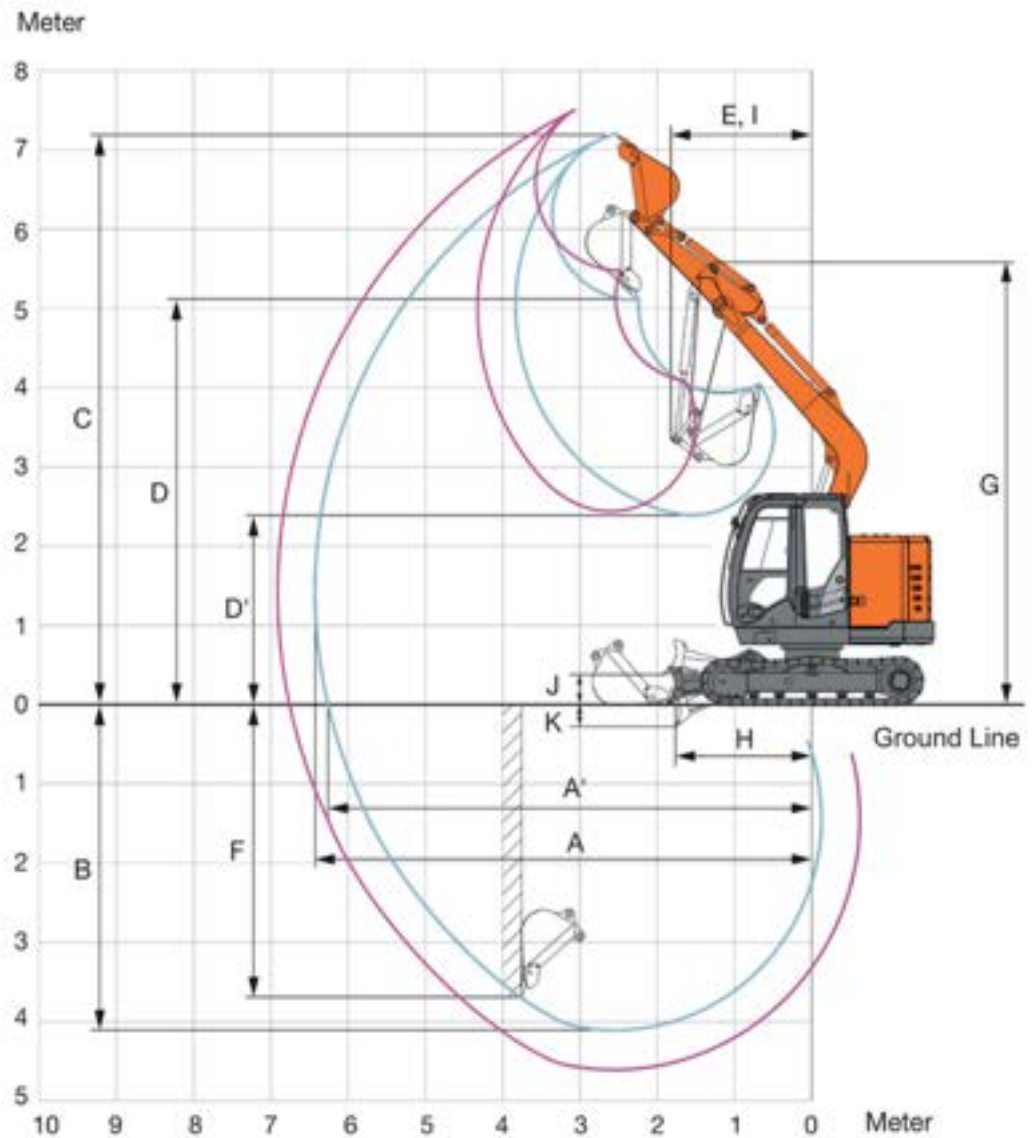


A: Load radius
B: Load point height
C: Lifting capacity

ZE85, Monoblock boom, blade above ground		Rating over front		Rating over side or 360 degrees														
Conditions	Load point height in m	Load radius										at max. reach						
		1.0 m		2.0 m		3.0 m		4.0 m		5.0 m		Rating over front	Rating over side or 360 degrees	Meter				
Boom 3.72 m	5											*1,400	*1,400			*1,360	*1,360	4.6
Arm 2.32 m	4											*1,450	*1,450	*1,520	1,290	*1,270	1,190	5.25
Grouser shoe 450 mm	3			*2,320	*2,320	*1,880	*1,880	*1,680	*1,680	1,570	1,270	*1,260	1,040	5.64				
	2					*2,580	*2,580	*2,010	1,730	1,530	1,230	1,270	970	5.83				
	1					*3,220	2,510	2,080	1,650	1,490	1,190	1,190	950	5.84				
	0 (Ground)					3,190	2,420	2,020	1,590	1,460	1,160	1,220	980	5.67				
Lifting capacity in kg	-1.0	*2,290	*2,290	*3,560	*3,560	3,70	2,380	1,990	1,560	1,450	1,150	1,340	1,060	5.31				
	-2.0	*3,710	*3,710	*5,040	4,890	3,100	2,390	1,990	1,570			1,590	1,260	4.7				
	-3.0			*4,100	*4,100	*2,840	2,450						*2,120	1,790	3.73			

ZE85, Monoblock boom, blade on ground		Rating over front		Rating over side or 360 degrees														
Conditions	Load point height in m	Load radius										at max. reach						
		1.0 m		2.0 m		3.0 m		4.0 m		5.0 m		Rating over front	Rating over side or 360 degrees	Meter				
Boom 3.72 m	5											*1,400	*1,400			*1,360	*1,360	4.6
Arm 2.32 m	4											*1,450	*1,450	*1,520	1,290	*1,270	1,190	5.25
Grouser shoe 450 mm	3			*2,320	*2,320	*1,880	*1,880	*1,680	*1,680	*1,600	1,270	*1,260	1,040	5.64				
	2					*2,580	*2,580	*2,010	1,730	*1,360	1,230	*1,290	970	5.83				
	1					*3,220	2,510	*2,350	1,650	*1,590	1,190	*1,370	950	5.84				
	0 (Ground)					*3,570	2,420	*2,590	1,590	*2,060	1,160	*1,510	980	5.67				
Lifting capacity in kg	-1.0	*2,290	*2,290	*3,560	*3,560	*3,640	2,380	*2,660	1,560	*2,080	1,150	*1,770	1,060	5.31				
	-2.0	*3,710	*3,710	*5,040	4,890	*5,440	2,390	*2,530	1,570			*2,020	1,260	4.7				
	-3.0			*4,100	*4,100	*2,840	2,450						*2,120	1,790	3.73			

ZE85 WORKING RANGE



2.12 m arm length (relating to the purple curve)		Dimensions
A	Max. digging reach	6,920 mm
A'	Max. digging reach (on ground)	6,760 mm
B	Max. digging depth	4,610 mm
C	Max. cutting height	7,610 mm
D	Max. dumping height	5,510 mm
D'	Min. dumping height	2,410 mm
E	Min. swing radius	2,170 mm
F	Max. vertical wall	4,220 mm
G	Front height at min. swing radius	5,610 mm
H	Min. level crowding distance	1,670 mm
I	Working radius at min. swing radius (max. boom-swing angle)	-
J	Blade bottom highest position above ground	360 mm
K	Blade bottom lowest position above ground	300 mm
excluding track shoe lug		

POWERTREE

MOBILE PLUG AND PLAY QUICK CHARGING STATION FOR OFF-ROAD USE



CUSTOMER BENEFITS

Modular concept:

- > Storage capacity configurable according to intended use
- > CCS2 DC fast charging with more than 800 volts

Plug & Play:

- > No specialist electricians required for commissioning
- > Mobile system with short set-up and dismantling times
- > „Off-Grid“ stand-alone solution: can also be operated without a mains connection

Suitable for construction sites:

- > Robust design in 10ft sea container
- > Quick and easy to transport
- > Air-conditioned buffer storage: can be used regardless of weather conditions

Extended off-road application possibilities:

- > Can be used on any construction site

Worldwide service network:

- > Established Deutz service network

Specifications

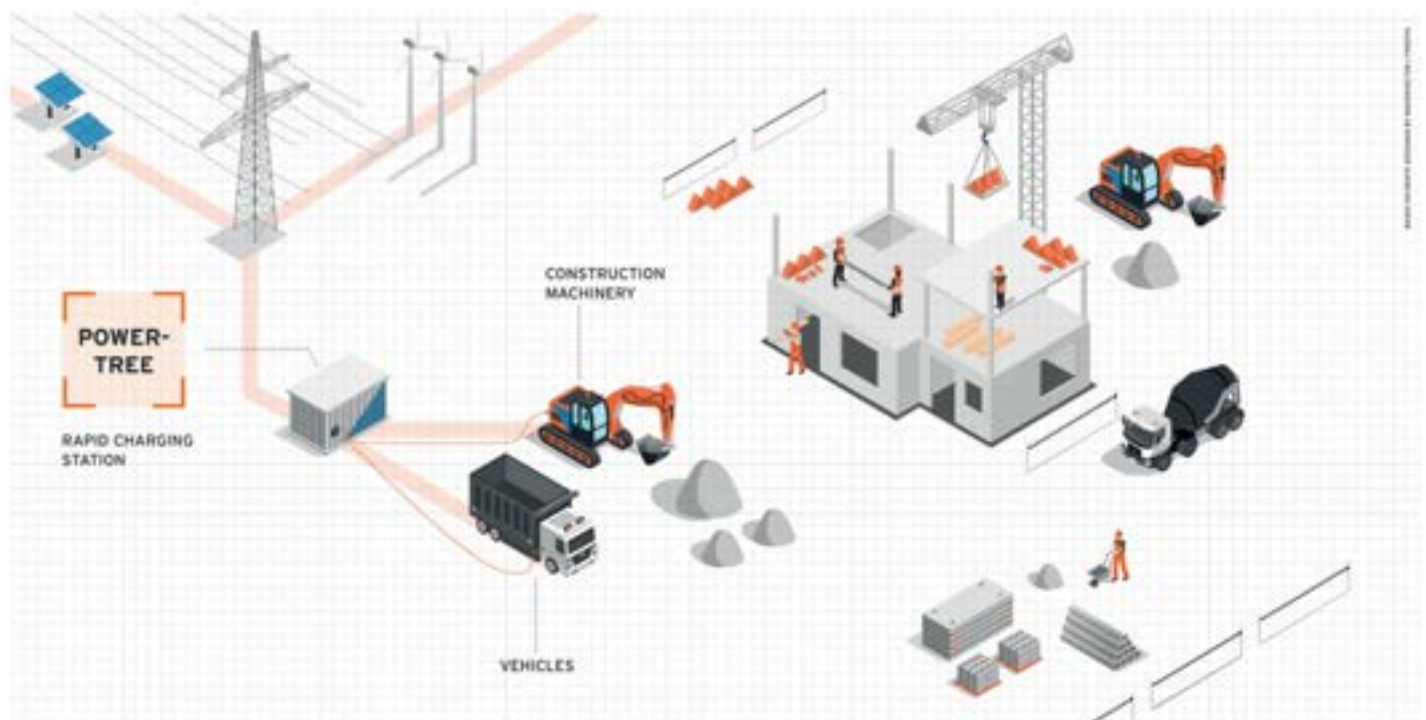
Battery / storage capacity	126 kWh
Charging points	1 x CCS
Main power supply (DC fast charging)	Up to 150kW charging power at 800V
Charging standard	CCS2
Auxiliary power supply (AC)	400V / 32A (22 kW) Output
Operating modes	On-grid (grid connection): 2 charges per day Off-grid (island operation): 1 charge per day
Charging connection vs. mains supply	400V / 63A (44 kW) Input
Dimensions (LxWxH)	3,000 x 2,450 x 2,900 mm
Weight	3,500 kg
Lifetime	10 Years

POWERTREE

THINKING ELECTROMOBILITY THROUGH TO THE END

Electromobility is also gaining ground on construction sites. Just as the electrically powered car is now part of our street scene, the electrically powered construction machine will be commonplace on the construction site in the future. Not only since the C40 initiative have the requirements of cities and municipalities been moving in the direction of emission-free construction machinery, especially in inner cities. In addition to the elimination of exhaust emissions, the significantly reduced noise pollution during machine operation is a major plus point, especially in inner-city areas.

At the same time, the question of how the batteries of these machines can be easily recharged without interrupting continuous operation poses new challenges for contractors and manufacturers. Because only when this hurdle is also overcome will electrically powered construction machines be a real alternative to their diesel-powered predecessors. In addition to directly installed on-board chargers, some construction machines already offer the option of fast charging, which allows the battery to be charged in a very short time. However, on very few construction sites today is a corresponding charging infrastructure available, because high electrical power is needed to charge large battery storage units in the machines. This has so far been a major obstacle to the spread of the technology in the market.



With the KTEG Powertree, a solution suitable for construction sites is now available for the first time that can charge a wide range of battery-electric construction machines and construction site vehicles in the shortest possible time. It is a mobile buffer battery with a quick charging station for construction site use in the guise of a robust and maximally flexible 10-foot container that is suitable for any off-road application. Thanks to the well thought-out concept, the KTEG Powertree can be put into operation on any construction site in less than 10 minutes without the need for specially trained personnel. Thus, the 100 kWh traction battery of the ZE85 is fully charged within 45 minutes, so that a conventional break time at noon is completely sufficient.