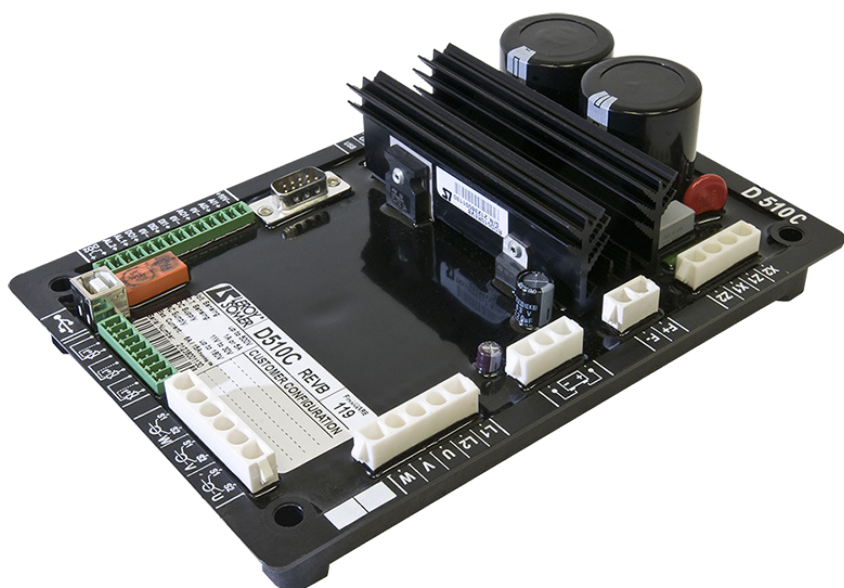


D510C DIGITAL AVR

FOR SHUNT, AREP or PMG EXCITATION



The D510C is a digital voltage regulator, which monitors and regulates the alternator output voltage. It is designed for alternators with SHUNT, AREP or PMG excitation.

The D510C is an AVR which can be configured using the Easyreg® software.

- There are 4 possible regulation modes: voltage, P.F., kVA, manual
- The I/O can be configured:
 - 2 x I: analog
 - 1 x O: analog
 - 2 x I: digital
 - 3 x O: digital
- 1 dry contact
- 1 USB port
- DB9 plug for CAN

It complies fully with the requirements of IEC standard 60034-1 and UL 708 and CSA certifications.

DATASHEET

CHARACTERISTICS

- Voltage regulation: $\pm 0.25\%$
- Function: regulation of voltage, PF, kVAR and manual regulation
- Response time depending on PID settings
- Rated field current: 6 A
- Maximum field current: 15 A/10 s
- Power supply range for voltage sensing: up to 530 V
- Protection:
 - Short-circuit / Loss of voltage reference / Overvoltage / Overexcitation / High Temperature /
 - Speed drop / Diode fault / Stator current unbalance / Current limitation
- Engine assistance:
 - Soft start : 0 - 100 s
 - U/F adjustable from 0.5 to 3 in increments of 0.1
 - LAM : 0 to 30%
 - Gradual increase : 0.1 to 30 s/Hz
- Grid code function

CONNEXION AND SETTING

The AVR is set using the Easyreg® software.

- This can be used to:
 - Set the AVR parameters
 - Configure the inputs and outputs
 - Display faults and parameter measurements

OPERATION CONDITIONS

- Operating temperature:
 - 40°C to + 65°C
- Storage temperature:
 - 55°C to + 85°C
- Shocks on the base : 9 g depending on the 3 axes
- Vibrations:
 - Less than 10 Hz : 2 mm half-peak amplitude
 - 10 Hz to 100 Hz : 100 mm/s
 - Above 100 Hz : 8 g

OPERATION RANGE

LSA	40	42.3	44.3	46.3	47.2	49.3	50.2	52.3	53.2	54.2
SHUNT AREP or PMG	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

