



群鹰继电器  
QUNYING RELAYS

磁保持继电器  
MAGNETIC LATCHING RELAY

QYT80-80

Power Relay Series 功率继电器系列 QYT80-80

### FEATURES特点

- 48VDC直流负载, 电流可达80A  
48VDC load, current up to 80A
- 产品符合 ROHS  
Products comply with RoHS
- 电信通信设备、工程机械、电瓶车、电动叉车、汽车、火车、船舶、不间断电源等电控系统  
Scope of application: telecommunication and communication equipment, engineering machinery, battery car, electric forklift, automobile, train, ship, etc
- 外形尺寸: 64.0x35.9x29.1  
Overall dimension: 64.0x35.9x29.1



### CONTACT PARAMETERS触点参数

Model series型号	QYT80-80
Contact form触点形式	1H(SPST-NO)
Contact material触点材料	Ag alloy银合金
Rating load(Resistive)额定负载	80A 48VDC
Contact voltage drop接触压降	≤80mV@80A

### CHARACTERISTICS性能参数

Insulation resistance绝缘电阻	100MΩ at 500VDC Min.
Contact Resistance接触电阻	20mΩ Max.
Operate Time吸合时间	30sec. Max.
Release Time释放时间	30sec. Max.
Dielectric strength介质耐压	AC1,000 50Hz/60Hz 1 Min. Leak current漏电流<1mA
Pulse width脉冲宽度	50ms~200ms
Vibration resistance抗振动	(10~200)Hz, Acceleration加速度≤3.5g
Shock resistance抗冲击	(60~100)ops/Min. Acceleration加速度≤4g
Lightning stroke雷击	8/20us 10/20KA lightning test ±5 times 雷击测试±各5次
Electrical Life机械寿命	10,000 OPS (1s通1s断 On 1s off 1s)
Electrical Life电气寿命	6,000 OPS (1s通9s断 On 1s off 9s)
Pollution level污染等级	III
Unit weight重量	Approx.168g
Working duty工作制	Continuous连续工作制
Ambient temperature环境温度	-25℃~+60℃
Ambient temperature存储温度	-40℃~+65℃
Ambient temperature相对湿度	20%~90% RH

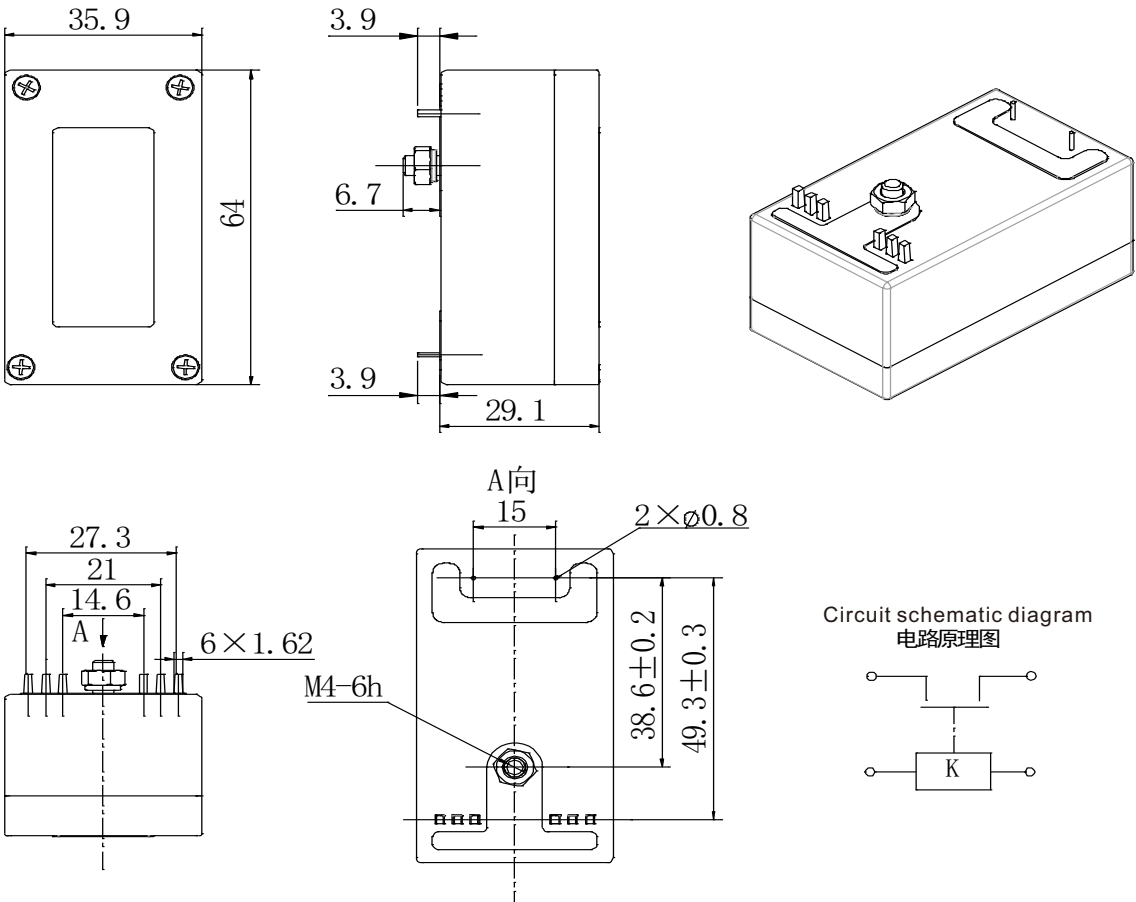
COIL RATINGS (at20℃) 线圈参数（在20℃）

Coil voltage 线圈电压 (V)	Coil operating voltage 线圈工作电压 (V)	Pick-up voltage 吸合电压 (V)	Drop-out voltage 释放电压 (V)	Holding current 保持电流 (A)	Coil power 线圈功率 (W)
12	0.85Us~1.1Us	≤70%	≥10%	≤0.45	4~7
24				≤0.25	
48				≤0.1	
60				≤0.1	

ORDERING INFORMATION订货标记

	QYT80	80	012DC	C	F	X
基本型号Basic model						
额定负载Rated load	63A					
线圈电压Coil voltage	12V,24V,48,60V					
触点形式Contact form	1H—一组常开1Form A					
单双线圈Single double coil	1L—单线圈Single coil					
特性号Property number	XXX—特殊要求special requirements	无Nil—标准Standard				

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



尺寸 (mm) Dimension (mm)	未注尺寸公差 (mm) Tolerance grade not noted(mm)
0~30	±0.3
30~60	±0.5
60~100	±1
>100	±2

注：

1.产品线圈采取正、负脉冲激励，激励时间 $50\text{ms} \leq t \leq 200\text{s}$  线圈不能持续长期通电，操作频率不得超过每分钟6次，并且脉冲应是方波。正脉冲（“+”接电源正，“-”接电源负）使触点闭合，负脉冲（“-”接电源负，“+”接电源正）使触点断开。线圈去激励后，继电器触点状态由产品内的永磁性磁钢保持。

#### ■ 注意事项

- 1.产品线圈的驱动电路功率必须大于等于产品线圈功率，否则会降低产品的切断能力。
- 2.对线圈连续施加的电压不能超过最大容许电压。否则，线圈异常发热会缩短绝缘层的寿命。
- 3.本接触器非防水结构，请勿在水、溶剂、和油可能接触到外壳或端子的环境中使用。否则可能因外壳老化或端子腐蚀、污浊而引起异常发热。
- 4.产品周围避免有大于200mt的磁场，强磁场会影响产品正常动作。

Note:

1. The product coil adopts positive and negative pulse excitation, and the excitation time is  $50\text{ms} \leq t \leq 200\text{s}$ . The coil shall not be continuously energized for a long time, the operating frequency shall not exceed 6 times per minute, and the pulse shall be square wave. The positive pulse ("+" is connected to the positive power supply and "-" is connected to the negative power supply) closes the contact, and the negative pulse ("+" is connected to the negative power supply and "-" is connected to the positive power supply) opens the contact. After the coil is de energized, the contact state of the relay is maintained by the permanent magnetic steel in the product.

#### ■ precautions

1. The driving circuit power of the product coil must be greater than or equal to the product coil power, otherwise the cutting capacity of the product will be reduced.
2. The voltage continuously applied to the coil shall not exceed the maximum allowable voltage. Otherwise, the abnormal heating of the coil will shorten the service life of the insulating layer.
3. This contactor is not a waterproof structure. Do not use it in the environment where water, solvent and oil may contact the shell or terminal. Otherwise, abnormal heating may be caused by shell aging or terminal corrosion and dirt.
4. Avoid magnetic field greater than 200MT around the product. Strong magnetic field will affect the normal operation of the product.