

## 大电流继电器 High Current Relay

100A/150A

### 特性 / FEATURES

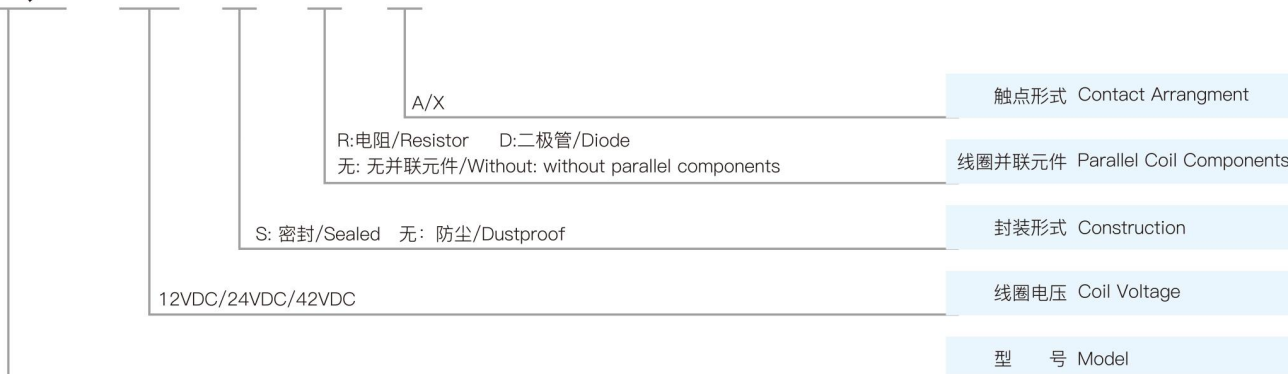
- 85°C时150A极限连续电流  
Limiting continuous current 150 A at 85°C
- 300A电流转换能力  
Current switching ability up to 300 A
- 适合42V电压等级  
Suitable for voltage levels up to 42 V
- 耐高温、潮湿和振动  
Heat, moisture and vibration resistant
- 防尘型和密封型  
Dustproof and sealed type



**RoHS**  
Compliant

### 订购信息 / ORDERING INFORMATION

## SQ3-12-S-R-A



### 触点参数 / CONTACT PARAMETERS

触点形式	Contact arrangement	A/X
接触压降(10A下测量)	Voltage drop (at 10A)	≤200mV
触点材质	Contact material	银合金/Silver alloy: AgSnO <sub>2</sub> In <sub>2</sub> O <sub>3</sub> 、AgSnO <sub>2</sub> 、AgNi
触点负载	Contact rating	A型: 150A 14VDC X型: 100A 14VDC
最大切换电压	Max switching voltage	42VDC
最大切换电流	Max switching current	300A (灯负载浪涌电流/Lamp load surge current)
最小负载	Min contact load	1A 5VDC
电耐久性 (频率:每小时600次)	Electrical endurance (Frequency:600 ops/h)	5x10 <sup>4</sup> ops
机械耐久性 (频率:每小时18000次)	Mechanical endurance (Frequency:18000 ops/h)	1x10 <sup>7</sup> ops

### 特性参数 / CHARACTERISTICS PARAMETERS

绝缘等级	Insulation level	Class B / Class F	
绝缘电阻	Insulation resistance	100MΩ (500VDC)	
介质耐压 (漏电流 1mA)	Dielectric strength (Leakage current 1mA)	线圈与触点间耐压 Dielectric strength (Between coil and contacts)	500VAC 1分钟/minute
		断开触点间耐压 Dielectric strength (Between open contacts)	500VAC 1分钟/minute
吸合时间(额定电压下)	Operate time(at nominal voltage)	≤25ms	
释放时间(额定电压下)	Release time (without diode)(at nominal voltage)	≤8ms	
湿度	Humidity	5% ~ 85% RH	
环境温度	Ambient temperature	-40°C ~ +125°C	
抗冲击	Shock resistance	稳定性/Functional	196m/s <sup>2</sup>
		强度/Destructive	490m/s <sup>2</sup>
抗振动	Vibration resistance	10Hz~500Hz 49m/s <sup>2</sup>	
重量	Weight	约/Approx 230g	
封装形式	Construction	防尘型/Dustproof    密封型/Sealed type	

备注: 以上数据均为初始值

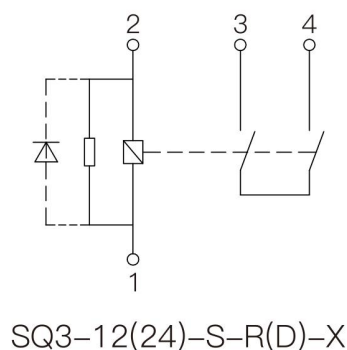
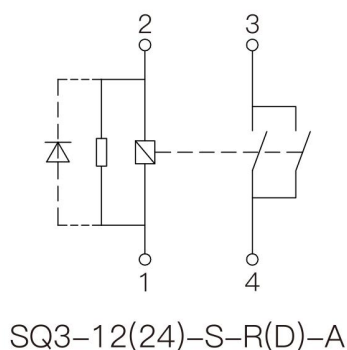
Remark: All above data is initial value

### 线圈参数 / COIL PARAMETERS

常温/At 23°C

功耗(W)	Power consumption(W)	4.4W	5.0W	4.6W	5.5W
额定电压(VDC)	Nominal voltage(VDC)	12	12	24	24
线圈电阻(Ω±10%)	Coil resistance(Ω±10%)	33	33	125	125
并联电阻(Ω)	Parallel resistance(Ω)		240		680
吸合电压(VDC)	Pick-up voltage(VDC)	≤7.2	≤7.2	≤14.4	≤14.4
释放电压(VDC)	Drop-out voltage(VDC)	≥1.2	≥1.2	≥2.4	≥2.4
允许最大电压(VDC)	Max allowable overdrive voltage(VDC)	27	27	54	54

### 线路图 / WIRING DIAGRAM



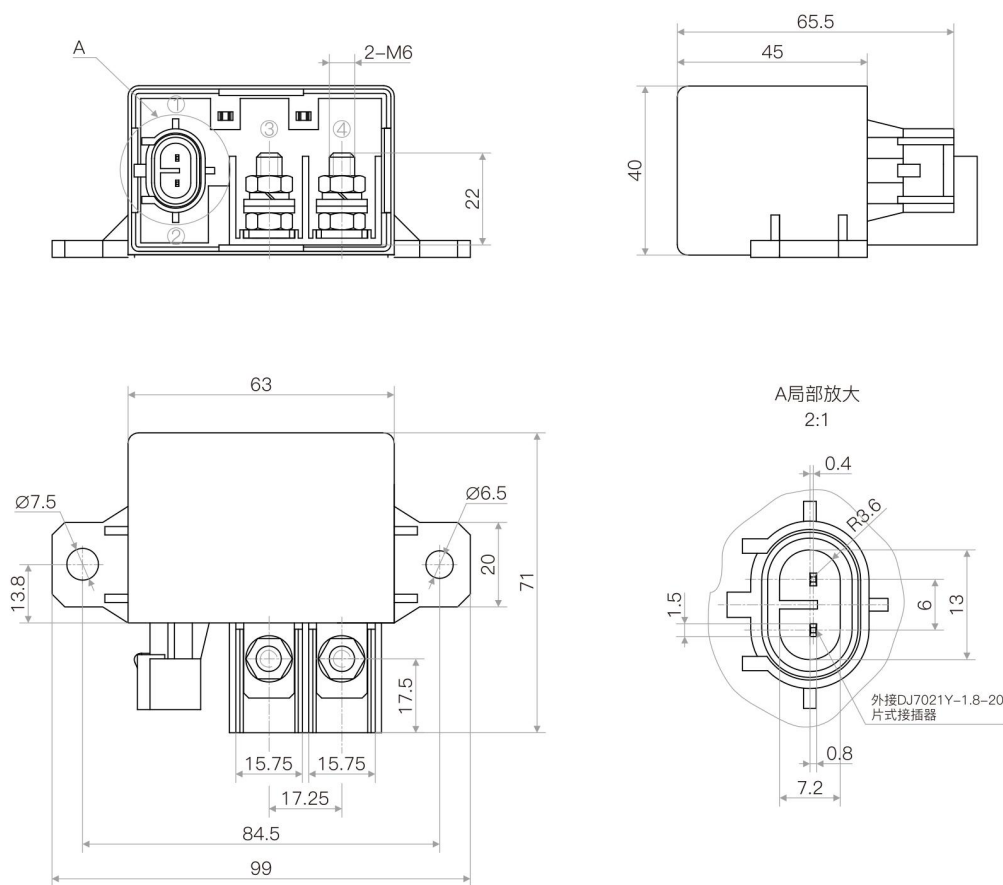
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**外形图 / OUTLINE DIMENSIONS**

单位/Unit(mm)

SQ3-12(24) -S-R (D)-A(X)



未注公差/Tolerance:  $\pm 0.3$     端子垂直度/Terminal vertical deviation tolerance: 0.3mm