

For Earth, For Life
Kubota



ELECTRIC RETROFIT KIT FOR KUBOTA MINI EXCAVATOR U27-4e

Battery :
20 kWh / 48 V

Machine weight :
2528 kg (Canopy)
2628 kg (Cabin)

INNOVATION

Kubota has developed an electric retrofit kit solution for KX019-4 mini-excavators, **available for new and used models.**

By replacing the combustion engine block with an electrification system, rental companies, public works companies, local authorities, farms, etc. **can support the ecological transition by carrying out decarbonised work** with zero CO2 emissions and quieter operation.

Thanks to a controlled total cost of ownership, there is no increase in the cost of worksites, making **the solution both ecologically and economically viable.**

ELECTRIC RETROFIT KIT

- Local supply chain (casings, electronic boards, etc.)
- Battery pack design and assembly
- Intellectual property of assembly machines
- Quality control on 100% of battery components
- Marking **CE**



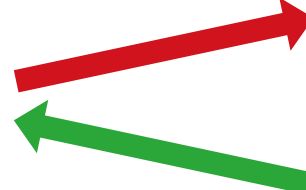
Made in France

What is in the electrical retrofit kit?

- BMS (battery management system)
- Battery pack
- Electric motor
- HMI (human-machine interface)
- Battery charger
- Cable harness
- Adapter parts



Removing the combustion engine



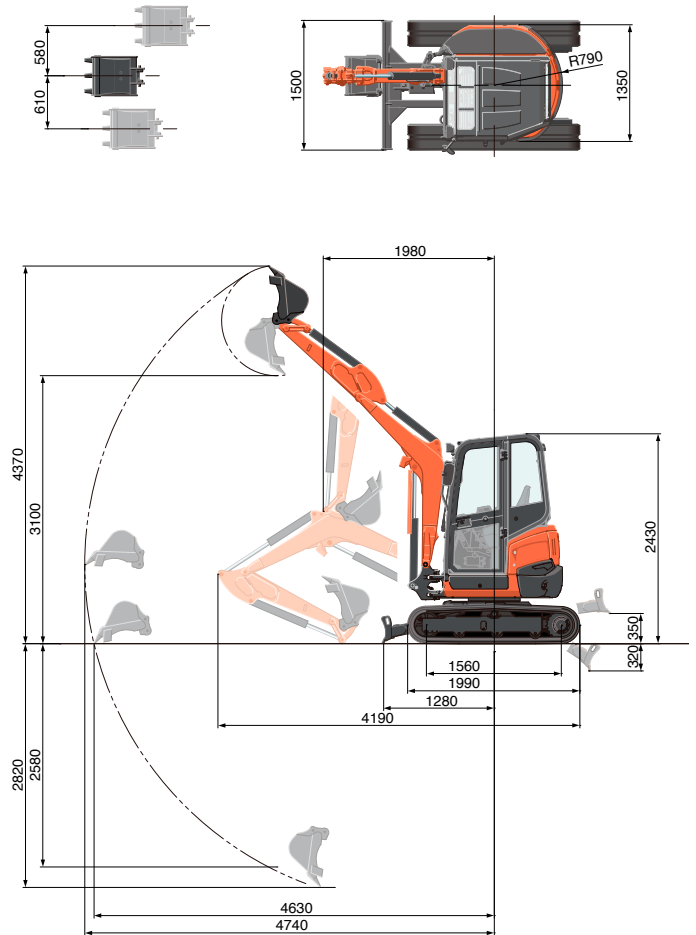
Addition of Electric retrofit kit



Specifications

		* Avec chenilles caoutchouc	
Modèle		U27-4e	
Poids de la machine*1 (cabine / canopy)	kg	2528 / 2628	
Poids opérationnel*2 (cabine / canopy)	kg	2603 / 2703	
Capacité godet, std. SAE/CECE	m ³	0,06	
Largeur godet	Avec dents latérales	500	
	Sans dent latérale	450	
Electrification Kit	Batterie	Lithium-ion NMC	
		48 V / 420 Ah	
		20 kWh	
		128 kg	
	Moteur électrique	12 kw	
	Chargeurs	2 x 3 kW	
	Communication	Gestion électronique par interface dédiée	
	Chargement	Environ 3,20h sur une source 400V / 32A	
Autonomie	Environ 3h*4		
Modes de travail	Eco / Normal / Boost*5		
Longueur hors tout	mm	4190	
Hauteur hors tout (cabine / canopy)	mm	2430 / 2420	
Vitesse de rotation	tr/min	9,8	
Largeur chenilles caoutchouc	mm	300	
Empattement	mm	1560	
Dimension lame (largeur x hauteur)	mm	1500 x 300	
Pompes hydrauliques	P1, P2	Pompes à débit variable	
	Débit ℓ /min	28,8 x 2	
	Pression d'utilisation MPa (kgf/cm ²)	21,6 (220)	
	P3	Type à engrenage	
	Débit ℓ /min	19,2	
	Pression d'utilisation MPa (kgf/cm ²)	17,2 (175)	
Force d'excavation maximum (balancier / godet)	daN (kgf)	12,3 (1260) / 21,0 (2140)	
Angle de déport (gauche / droit)	deg	75 / 55	
Circuit auxiliaire (AUX1)	Débit d'huile ℓ /min	48	
	Pression d'huile MPa (kgf/cm ²)	17,2 (175)	
Circuit auxiliaire (AUX2)	Débit d'huile ℓ /min	19,2	
	Pression d'huile MPa (kgf/cm ²)	17,2 (175)	
Capacité du réservoir hydraulique	ℓ	22	
Capacité du réservoir à carburant	ℓ	33	
Vitesse de translation (lente / rapide)	km/h	2,5 / 4,5	
Pression au sol (cabine / canopy)	kPa (kgf/cm ²)	24,7 (0,25) / 23,7 (0,24)	
Garde au sol	mm	290	
Niveau sonore	LpA	dB (A)	En cours de vérification
	LwA (2000/14/EC)	dB (A)	En cours de vérification
Vibration*3	Système main-bras (ISO 5349-2:2001)	Travaux de fouille m/s ² RMS	<2,5
		Travaux d'aplanissement m/s ² RMS	<2,5
		Translation m/s ² RMS	3,25
		Ralenti m/s ² RMS	<2,5
	Ensemble du corps (ISO 2631-1:1997)	Travaux de fouille m/s ² RMS	<0,5
		Travaux d'aplanissement m/s ² RMS	<0,5
		Translation m/s ² RMS	<0,5
		Ralenti m/s ² RMS	<0,5

Working Range



Arm: 1300 mm
Unit: mm

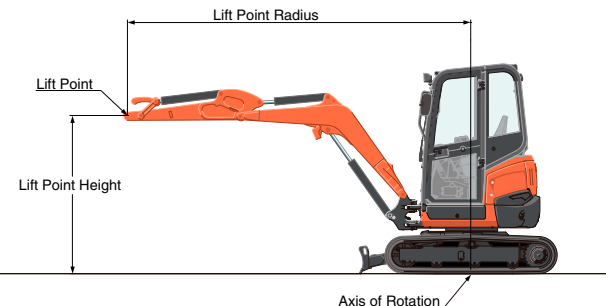
- *1 With 55 kg Kubota original bucket, 1190 mm arm, full tanks.
- *2 Machine weight + 75 kg operator.
- *3 These values are measured under specific conditions at maximum engine speed and can deviate, depending on the operating status.
- *4 Depending on working modes and conditions.
- *5 Eco (fixed at 1100 rpm)
Normal (from 1300 to 2300 rpm)
Boost (from 1800 to 2300 rpm)

Lifting capacity

Cabin, rubber version		kN (ton)			
Lift Point Height	Lifting point radius (2m)		Lifting point radius (max.)		
	Over-front (blade down)	Over-side	Over-front (blade down)	Over-side	
1.5m	7.3 (0.74)	7.2 (0.73)	–	–	
1.0m	10.2 (1.04)	6.8 (0.69)	4.2 (0.43)	2.4 (0.25)	
0.5m	11.5 (1.18)	6.5 (0.67)	–	–	
0m	12.3 (1.25)	6.4 (0.66)	–	–	

*The lifting capacities are based on ISO 10567 and do not exceed 75% of the static tilt load of the machine or 87% of the hydraulic lifting capacities of the machine.

*The excavator bucket, hook, sling and other lifting accessories are not included on this table.



- * Working ranges are with Kubota original bucket, without quick coupler.
- * Specifications are subject to change without notice for purpose of improvement.

* All images shown are for brochure purposes only.

When operating the excavator, wear clothing and equipment in accordance to local legal and safety regulations.

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