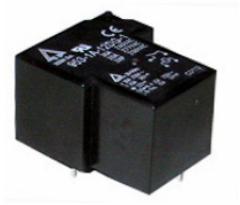
953G Series Relay

FEATURES

- UL, CE & TUV safety approval.
- Single contact 953 series relay offers 30A switching capacity for various kinds of applications.
- Up to 30A switching in SPDT-NO and 20A switching in SPDT-NC arrangement.
- Meets UL 508 & UL 873 spacing.
- Nominal power 930mW.
- Operating power 520mW.
- Standard type is open type without dust cover, additionally; dust cover and sealed cover types are available to meet customers' various requirement.



UL FILE NO: E162117
TUV FILE NO: R 3-02158203
CE DECLARATION OF CONFORMITY

ORDERING INFORMATION

953 - 1C - 12 D G F - 1
1 2 3 4 5 6 7

1.Model Number 2.Contact Arrangement 1A = 1 Form A (SPST-NO) 1B = 1 Form B (SPST-NC) 1C = 1 Form C (SPDT) 3.Coil Voltage DC: 5~48V AC: 6~277V 4.Coil Type D: DC A: AC	5.Enclosure Style Nil = Open Type (Without Dust Cover) G = Sealed Type (With Dust Cover) 6.Type of Insulation Nil = Class B F = Class F 7. Common Terminals Type 1 = 1 Common Terminal (No Common Terminal between Coil Terminals) 2 = 2 Common Terminals (One Common Terminal between Coil Terminals)

COIL RATINGS (at 20℃)

COIL TYPE	Coil Nominal Voltage (V)	Coil Resistance (Ω ±10%)	Pick-Up Voltage (V) ≤	Drop-Out Voltage (V) ≥	Nominal Current (mA)
DC Standard Coils	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	6	10	5.1	0.6	
	12	43	10.2	1.2	
	24	160	20.4	2.4	
	110	3160	93.5	11	
	220	13490	187	22	
	277	19900	235.4	27.7	

* Max Continuous Voltage at 20℃: 130% of Coil Nominal Voltage.

CONTACT RATINGS

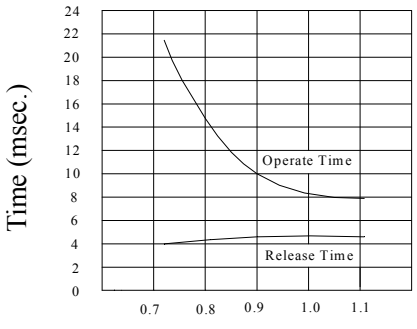
Contact Arrangement	1 Form A (SPST-NO)	1 Form B (SPST-NC)	1 Form C (SPDT)
Max. Switching Power	7500VA 600W	5000VA 300W	7500VA 600W
Max. Switching Voltage	277VAC 30VDC	277VAC 30VDC	277VAC 30VDC
Max. Switching Current	30A	20A	30A
Contact Resistance	≤50mΩ	≤50mΩ	≤50mΩ
Resistive Load	30A/250VAC 20A/277VAC 20A/30VDC	20A/240VAC 15A/277VAC 10A/30VDC	NO: 30A/240VAC 20A/277VAC 20A/30VDC NC: 20A/240VAC 15A/277VAC 10A/30VDC
Contact Material	Ag-CdO	Ag-CdO	Ag-CdO

CHARACTERISTICS

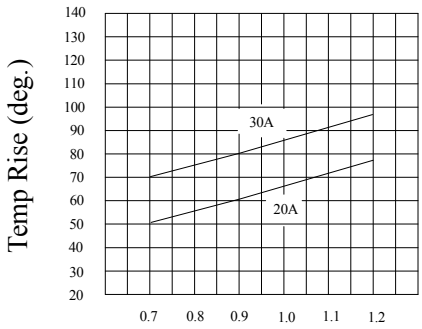
Electrical Life	1×10^5
Mechanical Life	1×10^7
Initial Insulation Resistance	Min. 500MΩ 500VDC
Contact Resistance (Initial)	≤50mΩ
Operate Time	≤15ms
Release Time	≤15ms
Initial Dielectric Strength	50/60Hz 1500VAC 1 min. (between open contacts) 50/60Hz 2500VAC 1 min. (between contacts and coil) (For 1 Common Terminal Relays) 50/60Hz 2000VAC 1 min. (between contacts and coil) (For 2 Common Terminal Relays)
Vibration Resistance	Malfunction: 10 to 55Hz at Double Amplitude of 1.5mm Destructive: 10 to 55Hz at Double Amplitude of 1.5mm
Shock Resistance	Malfunction: 10G (11ms) / Destructive: 100G (6ms)
Ambient Temperature	－55℃～＋85℃
Relative Humidity	85% at 40℃
Unit Weight	Approx. 25g

953G Referential Data

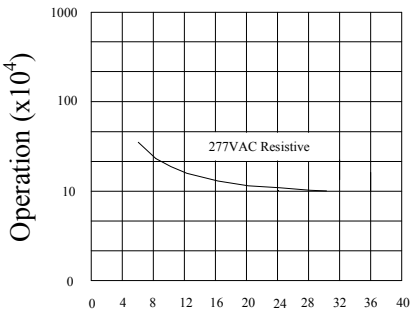
Timing



Coil Temperature Rise



Life Curves



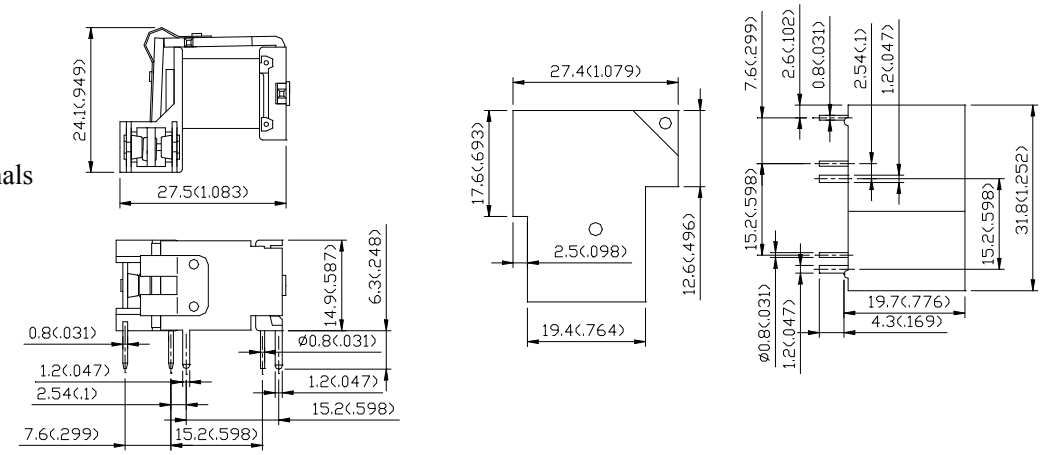
OUTLINE DIMENSIONS

Dimensions

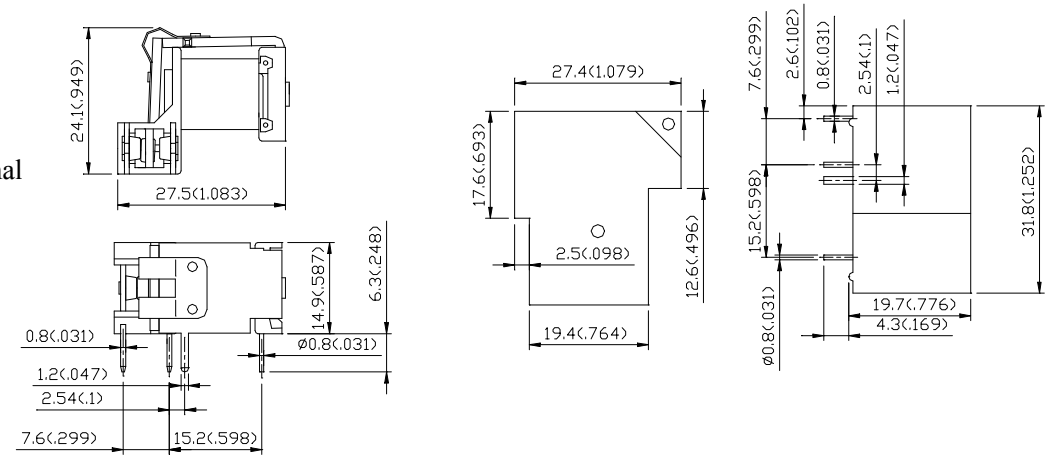
General Type

Sealed Type

2 Common Terminals



1 Common Terminal



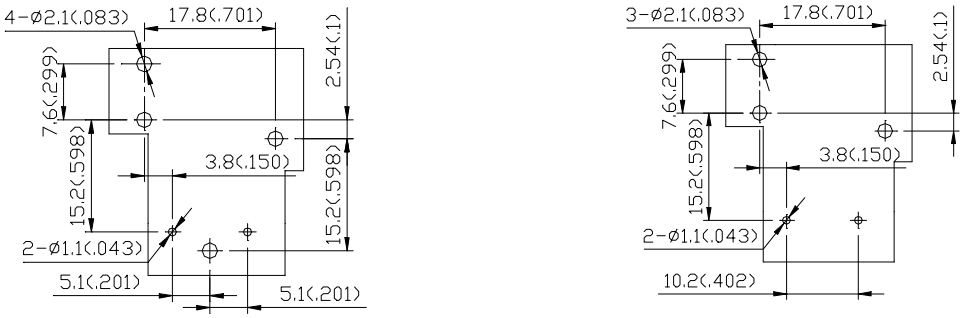
REMARK: Tolerance of outline dimensions: ±0.2 (.008).

Internal Connections (Bottom View)

2 Common Terminals

1 Common Terminal

Drilling Plan (Bottom View)



2 Common Terminals

1 Common Terminal

UNIT：mm (inch)

SAFETY APPROVAL

- UL APPROVAL

Contact Rating	1 Form A (SPST-NO)	1 Form B (SPST-NC)	1 Form C (SPDT)	
			NO	NC
Resistive Load	20A / 277VAC 19.8A / 277VAC 30A / 240VAC 20A / 30VDC	15A / 277VAC 10A / 30VDC	20A / 277VAC 20A / 30VDC	15A / 277VAC 10A / 30VDC
General Purpose Load	10A / 277VAC	8A / 277VAC	10A / 277VAC	8A / 277VAC
Motor Load (Cos ϕ : 0.4 ~ 0.5)	2HP / 250VAC 1HP / 125VAC	1/2HP / 250VAC 1/4HP / 125VAC	2HP / 250VAC 1HP / 125VAC	1/2HP / 250VAC 1/4HP / 125VAC
Horse Power	FLA 10.3 LRA 61.8 / 277VAC FLA 11.2 LRA 67.2 / 240VAC FLA 12 / 250VAC FLA 16 LRA 96 / 240VAC FLA 16 LRA 96 / 120VAC FLA 16 / 125VAC	FLA 4.9 / 250VAC FLA 5.8 / 125VAC	FLA 12 / 250VAC FLA 16 / 125VAC	FLA 4.9 / 250VAC FLA 5.8 / 125VAC
Ballast	20A / 277VAC		20A / 277VAC	

- TUV APPROVAL

Contact Rating	1 Form A (SPST-NO)	1 Form B (SPST-NC)	1 Form C (SPDT)	
			NO	NC
Resistive Load	30A / 250VAC 20A / 30VDC	15A / 250VAC 15A / 30VDC	20A / 250VAC 20A / 30VDC	10A / 250VAC 10A / 30VDC
Inductive Load (Cos ϕ : 0.4, L/R: 7ms)	15A / 250VAC 15A / 30 VDC	8A / 250VAC 8A / 30VDC	10A / 250VAC 10A / 30VDC	8A / 250VAC 8A / 30VDC
Motor Load (Cos ϕ : 0.6)	2HP / 250VAC 1HP / 125VAC	1/2HP / 250VAC 1/4HP / 125VAC	2HP / 250VAC 1HP / 125VAC	1/2HP / 250VAC 1/4HP / 125VAC
Pilot Duty Load (Rate 6000 Operations)	720VA / 240VAC 800VA / 125VAC	360VA / 240VAC 290VA / 125VAC	470VA / 240VAC 470VA / 125VAC	360VA / 240VAC 290VA / 125VAC

- CCEE APPROVAL

Contact Rating	1 Form A (SPST-NO)	1 Form B (SPST-NC)	1 Form C (SPDT)	
			NO	NC
Resistive Load	30A / 240VAC	20A / 240VAC	30A / 240VAC	20A / 240VAC

- CE DECLARATION OF COFORMITY

  In conformity with the Low Voltage Directive 73/23/EEC

  Test Report No.: E9967734E02 (TUV)

  Test Specification: EN61810-1
  EN61810-5
  EN60255-23