

D700 DIGITAL AVR



DIMENSIONS



The D700 is a digital Automatic Voltage Regulator (AVR) for alternators requiring a nominal excitation current up to 25A.

It has been designed for reliable electric power generation, with built-in options and settings to fit any installation, on or off-grid.

The D700 can be controlled through the integrated display or using the built-in webserver interface. It can also be configured through USB without external supply.

It also includes numerous inputs and outputs, and communication ports that match current industry standards.

DATASHEET

KEY FEATURES

- **Regulation modes**
 - Voltage
 - PF at generator output
 - PF at power delivery point
 - kVAr
 - Field current (manual mode)
- **Regulation features**
 - Voltage equalization prior to synchronization
 - Droop management for generator sets paralleling
 - Cross current compensation
 - Soft start
 - Load impact recovery help
 - Negative field forcing
- **kW, kVAr & kVA monitoring**
- **Manual mode with follower and bumpless transfer**
- **Protection & Limitation**
 - Under and over field current limitation
 - Loss of field sensing
 - Generator output under/over voltage
 - Loss of voltage sensing
 - Under speed management
- **Data logger**
- **Diodes fault**
- **Synchronization management**
- **Black start possible**

ELECTRIC FEATURES

- **Generator voltage sensing**
 - 3 phase, 2 phase or 1 phase & neutral
 - Range : 0-230-400-530VAC
- **Grid voltage sensing**
 - 3 phase, 2 phase or 1 phase & neutral
 - Range : 0-230-400-530VAC
- **Generator current sensing (CT)**
 - 1 or 3 phase
 - Range : 0-1A or 0-5A
- **Grid current sensing (CT)**
 - 1 phase
 - Range : 0-1A or 0-5A
- **Current sensing for "cross-current compensation"**
 - 1 phase
 - Range : 0-1A or 0-5A
- **Power supply**
 - AC input :
 - PMG, AREP, SHUNT
 - 2 independent circuits
 - Range : 50-277VAC
 - DC input (preloading system not supplied) :
 - Range : 50-400VDC
- **Excitation**
 - Rated current (permanent) : 0-25A
 - Short circuit current (10s max) : 50A at 25°C
 - Exciter resistance : > 4 ohms
- **Auxiliary supply range : 18-35VDC**
 - Consumption : < 1A
- **Frequency range : 30-400Hz**

INPUTS & OUPUTS

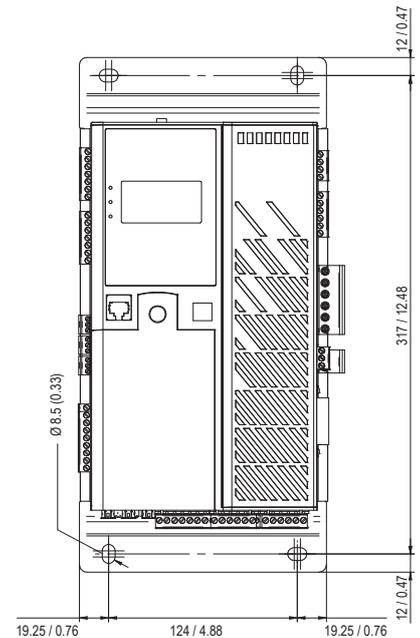
- **16 digital inputs**
 - Programmable
- **4 analog inputs**
 - Programmable : 4-20mA / $\pm 10V$ / 0-10V /pot.
 - Programmable functions
- **6 temperature sensing inputs**
 - Type : PT100
 - Programmable threshold
- **12 digital outputs**
 - 6 transistorized outputs :
 - * Characteristics : 60mA - 30VAC
 - 6 relay outputs :
 - * Characteristics : 30VDC - 3A / 125VAC - 1A
 - Reversible programmable logic
 - Programmable functions
- **12 analog outputs**
 - Programmable : 4-20mA / $\pm 10V$ / 0-10V /pot.
 - Programmable functions

COMMUNICATION & SETTINGS

- Dedicated configuration software
- Ethernet Modbus port
- USB port
- Serial port to control an additional power stage
- Serial port for external display
- Dedicated port for redundancy between 2 AVR (bumpless system)
- Optional COMPACT COM card from HMS for fieldbus
- Integrated display allowing full configuration & consultation
- Programmable logical functions

UNIVERSAL FITTING

Adapted mounting plate.



Other mounting plate available (additional kit).

