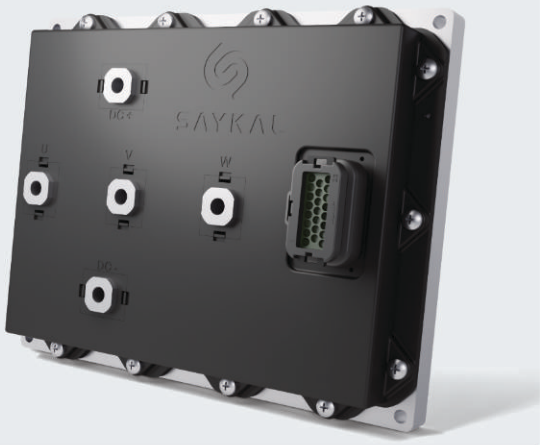
MOTRIS AC Controllers

Precise Control • Safe • Automotive Grade

SAYKAL MOTRIS AC Controllers bring smooth, efficient traction control to 24, 48, 72 and 96 V battery-powered vehicles. Designed to drive PMSM and induction motors, MOTRIS delivers over 97% efficiency with precise speed and torque control. Hill start assist supports confident starts on slopes, while regenerative braking recovers energy during deceleration. Its rugged IP67 design integrates key vehicle functions from accelerator and direction inputs to seat safety interlock, main contactor control and brake outputs simplifying integration and eliminating the need for additional interface modules. CAN / CAN FD connectivity keeps control, monitoring and firmware updates seamlessly connected.

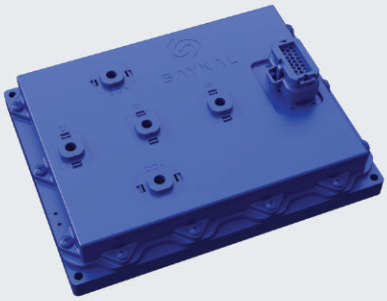


350 / 600	IP67	AC-IPM-PMSM	ECE R10	CAN/CAN FD
Nominal / Peak Arms	Protection	Motor Types	Compatible	Compatible

Application Examples

It can be used in a wide range of **LEV** and **machinery**, including **golf carts, electric boats, forklifts** and compact electric vehicles.

Drive Modes



1

Torque Mode

Lets the driver adjust pulling force with the pedal for controlled movement on ramps, when towing or during manoeuvres.

2

Speed Mode

Maintains the speed set by the pedal, even when the load or slope changes.

3

Regenerative Braking

Recovers energy during braking or downhill driving and returns it to the battery to help extend operating time.

4

Hill Start Assist

Helps prevent rollback on slopes for a smoother, more controlled start.

HOW IT WORKS

Regenerated energy back to battery

Battery Pack
24V/ 48V / 72V / 96V DC

Traction Inverter
DC to 3-phase AC

Motors
traction

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