

OTXV4	Auto Relay
	Features ● 40A switching capability(Another 70A high load is optional) ● Double normally open 2 x20A contact switching capability ● 1 Form A and 1 Form C configurations Plastic ● Outline Dimensions: (28 x 28 x 25) (28 x 31.8 x 41) mm ● Typical applications: rear window defogger, battery breaker, automobile air conditioner, oil pump control, fog lamp, cooling fan control, headlamp control

CONTACT DATA

Contact arrangement	1A、1B、1C、2A
Load	Resistive load (COS φ =1)
Contact material	AgSnO ₂
Contact rating	NO:40A 14VDC,2×20A 14VDC(1U) 80A 14VDC NC:30A 14VDC 40A 14VDC
Max. switching current	40A
Max. switching power	560W
Max. switching voltage	30VDC
Mechanical endurance	1x10 ⁷ OPS
Electrical endurance	See table below

CHARACTERISTICS

Insulation resistance	100mΩ(500VDC)	
Operate time (at rated. volt.)	10ms	
Release time (at rated. volt.)	10ms	
Shock resistance	Functional	10g
	Destructive	20g
Vibration resistance	10-40Hz, 1.5mm	
Humidity	20%~50%RH	
Ambient temperature	40%~85%RH	
Dielectric strength	Between coil & contacts	750VAC 1min
	Between open contacts	500VAC 1min
Unit weight	40g	

Notes:(1) The electrical durability is measured by the normally open contact or normally closed contact.

COIL DATA						
Coil power	Nominal Voltage VDC	Coil Resistance ±10%	Rated Current (mA)	Operation voltage VDC	Drop-out Voltage VDC	Max Applicable Voltage
1.6W	6	23	261	≤3.9	≥0.6	130% of rated voltage at 70℃ and 170% of rated voltage at 23℃
	12	90	133	≤7.8	≥1.2	
	24	360	67	≤15.6	≥2.4	
1.9W	6	19	317	≤3.9	≥0.6	
	12	76	158	≤7.8	≥1.2	
	24	300	79	≤15.6	≥2.4	

Notes :(1) When users have special requirements different from the above parameters, they can negotiate and order.
(2)5-24VDC coil resistance tolerance is ± 10%.

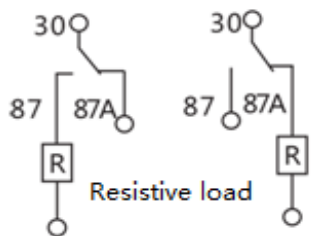


Figure 1

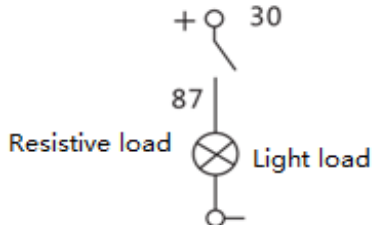


Figure 2

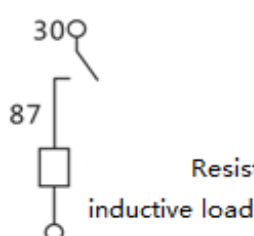


Figure 3

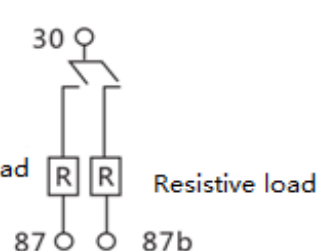


Figure 4

CONTACT DATA

Contact load voltage	Payload type		Contact load current A			break-make ratio		Electric durability (time)
			1C		1A	Connect S	Disconnect S	
			Normally open type	Normally closed type	Normally open type			
14VDC	Resistive	Connect	40	30	40	1.5	1.5	1×10 ⁵
		Disconnect	40	30	40			
	LED(1)	Connect	150 ⁽²⁾	-	150 ⁽²⁾	2	2	1×10 ⁵
		Disconnect	30		30			
	Inductive load	Connect	80	-	80	2	2	1×10 ⁵
		Disconnect	33		33			
27VDC	Resistive	Connect	20	10	20	2	2	1×10 ⁵
		Disconnect	20	10	20			

2A

Contact load voltage	Payload type		Contact load current A		Break-make ratio		Electric durability (time)
			NO1	NO2	Connect S	Disconnect S	
14VDC	Resistive	Connect	25	25	2	2	1x10 ⁵
		Disconnect	25	25			
27VDC	Resistive	Connect	10	10	1	2	1x10 ⁵
		Disconnect	10	10			

Notes:

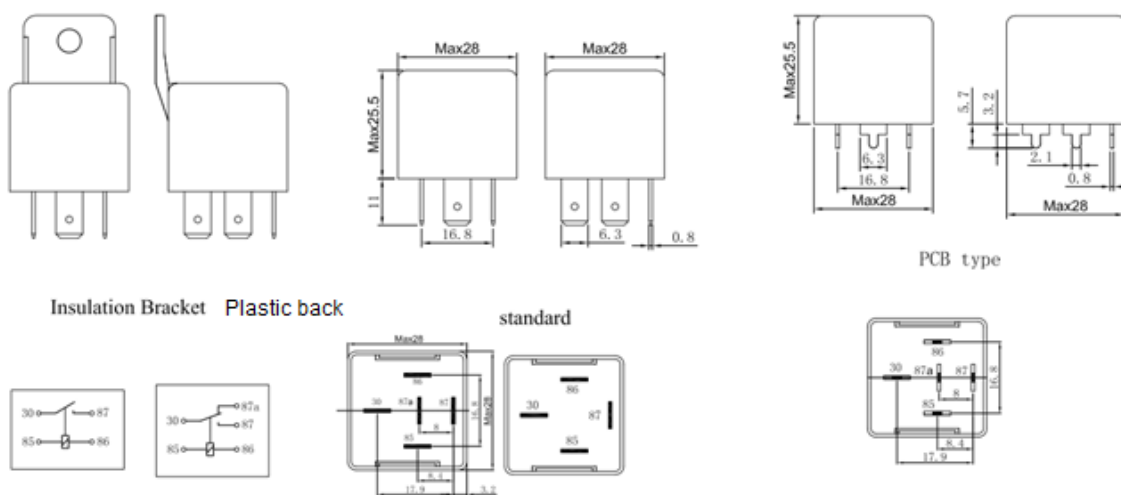
- (1) Special AgSnO contacts shall be used when used for flashlight load; When wiring, pay attention to the requirements of positive and negative poles, and ensure that the 30# terminal is connected to the positive pole of power supply;
- (2) Initial cold filament peak impact power supply;
- (3) When the relay coil is equipped with suppression circuit, contact wear and erosion will be aggravated and the risk of contact sticking will be increased, that is, the life of the relay will be reduced. When the diodes are connected at both ends of the coil, the electrical life of the relay will be sharply reduced.
- (4) The contact wiring diagram is as follows (normally open and normally closed loads are tested separately by different samples);
- (5) The load in this table is only for the coil without parallel diode, voltage regulator and other components.

ORDERING INFORMATION

	OTXV4	-D	-12V	-1A	-S	-1
Type						
Coil power	L: 1.6w	D:1.9w				
Coil voltage	6V, 12V, 24V					
Contact arrangement	1A:1FormA	1B:1FormB	1C:1FormC	2A:2FormA		
Construction	S: Dustproof type					
Structure form	1. Fast connection to the outlet 2. PCB outlet 3. Rain proof type (without mounting frame) 4. Rain proof type (with mounting frame) 5. Plastic mounting frame, quick connection to outlet end 6. Metal mounting frame, quick connection to outlet end					
Coil parallel element	Nil: No parallel component R: Parallel transient suppression resistance (680 ω , 12V) (2700 ω , 24V) R2: Parallel transient suppression resistance (470 ω , 12V) (1000 ω , 24V) R1: Parallel transient suppression resistance (560 ω , 12V) (1200 ω , 24V) D1: Parallel transient suppression diode, 86 pins connected to the positive pole D2: Parallel transient suppression diode with 85 positive terminals					

Notes: (1) We recommend flux proofed types for a clean environment (free from contaminations like H_2S , SO_2 , SO_2 , dust, etc.). We suggest to choose plastic sealed types and validate it in real application for an unclean environment (with contaminations like H_2S , SO_2 , SO_2 , dust, etc).

OMTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOMT unit: mm



Notes : (1)In case of no tolerance shown in outline dimension: outline dimension $\leq 1\text{mm}$, tolerance should be $\pm 0.2\text{mm}$; outline dimension $>1\text{mm}$ and $\leq 5\text{mm}$, tolerance should be $\pm 0.3\text{mm}$; outline dimension $>5\text{mm}$, tolerance should be $\pm 0.4\text{mm}$.
(2)The tolerance without indicating for PCB layout and pin size is always $\pm 0.1\text{mm}$.
(3)This product specification is for reference only, subject to change without prior notice

This specification is for reference only, the actual use is subject to the sample, all relays meet ROHS requirements, if there is any change will not be notified. web:www.qingmu.hk