

mecc alte



# AVR is Getting Smart!

POWER FROM WITHIN

# BRIDGING THE GAP



Permanent Magnets >



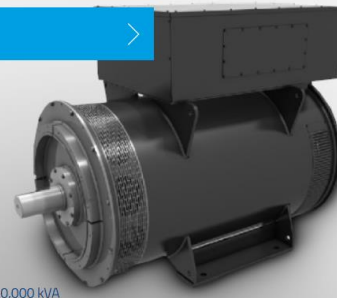
Alternators 0.5 - 20 kW

400 Hz >



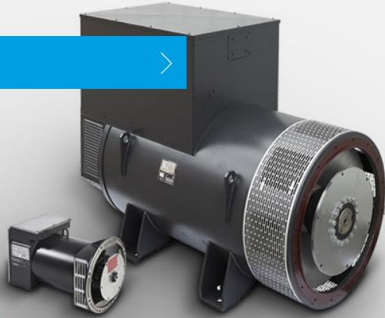
5 - 200 kVA alternators

Power Products MV/HV >



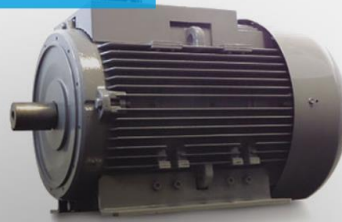
Powergen Alternators 1,000 - 10,000 kVA

Industrial >



Alternators 5 - 2,750 kVA

Totally Enclosed >



Alternators 50 - 96 kVA

Zanardi Products >



Brush - Brushless - Compound - Welders - Specials

Controllers >



NPE Space Saver >



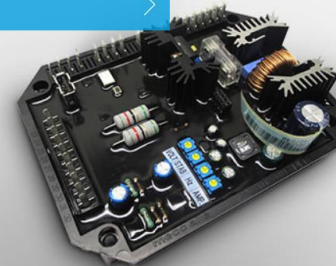
Alternators 5 - 36 kVA

Portable >



Alternators 1 - 18 kVA

AVRs >



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Power Generation is evolving, main power grids demand higher performance from the generator to ride through excursions better.

Complex systems involving multiple power sources including renewable supplies and batteries, demand more capability from the generator systems.

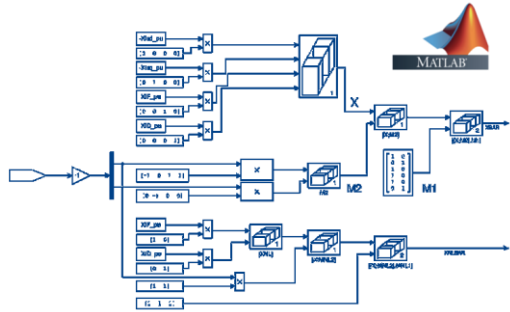
Mecc Alte's new MxK AVR's are designed with this future in mind and aim to bridge the gap between the application and the alternator.

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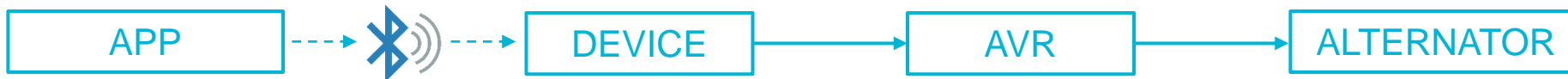


Mathematical high order model of synchronous alternator implementing the dynamics in the sub transient, transient and steady state condition (with residual magnetism, saturation and auxiliary winding)

Self stability setting by adaptive and/or auto tuning algorithm

Smart Link Connectivity, a fully integrated Digital CANbus, power management and monitoring in one single platform.

Monitoring, diagnostics, logs and settings with additional external device or software app (i OS and Win) via wired and wireless connectivity.

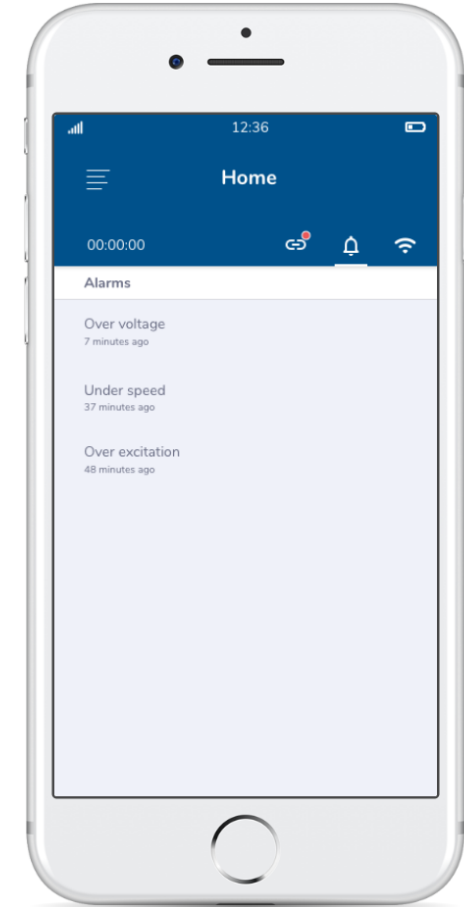
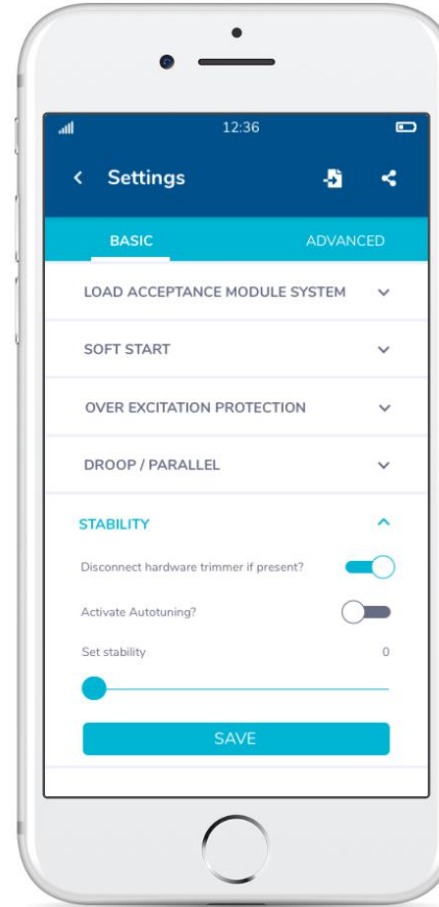
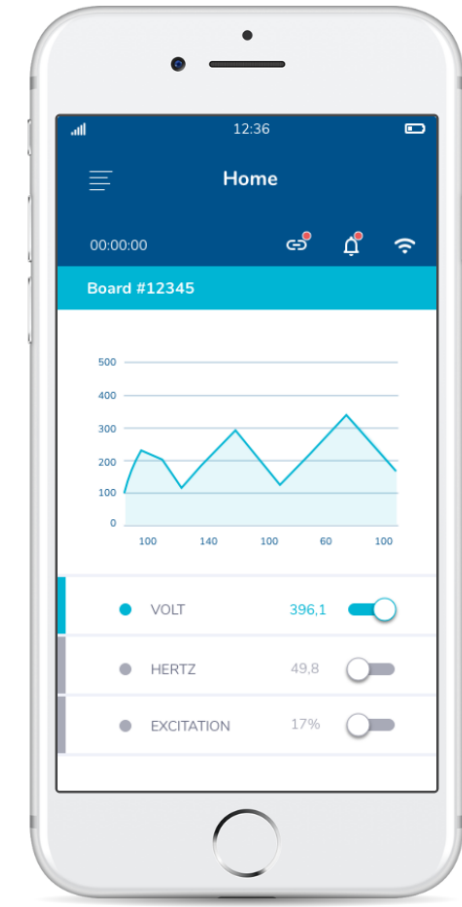
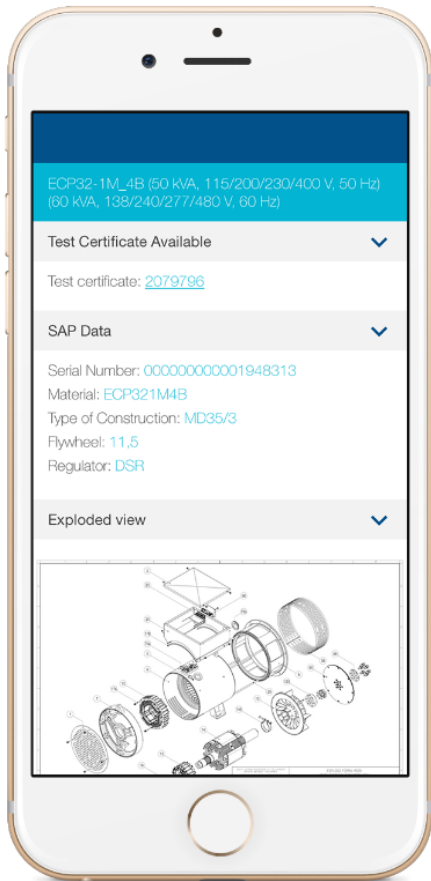


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# BRIDGING THE GAP

## FEATURES



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### M2K

### M2K<sup>S</sup>

### M3K

### M3K<sup>S</sup>

### M3K<sup>SHD</sup>

Full digital control with all functions of DSR or DER



CAN Bus - J1939



Three Phase Sensing

DROOP Setting by additional Potentiometer

Standard C.T. Input

Adjustable digital voltage DROOP

Overcurrent alarm on Capability curve

2 Additional DIP Switch (DROOP and LAMs)



CAN Bus - J1939



High Dynamic Response

USB Embedded

Insulated Active Protection Output (A.P.O.)

Line to line or line to neutral sensing

Standard (100V) Voltage Transformer compatibility

Self stability setting by auto tuning algorithm

Improved control robustness\*

Power Supply Overvoltage Protection (Feeding Voltage Limiter)

Board Over temperature Alarm  
2 rated frequencies: 50Hz, 60Hz

Maximum operative frequency: 90Hz variable speed applications

2 separate inputs for External Potentiometer and External DC Voltage ( $\pm 10V$ )

2 DIP Switch (Auto-Tuning)  
60Hz setting input

Up to 118 digital settings (parameters)



contact us at [info@meccalte.us](mailto:info@meccalte.us)



Thank you for your attention

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