### IBY-Bieber Electric (Shanghai) Co.,Ltd.



# CVT无功补偿测控装置

CVT Control of reactive power compensation device

技术参数
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#### Technical parameters

稳定工作状态 0.85-1.00	Stable state 0.85-1.00
<b>额定电压</b> 220V/50Hz	Rated voltage 220V/50Hz
取样电流 小于5A	Current sampling Less than 5A
继电器触点容量 <sup>交流220V/5A</sup>	Relay contact capacity AC 220V/5A
过电压保护 230-280V 5V步长	Over-voltage protection 230-280V 5V step
欠电压保护 180-200V 5V步长	Under voltage 180-200V 5V step
电压谐波超限 5%-25% 默认15% 步长0.5%	Voltage harmonic transfinite 5% -25% overrun 15% default step size of 0.5%
目标功率因数 0.85-1.00 步长0.01 默认0.95	Target power factor 0.85-1.00 Step 0.01 Default 0.95
门限系数 0.5-1.2 默认1.1 步长0.1	Threshold coefficient The default step size of 0.1 1.1 0.5-1.2
投入延时 0.02-600s	Input delay 0.02-600s
切除重投入时间 0-600s	Removal of heavy investment of time 0-600s
CT变比 0-1000 默认500	CT Ratio 0-1000 default 500
投切方式 先投先切循环方式	Switching manner Cut before the first investment cycle way
工作机制 连续工作制	Working mechanism Continuous duty
整机功耗 <15W	Machine power <15W
<b>净重</b> 0.95kg	Net weight 0.95kg
防护等级 IP41	Protection class IP41



# CVT无功补偿测控装置

### CVT Control of reactive power compensation device

# 详细功能

- ●监测与显示
- ◆各相电压、电流、功率因数
- ◆各相3、5、7、9、11、13次谐波电流和电压畸变率
- ◆各相总谐波电压畸变和总谐波电流畸变
- ◆无功功率、有功功率及电压频率
- ◆显示年月日, 时分秒
- ●设置
- ◆设置变比
- ◆设置控制参数

过压、欠压、延时、投切门限、总电压畸变、零序电流、ID等

- ◆设置密码
- ◆设置时间:年月日 时 分 秒
- ◆设置运行方式

设置每路初始电容,设置电容编码,如:1:1:1:1,1:2:2:2,1:2:4:4,1:2:4:8等

- ●保护
- ◆欠压保护:小于设定下限时,欠无功不投,已投的全切,快速切除
- ◆过压保护:大于设定上限时,欠无功不投,已投的全切,快速切除
- ◆失压保护:装置在断电之后控制信号会自己关闭,再次通电时各路电容处于分断状态
- ◆电压谐波畸变保护: 当总谐波畸变超过上限时, 控制器将电容快速切除
- ●自检复归
- ◆通电后,控制器进行自检,复归后所有回路为退出状态
- ●防投切振荡
- ◆每一次投入切除动作间保持一定的延时,确保负荷较轻时不会出现投切 振荡
- ●通信功能

利用RS-485/232通过ModBus或者DLT-645协议和上位机实现通信,上 传测得的变量和系统参数,并可通过上位机对控制参数进行设置

#### More features

#### Monitoring and Display

Each phase voltage, current, power factor

The phase 3, 5,7,9,11,13 current and voltage harmonic distortion rate Total harmonic voltage distortion of each phase and total harmonic current distortion

Reactive power, active power and voltage frequency

Years on display, such as the time when minutes and seconds

#### Set up

Set Ratio

Set control parameters: Overvoltage, undervoltage, delay, switching threshold, the total voltage distortion, zero sequence current, ID, etc.

Set Password

Set time: year, month, day, hour, minute, second

Set operation mode

Each set of initial capacitance, capacitance code set, such as: 1:1:1:1,1:2:2:2,1:2:4:4,1:2:4:8 etc.

#### Protection

Under-voltage protection: Less than the set lower limit of less reactive not vote, have voted the full cut, rapid removal

Over-voltage protection: More than the set limit, less reactive not vote, have voted the full cut, rapid removal

Voltage protection:Installed in power after the control signal will shut themselves off again when power is breaking state capacitance separate ways

Voltage harmonic distortion protection: When the total harmonic distortion over the limit, the controller will be quickly removed capacitor

#### Self-test revert

Power, the controller self-test, revert to the state after the withdrawal of all loops of anti-oscillation switching

#### Anti-switching oscillations

Removal of each input to maintain a certain delay between action to ensure that the load is light oscillation switching does not occur

### Communication

Using RS-485/232 or DLT-645 through ModBus protocol to achieve communication and PC, upload the measured variables and system parameters, through the host computer can be set on the control parameters

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