

Data Sheet

Kalmar

# STRADDLE CARRIERS

for shuttle operations



# A FLEXIBLE

range for you

Every Kalmar Straddle Carrier features a modular design that can be tailored to meet the needs of your business. You have three different straddle carrier solutions to choose from:

## Kalmar Electric Straddle Carrier.

The eco-efficient Kalmar Electric Straddle Carrier produces zero emissions at source and provides a flexible solution that can easily be adapted to meet your requirements. You have a choice of battery solutions and charging options plus a range of supportive products that can help to enhance your overall operations.



## Kalmar Hybrid Straddle Carrier.

The Kalmar Hybrid Straddle Carrier with start-stop technology delivers all the power you're used to, with up to 40% reduction in fuel consumption and up to 50 tons less CO<sub>2</sub> emissions per annum than a traditional diesel-electric machine. A regenerative energy system captures electrical braking and spreader-lowering energy, then stores this for re-use in Lithium-ion batteries.



## Kalmar Straddle Carrier.

The Kalmar Straddle Carrier offers high performance, excellent fuel efficiency and low noise. Featuring a diesel-electric drive, this straddle carrier complies with the latest exhaust emission regulations.



## The Kalmar AutoStrad™.

The Kalmar AutoStrad can pick, carry, stack and place containers independently. The Kalmar AutoStrad delivers a safe, eco-efficient and effective automated horizontal transport option. Its scalability and flexibility mean it is suitable for a variety of terminal operation modes.



### Key benefits

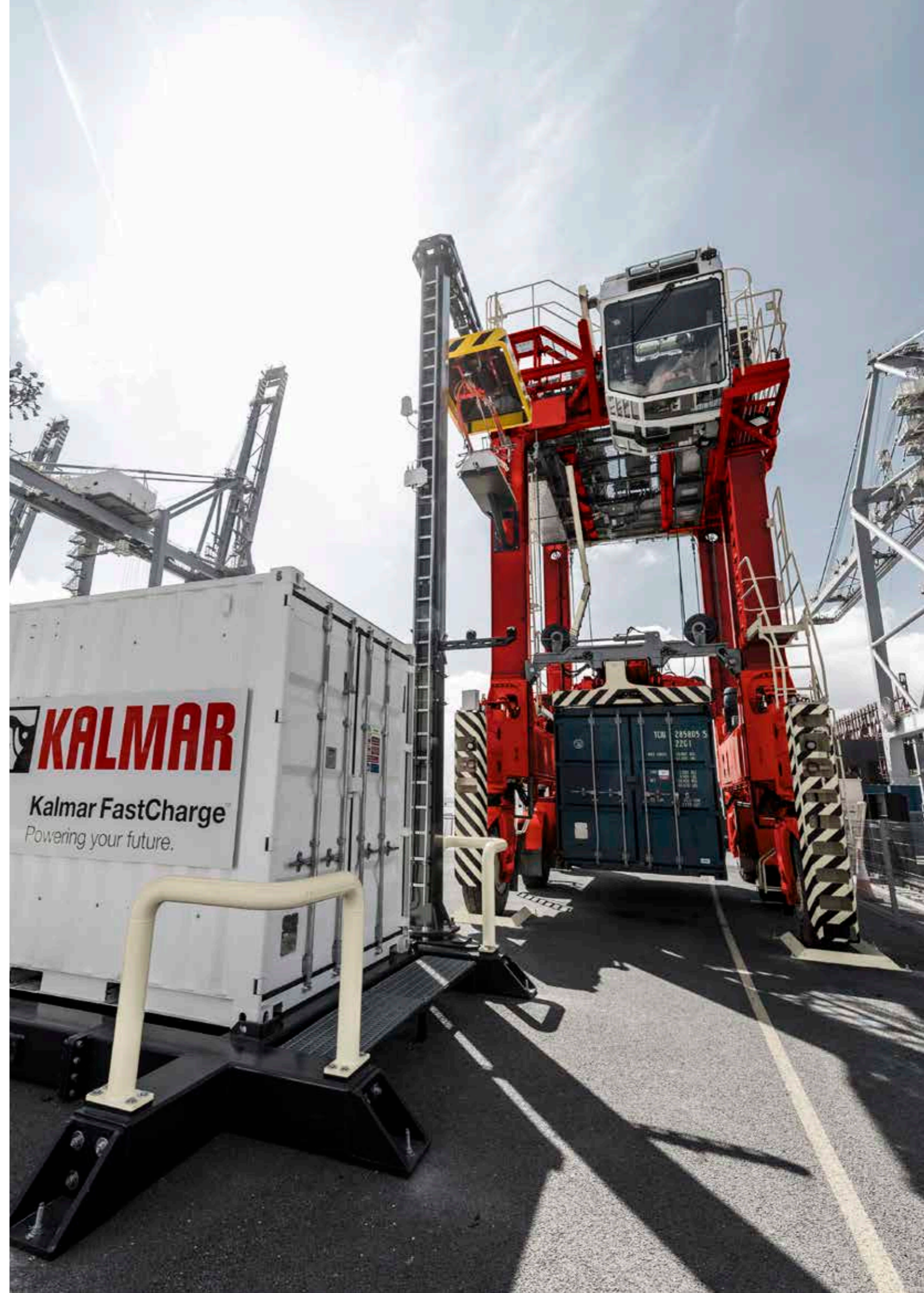
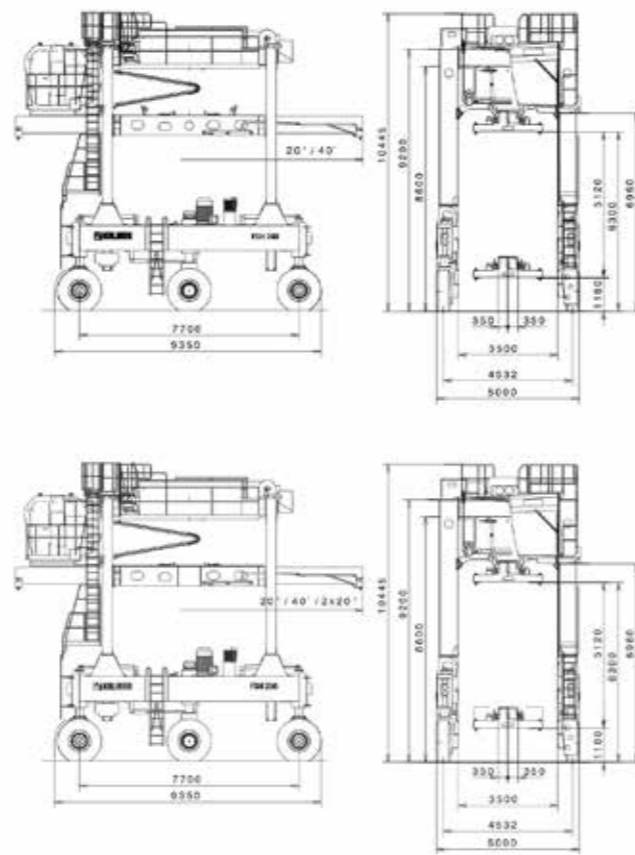
- Superior versatility for every need
- Decreased fuel consumption, up to 40% with hybrid
- Lower noise, lower emissions
- Zero emissions with Kalmar Electric Straddle Carrier
- Increased manoeuvrability
- Advanced safety
- Superior ergonomics
- Longer service intervals
- Secure and fast container handling
- Automation-ready.

# Kalmar

# ELECTRIC

Straddle Carrier

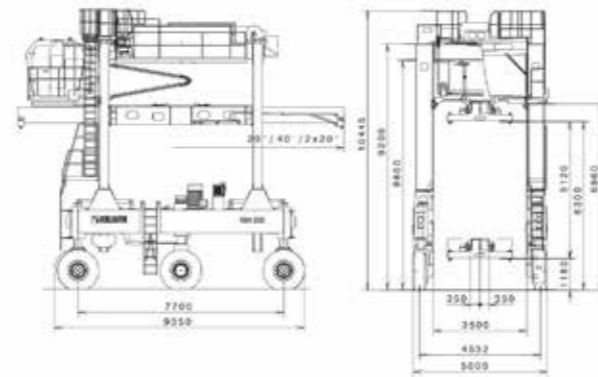
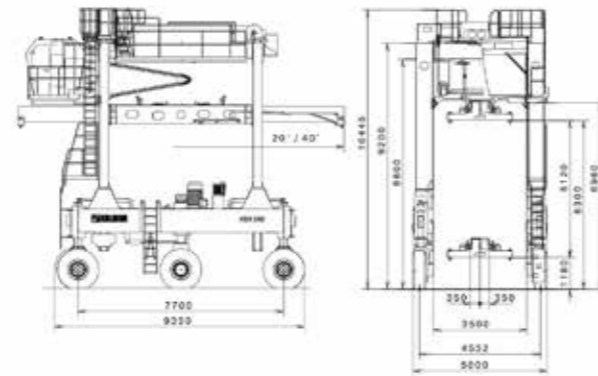
2-HIGH MODELS		SC240E	SC250E
<b>OPERATING DATA</b>			
Capacity under spreader - single lift	ton	40	50
Capacity under spreader - twin lift	ton	50	50
Service weight - high power	ton	51	52
Service weight - high energy	ton	53.5	54.5
Wheel load fully loaded - high power	ton	15.2	17.2
Wheel load fully loaded - high energy	ton	15.6	17.4
<b>DIMENSIONS</b>			
Lifting height front cabin, max.	mm	6300	
Pick-up height, min.	mm	1180	
Inside clear width	mm	3500	
Turning radius, inside	mm	3630	
Turning radius, outside	mm	9500	
<b>SPREADER</b>			
Twistlocks		ISO	
Positions	ft	20, 40	20, 40/2x20*
Side shift	mm	± 350	
Slew angle	deg.	± 6	
<b>SPEEDS</b>			
Max. travel speed, empty	km/h	30	
Max. travel speed, loaded	km/h	30	22
Max. lifting speed, empty	m/min	20	
Max. lifting speed, loaded	m/min	13	9
Max. lowering speed, empty	m/min	18	
Max. lowering speed, loaded	m/min	13	9
<b>POWER UNIT</b>			
Type		Fully Electric	
Charging system		CCS charging as standard, Kalmar FastCharge™ optional	
Energy Storage		Lithium-ion battery	
<b>DRIVE SYSTEM</b>			
Type		2-wheel drive	
Control		AC-frequency control	
Electric motors		2 induction motors	
<b>TYRES</b>			
Size		480/95R25	
<b>BRAKES</b>			
Service brakes		Wet disc in four wheels	
Parking brakes		Spring actuated, wet disc in two wheels	
<b>HOIST SYSTEM</b>			
Type		Winch rope hoist	
Control		AC-frequency control	
Electric motor		1 induction motor	
<b>CONTROL SYSTEM</b>			
Type		PLC	
Voltage		24 V	
Field bus		Can open Ethernet IP	



\* Also available: Extendable twinlift 45 ft. Subject to change without notice

# Kalmar HYBRID Straddle Carrier

2-HIGH MODELS		SC240H	SC250H
<b>OPERATING DATA</b>			
Capacity under spreader - single lift	ton	40	50
Capacity under spreader - twin lift	ton	50	50
Service weight	ton	51	52
Wheel load fully loaded - high power	ton	15.2	17.0
<b>DIMENSIONS</b>			
Lifting height front cabin, max.	mm	6300	
Pick-up height, min.	mm	1180	
Inside clear width	mm	3500	
Turning radius, inside	mm	3630	
Turning radius, outside	mm	9500	
<b>SPREADER</b>			
Twistlocks		ISO	
Positions	ft	20,40	20, 40/2x20*
Side shift	mm	± 350	
Slew angle	deg.	± 6	
<b>SPEEDS</b>			
Max. travel speed, empty	km/h	30	
Max. travel speed, loaded	km/h	30	22
Max. lifting speed, empty	m/min	20	
Max. lifting speed, loaded	m/min	13	9
Max. lowering speed, empty	m/min	18	
Max. lowering speed, loaded	m/min	13	9
<b>POWER UNIT</b>			
Type		Hybrid	
Charging system		Diesel generator	
Energy Storage		Lithium-ion battery (LTO)	
<b>ENGINE</b>			
Power	kW	77	
Torque	Nm	425	
Displacement	dm <sup>3</sup>	4.4	
Emission level		EU stage II/EU stage IV/US Tier 4f	
<b>DRIVE SYSTEM</b>			
Type		2-wheel drive	
Control		AC-frequency control	
Electric motors		2 induction motors	
<b>TYRES</b>			
Size		480/95R25	
<b>BRAKES</b>			
Service brakes		Wet disc in four wheels	
Parking brakes		Spring actuated, wet disc in two wheels	
<b>HOIST SYSTEM</b>			
Type		Winch rope hoist	
Control		AC-frequency control	
Electric motor		1 induction motor	
<b>CONTROL SYSTEM</b>			
Type		PLC	
Voltage		24 V	
Field bus		Can open Ethernet IP	

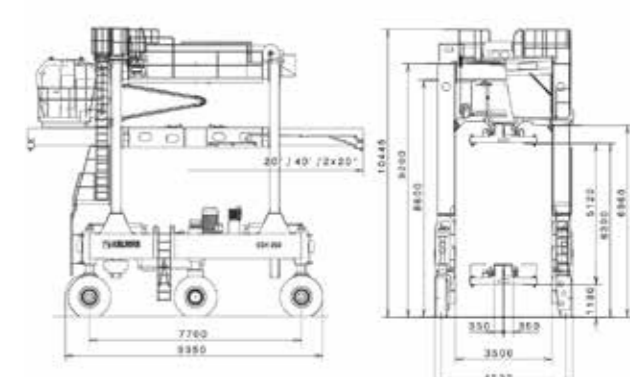
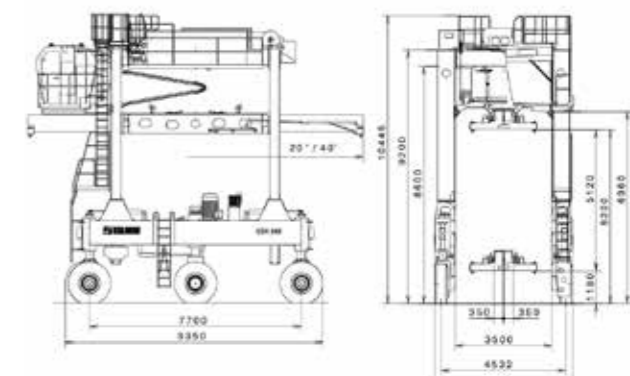


\* Also available: Extendable twinlift 45 ft.

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# Kalmar DIESEL-ELECTRIC Straddle Carrier

2-HIGH MODELS		SC240C	SC250C
<b>OPERATING DATA</b>			
Capacity under spreader - single lift	ton	40	40
Capacity under spreader - twin lift	ton	50	50
Service weight	ton	51	52
Wheel load fully loaded - high power	ton	15.2	17.0
<b>DIMENSIONS</b>			
Lifting height front cabin, max.	mm	6300	
Pick-up height, min.	mm	1180	
Inside clear width	mm	3500	
Turning radius, inside	mm	3630	
Turning radius, outside	mm	9500	
<b>SPREADER</b>			
Twistlocks		ISO	
Positions	ft	20,40	20, 40/2x20*
Side shift	mm	± 350	
Slew angle	deg.	± 6	
<b>SPEEDS</b>			
Max. travel speed, empty	km/h	30	
Max. travel speed, loaded	km/h	30	22
Max. lifting speed, empty	m/min	20	
Max. lifting speed, loaded	m/min	13	9
Max. lowering speed, empty	m/min	18	
Max. lowering speed, loaded	m/min	13	9
<b>POWER UNIT</b>			
Type		Diesel-electric	
Power system		Variable speed AC-generator	
<b>DRIVE SYSTEM</b>			
Type		2-wheel drive	
Control		AC-frequency control	
Electric motors		2 induction motors	
<b>TYRES</b>			
Size		480/95R25	
<b>BRAKES</b>			
Service brakes		Wet disc in four wheels	
Parking brakes		Spring actuated, wet disc in two wheels	
<b>HOIST SYSTEM</b>			
Type		Winch rope hoist	
Control		AC-frequency control	
Electric motor		1 induction motor	
<b>CONTROL SYSTEM</b>			
Type		PLC	
Voltage		24 V	
Field bus		Can open Ethernet IP	
<b>ENGINE</b>			
Power	kW	285	
Torque	Nm	1938	
Displacement	dm <sup>3</sup>	10.8	
Emission level		EU stage II/III/IV/US Tier2/3/4f	



\* Also available: Extendable twinlift 45 ft.

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# KALMAR

Making your every move count

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