

**ZWWH / ZQQH 型 有功功率、有功电能组合变送器 / 无功功率、无功电能组合变送器**  
**ZWWH / ZQQH Active power(WATT,WATT-Hour)/reactive power(VAR,VAR-Hour) transducer**

**■用途 Usage**

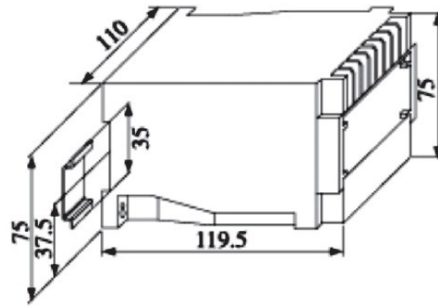
ZWWH/ZQQH型组合变送器是一种将电网中的有功功率、无功功率经隔离变送成线性的直流模拟信号；将有功电能，无功电能参数以光耦电极开路或断电器接点形式脉冲输出，以适应不同的RTU和电能记录装置，输出引线为四根线，双向数字输出正负两个方向的电能量。产品符合国家标准GB/T13850-1998。

ZWWH/ZQQH transducer is a device which can isolate and transmit electric parameters,such as active power,reactive power,into linear DC analog signal ;such as watt-hour ,var-hour,into pulse by Voltage, Open Collect and Relay Contact.Outputs leads to four wire, plus or minus two digital output two-way direction of electric energy.It meet the requirements of National standard GB/T13850-1998.

**■技术参数 Technical parameters**

输入标称值 Input nominal value	电流Current :1Aac ,5Aac;电压Voltage:100Vac,150Vac,300Vac,600Vac
输入过载 Input overload	持续2倍, 瞬时电流10倍/5秒; 瞬时电压2倍/30秒 Continual 2times,instantaneous current 10times/5Sec.;instantaneous voltage 2 times/30Sec.
输入负载 Input overload	电流互感器: ≤0.2VA, 电压互感器: ≤0.1VA Current transformer(CT)≤0.2VA,Voltage transformer(PT)≤0.1VA
精度 Accuracy	≤±0.2%R.O.
响应时间 Response time	<400mSec.
输出电流电压 Output current voltage	4~20mAdc,0~20mAdc,0~10mAdc, 0~10Vdc,1~5Vdc,0~5Vdc,and special
输出脉冲 Output pulse	电压脉冲, 开集极, 继电器连接 10pulse/kwh/100pulse/kwh等等 Voltage pulse Open collect ,Relay contact 10pulse/kwh/100pulse/kwh and special
输出波纹 Output ripple	<0.5%R.O.
输出负载 Output overload	电流输出时<750Ω,电压输出时>1000Ω Output current <750Ω,Output voltage>1000Ω
输出满度校调 Span adjustment	≤±20% of R.O.
输出零点校调 Zero adjustment	≤±20% of R.O.
工作电源 Power supply	AC220V±10%、AC110V、DC220V、DC110V、DC24V±20%
电源功耗 Consumption	直流供电<3W,交流供电<4VA DC Power <3W,AC Power <4VA
外壳材料 Case material	ABS
隔离 Isolation	输入/输出/电源/外壳 互相隔离 Between input/output/power/case
耐压强度 Isolation voltage	AC4KVrms/min
绝缘阻抗 Insulation resistance	>100MΩ,DC500V
工作环境温湿度 Operating temperature humidity	— 10℃~55℃ , <80%相对湿度 (无冷凝状态) — 10℃~55℃ , <80%Relative humidity(non-condensing)
储存环境温度湿度 Storage temperature humidity	— 20℃~70℃ , <70%相对湿度 (无冷凝状态) — 20℃~70℃ , <70%Relative humidity(non-condensing)
外型尺寸 Case dimension	119.5 mm(长)×110mm(宽)×75mm(高) 119.5 mm(Length)×110mm(Width)×75mm(Height)
安装方式 Mounting	标准导轨35mm,或螺钉固定 DIN rail 35mm,or fix to cubicle with bolt
重量 Weight	<500克 <500g

■外型尺寸 Dimension



■选型代码 Model Code

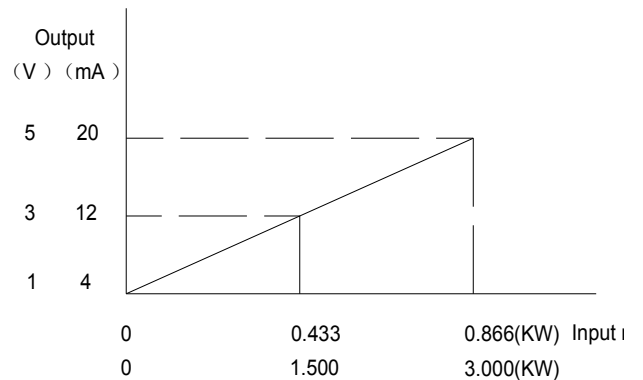
企业代码 Company code	功能代码 Function code	接线方式 Wiring	输入代码 Input code	输出1代码 Output1 code	输出2代码 Output2 code	工作电源 Aux.power	
Z	WWH 有功/电能组合 Watt/Watt-hr	12 单相二线 1P2W	A1 0~1A	A010 0~10mA	A 10p/kwh(kvar)	A22 AC220V	
		33 三相三线 3P3W	A5 0~5A	A020 0~20mA	B 100p/kwh(kvar)	A11 AC110V	
		34 三相四线 3P4W	A10 0~10A	A420 4~20mA	C 1000p/kwh(kvar)	D22 DC220V	
	QQH 无功/电能组合 Var/Var-hr			V10 0~100V	V01 0~1V	D 10000p/kwh(kvar)	D11 DC110V
				V11 0~110V	V05 0~5V	O Special	D24 DC24V
	WH 有功电能 Watt-hr			V12 0~120V	V15 1~5V	P 15V pulse	O Special
				V22 0~220V	V10 0~10V	C open collect	
	QH 无功电能 Var-hr			V38 0~380V	N NO O/P1	R relay contact	
				O Special	O Special		

请详细书写您所需产品的型号和参数!

■订货范例 Order example

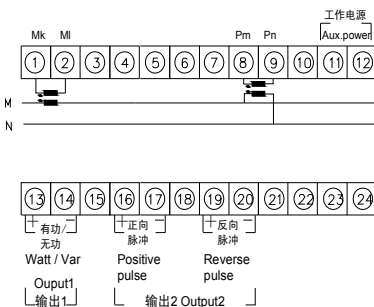
型号 Model : ZWWH-33-A5V10-A420-BP-A22  
 输入 Input : 3P3W,0~5Aac,0~100Vac,50Hz  
 输出1 Output1 : 4~20mA  
 输出2 Output2 : 继电器输出 Relay contact 100Pulse/Kwh  
 Power : AC220V 50Hz

■输入、输出曲线图 Input、Output curve

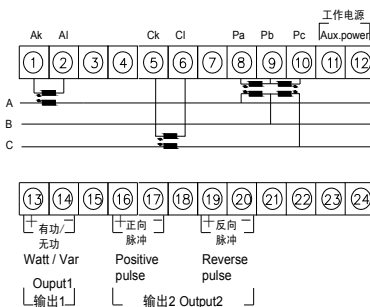


■接线图 Connection Diagram

有功电能、无功电能、有功功率/电能组合、无功功率/电能组合—单相二线  
 Watt-hour、Var-hour、Watt/Watt-hour、Var/Var-hour Transducer—single phase



有功电能、无功电能、有功功率/电能组合、无功功率/电能组合—三相三线  
 Watt-hour、Var-hour、Watt/Watt-hour、Var/Var-hour Transducer—3-phase 3wire



有功电能、无功电能、有功功率/电能组合、无功功率/电能组合—三相四线  
 Watt-hour、Var-hour、Watt/Watt-hour、Var/Var-hour Transducer—3-phase 4wire

