

**Solar Photovoltaic Relay 太阳能光伏继电器系列 - QY161F**
**FEATURES 特点**

- Applicable to inverter used for photovoltaic power generation systems  
适用于太阳能光伏发电用逆变器
- Applicable to UPS  
适用于UPS
- 35A switching capacity  
35A触点切换能力
- The clearance distance between contact and coil is bigger than 6.4mm, the creepage distance is bigger than 8mm.  
触点与线圈间电气距离大于6.4mm,爬电距离大于8mm.
- Insulation system: Class F  
绝缘等级: F级


**CONTACT PARAMETERS 触点参数**

Contact Form 触点形式	H-1组常开 0.9W	H-1组常开 1.4W
Contact Gap 触点间隙	Normal 普通	1.5mm;1.8mm;2.0mm;2.3mm
Rated Load 触点负载	25A 250VAC 2HP 250VAC	30A 277VAC 35A 250VAC
Contact Material 触点材料	Ag Alloy 银合金	
Max.Switching Voltage 最大切换电压	277VAC	
Max.Switching Current 最大切换电流	35A	
Max.Switching Power 最大切换功率	8750VA	

**CHARACTERISTICS 性能参数**

Surge voltage 浪涌电压	10KV 1.2/50 $\mu$ s (between coil and contacts)	
Contact Resistance 接触电阻	100m $\Omega$ Max	
Operate Time 吸合时间	20ms. Max	
Release Time 释放时间	10ms. Max	
Insulation Resistance 绝缘电阻	1000M $\Omega$ Min.(DC500V)	
Initial Dielectric Strength 介质耐压	between open contacts: 触点与触点间:	AC1,000V/ 2,500(Gap>1.5mm),50/60Hz 1Min
	between contacts and coil: 触点与线圈间:	AC 4500V,50/60Hz 1Min
Vibration Resistance 抗振动	Damage limits: 耐久:	10~55Hz Double Amplitude 双振幅 1.5mm
	Malfunction: 误动作:	10~55Hz Double Amplitude 双振幅 1.5mm
Shock Resistance 抗冲击	Damage limits: 耐久:	196m/s <sup>2</sup>
	Malfunction: 误动作:	980m/s <sup>2</sup>
Life 寿命	Mechanical Life (10800 per hour) 机械寿命 (每小时10800次)	1 $\times$ 10 <sup>5</sup>
	Electrical Life (600 per hour) 电气寿命 (每小时600次)	3 $\times$ 10 <sup>4</sup>
Ambient Temperature 环境温度	-40 $^{\circ}$ C ~ +85 $^{\circ}$ C (No condensation) (不冷凝)	
Unit Weight 单位重量	约Approx. 21g	

COIL RATINGS (at20°C) 线圈参数 (在20°C)

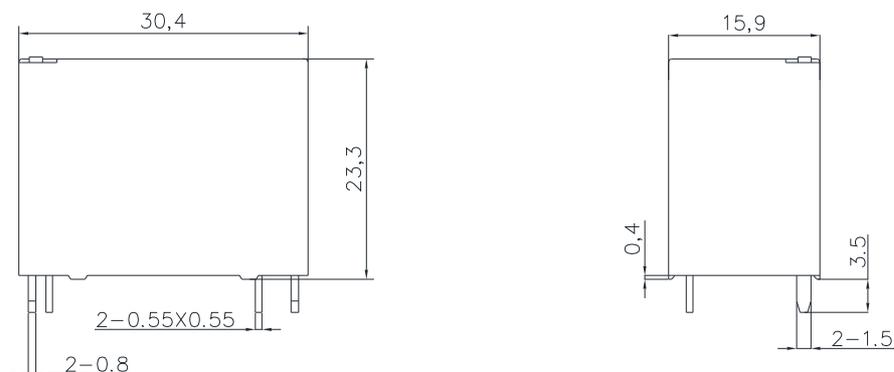
Coil Nominal Voltage 额定电压 (VDC)	Nominal Current 额定电流 ±10%(mA)	Coil Resistance 线圈电阻 ±10% (Ω)	Max. Continuous Voltage 最大连续外加电压	Pick-Up Voltage 吸合电压 (Max)	Drop-Out Voltage 释放电压 (Min)	Rated power 额定功率
5	180	27.8	Coil Nominal Voltage 130% 额定电压的 130%	Coil Nominal Voltage 75% 额定电压的 75%	Coil Nominal Voltage 10% 额定电压的 10%	About 0.9W 约 0.9W
9	100	90				
12	75	160				
18	50	360				
24	37.5	640				
48	180	2560				
5	281	17.8	Coil Nominal Voltage 130% 额定电压的 130%	Coil Nominal Voltage 75% 额定电压的 75%	Coil Nominal Voltage 10% 额定电压的 10%	About 1.4W 约 1.4W
9	155	58				
12	117	103				
18	78	231				
24	58.5	410				

ORDERING INFORMATION 订货标记

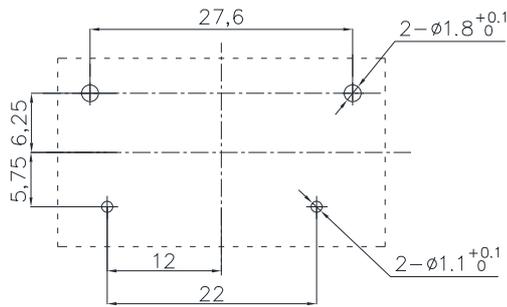
QY161F-012DC-H-S- □-XXX 1 2 3 4 5 6	
1. Model Number 基本型号: QY161F	4. Enclosure: S-General Type, K-Sealed Type 封装形式: S-标准型, K-密封型
2. Coil Voltage 线圈规格 (VDC): 005DC~048DC	5. Coil Power: P-0.9W Nil-1.4W 线圈功率: P-0.9W 无-1.4W
3. Contact Form: H-1 Form A 触点形式: H-1组常开	6. Features: XXX- Special Requirements, Nil-Standard Type 特性号: XXX-特殊要求, 无-标准型

OUTLINE DIMENSIONS (UNIT:mm) 外形尺寸 (单位: mm)

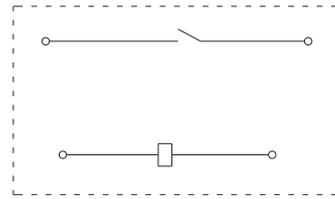
Outline Dimensions  
外形图



Mounting hole size (bottom view)  
安装孔尺寸 (底视图)



Wiring diagram (bottom view)  
接线图 (底视图)



Undimensioned tolerance: <1mm: ±0.2mm 1~5mm: ±0.3mm >5mm: ±0.4mm  
未标注尺寸公差: <1mm: ±0.2mm 1~5mm: ±0.3mm >5mm: ±0.4mm

Note: 1. The size of the lead foot is pre welding dimension. 注: 1、引出脚尺寸为预焊前尺寸  
2. installation hole size tolerance: + 0.1mm 2、安装孔尺寸公差: ±0.1mm

### TYPICAL USE 典型用途

- Household equipment, photovoltaic power generation systems, UPS, Smart socket, Charging pile Etc.
- 家用设备、太阳能光伏发电用逆变器、UPS、智能插座、充电桩等

### PERFORMANCE CHART 性能曲线图

