



D45 CRT CHARGE™ & D45 CRT LE CHARGE™

Zero-emission battery-electric
commuter coaches



The new D45 CRT CHARGE™ and the all-accessible D45 CRT LE CHARGE™ battery-electric highway coaches offer long range, high capacity, real-time performance analytics and unparalleled accessibility.

With electrically driven components and MCI's smooth riding suspension, passengers will experience a clean, quiet, and comfortable ride while powering through the steepest road grades.

Models.

Two models to choose from to meet your customer's needs.

Both models share the same electric platform supported by New Flyer's 50 years of zero-emission propulsion experience and NFI Infrastructure Solutions™, a service dedicated to providing safe, sustainable, and reliable charging solutions.



D45 CRT CHARGE™

Brings all-electric capability to the legendary high-floor commuter transit workhorse, now modernized with next generation innovation and style.



D45 CRT LE CHARGE™

Features a revolutionary patented low-entry (LE) vestibule with a seating area and ramp that significantly improves dwell times as well as the boarding and ride experience for all passengers, including those with mobility challenges.

The leader in green transportation.

In the last two decades alone, New Flyer has expanded in three categories of zero-emission buses — battery-electric, trolley-electric, and hydrogen fuel cell-electric — along with the widest range of charging options.

As part of NFI, MCI has leveraged this impressive history of electric-driven innovation and expertise into our electric coach product line, which makes us your best partner in battery-electric propulsion.

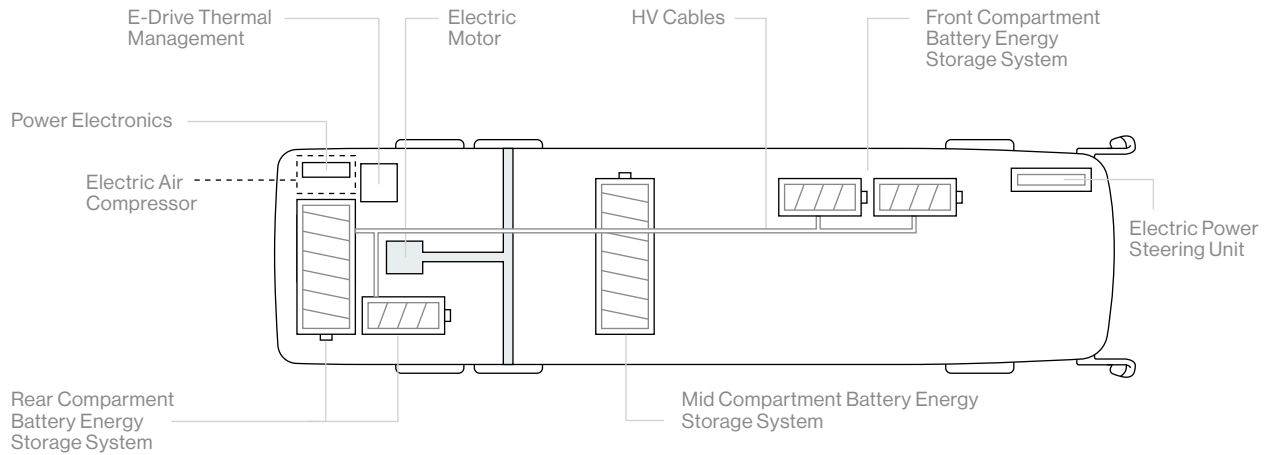
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A 45-foot electric coach can avoid approximately 80 metric tons of greenhouse gas (GHG) annually.





MCI

How it works.

The D45 CRT CHARGE™ and D45 CRT LE CHARGE™ use an electric motor powered by energy stored in rechargeable batteries.



Benefits

-  A high-torque electric drive system delivering 90% energy recovery and designed to handle long-distance applications and highway speeds.
-  Next generation, high-energy, long-range batteries with plug-in battery charging to 100 percent in less than 4 hours.
-  Range of 225+ miles with 520 kWh.
-  Regenerative braking, capturing kinetic energy to recharge the battery system, making for highly efficient driving in start-stop traffic conditions.

High tech safety systems.

Optional Tire Pressure Monitoring System (TPMS) with integrated Patented Digital Wheel End Sensing (DWES) system that monitors individual wheel ends for potential issues.

Optional next-generation 360 camera that provides a birds-eye view around the entire coach to significantly aid vision while maneuvering at low speeds.

NFI Infrastructure Solutions™ is a service dedicated to providing safe, reliable, smart and sustainable charging and mobility solutions. Learn what NFI Infrastructure Solutions™ can do for you at nfigroup.com/IS

What our Infrastructure Solutions team provides.



Supports mobility projects from start to finish.



Provides infrastructure planning and development.



Focuses on energy management optimization.



Provides cohesive transition of coach fleets to zero-emission electric technology.

Charging.

MCI battery-electric models comply with SAE J1772 standards.

The D45 CRT CHARGE™ and D45 CRT LE CHARGE™ are interoperable with charging systems available from: Siemens, ABB, Chargepoint, Heliox.

SIEMENS

ABB

-chargepoint+

heliox



Plug-In Charging

Depot charging reduces infrastructure cost, complexity, and battery degradation. Plug-in chargers can be used for overnight, mid-day, and on-route charging.

The D45 CRT CHARGE™ and D45 CRT LE CHARGE™ have a range of 225+ miles (520 kWh)* on a single charge. *Range is dependent on duty cycle

Bottom Charge	Top Charge	Charge Time
0%	100%	< 4 hrs
30%	80%	< 2 hrs

MCI CONNECT 360™

Connect 360™, operated by NFI Connect™, is a customizable performance dashboard that provides smart analytic reporting to expand insight and intelligence for managing your battery-electric coaches.



Additional range capability with improved driver performance.



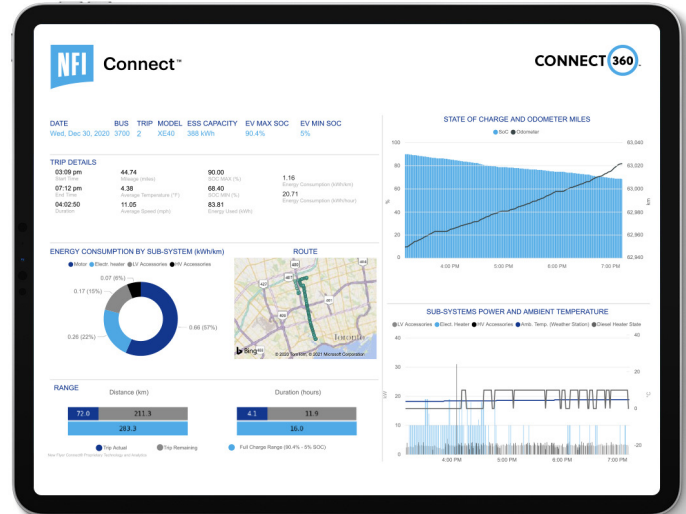
Intelligence on how to preserve battery energy throughout the day.



Decision-making information to optimize charging strategies.



Reduced operating cost and maximum fleet utilization.



Connect 360™ is included on every new battery-electric coach. Learn more at nfigroup.com/connect

Reliable service and support.

MCI service and support delivers a relationship-driven and responsive approach to customer care.



Comprehensive support that includes in-field expertise, technical call center and 24/7 roadside assistance.



Ongoing technical training from the industry's only Automotive Service Excellence (ASE) accredited MCI Academy technician training center.



Customizable programs to fit your financial needs through NFI Financial Solutions™.



On-the-go support with MCI Operator's App and MCI Companion App.



MCI Service Center - from routine maintenance and warranty to complex troubleshooting, you'll find all the help you need.



Aftermarket parts support from NFI Parts™, the industry's largest parts supplier.

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Accessibility at a whole new level.

Developed with accessibility in mind, the electric D45 CRT LE CHARGE™ features a revolutionary patented low-entry vestibule, and a seating area and ramp that significantly improve the boarding and ride experience for passengers with mobility needs.

Benefits



Easy

Rapid entry and exit via two doors decreasing dwell time.



Safe

Level boarding, improved wheelchair securement, and a comfortable riding experience for passengers with varying mobility.



Efficient

Ramp that provides loading times comparable to low-floor transit buses with flip ramps.



Standard Mid-Coach Lift

The D45 CRT CHARGE™ comes standard with a mid-coach Braun wheelchair lift.



MCI model specification highlights.

	D45 CRT CHARGE™		D45 CRT LE CHARGE™	
Body				
Length	45.83'	13.72 m	45.83'	13.72 m
Width	102"	2.59 m	102"	2.59 m
Roof Height	138.6"	3.51 m	138.6"	3.51 m
Tire Size	315/80 R22.5		315/80 R22.5	
Approach Angle	7.5°		7.5°	
Breakover Angle	8.2°		8.2°	
Construction	Semi-monocoque low-corrosion stainless-steel frame		Semi-monocoque low-corrosion stainless-steel frame	
Body Material	Fiberglass composite		Fiberglass composite	
Propulsion System				
Motor	Siemens		Siemens	
Maximum Power	320 kW		320 kW	
Maximum Torque	5000 Nm		5000 Nm	
Transmission/Gearbox	4.7 gear ratio direct drive		4.7 gear ratio direct drive	
Energy Storage System				
Battery Type	NMC lithium ion Ultra-high energy		NMC lithium ion Ultra-high energy	
Battery Capacity	520 kWh		520 kWh	
Usable SoC	89%		89%	
Battery Recycling Available	Yes		Yes	
Charging Plug-In				
Charge Rate (kW)	150+		150+	
Charge Time (7% to 96%)	< 4 hrs		< 4 hrs	
Plug / Adapter / Interface	CCS1		CCS1	
Number of Charge Ports	1		1	
Location(s) of Charge Ports	Rear curbside		Rear curbside	
EVSE Type (AC or DC)	DC		DC	
EVSE Supply Voltage	150 - 850 VDC		150 - 850 VDC	
EVSE Maximum Charge Current	200 A		200 A	

MCI

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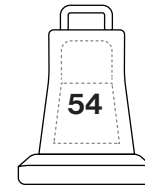
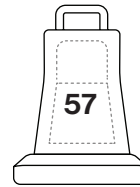
Performance

	D45 CRT CHARGE™		D45 CRT LE CHARGE™	
Nominal Range (estimated low to heavy usage)	156 - 250 miles	251 - 402 miles	156 - 250 miles	251 - 402 km
Top Speed	72 mph	116 kph	72 mph	116 kph
Exceeds APTA gradeability requirement	10% Grade: 30 mph	48 kph	10% Grade: 30 mph	48 kph
	2.5% Grade: 55 mph	88 kph	2.5% Grade: 55 mph	88 kph

Weight

Curb Weight (estimated)	43,000 lbs	19,500 kg	44,500 lbs	20,200 kg
Gross Vehicle Weight Rating	54,000 lbs	24,494 kg	54,000 lbs	24,494 kg
Gross Axle Weight Rating – Front	17,000 lbs	7,711 kg	17,000 lbs	7,711 kg
Gross SP Weight Rating – Rear	Drive: 23,000 lbs Tag: 16,500 lbs	10,432 kg 7,484 kg	Drive: 23,000 lbs Tag: 16,500 lbs	10,432 kg 7,484 kg

Passenger Capacity



Warranty

Vehicle	24-month limited warranty	24-month limited warranty
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MCIcoach.com/electric



MCIcoach.com/electric

VIC | VEHICLE INNOVATION CENTER

Learn more about this technology at the Vehicle Innovation Center
newflyer.com/vic