

BLACK START D550

MODULE FOR DIGITAL AVR

This module provides a 24VDC voltage, generated using the power supply (AREP, PMG) for digital AVRs of the D510C or D550 type.

It can also accept an external voltage 8-35VDC coming from a customer power supply. Thus, if this supply voltage is higher than 24VDC, it has the priority. In case of this external power supply disappears, 24VDC power supply provided by AREP or PMG source takes over (redundancy sources).

OPERATING VALUES

• AC power supply

- 2 connectors of 4 terminals for PMG, AREP and Shunt (input and output)
- Range: 50 - 277VAC (115% max. during 2 minutes)
- Maximum consumption: < 25VAC

• DC auxiliary supply

- 1 connector 3 poles (input from customer power supply 8-35VDC)

• AVR power supply

- 1 connector 2 poles (24VDC output to AVR)
- Maximum current: 1A

• Dimensions

• Environment

- Mounting in a cabinet or in a terminal box
- Operating conditions: ambient temperatures from -40°C to +70°C, relative humidity less than 95%, non-condensing
- Storage conditions: ambient temperatures from -55°C to +85°C, relative humidity less than 95%, non-condensing
- Vibration: 2 Hz to 25 Hz amplitude ± 1.6 mm
25 Hz to 100 Hz acceleration ± 4 g

• Conformity to standard

- Safety: IEC 61010-1 (CAT III, Pol. 2)



For a cabinet mounting, the module must be positioned to allow air to circulate freely in the heatsink and around the product. It is therefore recommended to mount the module horizontally at the base of the cabinet so that the heatsink is positioned vertically.

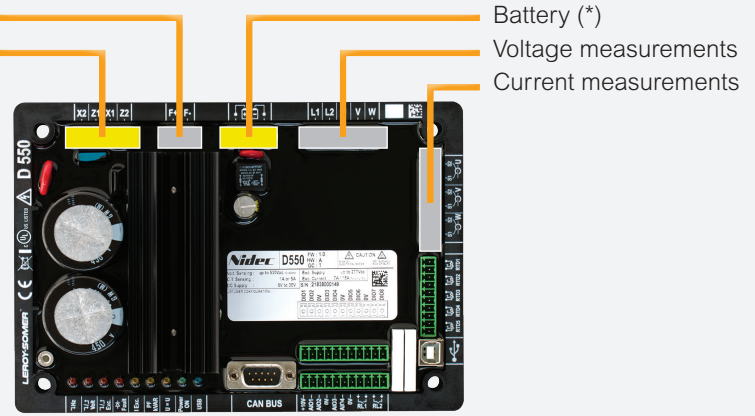
Initial state

Black start



Exciter
AREP, PMG, Shunt

D550



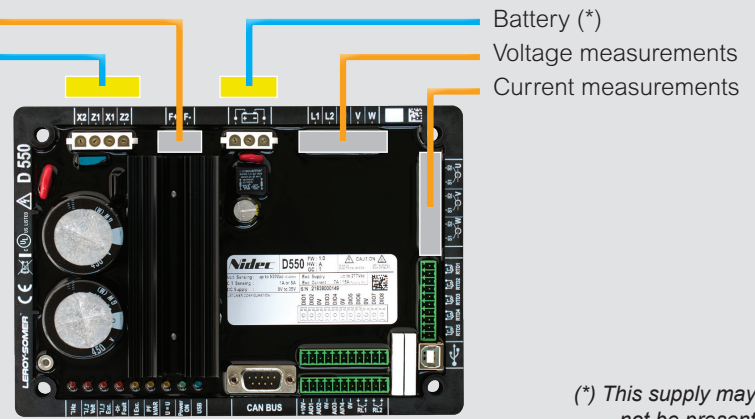
Step 1: Disconnection of D550 AVR

Black start



Exciter
AREP, PMG, Shunt

D550

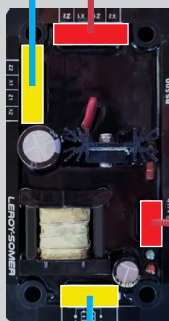


(*) This supply may not be present

Step 2: Connection of Black start module

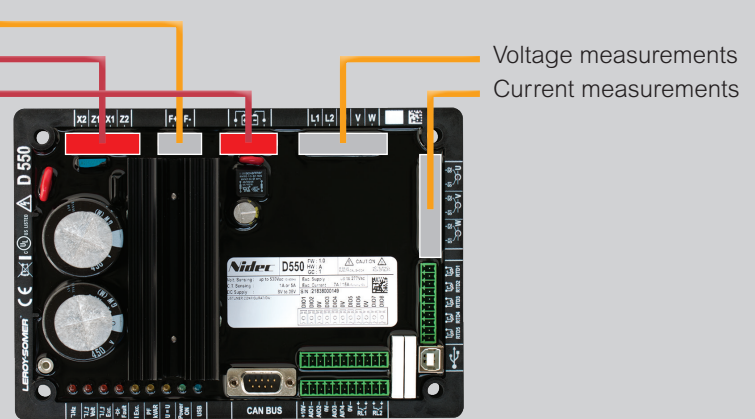
AREP, PMG, Shunt

Black start



Exciter

D550



Battery

Links to create



AREP:

- 2 connectors MAT'N LOCK 4 points, ref. : CNX 004 CO 029
- 8 female pins MAT'N LOCK, ref. : CNX 002 NZ 006
- Wires of 1.5 mm²

Battery:

- 1 connector MAT'N LOCK 2 points, ref. : CNX 002 CO 035
- 1 connector MAT'N LOCK 3 points, ref. : CNX 003 CO 056
- 5 female pins MAT'N LOCK, ref. : CNX 002 NZ 006
- Wires of 1.5 mm²