

## DCC2

# High efficiency DC/DC Converter for electric and hybrid vehicle applications

Inmotion is a premier global supplier of power electronics to the industrial hybrid and electric vehicle industry. With our comprehensive product lineup for both high and low voltage hybrid/electric vehicles, Inmotion sets a benchmark for quality and reliability, ease of adaptation, and cost of ownership.

The DC/DC converter is designed for a wide range of input voltages and, with an adjustable secondary voltage for 12 and 24 V systems, it is ideal for most hybrid/electric vehicle applications. All models are available with CAN bus communication in order to seamlessly integrate into the vehicle control system.



## PRODUCT FEATURES

- **Best in class quality and reliability** achieved through superior design and manufacturing processes
- **Rugged IP6K9K design** suitable for the demanding environment of electric vehicles
- **Field proven control SW platform** used for both industrial and on-road vehicles
- **High efficiency (up to 95%)** using Silicon Carbide (SiC) technology
- Documentation in accordance with **AIAG PPAP** standard
- Extensive and powerful event handling and data logging simplifies troubleshooting and ensures **minimized vehicle down time**
- **Liquid (WEG) cooling** for minimized physical size
- **Adjustable output voltage**
- Possible to parallel multiple units to achieve **higher delivered power** at secondary voltage
- **Choose between** PowerLok or cable lug connection for the low side voltage

## RATINGS

Model	Output Voltage <sup>1</sup> [V]	Output current [A]	Output power [kW]	Input voltage [V]		
				Nominal	Max	No de-rating
DCC35M12	14	270	3.75	350	450	270-450
DCC35M24	28	160	4.50			
DCC65M12	14	270	3.75	650	850	450-750
DCC65M24	28	270	7.50			

<sup>1</sup> Output voltage is adjustable via CAN or parameter. Typical output voltage for 12/24V battery shown in table

## ENVIRONMENTAL

Ambient operating temperature	-40° C to +100° C
Minimum WEG coolant temp/flow	65° C @ 6 l/min
Pressure drop	< 20 kPa at 65° C and 6 l/min
Storage temperature	-40° C to + 85° C
Protection class	IP6K9K and IP67
Shock and Vibration	ISO16750-3
Communication	CAN J1939 or CANOpen

## WEIGHT AND DIMENSIONS [mm]

Weight 10 kg

