



# 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.

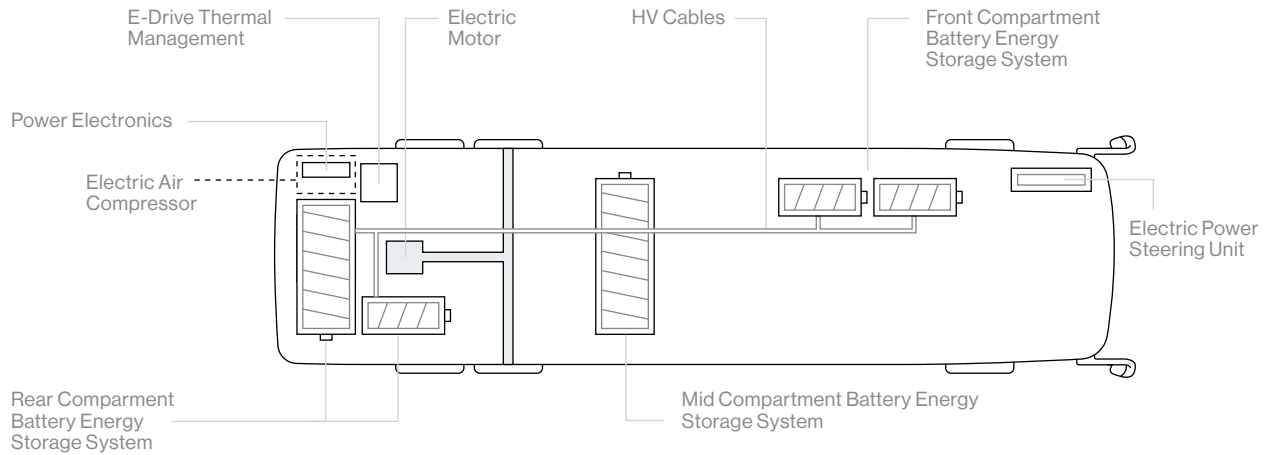
# 80

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.

# MCI

## NFI Infrastructure Solutions™

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](http://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.



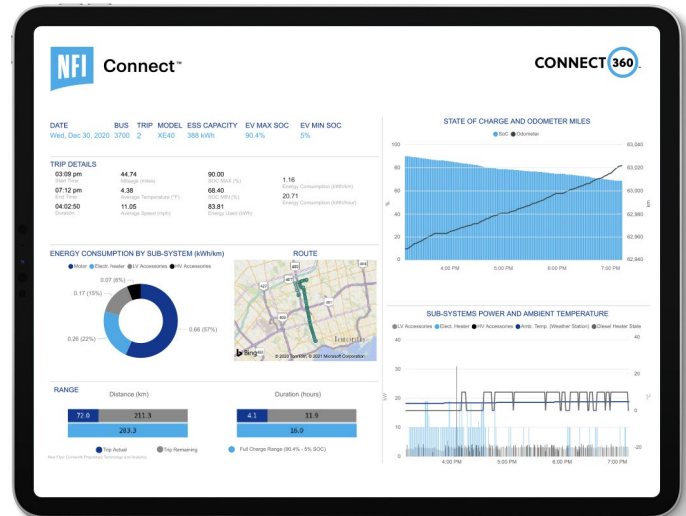
**Intelligence** on how to preserve battery energy throughout the day.



**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](http://nfigroup.com/connect)



MCIcoach.com/electric

## 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™.



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



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

# MCI

**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™	
<b>Body</b>				
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	
<b>Propulsion System</b>				
Motor	Siemens		Siemens	
Rated Power	320 kW		320 kW	
Maximum Torque	3320 ft-lbs		3320 ft-lbs	
Transmission/Gearbox	4.7 gear ratio direct drive		4.7 gear ratio direct drive	
<b>Energy Storage System</b>				
Battery Type	NMC lithium ion Ultra-high energy by XALT		NMC lithium ion Ultra-high energy by XALT	
Battery Capacity	520 kWh		520 kWh	
Usable SoC	85+%		85+%	
Battery Recycling Available	Yes		Yes	
<b>Charging Plug-In</b>				
Charge Rate (kW)	150+		150+	
Charge Time (7% to 94%)	< 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	
EVSE Mounting Type	Wall/cabinet		Wall/cabinet	
EVSE IP Rating	IP 54		IP 54	
EVSE Smart Charging Capabilities	Available		Available	
EVSE Manufacturers Certified for Use	All SAE J1772-compliant manufacturers		All SAE J1772-compliant manufacturers	
EVSE Buy America Compliant Manufacturer	No		Yes	

# MCI

## MCI model specification highlights.

### Performance

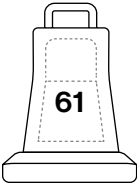
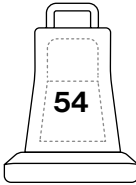
**Nominal Range** (estimated low to heavy usage)

**Top Speed**

**Meets or exceeds APTA gradeability requirement**

#### D45 CRT CHARGE™

#### D45 CRT LE CHARGE™

D45 CRT CHARGE™		D45 CRT LE CHARGE™	
156 - 250 miles	251 - 402 miles	156 - 250 miles	251 - 402 km
72 mph	116 kph	72 mph	116 kph
<b>10% Grade:</b> 15 mph		<b>10% Grade:</b> 15 mph	
	24 kph		24 kph
<b>2.5% Grade:</b> 40mph		<b>2.5% Grade:</b> 40mph	
	64 kph		64 kph
<b>Curb Weight (estimated)</b> 43,000 lbs		<b>Curb Weight (estimated)</b> 44,000 lbs	
<b>Gross Vehicle Weight Rating</b> 54,000 lbs		<b>Gross Vehicle Weight Rating</b> 54,000 lbs	
<b>Gross Axle Weight Rating – Front</b> 17,000 lbs		<b>Gross Axle Weight Rating – Front</b> 17,000 lbs	
<b>Gross Axle Weight Rating – Rear</b> <b>Drive:</b> 23,000 lbs <b>Tag:</b> 16,500 lbs		<b>Gross Axle Weight Rating – Rear</b> <b>Drive:</b> 23,000 lbs <b>Tag:</b> 16,500 lbs	
19,500 kg		20,000 kg	
24,494 kg		24,494 kg	
7,711 kg		7,711 kg	
10,432 kg		10,432 kg	
7,484 kg		7,484 kg	
			
24-month limited warranty		24-month limited warranty	

### Weight

### Passenger Capacity

### Warranty

Vehicle





# D45 CRT CHARGE™ & D45 CRT LE CHARGE™

[MCIcoach.com/electric](http://MCIcoach.com/electric)



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**VIC** | VEHICLE INNOVATION CENTER

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