

FEATURES特点

- UL, CE ,TUV & CQC safety approval.
UL, CE ,TUV 及 CQC 安规认证.
- Single contact 953 series relay offers 30A switching capacity for various kinds of applications.
在各种应用中，单触点的953系列继电器可提供30A的切换能力
- Both PCB terminal & Quick Connect Terminal for contacts.
PCB端子和快速端子两种连接型
- UL class F coil insulation type available.
UL Class F线圈绝缘等级



UL FILE NO.: E162117

TUV FILE NO.: R02158203

CQC FILE NO.: CQC02001001783

CONTACT RATING 接点参数

Contact Form接点形式	1A SPST-NO	1B SPST-NC	1C SPDT	
			NO	NC
Max. Switching Power最大切换功率	7500VA(30A) 600W (20A)	4800VA 300W	7500VA600W	
Max. Switching Voltage最大切换电压	250VAC 30VDC	250VAC 20VDC	250VAC 30VDC	
Max. Switching Current最大切换电流	30A	20A	30A	
Min. Switching Current/Voltage 最小切换电流/电压	100mA 5VDC			
Rating Load(Resistive)额定负载(阻性)	20A / 277VAC 20A / 30VDC 30A / 250VAC	15A / 277VAC 20A / 240VAC 10A / 30VDC	20A / 277VAC 30A / 240VAC 20A / 30VDC	15A / 277VAC 30A / 240 VAC 10A / 30VDC
Contact Material 接点材质	Ag Alloy 银合金			

CHARACTERISTICS 性能参数

Electrical Life 电气寿命	1×10^5
Mechanical Life机械寿命	1×10^7
Insulation Resistance绝缘阻抗	Min. 500M Ω 500VDC
Contact Resistance(Initial)接触电阻	$\leq 100m\Omega$ (6VDC 1A)
Operate Time 动作时间	$\leq 15ms$
Release Time 开放时间	$\leq 10ms$
Initial Dielectric Strength 耐压	between open contacts开放接点间: 50/60Hz 1500VAC 1min. between all contacts线圈接点间: 50/60Hz 2500VAC 1min.

Vibration Resistance 耐振动	Malfuction: 误动作:	10 ~ 55Hz Double Amplitude双振幅 1.5mm
	Damage limits: 耐久:	10 ~ 55Hz Double Amplitude双振幅 1.5mm
Shock Resistance 耐冲击	Malfuction: 误动作:	10G
	Damage limits: 耐久:	100G
Ambient Temperature环境温度	-40°C ~ +85°C	(No freezing 无结冰)
Relative Humidity相对湿度	85% at 40°C	
Unit Weight单位重量	约Approx. 30g	

ORDERING INFORMATION型号代码说明

953 -1C - 12 D A F - S <u>1</u> <u>2</u> <u>3</u> <u>4</u> <u>5</u> <u>6</u> <u>7</u>	
1. Model Number 型号 2. Contact Arrangement 接点形式 1A = 1 Form A 1组常开 1C = 1 Form C 1组转换 3. Coil Voltage 线圈电压 5、6、9、12、18、24、36、48VDC 6、12、24、110、220VAC 4. Coil Type 线圈形式 D=DC 直流 A=AC 交流	5. Connect Type 连接形式 A = PCB terminal & quick terminal 印刷板式端脚和接点快接引出 6. Type of Insulation 绝缘形式 Nil = Class A F = Class F 7. Enclosure 密封型式 N = Open Type 开放型 S = Sealed Type 密封型

COIL RATINGS (at 20°C) 线圈额定值 (在20°C)

COIL TYPE 线圈形式	Coil Nominal Voltage 线圈额定电压 (V)	Coil Resistance 线圈阻抗 ($\Omega \pm 10\%$)	Pick-Up Voltage 动作电压(V) (Max)	Drop-Out Voltage 开放电压(V) (Min)	Nominal Current 额定电流 (mA)
DC Standard Coils 直流标准线圈 (abt. 0.9W)	5	27	3.75	0.5	185
	6	40	4.5	0.6	150
	9	97	6.75	0.9	93
	12	155	9	1.2	77
	18	380	13.5	1.8	47
	24	660	18	2.4	36
	36	1440	27	3.6	25
	48	2560	36	4.8	19
AC Coils 交流线圈 (abt. 1.2VA~1.8VA)	6	10	4.8	0.6	
	12	43	9.6	1.2	
	24	160	19.2	2.4	
	110	3160	88	11	
	220	13490	176	22	

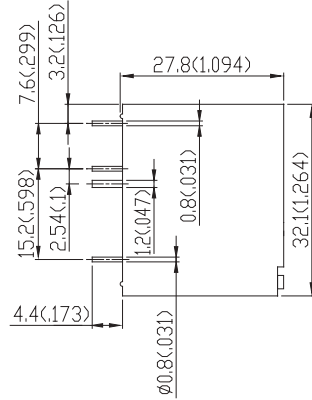
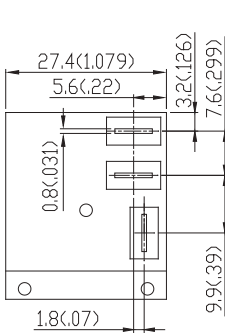
* Max Continuous Voltage at 20°C: 130% of Coil Normal Voltage. 最大使用电压在20°C:线圈额定电压的130%

* AC coils Max continuous Voltage at 20°C 110% 交流线圈最大使用电压在20°C: 线圈额定电压的110%

OUTLINE DIMENSIONS 外部尺寸

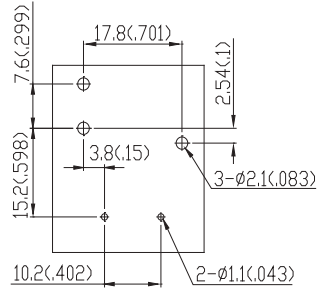
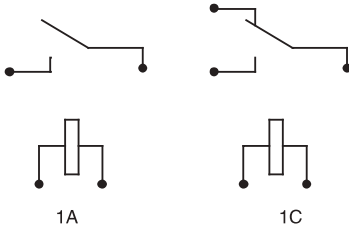
UNIT: mm(inch) 单位: 毫米(英寸)

Dimensions尺寸



Internal Connections接线图
(Bottom View底视图)

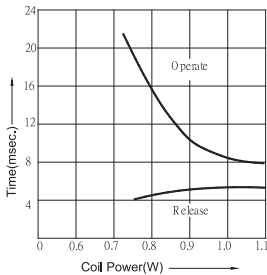
Drilling Plan孔位图
(Bottom View底视图)



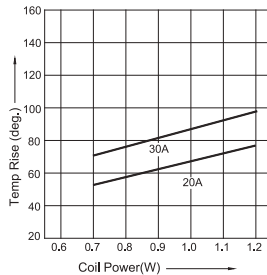
REMARK: Dimensions $\leq 5\text{mm} \pm 0.2\text{mm}$, $> 5\text{mm} \pm 0.3\text{mm}$, the tolerance of PCB thru hole: $+0.2\text{mm}$
备注: 尺寸公差 $\leq 5\text{mm} \pm 0.2\text{mm}$, $> 5\text{mm} \pm 0.3\text{mm}$, 印刷电路板孔 $+0.2\text{mm}$

953A Reference Data 参考资料

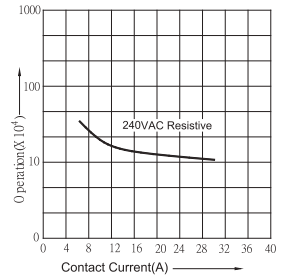
Timing



Coil Temperature Rise



Life Curves





953A系列继电器SERIES RELAY

SAFETY STANDARD安规认证

●UL APPROVAL UL 认证

Contact Form 接点形式	1 A	1B	1C	
			NO	NC
Rating Load(Resistive) 额定负载(阻性)	20A / 277VAC 20A / 30VDC	15A / 277VAC 10A / 30VDC	19.8A / 277VAC 30A / 240VAC	19.8A / 277VAC 30A / 240 VAC
General Purpose Load通用负载	15A / 277VAC	8A / 277VAC	—————	—————
Motor Load电机负载	16.0FLA / 96.0LRA 240VAC	10.0FLA / 58.0LRA /240VAC	—————	—————
Horse Power马力	FLA 12 / 250VAC 2HP FLA 16 / 125VAC 1HP	FLA 4.9 / 250VAC 1/2HP FLA 5.8 / 125VAC 1/4HP	FLA11.2 / LRA67.2 FLA10.3 / LRA61.8	
Ballast镇流负载	—————	—————	20A	
Coil Voltage线圈电压	5 – 110 VDC 6 – 220 VAC			

●TUV APPROVAL TUV认证

Contact Form 接点形式	1 A	1B	1C	
			NO	NC
Rating Load(Resistive) 额定负载(阻性)	30A / 250VAC 20A / 30VDC	10A / 250VAC 10A / 30VDC	30A / 250VAC 20A / 30VDC	10A / 250VAC 10A / 30VDC
Inductive Load感性负载 (L/R: 7ms)	10A / 30 VDC	8A / 30VDC	10A / 30VDC	8A / 30VDC
Coil Voltage线圈电压	DC: 5V,6V,9V,12V,18V,24V, 48V,110V AC: 6V,12V,24V,110V, 220V			

●CQC APPROVAL CQC认证

Contact Form 接点形式	1 A	1B	1C	
			NO	NC
Rating Load(Resistive) 额定负载(阻性)	30A / 240VAC	20A / 240VAC	30A / 240VAC	20A / 240VAC
Coil Voltage线圈电压	DC: 5V,9V,12V, 24V, 36V,48V AC: 110V, 220V			