

High current relay 大电流继电器系列-QYT96A

FEATURES特点

- 20A continuous current capability
20A持续电流能力
- High temperature resistance of PBT shell is 155°C
PBT外壳耐温155°C
- Magnetic arc blowing technology
磁吹弧技术
- Outline dimensions (26.4X26.4X24.8) mm.
外形尺寸 (26.4X26.4X24.8) mm。



CONTACT PARAMETERS触点参数

Model Series型号系列	QYT96A
Rating Load (Resistive)额定负载	20A 110VDC 30A 110VDC
Max. Switching Current最大切换电流(阻性)	120A
Max.Switching Voltage最大切换电压(阻性)	110VDC
Contact pressure drop接触压降 (首次First)	典型值30mV, 最大值250mV (10A下测量) 30mV typical, 250mV max (measured at 10A)

CHARACTERISTICS性能参数

Contact Materials触点材料	Ag Alloy银合金	
Contact Resistance接触电阻	50mΩ Max.	
Operate Time吸合时间	10msec.Max.	
Release Time释放时间	7msec.Max.	
Insulation Resistance绝缘电阻	100MΩ Min.(DC500V)	
Initial Dielectric Strength介质耐压	Between open contacts: 触点与触点间:	AC500V, 50/60Hz 1Min.
	Between contacts and coil: 触点与线圈间:	AC500V, 50/60Hz 1Min.
Vibration Resistance抗振动	Damage limits: 耐久:	10~55Hz Double Amplitude双振幅3.0mm
	Malfunction: 误动作:	10~55Hz Double Amplitude双振幅3.0mm
Shock Resistance抗冲击	Damage limits: 耐久:	100G Min.
	Malfunction: 误动作:	18G Min.
Life寿命	Mechanical Life (18 000per hour) 机械寿命 (每小时18 000次)	1×10 ⁷
	Electrical Life (900 per hour) 电气寿命 (每小时900次)	40A 110VDC 5×10 ⁴ 80A 48VDC 1×10 ⁵
Ambient Temperature环境温度	-40°C ~ +125°C (No condensation) (不冷凝)	
Unit Weight单位重量	约Approx 1.6g	

COIL RATINGS (at20°C) 线圈参数 (在20°C)

额定电压	动作电压	释放电压	最大线圈电压	额定电流		线圈电阻	
VDC	VDC	VDC	VDC	$\times (1 \pm 10\%) \text{mA}$		$R \times (1 \pm 10\%) \Omega$	
				1.6W	1.8W(并电阻)	1.6W	1.8W(并电阻)
12	≤ 7.2	≥ 1.2	20.2	134.0	150.0	90	80
24	≤ 14.4	≥ 2.4	40.5	66.7	75.0	360	320
额定电压	动作电压	释放电压	最大线圈电压	额定电流		线圈电阻	
VDC	VDC	VDC	VDC	$\times (1 \pm 10\%) \text{mA}$		$R \times (1 \pm 10\%) \Omega$	
				2.0W	2.2W(并电阻)	2.0W	2.2W(并电阻)
12	≤ 7.2	≥ 1.2	19	167.0	185	72	65
24	≤ 14.4	≥ 2.4	39	83.3	92.3	288	260

说明: 1. 1~1.7 线圈参数均以 12V, 1.6W (并电阻 680 Ω) 为例, 其余见规格参数见表。

保持电压	40%~100%UN (环境温度25°C) 50%~60%UN (环境温度85°C)
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说明:

- (1) 线圈保持电压为线圈施加额定电压100ms以上的线圈电压。
(2) 继电器线圈不允许长时间施加超过保持电压的上限值, 防止继电器过热烧毁。

ORDERING INFORMATION 订货标记

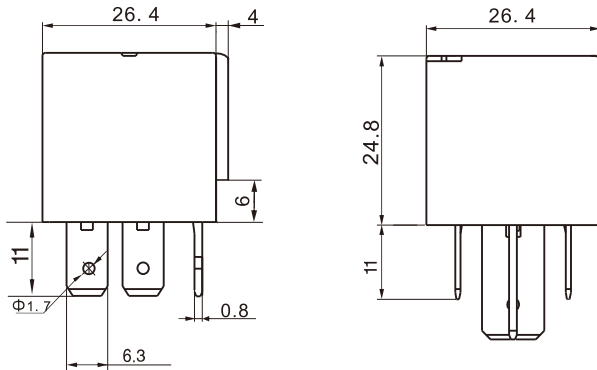
QYT96A-012DC-H-□-N-P-R-XXX							
1	2	3	4	5	6	7	8
1. Model Number基本型号: QYT96A 2. Coil Voltage线圈规格 (VDC): 12, 24, 36, 48 3. Contact Form: H-1 Form A 触点形式: H-1组常开 4. 封装形式Enclosure S-General type, K-Sealde case S-标准型, K-密封型				5. Coil Power: Nil -1.6W, N-2.0W 线圈功率: 无-1.6W, N-2.0W 6. 端子形式Foot Type Nil-QC Terminal, P-PCB Terminal 无-长脚, P-PCB式 7. Accessory: Nil - Standard Type, R-With Resistor, D-With Diode 配件形式: 无-普通型, R-带电阻, D-带二极管 8. Features: XXX-Client Specific Requirements, Nil-Standard Type 特性号: XXX-客户特殊要求, 无-标准型			

LIST OF RESISTANCE COMPONENTS 电阻元件使用类表

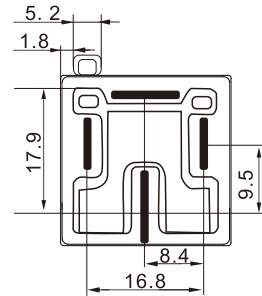
线圈电压 (VDC)	电阻 (Ω)			并联二极管 正极脚位	D1	D2
	R	R1	R2			
12	680	560	470	正极脚位	85	86
24	2700	1200	1000	负极脚位	86	85

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

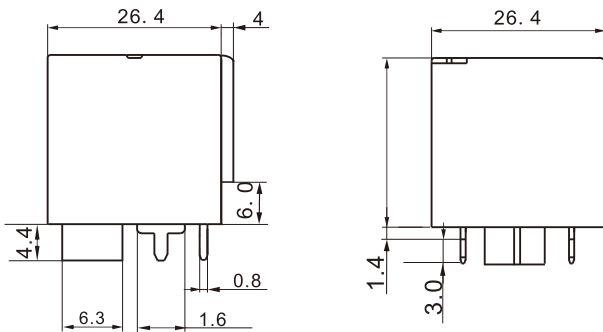
QC Outline drawing
插座式外形图



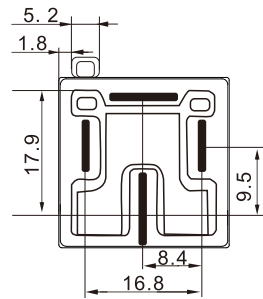
QC bottom view
插座式底视图



PCB Outline drawing
PCB式外形图

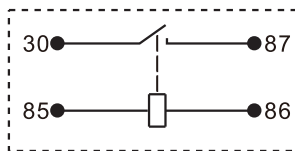


PCB bottom view
PCB式底视图

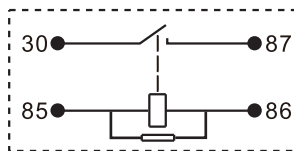


Wiring diagram
接线图

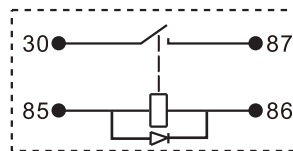
Routine
常规



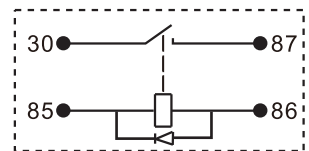
Add resistance
加电阻



Add diode+85
加二极管+85



Add diode+86
加二极管+86



Undimensioned tolerance: <1mm: $\pm 0.2\text{mm}$ 1~5mm: $\pm 0.3\text{mm}$ >5mm: $\pm 0.4\text{mm}$

未标注尺寸公差: <1mm: $\pm 0.2\text{mm}$ 1~5mm: $\pm 0.3\text{mm}$ >5mm: $\pm 0.4\text{mm}$

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: $\pm 0.1\text{mm}$