

# XCS4531E

## Container Reach Stacker

(Fully Electric Version)



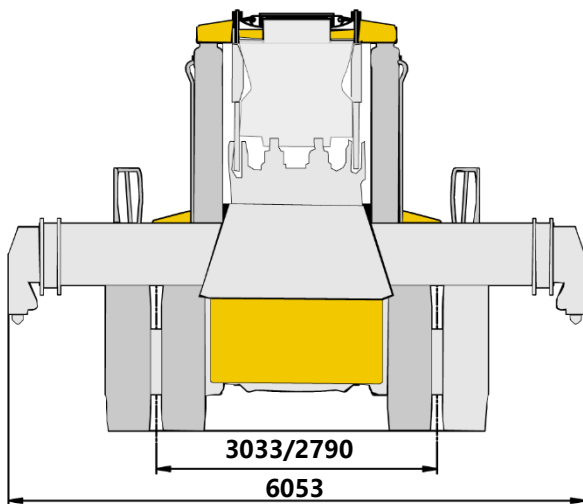
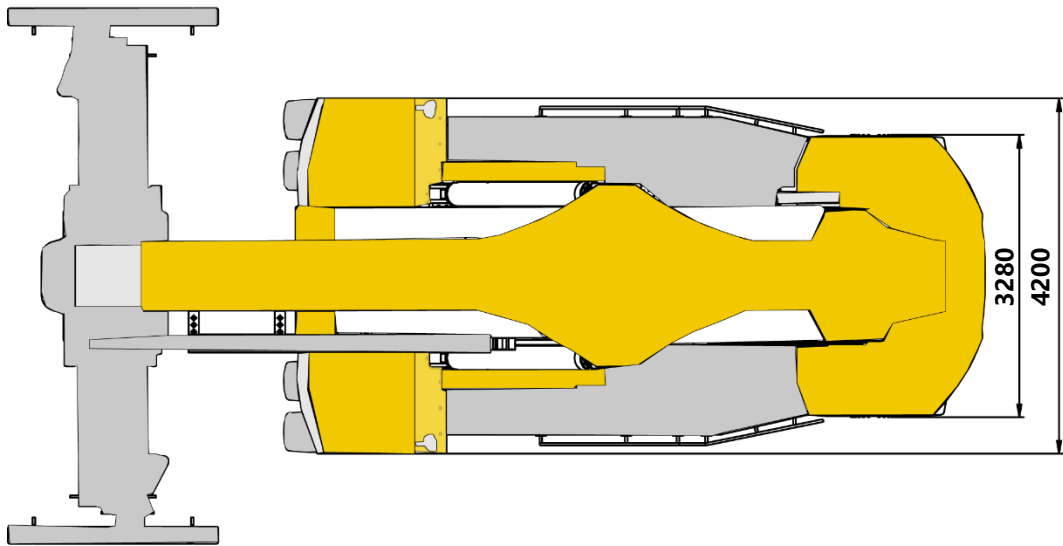
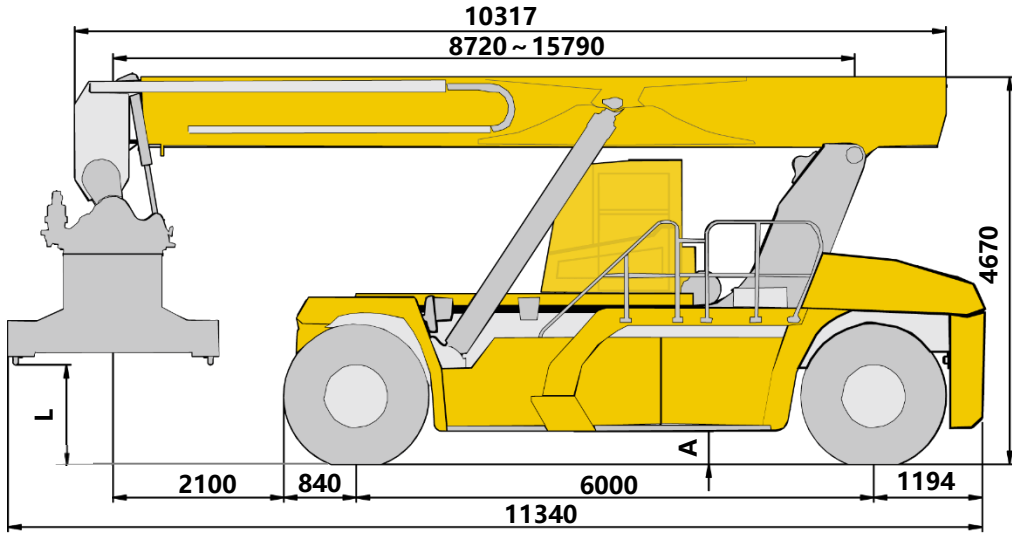
5 Containers



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# Dimensions



Spreader	L	A
XCMG	1200	350
Bromma	1155	350

# Technical specifications

## Standard equipment

**Spreader** The spreader is suitable for handling 20' and 40' standard containers. Telescoping, side shift and rotating function, as well as twist lock control are available.  
Its maximum lifting capacity is 45 t, and side shift is  $\pm 800$  mm.

**Cab** Full-view driver's cab.  
Equipped with ergonomic seat, two point retractable seat belt, 24V power supply, radio and HD Reverse view system.

**Air condition** High-power, fully automatic heating and cooling air condition.

**Motor** Permanent magnet synchronous electric motors and have advantages of large torque, high efficiency, low noise and maintenance-free.  
Peak power : 346kW.  
Peak torque : 3800 Nm.

**Battery pack** Proven iron phosphate lithium battery, high energy density, long cycle life and good safety.  
Voltage of battery pack: 618V.  
Capacity of battery pack: 595 kWh.

**Drive axle** D102PL341 heavy duty drive axle, manufactured by German Kessler.

**Tires** 6 diagonal tires, Tire specifications: 18.00-25 40PR.

**Brakes** Service brake: wet disc brake, acting on the front wheels, and equipped with independent cooling tank, high performance filter and radiator.  
Parking disc brake, acting on the front axle.

**Steering** Equipped with full hydraulic power steering, and easy to use.

**Hydraulic system** America Parker variable plunger pump and valves, the system has compound action, vertical lifting and spreader anti-swing function.

Equipped with high performance filter and high power independent radiator.

618V high voltage system., proven BMS battery management system, Power sources of 220 V and 380 V are practicable. Stationary and mobile charging poles with different powers may be used, easy to use.

24V Can bus control system, two batteries, negative ground.

**Electric System** Driving lights: two headlights, two turning signals in front of the vehicle; two turning signals, two brake lights and two reversing lights behind the vehicle.

Working lights: four working lights at the spreader locks, four working lights at the middle of the boom, two working lights behind the vehicle.

Warning lights: one rotating alarm lamp at the back of the vehicle.

**Safety devices** Three-level insulation protection, real-time monitoring of electric leakage & active protection, current & voltage overload protection, smoke warning and automatic fire extinguishing, LMT, 2.5m long distance astern radar, one 2kg fire extinguisher.

Frame is made of fine grain high tension steel, with anti-torsion large cross-section, strong carrying capacity.

**Frame** Finite element analysis and zero order design optimization method adopted for key structures ensure the strength and stiffness of structural members.

**Boom** Two-stage, quadrangular telescopic boom, anti-torsion design, leading to better operating performance and anti-torsion ability.

## Additional equipment

**Spreader** Bromma spreader is suitable for handling 20' and 40' standard containers. Telescoping, side shift and rotating function, as well as twist lock control are available.

Rated lifting capacity: 45 t.

Side shift:  $\pm 800$  mm.

Rotation angle:  $-105^{\circ} \sim +195^{\circ}$ .

**Product parts list is as mentioned above, refer to the product quotation for specific parts.**

## Weight

Item	Front Axle	Rear Axle	Total weight	Tolerance
Unloaded	34406kg	36409kg	70816kg	±3%
Rated load	99923kg	15893kg	115816kg	±3%

The axle loads listed in the table are the values when 45t Load located on the first row.

## Working speeds

Item	Unloaded	Rated load	Tolerance
Lifting speed	420mm/s	250mm/s	±10%
Lowering speed	360mm/s	360mm/s	±10%
Traveling speed	20km/h	14km/h	±10%

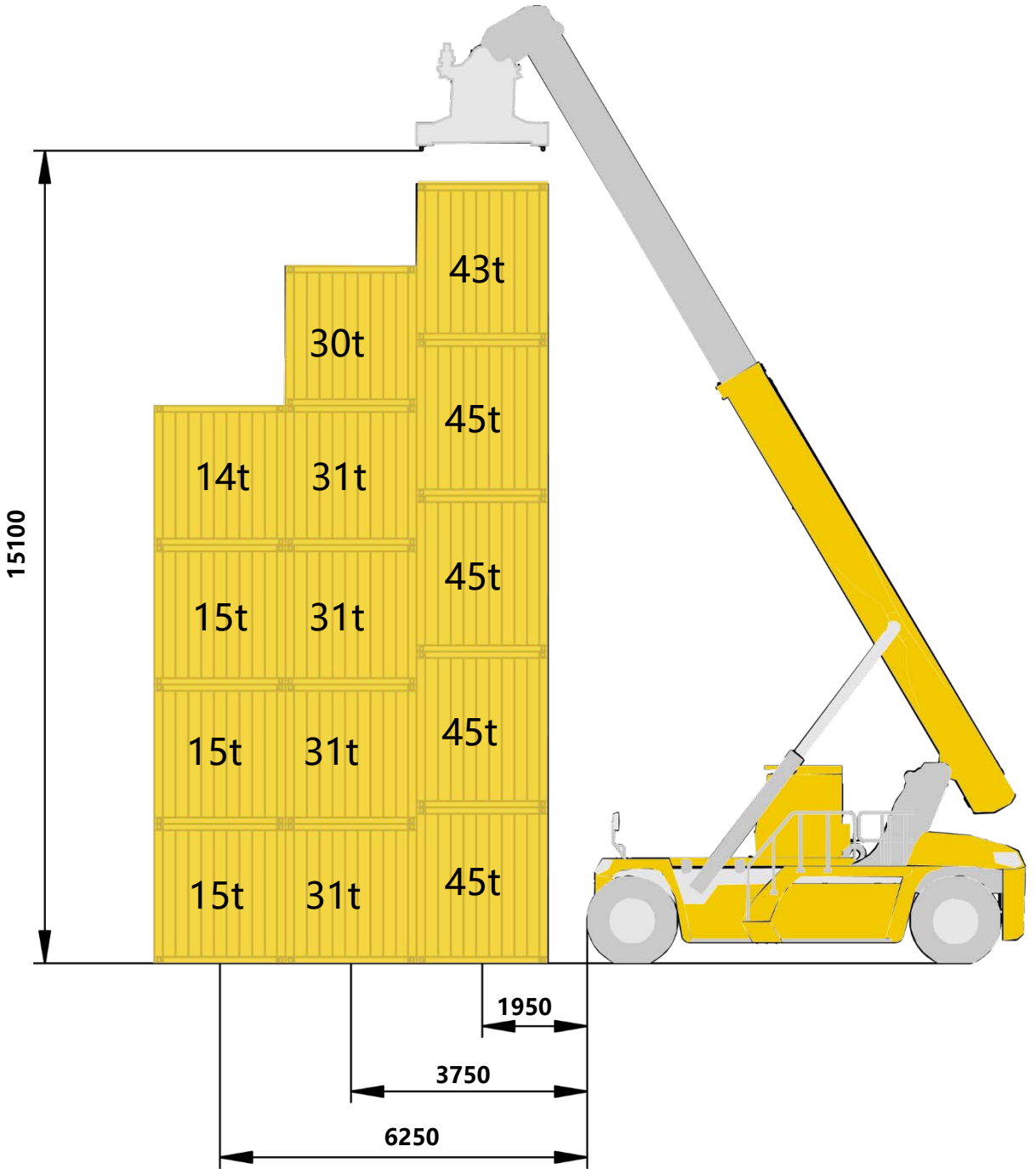
## Spreader specifications

Item	XCMG Spreader	Bromma Spreader	Tolerance
Lifting capacity	45000kg	45000kg	≥
Side shift	±800mm	±800mm	±1.5%
Telescoping time	Extend: 25s Retract: 11s	15s	±10%
Rotating time	50S	50s	±10%
Shifting time	15s	15s	±10%
Lock\unlock time	1s	1s	±10%

## Power specifications

Item	Parameter
Voltage of battery pack	618V
Capacity of battery pack	595kwh
Motor peak power	346kw
Motor peak torque	3800Nm

# Lifting capacities



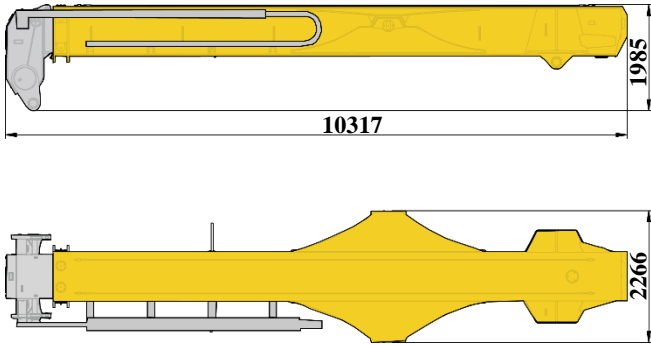
Spreader	Max. Lifting Height	Max. Lifting Capacity	Number of Stacking
XCMG	15375mm	45t	5 (9'6")-5 (8'6") -4 (8'6")
Bromma	15100mm		

# Dimensions of transported parts

**2**

**Boom assembly**

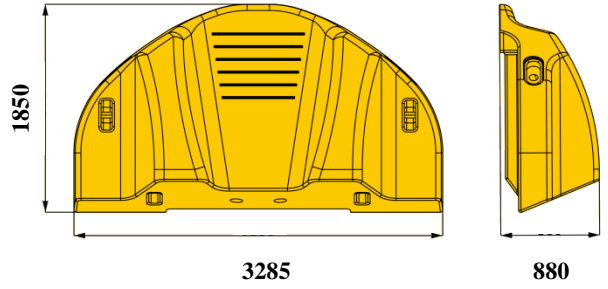
Weight	13935kg
Qty	1



**4**

**Counterweight A**

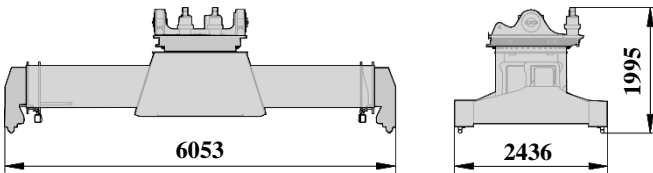
Weight	13.742kg
Qty	1



**3**

**Spreader**

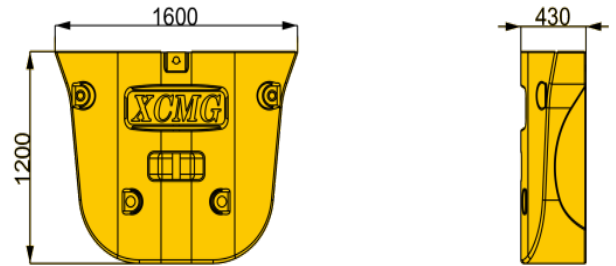
Weight	8000kg
Qty	1



**5**

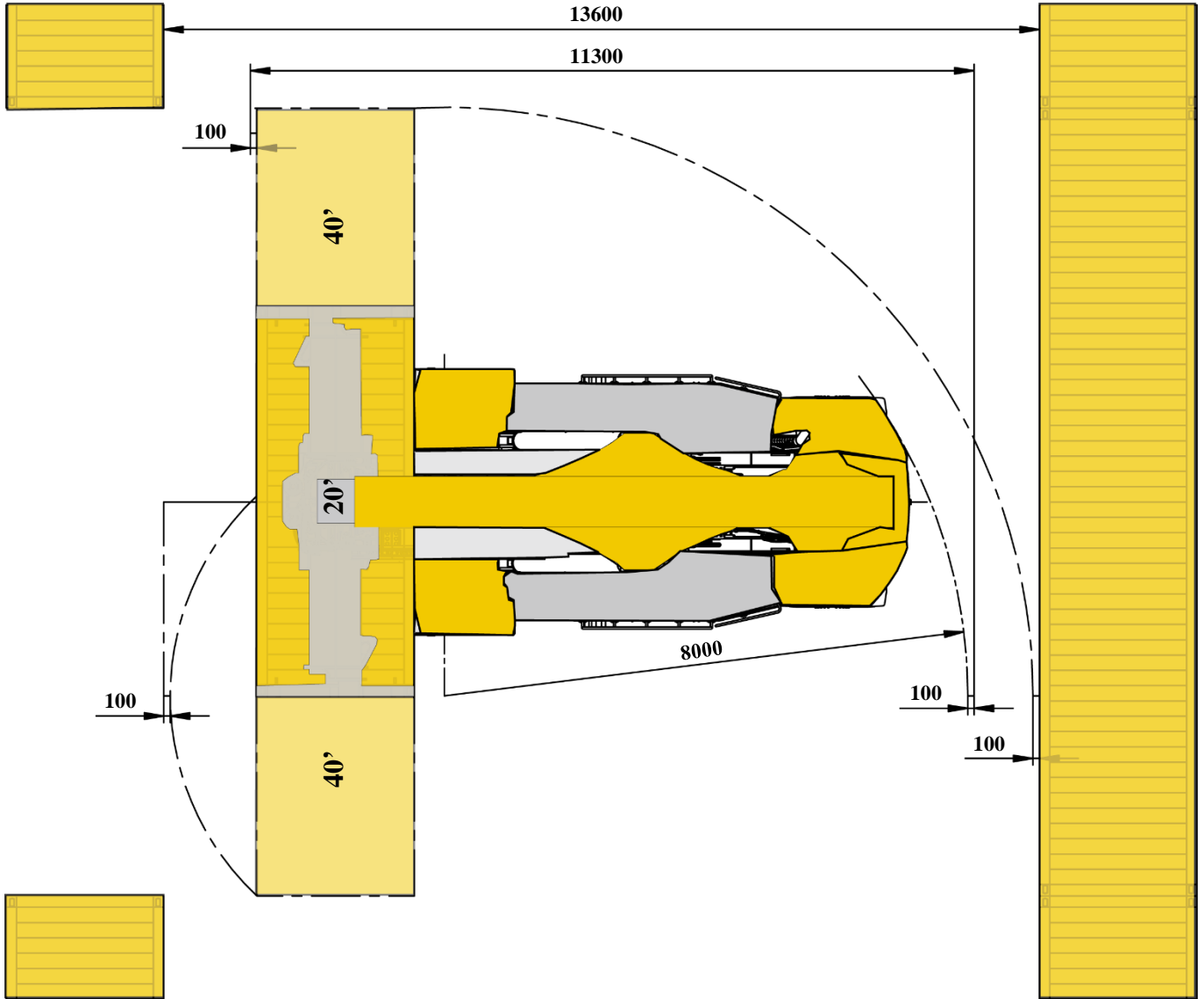
**Counterweight B**

Weight	3826kg
Qty	1



**NOTES:** All of these are single piece weight, and boom assembly include boom and telescopic cylinder.

# Aisle width





## Main Technical Data

No.	Item	Unit	Parameter	Tolerance	
1	length	mm	11340	±2%	
2	Width	Spreader	mm	6053	±2%
3		Front wheel	mm	4200	±2%
4	Height	mm	4670	±2%	
5	Wheelbase	mm	6000	±1%	
6	Trace	Front	mm	3033	±1%
7		Rear	mm	2790	±1%
8	Overhang	Front	mm	840	±1%
9		Rear	mm	1194	±1%
10	Min. ground clearance	mm	350	±1%	
11	Min. turning radius	mm	8000	≤102%	
12	Max. gradeability	%	13%	≥90%	
13	Dead weight	kg	71200	±3%	
14	Rated lifting capacity	kg	45000	—	
15	Stacking capacity	—	5-5-4	—	
16	Max. lifting height	mm	15100	±1.5%	
17	Max. lifting speed	Unloaded	mm/s	420	±10%
18		Rated load	mm/s	250	±10%
19	Max. lowering speed	Unloaded	mm/s	360	±10%
20		Rated load	mm/s	300	±10%
21	Max. traveling speed	Unloaded	km/h	20	±10%
22		Rated load	km/h	14	±10%
23	Aisle width	20'	mm	11300	±2%
24		40'	mm	13600	±2%

## Main parts list

N0.	Name	Model	Manufacturer
1	Spreader (XCMG)	XJD450	Xuzhou XCMG Port Machine Co.,Ltd.
2	Spreader (Bromma)	RSX40	Sweden Bromma
3	Drive Axle	D102PL341	Germany Kessler
4	Pump	P105	America Parker
5	Main valve	M402LS-2-4092B	America Parker
6	Telescopic cylinder	XCS45_2.16	Xuzhou Hydraulic Parts Co., Ltd. XCMG
7	Luffing Cylinder	XCS45_2.28	Xuzhou Hydraulic Parts Co., Ltd. XCMG
8	Tire	18.00-25	Guizhou Tyre Co., Ltd. Hongzhou Zhongce Rubber Co., Ltd.
9	Cab	XCS4531K.03	Hubei Qixing Cabin Manufacturing Co., Ltd.
10	Radiator	XCS4531K.48	AKG Thermal Systems(Taicang) Co.,Ltd

1. All information in the brochure is provided for reference only. Never rely on it to operate the machine. Refer to the operation manual for operation instructions of the machine.
2. Container reach stacker belong to off-road machines. Local traffic rules and regulations must be observed. For long-distance job site transfer, use a trailer and take GVW, axle load and dimensions of the machine into consideration.
3. The machine must be operated on firm ground, which gradient does not exceed 3%.
4. Operation of the machine is permissible only when the wind force is below grade 6.  
When operating the machine under wind, it is necessary to observe wind speed, equipment status and operating environment. In addition, the wind velocity on the ground is different with that in the high air, and it is also different on flat ground and in city air, which shall be taken into account.

A decorative graphic consisting of three parallel, slanted lines in blue and yellow, resembling a stylized lightning bolt or speed lines.

## **XCS4531E Container Reach Stacker (Fully Electric Version)**

