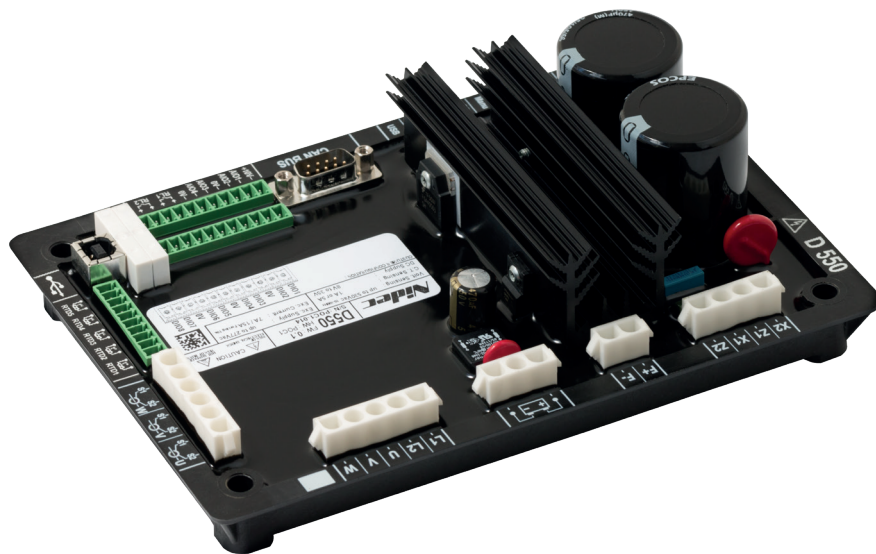# D550 DIGITAL AVR
FOR ALTERNATORS WITH SHUNT, AREP OR PMG EXCITATION

The D550 is a digital automatic voltage regulator (AVR) for alternators with rated field current up to 7 A.

It offers a vast array of regulation modes suitable for all power generation applications, including grid-connected configurations.

The D550 also integrates a visual interface through the EasyReg Advanced software, which allows the user to read the configuration values and parameters. It can also be configured directly via USB without external power supply.

The D550 also includes several protections and functions to keep the alternator running in full safe operation.

The communication port is CANJ1939 compatible.

KEY FEATURES

- **Regulation modes**
  - Voltage
  - Field current (manual mode)
  - Generator power factor
  - Grid power factor
  - Generator kVAr

- **Regulation features**
  - Voltage equalization
  - Droop management
  - Cross current compensation
  - Soft start
  - Load Acceptance Module (L.A.M.) function to assist during heavy load application events
  - Negative field forcing

- **kW, kVAr, kVA & PF calculation**

- **Protections & Limitations**
  - Under and over field current limitation
  - Loss of field sensing
  - Generator under/over voltage
  - Loss of sensing
  - V /Hz regulation mode

- **Data logger** (option)

- **Events log**

ELECTRIC FEATURES

- **Generator voltage measurement**
  - 3-phase, 2-phase
  - Range: 0-230-530 VAC
  - Consumption: < 2 VA

- **Grid voltage measurement**
  - 2-phase
  - Range: 0-230-530 VAC
  - Consumption: < 2 VA

- **Generator current measurement**
  - 1 or 3-phase
  - Secondary range: 1 or 5 A
  - Consumption: < 2 VA

- **AC supply input**
  - PMG, AREP, SHUNT
  - Range: 50-277 VAC

- **Excitation**
  - Rated field current (continuous): 7 A at 70°C
  - Field forcing current (10s max): 15 A at 70°C
  - Recommended field resistance: > 4 ohms

- **Auxiliary supply:** 8-35 VDC
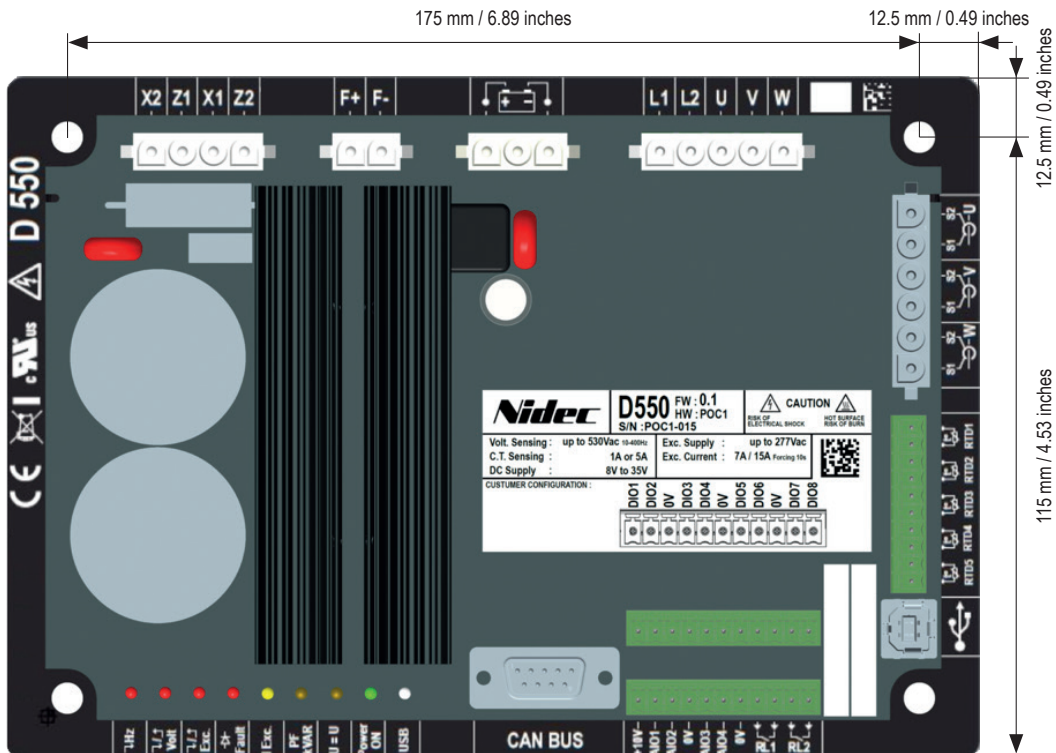 - Consumption: < 1 A

- **Frequency range:** 30-400 Hz

INPUTS / OUPUTS

- **8 programmable digital inputs & outputs**
  - Output specification: 150 mA - 30 VDC

- **4 programmable analog inputs & outputs**
  - 4-20 mA / ±10 V / 0-10 V / potentiometer (1 kΩ)

- **2 relay outputs**
  - Specifications: 125 VAC - 5 A

- **5 temperature sensings**
  - Type: Pt100/CTP
  - Programmable threshold

COMMUNICATION & SETTINGS

- Software configuration (PC tool)

- USB port (self powered)

- CAN J1939 and Proprietary (Leroy-Somer protocol)

DIMENSIONS

Same footprint as Leroy-Somer D510C