

## **EXCITER APPLICATION**

- $\rightarrow$  The easygen controls the excitation with PWM signal connected to EX-10
- → EX-10 does not need Voltage and Current sensing
- → All generator types covered: Self / Shunt Excitation, Internal / Auxiliary Winding Excitation, Permanent Magnet (PMG), Single or Three Phase



Voltage relay for Mains De-coupling



- → The generator **real load** [%]
- → The configurable generator **minimal load** [%]

To control the PV inverter, the easYgen3000 XT calculates a variable PV load ref. [%]. This reference can be given in three possible ways to the PV inverter:

- → As an Analog output

  - the easYgen3000 XT to transfer a setpoint







- → 3 True RMS Voltage, Class 0.5 measurement accuracy
- $\rightarrow$  O/U voltage & Assymetry (59/27, 47)
- $\rightarrow$  O/U frequency (81 O/U)
- $\rightarrow$  Phase shift (78)
- → df/dt (ROCOF)
- → QV Monitoring

The easYgen3000 XT regulates the PV Inverter in parallel with the Diesel Generator. The PV regulation output is a PID control loop based on:

→ As **Digital outputs** (0%, 30%, 60%, 100%...Ripple control) → As a Modbus TCP value using the Modbus Master function built in

→ Voltage increase & under voltage monitoring for Fault ride through (FRT)

