



# D45 CRT CHARGE™ + D45 CRT LE CHARGE™

Zero-emission battery-electric  
commuter coaches



**The 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.**

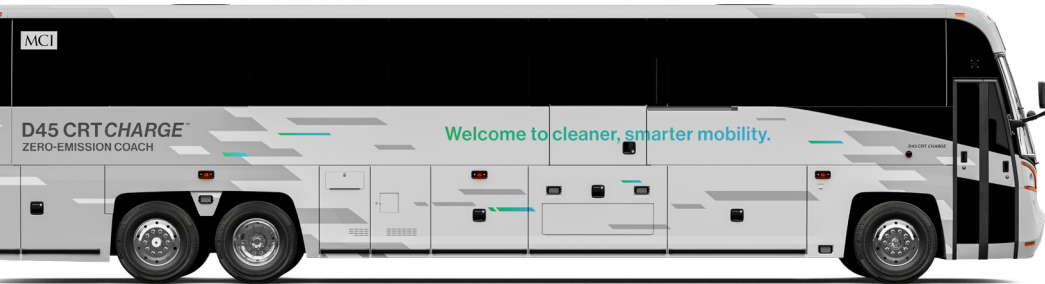
With electrically driven components and MCI's smooth riding suspension, passengers will experience a clean, quiet, and comfortable ride while powering through the steepest road grades.

# MCI

## Models.

### Two models to choose from to meet your 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.

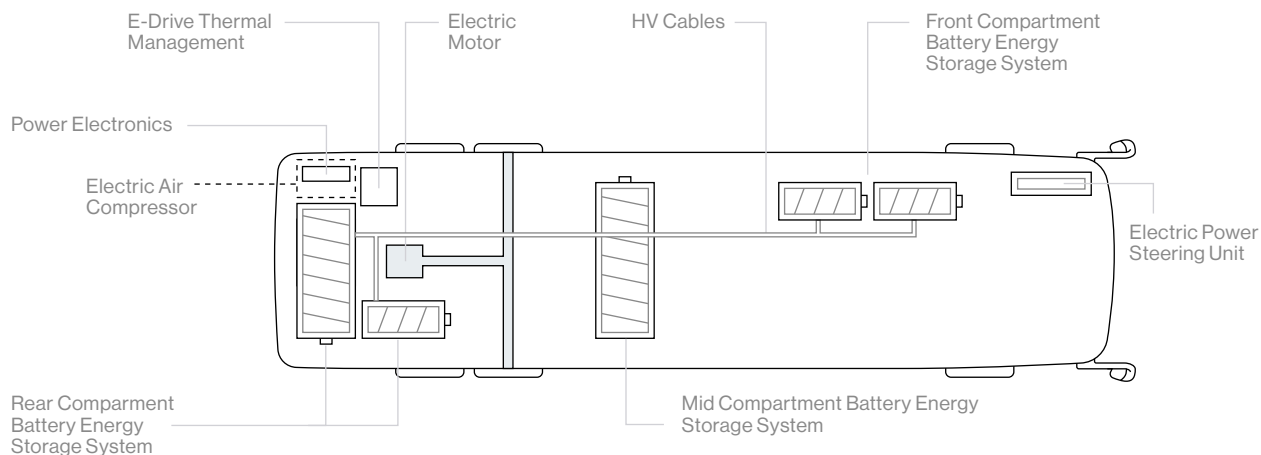
# 80+

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



## 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™

NFI Infrastructure Solutions™ is a service dedicated to delivering safe, reliable project management for smart, sustainable, zero-emission mobility. Learn what NFI Infrastructure Solutions™ can do for you at [mcicoach.net/IS](https://mcicoach.net/IS)

## What our Infrastructure Solutions team provides.



Project management of zero-emission mobility projects.



Infrastructure planning and development.



Maximization of energy and fuel transfer and usage



Support for all NFI North American electric bus deployments.

## 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: Power Electronics, 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 [mcicoach.com/connect](http://mcicoach.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™.



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.

# MC

## 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

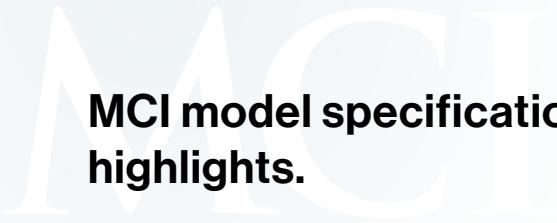
The D45 CRT CHARGE™ comes standard with a mid-coach Braun wheelchairs lift.



# MCI

## MCI model specification highlights.

	D45 CRT CHARGE™		D45 CRT LE CHARGE™	
Body				
Length	45.82’	13.72m	45.82’	13.72m
Width	102”	2.59m	102”	2.59m
Roof Height	138.6”	3.51m	138.6”	3.51m
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	Accelera™ by Cummins		Accelera™ by Cummins	
Rated Power	320 kW		320 kW	
Maximum Torque	4800 Nm		4800 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 94%)	< 4 hrs		< 4 hrs	
Plug / Adapter / Interface	CCS 1		CCS 1	
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 model specification highlights.

## 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
Meets or exceeds APTA gradeability requirement	10% Grade: 30 mph  2.5% Grade: 55 mph	48 kph  88 kph	10% Grade: 30 mph  2.5% Grade: 55 mph	48 kph  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 Axel 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](http://MCIcoach.com/electric)



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**VIC** | VEHICLE INNOVATION CENTER

Learn more about this technology at the Vehicle Innovation Center  
[newflyer.com/vic](http://newflyer.com/vic)