



MECHANICAL AND ELECTRICAL DIVISION

Battery-powered vehicles offer many benefits over combustion engines: no emissions, silent operation, energy efficiency and low maintenance costs. However, selecting and integrating the right components for an optimized electric powertrain can be a challenging and time-consuming task. Whether it is for industrial equipment, construction, agricultural machinery, compact urban vehicles, or any other electrification projects, the Canimex electrification team is your trusted partner.

Collaborating with renowned manufacturers for more than 50 years, we supply, customize and integrate premium mechanical and electrical powertrain components for turnkey solutions for our partners. From electric transaxles, wheel drives, AC and DC motors, motor controllers with parametrization, actuators, batteries and battery chargers, to mechano-electric sub-assemblies, engineering support and testing capabilities, we are the electrification partner you have been waiting for!

#### OUR **SOLUTIONS**

- Exclusive partnerships in the electrification industry
- Solid technical expertise
- Project management team
- Testing capabilities
- **High-quality** standards

#### **ELECTRIC TRANSAXLES**

## **TX1 SERIES**





#### SIMPLY POWERFUL E-TRANSAXLE

- SCALABLE DESIGN
- HIGHLY EFFICIENT
- LIGHTWEIGHT
- MULTI-ANGLE INSTALLATION
- SEMI-FLOATING AXLE

TX1 Series is an ultra-quiet electric powertrain suitable for light- and medium-duty electric vehicles. It has adjustable mounting widths and is available with IPM or AC waterproof motors, differential lock, and brakes.

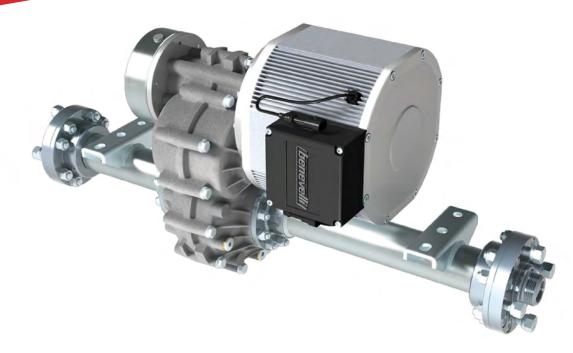


Voltage	From 24 to 120 Vdc
Efficiency	Axle efficiency up to 95%
Output Torque	Up to 600 Nm
Load	Up to 700 kg
Ratio	6 – 10 – 12 – 16 – 19 – 22 – 24 – 28 – 32
Motors	PMDC - AMAC - SMAC
Peak Power	(S2-5 min): up to 7 kW
Peak Torque	(S2-5 min): up to 600 Nm
Continuous Power	(S2-60 min): up to 3 kW
Continuous Torque	(S2-60 min) : up to 300 Nm
IP Protection	Up to IP 69 K



## **TX2 SERIES**





#### BUILT FOR ELECTRIFICATION ON AN EPIC SCALE

- SCALABLE DESIGN
- HIGHLY EFFICIENT
- LIGHTWEIGHT
- MULTI-ANGLE INSTALLATION
- FULL-FLOATING AXLE

The highest power density in a transaxle and a breakthrough versatile transmission system with integrated differential. Exceptional design and precision-machined gears ensuring the most durable transaxle ever.

Voltage	24 - 600 V		
Efficiency	Axle efficiency up to 95%		
Output Torque	Up to 1 600 Nm		
Load	Up to 1 600 kg		
Ratio	5 – 7 – 9 – 10 – 12 – 16 – 22 – 27 – 35 43 - 56 - 80		
Motors	AMAC - SMAC		
Peak Power	(S2-5 min): up to 16 kW		
Peak Torque	(S2-5 min): up to 1 600 Nm		
Continuous Power	(S2-60 min): up to 10 kW		
Continuous Torque (S2-60 min): up to 1 600 Nm			
IP Protection	Up to IP 69 K		



SCAN THE CODE TO SEE THE COMPONENT IN 3D.



#### **ELECTRIC WHEEL DRIVE**

# **WD220 SERIES**





#### THE MOST ADVANCED ALL-IN-ONE WHEEL DRIVE SOLUTION

- EASY TO INSTALL
- HIGHLY EFFICIENT
- HIGH POWER DENSITY
- HIGH LOAD CAPACITY

The WD220 Series electrified wheel drive utilizes high-density IPM motors that, thanks to permanent magnet design, makes the unit 50% smaller than a traditional wheel drive.

Voltage	From 24 to 600 V
Efficiency	Wheel drive efficiency up to 95%
Output Torque	Up to 1 000 Nm (each wheel)
Load	Up to 3 000 kg (each wheel)
Ratio	41
Motors	SMAC
Peak Power	(S2-5 min): up to 7 kW (each wheel)
Peak Torque	(S2-5 min): up to 820 Nm
Continuous Power	(S2-60 min): up to 3 kW (each wheel)
Continuous Torque	(S2-60 min): up to 410 Nm
IP Protection	Up to IP 69 K





## **DD200 SERIES**





#### **COMPACT DRIVE SYSTEM FOR AGVs & AMRs**

- EASY TO INSTALL
- HIGHLY EFFICIENT
- MODULAR SYSTEM
- ALL-IN-ONE SOLUTION

Wheel drives from DD200 prove their reliability value due to the advantageous arrangement of both the bearings and a two-stage planetary gearbox.

Voltage	24 - 48 V
Output Torque	Up to 110 Nm (each wheel)
Load	Up to 450 kg (each wheel)
Ratio	28 - 34 - 45 - 58
Motors	SMAC
Peak Power	(S2-5 min): up to 2 kW
Peak Torque	(S2-5 min): up to 110 Nm
Continuous Power	(S2-60 min): up to 1 kW
Continuous Torque	(S2-60 min): up to 55 Nm
IP Protection	Up to IP 69 K



SCAN THE CODE TO SEE THE COMPONENT IN 3D.



#### **ELECTRIC WHEEL DRIVE**

## **DD1 SERIES**





#### **DUAL DRIVE UNITS FOR AGVs & AMRs**

- EASY TO INSTALL
- HIGHLY EFFICIENT
- MODULAR SYSTEM
- ALL-IN-ONE SOLUTION

The DD1 package includes wheel, electric motor, gearbox, safety encoder and EM brake as an all-in-one compact solution. Easy to install, this unit includes AC or IPM electric motors along with 200 mm Polyurethane wheels.

Voltage	From 24 to 120 V
Efficiency	Wheel drive efficiency up to 95%
Output Torque	Up to 500 Nm (each wheel)
Load	Up to 600 kg (each wheel)
Ratio	6 – 10 – 12 – 16 – 22 - 24 – 28 - 32
Motors	PMDC - AMAC - SMAC
Peak Power	(S2-5 min): up to 7 kW (each wheel)
Peak Torque	(S2-5 min): up to 500 Nm
Continuous Power	(S2-60 min): up to 3 kW (each wheel)
Continuous Torque	(S2-60 min): up to 320 Nm
IP Protection	Up to IP 69 K





## L1CAC SERIES



#### WHEEL DRIVE SOLUTION FOR CLEANING & ROBOTS

- EASY TO INSTALL
- HIGHLY EFFICIENT
- DURABILITY
- COMPACT

Fully omnidirectional wheel drive ensured by an integrated motor wheel and control system in a very compact design. The L1Cac is the evolution of the L1C wheel drive. Perfectly designed for the cleaning and robotic industries.

Voltage	From 12 to 48 V
Output Torque	Up to 476 Nm
Load	250 - 900 kg
Ratio	20 to 43
Motors	AC - DC
Peak Torque	Up to 476 Nm
Continuous Torque	Up to 261 Nm





#### **ELECTRIC SERVO-MOTOR WHEEL DRIVE UNIT**

# **MV300 SERIES**



#### STEERING-WHEEL DRIVE SOLUTION FOR INDUSTRIAL APPLICATIONS

- EASY TO INSTALL
- HIGHLY EFFICIENT
- DURABILITY
- COMPACT

Compact servo-wheel drive unit for indoor and outdoor forklifts and other industrial equipment.

Voltage	From 12 to 48 V
Output Torque	Up to 1 400 Nm
Load	Up to 2 700 kg
Ratio	25
Motors	AC - DC
Peak Torque	Up to 1 400 Nm
Continuous Torque	2 000 h up to 460 Nm





# **AMAC SERIES**





#### ASYNCHRONOUS MOTORS REINVENTED

- MODULAR DESIGN
- LOW TO HIGH VOLTAGE
- WATERPROOF
- EMB READY

Highly industrialized, scalable and adapted for any vehicle class, AMAC is the electric motor series you always desired. Motors are applicable to traction, steerings and hydraulic pumps.

Voltage	From 24 to 800 V
Efficiency	Efficiency peak up to 88%
Maximum Speed	7 500 rpm
Peak Power	(S2-5 min): 1 - 30 kW
Peak Torque	(S2-5 min): 8 - 130 Nm
Continuous Power	(S2-60 min): 0.6 - 19 kW
Continuous Torque	(S2-60 min): 4 - 61 Nm
IP Protection	Up to IP 69 K





## **ELECTRIC MOTORS**

# **SMAC SERIES**





#### SYNCHRONOUS IPM MOTORS

- HIGH POWER DENSITY
- SCALABLE DESIGN
- WATERPROOF

More performance, more efficiency, more compactness, the SMAC series is the solution for all vehicle classes: scalable and flexible, these motors are designed for the most demanding uses.

Voltage	From 24 to 800 V
Efficiency	Efficiency peak up to 96%
Maximum Speed	10 000 rpm
Peak Power	(S2-5 min): 0.6 - 68 kW
Peak Torque	(S2-5 min): 8 - 195 Nm
Continuous Power	(S2-60 min): 0.3 - 30 kW
Continuous Torque	(S2-60 min): 4 - 100 Nm
IP Protection	Up to IP 69 K





## **E-PUMPS**





#### REENGINEERED IN THE BEST WAY

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LIGHTWEIGHT

WATERPROOF

NO NOISE PUMP

• TEMPERATURE SENSOR

• SUITABLE FOR AMAC & SMAC MOTORS

Voltage	From 24 to 600 V
Efficiency	Up to 95%
Power	From 0,3 to 30 kW
Maximum Pressure	300 (bar)
IP Protection	From IP54 to IP66

E-Pump system consists of an electric motor directly coupled to a no noise helical rotor pump adapted to the customer requirements. Available with high-efficiency and low-inertia PMAC or AC motors, e-pumps are designed for hybrid & electric mobile applications.



SCAN THE CODE TO SEE THE COMPONENT IN 3D.



## **CONTROLLERS**

# **DMC CONTROLLERS**





#### **MOTOR CONTROLLER**

#### ACCESSORIES

- Battery discharge indicator
- Electronic throttle pedal
- LCD HMI
- DC-DC converter

DMC Motor controllers are premium controllers with autotune function to ensure a quick and easy set-up for AC and PMAC motors.

# SCAN THE CODE TO SEE THE COMPONENT IN 3D.

#### CONTROLLER CONFIGURATION & TECHNICAL SUPPORT

- Controller configuration
- Fine-tuning support on the field
- CANopen
- Wiring harness

Voltage	Up to 120 Vdc
Efficiency	Up to 95%
IP Protection	IP 65



#### **BATTERIES**

# **LINEAR ACTUATORS**



## WIDEST RANGE OF ELECTRIC ACTUATORS ON THE MARKET

- MODULAR DESIGN
- LOW TO HIGH VOLTAGE
- WATERPROOF
- MEDIUM & HIGH LOADS

With the widest range of linear actuators, control units and operating devices on the market, we are your preferred partner to match your application needs, even the most demanding requirements.

Voltage	12 VDC, 24 VDC, 48 VDC, 96 VDC, 120 VAC, 230 VAC, 400 VAC
Maximum dynamic axial force	Up to 500 KN
Dynamic load capacity	Up to 572 kN
Maximum speed	Up to 1.111 mm/s
Maximum stroke	Up to 2 000 mm
Operating temperature	-40 °C +65 °C
Continuous Torque	2 000 h up to 460 Nm
IP Protection	Up to IP 67





## **CUSTOM BATTERY SOLUTIONS**



#### ADVANCED BATTERY MODULE PLATFORM

- SCALABLE PLATFORM TO REACH CUSTOMER REQUIREMENTS
- COMMUNICATION CanBUS J1939
- MULTIPLE FORM CASE
- CUSTOMIZED FORM CASE

The battery module platform is an easily scalable product that quickly delivers the required energy for your system. The platform allows a maximum capacity of 225 kWh.

Voltage	24 Vdc to 800 Vdc
Voltage	24 VUC 10 600 VUC
Standard capacity	4.7 kWh - 11.75 kWh - 23.3 kWh - 32.6 kWh - 46.6 kWh - 70 kWh
Discharge current	Up to 4C
	<u> </u>
Enclosure rating	IP 67 (battery and charger)
Technology	Lithium-Ion (NMC)
Discharge	-30°C to +45°C
temperature range	-30 € 10 +43 €
Battery charger	Available
Certifications	UL - UN 38.3 - UL 2580 - SAE J2380 ISO 6469-1
Cooling strategy	Liquid and air ready



## **COMMERCIAL BATTERY PACKS**



### LITHIUM-ION COMMERCIAL BATTERY PACK

- UP TO 10 BATTERIES IN PARALLEL TO REACH A CAPACITY OF UP TO 100 KWH
- COMMUNICATION CanBUS J1939
- MULTIPLE FORM CASE TALL AND LONG

The perfect battery system for most electrical off-highway applications; providing unmatched power, reducing maintenance and lowering the total cost of ownership.

Voltage	48 VDC
Standard capacity	1.5 kWh - 3.5 kWh - 5 kWh - 7 kWh 10 kWh
Discharge current	Up to 400 A (10 sec)
Enclosure rating	IP 66 (battery and charger)
Technology	Lithium-Ion (LFP)
Discharge temperature range	-20°C to +70°C
Battery charger	Available
Certifications	UN 38.3 - UL 1642

# NOTES





## **ELECTRIC APPLICATIONS**









## **ELECTRIC APPLICATIONS**









## **CANIMEX GROUP IN BRIEF**

Over **50 YEARS** of partnership and innovation

The strength of one group with the expertise of **7** business **UNITS** 

A world leader with a presence in more than **70 COUNTRIES** 

1,800,000

Production and warehousing facilities in Drummondville totalling more than 1,800,000 SQUARE FEET

1969

A tradition of excellence **SINCE 1969** 





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