

V O L V O



Volvo Compact Excavators 1.79-2.06 t

# EC18 ELECTRIC, ECR18 ELECTRIC

Volvo Construction Equipment



# Welcome to our world

Welcome to a world of industry leading machinery. A world where imagination, hard work and technological innovation will lead the way towards developing a future which is cleaner, smarter, and more connected. A world supported by the enduring values of the Volvo Group. A world of stability, sustainability and innovation. A world which we put our customers at the heart of.

Welcome to the world of Volvo Construction Equipment – we think you're going to like it here.

## Small machines, big results

With decades of experience in the design and manufacture of compact excavators and wheel loaders, our range of compact machinery is designed with customer success in mind. Built from the same DNA as large Volvo machinery, our compact range sets the standard for efficiency performance and uptime – complemented by an extensive range of Volvo attachments for maximum versatility.

Building on our proud history, the Volvo Concept Lab continues to create cutting-edge ideas and innovative concepts – such as our award-winning electric compact machines – to ensure we offer our customers machines which deliver big results long into the future.



## Solutions for you

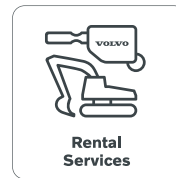
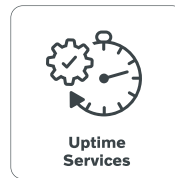
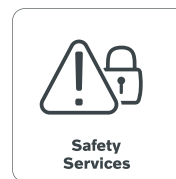
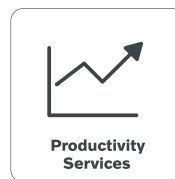
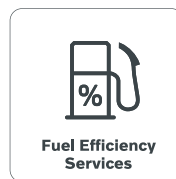
Our industry leading machines are just the start of your relationship with Volvo. As your partner, we have developed an extensive range of additional solutions to help you improve uptime, boost productivity and reduce costs.

### Designed for your business

Structured across nine blocks, our portfolio of products and services are designed to complement your machine's performance and boost your profitability. Simply put, we offer some of the best guarantees, warranties and technological solutions in the industry today.

### There when you need us

Whether you're buying new or used, our global network of dealers and technicians offer around-the-clock support, including machine monitoring and world-class parts availability. It's the basis of everything offered by Volvo Services, so you can be confident we've got you covered right from the start.



# BUILDING TOMORROW



ECR18

VOLVO

ELECTRIC





# TAKE YOUR BUSINESS TO NEW PLACES

Building on the success of the ECR25 Electric and expanding on the proven technology of their diesel counterparts, the introduction of the EC18 Electric and ECR18 Electric Compact Excavators opens up a new category within the Volvo electric machinery portfolio.

# Work anytime, anywhere

The EC18 Electric and ECR18 Electric boast both low noise and zero-tailpipe emissions, creating new opportunities for your business. Operate in noise sensitive areas and out of standard hours, as well as on low-carbon projects and indoors, without the need for costly fume extraction systems or being restricted by operator time limits.



## Create a better work environment

Operators will experience the world-class operator environment for which Volvo is renowned, including large entrance, superior visibility and comfort levels, further enhanced thanks to a dramatic reduction in noise, vibration and heat, and no exhaust fumes. This all contributes towards a quieter and cleaner jobsite, improving communication and working conditions for all personnel.

## Small but tough

With a variable undercarriage that retracts to less than 1m and expands up to 1.35m, combined with a reduced machine height to less than 2.35m, you can count on the compact excavator to deliver superior performance when working in confined spaces. The machine design ensures that the right frame corner, swing post and cylinder stay within the tracks' width, resulting in maximum visibility and a reduced risk of machine damage when working alongside obstacles.

### **Unrivalled operator experience**

The Volvo Electric Compact Excavators provide everything you would expect from their diesel counterparts, including heated cab (EC18 Electric only), ergonomic and intuitive controls, unrivalled combination of movements as well as best-in-class stability.

This is further enhanced by a number of features unique to the electric concept more responsive hydraulics due to the immediate torque, and a range of customizable settings to adapt machine behavior according to the type of work and operator preference. Auxiliary hydraulic flows and joystick responsiveness are easily adjusted from the user-friendly interface.









# MAKE THE MOST OF EVERY CHARGE

The EC18 Electric can deliver up to 6 hours of work per charge depending on the environment and task at hand. For example, 4 hours 30 minutes of non-stop work could be expected when grading with a ditching bucket, and 2 hours when trenching.

The ECR18 Electric can deliver up to 5 hours of work per charge depending on the environment, task at hand and work mode. For example, 3 hours 30 minutes of non-stop work could be expected when grading continuously.

To find out if an electric Volvo machine is the right fit for your activities, just talk to your dealer, who can help you calculate operating time and the optimum charging solution based on your operation.

# Uptime you can count on

Enter the brave new world of electric machinery with complete confidence thanks to a range of solutions and services from Volvo. Count on the best battery technology, reduced servicing, fast-charging solutions and impressive warranties to give you complete peace of mind that your EC18 Electric and ECR18 Electric will deliver all the performance and uptime which your operation demands.



## Flexible charging solutions

The Volvo EC18 Electric and ECR18 Electric come with an on-board charger which supplies a 3 kW power output to the batteries, allowing the machine to charge from 0% to 100% in as little as 6 hours for EC18 Electric and 5 hours for ECR18 Electric. They come with the necessary charging cable, plug and adapters to charge from a wall socket or wallbox.

When projects and applications demand faster charging, a range of optional fast off-board chargers are available for both indoor and outdoor use. These will charge the EC18 Electric and ECR18 Electric from 0 to 80% in up to 1 hour 15 minutes and 1 hour respectively.

## The best battery technology

The best machines deserve the best power solutions, which is precisely what you can expect in the Volvo Electric Compact Excavators, equipped with a lithium-ion 48V battery. Simply put, this is the best technology for the job with a capacity of 20 kWh for the EC18 Electric, and 16 kWh for the ECR18 Electric.

What's more, the battery is designed to deliver up to 2,000 full charge cycles, accounting for the full life expectancy of the machine.

### Reduced maintenance

Give your uptime a boost and reduce maintenance requirements thanks to the fully electrified machine, powered by a maintenance-free motor. What's more, the electric motors stop when the machine is not working or moving, eliminating unnecessary wear.



### EMMA: your uptime partner

Stay ahead of charging requirements and ensure your Volvo electric machine is ready for action with our Electric Machine Management Application. 'EMMA' is a web application providing insight into your machine, including charging status, battery level and geographic location. Simply access the application on any internet-connected device to gain valuable information to help you manage the charging process more efficiently and maximize machine uptime.

### 5 years premium support\*

In addition to the first-class back-up and support from your Volvo dealer, Volvo CE electric machines come complete with 2-year free servicing and a 2-year full machine warranty. Furthermore, by signing up for a maintenance agreement after year 2, the battery and electronic components are covered free of charge against defects for an additional 3 years.

*\*Check details with your local dealer*



◀ Here is how a day out with EMMA looks like

# EC18 Electric: A proven past, an electric future

## Zero emission electric power

- No emission locally
- Sound level down
- Low electricity cost
- No power consumption when machine not working

## Flexible charging solutions

- Safe and standard Electric Vehicles (EV) charging protocol
- 0 to 100% in up to 6 hours on a 16A workshop outlet
- Standard fast charger preparation
- 0 to 80% in up to 1 hour 15 minutes with our selection of fast chargers
- Keep track of charging status, battery level and geographic location with EMMA, the Electric Machine Management Application

## State-of-the-art battery technology

- 2 to 6 hours of run time depending on application
- Operating time calculator available (contact your dealer)
- 48V lithium-ion, maintenance-free battery
- Designed to deliver up to 2,000 full charge cycles
- 5-year battery warranty

## Reduced maintenance

- Maintenance-free electric motor, featuring auto shutoff to save wear
- Easy access to components
- 50-hours greasing intervals

## Small but tough

- Overall minimum width of 995 mm with expendable undercarriage
- Short radius
- Front right corner, swing post and cylinder within tracks' width
- High-profile cast-iron counterweight
- All-round steel panels recessed from counterweight
- Hoses routed inside the boom



## A new level of operator comfort

- Large entrance, spacious and uncluttered heated cab
- Superior visibility, low vibration
- 5" color display with jog wheel navigation
- Extensive information and customization abilities
- Simplified menu for better control over settings management
- Fingertip controls, with adjustable hydraulic flow
- Secondary accessory circuit
- Double acting circuit for hydraulic quick coupler

## Go where others can't

- Electric vehicles are a requirement of tenders in many cities
- Ability to work indoor
- Ability to work out of standard hours
- Get access to low-carbon projects
- Removed need for fume extraction systems and operator time limits

## Proven performance

- Same performance as its diesel equivalent
- Great stability for safety and comfort
- Outstanding lifting capacity
- Great combined movements performance
- Wide range of Volvo Attachments



Explore  
the machine  
in our walkaround  
video



# ECR18 Electric: Still as compact, far more discreet

## Zero emission electric power

- No emission locally
- Sound level down
- Low electricity cost
- No power consumption when machine not working

## Flexible charging solutions

- Safe and standard Electric Vehicles (EV) charging protocol
- 0 to 100% in up to 5 hours on a 16A workshop outlet
- Standard fast charger preparation
- 0 to 80% in up to 1 hour with our selection of fast chargers
- Keep track of charging status, battery level and geographic location with EMMA, the Electric Machine Management Application

## State-of-the-art battery technology

- 2 to 5 hours of run time depending on application
- Operating time calculator available (contact your dealer)
- 48V lithium-ion, maintenance-free battery
- Designed to deliver up to 2,000 full charge cycles
- 5-year battery warranty

## Reduced maintenance

- Maintenance-free electric motor, featuring auto shutoff to save wear
- Easy access to components
- 50-hours greasing intervals

## Small but tough

- Overall minimum width of 995 mm with expendable undercarriage
- Ultra-short tail radius
- Front right corner, swing post and cylinder within tracks' width
- High-profile cast-iron counterweight
- All-round steel panels recessed from counterweight
- Hoses routed inside the boom



## A new level of operator comfort

- Large entrance, spacious and uncluttered operator environment
- Superior visibility, Low vibration
- 5" color display with jog wheel navigation
- Extensive information and customization abilities
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- Fingertip controls, with adjustable hydraulic flow

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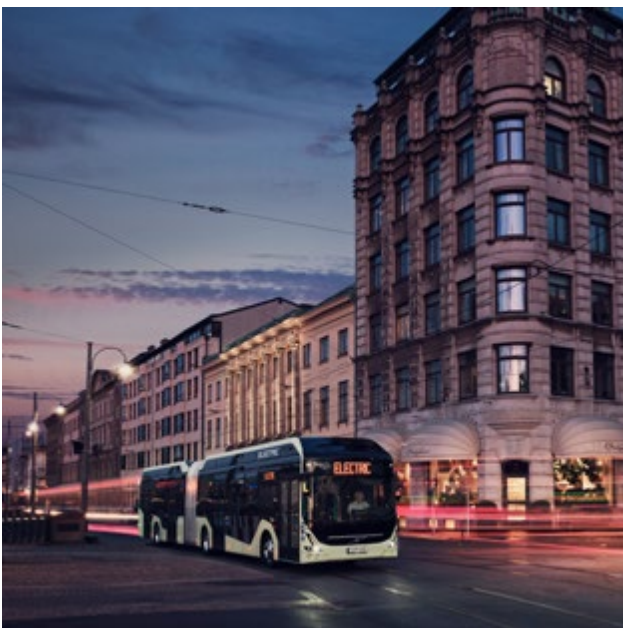




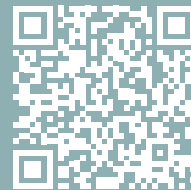


# A commitment to electric

At Volvo Construction Equipment we are committed to building the world we want to live in. A world where progress is made in a sustainable, efficient and peaceful way. The EC18 Electric and ECR18 Electric are just one part of this and join an ever-growing portfolio of Volvo electric machines, trucks and buses – helping to raise the bar for our industry when it comes to electric solutions.



**JOIN THE ELECTRIC  
REVOLUTION**



Reserve your Volvo electric construction machine online!

# Volvo EC18 Electric, ECR18 Electric in detail

	EC18 Electric	ECR18 Electric
<b>Electrical System</b>		
Battery Type	Lithium-ion	Lithium-ion
Battery Voltage	V	48
Battery capacity	kWh	20
	Ah	450
Indicative runtime (depending on application)	hours	up to 6
Auxiliary Battery Voltage	V	12
<b>Electrical motor</b>		
Motor type	Permanent magnet	Permanent magnet
Motor power (peak)	kW	18
Motor power (continuous)	kW	12.5
Operating mode max. / Standard	r/min	2 550
Operating mode max. / Eco	r/min	2 250
Operating mode max. / Boost	r/min	3 000
<b>Swing system</b>		
Max, slew speed	r/min	9.5
Max, slew torque	daNm	243
<b>Travel System</b>		
Max, drawbar pull	daN	1 300
Max. travel speed low	km/h	1.8
Max. travel speed high	km/h	3.5
Gradeability	°	30
<b>Digging Performances</b>		
Standard bucket width (blade, W/O side cutter)	mm	450
Standard bucket mass	kg	33
Standard bucket rated capacity	l	36
Bucket rotation	°	196
Bucket breakout force (ISO)	daN	1 290
Short arm tearout force (ISO)	daN	795
Long arm tearout force (ISO)	daN	695

	EC18 Electric	ECR18 Electric
<b>Hydraulic system</b>		
Maximum system flow	l/min	34
Maximum flow for accessories	l/min	30
Maximum flow for 2nd accessory circuit	l/min	23
Maximum operating pressure	MPa	17
<b>Weight and Ground Pressure</b>		
Operating weight according to ISO 6016	kg	1 955
Ground pressure (cab)	kPa	28.9
Ground pressure (canopy)	kPa	27
Transport weight	kg	1 880
With rubber tracks	mm	230
With short arm	mm	950
With canopy	-kg	84
With long arm	+kg	4
With long arm and heavy counterweight	+kg	42
With heavy counterweight	+kg	38
With steel tracks	+kg	32
<b>Service Refill</b>		
Hydraulic system, total	l	21
Hydraulic tank	l	15
<b>Undercarriage</b>		
Bottom/top rollers per side		3 / 0
Track tension		By grease piston
Blade (width x height)	mm	1 340 x 230

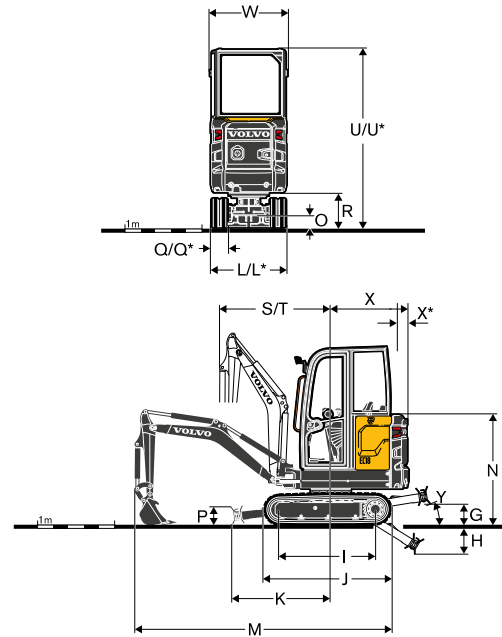
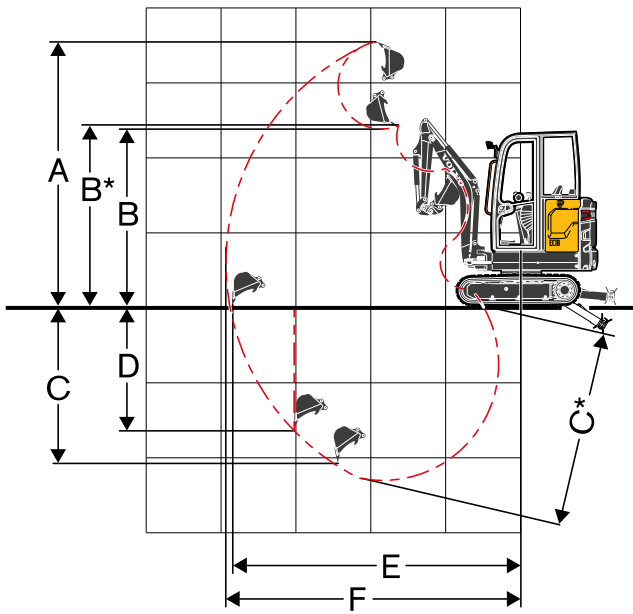
## Attachments specifications

	Unit	General Purpose buckets								Aggressive Cut buckets			Ditching buckets				Hydraulic breaker HB02 Low Noise
		200	250	300	400	450	500	600	350	550*	550	850	1 000	850	1 000		
Quick Coupler type	mm	200	250	300	400	450	500	600	350	550*	550	850	1 000	850	1 000	-	
Volvo mechanical (pin-on)	l	14	19	23	32	36	41	51	-	-	-	59	76	59	-	Pin-on bracket	
Lehnhoff® mechanical	l	-	-	23	32	-	41	-	-	-	-	59	76	59	-	Lehnhoff type bracket	
Mechanical, symmetrical type	l	-	-	-	-	-	-	-	25	55	55	-	76	-	76	Symmetrical type bracket	

\*with teeth

For more details, see Attachments catalogue

# Specifications EC18 Electric

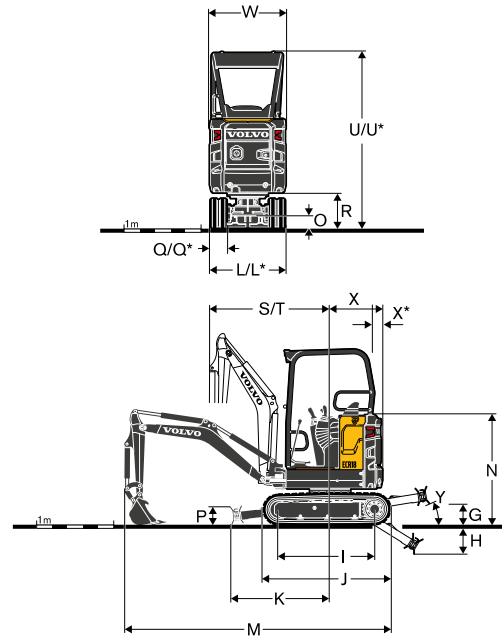
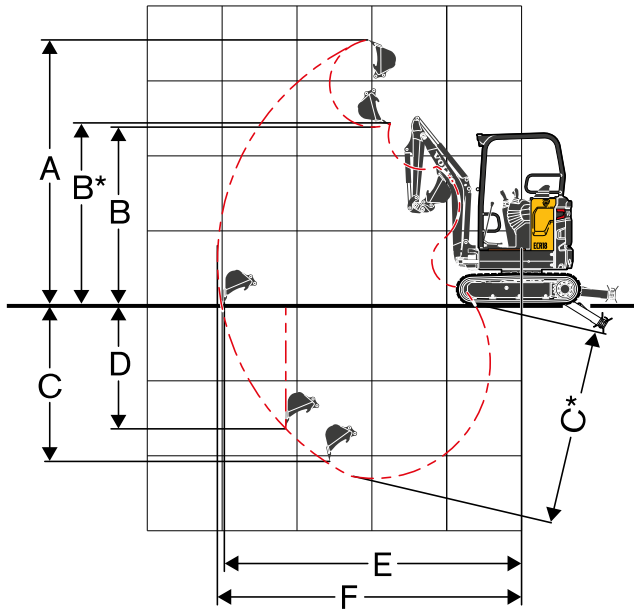


## DIMENSIONS

Description		Unit	EC18 Electric	
Arm		mm	950	1 150
A	Maximum cutting height	mm	3 439	3 582
B	Maximum dump height	mm	2 444	2 588
B*	Maximum bucket clearance	mm	2 482	2 625
C	Digging depth	mm	2 234	2 434
C*	Maximum digging depth	mm	2 500	2 700
D	Maximum vertical wall digging depth	mm	1 898	2 091
E	Maximum digging reach at ground level	mm	3 800	3 993
G	Highest position dozer blade	Short blade	mm	225
		Long blade	mm	267
H	Lowest position dozer blade	Short blade	mm	296
		Long blade	mm	386
J	Track length	mm	1 620	
K	Dozer blade, maximum reach at ground level	Short blade	mm	1 082
		Long blade	mm	1 272
L	Overall width with 230mm tracks	Min	mm	995
		Max	mm	1 352
M	Overall length	mm	3 550	3 431
M*	Transport length (arm lowered)	Short blade	mm	3 810
		Long blade	mm	4 000
P	Dozer blade height	mm	231	
Q	Shoe width (rubber)	mm	230	
Q(*)	Shoe width (steel)	mm	230	
R	Ground clearance to superstructure	mm	456	
S	Front slew radius	mm	1 455	1 476
T	Front slew radius with maximum offset	mm	1 181	1 184
U	Overall height cab	mm	2 334	
U*	Overall height canopy	mm	2 298	
X	Tail slew radius	mm	1 018	
X*	Rear overhang (across tracks)	mm	342	
$\beta_1$	Maximum boom offset to the right	mm	419	
$\beta_2$	Maximum boom offset to the left	mm	525	

(\*) Option

# Specifications ECR18 Electric



## DIMENSIONS

Description		Unit	ECR18 Electric	
Arm		mm	950	1 150
A	Maximum cutting height	mm	3 442	3 582
B	Maximum dump height	mm	2 444	2 588
B*	Maximum bucket clearance	mm	2 482	2 625
C	Digging depth	mm	2 234	2 434
C*	Maximum digging depth	mm	2 528	2 727
D	Maximum vertical wall digging depth	mm	1 898	2 091
E	Maximum digging reach at ground level	mm	3 921	4 113
G	Highest position dozer blade	Short blade	mm 225	
		Long blade	mm 267	
H	Lowest position dozer blade	Short blade	mm 267	
		Long blade	mm 386	
J	Track length	mm	1 620	
K	Dozer blade, maximum reach at ground level	Short blade	mm 1 082	
		Long blade	mm 1 272	
L	Overall width with 230mm tracks	Min	mm 995	
		Max	mm 1 352	
M	Overall length	mm	3 431	3 309
M*	Transport length (arm lowered)	Short blade	mm 3 932	
		Long blade	mm 4 122	
P	Dozer blade height	mm	231	
Q	Shoe width (rubber)	mm	230	
Q(!)	Shoe width (steel)	mm	230	
R	Ground clearance to superstructure	mm	456	
S	Front slew radius	mm	1 575	1 568
T	Front slew radius with maximum offset	mm	1 269	1 287
U*	Overall height canopy	mm	2 298	
X	Tail slew radius	mm	688	
X*	Rear overhang (across tracks)	mm	12	
$\beta_1$	Maximum boom offset to the right	mm	516	
$\beta_2$	Maximum boom offset to the left	mm	640	

(!) Option

# Equipment EC18 Electric

## STANDARD EQUIPMENT

### Drivetrain

- Automatic two-speed travel hydraulic motors with reduction gears
- Inner flange bottom rollers lubricated for life
- Grease tensioning wheel lubricated for life

### Electric / Electronic control system

- Maintenance free 48V battery - fixed for anti-theft protection
- On-board charger with Type 2 socket
- Standard charger cable with 3 plugs (domestic - white, CEE 16A 1 phase - blue, and CEE 32A 3 phase - Red)
- Fast charger ready with weather protected socket
- Maintenance free 12V auxiliary battery
- High quality connectors
- Protected battery cut-off switch
- Auto-idling and auto-shutdown function on electric motor

### Swing system

- Radial piston hydraulic motor with integrated shockless valve
- Automatic multi-disc spring applied hydraulic released slew brake
- Centralized and remote lubrication of crown wheel and ball bearing

### Superstructure

- Stamped steel panels all-around, recessed 5 to 15mm
- 4 integrated tie-down points on upper structure

### Undercarriage

- Box welded fabricated frame
- Sturdy removeable protecting covers for track motors and slew system
- Box section highly rigid dozer blade structure

### Hydraulic system

- High performance Volvo hydraulic system
- Flow-Sharing and Load Sensing main control valve
- Boom cylinder cushioning at end stroke (up)
- Patented filtering and filling element
- Large side by side oil cooler and radiator
- Double-acting hydraulic circuit for accessories
- Breaker/Shear valve
- Hydraulic hoses routed inside the boom for increased protection
- Plastic tank with drain plug

### Cab / Canopy

- Cushionned operator station
- Large entrance access
- Large and roomy uncluttered floor
- Highly visible orange footstep
- Highly visible orange seatbelt with warning indicator
- Warning beacon, flashing LED
- Front cabin LED worklight
- Right and left rear-view mirror
- White noise travel alarm
- Toolbox with integrated storage for operator's manual and lockable door

### Cab

- Highly visible orange handrail
- Flat toughened glass all-around
- Gas-strut assisted front window opening
- Front windscreen wiper and washer nozzle
- Right hand side sliding window
- Heating systems with in-cab adjustment of temperature and air flow, and multiple air vents
- Filtered air inlet
- Radio preparation (antenna, wire harness)
- Additional lockable storage box (behind the seat)

## STANDARD EQUIPMENT

### Digging equipment

- Casted end and structural parts on arm, pivot, undercarriage and upper structure noze
- Monoblock box welded fabricated boom and arm
- Long-life steel bushings & hardened, pre-lubricated and corrosion resistant pins
- 50-hours intervals on all grease points

### Machine controls

- Automatic locking device for pilot controls and travel levers when the left console is raised
- Proportional and adjustable fingertip control for boom offset and auxiliary circuit
- Large travel pedals
- Breaker (full flow) toggle switch on right joystick
- Pressure accumulator to lower the equipment on the ground

### Instrumentation and monitoring

- High contrast colour 5" LCD display with day and night modes enabling good readability whatever lighting conditions
- Jogwheel for easy navigation and electric motor speed adjustment
- Simplified menus with master profile for full control and user profile with limited customization
- 3 working modes: Standard, ECO and Boost
- Built-in anti-theft feature
- Several warning messages, coupled to needed action, in the event of malfunction
- Volvo Telematic System

### Official approval

- Machine conforming to European directive 2006/42/EC
- Low voltage certified according to European directive 2014/35/EU
- Noise emissions in the environment conforming to directive 2000/14/EC
- Hand Arm Vibrations - Whole Body Vibrations compliant with directive 2002/44/EC
- Electromagnetic compatibility (EMC) conforming to European directive 2014/30/EU
- Object handling device conforming to EN 474-1 and EN 474-5 standards
- ROPS (Roll-Over Protective Structure) conforming to ISO 3471
- TOPS (Tip-Over Protective Structure) conforming to ISO 12117 and EN 13531 standards
- OPG 1 (Operator Protective Guard on top) conforming to ISO 10262 standard (when equipped)
- FOPS (Falling Object Protective Structure) conforming to EN ISO 3449

# Equipment EC18 Electric

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## OPTIONAL EQUIPMENT

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### Operator environment

Robust 4-pillar structure canopy

Heated cab

Vinyl seat with mechanical suspension, extended back with lumbar adjustment and 2" orange retractable seatbelt

Fabric seat with mechanical suspension, extended back with lumbar adjustment and 2" orange retractable seatbelt

Electrical switch for ISO/SAE control pattern change

Radio, AUX, USB, Bluetooth

Radio DAB, USB, Bluetooth, MP3

Controls lock, switch

Controls lock, seat operator presence and switch

Controls lock, seatbelt sensor

Front guard OPG1 for canopy

Tool kit

### Machine exterior

LED worklights package

Green beacon link to safety belt

Heavy counterweight

Several level of customisation (RAL specifications) to match with your corporate identity

### Undercarriage

230mm rubber tracks

230mm steel tracks

Short dozer blade

Long dozer blade

### Hydraulics

Relief valve for auxiliaries

Hydraulic drain for accessories

Second accessory circuit with proportional and adjustable controls

Kit 2 flat face hydraulic couplings

Kit 4 flat face hydraulic quick couplings

Double acting circuit for hydraulic quick couplers

Boom and arm safety lifting valves

Boom, arm and dozer blade safety lifting valves

Safety valve certification

Mineral hydraulic oil VG32

Mineral hydraulic oil VG46

Mineral hydraulic oil VG68

Bio hydraulic oil VG32 (PANOLIN®)

Bio hydraulic oil VG46 (PANOLIN®)

### Digging equipment

Short arm

Long arm

### Attachments

Volvo mechanical quick coupler (pin-on)

Lehnhoff® mechanical quick coupler

Symmetrical type mechanical quick coupler (S30)

General Purpose buckets

Fixed Ditching buckets

Tilttable Ditching buckets

Hydraulic breaker HBO2LN

### Charging solutions

Fast charger, 9.6 kW, indoor use

Fast charger, 17.3 kW, indoor use

Fast charger, 17.3 kW, outdoor use

# Equipment ECR18 Electric

## STANDARD EQUIPMENT

### Drivetrain

Automatic two-speed travel hydraulic motors with reduction gears  
 Inner flange bottom rollers lubricated for life  
 Grease tensioning wheel lubricated for life

### Electric / Electronic control system

Maintenance free 48V battery (3-rack) - fixed for anti-theft protection  
 On-board charger with Type 2 socket  
 Standard charger cable with 3 plugs (domestic - white, CEE 16A 1 phase - blue, and CEE 32A 3 phase - Red)  
 Fast charger ready with weather protected socket  
 Maintenance free 12V auxiliary battery  
 High quality connectors  
 Protected battery cut-off switch  
 Auto-idling and auto-shutdown function on electric motor

### Swing system

Radial piston hydraulic motor with integrated shockless valve  
 Automatic multi-disc spring applied hydraulic released slew brake  
 Centralized and remote lubrication of crown wheel and ball bearing

### Superstructure

Stamped steel panels all-around, recessed 5 to 15mm  
 4 integrated tie-down points on upper structure

### Undercarriage

Box welded fabricated frame  
 Sturdy removable protecting covers for track motors and slew system  
 Box section highly rigid dozer blade structure

### Hydraulic system

High performance Volvo Hydraulic System  
 Flow-Sharing and Load Sensing main control valve  
 Boom cylinder cushioning at end stroke (up)  
 Patented filtering and filling element  
 Large side by side oil cooler and radiator  
 Double-acting hydraulic circuit for accessories  
 Breaker/Shear valve  
 Hydraulic hoses routed inside the boom for increased protection

### Canopy

Robust 4-pillar structure canopy  
 Cushioned operator station  
 Highly visible orange footstep  
 Highly visible orange seatbelt with warning indicator  
 Warning beacon, flashing LED  
 Front cabin LED worklight  
 Right and left rear-view mirror  
 White noise travel alarm  
 Toolbox with integrated storage for operator's manual and lockable door

### Digging equipment

Casted end and structural parts on arm, pivot, undercarriage and upper structure nozzle  
 Monoblock box welded fabricated boom and arm  
 Long-life steel bushings & hardened, pre-lubricated and corrosion resistant pins  
 50-hours intervals on all grease points

### Machine controls

Automatic locking device for pilot controls and travel levers when the left console is raised  
 Proportional and adjustable fingertip control for boom offset and auxiliary circuit  
 Pressure accumulator to lower the equipment on the ground

### Instrumentation and monitoring

High contrast colour 5" LCD display with day and night modes enabling good readability whatever lighting conditions  
 Jogwheel for easy navigation and electric motor speed adjustment  
 Simplified menus with master profile for full control and user profile with limited customization  
 3 working modes: Standard, ECO and Boost  
 Built-in anti-theft feature  
 Several warning messages, coupled to needed action, in the event of malfunction  
 Volvo Telematic System

## STANDARD EQUIPMENT

### Official approval

Machine conforming to European directive 2006/42/EC  
 Low voltage certified according to European directive 2014/35/EU  
 Noise emissions in the environment conforming to directive 2000/14/EC  
 Hand Arm Vibrations - Whole Body Vibrations compliant with directive 2002/44/EC  
 Electromagnetic compatibility (EMC) conforming to European directive 2014/30/EU  
 Object handling device conforming to EN 474-1 and EN 474-5 standards  
 ROPS (Roll-Over Protective Structure) conforming to ISO 3471  
 TOPS (Tip-Over Protective Structure) conforming to ISO 12117 and EN 13531 standards  
 OPG 1 (Operator Protective Guard on top) conforming to ISO 10262 standard (when equipped)  
 FOPS (Falling Object Protective Structure) conforming to EN ISO 3449

## OPTIONAL EQUIPMENT

### Operator environment

Vinyl seat with mechanical suspension, extended back with lumbar adjustment and 2" orange retractable seatbelt  
 Additional lockable storage box (behind the seat)  
 Electrical switch for ISO/SAE control pattern change  
 Controls lock, switch  
 Controls lock, seat operator presence and switch  
 Controls lock, seatbelt sensor  
 Tool kit

### Machine exterior

LED worklights package  
 Green beacon link to safety belt  
 Heavy counterweight  
 Several level of customisation (RAL specifications) to match with your corporate identity

### Undercarriage

230mm rubber tracks  
 230mm steel tracks  
 Short dozer blade  
 Long dozer blade

### Hydraulics

Relief valve for auxiliaries  
 Kit 2 flat face hydraulic couplings  
 Double acting circuit for hydraulic quick couplers  
 Boom and arm safety lifting valves  
 Boom, arm and dozer blade safety lifting valves  
 Several grades of mineral and bio hydraulic oil

### Digging equipment

Short arm  
 Long arm

### Machine controls

On/Off fingertip control for boom offset and auxiliary circuit

### Attachments

Volvo mechanical quick coupler (pin-on)  
 Lehnhoff® mechanical quick coupler  
 Symmetrical type mechanical quick coupler (S30)  
 General Purpose buckets  
 Fixed Ditching buckets  
 Tiltable Ditching buckets  
 Hydraulic breaker HB02LN

### Charging solutions

Fast charger, 9.6 kW, indoor use  
 Fast charger, 17.3 kW, indoor use  
 Fast charger, 17.3 kW, outdoor use

**V O L V O**