



»» Features

- 70A high power automotive relay.
- High temperature endurance up to 125° C.
- Optional to be equipped with protection diode or resistor.
- Dust cover version, flux free type, sealed & weather proof type or flange cover version to be chosen.
- Tinned terminal is available on request.
- Comply with RoHS-Directive 2011/65/EU, and ELV-Directive 2000/53/EC.

»» Type List

Terminal style	Contact form	Designation (provided with)	Enclosure style		
			Dust cover	Flux tight	Sealed type washable
Socket terminal	1A (SPNO)	-----	897-1AH-D	897-1AH-C	897-1AH-S
		Resistor	897-1AH-D-R1	897-1AH-C-R1	897-1AH-S-R1
PCB terminal ⁽¹⁾	1A (SPNO)	-----	897P-1AH-D	897P-1AH-C	897P-1AH-S
		Resistor	897P-1AH-D-R1	897P-1AH-C-R1	897P-1AH-S-R1

Terminal style	Contact form	Designation (provided with)	Enclosure style	
			Flanged cover (dust cover)	Flanged cover (flux tight)
Socket terminal	1A (SPNO)	-----	897-1AH-D1	897-1AH-C1
		Resistor	897-1AH-D1-R1	897-1AH-C1-R1

Terminal style	Contact form	Designation (provided with)	Enclosure style	
			Steel bracket (dust cover)	Steel bracket (flux tight)
Socket terminal	1A (SPNO)	-----	897-1AH-D1S	897-1AH-C1S
		Resistor	897-1AH-D1S-R1	897-1AH-C1S-R1

Terminal style	Contact form	Designation (provided with)	Enclosure style	
			Steel bracket (dust cover with shroud)	Steel bracket (dust cover with weather proof)
Socket terminal	1A (SPNO)	Resistor	897-1AH-D1SF-R1	897-1AH-D1SW-R1

Note : (1) Special PCB terminal version (NO, COM 3 pin type) are available.

»» Ordering Information

897 P - 1AH - C - R1 - T 001
 1 2 3 4 5 6 7

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|----------|--|------|---|
| 1. 897 | -- Basic series designation | 4. D | -- Dust cover |
| 2. Blank | -- Socket terminal | C | -- Flux tight |
| P | -- PCB terminal | S | -- Sealed type washable |
| P1 | -- Special PCB terminal (NO,COM 3 pin type) | D1 | -- Flanged cover (dust cover) |
| | | C1 | -- Flanged cover (flux tight) |
| | | S1 | -- Flanged cover (sealed type washable) |
| 3. 1AH | -- Single pole normally open, contact material AgSnO | D1S | -- Steel bracket (dust cover) |

- C1S -- Steel bracket (flux tight)
 S1S -- Steel bracket (sealed type washable)
 D1SF -- Steel bracket (dust cover with shroud)
 D1SW -- Steel bracket (dust cover with weather proof)
5. Blank -- Standard type
 R1 -- Coil parallel with resistor 1/2W for 12V 680Ω, 24V 2700Ω
6. Blank -- Standard type
 T -- Special requirement for Tin plated terminal
7. Blank -- Standard type
 001 -- Coil parallel with diode IN4007 the positive pole on # 85 terminal
 002 -- Coil parallel with diode IN4007 the negative pole on # 85 terminal

»» Contact Rating

Max. Continuous current	70A 14VDC, 25A 28VDC
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»» Coil Rating (DC)

Rated voltage (V)	Rated current ±10 % at 23°C (mA)	Coil resistance ±10 % at 23°C (Ω)	Max. continuous Voltage at 85°C ⁽¹⁾	Pick up voltage(Max) at 23°C	Drop out voltage(Min) at 23°C	Power consumption at rated voltage
12	133	90	100% of rated voltage	65% of rated voltage	10% of rated voltage	approx. 1.6W
24	66.7	360				

Notes : (1) Continuous contact current at 50A.

»» Specification

Contact material	AgSnO alloy	
Contact voltage drop ⁽¹⁾	Typ. 30mV at 10A	
Insulation resistance ⁽¹⁾	20 MΩ Min. (DC 500V)	
Operate time ⁽¹⁾	20ms Max.	
Release time ⁽¹⁾	20ms Max.	
Dielectric strength ⁽¹⁾	Between open contact	: AC 500V , 50/60Hz 1 min.
	Between contact and coil	: AC 500V , 50/60Hz 1 min.
Vibration resistance	Operating extremes	10 ~ 500Hz 5G
	Damage limits	10 ~ 500Hz 5G
Shock resistance	Operating extremes	10G
	Damage limits	100G
Life expectancy	Mechanical	10,000,000 operations (frequency 18,000 operations/hr)
	Electrical	100,000 operations (frequency 1,200 operations/hr)
Temperature range	Operating	-40~+125°C (no freezing)
Weight	Approx. 40 g	

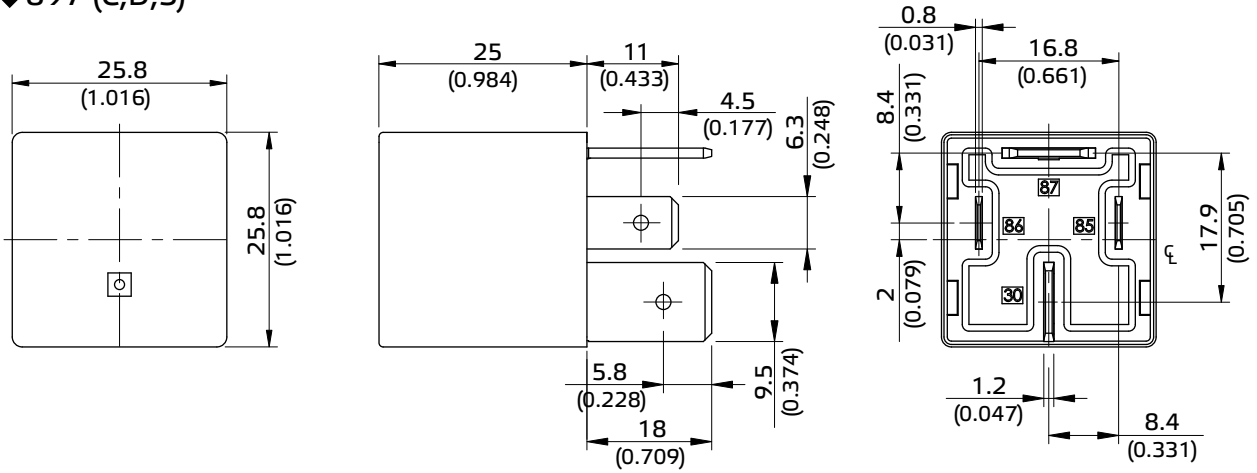
Note : (1) initial value. Operate and release time excluding contact bounce.



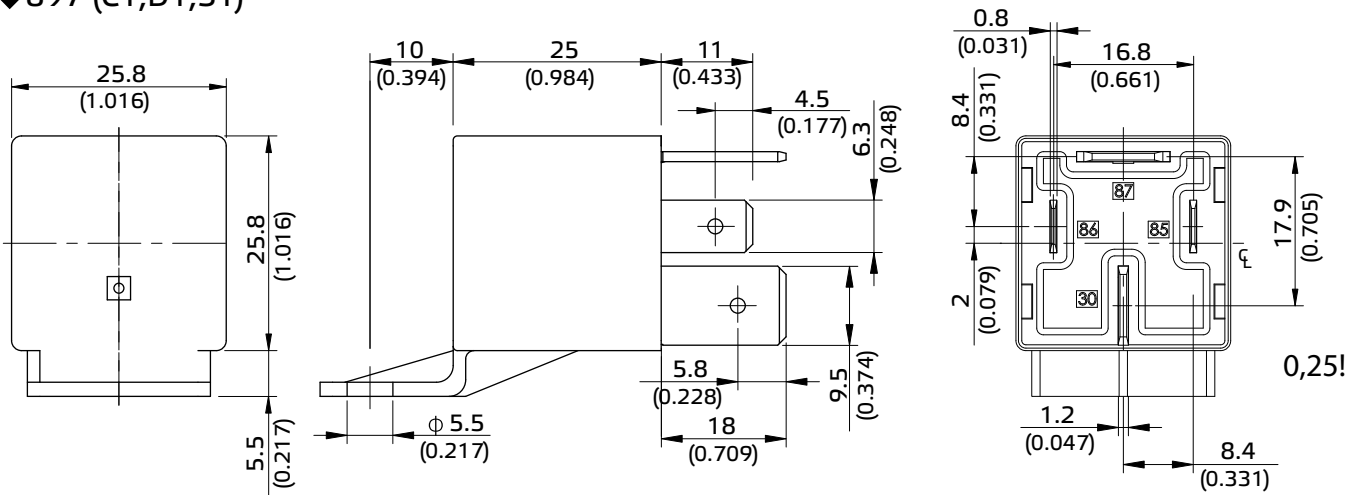
897

»» Outline Dimensions

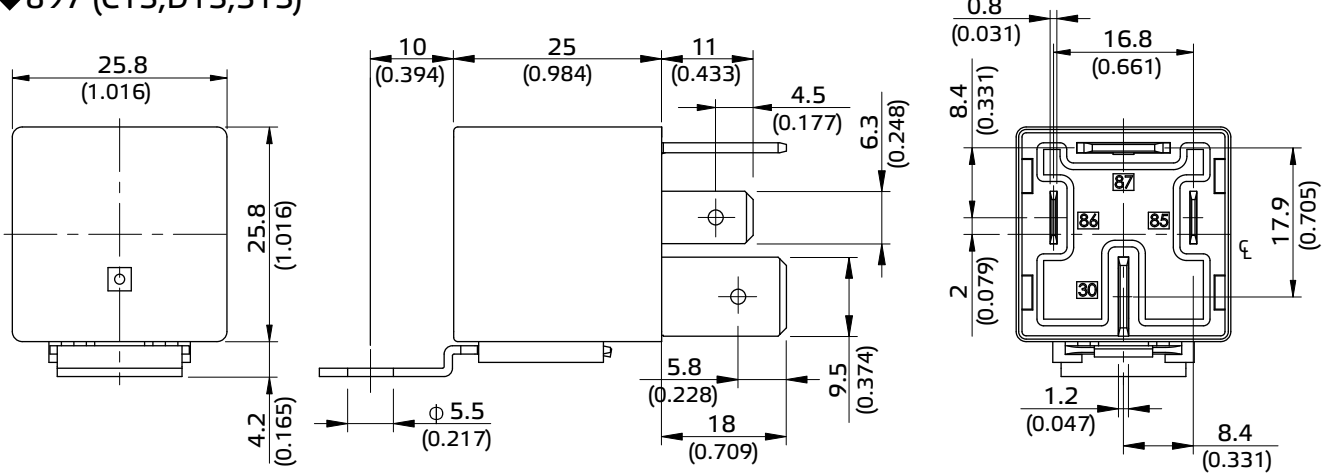
◆ 897 (C,D,S)



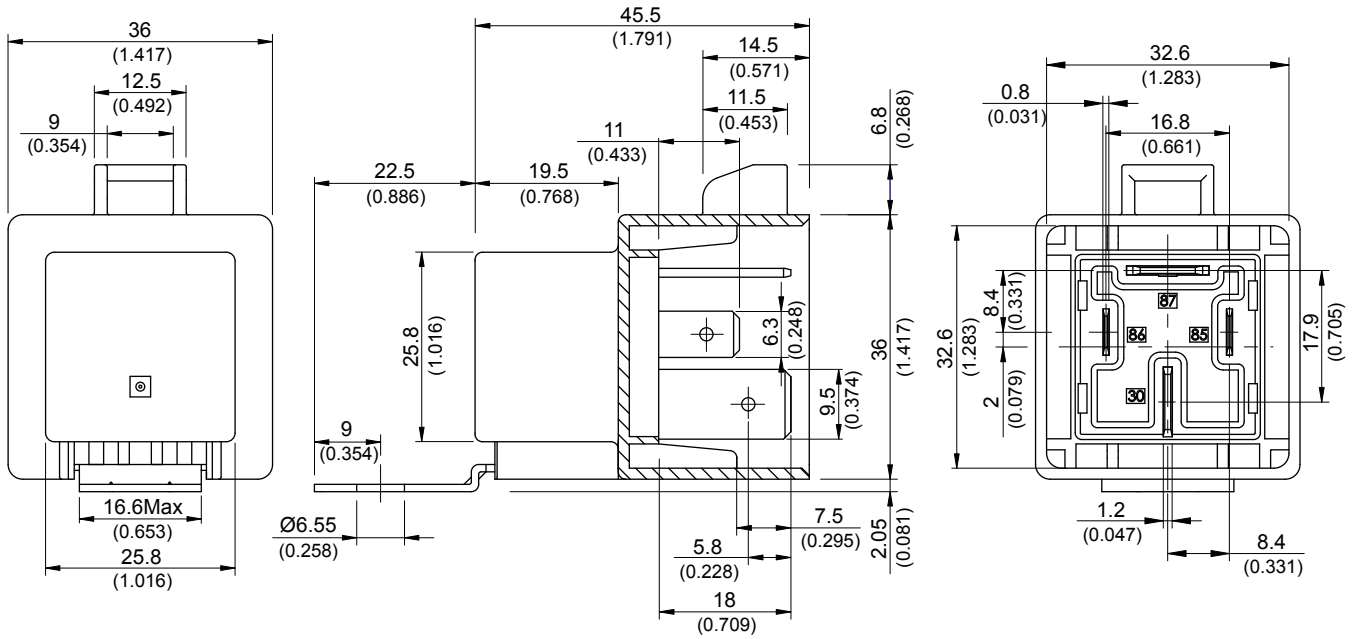
◆ 897 (C1,D1,S1)



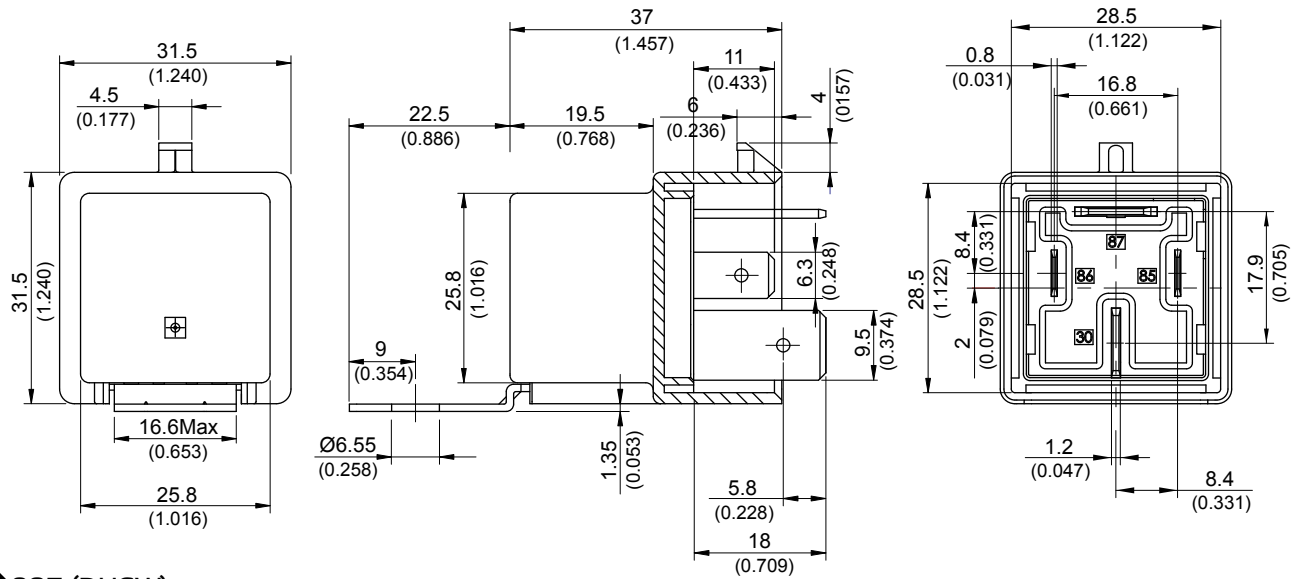
◆ 897 (C1S,D1S,S1S)



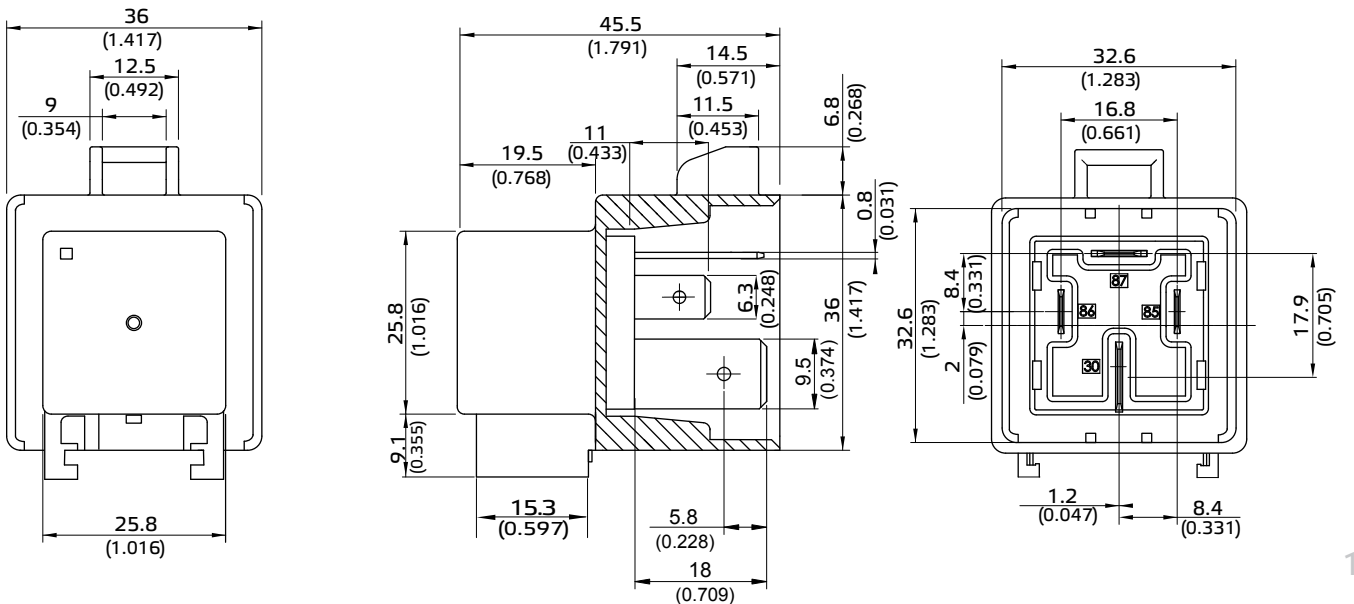
◆897 (D1SW)



◆897 (D1SF)



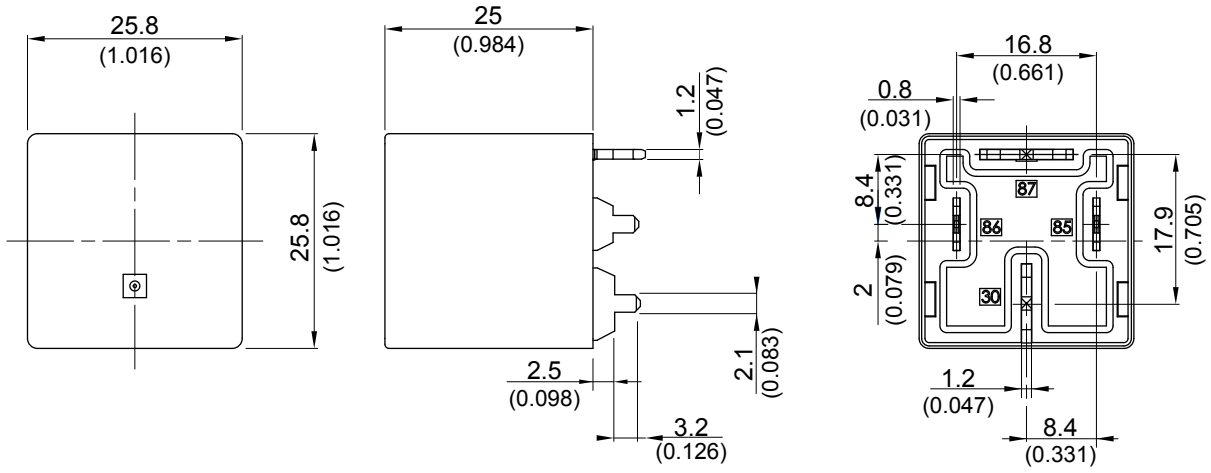
◆897 (DUSW)



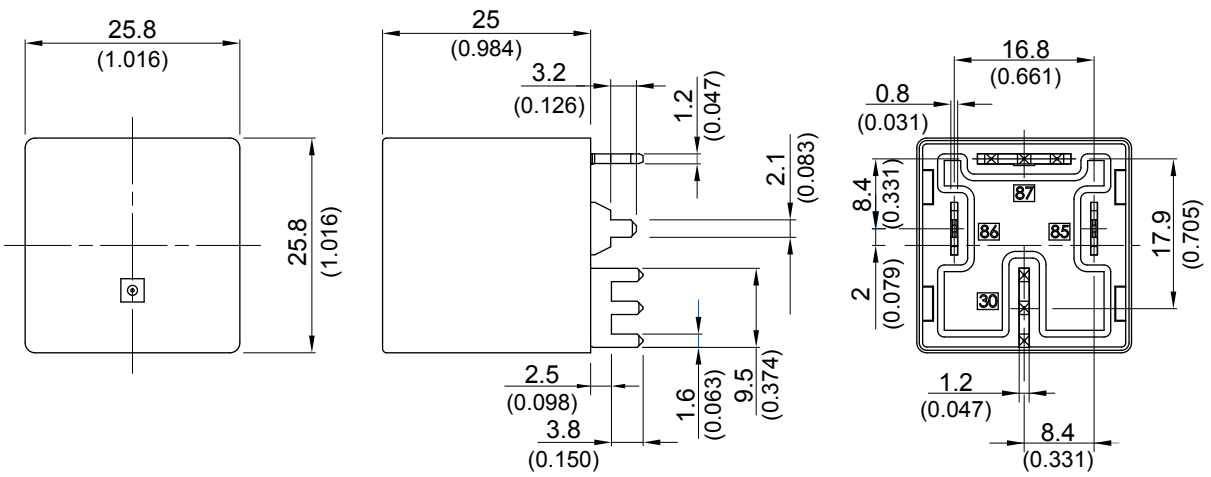


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◆897P (C,D,S)



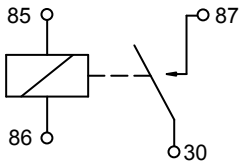
◆897P1 (C,D,S)



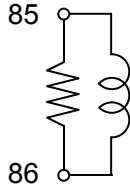
»» Wiring Diagram

BOTTOM VIEW

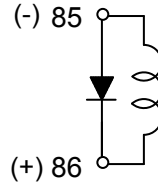
1A



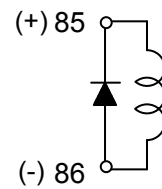
R1



001



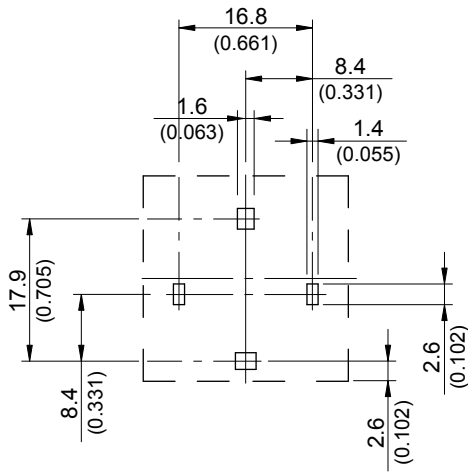
002



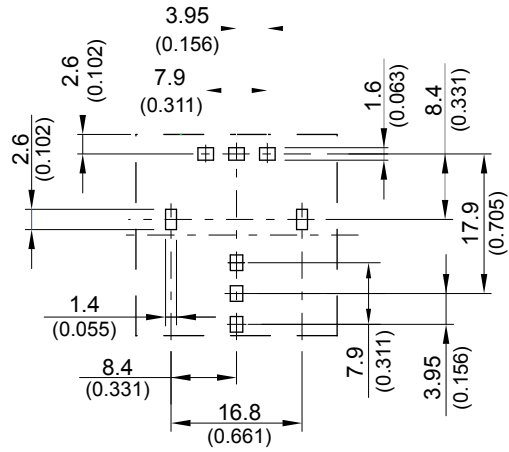
»» PC Board Layout

BOTTOM VIEW

◆897,897P



◆897P1

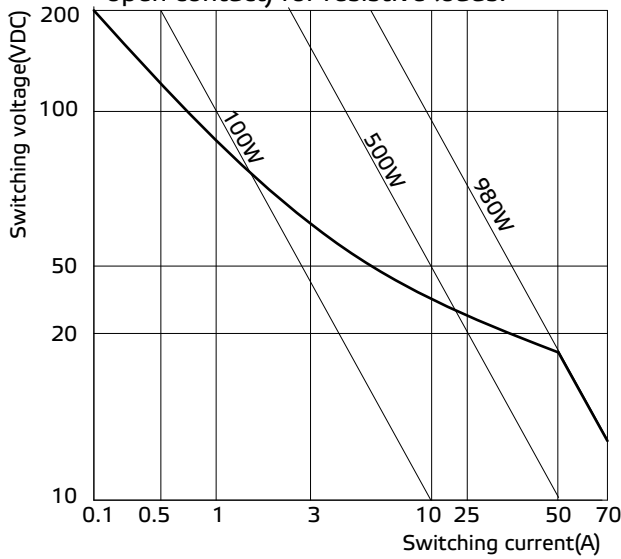




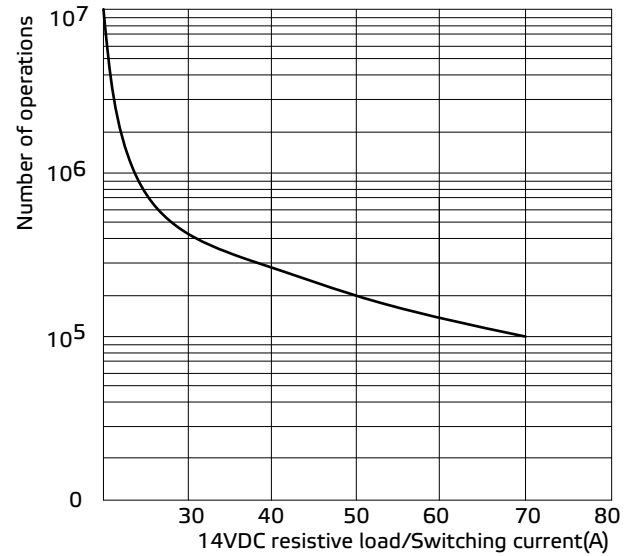
897

»» Engineering Data

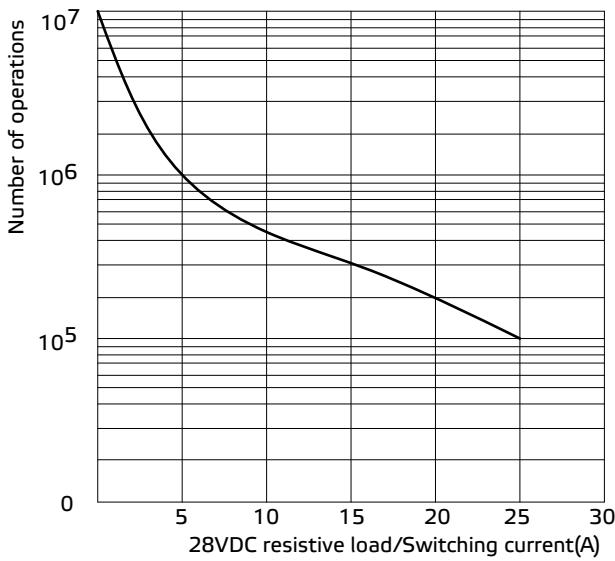
Safe breaking, arc extinguished (normally open contact) for resistive loads.



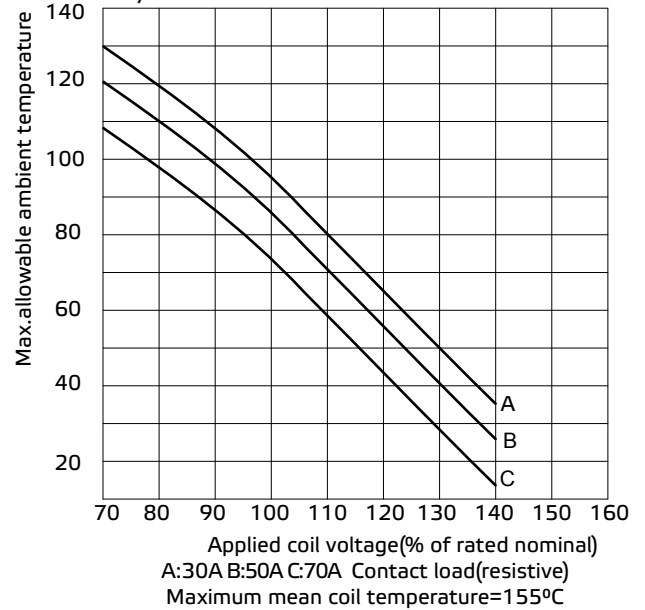
Life expectancy



Life expectancy



Ambient temperature vs coil voltage for continuous duty



Operate time/Release time

