



»» Features

- 70A high power automotive relay.
- High temperature endurance up to 125 degree 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 2002/95/EC, 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	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

»» Ordering Information

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

- | | | | |
|----------|---|------|---|
| 1. 897 | -- Basic series designation | 4. D | -- Dust cover |
| 2. Blank | -- Socket terminal | C | -- Flux tight |
| P | -- PCB terminal | S | -- Sealed type washable |
| 3. 1AH | -- Single pole normally open,
contact material AgSnO | D1 | -- Flanged cover (dust cover) |
| | | C1 | -- Flanged cover (flux tight) |
| | | S1 | -- Flanged cover (sealed type washable) |
| | | D1S | -- Steel bracket (dust cover) |

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|---|---|
| C1S -- Steel bracket (flux tight) | 6. Blank -- Standard type |
| S1S -- Steel bracket (sealed type washable) | T -- Special requirement for Tin plated terminal |
| D1SF -- Steel bracket (dust cover with shroud) | |
| D1SW -- Steel bracket (dust cover with weather proof) | 7. Blank -- Standard type |
| 5. Blank -- Standard type | 001 -- Coil parallel with diode IN4007 the positive pole "+" on # 85 terminal |
| R1 -- Coil parallel with resistor 1/2W for 12V 680Ω , 24V 2700Ω | 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	65 % of	10 % of	approx. 1.6W
24	66.7	360	rated	rated	rated	
			voltage	voltage	voltage	

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	10~55Hz , amplitude 2mm
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

»» Outline Dimensions

◆ 897 (C,D,S)



◆ 897 (C1,D1,S1)



◆ 897 (C1S,D1S,S1S)



◆ 897 (D1SW)

◆ 897 (D1SF)

◆ 897P (C,D,S)


»» Wiring Diagram

BOTTOM VIEW

1A



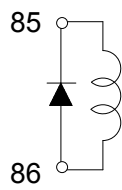
R1



001



002



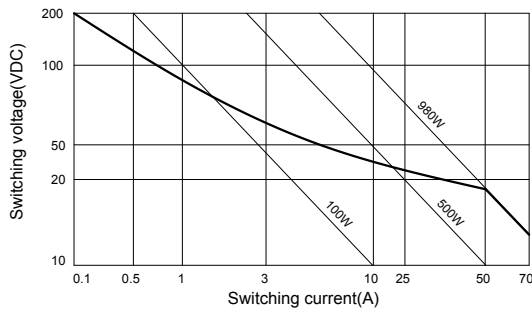
»» PC Board Layout

BOTTOM VIEW



»» 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

