

# HVR610

## 数字电压调节器

### DIGITAL VOLTAGE REGULATOR



#### ● 简介

采用国产化元器件，具有自动电压调节 (AVR)、励磁电流调节 (FCR)、无功功率调节 (VAR)、功率因数调节 (PF) 四种励磁调节模式。可用于永磁励磁发电机 (PMG)，辅助绕组励磁发电机 (AUXW)，自励磁发电机 (SHUNT) 的自动电压调节。

#### ● 特点

- 过励限制、欠励限制、定子电流限制、伏频(U/F)限制功能
- 自动电压调节(AVR)和励磁电流调节(FCR)模式具有软启动功能
- 励磁调节采用PID算法，四种调节模式的参数独立
- 电流互感器二次侧额定电流可设置为5A或1A
- 加载补偿功能(LCF),下垂功能,传输线压降补偿功能
- 适合三相三线、三相四线、二相三线、单相二线，额定频率10-200Hz 系统
- 可检测发电电压谐波THDu，发电电流谐波 THDi，1-15次谐波
- 发电电压和发电电流测量为真有效值
- 保护和报警检测功能
- 通过 PC 软件进行实时数据曲线分析
- 运行数据记录，电压调节器在运行过程中1s记录一次运行数据，可记录 8192 条运行数据，通过 PC 软件可保存为 CSV 文件
- 实时时钟，历史记录功能，可循环记录999条事件
- 黑匣子功能，可循环记录5组故障报警数据
- 交流控制电压精度：0.25%THDu<5%

#### Overview

Adopts domestic components. It has four excitation regulation modes: automatic voltage regulation (AVR), field current regulation (FCR), reactive power regulation (VAR), power factor regulation (PF). It can be widely used in all types of generators like PMG, AUXW, SHUNT, etc. for automatic voltage regulation.

#### Features

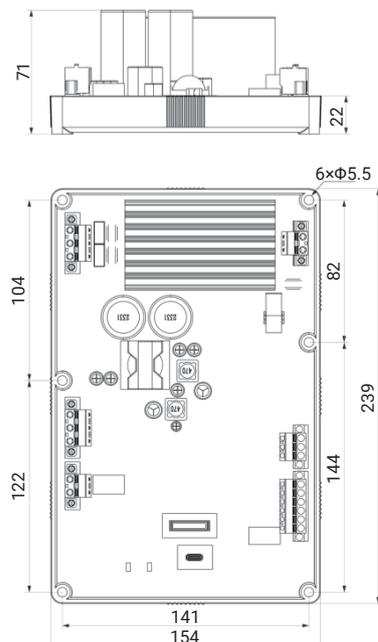
- Over-excitation limit, under-excitation limit, stator current limit, U/F limit function is fitted
- Soft start function is fitted for automatic voltage regulation (AVR)and field current regulation(FCR)modes
- PID algorithm for excitation regulation and parameters of four modes are independent
- The secondary rated current of current transformer can be set as 5A or 1A
- With load compensation function(LCF), droop function and transmission line drop function
- Adapt to AC systems of 3P3W, 3P4W, 2P3W and 1P2W, rated frequency range is 10Hz-200Hz
- Detect generator voltage harmonic THDu, generator current harmonic THDi, and 1st-15st harmonic
- The generated voltage and current are measured as true RMS values
- Protection and alarm detection function
- Real-time data curve analysis can be realized by PC software
- With running data record function
- Voltage regulator can record running data once per second and 8192 pieces in total that can be saved as CSV file via PC
- Black box function enables to loop record 5 groups of fault alarm dataand 8192 pieces in total that can be saved as CSV file via PC
- AC control voltage precision: 0.25%(THDu<5%)and 8192 pieces in total that can be saved as CSV file via PC



<p><b>励磁电源</b> Excitation Power</p>	<p>DC63V励磁系统: AC(100-139)V或DC125V 励磁电流7A时: 500W, 10A时: 720W</p> <p>DC125V励磁系统: AC(190-277)V单相, 三相AC(190-260)V或DC250V 励磁电流7A时: 920W, 10A时: 1320W</p> <p>频率: (50-500)Hz或DC</p>	<p>DC63V system: AC(100-139)V or DC125V 500W at 7A current, 720W at 10A current</p> <p>DC125V system: Single phase for AC(190-277)V Three phases for AC(190-260)V or DC250V 920W at 7A current, 1320W at 10A current</p> <p>Frequency: (50-500)Hz or DC</p>
<p><b>交流采样</b> AC Sampling</p>	<p>交流电压 范围: AC30V-AC720V (ph-ph) 分辨率: 0.1V, 精度: 0.2%</p> <p>交流频率 范围: 10-200Hz, 分辨率: 0.01Hz, 精度: 0.1Hz</p> <p>交流电流 额定: 5A或1A 范围: 0-15A (额定5A时) 或0-3A (额定1A时) 分辨率: 0.1A, 精度: 0.5%</p>	<p>AC Voltage Range: AC30V-AC720V (ph-ph) Resolution: 0.1V, Accuracy: 0.2%</p> <p>AC frequency Range: 10-200Hz, Resolution: 0.01Hz, Accuracy: 0.1Hz</p> <p>AC current Rated: 5A or 1A Range: 0A - 15A (rated 5A) or 0A - 3A (rated 1A) Resolution: 0.1A, Accuracy: 0.5%</p>
<p><b>环境</b> Environment</p>	<p>工作温度: (-40~+70)°C 工作湿度: (20~93)% RH 贮存温度: (-40~+80)°C 防护等级: IP20</p>	<p>Working Temperature: (-40~+70)°C Working Humidity: (20~93)% RH Storage Temperature: (-40~+80)°C IP Rating: IP20</p>
<p><b>标准</b> Standard</p>	<p>振动: 18-2000Hz: 5g IEC 60068-2-6</p> <p>冲击: 50g<sub>n</sub>, 11ms, 半正弦, 三个互相垂直方向的每一方向连续施加三次冲击, 即共18次 IEC 60068-2-27</p> <p>碰撞: 25g<sub>n</sub>/16ms, 半正弦 IEC 60255-21-2</p>	<p>Vibration: (18-2000)Hz: 5g IEC 60068-2-6</p> <p>Shock: 50g<sub>n</sub>, 11ms, half-sine, apply three shocks successively in each direction of three mutually perpendicular axes, which means 18 shocks in total IEC 60068-2-27</p> <p>Bump: 25g<sub>n</sub>/16ms, half-sine IEC 60255-21-2</p>

● 尺寸 Dimensions

单位(Unit): mm



● 端口 Ports

